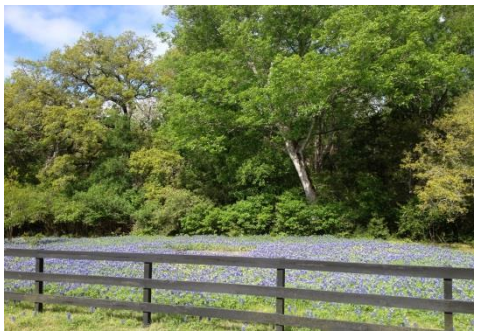


LEE COUNTY
Transportation and Economic DEVELOPMENT PLAN

Adopted December 8, 2014
By the Lee County Commissioners' Court

With support from:

THE STATE OF TEXAS · COUNTY OF LEE

CAPCOG
Capital Area Council of Governments

Texas Department of Transportation

Texas A&M Transportation Institute

Acknowledgments

The Lee County Transportation and Economic Development plan is the work of many people dedicated to planning the best transportation system, and developing the best economic development strategies for Lee County. The plan was prepared through a partnership with regional and local governments and local resident volunteers. The authors of the Lee County Transportation and Economic Development plan would like to acknowledge the following individuals for their invaluable contributions to the plan.

Lee County Transportation Advisory Committee

Paul E. Fischer
Lee County Judge

Rodney Meyer
Lee County Sheriff

John Dowell
City of Giddings Mayor

Charlotte Hooper
City of Lexington Mayor

Linda Patschke
Lexington EMS

Sylvin Mersiovsky
B&M Ambulance

Dr. Frances McArthur
Lexington ISD

Curtis Krause
Giddings ISD

Allen Law
Giddings ISD

Mike Organ
Lee County Citizen Representative

Douglas Hartfield
Lee County Commissioner

Ricky Jorgensen
City Manager of Giddings

Evan Gonzales
Round Top State Bank

James Marburger
Lexington ISD

Brian Fischer
Fischer Langham Custom Builders

Kenny Ford
Lee County Citizen Representative

Lyle Nelson
CARTS

Roy Dill
TxDOT Area Engineer,
Bastrop Area Office

Diana Schulze
TxDOT Assistant Area Engineer,
Bastrop Area Office

Andrew Hudanish
Union Pacific Railroad

Lee County Economic Development Advisory Committee

Maurice Pitts
Lee County Commissioner

Charlotte Hooper
City of Lexington Mayor

Tim Langham
Lions Club Nominee

Denice Harlan
Giddings Chamber of Commerce

Nick Hinze
1st National Bank, Giddings

Sharon Blasig
Lee County Clerk

Rainey Owen
Lee County Citizen Representative

Avery Wright
Wright Insurance Agency

Thomas Jatzlau
Prosperity Bank

Tim Walther
Citizens National Bank

Lisa Noak
Round Top State Bank

Allen Law
Giddings ISD

Kathy Bricker
Lexington ISD

Maxine Siegmund
Lee County

David Rains
Dime Box ISD

Joyce Bise
Lee County Citizen Representative

Dave Roussel
Lee County Citizen Representative

John Dowell
City of Giddings Mayor

Tonya Britton
Giddings EDC Director

Executive Summary

Lee County, TxDOT, and CAPCOG developed the Lee County Transportation and Economic Development Plan to identify transportation priorities and integrate strategies for economic growth. The plan recognizes the need for coordination of significant countywide projects and is a blueprint for future transportation facilities. Extensive public input was obtained to ensure that the goals and strategies represent the interests of Lee County residents and stakeholders.

The need for such a plan is driven by the continued population growth occurring in the nearby Austin–San Antonio region. Development has occurred in the area since 1980, and continued development of the unincorporated areas around the city of Giddings and U.S. Highway (US) 290 can be expected to have a more direct impact on Lee County in the future. A steady rise in population and employment is projected for the county, with population nearing 20,000 and over 7,200 jobs expected by 2040. Since 1980, median income has risen to levels near the state median.

Demographic and economic information was used along with historic traffic data to project future levels of service for the county's road network. Over the last decade, average annual daily traffic counts have risen 21% to 40% on many road segments near Giddings and Lexington, but some county roads and segments of US 290 and US 77 have seen minor declines. Research from the Texas A&M Transportation Institute projects increasing congestion in 2040 without road capacity upgrades. Despite increased congestion, only segments of US 290 in Giddings project to have failing or near-failing levels of service in 2040.

Transportation infrastructure projects should be designed to support economic growth and lure investment. The geographical location of Lee County, between two major high-growth metro areas, invites opportunities for businesses involved with manufacturing and assembly, storage, and shipping. A survey of residents and focus groups found that the biggest challenges Lee County may face with regard to economic development are lack of community consensus about growth, agreement on which strategies should be pursued, and participation by key stakeholders through implementation.

A long-term goal emerging from the plan was to improve the economic image of the county by addressing the physical appearance of commercial properties, improving websites to attract visitors, and coordination of businesses to serve downtown visitors. Promotion of small business development was also identified as a key goal for long-term stability. Stakeholders value the recent employment and wage increases from development of the Eagleford Shale, but expressed concern about deteriorating road conditions and long-term stability of the oil production.

Tourism opportunities were identified as a way to generate economic growth in the short term. The county is home to three historic train depots and other historical and recreational resources, presenting potential to develop more robust tourism activity.

Traffic analysis, challenges and opportunities and existing plans were combined with public and stakeholder input to create a comprehensive list of needed transportation projects. The Transportation Advisory Committee, with feedback from city councils and Commissioners' Court, prioritized the comprehensive list of future projects. In addition, TxDOT developed cost estimates for selected projects.

Lee County is poised for continued growth, and this plan stands as a blueprint to accommodate growth and build the local economy. A broad public involvement plan was included to give the people of Lee County a voice in future project developments and state funding decisions. The plan should be updated periodically as conditions change, median income has risen new projects are completed and the economy evolves.

Table of Contents

Page

List of Figures viii

List of Tables xi

Chapter 1—Introduction 1
1.1 Report Organization 1
1.2 Study Background and Purpose 1
1.3 Study Area 2
1.4 Study Participants 4
1.5 Purpose and Benefits of a County Transportation and Economic Development Plan 5
1.6 Relationship between Transportation, Land Use, and Economic Development 5
1.7 Public Involvement 6
1.8 Study Process 6

Chapter 2—Existing Conditions 7
2.1 Summary of Existing Plans 7
2.1.1 City of Giddings Comprehensive Plan 7
2.1.2 City of Lexington Comprehensive Plan 7
2.1.3 Austin to Houston Passenger Rail Study 8
2.1.4 Regional Economic Revitalization and Utilization Planning Council 8
2.2 Land Use Inventory 8
2.2.1 City of Giddings Land Use 9
2.2.2 City of Lexington Land Use 10
2.3 Demographic Trends 10
2.3.1 Population 10
2.3.2 Employment 13
2.3.3 Commute to Work 15
2.3.4 Age 16
2.3.5 Schools 17
2.4 Existing Socioeconomic Trends 21
2.4.1 Race/Ethnicity 21
2.4.2 Income 22
2.4.3 Poverty Levels 23
2.5 Flooding 23
2.6 Air Quality 25
2.7 Safety 25
2.8 Existing Transportation Conditions 27
2.8.1 Roadway Network 27
2.8.2 Typical Roadway Sections 29
2.8.3 Alternative Modes 33
2.9 Lee County Emergency Evacuation Routes 38
2.10 Existing Transportation Financing 39
2.10.1 Lee County Revenue and Transportation Expenditures 39
2.10.2 City of Giddings Revenue and Transportation Expenditures 41
2.10.3 City of Lexington Revenue and Transportation Expenditures 42

Chapter 3—Economic Development 43
3.1 The Approach to Economic Development Planning 43
3.2 Existing Conditions 44
3.3 The Trends That Impact Economic Development—Challenges and Strengths 52
3.4 Goals and Strategies 53
3.4.1 Goal 1: Position Greater Lee County for Long-Term Economic Growth 53
3.4.2 Goal 2: Promote Small Business Development for Long-Term Stability 55
3.4.3 Goal 3: Focus on Tourism for Short-Term Gains 56
3.4.4 Goal 4: Make Strategic Choices about New Investments 57
3.5 Organizing for Success 58

Chapter 4—Lee County Demographic and Traffic Trends 61
4.1 County-Level Base Year (2010) Demographic Trends 61
4.1.1 Population 61
4.1.2 Employment 62
4.1.3 Income 63
4.1.4 Summary 64
4.2 County-Level Analysis for Forecast Year (2040) Demographic Trends 64
4.2.1 Population 64
4.2.2 Employment 65
4.2.3 Income 66
4.2.4 Summary 66
4.3 Traffic Growth Analysis 67
4.3.1 Base Year (2010) Analysis Results 67
4.3.2 Forecast Year (2040) Analysis Results 68
4.4 Planned and Programmed Transportation Improvements 71

Chapter 5—Transportation and Economic Development Plan 73
5.1 The Public Involvement Process 73
5.1.1 Advisory Committees 73
5.1.2 Lee County Questionnaire 74
5.1.3 Public Meetings 75
5.2 Infrastructure Needs Assessment 76
5.3 Recommended Transportation and Economic Development Improvements 76
5.4 Maps of Recommended Transportation and Economic Development Improvements 84

Chapter 6—Recommendations and Plan Implementation Strategies 89
6.1 Findings and Recommendations 89
6.2 Project Prioritization 89
6.2.1 Transportation Advisory Committee Prioritization Exercise 89
6.2.2 Potential Project Costs 93
6.3 Possible Funding Sources 93
6.3.1 Funding Availability and Opportunities 94
6.3.2 Fuel Tax 94
6.3.3 Local Sales Tax 94
6.3.4 Vehicle Registration Fees 94
6.3.5 Property Taxes 95
6.4 Implementation of the Plan 95

Appendix A—Demographic and Traffic Trends Technical Memo 97

Appendix B—Lee County Transportation and Economic Development Plan Questionnaire Results.....129

Appendix C—Summary of Public Input at Public Meetings 149

Appendix D—Capital Area Rural Transit System (CARTS) 153

List of Figures

Page

Figure 1. Lee County Vicinity Map. 3
Figure 2. TxDOT Roadway Functional Classification for State Highways in Lee County (Source: TxDOT). 4
Figure 3. City of Giddings Zoning Map (Source: City of Giddings). 10
Figure 4. Historic Population Growth in Lee County and Nearby Counties (Source: U.S. Census Data). 12
Figure 5. Lee County Projected Population Growth (Source: P. Ellis, Texas A&M Transportation Institute). 13
Figure 6. Lee County Employment Growth from 2005 to 2040 (Source: P. Ellis, Texas A&M Transportation Institute). 14
Figure 7. Employment Location of Lee County Residents as Percentage of Total Workforce (Source: American Community Survey Data). 15
Figure 8. Commute Times as Percentage of Lee County Workforce (Source: American Community Survey Data). 16
Figure 9. Lee County Population by Percent Age Group (Source: U.S. Census Data). 17
Figure 10. Median Age in Lee County Compared to Other Regions (Source: 2010 U.S. Census Data/CAPCOG). 17
Figure 11. School District Boundaries within Lee County (Source: Texas Education Association). 18
Figure 12. Total Enrollment in Lee County ISDs (Source: Texas Education Agency). 20
Figure 13. Historic Enrollment in Lee County ISDs (Source: Texas Education Agency). 20
Figure 14. Projected Race/Ethnicity in Lee County, TX (Source: P. Ellis, Texas A&M Transportation Institute; Texas State Data Center). 21
Figure 15. Projected Race/Ethnicity in Texas (Source: P. Ellis, Texas A&M Transportation Institute; Texas State Data Center). 22
Figure 16. Median Income for Lee County and the State of Texas (Source: P. Ellis, Texas A&M Transportation Institute; U.S. Census Data). 22
Figure 17. Percentage of Population Living Below the Poverty Line in Lee County and the State of Texas (Source: U.S. Census Data/American Community Survey Data). 23
Figure 18. FEMA Potential Flood Hazards (Source: Texas Natural Resource Information System). 24
Figure 19. Bridge over Nails Creek, Lee County, Texas (Photo Credit: Texas A&M Transportation Institute). 25
Figure 20. Serious Crashes in Lee County 2010–2012 (Source: Texas Department of Transportation). 26
Figure 21. Minor Crashes in Lee County 2010–2012 (Source: Texas Department of Transportation). 27
Figure 22. Lee County Roadway Network and Railroad Lines (Source: Texas Department of Transportation). 28
Figure 23. Average Daily Traffic in Lee County (2011) (Source: Texas Department of Transportation). 29
Figure 24. Section Drawing of US 290 East of Giddings (Source: Texas A&M Transportation Institute). 30
Figure 25. Photo of US 290 East of Giddings (Source: Google Earth). 30

Figure 26. Section Drawing of US 77 through Lexington (Source: Texas A&M Transportation Institute).....30
Figure 27. Photograph of US 77 through Lexington (Source: Google Earth). 31
Figure 28. Section Drawing of SH 21 near Lincoln (Source: Texas A&M Transportation Institute). 31
Figure 29. Photograph of SH 21 near Lincoln (Source: Texas A&M Transportation Institute). 32
Figure 30. Section Drawing of US 290 in Downtown Giddings (Source: Texas A&M Transportation Institute).....32
Figure 31. Photograph of Intersection of US 290 (facing west as shown on left) and US 77 (facing north as shown on right) in Downtown Giddings (Source: Google Maps). 33
Figure 32. CARTS Schedule for Lee County (Source: CARTS). 34
Figure 33. Truck Volumes on State Roads in Lee County (2011) (Source: Texas Department of Transportation).....36
Figure 34. Lee County Alternative Modes of Transportation Not Including Transit (Source: TxDOT, Texas A&M Transportation Institute).....37
Figure 35. Lee County Emergency Evacuation Routes. 38
Figure 36. City of Giddings Revenues for FY 2012–2013 (Source: City of Giddings). 41
Figure 37. City of Giddings Street Expenditures for FY 2012–2013 (Source: City of Giddings).....41
Figure 38. City of Lexington Revenues for FY 2012–2013 (Source: City of Lexington).....42
Figure 39. City of Lexington Street Expenditures FY 2012–2013 (Source: City of Lexington). 42
Figure 40. Lee County Projected Population (Source: Texas State Data Center).....44
Figure 41. Lee County Historic Population Growth (Source: Decision Data Resources).....44
Figure 42. Racial Distribution for Lee County and Surrounding Regions (Source: Decision Data Resources). 45
Figure 43. Educational Attainment for Lee County and Surrounding Areas (Source: Decision Data Resources). 45
Figure 44. Educational Enrollment in Lee County and Surrounding Regions (2010) (Source: Decision Data Resources).....46
Figure 45. Current Unemployment Rate in Lee County and Surrounding Counties (Source: Bureau of Labor Statistics). 47
Figure 46. Increase in Median Household Income for Lee County and Surrounding Regions (2012–2015) (Source: Decision Data Resources).....47
Figure 47. Breakdown of Incorporated and Unincorporated Businesses for Self-Employed Individuals in Lee County and Surrounding Regions (Source: Decision Data Resources). 48
Figure 48. Percent of Lee County Residents Working from Home (2000 and 2010) (Source: Decision Data Resources).....49
Figure 49. Occupations in Lee County with Average Hourly Wage (Source: Economic Modeling Specialists, Inc.). 50
Figure 50. Reasons for Housing Vacancies (2010), as a Percentage of Total Vacancies in Lee County and Surrounding Regions. 51
Figure 51. Housing Units by Type in Lee County and Surrounding Regions (Source: Decision Data Resources). 51
Figure 52. Hotel Occupancy Rates in Lee County and Surrounding Counties, 2012 and 2013 (Source: Source Strategies, Texas Governor’s Office).....52
Figure 53. Average Hotel Room Rates in Lee County and Surrounding Counties (Source: Source Strategies, Texas Governor's Office).....52

Figure 54. Traffic Growth in Lee County (between 2001 and 2010).....68
Figure 55. Current Levels of Service for Lee County (2010).....70
Figure 56. Projected Levels of Service for the Lee County Network (2040).....71
Figure 57. Planned and Programmed Projects in Lee County (Source: TxDOT). 72
Figure 58. Oil and Gas Activity in Lee County, 2013. 83
Figure 59. Lee County Energy Transportation Reinvestment Zone (Source: Lee County).....84
Figure 61. Proposed Transportation Safety Improvements. 86
Figure 62. Proposed Pedestrian, Tourism, and Transit Improvements. 87
Figure 63. Proposed Airport Improvements.....88

List of Tables

Page

Table 1. Historic Population and Compound Annual Average Growth by Period for Bastrop, Caldwell, Hays, Lee, Travis, and Williamson Counties and Texas from 1980 to 2010 (Source: U.S. Census Data).....11
Table 2. Projected Employment Type in Lee County (Source: P. Ellis, Texas A&M Transportation Institute; Texas Workforce Commission).....14
Table 3. Historical School Age Population within Lee County (1990, 2000, and 2010 Decennial Census Data).....19
Table 4. Lee County ISD Enrollment Figures (Source: Texas Education Agency).....19
Table 5. Lee County Road and Bridge Funds for FY 2012–2013 (Source: Lee County).....39
Table 6. Lee County Road and Bridge Expenditures for FY 2012–2013 (Source: Lee County).....40
Table 7. Base Year Population and Compound Annual Average Growth for Bastrop, Caldwell, Fayette, Hays, Lee, Travis, and Williamson Counties and Texas. 61
Table 8. Number of Households and Average Household Size for Lee County and Texas. 62
Table 9. Lee County Population and Total Employment from 2005 to 2010. 63
Table 10. Lee County Employment by Type.....63
Table 11. Median Household Income for Lee County and Texas from 1980 to 2010.....63
Table 12. Summary of Demographic Data for 2010. 64
Table 13. Lee County Projected Population and Population Change from 2010 to 2040.....64
Table 14. 2010 Census and Projected Households and Average Household Size for Lee County from 2010 to 2040. 65
Table 15. Lee County Population and Employment Data from 2010 to 2040.....65
Table 16. Lee County Base Year and Suggested Employment Control Totals 2010–2040. 66
Table 17. Lee County Median Income Projections from 2020 to 2040 under the 0.5 Migration Scenario.....66
Table 18. Recommended Lee County Control Totals from 2010 to 2040. 67
Table 19. Lee County Recommended and Planned Transportation and Economic Development Improvements.....77
Table 20. TAC Ranking of TAC/Public Recommended Roadway Repairs-Replacements.....89
Table 21. TAC Ranking of TAC/Public Recommended Roadway Expansions-Operational Improvements.....90
Table 22. TAC Ranking of TAC/Public Recommended Safety-Related Improvements.....91
Table 23. TAC Ranking of TAC/Public Recommended Tourism Signage Improvements. 91
Table 24. TAC Ranking of TAC/Public Recommended Pedestrian and other Infrastructure Improvements.....92
Table 25. TAC Ranking of TAC/Public Recommended Transit Service Improvements.....92
Table 26. TAC Ranking of TAC/Public Recommended Airport Improvements.....92
Table 27. Lee County Recommended and Planned Transportation Improvement Cost Estimates (Source: TxDOT).....93

Chapter 1—Introduction

1.1 Report Organization

The Lee County Transportation and Economic Development Plan is the result of a collaborative effort between Lee County and the Capital Area Council of Governments (CAPCOG) with support from the Texas Department of Transportation (TxDOT) and Texas A&M Transportation Institute (TTI) to develop a vision for economic growth and transportation improvements to guide Lee County through the year 2040.

The report is organized into the following chapters:

- Introduction—description of the study area, background, and purpose; study participants; county transportation plan purpose and benefits; transportation and economic development relationship; public involvement; and study process.
- Existing Conditions—discussion of the existing land use; natural environment and air quality; safety conditions; transportation conditions; and revenue for the City of Giddings and the City of Lexington.
- Economic Development—discussion of the existing demographic and socioeconomic trends and conditions, including age and population, employment, schools, and health facilities; state of the county economy; tourism; development along U.S. highway corridors; broadband Internet; and future economic development recommendations for the county.
- Future Conditions and Traffic Trend Analysis—discussion of future population and employment trends, traffic trends, and planned and programmed roadway improvements.
- Transportation and Economic Development Plan—visualization of how recommended transportation and economic development improvements create a comprehensive strategic plan for the future growth and development of Lee County.
- Recommendations and Plan Implementation Strategies—findings and recommendations from the study, possible funding sources for the projects, and steps to implement the plan.

1.2 Study Background and Purpose

The Lee County Transportation and Economic Development Plan was undertaken because Lee County, CAPCOG, and TxDOT recognized the need for a coordinated regional transportation plan. This plan provides guidance for system connectivity and continuity, both within and between counties, as well as the integration of economic development strategies with standard transportation analyses to provide greater context for planning and implementation of transportation improvements. In addition, CAPCOG and Lee County officials took advantage of the opportunity to provide insight on the best strategies to develop long-term economic prosperity for Lee County. TxDOT sponsored the Lee County Transportation and Economic Development Plan in an effort to develop a long-range transportation and economic development strategy that Lee County might not otherwise have the resources to develop.

A comprehensive countywide plan is a blueprint for the future that looks at all modes of transportation, including roads, transit, pedestrian, and bicycle facilities. The Lee County Transportation and Economic Development Plan allows county officials to identify and preserve rights of way (ROWs) needed for expansion of existing facilities as well as future new corridors to serve anticipated growth and development.

The need for such a plan is driven by the continued rapid population growth occurring in the nearby Austin–San Antonio region. Significant development has occurred in the area since 1980,

and continued development of the unincorporated areas around the city of Giddings and U.S. Highway (US) 290 can be expected to have a more direct impact on Lee County in the future.

A proactive public involvement/outreach process assured that this comprehensive multimodal transportation and economic development plan was developed by county residents for county residents to address the needs of a growing population.

1.3 Study Area

Lee County is located east of Bastrop and Travis Counties. The vicinity map for Lee County is provided in Figure 1. The study area for the Lee County Transportation and Economic Development Plan included all of Lee County and coordinated with the adjoining counties.

Lee County is approximately 634 square miles. The county seat is the Giddings, and the incorporated cities in the county are Giddings and Lexington. There are several unincorporated communities in Lee County; the largest of these, Dime Box, supports its own school district. The 2010 population of Lee County was approximately 16,612 residents, with an average density of 26.2 residents per square mile.

Four public school districts serve Lee County residents: Dime Box, Elgin, Giddings, and Lexington Independent School Districts (ISDs). The county is home to the Nails Creek State Park on the banks of Lake Somerville.

Roadways within Lee County are classified as principal arterial, minor arterial, major collector, minor collector, or local road. Figure 2 shows the functional classification of the roadway network within Lee County. The major roadways for through traffic in Lee County are US 290 and US 77, as well as State Highway (SH) 21.

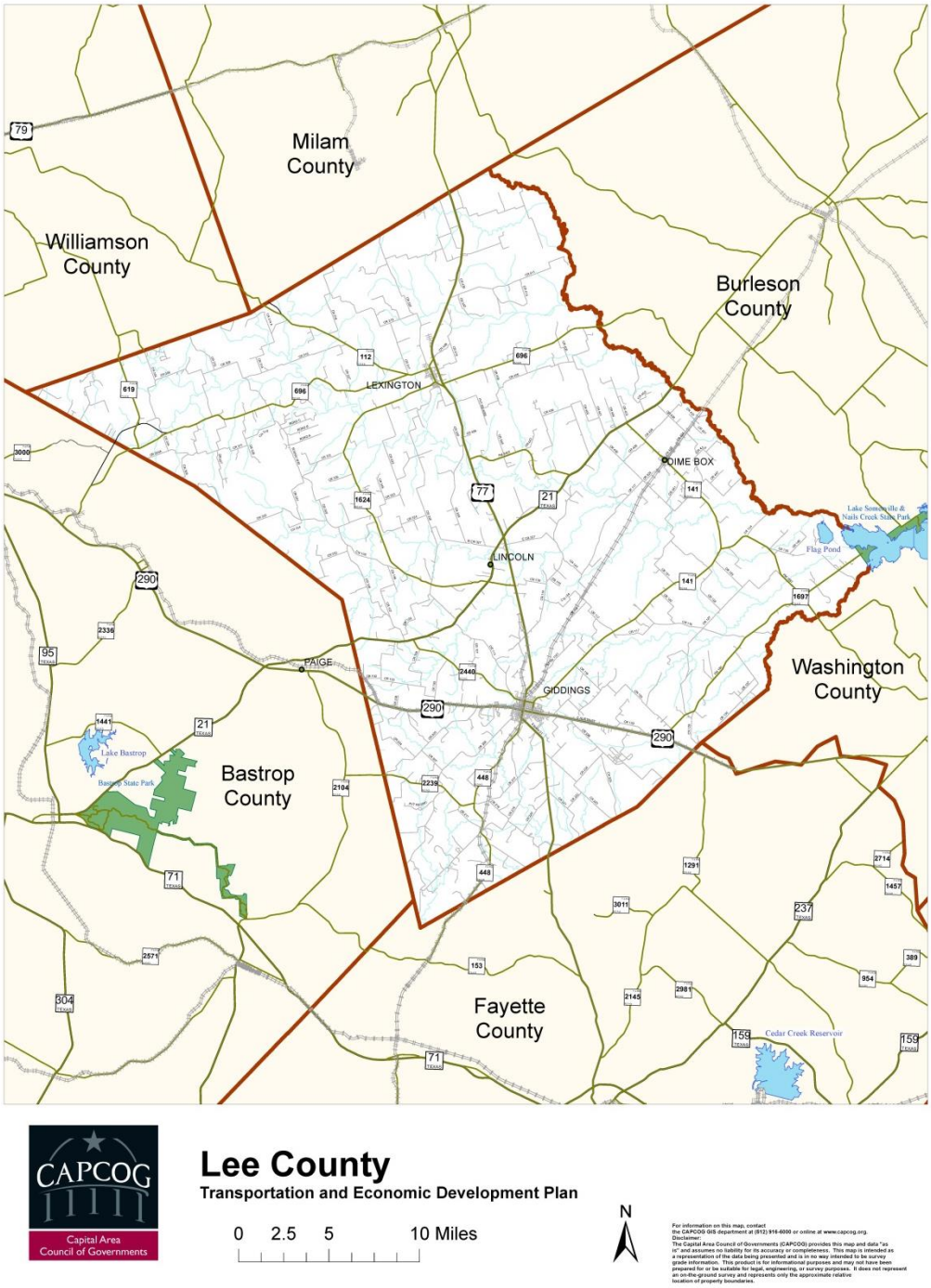


Figure 1. Lee County Vicinity Map.

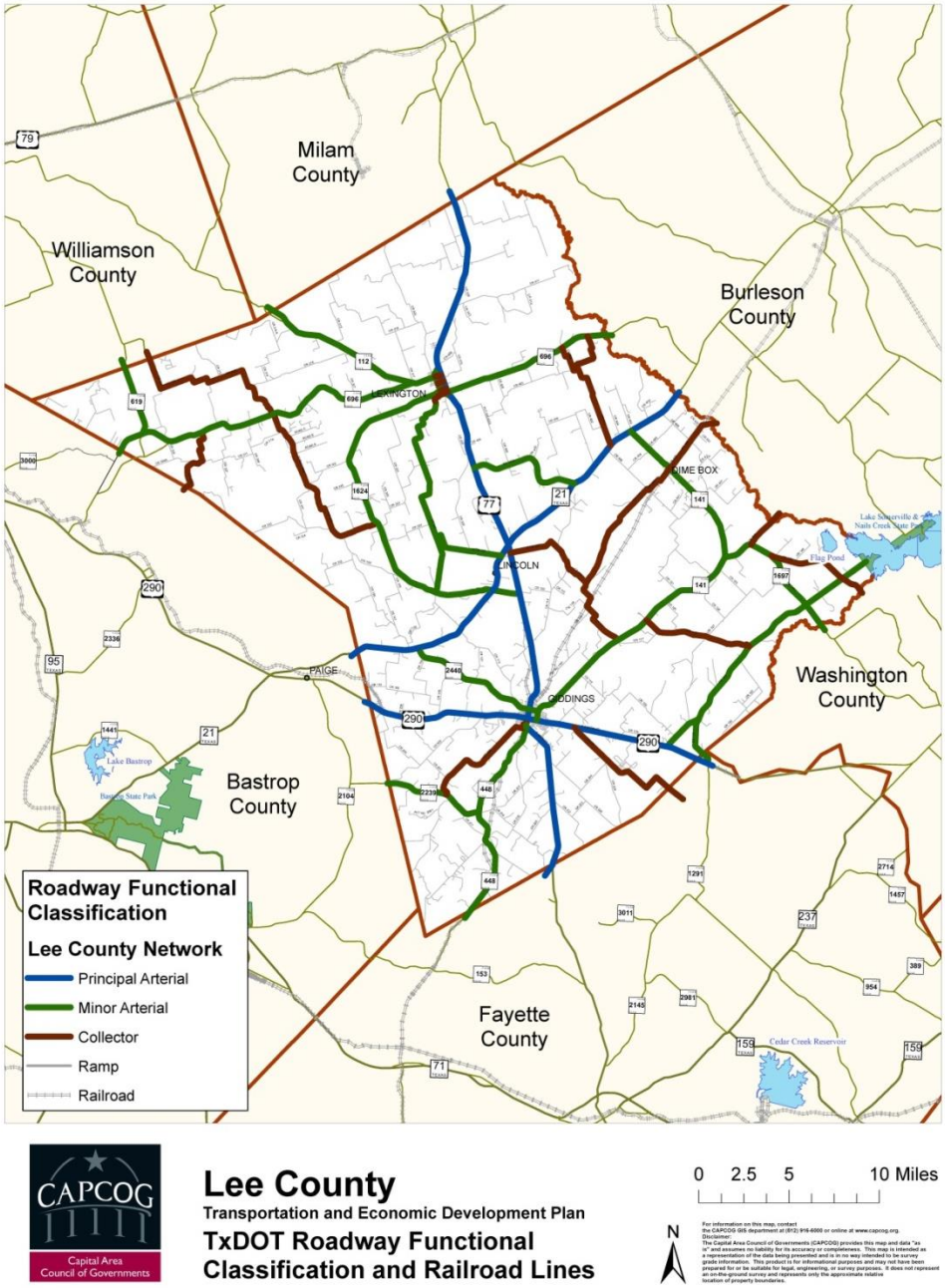


Figure 2. TxDOT Roadway Functional Classification for State Highways in Lee County (Source: TxDOT).

1.4 Study Participants

Four groups or agencies participated in the Lee County Transportation and Economic Development Plan planning process. The agencies and their responsibilities are listed below:

- Lee County—served as the lead agency directing the project, headed by the county judge, commissioners, and staff.
- CAPCOG—provided support to other agency members; provided support to county and local officials; provided guidance for the public involvement activities; provided technical analysis

for specific aspects of existing and future conditions; hosted the website; and assured that the planning process was consistent with the local and regional transportation planning process.

- TxDOT—provided support to other agency members; provided support to county and local officials to meet the goals and objectives outlined by the advisory committee; provided guidance for the public involvement activities; coordinated with CAPCOG to facilitate data sharing; provided technical analysis for specific aspects of existing conditions; and assured that the planning process was consistent with the local and regional transportation planning process.
- TTI—developed future demographic and transportation projections; provided overall guidance for participants; assured uniformity in the process and content of the plan; provided technical analysis for specific aspects of existing conditions and finance; facilitated public meetings; served on the project management team; oversaw the project website; and provided technical support and analysis of the project questionnaire.

In addition to the participants listed above, a Transportation Advisory Committee and an Economic Development Advisory Committee were formed to provide guidance and input on the planning process (advisory committee members are listed in Chapter 6). The advisory committees were comprised of elected officials, county residents, representatives of local businesses, chambers of commerce, local ISDs, and a representative from Union Pacific. Various members of local governing bodies also served on the two committees, including the county sheriff, county judge, county commissioners, county clerk, the city manager of Giddings, and the mayor of Lexington.

1.5 Purpose and Benefits of a County Transportation and Economic Development Plan

As stated earlier in this chapter, the purpose of a county plan is to create a blueprint for the future that evaluates the current and future needs of all modes of transportation in order to identify and preserve rights of way necessary to accommodate future expansion and growth. Section 201.619 of the Texas Transportation Code outlines a process that allows TxDOT and a county to identify future transportation corridors that are important to the accommodation of future growth. This plan is the first step in that process. Additionally, Section 232.0033 of the Texas Local Government Code authorizes the county commissioner's court to refuse a plat for recordation if all or part of the subdivision is located within the area of the alignment of an environmentally cleared future transportation corridor so designated through the above process.

The Lee County Transportation and Economic Plan serves as a collective vision of how transportation and economic development needs will be addressed as growth occurs in the future. It is a guideline for the county, cities within the county, and residents to consider in planning new residential, commercial, and industrial developments. The county will be able to share this plan with other entities, such as utility providers, school districts, economic development groups, TxDOT, and land developers. The Lee County Transportation and Economic Development Plan will also be a reference during any general planning updates and will be instrumental as undeveloped land is converted to other uses or as property is redeveloped.

1.6 Relationship between Transportation, Land Use, and Economic Development

Transportation and land use are interrelated. This means, in part, that land use affects the level of transportation service that is needed. For example, where land is used in a low-density residential pattern, frequent transit service is usually not cost effective. Similarly, it means that the level of transportation service affects the kind of land use that will be suitable for an area. For instance,

an established truck route will make it easier for adjacent land to be used for industrial or commercial uses. A multimodal, high-quality transportation system can help attract or retain intended land uses. Conversely, a new large-scale residential development will generate additional travel for the existing roads that provide access to the new development. Improvements to the roads serving the development may be needed to improve access to the development.

In addition to land use affecting the level of transportation service needed, the interrelationship of land use and transportation can affect economic development as well. As land use drives transportation infrastructure needs, changes in transportation infrastructure will in turn provide increased opportunities for development as well as affect access to employment.

Given the relationship between transportation and land use, decisions about needed transportation facilities and programs should take into account the demands of the local population and the growing economy. Transportation planning should provide for a circulation system that reflects existing and proposed land use patterns—to provide efficient access within a commercial core for pedestrians, bicyclists, cars, trucks, and buses—while also encouraging quiet access in a residential neighborhood. Investments in the transportation system are expected to support growth and/or redevelopment targeted by the county's land use goals.

Land use plans at both the regional and local level are used to forecast future transportation demands. Projected employment and population growth translate to growth in traffic volumes in specific geographic areas. High-intensity land uses, such as office space and retail, generate significant demands on the transportation system. Planning for high-intensity land use should include an assessment of the traffic impact on the existing streets.

1.7 Public Involvement

The objective of the public involvement plan used when developing the Lee County Transportation and Economic Plan was to share information with the public and project stakeholders about the planning process and how to provide feedback; collect feedback from the community in a convenient method for participants; and use the community input to identify county transportation and economic goals and to review proposed improvements.

The communication strategy included seeking feedback on effective strategies from the project advisory committees; developing a project website and cohesive look for project materials; making presentations at city council and commissioner court meetings; proactively seeking traditional and social media involvement; using a questionnaire to broaden involvement; holding three economic development, five transportation advisory, and two public meetings for local input; and meaningfully incorporating public input into the development of the plan.

1.8 Study Process

The planning process was conducted in three phases. Phase I was the project initiation stage and consisted of data collection, memorandum of understanding execution between the participating entities, baseline mapping, public involvement planning, committee establishment, and initial coordination efforts. Phase II was the needs assessment stage in which land use forecasts, traffic projections/travel demand modeling, needs analysis, scenario planning, and additional public involvement took place. Phase III was the actual plan development stage. This stage included evaluation of potential projects, drafting of the financial options, and final adoption of the plan by the county.

Chapter 2—Existing Conditions

In order to develop a plan for the future, the first step in the planning process was to gain an understanding of the existing conditions in Lee County. A variety of factors were considered in the assessment of transportation needs, including:

- Demographic and socioeconomic analyses, which help describe who is living/working in Lee County and lay the foundation for population and employment projections.
- Land uses that influence transportation needs as they relate to the location of residential, commercial, educational, and industrial developments.
- Numerous natural, environmental features that affect decisions on both land use and transportation.
- New air quality standards issued by the Environmental Protection Agency (EPA), which will impact the transportation planning activities in most metropolitan planning organizations (MPOs) and in turn may impact the ability of adjacent counties to provide a coordinated transportation system.
- Vehicle crash data to help identify key locations where spot improvements may be warranted.
- Freight movement.

2.1 Summary of Existing Plans

This section reviews the existing comprehensive plans for cities within Lee County.

2.1.1 City of Giddings Comprehensive Plan

In 1995, planning students in Texas A&M University's Urban Planning Program worked with the City of Giddings in developing Horizon 2010, a comprehensive plan for Giddings. The plan provided existing and potential future views of the city's history and development, existing environment, population conditions and trends, economic development, land use, transportation, historic preservation, infrastructure, housing, and education. The plan also provided goals and objectives in the areas of:

- Environment.
- Economic development.
- Land use.
- Transportation.
- Community appearance.
- Historic preservation.
- Infrastructure.
- Housing.
- City services.

2.1.2 City of Lexington Comprehensive Plan

The Lexington City Council adopted the Lexington Comprehensive Plan in 1995 and the plan was updated in 2002. The plan provides guidance for Lexington in the area of housing, land use, infrastructure and economic development and outlines the following goals for housing, economic development and land use:

- Goals for housing:
    - Goal 1: Assist Lexington residents in the procurement of safe, affordable housing.
    - Goal 2: Upgrade the quality of the existing housing stock in Lexington.
- Goals for economic development:
    - Goal 1: Make Lexington more attractive to potential residents.
    - Goal 2: Encourage new retail and commercial development in Lexington.
- Goals for land use:
    - Goal 1: Maintain the rural character and quality of life in Lexington.
    - Goal 2: Develop land use regulation for the City of Lexington.

2.1.3 Austin to Houston Passenger Rail Study

TxDOT commissioned a 2011 feasibility study of passenger rail service between Austin and Houston through Giddings. The analysis identified existing rail infrastructure, potential alternative alignments, and required infrastructure improvements and costs. Commuter service through Giddings would present transportation and economic development opportunities, but this study was only a first step.

Capital Metro owns the existing tracks from Austin to Giddings and has long range goals to extend commuter service from Austin to Elgin, but no funding or timetable currently exists. Inoperable track conditions are present on the segment between Butler, just east of Elgin, and Giddings. In addition, the current alignment features multiple curves and infrastructure problems that would not allow train speeds required for passenger service. The cost of improving this segment was estimated to be on par with the cost to build new tracks in other segments of the Austin-Houston corridor. Estimates of ridership and cost-benefits were outside the scope of the study.

There is growing interest from the private sector of the market potential of high speed rail in Texas. In August 2014, TxDOT announced plans to seek grant funding from the Federal Railroad Administration to conduct a follow-up corridor analysis and environmental study. The proposal, if funded, would examine new alternatives, including public-private partnerships, to provide high speed rail service from Austin to Houston.

2.1.4 Regional Economic Revitalization and Utilization Planning Council

The “Rev-Up” Economic Strategic Plan, funded by a federal grant and completed in June 2011, assisted a seven-county region experiencing economic distress from major manufacturing declines. Lee County was included in the study. The primary loss of jobs was due to a shutdown of operations at an aluminum smelter in Milam County, just north of the Lee County line. It is estimated that 1,200 employees were laid off in 2008. The lone remaining atomizer ceased operations in 2014. The shutdown has reduced job opportunities for Lee County residents. Workforce Solutions of Central Texas has assisted the unemployed with grants and training, and laid off workers are eligible for new career training through the federal Trade Adjustment Act. More information is available from this link: www.rev-up-council.org.

2.2 Land Use Inventory

With moderate but continued growth expected, Lee County needs a balance between accommodating new development and preserving the county’s natural resources. The two major cities, Giddings and Lexington, currently comprise 36 percent of the county’s population.

Land use is a term planners and policymakers employ that simply describes how humans use the land. Descriptive terms commonly associated with land use include:

- Type—including residential, commercial, industrial, agricultural, etc.
- Intensity—meaning rural, exurban, suburban, and urban.
- Density—persons or households per square mile.
- Connectivity—in terms of transportation, water, wastewater, power, etc.

In the past, the planning perspective was that land use determines transportation needs. For example, traffic associated with a new development on a county road outside of town creates demand for additional lanes. The new development is the catalyst for increased road capacity. Many communities are finding that increasing road capacity to support existing development can actually spur additional growth that, in turn, increases traffic and the demand for additional capacity. This demonstrates a much closer connection between land use and transportation. Historically, Lee County's rural land use pattern has been supported by a network of local, county, farm-to-market, and state arterial roadways that satisfied county residents' transportation needs. If, however, there is a shift in the transportation infrastructure required to support the needs of the county's residents, understanding these changing land use patterns will provide insights for future transportation requirements as well as the types of land use they stimulate.

2.2.1 City of Giddings Land Use

Figure 3 shows the current zoning for the city of Giddings. The current land use features general commercial development along the US 290, SH 71, and Farm-to-Market (FM) 141 corridors with a majority of single-family residential developments located in the core directly behind the commercial districts. The area beyond the core of commercial and residential developments is zoned for agricultural and residential land uses.

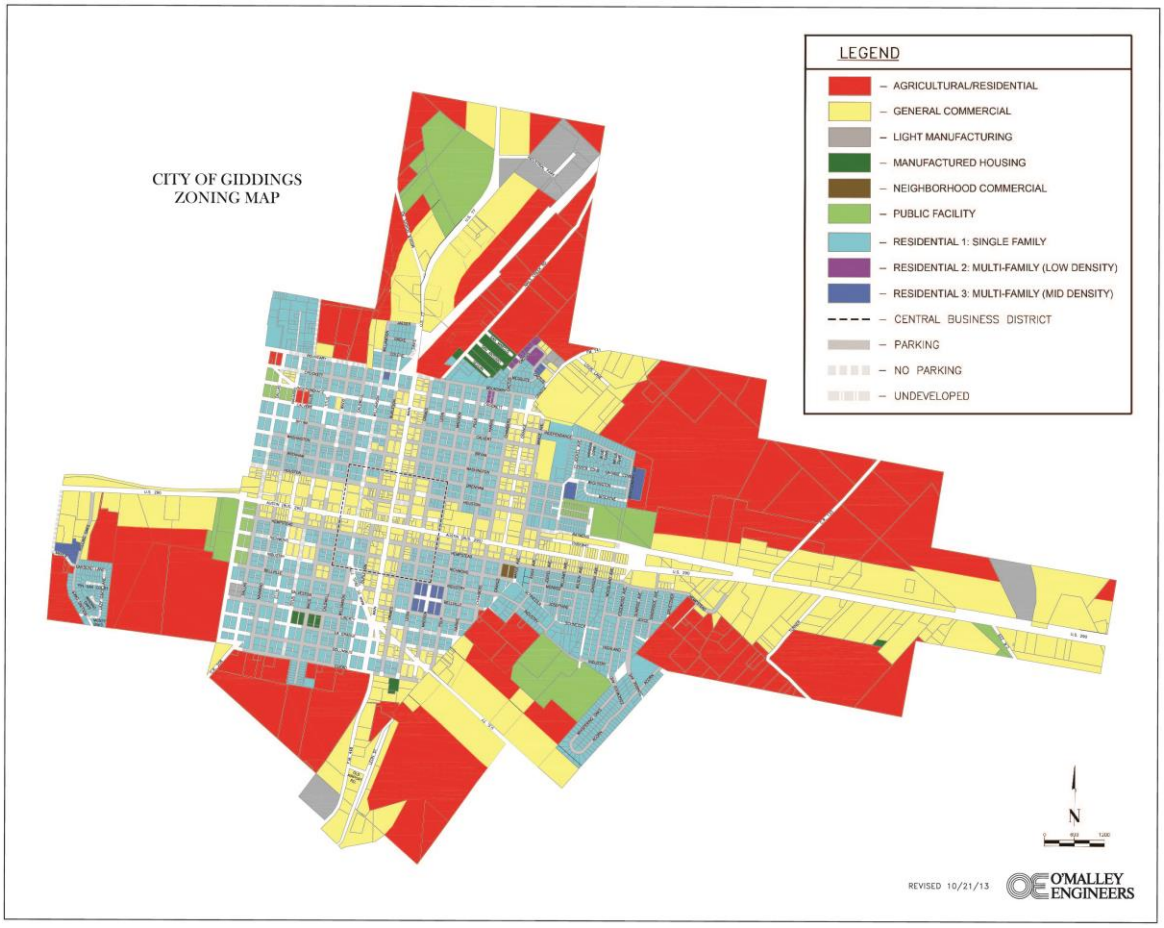


Figure 3. City of Giddings Zoning Map (Source: City of Giddings).

Note that at the time this plan was developed, the City of Giddings had not developed a future land use map.

2.2.2 City of Lexington Land Use

The city of Lexington has no land use designations within its city limits. Each development type is considered on a case-by-case basis by the city council. As such, no current or future land use map has been developed for the City of Lexington.

2.3 Demographic Trends

2.3.1 Population

The demographic trends discussed in this chapter are based upon the baseline population and employment figures taken from the 2010 U.S. Census as this is the most recent and complete dataset available to researchers at the time the analysis was conducted. Population data from the U.S. Census Bureau were obtained for Lee County. In addition, population data for the neighboring and nearby counties of Bastrop, Caldwell, Hays, Lee, Fayette, Milam and Williamson as well as the state of Texas were obtained in order to provide a comparison of current and historical populations of the counties in the region. These data reflect the official population count for the county and are useful in the analysis of past and current growth trends. Table 1 shows the

1980 to 2010 population for Lee and other nearby counties, as well as for the state, along with the compound annual average growth in population by decade and for the 30-year period.

Table 1. Historic Population and Compound Annual Average Growth by Period for Bastrop, Caldwell, Hays, Lee, Travis, and Williamson Counties and Texas from 1980 to 2010 (Source: U.S. Census Data).

County	Population			
	1980	1990	2000	2010
Lee County	**10,952**	**12,854**	**15,657**	**16,612**
Caldwell County	23,637	26,392	32,194	38,066
Fayette County	18,832	20,095	21,804	24,554
Hays County	40,594	65,614	97,598	157,107
Bastrop County	24,726	38,263	57,733	74,171
Williamson County	76,521	139,551	249,967	422,679
Milam County	22,732	22,946	24,238	24,757
Texas	**14,229,191**	**16,986,510**	**20,851,820**	**25,145,561**
County	**Compound Annual Average Growth by Period**			
	1980-1990	1990-2000	2000-2010	1980-2010
Lee County	**1.60%**	**2.00%**	**0.60%**	**1.40%**
Caldwell County	1.10%	2.00%	1.70%	1.60%
Fayette County	0.70%	0.80%	1.20%	0.90%
Hays County	4.90%	4.00%	4.90%	4.60%
Bastrop County	4.50%	4.20%	2.50%	3.70%
Williamson County	6.20%	6.00%	5.40%	5.90%
Milam County	0.09%	0.55%	0.21%	0.3%
Texas	**1.80%**	**2.10%**	**1.90%**	**1.90%**

Compared to Caldwell, Hays, Bastrop, and Williamson Counties, Lee County's population growth has been fairly conservative over the period examined—between 1980 and 2010—especially during the period between 2000 and 2010. For each of the past three decades, the population in Lee County has been increasing at an annual rate of between 0.5 and 2.0 percent per year, a rate less than the state of Texas as a whole, and less than the growth experienced in the core urban counties of Hays, Caldwell, Williamson, and Bastrop. Comparatively, the growth in Lee County has been most similar to that of Fayette County, and greater than the growth experienced in Milam County. Figure 4 provides an illustration of the above counties' population growth between 1980 and 2010. Note that Williamson County has been omitted from Figure 4, as the total population and population growth are far greater than the other counties in Table 1.

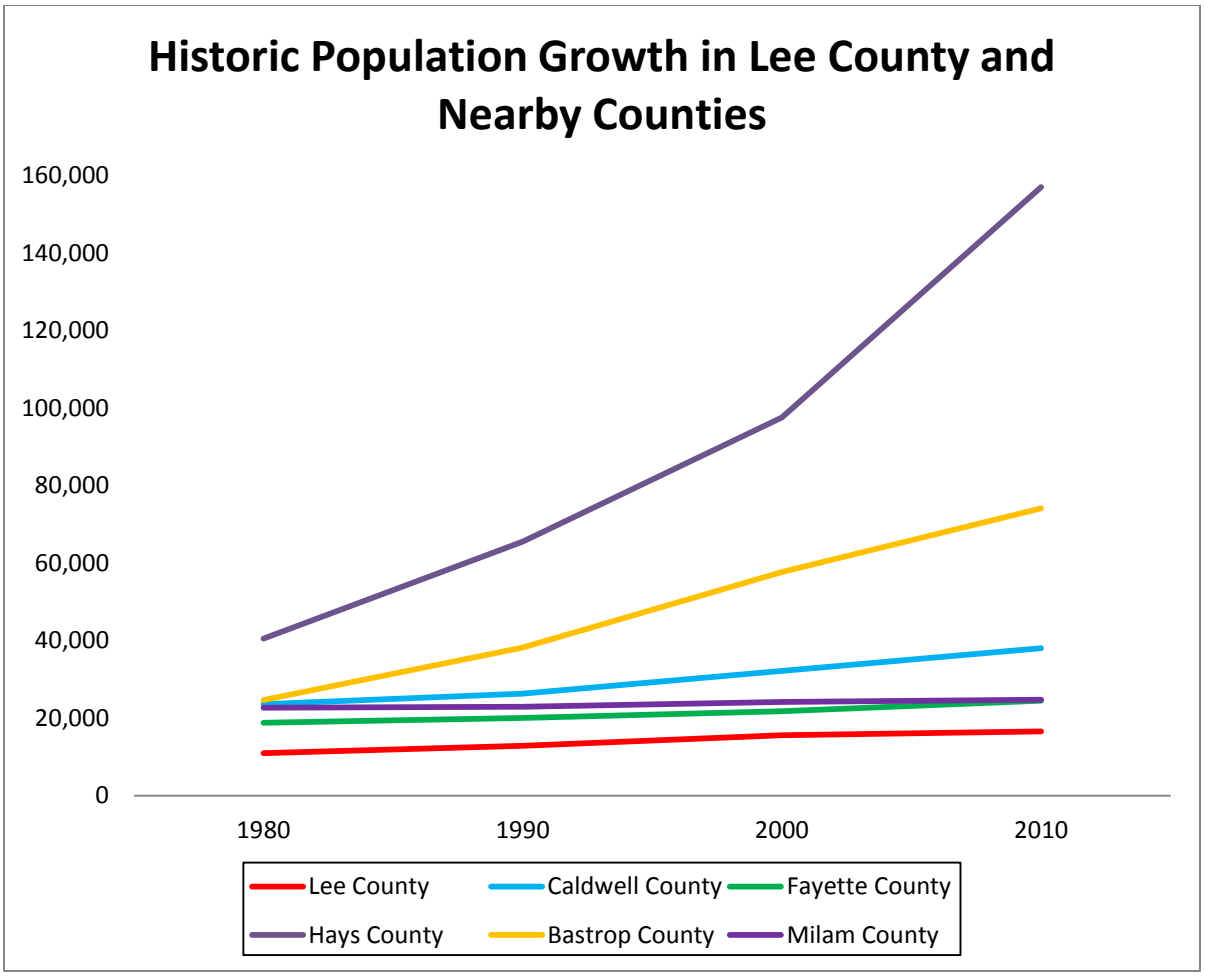


Figure 4. Historic Population Growth in Lee County and Nearby Counties (Source: U.S. Census Data).

As shown in Figure 4, Lee County's population growth has been fairly flat, especially in comparison to nearby counties such as Bastrop and Hays County. As mentioned previously, Lee County's population growth slowed between 2000 and 2010 compared to the period between 1980 and 2000.

The Texas A&M Transportation Institute developed population projections for Lee County. Historical data and forecasted population estimates can be seen in Figure 5, extending from the year 2005 until 2040. Under this projection, the population of Lee County will increase from 16,612 in 2010 to 20,581 in 2040.

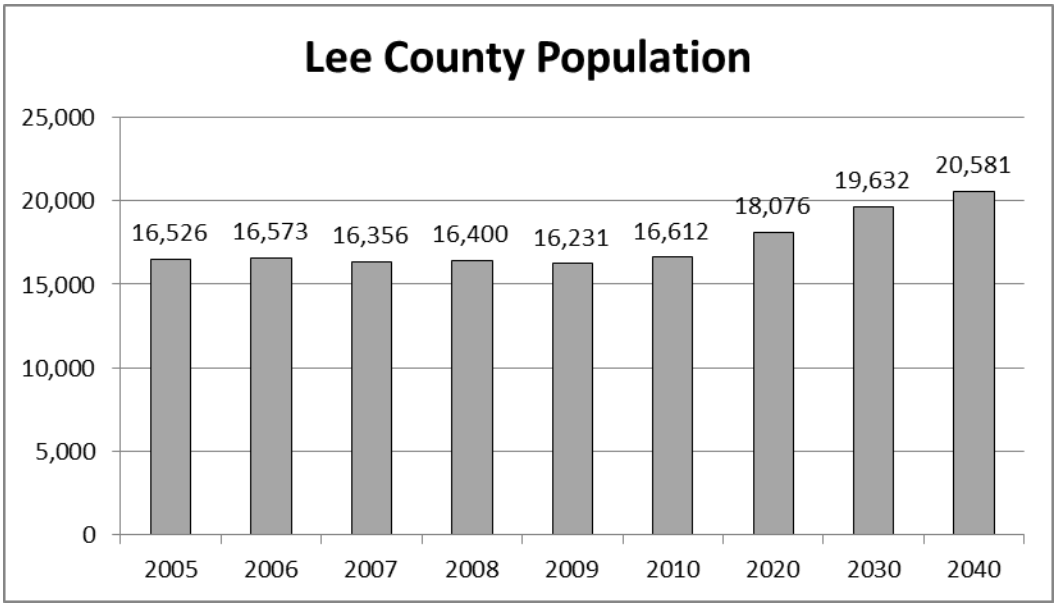


Figure 5. Lee County Projected Population Growth (Source: P. Ellis, Texas A&M Transportation Institute).

2.3.2 Employment

Employment projections were developed for Lee County. Future employment is dependent on numerous factors such as population, labor force, labor force participation, educational attainment, economic conditions, and technology changes. It is important to note that it is difficult to foresee, much less project, many of the factors that affect employment levels, but reasonable estimates of employment can be made based on population and analysis of past trends. The ratio of population to employment is effective in estimating the total future employment for an area. Historical data and forecasted employment estimates can be seen in Figure 6, extending from the year 2005 until 2040. It is anticipated that Lee County employment will grow from 5,771 total jobs in 2010 to 7,245 total jobs in 2040, equaling an estimated total of nearly 1,500 new jobs by the year 2040.

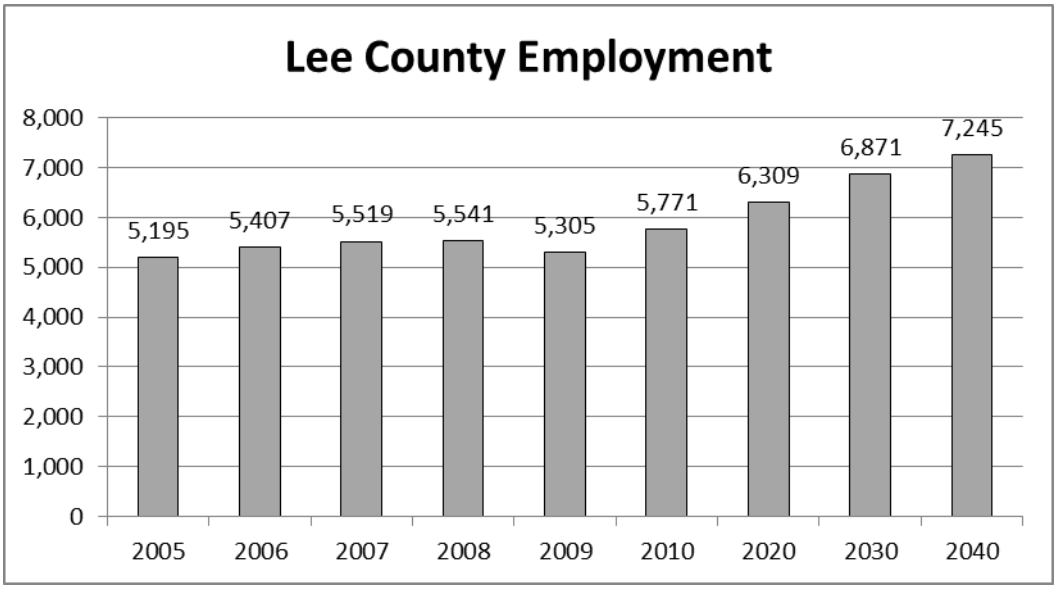


Figure 6. Lee County Employment Growth from 2005 to 2040 (Source: P. Ellis, Texas A&M Transportation Institute).

Table 2 provides the current and projected employment types in Lee County. Employment type is categorized into four groupings. The first group is basic employment, which is made up of industries that export goods from the region and bring wealth from outside. For example, industries such as mining, logging, and many large manufacturing companies are considered basic employers because their goods are shipped outside the location where they are sourced. In addition to basic, other employment within Lee County includes retail, service, and education. Based on projections by the Texas Workforce Commission, the basic employment sector will decrease slightly over the period of 2010–2040, with the retail and service sectors gaining a slight share of the total employment.

Table 2. Projected Employment Type in Lee County (Source: P. Ellis, Texas A&M Transportation Institute; Texas Workforce Commission).

	2010	2020	2030	2040
	Percentage of Employment by Type			
Basic	46.9%	46.0%	45.0%	44.0%
Retail	15.3%	15.5%	16.0%	16.5%
Service	27.9%	29.0%	29.5%	30.0%
Education	10.0%	9.5%	9.5%	9.5%
	Employment by Type			
Basic	2,705	2,902	3,092	3,188
Retail	882	978	1,099	1,195
Service	1,609	1,830	2,027	2,174
Education	575	599	653	688
Total	**5,771**	**6,309**	**6,871**	**7,245**

2.3.3 Commute to Work

American Community Survey (ACS) data provide insight into the commuting patterns of the residents of Lee County. The location of employment for Lee County residents who commute to work (excluding individuals who work at home or are unemployed) is shown in Figure 7. The bar chart represents the percentage of the Lee County workforce that commutes either within Lee County or to neighboring counties.

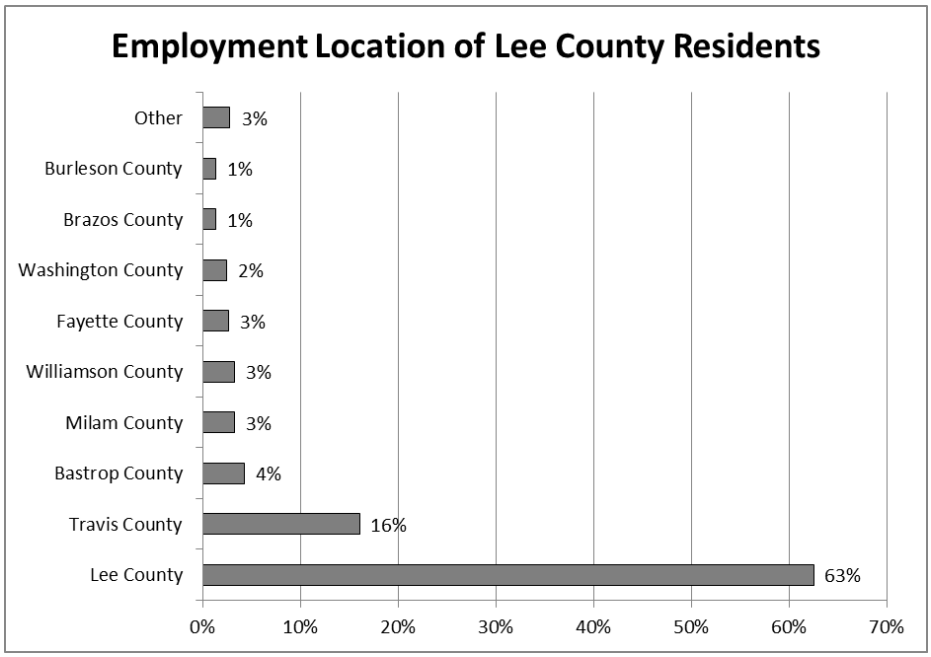


Figure 7. Employment Location of Lee County Residents as Percentage of Total Workforce (Source: American Community Survey Data).

As shown in Figure 7, the vast majority (63 percent) of Lee County residents who commute to work commute within Lee County. The location that captures the second highest percentage of Lee County commuters is significantly smaller, with 16 percent of Lee County workers traveling to Travis County for work.

ACS data also provide insight into travel time to work for commuters who reside within Lee County. Figure 8 illustrates the amount of time that Lee County residents spend traveling to work.

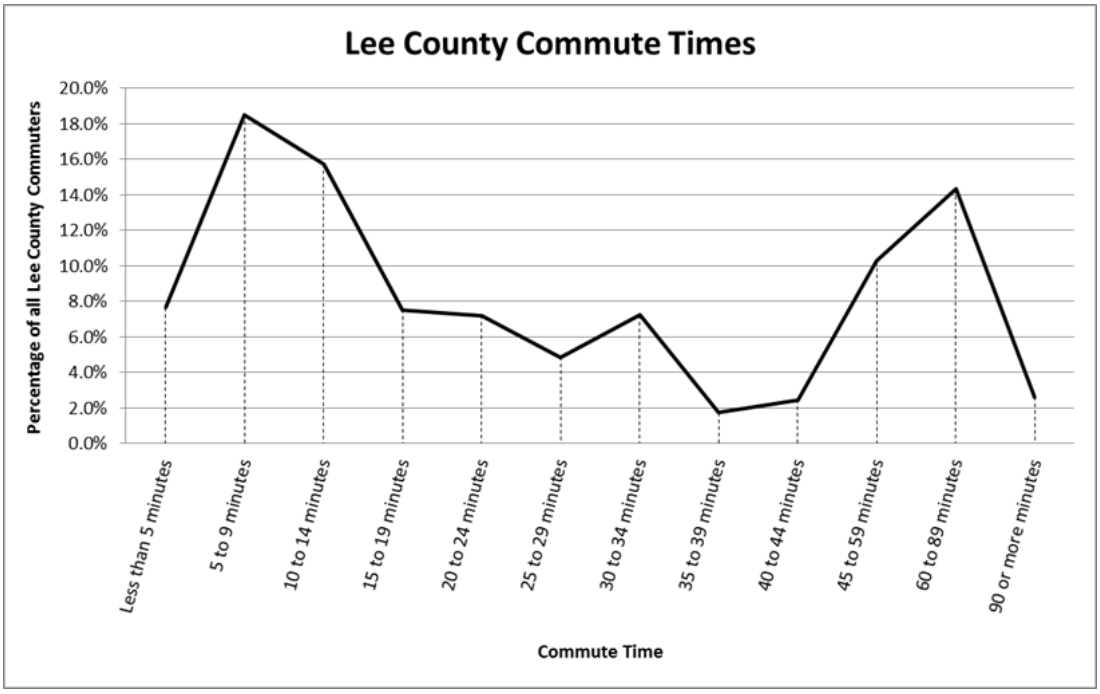


Figure 8. Commute Times as Percentage of Lee County Workforce (Source: American Community Survey Data).

As shown in Figure 8, approximately 40 percent of Lee County residents who commute to work travel less than 15 minutes to reach their destination. In addition, approximately 25 percent of Lee County residents who commute to work spend between 45 and 90 minutes traveling to their place of employment. This aligns with the data shown in Figure 7, which explains that the vast majority of Lee County residents who commute to their place of employment work within Lee County, which accounts for the majority of travel times less than 15 minutes. In addition, the next highest percentage of Lee County residents who travel to work commute to Travis County, which aligns with the proportion of commuters who spend 45 minutes to one and a half hours traveling to their place of employment.

2.3.4 Age

According to 2010 census data, approximately 6.5 percent of the population in 2000 was under the age of five, 22.5 percent was of school age (ages five through 19), 55.2 percent was of adult employment age (20 through 64), and 15.8 percent was of retirement age (65 and older).

Figure 9 shows each age group (shown as five-year intervals) as a percentage of the total population in Lee County.

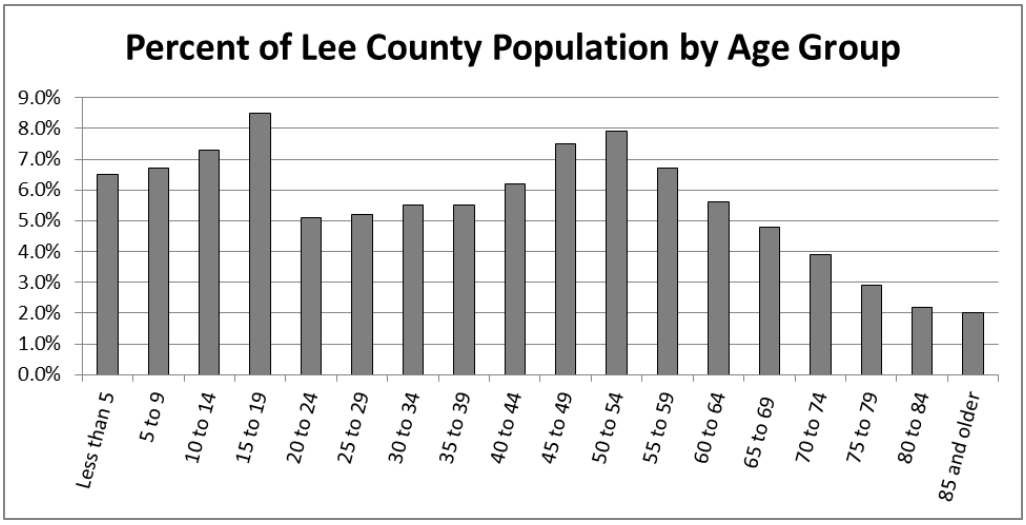


Figure 9. Lee County Population by Percent Age Group (Source: U.S. Census Data).

As shown in Figure 10, the median age in Lee County is 39.1, according to 2010 U.S. Census data. Figure 10 also provides the median age for all of the rural counties in the CAPCOG region (the CAPCOG region includes Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, and Williamson Counties), as well as the median age for the entire CAPCOG region, including the urbanized areas. At 39.1, the median age in Lee County is approximately six years younger than the median age of all rural counties in the CAPCOG region (45.2). When compared to the entire CAPCOG region, including the urban cores, the median age in Lee County is approximately six years older than the median age of the entire region.

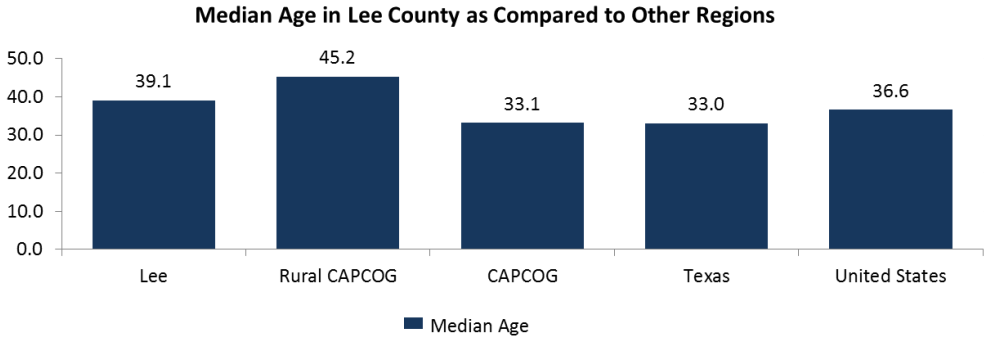


Figure 10. Median Age in Lee County Compared to Other Regions (Source: 2010 U.S. Census Data/CAPCOG).

2.3.5 Schools

There are three independent school districts within Lee County: Giddings ISD, Lexington ISD, and Dime Box ISD. A small portion of the northwest corner of Lee County falls within the jurisdiction of Elgin ISD, in neighboring Bastrop County. Figure 11 shows the boundaries of each of the three ISDs in Lee County as well as the small portion of Elgin ISD that is within Lee County.

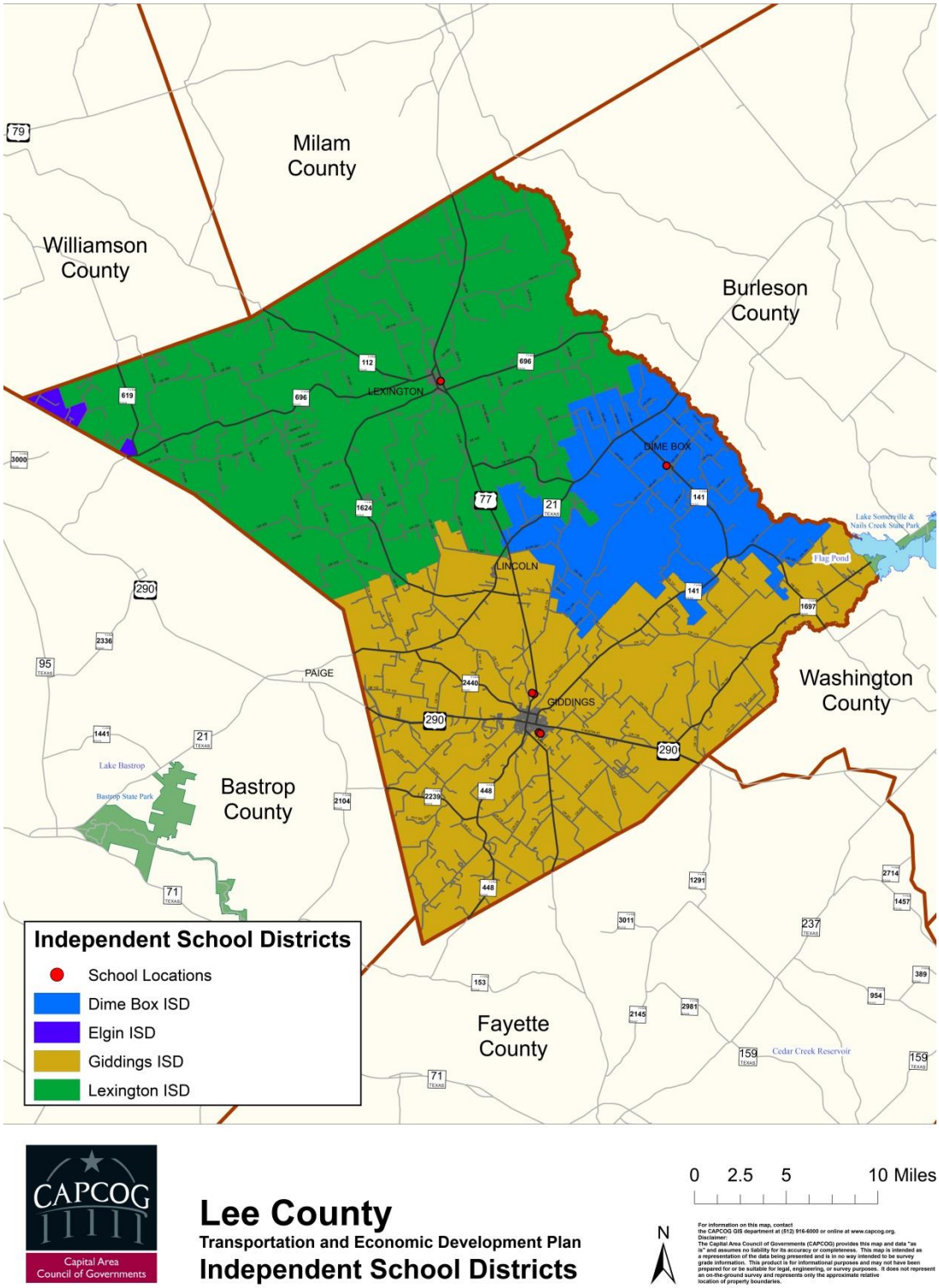


Figure 11. School District Boundaries within Lee County (Source: Texas Education Association).

Decennial U.S. Census data were used to calculate the total number of children in Lee County that are school age (defined as between the ages of five and 19) in the years 1990, 2000, and 2010. Table 3 provides the aggregate total of all children who lived within Lee County and were

either enrolled in Giddings, Lexington, or Dime Box ISDs or otherwise educated, such as home or private schooled.

Table 3. Historical School Age Population within Lee County (1990, 2000, and 2010 Decennial Census Data).

School Year	1990	2000	2010
School Age Population (5-19)	4,162	5,079	4,824
Total Population	12,854	15,657	16,612
Percentage of Population that is School Age	**32.38%**	**32.44%**	**29.04%**

The Texas Education Agency (TEA) compiles annual enrollment numbers for children who attend ISDs within the state of Texas through the Academic Excellence Indicators System (AEIS). These data are often used by school districts, such as Giddings ISD, to determine trends in enrollment rates and to plan for future facilities. Table 4 provides the individual enrollment totals for each of the three ISDs in Lee County for the school years of 1989–1990, 1999–2000, 2009–2010, and the most recent year the data are available, 2013–2014.

Table 4. Lee County ISD Enrollment Figures (Source: Texas Education Agency).

School Year	1989 - 1990	1999 - 2000	2009 - 2010	2013 - 2014
Giddings ISD	1487	1760	1901	1931
Lexington ISD	809	994	919	887
Dime Box ISD	199	200	178	185
Total	**2495**	**2954**	**2998**	**3003**

As shown in Table 3, the total population in Lee County grew over the 20-year period between 1990 and 2010, yet the percentage of the population that was of school age remained consistent at 32 percent in both 1990 and 2000 and dipped slightly to 29 percent in 2010. As shown in Table 4 and Figure 12, which show the total enrollment of each ISD in Lee County in comparison with one another, the increase in the total number of school-aged children in Lee County is reflected in the increase in student enrollment in Lee County ISDs, most notably between the years of 1990 and 2000. As shown in both Table 4 and Figure 12, the majority of the increase in student enrollment has been in Giddings ISD (30 percent increase in enrollment between 1990 and 2014), whereas the Lexington school system has experienced a modest increase in enrollment (10 percent between 1990 and 2014), and Dime Box ISD has actually decreased in enrollment (−7 percent between 1990 and 2014).

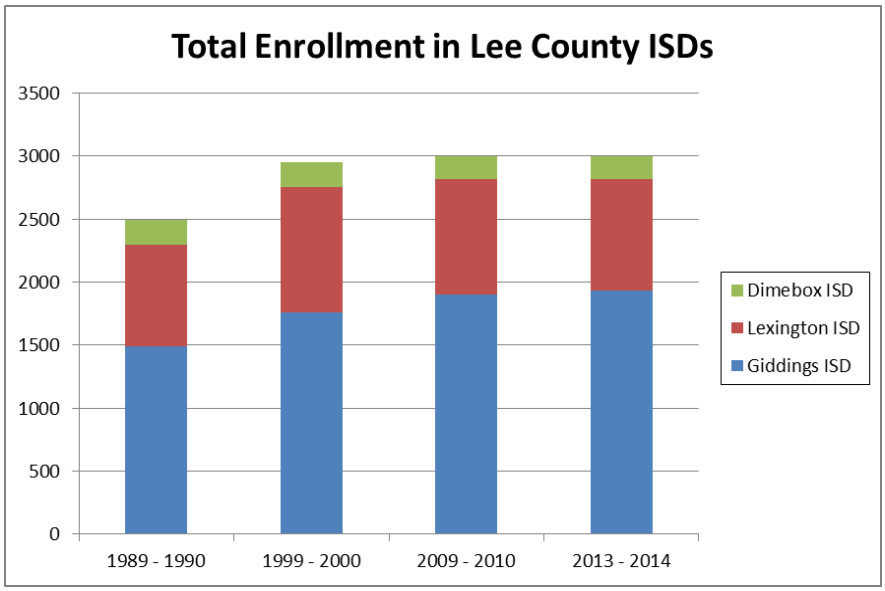


Figure 12. Total Enrollment in Lee County ISDs (Source: Texas Education Agency).

Figure 13 provides the historic enrollment of all Lee County ISDs between the school years of 1989–1990 and 2013–2014.

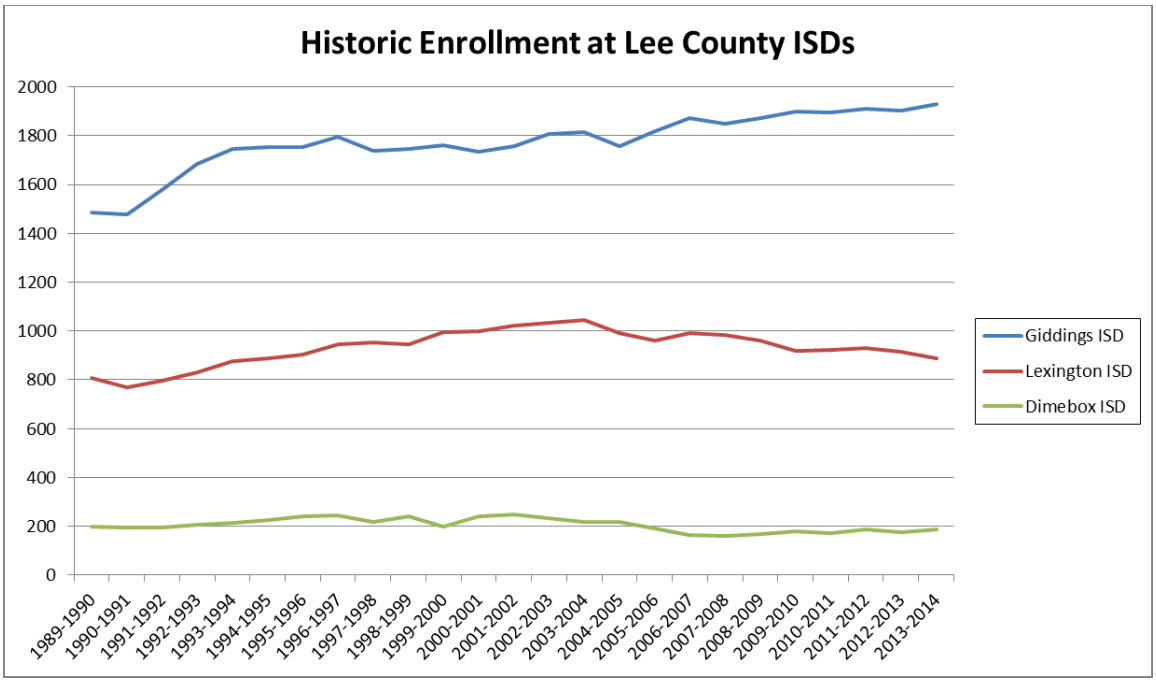


Figure 13. Historic Enrollment in Lee County ISDs (Source: Texas Education Agency).

Giddings ISD experienced significant growth in enrollment in the period between 1990 and 1997. During the next 10 years, the school district's growth in enrollment was fairly flat. In the period between 2007 and 2014, enrollment has continued to grow at a pace slightly lower than in the early '90s but more rapidly than in the interim period from 1997 to 2007. Overall, Giddings ISD is the only school district within Lee County that has seen sustained growth in enrollment throughout the analysis period.

Lexington ISD experienced a similarly significant rate of growth from the early 1990s into the mid-2000s, peaking at over 1,000 total students, but has consistently declined in enrollment during the subsequent nine years of the analysis period.

Over the 24-year analysis period, Dime Box ISD has decreased its total enrollment by only 14 students. While Dime Box ISD is the only school district in Lee County to experience negative growth overall, its enrollment has been extremely consistent (plus or minus 20 students) throughout the entire period of analysis.

2.4 Existing Socioeconomic Trends

This section reviews the race/ethnicity, income, and poverty level trends within Lee County.

2.4.1 Race/Ethnicity

According to the Texas State Data Center, the racial makeup of Lee County was 65 percent Anglo, 10.7 percent Black, 22.4 percent Hispanic, and 1.9 percent other in 2010, as shown in Figure 14. The Texas State Data Center also provides projections for the future population of race and ethnicity within the state of Texas. Based on Texas State Data Center projections, the race/ethnicity of the Lee County population between 2010 and 2040 will remain mainly Anglo, though the proportion of Anglo residents will shrink from 65 percent of the population to 56 percent of the population by the year 2040. However, the Hispanic population will grow from 22 percent of the population in 2010 to more than 33 percent of the population in 2040.

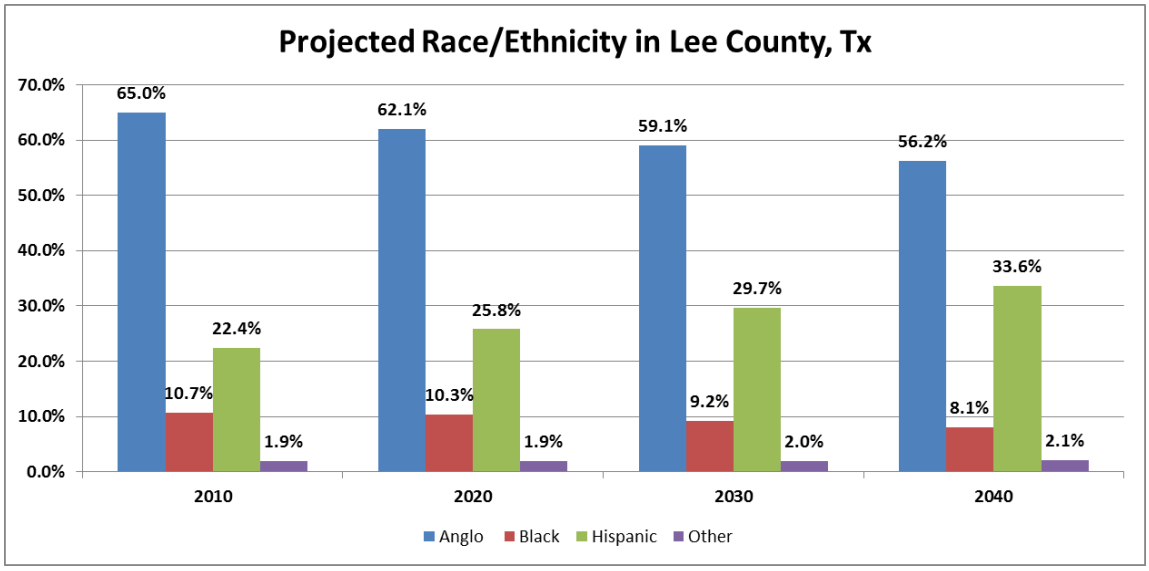


Figure 14. Projected Race/Ethnicity in Lee County, TX (Source: P. Ellis, Texas A&M Transportation Institute; Texas State Data Center).

Figure 15 shows the projected race/ethnicity for the state of Texas, according to the Texas State Data Center. It is notable that statewide, Hispanics will become the majority for the state of Texas by the year 2040 (50 percent), while Anglos will represent only about 31 percent of the total population. The projection for the state of Texas is in contrast to the projections for Lee County, where the Anglo population will remain the majority of the population.

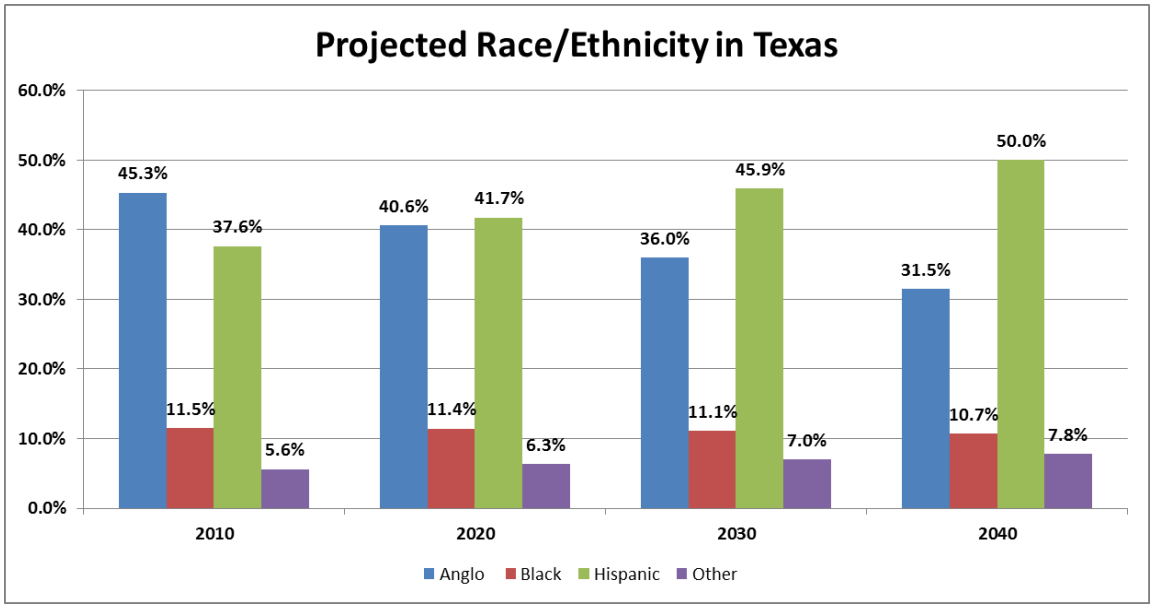


Figure 15. Projected Race/Ethnicity in Texas (Source: P. Ellis, Texas A&M Transportation Institute; Texas State Data Center).

2.4.2 Income

The median household income in 2010 for Lee County was $48,416, as compared to the state of Texas, which was slightly higher in 2010, at $49,646. Figure 16 provides the median income for both Lee County (shown in blue) and the state of Texas (shown in red) for the period of 1980 through 2010. It is notable that the median household income in Texas has remained relatively flat, while the median household income in Lee County has increased to more closely mirror the statewide median income. Note that the 1980 to 2000 incomes are from the decennial census and the 2010 median household income is from the ACS 2012 five-year estimates and then adjusted back to 2010 dollars.

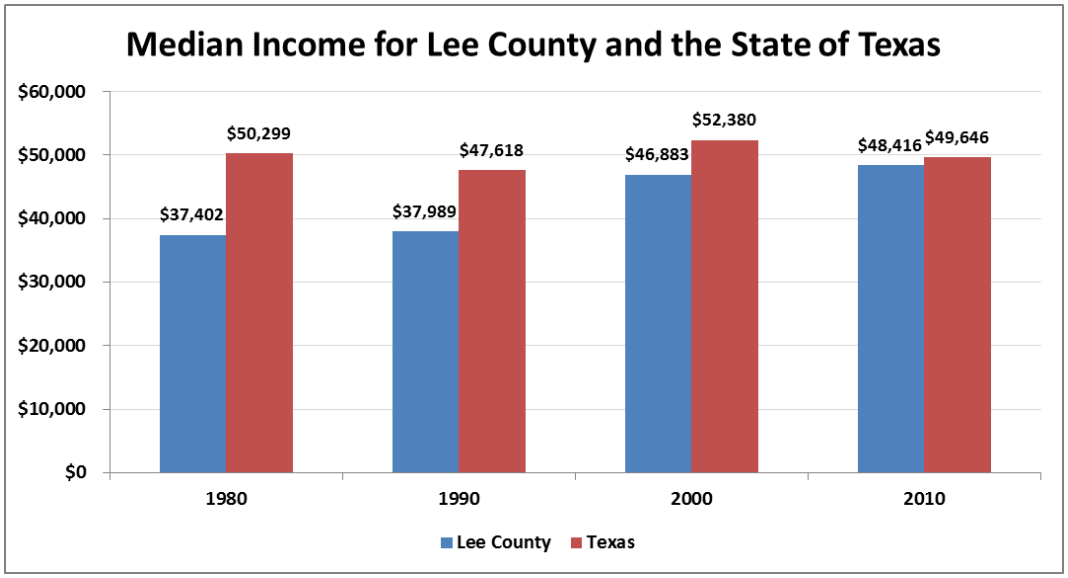


Figure 16. Median Income for Lee County and the State of Texas (Source: P. Ellis, Texas A&M Transportation Institute; U.S. Census Data).

2.4.3 Poverty Levels

U.S. Census data provide the percentage of the population that lives below the poverty level. Figure 17 provides the percentage of the population that lives below the poverty level for both the state of Texas as a whole and Lee County. The percentage of the population for Lee County and the state of Texas that lived below the poverty level in the year 2000 was taken from the 2000 decennial census. The percentage of the population for both geographies living below the poverty level in 2012 was taken from 2008–2012 American Survey Data. As shown in Figure 17, the percentage of the population that lived under the poverty level grew both within Lee County and in the state of Texas between the years 2000 and 2012. During this period, the percentage of the population living below the poverty line grew only 1 percent in Lee County, from 12 percent to 13 percent, as compared to a 3 percent increase throughout the state of Texas, which grew from 15 percent to 18 percent. It is important to note that the percentage of the population in Lee County living below the poverty line was 3 percent lower than the statewide average in 2000 and 5 percent lower than the statewide average in 2012.

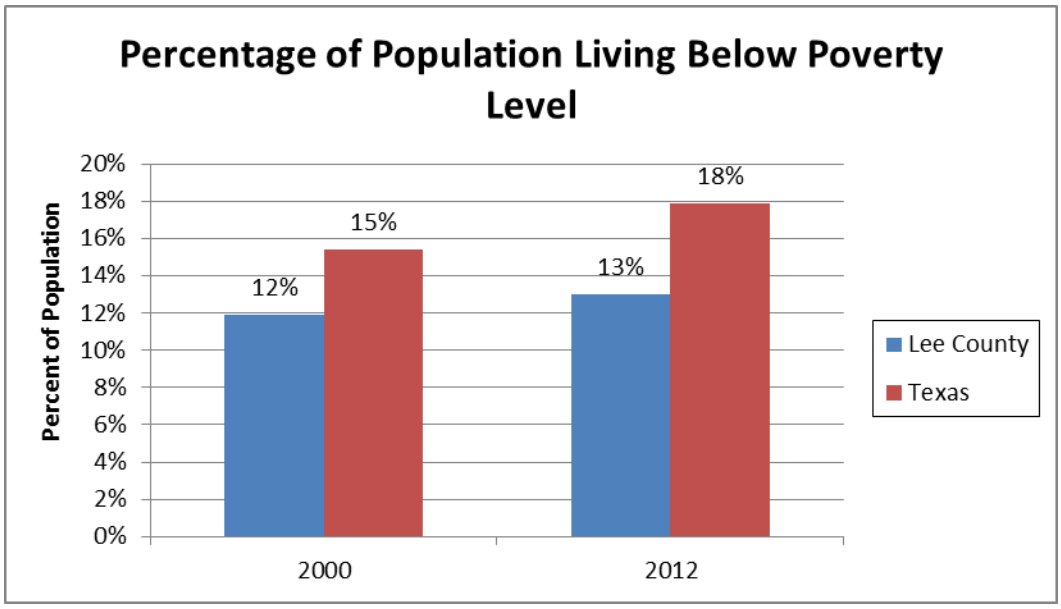


Figure 17. Percentage of Population Living Below the Poverty Line in Lee County and the State of Texas (Source: U.S. Census Data/American Community Survey Data).

2.5 Flooding

Periodic flooding occurs throughout the county along creeks, reducing roadway connectivity and creating safety hazards. The Federal Emergency Management Agency (FEMA) has identified areas of potential flood hazards, as seen in Figure 18.

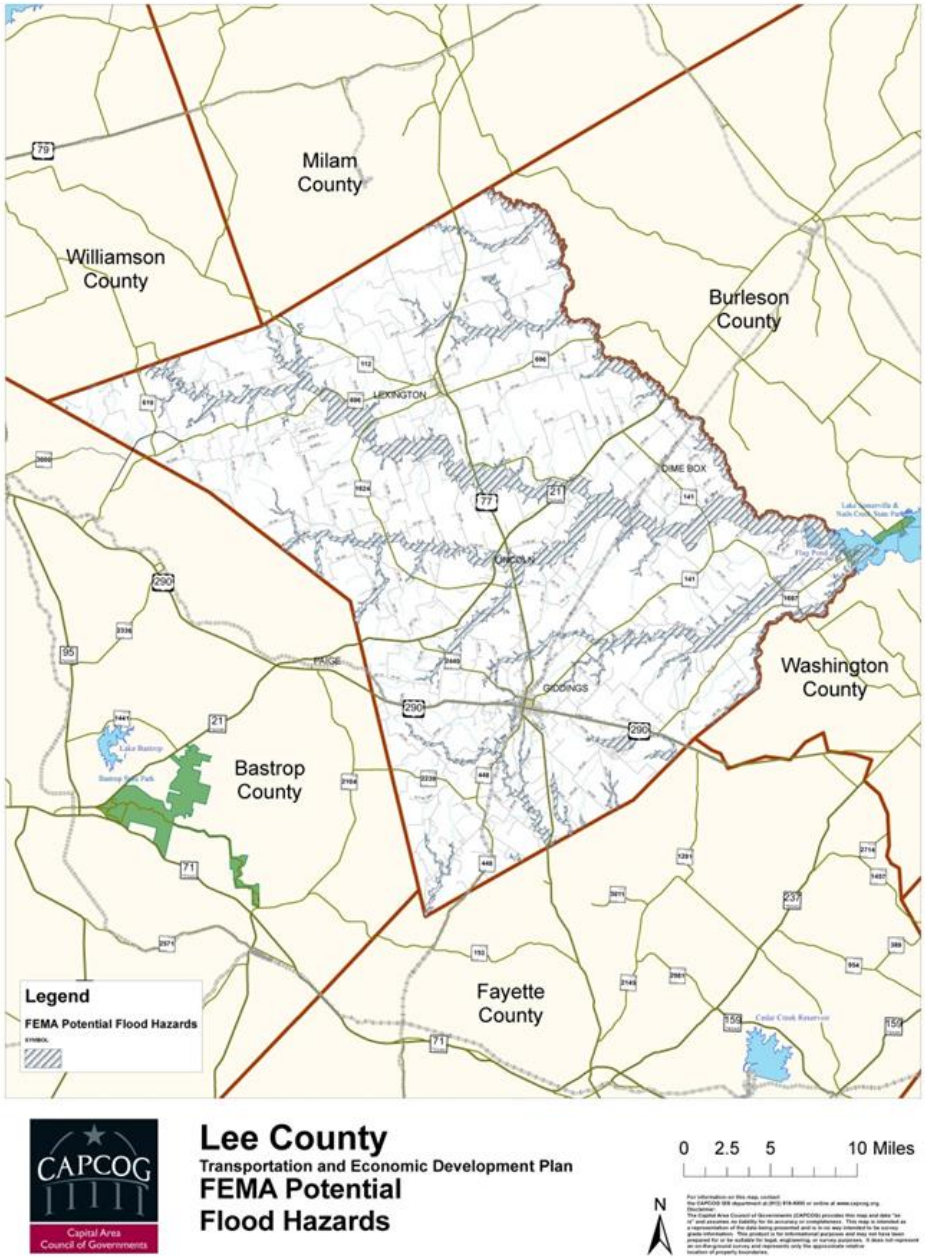


Figure 18. FEMA Potential Flood Hazards (Source: Texas Natural Resource Information System).

In consultation with the public, TxDOT, and local staff, the Lee County Transportation and Economic Development Plan considers several opportunities to improve existing low-water crossings, such as the bridge over Nails Creek in Lee County, as shown in Figure 19.

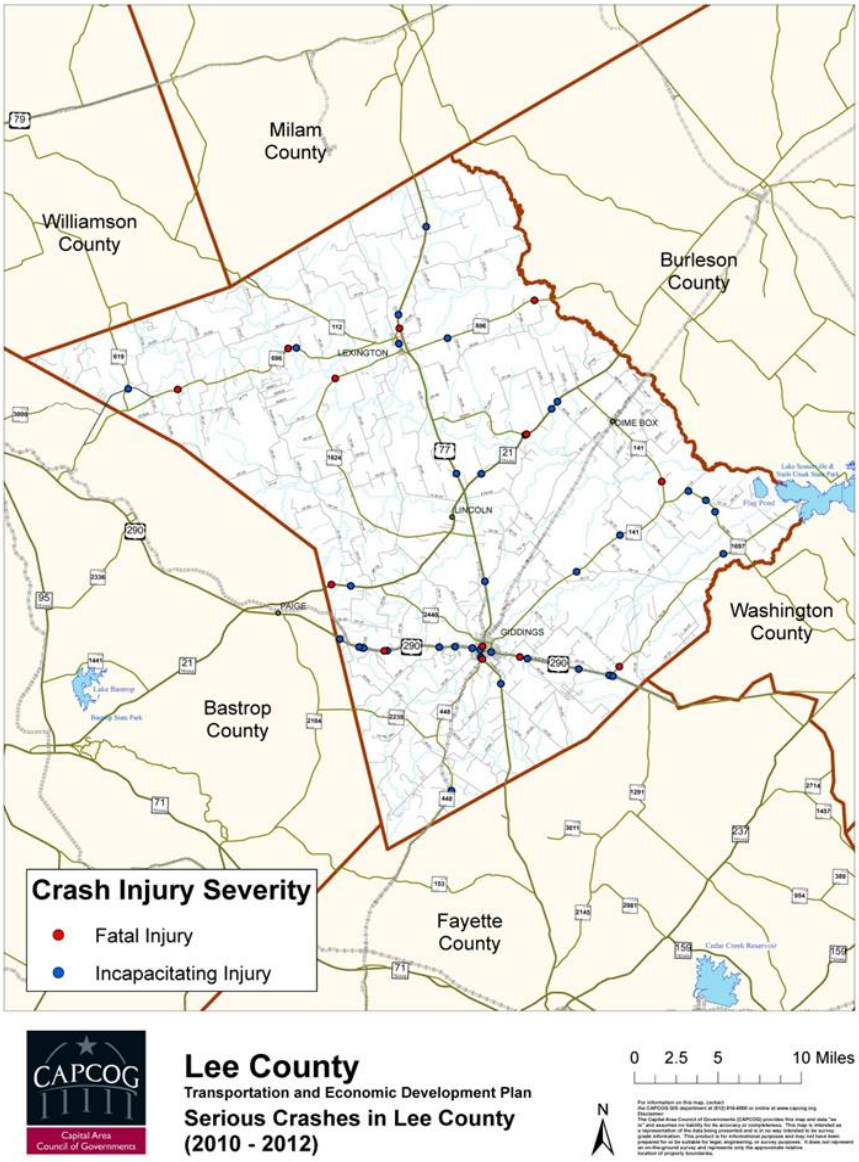
Figure 19. Bridge over Nails Creek, Lee County, Texas (Photo Credit: Texas A&M Transportation Institute).

2.6 Air Quality

In addition to population growth, traffic, and weather, air quality is an important shared condition that affects life throughout the region. Federal and state transportation planning guidance requires that the air quality impact of transportation-related emissions be considered in the state air quality planning process. Ground-level ozone is the primary air pollutant of concern in Central Texas. Lee County is currently in air quality attainment. However, if the ozone standard is lowered by the EPA within the next few years, the Austin area is likely to be designated as nonattainment, which may affect future development in Lee County.

2.7 Safety

Figure 20 and Figure 21 provide a graphic illustration of the injury and fatal crashes from 2010 to 2012 and the minor vehicle accidents from 2010 to 2012, respectively. Injury crashes commonly occur in the urban environments and along the major highways. Fatal crashes occur rarely, but they occur around population centers and highways.



CAPCOG
Capital Area Council of Governments

Lee County
Transportation and Economic Development Plan
Serious Crashes in Lee County (2010 - 2012)

0 2.5 5 10 Miles

N

Figure 20. Serious Crashes in Lee County 2010–2012 (Source: Texas Department of Transportation).

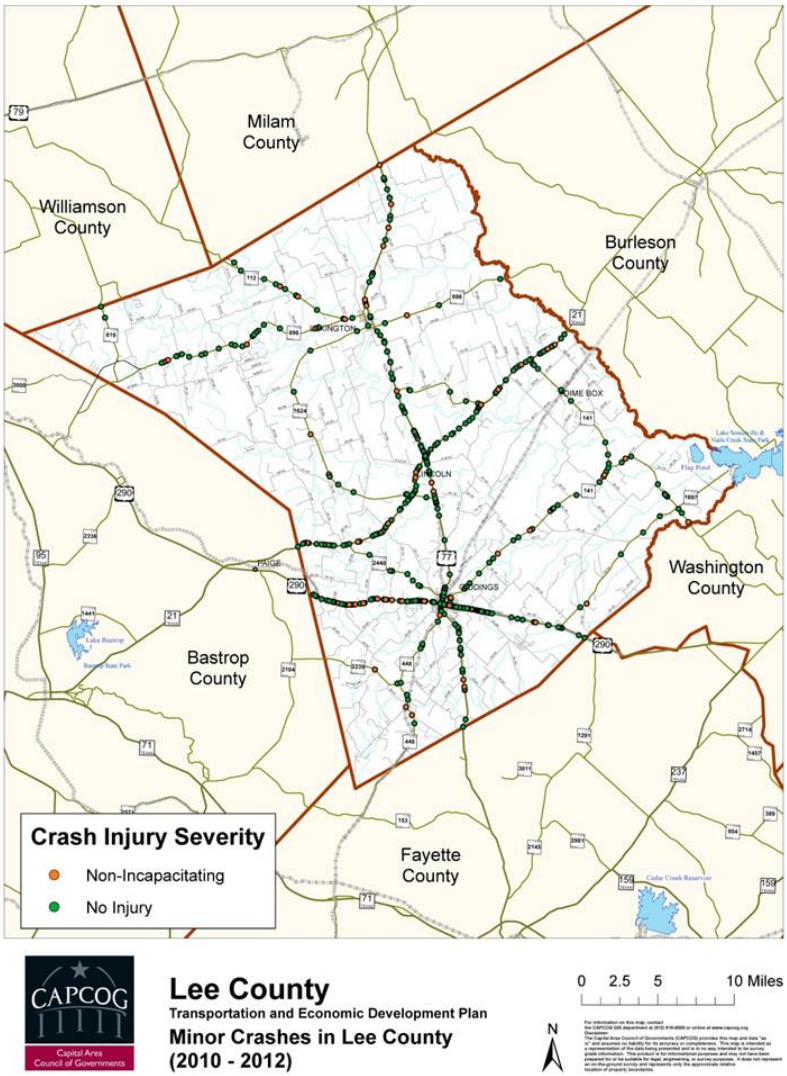


Figure 21. Minor Crashes in Lee County 2010–2012 (Source: Texas Department of Transportation).

2.8 Existing Transportation Conditions

This section provides an overview of Lee County's roadway networks, alternative modes, transit elements, and truck traffic.

2.8.1 Roadway Network

The roadway system in Lee County is provided and maintained by the state, the county, and Giddings and Lexington. It provides a network for people and goods to move through and within Lee County. Figure 22 is a map of the roadway network within Lee County. Roadways are classified as principal arterials, minor arterials, collectors, or ramps. Railroads within Lee County are also shown in Figure 22.

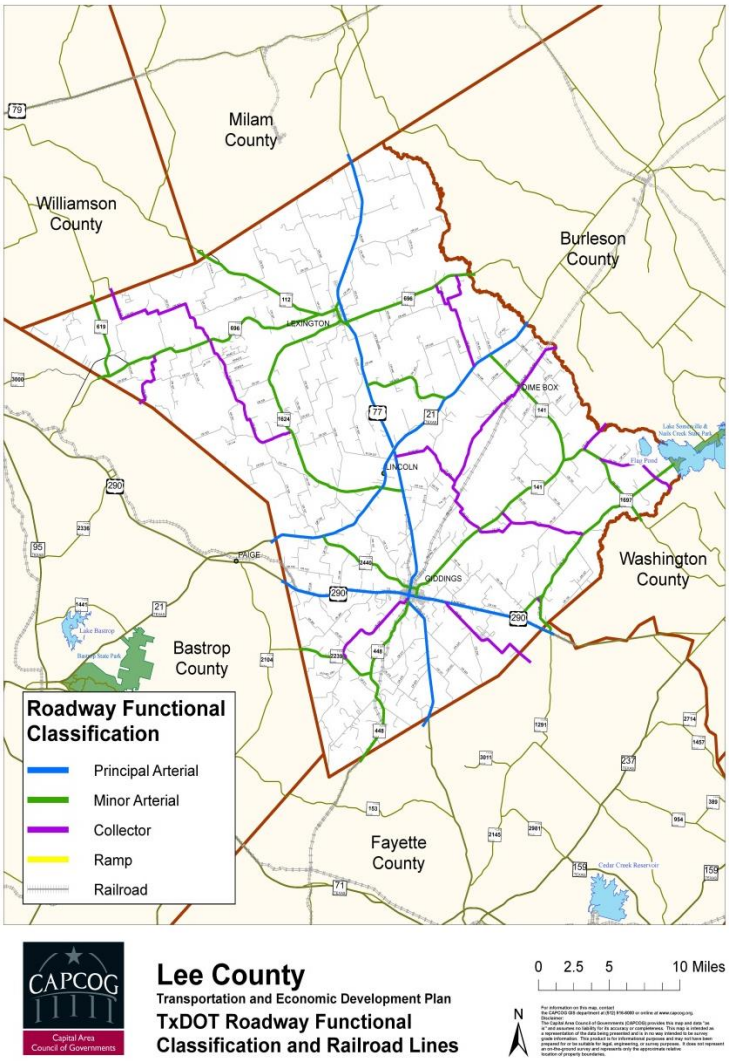


Figure 22. Lee County Roadway Network and Railroad Lines (Source: Texas Department of Transportation).

Figure 23 shows the average daily traffic volumes on the road network in Lee County for the year 2011. As expected, US 290 carries the most traffic in the county, with between 10,001 and 21,000 vehicles traveling on this road every day, on average. SH 77 and SH 21 also carry a large amount of traffic within Lee County, averaging between 4,000 and 10,000 vehicles per day.

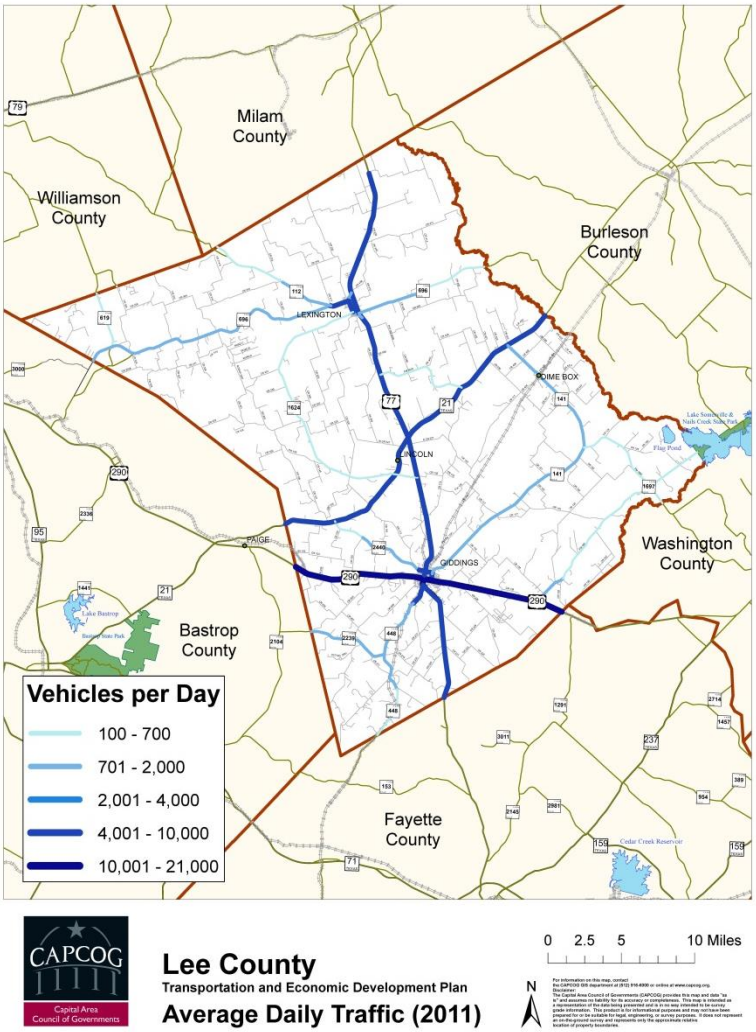


Figure 23. Average Daily Traffic in Lee County (2011) (Source: Texas Department of Transportation).

2.8.2 Typical Roadway Sections

Roadways are owned, designed, and maintained by several different entities within the county. Highways, labeled “US” and “RM” in this county, as well as several other designations, are the responsibility of TxDOT. TxDOT also has the responsibility of maintaining roads within the two state parks. County roads often include the prefix CR but usually also have a locally known name. City streets are generally those within city limits but not on the state highway system. Following are visual examples of typical roadway sections found in Lee County. In reality, widths and roadway geometry vary along the roadway.

Principal Arterial US 290 East of Giddings

US 290 is the principal roadway transecting Lee County. Connecting Houston, Austin, and points beyond, US 290 has seen increased usage as truck activity has grown in the region. In addition, population growth in the region has contributed to increased usage. The section of US 290 in Lee County just east of Giddings is an example of a principal arterial within the county. This section of US 290 has four 13-foot travel lanes with wide shoulders (5 feet on the inside and

10 feet on the outside, with a large center median (60 feet) separating opposing traffic. Figure 24 and Figure 25 provide a section drawing and photograph of US 290 east of Giddings.

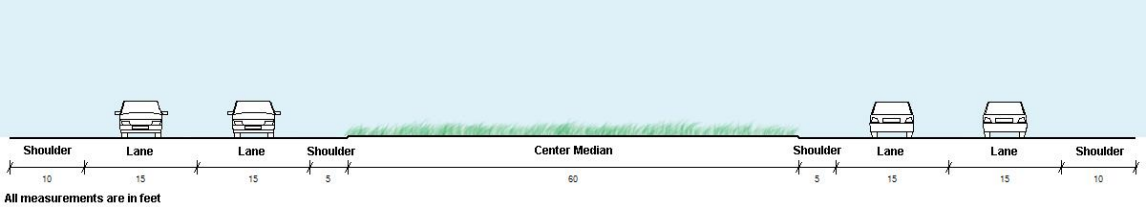


Figure 24. Section Drawing of US 290 East of Giddings (Source: Texas A&M Transportation Institute).

Figure 25. Photo of US 290 East of Giddings (Source: Google Earth).

Principal Arterial US 77 through Lexington

US 77 is another example of a principal arterial in Lee County that accommodates high-speed traffic through the region. US 77 is oriented north-south and connects Giddings to Lexington and Rockdale in neighboring Milam County. Though US 77 carries a large share of through traffic, the stretch of the roadway through Lexington provides area citizens with access to local businesses and residences. This section of US 77 has four 12-foot travel lanes with wide (8-foot) shoulders on the outside and a 15-foot center turning lane for traffic accessing local businesses and side streets. Figure 26 and Figure 27 provide a section drawing and photograph of US 77 through Lexington.

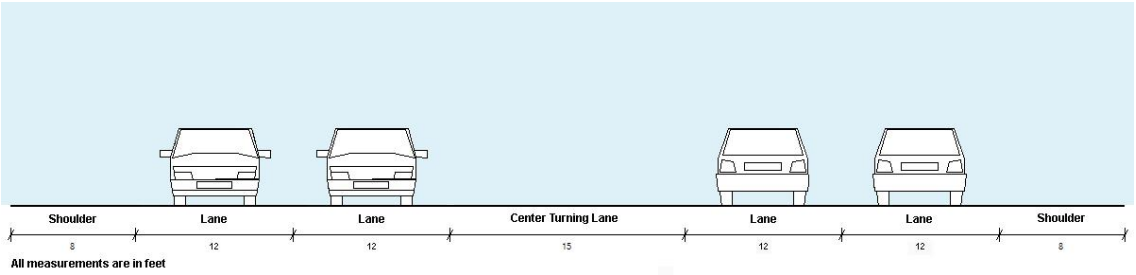


Figure 26. Section Drawing of US 77 through Lexington (Source: Texas A&M Transportation Institute).

Figure 27. Photograph of US 77 through Lexington (Source: Google Earth).

Principal Arterial Rural SH 21 near Lincoln

SH 21 is an example of a principal arterial in Lee County that carries traffic east and west through Lee County. Wide lanes and recent surface improvements facilitate truck and commuter traffic. Additionally, SH 21 provides local access to the unincorporated towns of Lincoln and Dime Box. The section of SH 21 shown in the section drawing and photograph in Figure 28 and Figure 29, respectively, is located near the intersection of SH 21 and US 77 and the town of Lincoln and has four 13-foot travel lanes and small (5-foot) shoulders on the outside.

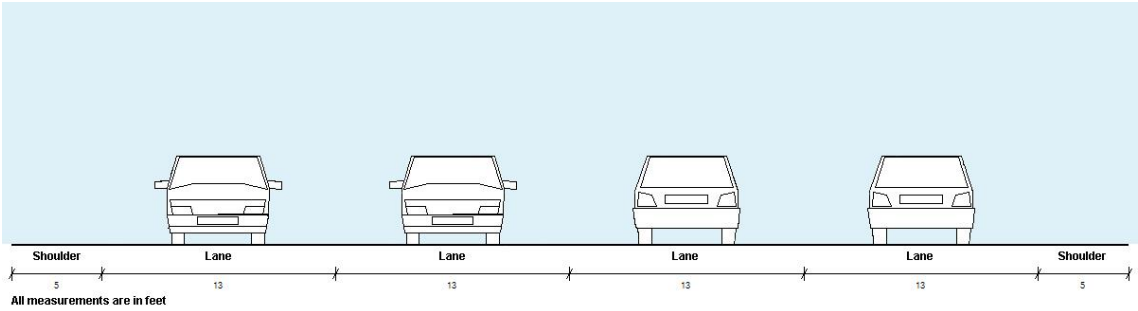


Figure 28. Section Drawing of SH 21 near Lincoln (Source: Texas A&M Transportation Institute).

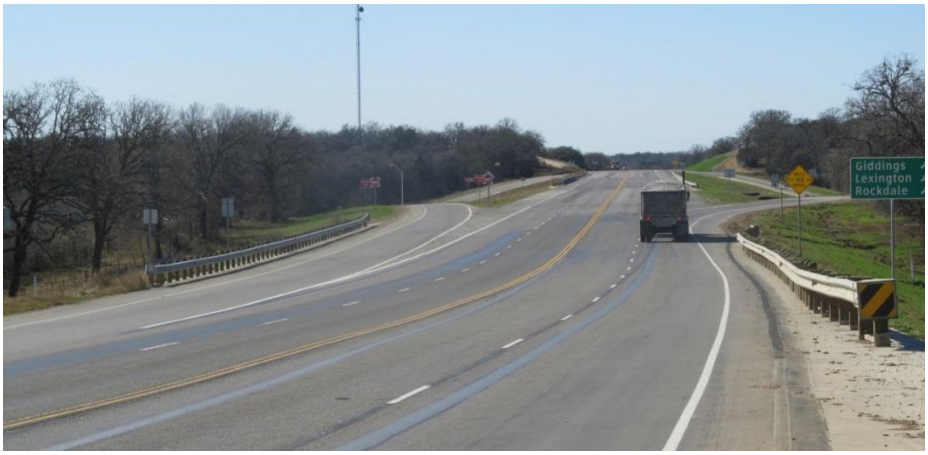


Figure 29. Photograph of SH 21 near Lincoln (Source: Texas A&M Transportation Institute).

Intersection of US 290 and US 77 in Downtown Giddings

Giddings is home to some of the most historic buildings in both Lee County and Central Texas. These building now house several businesses in a growing downtown commercial district, including cafes and coffee shops. At the center of downtown Giddings is the intersection of US 290 and US 77. Through downtown Giddings, both roadways provide access for regional travelers heading north-south and east-west through Lee County, as well as access to local businesses and residences. Figure 30 provides a detailed section view of US 290 at the intersection of US 290 and US 77. The roadway features four 12-foot travel lanes, a 12-foot turning lane for traffic turning north onto US 77 from eastbound US 290, a 10-foot shoulder on the eastbound side of US 290 that is used for right-turning traffic (onto southbound US 77), and parallel parking (10 feet) on the westbound side of US 290. This section of US 290 (also known as W. Austin Street in Giddings) also features sidewalks on either side that are approximately 10 feet wide and abut local businesses. Figure 31 provides a photograph of the intersection of US 290 and US 77 in downtown Giddings.

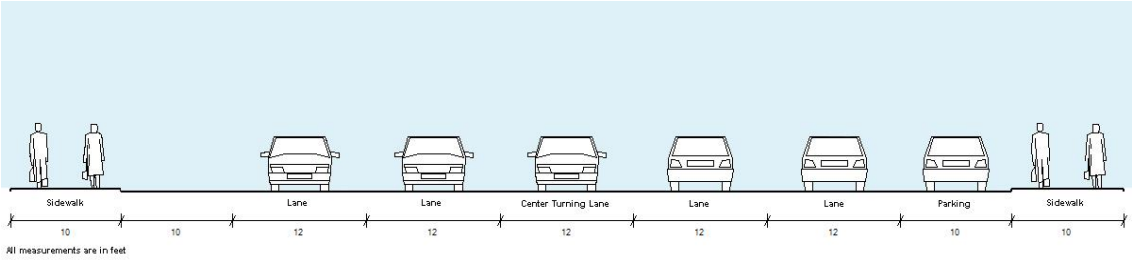


Figure 30. Section Drawing of US 290 in Downtown Giddings (Source: Texas A&M Transportation Institute).

Figure 31. Photograph of Intersection of US 290 (facing west as shown on left) and US 77 (facing north as shown on right) in Downtown Giddings (Source: Google Maps).

2.8.3 Alternative Modes

Lee County relies upon a diverse network of transportation infrastructure. This section looks at the transit elements and truck traffic existing in the county.

Transit Element

As Lee County continues to grow, the level and type of transportation service historically provided by the Capital Area Rural Transportation System (CARTS) will need to change and grow to meet the needs of the growing population.

To increase the efficiency of the transportation system, public transit vehicles can be utilized to accommodate many people who are taking similar routes to a common destination, as well as those who are unable to drive, walk, or bicycle to their destinations. Paratransit is a flexible alternative to traditional fixed-route/scheduled transit and utilizes vehicles such as shuttle buses, vans, and taxis. Paratransit service ranges from those allowing pick-up/drop-off along a defined route by request to those offering on-demand curb-to-curb service within a given geographical area.

Capital Area Rural Transit Service

CARTS is a rural transit district encompassing a 7,200-square-mile region surrounding Austin. The district is a geographic combination of a rapidly growing metropolitan center surrounded by rural, suburban, and exurban communities. The communities in the CARTS district include rapidly urbanizing rural to metropolitan transition areas.

Demand-response service is available to Lee County. CARTS offers prearranged service to the public for intercity or inter-county travel, as well as travel outside of Lee County. CARTS services are offered Monday through Friday from 8:00 AM to 4:00 PM. Route information can be accessed at the CARTS website: www.ridecarts.com. Figure 32 displays the Lee County CARTS transit schedule. Between September 2012 and August 2013, CARTS provided a total of 4691 passenger trips for Lee County.

The Regional Transit Coordination Committee (RTCC), an effort covering the 10-county capital region and including multiple regional partners, is studying how to create a more seamless transit

network for all residents. The eventual product of the study will be an integrated ride-finding system and enhancements to service in areas that show demonstrated needs. Lee County is one of the counties within the RTCC study area.

CARTS

Effective date January 1, 2008

CAPITAL AREA RURAL TRANSPORTATION SYSTEM

CARTS RIDE LINE 1-800-456-RIDE (7433) TOLL FREE

LEE COUNTY

RIDES ARE SCHEDULED MONDAY-FRIDAY FROM 8:00 AM TO 4:00 PM / 24 HOURS ADVANCE NOTICE RECOMMENDED
LOCAL VEHICLES SERVE NEIGHBORING TOWNS SO LOCAL RIDE TIMES MAY VARY

Community Served	Destination	Route Day	Departure	Return	One-Way Fare	Reduced Fare*
GIDDINGS	**Local Service**	**Monday thru Friday**	**8:00a**	**4:30p**	**$2.00**	**$1.00**
	To: Elgin	1st & 3rd Tuesday	8:15a	4:00p	$6.00	$3.00
	To: Austin	1st & 3rd Tuesday	8:15a	3:00p	$6.00	$3.00
	To: Brenham	1st & 3rd Wednesday	8:15a	2:00p	$6.00	$3.00
	To: La Grange	Monday	1:30p	3:30p	$6.00	$3.00
	To: Paige	Tuesday	8:30a	1:30p	$4.00	$2.00
LEXINGTON	To: Rockdale	1st Friday	8:30a	12:00p	$6.00	$3.00
	To: Elgin	1st & 3rd Tuesday	7:45a	4:00p	$6.00	$3.00
	To: Austin	1st & 3rd Tuesday	7:45a	3:00p	$6.00	$3.00
	To: Brenham	1st & 3rd Wednesday	8:30a	2:00p	$6.00	$3.00
	To: Giddings	Thursday	8:30a	2:00p	$4.00	$2.00
DIMEBOX	To: Rockdale	1st Friday	8:30a	12:00p	$6.00	$3.00
	To: Elgin	1st & 3rd Tuesday	7:45a	4:00p	$6.00	$3.00
	To: Austin	1st & 3rd Tuesday	7:45a	3:00p	$6.00	$3.00
	To: Brenham	1st & 3rd Wednesday	8:30a	2:00p	$6.00	$3.00
	To: Giddings	Thursday	8:30a	2:00p	$4.00	$2.00
DOAK SPRINGS	To: Rockdale	1st Friday	8:30a	12:00p	$6.00	$3.00
	To: Elgin	1st & 3rd Tuesday	7:45a	4:00p	$6.00	$3.00
	To: Austin	1st & 3rd Tuesday	7:45a	3:00p	$6.00	$3.00
	To: Brenham	1st & 3rd Wednesday	8:30a	2:00p	$6.00	$3.00
	To: Giddings	Thursday	8:30a	2:00p	$4.00	$2.00

*Reduced Fare: Seniors, Persons with Disabilities, and Children Under 12

Figure 32. CARTS Schedule for Lee County (Source: CARTS).

Pedestrian and Bicycle

Since vehicle parking is not always at the front door of a destination, every trip includes at least a short journey as a pedestrian. Both Giddings and Lexington's downtown districts have many conditions conducive to pedestrian and bicycle travel, including short block lengths, sidewalks, and crosswalks. In addition, the state highway system includes wide shoulders that provide comfortable bicycle connections in some areas.

Bicyclists use the roadway network for work commuting, school trips, shopping, and social purposes. When striped shoulders or bike lanes are provided, they increase the predictability of bicycle and vehicle placement in the lanes, increasing the safety of passing events. TxDOT is currently working on a bicycle plan for the 11-county Austin District, which includes Lee County. Planned improvements of bicycle facilities are part of road widening projects, where wider road shoulders allow for bicyclists to safely use the roadway infrastructure without impeding traditional vehicular use.

Truck Traffic

It is important that industrial sites, which affect the economic well-being of the community, are served by appropriate roadways that are designed, constructed, and designated for truck use. Large trucks may hinder the operation of local roads built for the use of passenger vehicles. Heavier vehicles cannot maneuver and stop/start with the same agility as passenger vehicles, thereby reducing traffic flow and causing damage to the existing pavement. In addition, there are safety concerns associated with large industrial traffic mixing with local traffic.

Figure 33 illustrates truck traffic as a percentage of the average daily traffic (shown in Figure 23) in Lee County. US 77 has the largest proportion of trucks to passenger vehicles within Lee County. It is important to note that the heaviest amount of total traffic in the county is on US 290, so while the largest proportion of trucks to cars is on US 77, there is likely still a higher total number of trucks traveling on US 290.

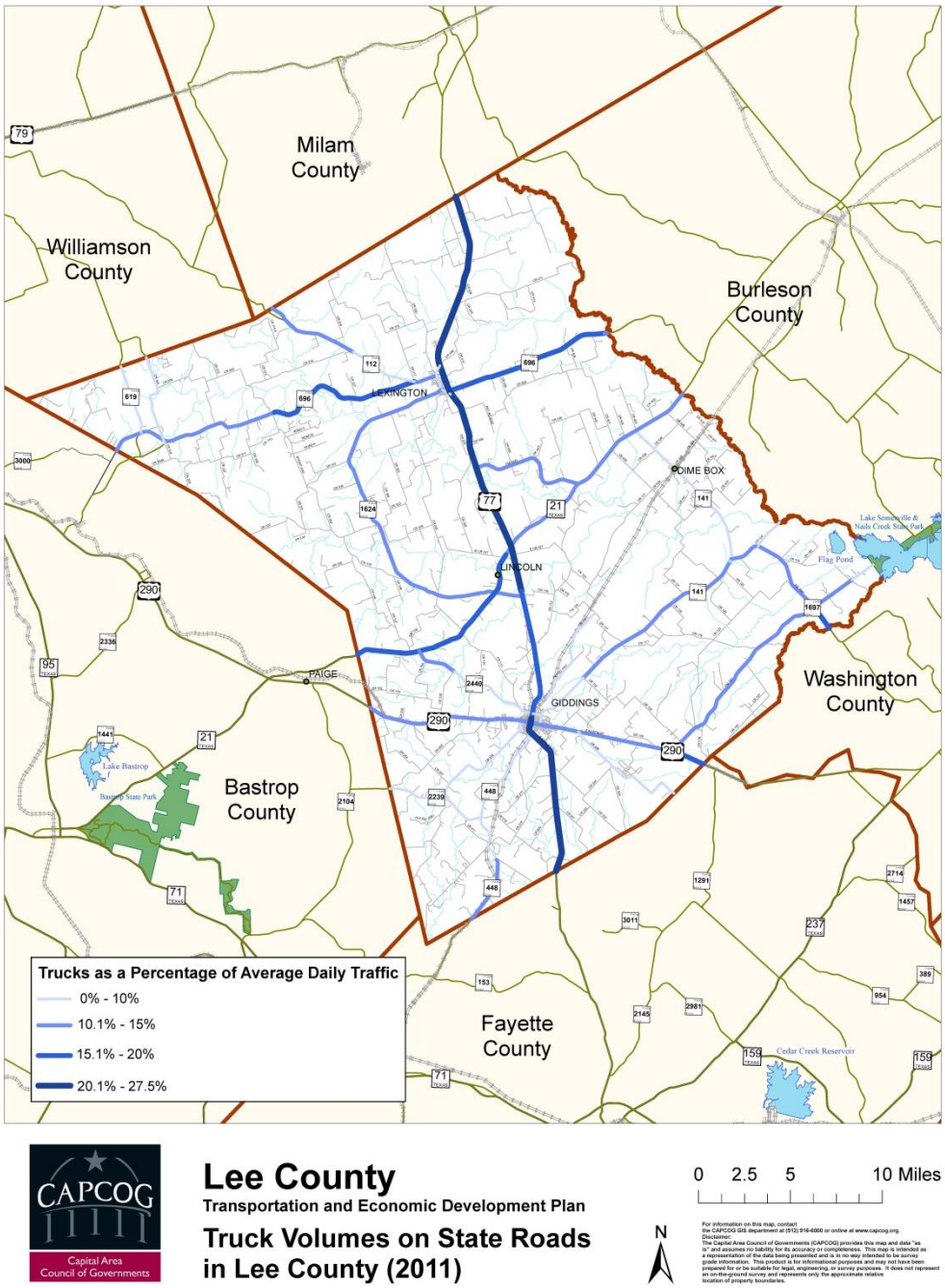


Figure 33. Truck Volumes on State Roads in Lee County (2011) (Source: Texas Department of Transportation).

Pipelines, Air Travel, and Railroad

In addition to alternative modes of transportation such as transit, pedestrians and bicycles, and truck traffic, railroad, air travel, and pipelines that carry goods to, from, and through Lee County are also an important part of the transportation infrastructure. Figure 34 provides a map of the pipelines, airports, and railroads in Lee County.

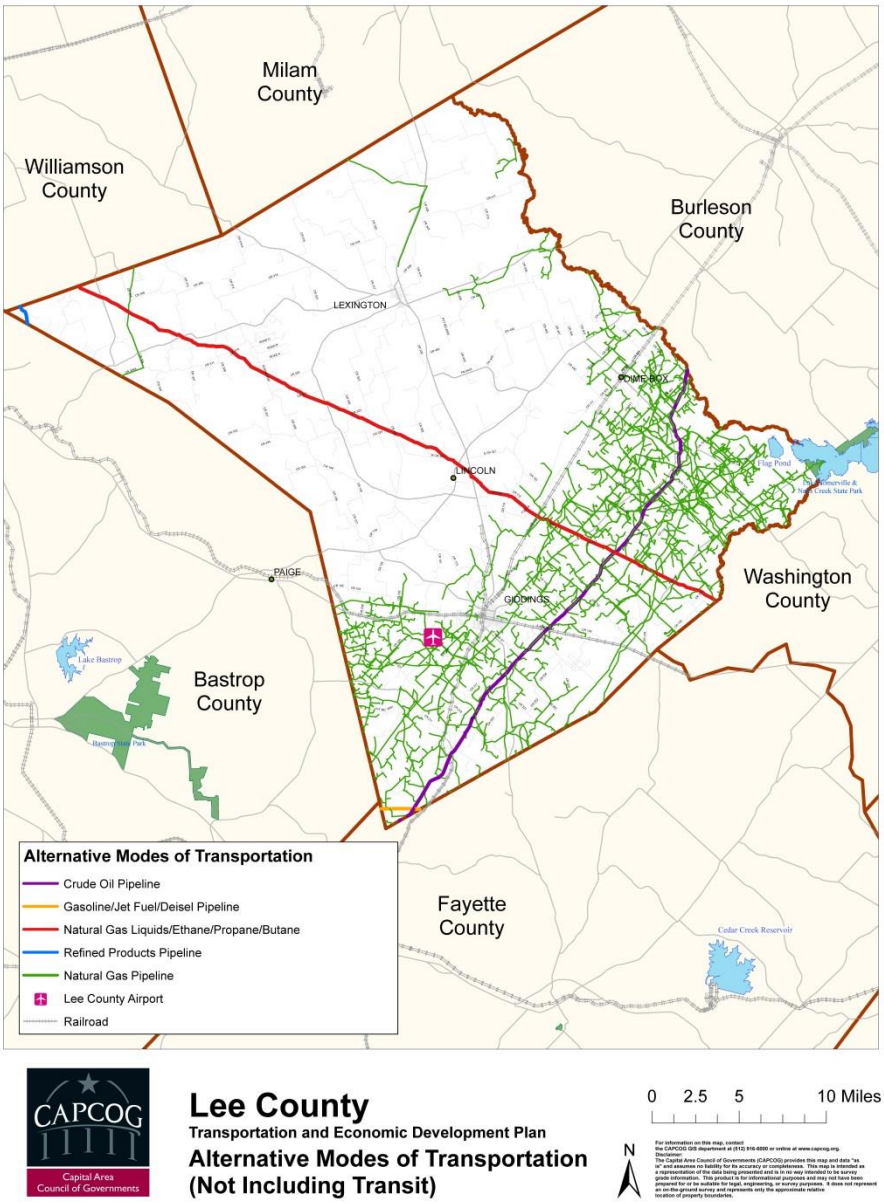


Figure 34. Lee County Alternative Modes of Transportation Not Including Transit (Source: TxDOT, Texas A&M Transportation Institute).

As shown in Figure 34, there are several pipelines that carry numerous goods throughout Lee County. The majority of the pipelines carry natural gas, especially in the southern third of the county. There is one major pipeline that carries natural gas liquids, ethane, propane and butane through the county heading north-south, as well as a pipeline that carries crude oil east-west through the southern part of the county. In addition, Lee County has one airport.

2.9 Lee County Emergency Evacuation Routes

When the Houston area is threatened by a major hurricane and mandatory evacuations are issued, local authorities working with the State Operations Center will make the decision of whether to activate the Hurricane Evacuation Contraflow Plan. When activated, US 290 eastbound lanes will be reversed to carry two lanes of westbound traffic from Houston, through Lee County, to Austin. The Hurricane Evacuation Contraflow Plan is under the authority of TxDOT. In addition, US 77 is designated as a non-contraflow emergency evacuation route. Figure 35 shows the evacuation routes through Lee County.

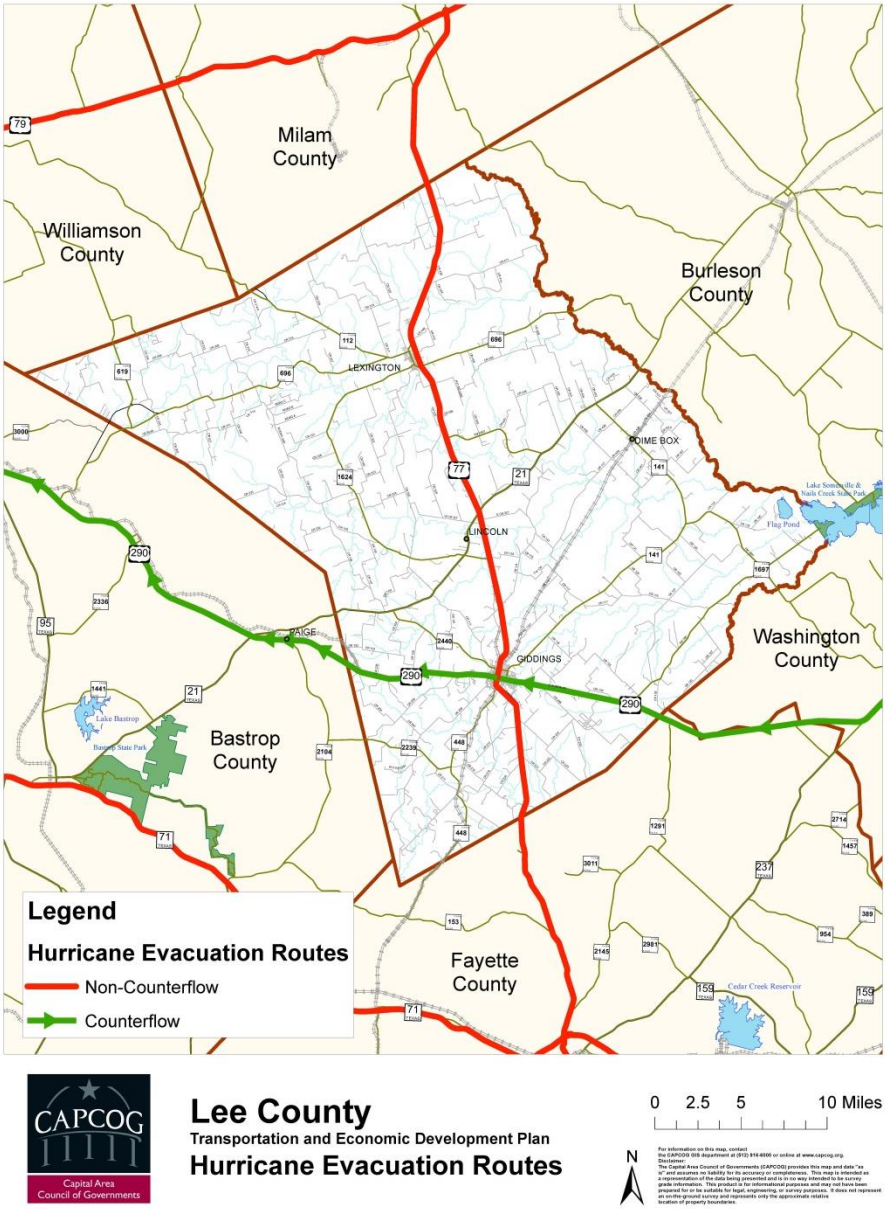


Figure 35. Lee County Emergency Evacuation Routes.

2.10 Existing Transportation Financing

The following section reviews the revenues and expenditures for transportation funding for Lee County, the City of Giddings, and the City of Lexington.

2.10.1 Lee County Revenue and Transportation Expenditures

Lee County receives the majority of its revenue for roads and bridges from auto registration fees and transfer funds from other departments. The road and bridge funds are divided into four sections, one for each county commissioner. Transfers from the lateral road fund, contingency fund, or capital improvement fund take place when appropriate. Table 5 shows available funds for roads and bridges in Lee County for the 2012–2013 fiscal year (FY).

Table 5. Lee County Road and Bridge Funds for FY 2012–2013 (Source: Lee County).

FUNDS AVAILABLE	R&B #1	R&B #2	R&B #3	R&B #4
INTEREST EARNINGS	5,113.13	10,549.82	10,056.07	13,708.49
CURRENT AD VAL. TAXES	0	0	0	0
DELINQUENT TAXES	0	0	0	0
COUNTY SALES TAX	15,139.85	15,139.84	15,139.81	15,139.78
RENTS & ROYALTIES	393.1	2382.42	0	150
AUTO REGISTRATION	156,686.21	156,686.14	156,686.03	156,685.94
AUTO LICENSE - R & B FEES FINES COUNTY COURT	1,617.65	1,617.65	1,617.65	1,617.65
FINES COUNTY COURT	40,768.77	40,768.75	40,768.72	40,768.69
COUNTY COURT FEES	1,749.66	1,749.66	1,749.66	1,749.66
ROAD DAMAGES	0	0	0	0
SALE OF FIXED ASSETS	0	78373.5	0	22600
MISC. INCOME	6,809.04	6,809.04	6,809.03	6,904.02
PAYMENT IN LIEU OF TAXES	0	0	0	0
SALE OF MATERIALS	2,552.60	4,728.20	339	953.5
FINANCING PROCEEDS	0	0	0	0
TRANSFER FROM LATERAL RD.	353,524.57	424,229.49	547,963.06	441,905.68
TRANSFER FROM CONTINGENCY	0	0	0	0
TRANSFER FROM GEN. FUND	98,195.52	98,300.76	98,484.98	98,327.05
TOTAL FUNDS AVAILABLE	**682,550.10**	**841,335.27**	**879,614.01**	**800,510.46**

Table 6 shows road and bridge expenses from the 2012–2013 fiscal year. As shown, salaries, employee benefits, and materials contributed most to county expenditures. For the 2012–2013 fiscal year, the Lee County Road and Bridge Fund had an income of $3,204,009.84 and an expense total of $2,815,454.60, leaving a net surplus of $388,555.24.

Table 6. Lee County Road and Bridge Expenditures for FY 2012–2013 (Source: Lee County).

EXPENSES	R&B #1	R&B #2	R&B #3	R&B #4
SALARY - ELECTED OFFICIAL	43,250.00	43,250.00	44,954.00	43,250.00
OVERTIME	1,343.46	1,111.22	2,300.03	1,020.21
RECYCLING SALARY	3,477.12	0	0	3,475.20
SALARY - ROAD HANDS	158,021.66	134,353.49	207,641.28	129,327.52
CO. PORTION - SOC. SEC.	13,966.92	13,882.58	19,272.68	12,620.12
CO. PORTION - MEDICAL INS.	59,250.58	40,769.50	62,242.42	52,953.16
CO. PORTION RETIREMENT	16,823.40	13,446.76	20,216.41	14,501.83
WORKER'S COMPENSATION INS.	6,678.60	8,014.32	8,092.41	8,348.24
RETIREE INSURANCE	0	0	7,813.74	
CO. PORTION - DENTAL	1,757.28	1,339.96	1,953.84	1,467.60
INS. CO. PORTION - LIFE INS.	654.12	518.3	816.32	529.34
OFFICE SUPPLIES	18.61	0	0	0
GAS, OIL, DIESEL	71,861.54	34,494.43	62,996.57	49,328.57
PARTS, REPAIRS, SUPPLIES	54,349.70	39,198.06	42,887.79	37,645.00
GRAVEL & CONCRETE	25,470.90	24,244.90	48,270.39	33,265.44
PIPES & CULVERTS	4,829.69	3,070.76	9,598.55	7,682.13
SIGNS & REFLECTORS	384.45	2,034.33	1,367.20	757.74
FENCING EXPENDITURES	17,249.28	12,833.18	18,147.80	2,188.00
PRE-MIX	14,057.95	1,342.25	0	10,072.09
TIRES & TUBES	11,536.15	4,612.74	9,297.29	13,559.18
TELECOMMUNICATIONS EXPENSE	981.72	2,282.22	1,494.98	1,959.44
TRAVEL REIMBURSEMENT	9,838.52	11,581.77	10,777.32	10,087.66
EXPENSE ALLOWANCE	4,200.00	4,200.00	4,200.00	4,200.00
UTILITIES	1,948.15	2,691.78	3,534.87	1,574.74
BRIDGE & PAVING	12,914.19	167,877.42	205,945.89	102,219.03
SUB-CONTRACT BRIDGE/PAVING	84,976.20	0	0	0
RECYCLING EXPENSES	0	0	894.87	0
RURAL FIRE PROTECTION	71.48	3,213.66	0	71.48
BONDS	0	0	178	0
CONFERERNCES, TRAINING, SEMINARS	1,648.68	790.28	1,581.14	500.12
UNEMPLOYMENT INSURANCE	210.9	175.47	365.39	172.62
LANDFILL EXPENSES	2,630.53	7,760.08	10,927.so	2,753.95
MISCELLANEOUS FEES & EXPENSES	1,464.48	1,118.77	1,598.72	1,851.34
CAPITAL - LAND	0	0	0	0
EQUIPMENT RENTAL	0	25,165.00	16,925.00	0
OFFICE FURNITURE & EQUIPMENT	0	1,298.98	1,055.33	0
CAPITAL - VEHICLES	5,625.00	56,925.00	7,000.00	5,625.00
CAPITAL - MACHINERY & EQUIPMENT	7,000.00	164,250.00	67,900.00	833.96
CAPITAL - BUILDINGS	222.2	0	0	0
PRINCIPAL - LEASE/PURCHASE	0	49,944.95	0	0
INTEREST - LEASE/PURCHASE	0	1,550.95	0	0
TRANSFER TO RIGHT OF WAY	1,250.00	1,250.00	1,250.00	1,250.00
TRANSFER TO RECYCLING	1,000.00	1,000.00	1,000.00	1,000.00
EXPENSE TOTALS	**640,963.46**	**736,807.32**	**736,807.32**	**556,090.71**

2.10.2 City of Giddings Revenue and Transportation Expenditures

In the 2012–2013 fiscal year, the City of Giddings had revenues of $4,650,712. The majority of revenues were raised from taxes. Figure 36 shows the City of Giddings revenues for the 2012–2013 fiscal year.

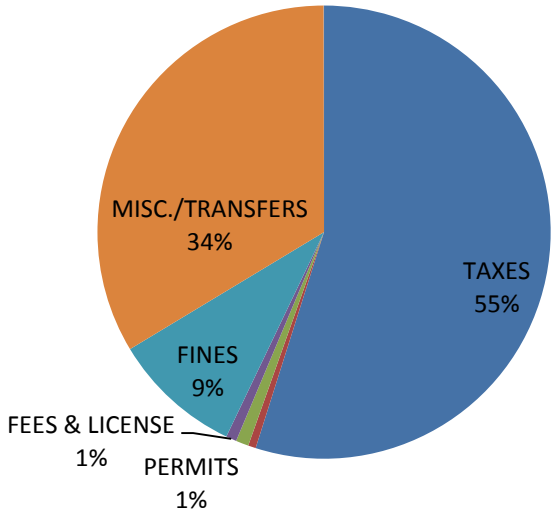


Figure 36. City of Giddings Revenues for FY 2012–2013 (Source: City of Giddings).

The majority of transportation-related expenses for the City of Giddings were employee salaries; however, street materials, seal coating, and drainage improvements also significantly contributed to expenditures. Figure 37 shows expenditures for the City of Giddings for the 2012–2013 fiscal year.

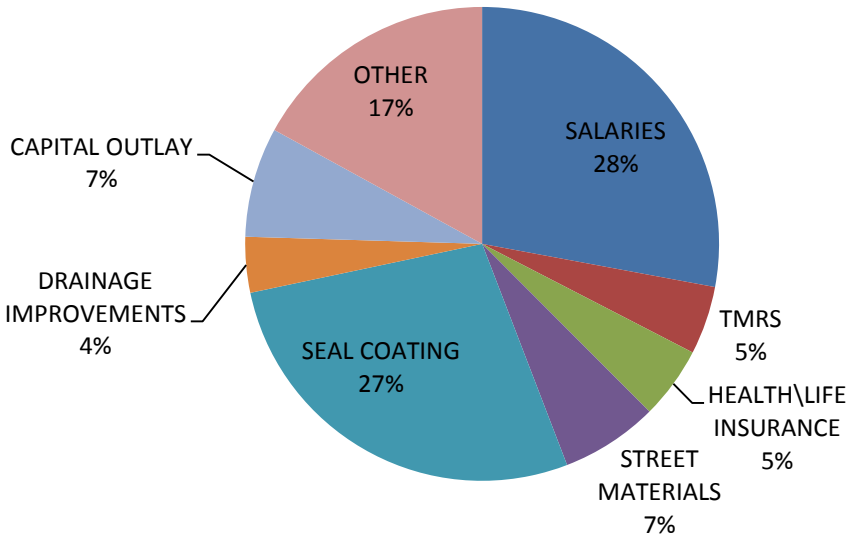


Figure 37. City of Giddings Street Expenditures for FY 2012–2013 (Source: City of Giddings).

2.10.3 City of Lexington Revenue and Transportation Expenditures

In the 2012–2013 fiscal year, the City of Lexington had revenues of $734,943. The vast majority of revenues (79 percent) were raised from property taxes, sales taxes, and garbage collection. Figure 38 shows City of Lexington revenues for FY 2012–2013

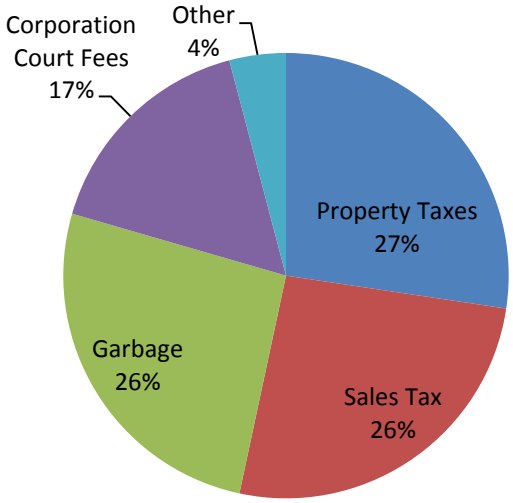


Figure 38. City of Lexington Revenues for FY 2012–2013 (Source: City of Lexington).

The majority of transportation-related expenses for the City of Lexington were employee salaries; however, street materials and capital outlays also significantly contributed to expenditures. Figure 39 shows expenditures for the City of Lexington.

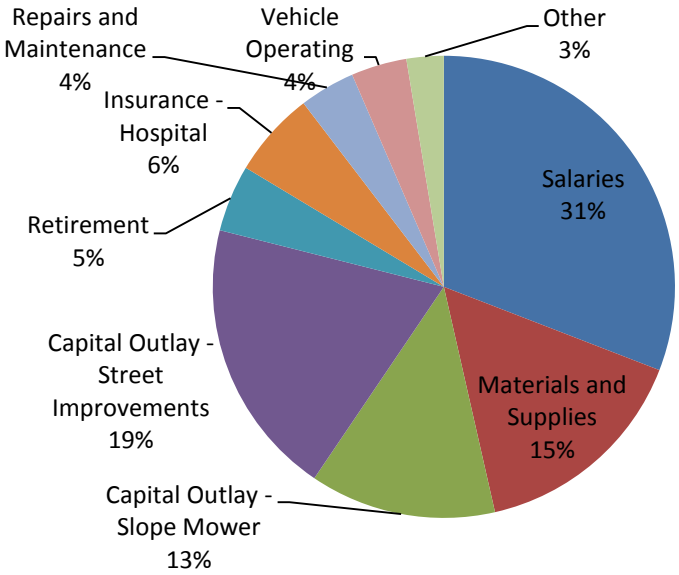


Figure 39. City of Lexington Street Expenditures FY 2012–2013 (Source: City of Lexington).

Chapter 3—Economic Development

3.1 The Approach to Economic Development Planning

While this plan is more about transportation than economic development, transportation planning should not be done without consideration of a community's economic development goals. This section of the plan recommends economic development goals and strategies, and then links identified transportation issues related to economic development back to strategies of the plan. The following analyses, observations, and recommendations are intended to be considered by the community at large—the county, its cities, and its unincorporated areas—because not working together will decrease the probability of success on many levels.

The economic development planning done by CAPCOG takes a different approach than what a traditional economic development consultant might take because the recommended goals are data-driven based on research and analysis that demonstrate existing strengths and challenges. Just because a goal is popular within a community doesn't make it feasible; therefore, the recommendations in this chapter are intended to encourage community consideration of strategies most likely to see the earliest success.

A study about how to do economic development—and such studies are numerous—was recently released by the Manhattan Institute for Policy Research; while the study's focus was on urban areas, the institute's advice is the best a community of any size can receive: that the lesson for policy makers is to understand the inherent strengths of a place and make the most of them. CAPCOG's process involved conducting an analysis of the demographic and economic data for Lee County so researchers would have a realistic idea of what was happening with growth, employment opportunities, economic trends, and educational attainment linked to the available labor force. Researchers worked with an economic development committee solicited by the Lee County judge and commissioners and used this group to help understand what the data were revealing. For example, some of the economic data would typically look different for a county the size of Lee, but the Eagle Ford Shale activity has skewed the data. Researchers also asked the committee what type of economic development had been tried in the past; they wanted to know what worked and what did not work, and why?

Next in the process was the survey work conducted by the Texas A&M Transportation Institute (contained in the appendices of this plan), which surveyed people in the community about both transportation and economic development issues. Researchers discovered that most of those surveyed had a good idea about what the strengths and challenges were for the Lee County area. This finding may seem predictable, but in fact, more often, a community has hopes that are not founded in reality because members really do not understand the challenges. The third meeting with the economic development committee concentrated on talking through the survey results to help researchers understand them. For example, researchers were curious why those surveyed named several assets for economic growth but felt the county's image was not an asset.

The process researchers used to develop this portion of the plan also included discussions with key stakeholders, gathering of economic development plans or reports, and review of case studies on projects in other counties with similarities to Lee County—not metro but between two major metros, not too far from a high-growth area but still characteristically rural, and currently experiencing an economic boom yet home to many people who may not favor growth. Usually, economic development efforts get stale in every community, not because people are not trying hard but because things change, people change, ideas change, and resources change. Thus, the researchers' goal was to provide a look at the possibilities through different eyes.

3.2 Existing Conditions

Lee County has experienced consistent, though tepid, growth in recent years—a trend that is projected to continue into the coming decades. At current estimates, the population of Lee County is projected to rise from its current level of near 17,000 to just over 21,000 by 2050. These trends are unsurprising in light of Lee County's rural location. However, the area's limited population does present certain constraints (and, alternatively, opportunities) for the development of the county and its economy. Figure 40 shows the projected population for Lee County.

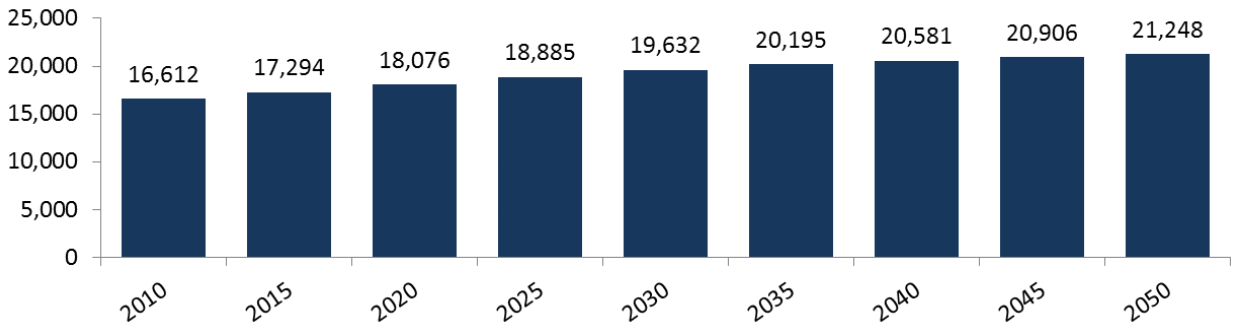


Figure 40. Lee County Projected Population (Source: Texas State Data Center).

Between 1990 and 2000, Lee County grew by approximately 22 percent, and this growth slowed to 6.1 percent for the decade between 2000 and 2010. Though this decline in growth was in keeping with the trends seen in the surrounding region and in the state as a whole, it was more severe in Lee County than in the surrounding areas. Historic population growth in Lee County is shown in Figure 41.

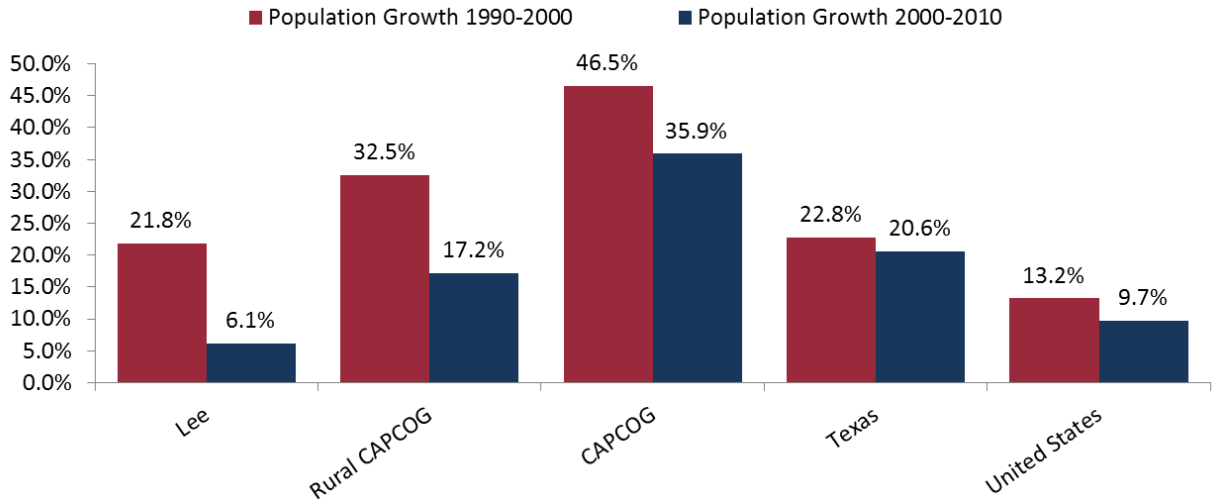


Figure 41. Lee County Historic Population Growth (Source: Decision Data Resources).

The composition of Lee County's population from the standpoint of race and ethnicity is generally in line with what one would expect for the rural capital area of Texas. Figure 42 shows the racial distribution for Lee County.

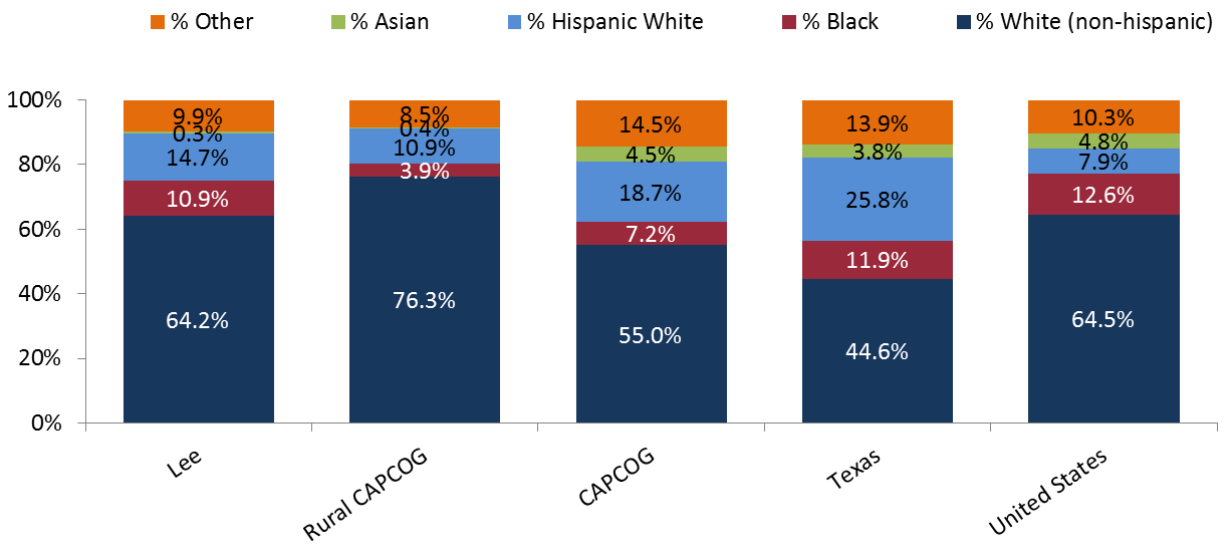


Figure 42. Racial Distribution for Lee County and Surrounding Regions (Source: Decision Data Resources).

Lee County could be challenged by a low level of educational attainment, particularly among individuals over the age of 35. For the population of Lee County as a whole, less than 15 percent has earned a bachelor's degree or higher, and more than 25 percent of the population does not have a high school degree. While stakeholders reported on the survey that local K–12 educational resources are viewed as a strong asset for the county, it should be recognized that for many businesses, developers, and site selectors, the educational attainment of the population as a whole is viewed as a key metric for investment decisions. Although Lee County may be successful in educating its youth, its experience (one shared by many rural areas) of having difficulty retaining its young, educated population exacerbates the educational attainment of the population as a whole. Educational attainment for Lee County and surrounding regions is shown in Figure 43.

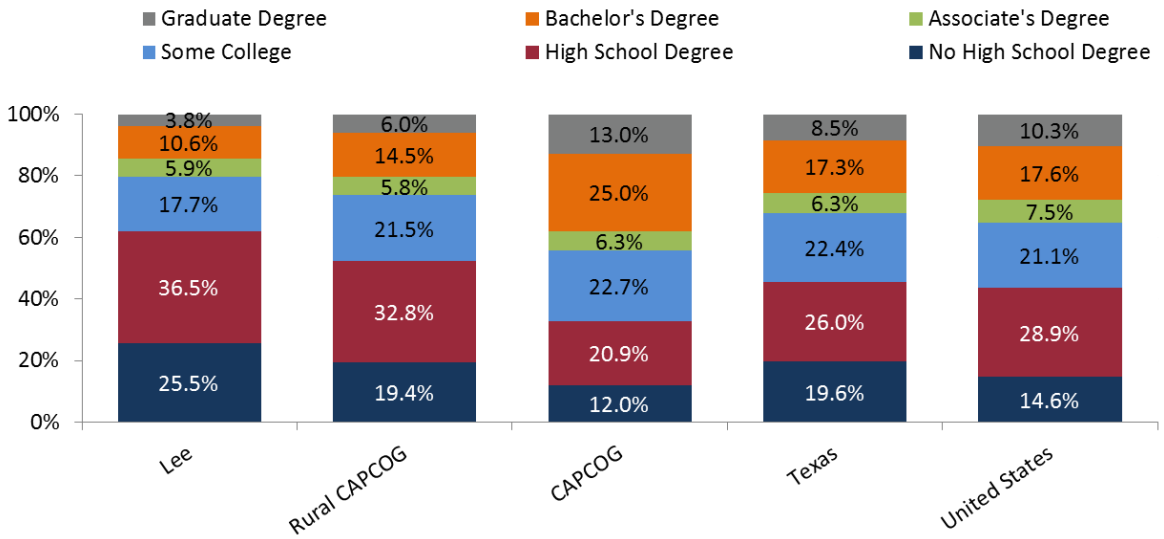


Figure 43. Educational Attainment for Lee County and Surrounding Areas (Source: Decision Data Resources).

When looking at the number of residents (of all ages) that were enrolled in school in 2010, it can be seen that the students in Lee County are far more concentrated in the primary and secondary school grades than is the case in other locations, rural or urban. Even accounting for the overall low population of students within the county, Lee County has relatively few residents enrolled in pre-K or in college or graduate-level programs. While the distribution of educational enrollment supports local stakeholders' claims regarding the county's suitability for school-age children, the lack of enrollment in college and graduate-level programs is unlikely to lead to significant changes in the current distribution of the educational attainment among residents and workers. The impacts of this can be seen in the county's ability to support or attract industries that rely on a highly educated workforce. Educational enrollment for Lee County and surrounding regions is shown in Figure 44.

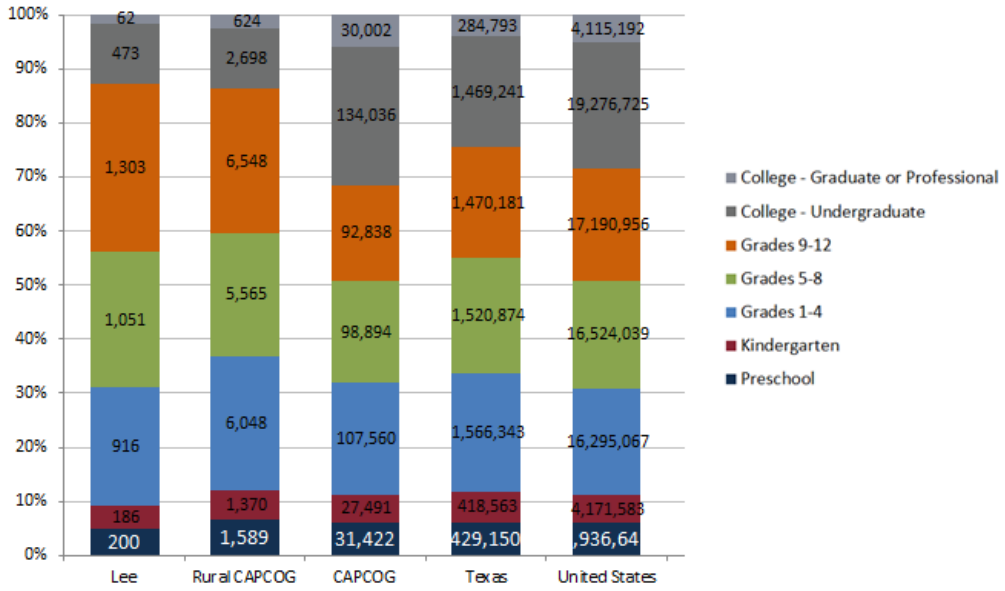


Figure 44. Educational Enrollment in Lee County and Surrounding Regions (2010) (Source: Decision Data Resources).

Lee County has enjoyed consistently low unemployment and has experienced employment growth of over 2 percent annually for the past 10 years. This employment performance has been very strong, even in comparison to many of the surrounding counties, which have been national leaders in employment growth during an otherwise turbulent period for the national economy. At a sub-4.0 rate of unemployment, Lee County is at or near what most economists would consider full employment. The current unemployment rates for Lee County and surrounding counties are shown in Figure 45.

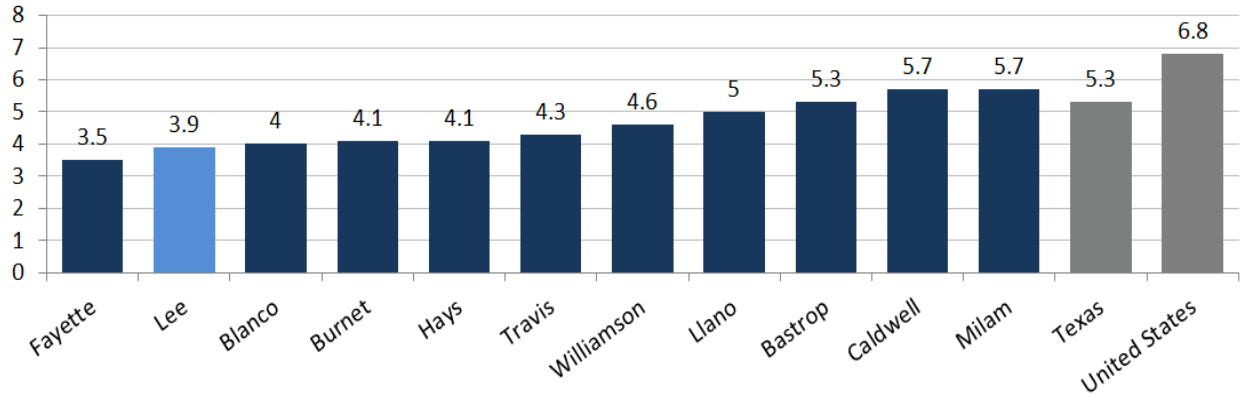


Figure 45. Current Unemployment Rate in Lee County and Surrounding Counties (Source: Bureau of Labor Statistics).

Lee County has also enjoyed rising incomes in recent years, with the median household income rising by $2,395 from 2010–2013, to approximately $48,000. Though higher than other rural counties within the region, Lee County households earn less per year than do all households in the state or nation as a whole. Figure 46 shows the increase in median income for Lee County and surrounding regions between 2012 and 2015.

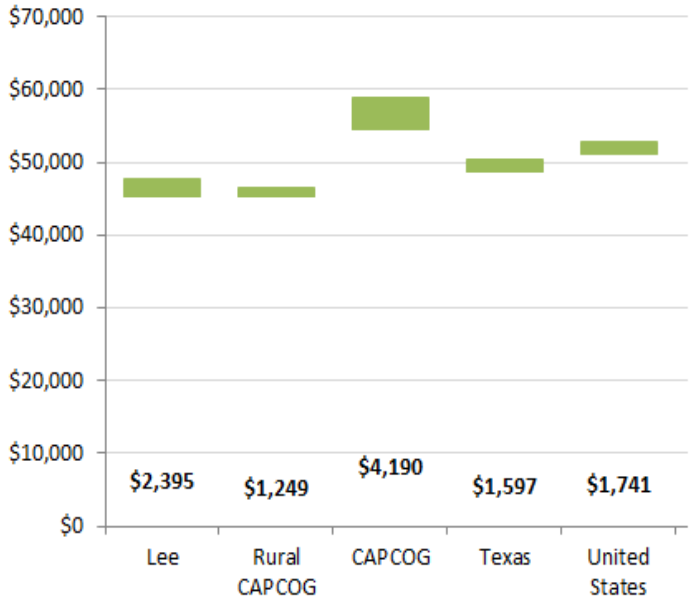


Figure 46. Increase in Median Household Income for Lee County and Surrounding Regions (2012–2015) (Source: Decision Data Resources).

According to the U.S. Census, approximately 884 individuals in Lee County were self-employed in 2010. Perhaps more important is the breakdown of these individuals by those who are self-employed in an incorporated business versus those who are not. When compared to other locations, rural or urban, Lee County has relatively few self-employed individuals who have incorporated their business. Beyond sharing in the protections and benefits of incorporation, individuals who are self-employed in incorporated businesses are more likely to employ other individuals as well, planting the seeds for the formation, operation, and growth of a small

business. Figure 47 provides the breakdown of incorporated and unincorporated businesses of self-employed individuals for Lee County and surrounding regions.

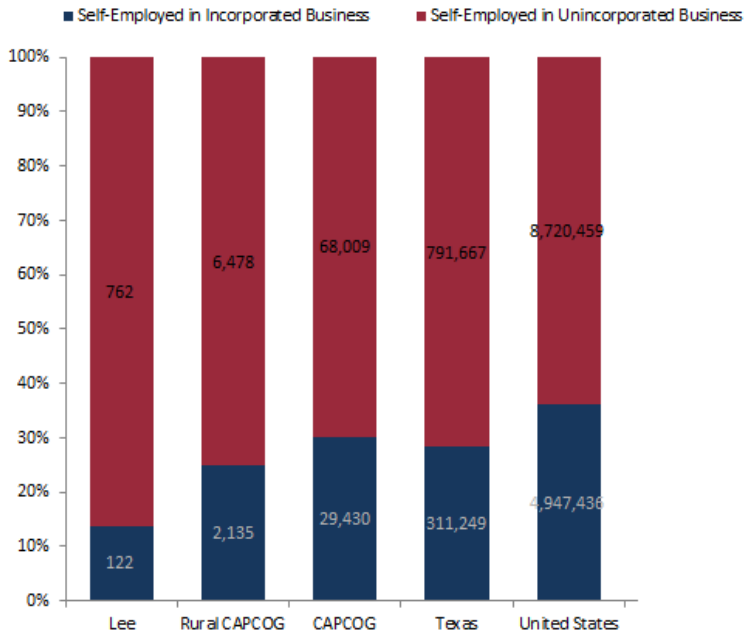


Figure 47. Breakdown of Incorporated and Unincorporated Businesses for Self-Employed Individuals in Lee County and Surrounding Regions (Source: Decision Data Resources).

A striking trend in recent years for Lee County has been the percentage of individuals who work from home. National trends, which are reflected in state and regional locations, have seen the percentage of individuals working from home increase over the past decade. There are many reasons for why this has been occurring, ranging from new technologies that enable workers to more easily conduct business remotely to shifts in corporate policy supporting or even encouraging employees to work from home. As shown in Figure 48, Lee County has experienced a decline in the percentage of individuals who work from home between 2000 and 2010. This is in contrast with the surrounding regions within Central Texas, the state of Texas, and the United States, where the percentage of individuals who work from home has increased during this period.

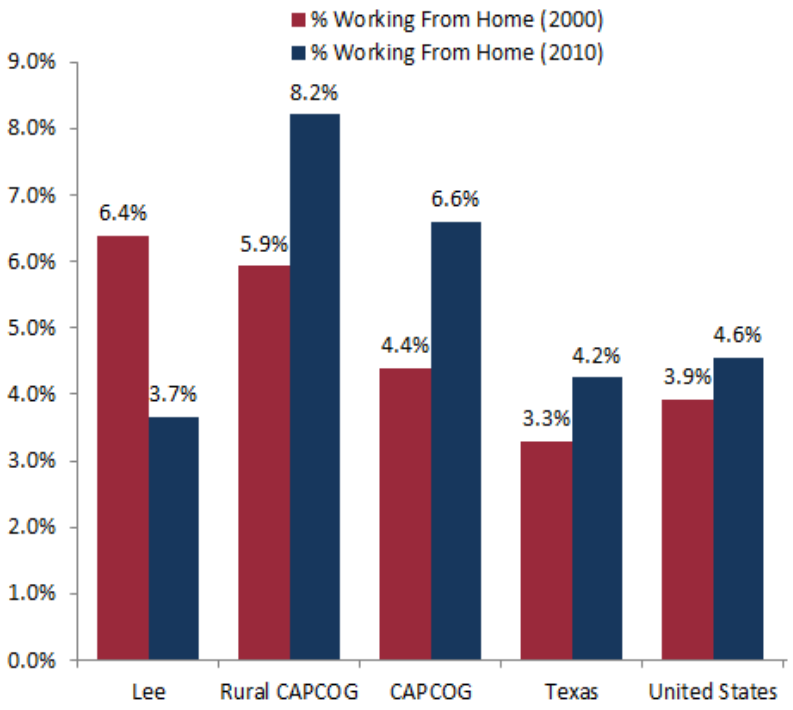


Figure 48. Percent of Lee County Residents Working from Home (2000 and 2010) (Source: Decision Data Resources).

Figure 49 shows the occupations within Lee County including the number of jobs per occupation and average hourly rate. The effects of the recent oil and gas boom in the state of Texas, and particularly in the Eagle Ford Shale (part of which is located in Lee County), can clearly be seen in the employment data for the county. The most common occupations for residents of Lee County are those that involve construction or extraction activities—an occupational category that applies to the oil and gas industry. While this industry has been a strong source of employment opportunities for local residents, paying wages that are generally above what most workers living in Lee County can otherwise find, several survey and focus group participants voiced concern that these jobs may only be temporary.

Looking beyond those occupations that are strongly tied to oil and gas extraction, Lee County's workers are mostly employed in relatively low-skill, low-wage jobs, and occupations that require a higher level of education and pay relatively high salaries, such as management or professional services, are uncommon among county residents.

Note that the data presented in Figure 49 also reflect individuals who reside in Lee County but work in other locations, such as Austin.

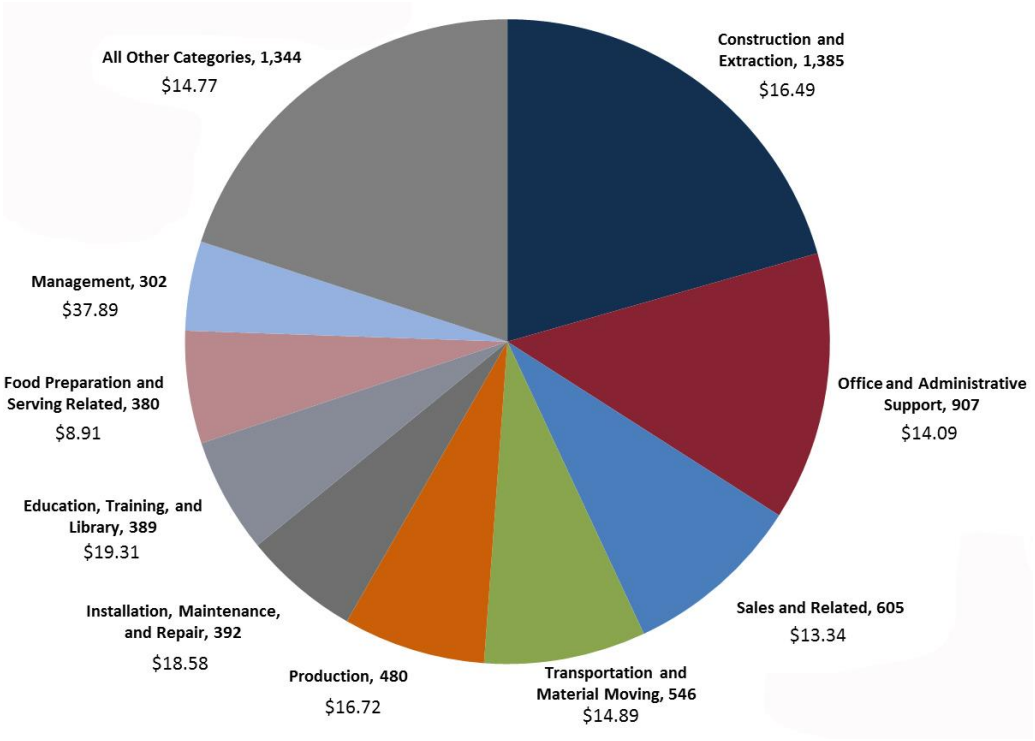


Figure 49. Occupations in Lee County with Average Hourly Wage (Source: Economic Modeling Specialists, Inc.).

At 18.1 percent, the percentage of housing units that are vacant in Lee County, while lower than other rural areas nearby, is far larger than the levels found statewide and nationally. However, rather than being a reflection of a poor housing market, the reasons behind the housing vacancies tend to be tied to properties that are used for seasonal or recreational use or, as suggested by surveys and focus group discussions, properties that are inherited, not occupied by the owner, and not planned for sale or lease. Figure 50 shows reasons for housing vacancies in Lee County and surrounding regions.

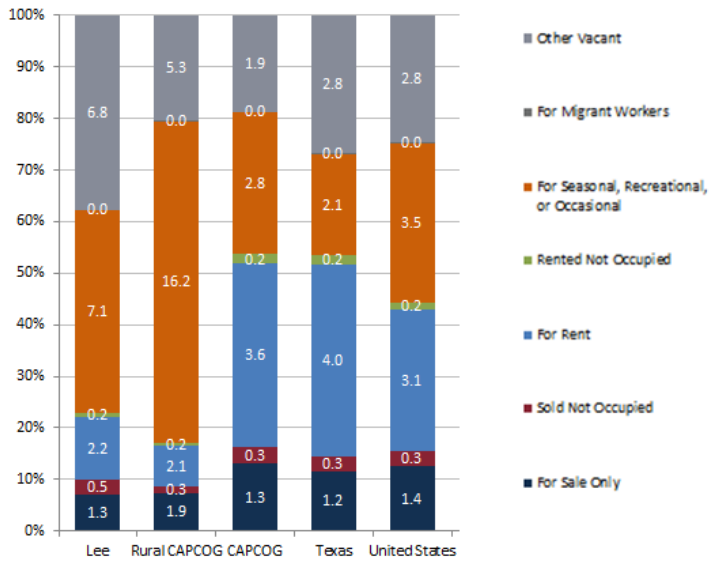


Figure 50. Reasons for Housing Vacancies (2010), as a Percentage of Total Vacancies in Lee County and Surrounding Regions.

There also appears to be a reluctance to sell property that may offer its owners royalties for oil and gas extraction now or in the future. Figure 51 shows the housing units by type in Lee County and surrounding regions.

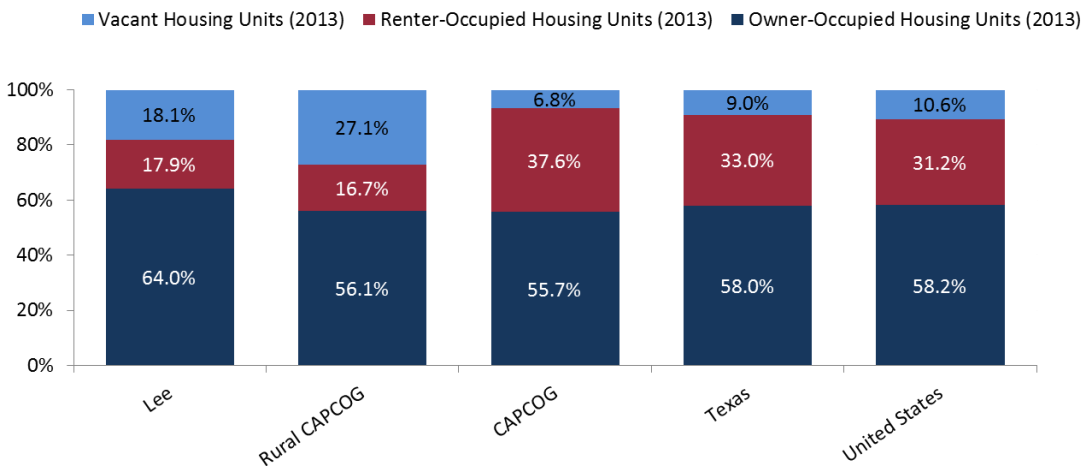


Figure 51. Housing Units by Type in Lee County and Surrounding Regions (Source: Decision Data Resources).

Lee County's hotel performance in recent years has been relatively strong among rural counties of the capital area. However, when compared to other locations in the area, the hotel performance in Lee County is only moderately competitive. At 58 percent hotel occupancy in 2013, Lee County has seen a rise in both occupancy and room rates—both likely the result of nearby oil and gas activity. Figure 52 shows the hotel occupancy in Lee County and surrounding counties for 2012 and 2013.

Apart from the recent support generated by regional oil and gas activity, tourism leading to overnight hotel stays does not appear to have been a significant part of the county's economy in recent years.

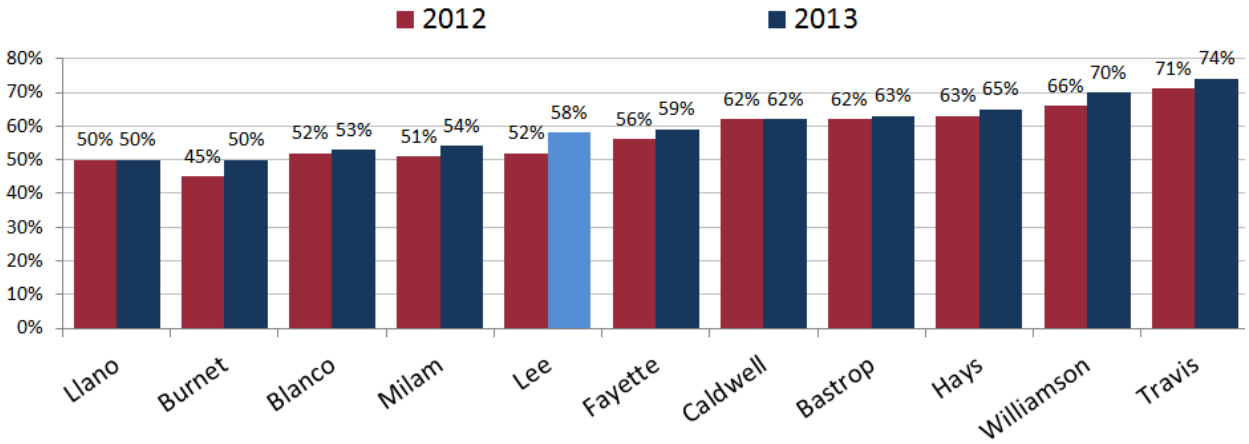


Figure 52. Hotel Occupancy Rates in Lee County and Surrounding Counties, 2012 and 2013 (Source: Source Strategies, Texas Governor's Office).

Even with the recent gains, however, there are limited numbers of hotel rooms within Lee County and, at $54, room rates remain the lowest of all counties in the capital area. Figure 53 shows the average hotel room rates in Lee County and surrounding counties as well as the percent change in hotel room rates between 2012 and 2013.

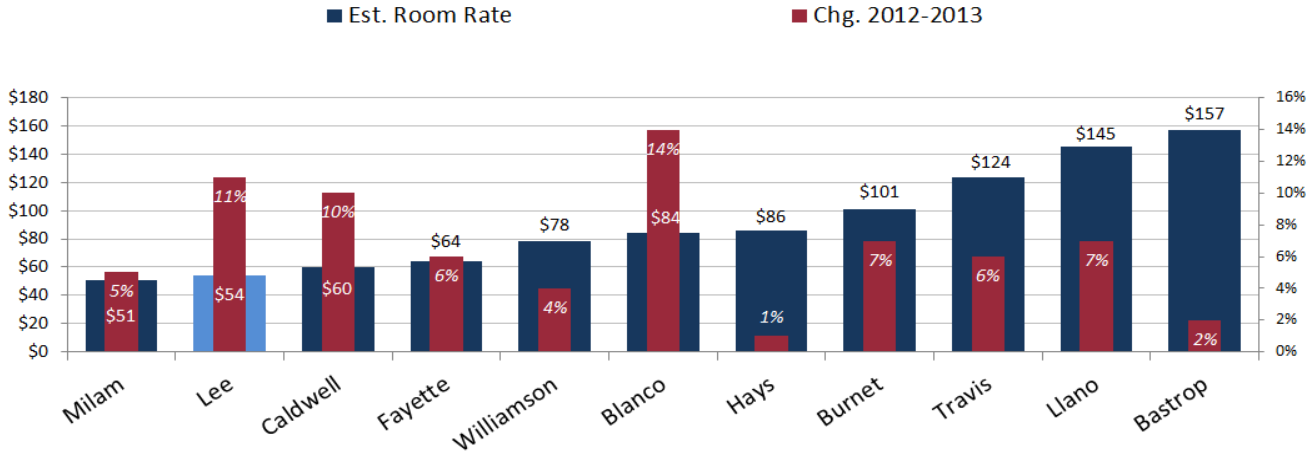


Figure 53. Average Hotel Room Rates in Lee County and Surrounding Counties (Source: Source Strategies, Texas Governor's Office).

3.3 The Trends That Impact Economic Development—Challenges and Strengths

The current challenges and strengths in Lee County will require both short-term and long-term goals. The county and its cities are going to grow as long as the economies of the Austin and Houston metro areas do not stagnate. The rate of growth is being driven to some degree by the Eagle Ford Shale activity; however, longer term, this county could be the next frontier of eastward development after Bastrop and Caldwell Counties absorb the significant residential and commercial growth now occurring.

The current challenges are significant but not numerous. A key factor brought up in several meetings was the lack of housing supply and lack of land for development of housing, or more specifically, the fact that land and houses are being held onto for above-market prices that will preclude a reasonable opportunity for homebuyers and developers. If this is the case, it could have an impact on economic development efforts. Some new single-family rental housing has been developed in the last two years, and its developers are planning additional rental homes, although a specific timeline was not available. The county has an unusually high vacancy rate for existing housing; it is unclear what has caused this high rate, but having these properties available for rental would be helpful to increase the housing supply.

It is important to understand that even if a new employer moved to the county with 50 new jobs, those workers would have a difficult time finding somewhere to live unless they were already living in the county. Since the county's unemployment rate is hovering at 4 percent, a rate that most economists say represents full employment (meaning everyone who wants to work and can work is already working), it could only mean many people leave one job to jump to another. The more likely scenario is that a medium-sized company employing 50 people might draw workers from outside the county who will commute from another county. This scenario is a current trend in the 10-county region since about 50 percent of workers commute across a county line for their jobs. The economic benefit to the employer's county is lessened as workers take their paychecks back to the county where they live.

When discussing new or expanding businesses, workforce must also be considered. In most counties like Lee, it can be the chicken-and-the-egg issue because employers attract workers, but workers are needed to attract employers. This is less the case for small businesses, hence a shorter-term goal. However, to raise the wage level of jobs in the county, a higher level of education and training will be needed. Currently, 60 percent of Lee County residents do not have an education beyond a high school degree—that education level is acceptable for the Eagle Ford Shale jobs, but the input received during this project was that permanent quality jobs with good wages are desired.

The biggest challenges Lee County may have with regard to economic development are lack of community consensus about growth, agreement on which strategies should be pursued, and participation by key stakeholders to carry through out those strategies. Fortunately, these challenges are solvable and are not unusual.

In terms of strengths, Lee County has several tied to economic development. First, it is one of the increasingly few areas that can say it will have a stable water supply. In addition, because it is between two major high-growth metro areas and has north-south and east-west highways running through it, its geographical location invites opportunities for businesses involved with manufacturing and assembly, storage, and shipping. The county is an easy drive from most places, and the central city is home to three historic train depots and other historical and recreational resources, which means that the area has potential to develop more robust tourism activity. Committee meetings indicated that there are many interested citizens who are capable of working on economic development; it should not be just the professional staff at the chambers of commerce and economic development corporations carrying the load.

3.4 Goals and Strategies

3.4.1 Goal 1: Position Greater Lee County for Long-Term Economic Growth

Getting individuals who commute from another county to want to live in the community where they work starts with good schools. Schools are not the only factor, but if the schools are good, many families will forego other amenities. Based on conversations with community representatives, schools in Lee County are good but the next step is build a platform for telling the story about the K-12 educational assets. Schools should have an ongoing goal of receiving

strong ratings but should also focus on quantifying factors that contribute to a favorable school system, like a high teacher-to-student ratio and classrooms that are not crowded.

Survey and focus group respondents stated several times that many people living in Lee County do not want growth. In addition, because of family estates or holding of property for excessive prices, accommodating growth may be difficult. Those in charge of the economic future—community leaders and elected officials—must seek buy-in through an educational process. For cities, counties, and ISDs, infrastructure costs, e.g., buildings, supplies, and salaries, keep going up. When property and sales tax revenue do not keep up, there is either an increased burden on existing households and businesses or a degradation of public services.

Image is important; as noted before, only 11 percent of those responding to the survey felt the county has an image that is favorable for economic growth. In the meetings, planners learned that image was more about physical appearance and the message being sent to potential tourists and business owners because of a lack of maintenance and upkeep of buildings and properties. Local residents will eat at a restaurant if the paint is peeling and there are weeds at the front door because they know the food is good, but someone passing through probably will not.

Many individuals now work full time from home doing such things as providing help desk services, designing software, or even buying and selling merchandise on eBay. They can live just about anywhere, as long as there are reliable communication services and they like the community. The strategy for attracting this group of workers, sometimes called free agents, is commonly referred to by planning consultants as place making.

The county needs to think about the transportation infrastructure to support economic growth and lure investment by companies looking for a community. The term “infrastructure” is meant in the broadest sense—not just roads but also other transportation modes for pedestrian traffic, transit, and bicycles. Future development and redevelopment of road systems should be done with economic growth in mind. The transportation section of this plan contains many projects that will enhance the recommendations being made, specifically signage, visitor parking, courthouse streetscaping, sidewalks connecting the downtown area to the courthouse square, and placement of a transit flag-stop station.

The following are recommendations for positioning greater Lee County for long-term economic growth:

- Positioning the county will require widespread agreement and needs to be a process that brings together local officials, businesses, community leaders, and citizens with an understanding that success will be better accomplished by working together. Resources for promotion and business development are limited but, used wisely, can be maximized for economic impact. While it is recognized that the county and its cities will not want to combine forces on every issue, a standing committee should be established with the task of assessing the economic competitiveness of the county. The committee should consider whether local governments are making choices that help or hurt opportunities for economic growth.
- This standing committee needs to establish short- and long-term goals for infrastructure to ensure competitiveness; this means some strategies should be developed for promoting schools, recruiting a healthcare clinic, creating awareness about the value of having housing, and planning investments in transportation infrastructure that builds long-term capacity.
- Economic growth can mean more people spend money in a community or more businesses invest in a community. Assuming this is a desired outcome, business owners will need to take the first step toward addressing physical appearance and image. Some business owners may make the case that there are already enough customers coming to their establishments, but they collectively are the face of the community and need to buy in to the broader goals.
- The county should think about place making as a strategy. Survey responses indicated 67 percent of people live in Lee County because they grew up there, have family there, and

are raising kids there. Very few said they lived there because of its appeal and amenities. Place making is about creating appeal and amenities. The Texas Main Street Program understood this concept before there was a name for it—new Main Street cities were often advised to clean and paint building fronts, kill weeds, and consider some planters, benches, awnings, and light posts for ambiance. Any community serious about economic development should consider this advice.

- The county should address housing in several ways. First, developers who are building new housing should be asked to include landscaping and sidewalks or paths that increase appeal. Any new RV park should also be developed with features that will make it attractive at a later date for small housing units by putting in lot sizes that can support a garden home. Since the Eagle Ford Shale activity has increased the demand for housing, all efforts should be made to ensure additions to the community's housing stock be achieved without becoming an eyesore. Some minor subsidy can be offered to housing developers to incentivize a bit of extra investment on their part—adding siding, planting trees, and creating walkways.

3.4.2 Goal 2: Promote Small Business Development for Long-Term Stability

Working toward the expansion of small businesses is the best way to help a local economy stay diversified and stable; the short-term goal should be to help local businesses grow. There could be some opportunities linked to all the self-employed or unincorporated businesses that show up in the county's data. The county needs to consider such questions as the following: Who are these people and can they increase output of their services or products? Sell more? Hire a couple of people? Maybe need a temporary office at some point?

The sweet spot for small business development will always be in the central business district. If a city is fortunate enough to have a defined downtown area, particularly with some historic properties, that area should be leveraged. Because Giddings' downtown area is dissected by two major highways, the city has built-in traffic that most downtowns would love to have. The first question for any downtown development or revitalization effort should be the following: What is the right mix of businesses that can be sustained? Getting this mix right will determine the level of success overall. Without a reliable flow of visitors in a downtown area, businesses located there will depend more on local customers, so downtown buildings are often filled by attorneys, accountants, mortgage companies, government offices, and a few restaurants or coffee shops. A concentrated effort to make the downtown a tourism destination and prompt travelers to stop requires a mix of businesses that will encourage them to walk around and spend money. This observation is not a criticism of local businesses occupying downtown properties; however, for tourism purposes, the buildings downtown are prime real estate, while businesses serving the local citizens can be anywhere.

Small business development starts with making sure there are resources available. The Small Business Development Center (SBDC) at Texas State in San Marcos is assigned a service area that includes Lee County, and the staff has indicated its willingness to come to the county; however, an organized effort needs to be made to identify existing or potential small business owners who would like assistance and develop a schedule of meetings for the SBDC visit. SBDCs provide business planning as well as management tools and are funded by the Small Business Administration. Another great resource for businesses ready to fine-tune a business plan and seek financing is BCL Texas, a non-profit organization that provides strong hands-on coaching with the intent of helping a small business create jobs; BCL is based in Austin but often works in rural counties. Assistance with financing a business can range from traditional lending to crowd funding.

The following are recommendations for promoting small business development for long-term stability:

- Starting a more formal outreach with the small business community may help the chamber and EDC have a better idea of demand for services. A shared service center that can provide reliable Internet, copying and printing services, packaging and shipping, and other services could be the site for SBDC visits, or visits by other organizations interested in business development. Without broader access to reliable Internet services communitywide, potential free agents who could be building their businesses online may see their success rate lag.
- Many communities provide tax abatement or other financial support to new companies moving in. It is just as important to provide incentives for small business development but on a different scale since their job creation and investment numbers are more modest. For example, a major renovation of a downtown building could justify a 50 percent tax abatement for three to five years.
- Broadband connectivity is one infrastructure project that should be high on a community's priority list; businesses today rely on digital communications, which could range from marketing and taking orders to storing data. While there is DSL service, a strategy should be pursued to connect high-speed services at key sites—schools, shared service centers, local businesses, and government buildings. Once the demand begins to be identified, broadband providers in nearby counties should be contacted to start a discussion about their criteria to extend fiber or wireless services.

3.4.3 Goal 3: Focus on Tourism for Short-Term Gains

Tourism is the best short-term economic development strategy for this area; it can bring in new dollars to a community with minimal impact on schools and other government services. Survey responses generally indicated that the community is in favor of some type of tourism activities, but what has been tried in the past was not as successful as it should have been. A combination of restaurants, retail establishments, historic attractions, and recreational resources gives the county a foundation to build on.

If tourism is intended to be an economic development strategy to bring in dollars to the community, the goal would be having a reasonable stream of people coming to the county on a regular basis versus an influx periodically. Though chambers may work on events during the year, some of the events have a local or targeted audience. Successful tourism is often best achieved once a community determines a brand or theme and builds activities around that theme.

Giddings has heritage and historic sites that should be packaged and promoted. The train depots can be leveraged to take a lead role in marketing the area to differentiate it from other counties that do not have the bragging rights for three historic depots; reports on activities in recent years do not indicate that much has been done to capitalize on the depots and other historic features.

The following are recommendations for focusing on tourism for short-term gains:

- Lee County and the surrounding areas should focus on key assets that, with a concerted effort, could be used to increase tourism.
- Giddings has already built its brand as the Depot Capital, but there is an opportunity to take this branding to the next level. Not many communities in Texas are focused on train themes or have more than one depot to call their own. Similar cities in other states have festivals of trains, train villages, model railroad (RR) clubs, and train swap meets. At Christmas, a Polar Express theme could bring people in looking for holiday activities. Some foundations like BNSF support community activities with train themes, and many makers (Lionel, American Flyer, Lego, USA Trains) could be sponsors. The Dailey Foundation offers grants for railroad heritage initiatives. San Antonio has a haunted RR crossing; perhaps a Halloween event could be conjured up with an annual haunting of a depot.
- Lee County seems to have been popular for hunting in years past; discussions with the committee suggested landowners were less enthusiastic about advertising the area for hunting due to some misuse of property. A stronger effort should be considered to promote

hunting, particularly by hunters who are interested in long-term leases and are likely to maintain the property and support local businesses. Lee County has a good range of birds and game including deer, turkey, wild hogs, ducks, doves, and, according to Texas Parks and Wildlife, alligators. Plus, the more hunting activities bringin dollars from somewhere else, the more viable the businesses are.

- The county should increase the aesthetic appeal of businesses along travel corridors so that people driving by are curious about exploring or decide the area is an ideal place to take a break on their trip. It is important for the businesses on the main corridors to be attractive to non-local customers.
- The long-term impact of the proposed study of the railroad crossings on Giddings' downtown will be valuable; however, it will be important to talk to other small cities with successful downtowns that are dissected by railroad tracks to garner lessons learned. The addition of sidewalks around the courthouse with streetscaping is important to better showcase this historic site.
- The county should create some buzz so that people are curious about driving over to the county to see what is going on. Central Texans living in the outer ring around Austin are often looking for alternatives to Austin's traffic and limited parking and are tiring of driving to Salado, Gruene, Fredericksburg, and other surrounding towns. Each of those communities has created a brand that it could build on with musical events, market days, antique shows, art walks, and heritage attractions. If this tourism becomes a focus of future economic development efforts, it could provide a lucrative stream of revenue that is independent of the current oil boom.
- If the county and its cities decide tourism is a strategy worth some effort, a stronger online presence is needed to appeal to those looking for day trips or an extended trip. There are some interesting listings on both the Giddings and Lexington Chamber of Commerce sites, but they are either more focused on the local community or are not marketing in a way that reaches a broader group of potential visitors. Attention is also needed to any websites that contain negative or outdated information.
- Texas Campgrounds, the go-to site for RV tourism, does not list any campsites or RV parks in Lee County (closest listed are in La Grange and Fayetteville). Bed & Breakfasts (B&Bs) are popular in rural areas and sometimes preferred over a motel/hotel; however, no listings for B&Bs could be found for Lee County, with the closest appearing in Round Top. TravelTexas, the state's tourism site, has five listings for Giddings, Lexington, and Lee County, and they are focused on historical attractions only. However, the historic train depots are not listed on the National Register of Historic Places (there are three other listings for Lee County), or on Texas Time Travel (part of the state's tourism website). Texas Highways, the Texas travel magazine produced by TxDOT, does not have any events listed for 2014 for the area. Some of the hotel occupancy tax should be targeted at developing and managing a more cohesive online picture of the community.

3.4.4 Goal 4: Make Strategic Choices about New Investments

While small business development is credited for creating between 60 and 80 percent of jobs, depending on the source, a community always wants a new company to elevate the employment opportunities, yet it is this goal that a community has the least influence over. A company can locate in a community because the infrastructure is in place, or the workforce has specific expertise and talent, or the raw materials are in close proximity; however, it can also be as simple as the owners just liking a certain location. Shoot at anything that flies; claim anything that falls—anyone who has been in economic development long enough has heard this saying when talking about recruiting new companies.

Extensive marketing can be elusive in order to attract new companies.. Promoting a community at a trade show is also expensive, and the return on that investment often does not occur. The best strategy is to make the community attractive, be prepared to talk about access to workers, and know the competitive advantages.

Lee County has several factors that distinguish it from other places—its proximity between two major metro areas experiencing robust growth, the intersection of two major highways, and its availability of a reliable water supply. All of these are competitive advantages. The possibility of increased freight traffic through the Port of Houston due to the forthcoming Panama Canal expansion could give communities to its west with highway access some opportunities. A TxDOT study exploring the impact on Texas transportation infrastructure suggests exports might increase before imports do for multiple reasons, but the result could be makers of products looking for locations to assemble, store, or ship from in areas west of Houston where land costs are affordable.

There was a time when no community serious about economic development did not have an industrial park, especially in Texas. Those were the days when all manufacturing was still being done in the United States and Texas could provide cheap labor and land. These days, the decision to make this sizable investment should be done strategically; it is a calculation of whether a community wants to tie up dollars building out infrastructure for a park that might otherwise see a more definite return on investment in a shorter time period.

The following are recommendations for making strategic choices about new investments:

- Before making a final commitment to build an industrial park, economic development stakeholders should assess and prioritize short- and long-term strategies. Tying up dollars in land and infrastructure does not guarantee business investment at the chosen location. For instance, a company located in Lockhart recently bought land on the opposite end of the city from where the industrial park is located, and the city's EDC extended the infrastructure to the company's greenfield site and also opened additional areas for development. Giddings should consider optioning a few strategic sites to keep land costs reasonable and set funding aside to extend infrastructure when needed.
- During the review of plans and reports, it was difficult to determine what type of economic incentive policies the county or its cities have been using. The best incentive policy is one linked to the type of businesses desired; incentives should not be used as a reward system but rather as a lure. Some small communities have entered into an expensive habit of giving incentives to large retail chains that would have come anyway; any incentives given to retail should be to plug a leak, meaning to bring an identifiable volume of products or services being bought elsewhere back to the local level. For any incentives to apply, the business should pay decent wages and benefits to employees, whether hiring five or 50.

3.5 Organizing for Success

The smaller cities and towns on the outer edge of a larger city are always economically tied to that larger city to some degree. As long as the majority of employment, retail, and services are in that larger city, the rest of the county has some dependency. In turn, the businesses in the major population area should understand they serve a broader area of customers. It should be a symbiotic relationship. As noted earlier, each city as well as the county might have individual projects, but to ignore the interdependence between them will not help achieve sustainable economic growth.

An article in the Sunday Parade Magazine highlighted Collierville, Tennessee (also home of an old train depot), and the overriding message was about the value of healthy downtowns and the need for "residents, businesses, and government to work together, one step at a time" with consideration to "preserving the best of what makes the town special." More importantly, a downtown area is the heart of a community, and its appearance sends a message to outsiders about the community's priorities.

A final recommendation, and probably the most important one in this section, is that the county should make sure economic development strategies are the consensus of the broader community

and not tied to individuals within the community. Economic development is long term, so staying on a path for several years best delivers success. The county must get community leaders and business owners actively involved in a structured economic development committee that focuses on the broader goal of making sure Greater Lee County makes investment and policy decisions that support economic growth. This group's job should be to support and encourage the local governments in the decision-making process and to stay involved for the long haul.

Chapter 4—Lee County Demographic and Traffic Trends

4.1 County-Level Base Year (2010) Demographic Trends

This section will provide current data for population, household, income, and employment information for Lee County, Texas. It is important to note that researchers used 2010 US Census data because much of the analysis that was conducted in this chapter required demographic data at the census block level and centennial census data was the most accurate dataset available for Lee County at this level.

4.1.1 Population

Population data were obtained from the U.S. Census Bureau for Bastrop, Caldwell, Fayette, Hays, Lee, Travis, and Williamson Counties, and Texas as a whole. Table 7 shows the 2010 population for Lee and nearby counties, as well as for the state, along with the compound annual average growth in population for the 30-year period between 1980 and 2010.

Table 7. Base Year Population and Compound Annual Average Growth for Bastrop, Caldwell, Fayette, Hays, Lee, Travis, and Williamson Counties and Texas.

Area	Population
	2010
Bastrop County	74,171
Caldwell County	38,066
Fayette County	24,554
Hays County	157,107
Lee County	16,612
Milam County	24,757
Travis County	1,024,266
Williamson County	422,679
Texas	25,145,561
Area	Compound Annual Average Growth
	1980–2010
Bastrop County	3.7%
Caldwell County	1.6%
Fayette County	0.9%
Hays County	4.6%
Lee County	1.4%
Milam County	0.3%
Travis County	3.0%
Williamson County	5.9%
Texas	1.9%

Census household data were obtained for Lee County and Texas; the number of households and average household size from 1980 to 2010 are provided in Table 8. Though experiencing an increase in households over the 40-year period, Lee County is growing at a slower rate than the state as a whole. This trend may be expected to continue given that much of the state's population growth has been driven by an influx of younger Hispanics, whereas Lee County's population is primarily older and Anglo. The greater increase in the Hispanic population across the state has been a major factor driving the increase in average household size. And, while the percentage of Hispanic population is increasing in Lee County, it is increasing at a much slower rate than in the state as a whole. Average household size for the state and county peaked in 1980 but since 1990 has remained fairly consistent.

Table 8. Number of Households and Average Household Size for Lee County and Texas.

Area	Number of Households				
	1980	1990	2000	2010	Percent Change (1980–2010)
Lee County	3,901	4,706	5,663	6,151	57.7
Texas	4,934,936	6,070,937	7,393,354	8,922,933	80.8
Area	Average Household Size				
	1980	1990	2000	2010	Percent Change (1980–2010)
Lee County	2.7	2.62	2.65	2.62	−3.1
Texas	2.81	2.73	2.74	2.75	−2.2

4.1.2 Employment

Employment levels are dependent on numerous factors including population, labor force, labor force participation, educational attainment, economic conditions, and technology changes. It is difficult to foresee, much less project, many of these factors, but reasonable estimates of employment can be made based on population and analysis of past trends. The ratio of population to employment, for example, is effective in estimating the total future employment for an area. Generally, counties that contain urban employment centers have a higher ratio of population to employment than surrounding rural or residential counties. Additionally, urban regions consisting of multiple counties typically have a core county, which has a higher density of population and employment than the other counties within the urban area. Because of their economic advantages, core counties tend to attract employees from surrounding counties. Despite this loss of workers, outlying counties often increase their population-to-employment ratio over time as population increases due to the corresponding growth in retail and service employment.

Population estimates for 2005 through 2009 from the U.S. Census Bureau and total employment estimates from the Bureau of Labor Statistics (2005–2009 employment) and Texas Workforce Commission (2010 employment) are provided in Table 9. Also provided are the calculated population-to-employment ratios for the same years. During the period from 2005 to 2010, the population-to-employment ratio for Lee County generally ranged from 31 percent in 2005 to 34 percent in 2010. These ratios are reasonable for a rural county that is not an integral part of an urbanized area.

Table 9. Lee County Population and Total Employment from 2005 to 2010.

Population and Employment	2005	2006	2007	2008	2009	2010
Population	16,526	16,573	16,356	16,400	16,231	16,612
Employment	5,195	5,407	5,519	5,541	5,305	5,771
Employment/Population	31.4%	32.6%	33.7%	33.8%	32.7%	34.7%

The distribution of employment by type (basic, retail, service, and education) can change as industry, technology, and economic conditions change. Over the past 20–30 years, many urban areas have experienced a decline in the proportion of basic employment and an increase in service employment. The downward trend in basic employment is largely due to the loss of manufacturing jobs, the loss of agricultural land as a result of development, and increases in productivity. The increase in service employment can generally be attributed to improvements in technology, increased government programs, and generally favorable economic conditions. The proportion of retail and education jobs has remained relatively constant in most areas, except in quickly growing suburban areas, where they tend to decline as population and supporting employment increase. The number and percentage of 2010 employment by type for Lee County are provided in Table 10.

Table 10. Lee County Employment by Type.

Employment Type	Jobs	Percentage
Basic	2,705	46.9
Retail	882	15.3
Service	1,609	27.9
Education	575	10.0
Total	5,771	100.0

4.1.3 Income

Table 11 reveals the median household income in nominal (real) and constant (adjusted for inflation) dollars for Lee County and Texas for 1980 through 2010. When adjusted for inflation (constant 2010 dollars), the median household income in Texas has remained relatively flat, while the median in Lee County has increased, more closely mirroring the statewide median income.

Table 11. Median Household Income for Lee County and Texas from 1980 to 2010.

Median Household Income	1980	1990	2000	2010
Nominal Dollars				
Lee County	$14,101	$22,718	$36,938	$48,416
Texas	$18,963	$28,476	$41,269	$49,646
Constant 2010 Dollars				
Lee County	$37,402	$37,989	$46,883	$48,416
Texas	$50,299	$47,618	$52,380	$49,646

4.1.4 Summary

Table 12 presents a summary of the demographics obtained for Lee County for 2010.

Table 12. Summary of Demographic Data for 2010.

Population and Households	2010
Population	16,612
Households	6,151
Median Household Income	
Nominal Dollars	$48,416
Constant 2010 Dollars	$48,416
Employment	
Basic	2,705
Retail	882
Service	1,609
Education	575
Total	5,771

Please refer to Appendix A for a more detailed explanation of the base year (2010) demographics.

4.2 County-Level Analysis for Forecast Year (2040) Demographic Trends

For the past three decades, population in Lee County has been increasing at an annual rate of between 0.5 and 2.0 percent per year—a rate less than that of the state as a whole, and less than the growth experienced in the core urban counties of Hays, Travis, and Williamson and the nearby county of Bastrop. Comparatively, the growth in Lee County has been most similar to that of Caldwell County.

4.2.1 Population

Population projections were obtained from the Texas State Data Center (TSDC) for Lee County. The 2010 population and 2020–2040 population projections are provided in Table 13, which shows a total population increase in Lee County of 3,969 persons, or about 24 percent

Table 13. Lee County Projected Population and Population Change from 2010 to 2040.

2010 Census Population	Projected Population			Change 2010–2040	
	2020	2030	2040	Number	Percent
16,612	18,076	19,632	20,581	3,969	23.9

Projections of age and race/ethnicity assist in assessing the reasonableness of population projections relative to the differences in growth between areas. Notable for Lee County is its increase in population for older cohorts (45–64, and 65 and older) compared to the state. In 2010, approximately 16 percent of the population in Lee County was 65 or older, and the median age was 39.8 years. By 2040, nearly 23 percent of the population in Lee County is expected to be 65

or older, and the median age is estimated to be 42.9 years. In contrast, in 2010 only 10 percent of the Texas population was 65 or older, and the median age was 33.6 years. By 2040, the median age in Texas is expected to be 35.8 years, with 18 percent of the population 65 or older.

Lee County is projected to remain primarily Anglo (56 percent) in 2040, in contrast to the rest of the state, where Hispanics are expected to become the majority (50 percent), with Anglos representing only 31 percent of the total population. Race/ethnicity affects population growth because Anglos have lower birth rates than Hispanics and Blacks, and represent a higher percentage of the older age cohorts. With the population in Lee County expected to remain largely Anglo, the population will age and grow more slowly if migration rates remain as they were from 2000 to 2010

TSDC produces projections of the number of households within each county in the state. These projections, as well as 2010 Census figures and projections for average household size, are provided in Table 14. These projections indicate that household size is expected to continue to decline in Lee County. Given the projected age and race/ethnicity of the future population of Lee County, a slight but continued decline in average household size is reasonable.

Table 14. 2010 Census and Projected Households and Average Household Size for Lee County from 2010 to 2040.

Number of Households and Household Size	Census 2010	TSDC 2020	TSDC 2030	TSDC 2040
Number of Households	6,151	7,088	7,916	8,346
Average Household Size	2.62	2.55	2.48	2.47

4.2.2 Employment

Future estimates of the total employment for Lee County were based on the 2010 base year population-to-employment ratio and population projections from the TSDC. It is expected that the population-to-employment ratio in Lee County will increase very little over the next 30 years and could, in fact, decrease slightly if more future residents are employed outside the county. Population projections, estimated population-to-employment ratios, and total employment estimates for 2010 and the forecast years 2020, 2030, and 2040 are provided in Table 15.

Table 15. Lee County Population and Employment Data from 2010 to 2040.

Population and Employment	2010	2020	2030	2040
Population	16,612	18,076	19,632	20,581
Employment	5,771	6,309	6,871	7,245
Employment/Population	34.7%	34.9%	35.0%	35.2%

It is expected that over the forecast period, basic employment will continue to comprise the highest percentage of employment within the county, but this percentage will decrease slightly as service employment increases. The percentage of education and retail employment is expected to remain relatively constant. Estimated employment for the forecast years is provided in Table 16.

Table 16. Lee County Base Year and Suggested Employment Control Totals 2010–2040.

Employment Type	2010	2020	2030	2040
Percentage				
Basic	46.9	46.0	45.0	44.0
Retail	15.3	15.5	16.0	16.5
Service	27.9	29.0	29.5	30.0
Education	9.9	9.5	9.5	9.5
Number				
Basic	2,705	2,902	3,092	3,188
Retail	882	978	1,099	1,195
Service	1,609	1,830	2,027	2,174
Education	575	599	653	688
Total	5,771	6,309	6,871	7,245

4.2.3 Income

TSDC prepares forecasts of household income for counties throughout the state. The median income forecasts for Lee County for 2020 through 2040 are provided in nominal (real) and 2010 constant (adjusted for inflation) dollars in Table 17.

Table 17. Lee County Median Income Projections from 2020 to 2040 under the 0.5 Migration Scenario.

Median Household Income	2020	2030	2040
Nominal Dollars	$65,801	$76,745	$92,937
Constant 2010 Dollars	$53,068	$51,484	$51,213

4.2.4 Summary

The Lee County population, household, median household income, and employment (total and by type) totals for the 2010 base year and projections for the forecast years of 2020, 2030, and 2040 are summarized in Table 18.

Table 18. Recommended Lee County Control Totals from 2010 to 2040.

Population and Households	2010	2020	2030	2040
Population	16,612	18,076	19,632	20,581
Households	6,151	6,840	7,639	8,041
Median Household Income				
Nominal Dollars	$48,416	$65,801	$76,745	$92,937
Constant 2010 Dollars	$48,416	$53,068	$51,484	$51,213
Employment				
Basic	2,705	2,902	3,092	3,188
Retail	882	978	1,099	1,195
Service	1,609	1,830	2,027	2,174
Education	575	599	653	688
Total	5,771	6,309	6,871	7,245

Please refer to Appendix A for a more detailed explanation of the forecast year (2040) demographic trends.

4.3 Traffic Growth Analysis

The objective of this section is to estimate current and projected traffic growth for Lee County. As discussed in the previous sections, the county had a population of less than 20,000 in 2010 and major growth is not expected over the next 30 years. Typically, regions with populations under 50,000 do not use a three or four step transportation modeling process, but instead analyze existing and projected traffic counts to evaluate current conditions, project future traffic conditions and congestion, and identify potential improvements to the existing transportation system. This analysis therefore aims to assess traffic trends in the county to develop a better understanding of future needs. In order to develop base year and forecast year analyses of traffic trends, annual counts (measured in annual average daily traffic [AADT] volumes) were used for current and projected traffic conditions.

Please note that in the following analysis, researchers used 2010 AADT volumes in order to stay consistent with the use of 2010 US Census data that was used for the demographic analysis. To perform the traffic growth analysis, researchers developed the roadway network in Lee County by creating numerous links (portions of the roadway network that share similar facility characteristics such as speed, facility type, number of lanes, etc.). When conducting the traffic growth analysis, researchers allocated traffic count volumes from each of the 67 traffic count sites to the links that shared similar facility characteristics and were proximal to the traffic count sites. As shown in Figure 55 and Figure 56, the result of this reporting shows no traffic volumes on some portions of the roadway network. This is not a result of not having traffic volume data but rather those data do not meet the criteria discussed above. Please refer to Appendix A for a more detailed explanation of the methodology used for the traffic growth analysis summarized in this chapter.

4.3.1 Base Year (2010) Analysis Results

According to AADT growth rates between 2001 and 2010, there has been higher growth in traffic volume around Giddings, especially along the stretch of US 77 passing through the city, although the total rate of growth is still below 40 percent. In particular, it appears that SH 21 and US 77 have a relatively higher rate of traffic growth than the rest of the roadways in Lee County. FM 141 and 180 experienced the greatest declines in traffic volume over the 10-year period. Figure 54 provides the geographic distribution of AADT growth rates between 2001 and 2010.

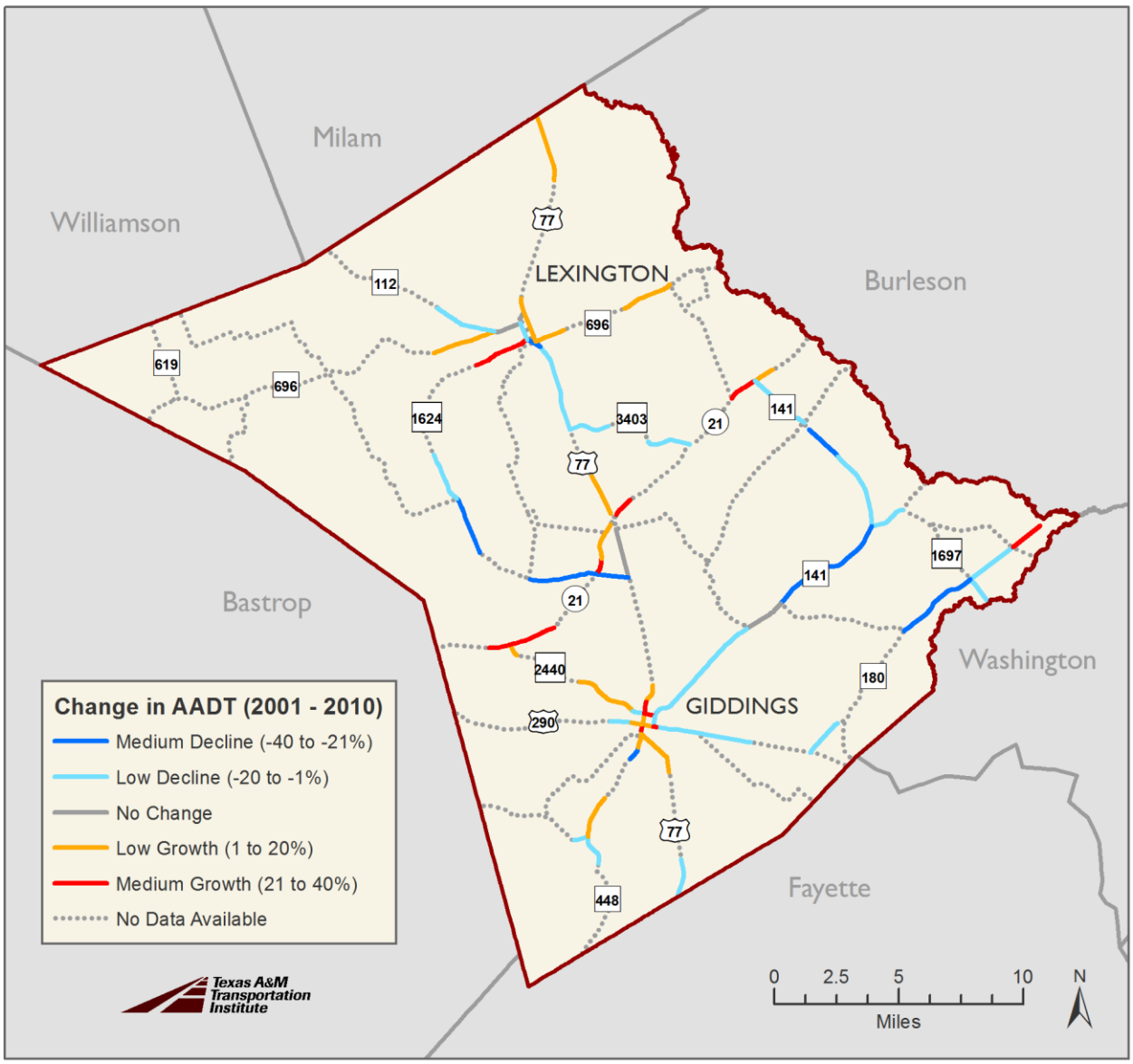


Figure 54**. Traffic Growth in Lee County (between 2001 and 2010).**

4.3.2 Forecast Year (2040) Analysis Results

Following the base year traffic growth analysis, an additional analysis was conducted to evaluate potential future traffic growth scenarios. To achieve this, two different scenarios were developed for the 2040 forecast year:

- Scenario I: Forecasted growth factors were developed for each traffic count site within Lee County using 2010 and projected 2040 demographic data. Two sets of growth factors were developed, based on either household or employment data, and the resulting forecast volumes obtained were allocated to each traffic count site. The maximum projected volumes for each traffic count site were chosen as a potential worst-case demographic-based scenario.
- Scenario II: Historic traffic trend formulations were developed for each traffic count site using the 20-year AADT count data. These trends were developed using both straight-line and exponential formulations, resulting in two sets of forecast volumes. Again, the maximum

projected volume was selected for each traffic county site as a potential worst-case traffic-trend-based scenario.

The demographic-based scenario (Scenario I) might be likelier to occur than the traffic-trend-based scenario (Scenario II), particularly for roads influenced by local traffic, because it is not reasonable to assume that traffic will steadily grow independently of regional demographic characteristics. However, both scenarios are presented for evaluation purposes.

Despite differences in methodologies and forecasts, current and projected LOS (levels of service) for Lee County are similar and reasonable when compared to roadway capacities. The entire network falls within the range of LOS A–C for 2010, as shown in Figure 55. In addition, nearly all of the Lee County roadway network falls within the range of LOS A-C for both 2040 scenarios, with the exception of a portion of US 290 passing through Giddings, as shown in Figure 56. Similar to the results for 2010, the results for 2040 indicate no traffic volumes exceeding their roadway capacity under Scenario I. Under Scenario II, a small stretch of this road segment near the center of the City of Giddings is forecasted to be over capacity (LOS F), but otherwise the current and projected scenarios do not deviate from each other.

Based on the projection and analysis of traffic count trends, no roadways show an immediate or forecast need for expansion because of traffic growth. However, traffic volumes should be monitored incrementally in the future for impacts from localized land development. Also, roadway improvements may be needed for safety purposes and for periodic special traffic-producing events, such as hurricane evacuations

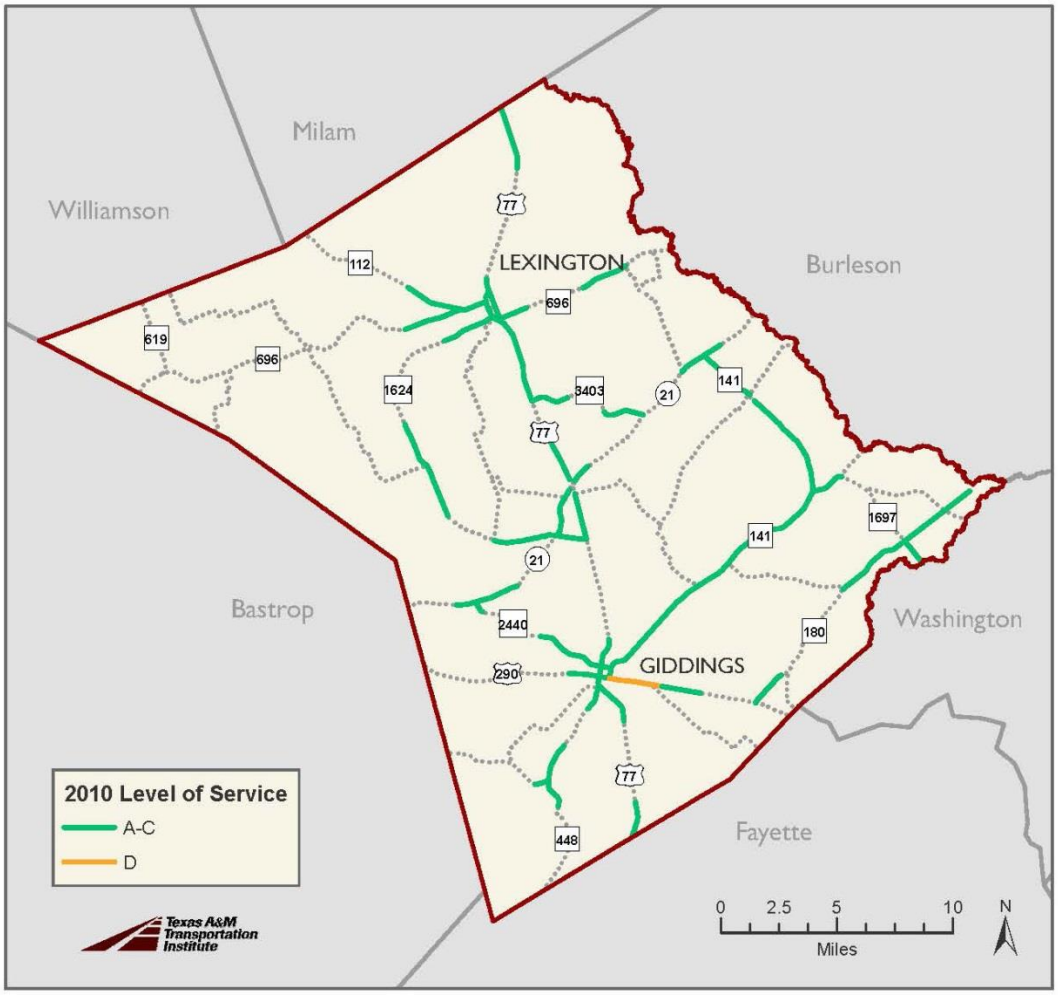


Figure 55. Current Levels of Service for Lee County (2010).

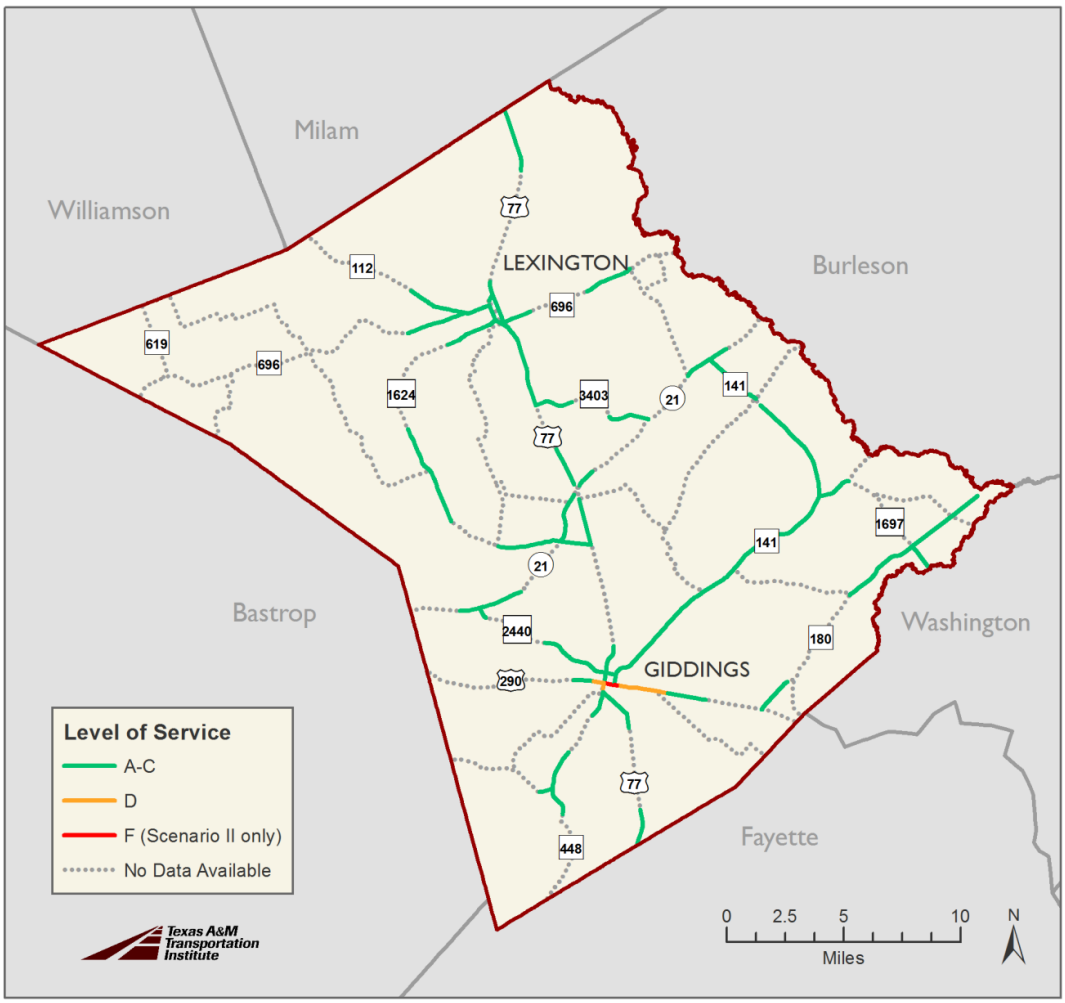
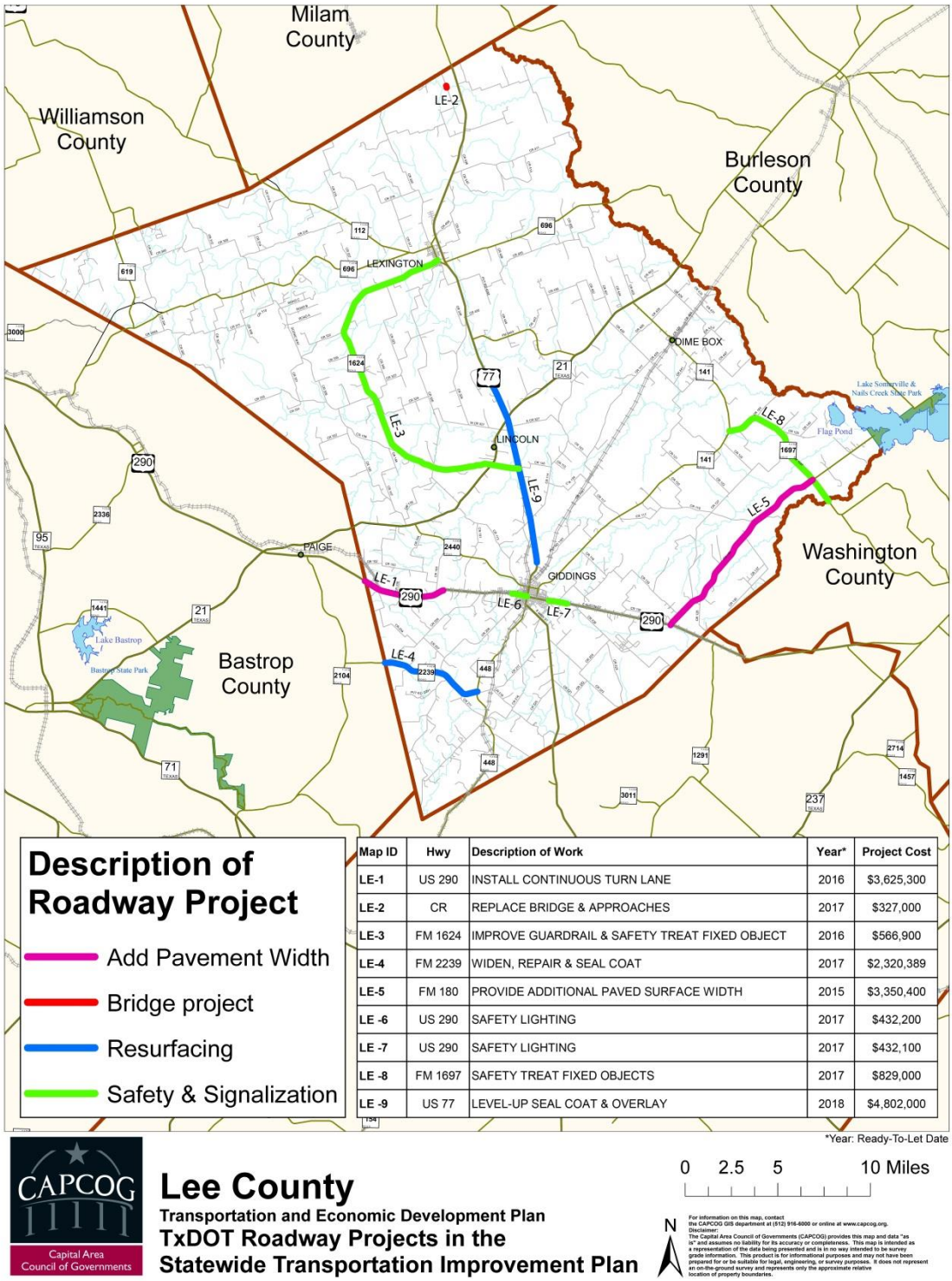


Figure 56. Projected Levels of Service for the Lee County Network (2040).

Please refer to Appendix A for a more detailed explanation of the traffic growth analysis.

4.4 Planned and Programmed Transportation Improvements

TxDOT has several transportation improvements that have already been programmed for Lee County. These planned projects are either underway or will begin within the next few years. These improvements address some of the more immediate transportation needs within the county. Future needs and improvements will be addressed in Chapters 5 and 6. Figure 57 provides a map of the five projects that are in the 2015–2018 TxDOT Statewide Transportation Improvement Program and are currently planned and programmed for Lee County.



Map ID	Hwy	Description of Work	Year*	Project Cost
LE-1	US 290	INSTALL CONTINUOUS TURN LANE	2016	$3,625,300
LE-2	CR	REPLACE BRIDGE & APPROACHES	2017	$327,000
LE-3	FM 1624	IMPROVE GUARDRAIL & SAFETY TREAT FIXED OBJECT	2016	$566,900
LE-4	FM 2239	WIDEN, REPAIR & SEAL COAT	2017	$2,320,389
LE-5	FM 180	PROVIDE ADDITIONAL PAVED SURFACE WIDTH	2015	$3,350,400
LE -6	US 290	SAFETY LIGHTING	2017	$432,200
LE -7	US 290	SAFETY LIGHTING	2017	$432,100
LE -8	FM 1697	SAFETY TREAT FIXED OBJECTS	2017	$829,000
LE -9	US 77	LEVEL-UP SEAL COAT & OVERLAY	2018	$4,802,000

*Year: Ready-To-Let Date

CAPCOG
Capital Area Council of Governments

Lee County
Transportation and Economic Development Plan
TxDOT Roadway Projects in the Statewide Transportation Improvement Plan

0 2.5 5 10 Miles

N

For information on this map, contact the CAPCOG GIS department at (512) 916-6000 or online at www.capcog.org.
Disclaimer:
The Capital Area Council of Governments (CAPCOG) provides this map and data "as is" and assumes no liability for its accuracy or completeness. This map is intended as a representation of the data being presented and is in no way intended to be survey grade information. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or survey purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

Figure 57. Planned and Programmed Projects in Lee County (Source: TxDOT).

Chapter 5—Transportation and Economic Development Plan

5.1 The Public Involvement Process

The Lee County Transportation and Economic Development Plan always had a primary guiding principal: to be developed by Lee County, for Lee County. From the start of the project, the need for community outreach was recognized, and a public involvement plan was developed. The following sections outline some of the primary public involvement strategies employed for the Lee County Transportation and Economic Development Plan.

5.1.1 Advisory Committees

Two citizen advisory committees were appointed by the Lee County Commissioners Court to guide the planning process, share information, and implement the public involvement plan. The Transportation Advisory Committee (TAC) and Economic Development Advisory Committee (EDAC) both met regularly throughout the development of the Lee County Plan. While the TAC identified transportation issues and proposed improvements, the EDAC concentrated on economic-development-related issues and strategies (refer to Chapter 3), which were integrated into the plan to provide a more comprehensive blueprint for the county.

The advisory committees were comprised of county residents, elected officials and administrators from the county and the cities of Giddings and Lexington, local business owners, independent school district representatives, and local economic development corporation and chamber of commerce representatives.

The TAC was tasked with providing oversight for the transportation planning process and ensuring that the community's vision was reflected in the final plan. The committee completed the following activities:

- Developed study goals.
- Provided background on development patterns, trends, and future needs for member organizations.
- Provided comments on the public involvement plan.
- Provided feedback on public information materials prepared for public meetings and outreach events.
- Provided guidance on assumptions made for the future of the county, such as the allocation of future population and employment growth.
- Participated in mapping exercises to identify transportation issues and to propose recommendations for transportation improvements.
- Reviewed and provided comments on the draft plan.
- Developed and supported the final plan adoption process.

Members of the Transportation Advisory Committee included:

- Rodney Meyer, Lee County Sheriff.
- Linda Patschke, Lexington EMS.
- Sylvin Mersiovsky, B&M Ambulance.
- Dr. Frances McArthur, Lexington ISD.
- Curtis Krause, Giddings ISD.

- Allen Law, Giddings ISD.
- Mike Organ, Lee County citizen representative.
- Ricky Jorgensen, city manager of Giddings.
- Paul E. Fischer, Lee County judge.
- Douglas Hartfield, Lee County commissioner.
- Evan Gonzales, Round Top State Bank.
- James Marburger, Lexington ISD.
- Brian Fischer, Fischer Langham Custom Builders.
- Kenny Ford, Lee County citizen representative.
- Lyle Nelson, CARTS.
- Roy Dill, TxDOT area engineer—Bastrop Area Office.
- Diana Schulze, TxDOT assistant area engineer—Bastrop Area Office.
- Andrew Hudanish, Union Pacific Railroad.
- John Dowell, City of Giddings mayor.
- Charlotte Hooper, City of Lexington mayor.

The EDAC was tasked with analyzing current demographic and economic data for Lee County and recommending economic development strategies that would encourage business investment and job growth within the county. The committee's recommendations are outlined in Chapter 3—Economic Development.

Members of the Economic Development Advisory Committee included:

- Tim Langham, Lions Club nominee.
- Denice Harlan, Giddings Chamber of Commerce.
- Nick Hinze, 1st National Bank—Giddings.
- Sharon Blasig, Lee County clerk.
- Rainey Owen, Lee County citizen representative.
- Avery Wright, Wright Insurance Agency.
- Thomas Jatzlau, Prosperity Bank.
- Charlotte Hooper, City of Lexington mayor.
- Maurice Pitts, Lee County commissioner.
- Tim Walther, Citizens National Bank.
- Lisa Noak, Round Top State Bank.
- Allen Law, Giddings ISD.
- Kathy Bricker, Lexington ISD.
- Maxine Siegmund, Lee County.
- David Rains, Dime Box ISD.
- Joyce Bise, Lee County citizen representative.
- Dave Roussel, Lee County citizen representative.
- John Dowell, City of Giddings mayor.
- Tonya Britton, Giddings EDC director.

5.1.2 Lee County Questionnaire

A specific goal of the Lee County Transportation and Economic Development Plan included gathering residents' opinions and thoughts about the future growth, transportation issues, and economic development for their county. Between May and July 2014, 59 county residents completed the Lee County Survey. The surveys were received through a web page and paper copies distributed in public meetings, at local community facilities, and at businesses. Appendix B includes a summary of the results, which were used in developing transportation and economic development proposals for the plan.

5.1.3 Public Meetings

In addition to gathering input through the questionnaire, two public meetings were held to inform residents about the status of the plan and provide them an opportunity to comment on the work thus far. The first meeting, held May 22, 2014, at the St. John Lutheran Church Family Life Center in Lincoln, presented information to the public about the existing conditions in Lee County and kicked off the questionnaire process. A total of 29 people attended this public event. At the meeting, the attendees had the opportunity to view several map exhibits including:

- TxDOT Roadway Functional Classification and Railroad Lines.
- Average Daily Traffic in Lee County, 2011—provided the average total volume of traffic per day on state roadways.
- Truck Volumes on State Roads, 2011—provided percent of truck traffic utilizing the state roadway system.
- TxDOT Roadway Projects for Lee County 2015–2017.
- Oil and Gas Activity within Lee County, 2013.
- Hurricane Evacuation Routes within Lee County.
- County Topology/Hydrology Maps.
- Floodplain Map for Lee County.
- Independent School Districts in Lee County.
- Minor and Major Motor Vehicle Crash Data 2010–2012.
- Lee County Demographics and Economy Display—CAPCOG-provided population and employment information.
- Projected 2040 Housing and Employment Allocation—based on the TAC mapping exercise results.
- Population Density by Census Block in Lee County, 2010.
- Pavement Conditions for State Roadways within Lee County, 2013.
- Giddings/Lee County Airport.
- CARTS Display—current rural transit services for Lee County.

A public comment station was set up for the meeting to allow the attendees an opportunity to receive and complete the questionnaire. An exercise map of Lee County was also available where residents could comment on the transportation and economic development issues identified by both advisory committees. Several comments were collected on the exercise map.

A summary of the comments heard at the May 22, 2014, public meeting can be viewed in Appendix C.

The second public meeting was held on Monday, October 6, 2014, at the Lee County Courthouse in Giddings. The meeting was held in an open house format with a short presentation on the plan findings. A total of approximately 10 people attended the public meeting. At the meeting, attendees were provided information on the following topics:

- Proposed thoroughfare improvements (recommendations from the TAC).
- Economic development improvements and recommendations (from the EDAC).
- Historical and Projected Population counts for Lee County.
- Lee County Population Density (Current and Projected).
- Historic Median Household Income for Lee County.
- Projected Median Household Income for Lee County.
- Lee County Employment Density (Current and Projected).
- Change in Average Annual Daily Traffic for Lee County (2001-2010).
- Projected Level of Service for Lee County (2040).

Draft copies of the Lee County Transportation and Economic Development Plan were available for members of the public to review. In addition, comment forms were provided for members of the public to provide written comments on the plan.

A summary of the comments heard at the October 6, 2014, public meeting can be viewed in Appendix C.

5.2 Infrastructure Needs Assessment

An integral part of developing an effective plan is assessing the needs of the county. The transportation requirements of the county may also differ depending on one's perspective. Municipal, county, and TxDOT technical staff may recognize needs differently than the general public. To ensure a comprehensive needs assessment, the Lee County Commissioners' Court carefully selected the members of the project's two advisory committees to represent a broad spectrum of county residents with diversified areas of expertise and knowledge. The two advisory committees, with input from citizens that attended the public meetings and with the results of the questionnaire, developed a list of recommended transportation improvements along with suggested economic development enhancements, as shown in Table 19**.**

As the population of and employment of Lee County grows, more housing and schools will be built, more goods will be transported, and more business will be conducted within the county. To maintain economic vitality as well as the quality of life of the citizens, the transportation infrastructure must be periodically assessed and updated. Identifying infrastructure needs assures that environmental quality concerns can be avoided or mitigated when planning future transportation improvements.

5.3 Recommended Transportation and Economic Development Improvements

The proposed improvements, as shown in Table 19, were categorized as follows: TxDOT planned projects for Lee County, TAC/public recommended projects, and CARTS recommended transit service improvements. Then under each of these categories, the planned and proposed improvements were listed according to the following project classifications:

- Roadway Repairs/Replacements.
- Roadway Expansions/Operational Improvements.
- Safety-Related Improvements.
- Pedestrian and Other Infrastructure Projects.
- Tourism Signage Enhancements.
- Transit Service Improvements.
- Airport Improvements.

Within each section of Table 19, a specific location is described, the identified issue is explained, a planned or proposed improvement is offered, other comments are provided to cross reference to related proposals or to clarify the recommended improvement, verification of project funding is given, and designation of jurisdictional responsibility for project implementation is listed.

The majority of the planned or proposed improvements address transportation issues with the existing TxDOT roadway system. This includes both state highways and farm-to-market roads located within Lee County. Other transportation projects for the cities of Giddings and Lexington are also listed along with targeted economic development proposals such as pedestrian, streetscaping, and signage improvements. Likewise, the table includes a CARTS recommendation for improved transit services for Lee County residents by proposing a flag-stop interurban transit facility in Giddings. Appendix D provides a brief overview of how CARTS is

addressing the current and future transit needs of Lee County along with a map of the proposed interurban coach routes. The items highlighted in purple are proposed county-sponsored projects that include county roadway improvements along with planned upgrades to the Giddings/Lee County Airport.

Table 19. Lee County Recommended and Planned Transportation and Economic Development Improvements.

LEE COUNTY RECOMMENDED AND PLANNED TRANSPORTATION IMPROVEMENTS				
Sources *: Transportation Advisory Committee(TAC) appointed by the Lee County Commissioners Court*	*Citizen Input from the May and October 2014 Public Meetings in Lincoln and Giddings, and from the Questionnaire Results (refer to Appendix A)*	*TXDOT Austin District Planned Roadway Projects for Lee County 2015-2017*	*Capital Area Rural Transit Services (CARTS)*	*Proposed County Sponsored Projects (highlighted in purple)*

TXDOT PLANNED ROADWAY REPAIRS-REPLACEMENTS					
ID / LOCATION	**ISSUES**	**PLANNED IMPROVEMENTS**	**TXDOT PROJECT LET YEAR**	**FUNDED**	**RESPONSIBLE ORGANIZATION**
A) FM 2239 (FM 448 to the Bastrop County Line)	Roadway surface maintenance issue	Repair and seal coat	2017 - Refer to TxDOT Planned Roadway Expansions/Operational Improvements, ID: N (FM 2239)	X	TxDOT
B) CR 314 A and Allen Creek	Bridge condition and design	Replace bridge and approaches	2017	X	TxDOT

Table 19. Lee County Recommended and Planned Transportation and Economic Development Improvements (Continued).

TAC/PUBLIC RECOMMENDED ROADWAY REPAIRS-REPLACEMENTS					
ID / LOCATION	ISSUES	PROPOSED IMPROVEMENTS	OTHER COMMENTS	FUNDED	RESPONSIBLE ORGANIZATION
C) SH 21 (Manheim to Elm Creek)	Slick pavement	Pavement resurfacing			TxDOT
D) US 77 (SH 21 to FM 696)	Rough pavement conditions	Pavement resurfacing			TxDOT
E) FM 1624	Rough pavement conditions	Pavement resurfacing	Refer to TxDOT Planned Safety, ID: NN (FM 1624)		TxDOT
F) E CR 327 - from intersection of US 77 and E CR 327 eastward 2.63 miles	Oil field traffic has destroyed this road	Remix sub base and add base, rework bar ditches and repave. Replace crushed pipes.	County Transportation Infrastructure Fund (CTIF) Grant Program Project	X	Lee County
G) CR 114 - from intersection of E CR 327 and CR 114 northward 3 miles	Oil field traffic has destroyed this road	Remix base, add base, and repave.			Lee County
H) CR 135 - from intersection of US 77 and CR 135 eastward 1.76 miles	Oil field traffic has destroyed this road	Remix base, add base, and repave.			Lee County
I) CR 143 - from intersection of CR 114 and CR 143 eastward for 1.24 miles	Oil field traffic has caused bad potholes and soft areas in the road	Fill large potholes and dig out soft areas and fill with new base and premix			Lee County
J) CR 117 - from intersection of CR 143 and CR 117 eastward/southeastward 3.811 miles	Oil field traffic has caused bad potholes and soft areas in the road	Fill large potholes and dig out soft areas and fill with new base and premix			Lee County
K) CR 104 - from intersection of FM 2440 and CR 104 southward 1.2 miles	Oil field traffic has caused bad potholes and soft areas in the road	Till and add gravel as needed	CTIF Grant Program Project	X	Lee County
L) CR 320 - from Lexington City Limits northward 3.5 miles	Oil field traffic has destroyed this road	Repave road	CTIF Grant Program Project	X	Lee County
M) E CR 428 - from FM 141 to CR 426	Oil field traffic has destroyed this road	Repave road	CTIF Grant Program Project	X	Lee County

TXDOT PLANNED ROADWAY EXPANSIONS-OPERATIONAL IMPROVEMENTS					
ID / LOCATION	ISSUES	PLANNED IMPROVEMENTS	TXDOT PROJECT LET YEAR	FUNDED	RESPONSIBLE ORGANIZATION
N) FM 2239 (FM 448 to Bastrop County Line)	Inadequate pavement width for traffic	Widen pavement by adding 3 foot shoulders	2017 - Refer to TxDOT Planned Roadway Repairs/Replacements, ID: A (FM 2239)	X	TxDOT
O) FM 180 (US 290 to FM 1697)	Inadequate pavement width for traffic	Provide additional 3 foot shoulders to paved surface width	2015	X	TxDOT
P) US 290 (Bastrop County Line to just east of CR 105)	Problems with left turns onto intersecting county roads and driveways	Install continuous turn lane	2016	X	TxDOT

Table 19. Lee County Recommended and Planned Transportation and Economic Development Improvements (Continued).

TAC/PUBLIC RECOMMENDED ROADWAY EXPANSIONS-OPERATIONAL IMPROVEMENTS					
ID / LOCATION	ISSUES	PROPOSED IMPROVEMENTS	OTHER COMMENTS	FUNDED	RESPONSIBLE ORGANIZATION
Q) FM 696 (East and west of US 77)	Increased commuter traffic on a narrow, curvy roadway	Add 3 foot shoulders, widen lanes, straighten alignment, and provide turn lane and passing lanes			TxDOT
R) SH 21 (Burleson County Line to Bastrop County Line)	Traffic level exceeds current capacity. Difficult ingress and egress from county roads	On an interim basis construct continuous center turn lane Fully implement Presidential Corridor Plan - 4-lane divided highway	Right-of-way (ROW) acquisition will be required for both the turn lane and the divided project		TxDOT
S) FM 141 and UP Railroad in Dimebox	Roadway traffic flow and high volume of trains coming through Dimebox creates frequent traffic delays on FM 141	Study traffic mobility and cost of constructing an overpass or underpass to circumvent the railroad			TxDOT
T) US 77 and FM 1624	No left turn lane for traffic accessing roadway off of US 77	Provide left turn lane			TxDOT
U) US 290 from Bastrop County Line to Navarro St.	High volume of traffic on a major undivided highway	Widen and reconstruct US 290 as a 4-lane divided highway	Refer to TxDOT Planned Roadway Expansions, ID: P (US 290)		TxDOT
V) US 77 and US 290	Increasing truck traffic from Brenham and College Station to/from points south on US 77 and west on US 290	Study feasibility of constructing a highway connector between US 77 and US 290 southeast of Giddings	Refer to TAC/P Recommended Expansions, ID: Y (US 290)		TxDOT
W) US 77 and Loop 123 - south side of Lexington	Short turn lane and deficient stripping of existing lanes	Reconstruct intersection providing improved left turn lane capacity and restriping			TxDOT
X) FM 1697 from FM 141 to Washington County Line	No shoulders	Widen pavement by adding 3 foot shoulders			TxDOT
Y) US 290 and UP Railroad	Heavy roadway traffic flow and high volume of trains coming through town creates frequent traffic jams on US 290	Study traffic mobility, economic impact and cost of constructing the following options: overpass, underpass, reliever route around Giddings, or relocate railroad line	Refer to TAC/P Recommended Safety, ID: CC (US 290)		TxDOT, City of Giddings and UP
Z) CR 226 and US 290	Inadequate access to proposed industrial park on the north side of US 290	Extend CR 226 north of US 290 into proposed industrial park			City of Giddings, EDC and Lee County
AA) US 77 from US 290 to Fayette County Line	Increasing truck traffic and deteriating pavement conditions	Provide pavement repair, level up and seal, and reconstruct highway into a Super 2			TxDOT
BB) FM 141 from FM 1697 to SH 21	No shoulders	Widen pavement by adding 3 foot shoulders			TxDOT

Table 19. Lee County Recommended and Planned Transportation and Economic Development Improvements (Continued).

TAC/PUBLIC RECOMMENDED SAFETY RELATED IMPROVEMENTS					
ID / LOCATION	ISSUES	PROPOSED IMPROVEMENTS	OTHER COMMENTS	FUNDED	RESPONSIBLE ORGANIZATION
CC) US 290 and UP Railroad	Railroad crossing arms often fail and block traffic flow	Repair/replace railroad crossing arms	Refer to TAC/P Recommended Expansions, ID: Y (US 290)		UP Railroad Co.
DD) US 77 in Lexington	Limited visibility of school zone warning lights	Install school zone warning lights that are visible while traveling both north and south along US 77			TxDOT
EE) US 290 East of Giddings	Low speed limit on divided section of US 290	Conduct traffic speed study to determine appropriate speed limit			TxDOT
FF) FM 1697 and FM 180	Frequent violation of traffic stop sign	Provide safety/warning lights at intersection			TxDOT
GG) SH 21 Right-of-Way (ROW)	Visibility limited by high grass in ROW	Increase frequency of ROW mowing at key intersections	Programmed TxDOT maintenance		TxDOT
HH) CR 117, 114, 327,143 and 135	Traffic signs have been altered and ruined by graffiti	Replace stop signs, speed limit signs and other traffic related signs			Lee County
II) US 77 and North Ave. in Lexington	Dangerous intersection with no traffic regulation	Traffic analysis to determine if a traffic light is needed			City of Lexington and TxDOT
JJ) SH 21 in Lincoln	Speed limit too high going through Lincoln	Conduct traffic speed study to determine appropriate speed limit			TxDOT
KK) Hale Street and 5th Street in Lexington	No posted school zone or speed limit change for road behind school that wraps around the student pick up area	Conduct traffic speed study to determine appropriate speed limit and verify need for a designated school zone			City of Lexington and Lexington ISD
LL) US 77 north of Lexington	Speed limit to high entering into Lexington on the north side	Conduct traffic speed study to determine appropriate speed limit transitioning into Lexington			TxDOT
MM) US 77 and Giddings High School driveway	Students and staff pulling out of parking lot into primary traffic lane creates traffic hazard	Conduct traffic study to determine what type of traffic control measures and/or driveway redesign could be implemented			TxDOT, City of Giddings and Giddings ISD

TXDOT PLANNED SAFETY RELATED IMPROVEMENTS					
ID / LOCATION	ISSUES	PLANNED IMPROVEMENTS	TXDOT PROJECT LET YEAR	FUNDED	RESPONSIBLE ORGANIZATION
NN) FM 1624 (US 77 to SL 123 in Lexington)	Damaged and inadequate guardrail along roadway	Improve guardrail and safety treat fixed objects	2016	X	TxDOT

Table 19. Lee County Recommended and Planned Transportation and Economic Development Improvements (Continued).

TAC/PUBLIC RECOMMENDED PEDESTRIAN AND OTHER INFRASTRUCTURE IMPROVEMENTS					
ID / LOCATION	ISSUES	PROPOSED IMPROVEMENTS	OTHER COMMENTS	FUNDED	RESPONSIBLE ORGANIZATION
OO) Burns St. from 5th St. to 1st St. and 3rd St. from US 77 to SL 123 (Rockdale St)	No sidewalks provided for students at the school campuses and limited pedestrian linkage to downtown	Construct sidewalks linking all of school buildings, activity areas and downtown along with properly marked crosswalks and signage			City of Lexington and TxDOT
PP) Downtown Lexington - From 3rd St. to 4th St. and from Rockdale Street (SL 123) to Main St. (including Wheatley St. and the City Park)	Unleveled and missing sidewalks throughout portions of downtown; outdated parking design and limited streetscaping amenities	Construct/reconstruct sidewalks, crosswalks, parking areas, and install streetscaping amenities (restore and add to existing decorative lighting, provide updated signage and landscaped areas along with other pedestrian features)			City of Lexington and TxDOT
QQ) Courthouse Square in Giddings - South Main (US 77), East Hempstead, South Grimes and East Richmond	The streets around the courthouse have incomplete sidewalks, outdated parking design and lack streetscaping	Construct/reconstruct sidewalks, crosswalks, parking areas, and install streetscaping amenities (add to existing decorative lighting, provide updated signage, landscaped areas and other pedestrian features)			City of Giddings and TxDOT
RR) US 77 from East Hempstead to Railroad St. and South Grimes St from East Hempstead to Railroad St, and US 290 from Burleson to South Grimes St.	Unattractive and under utilized sidewalks connecting the courthouse square with downtown and along the two major highways	Install streetscaping elements - street furniture, coordinated lighting, street trees, awnings and decorative crosswalks			City of Giddings and TxDOT
SS) Downtown Giddings	Inadequate visitor parking downtown	Provide designated visitor parking area with convenient pedestrian access to downtown businesses	Refer to TAC/P Recommended Pedestrian, ID: RR (US 77)		City of Giddings
TT) FM 141 and CR 424 in Dime Box	Limited parking for teachers and other staff at school campus	Provide designated parking areas for school staff and administrators adjacent to the school buildings or within convenient walking distance of the campus facilities			Dime Box ISD

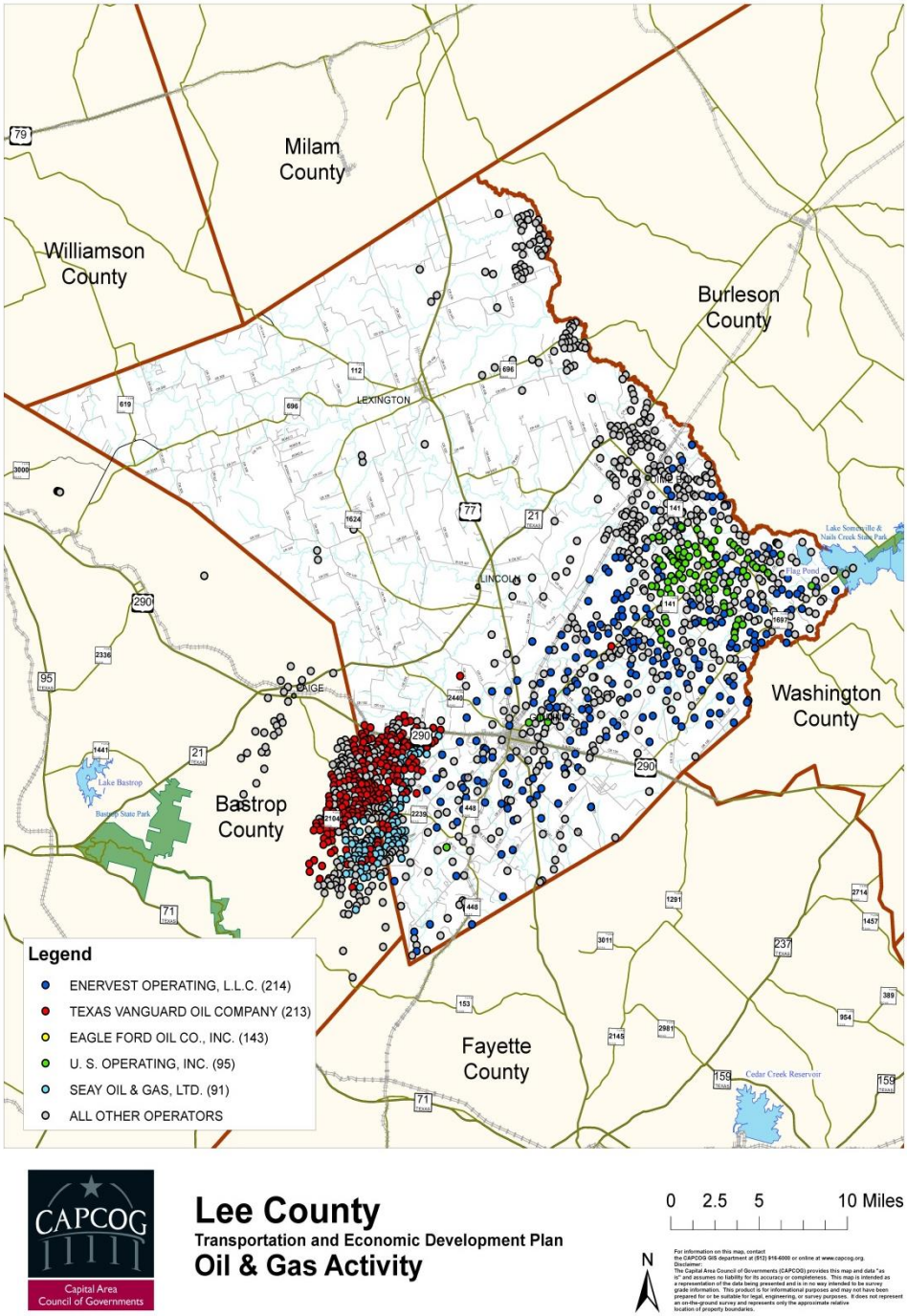
TAC/PUBLIC RECOMMENDED TOURISM SIGNAGE IMPROVEMENTS					
ID / LOCATION	ISSUES	PROPOSED IMPROVEMENTS	OTHER COMMENTS	FUNDED	RESPONSIBLE ORGANIZATION
UU) US 77 - north of SL 123 and south of SL 123 in Lexington	Limited signage to direct visitors to downtown Lexington and other sites of interest	Install way-finding signage for both north and south bound traffic along US 77	(ROW coordination)		City of Lexington and TxDOT
VV) US 290 - east and west sides of Giddings and US 77 - north and south sides of Giddings	Limited signage to direct visitors to downtown Giddings and other sites of interest	Install way-finding signage for both north and south bound traffic along US 77, and for east and west bound traffic along US 290	(ROW coordination)		City of Giddings and TxDOT
WW) US 77 north and south of Lexington	Minimal designation signage for Lexington	Construct gateway signage feature with landscaping on the north and south sides of Lexington on US 77	(ROW coordination)		City of Lexington and TxDOT
XX) US 290 east and west of Giddings, and US 77 north and south of Giddings	Minimal designation signage for Giddings	Construct gateway signage feature with landscaping on the north and south sides of Giddings on US 77, and on US 290 on the east and west sides of Giddings	(ROW coordination)		City of Giddings and TxDOT

CARTS RECOMMENDED TRANSIT SERVICE IMPROVEMENTS					
ID / LOCATION	ISSUES	PROPOSED IMPROVEMENTS	OTHER COMMENTS	FUNDED	RESPONSIBLE ORGANIZATION
YY) Giddings	Inadequate intercity bus service	CARTS flag-stop interurban transit facility (refer to Appendix B)	Centrally located site near US 77 and US 290. Coordination with the City of Giddings and TxDOT		CARTS

Table 19. Lee County Recommended and Planned Transportation and Economic Development Improvements (Continued).

TAC/PUBLIC RECOMMENDED AIRPORT IMPROVEMENTS					
ID / LOCATION	ISSUES	PROPOSED IMPROVEMENTS	OTHER COMMENTS	FUNDED	RESPONSIBLE ORGANIZATION
ZZ) Giddings/Lee County Airport	Inadequate hangar space at the airport	Add 10 unit T-Hangars to airport facilities	$1.1 million grant from TxDOT's Aviation Division	X	TxDOT, Lee County and City of Giddings
AAA) Giddings/Lee County Airport	Runway is not long enough to accommodate increasing air traffic	Lengthen existing runway			TxDOT, Lee County and City of Giddings

Table 19 also shows four county road projects that are currently funded through the County Transportation Infrastructure Fund (CTIF) Grant Program, which was created by the 83rd Texas Legislature, codified in Section 256.103 of the Texas Transportation Code and is being administered by TxDOT. This funding is available to counties for transportation infrastructure projects located in areas affected by increased oil and gas production. Figure 58 shows the oil and gas activity in Lee County as of 2013.



CAPCOG
Capital Area Council of Governments

Lee County
Transportation and Economic Development Plan
Oil & Gas Activity

For information on this map, contact the CAPCOG GIS department at (512) 916-6000 or online at www.capcog.org.
Disclaimer:
The Capital Area Council of Governments (CAPCOG) provides this map and data "as is" and assumes no liability for its accuracy or completeness. This map is intended as a representation of the data being presented and is in no way intended to be survey grade or legal data. It is provided for informational purposes and may not have been prepared for or be suitable for legal, engineering, or survey purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

Figure 58. Oil and Gas Activity in Lee County, 2013.

The county was required to submit a supplemental road condition report, create a county energy transportation reinvestment zone (shown in Figure 59), provide a detailed list and scope of transportation infrastructure projects to be funded, and provide matching funds in the amount of 10 percent of the grant amount. Lee County is designated to receive $420,242 from TxDOT. The county's share will be $105,061 in matching funds. The total cost of the four CTIF Grant Program projects is $525,303.

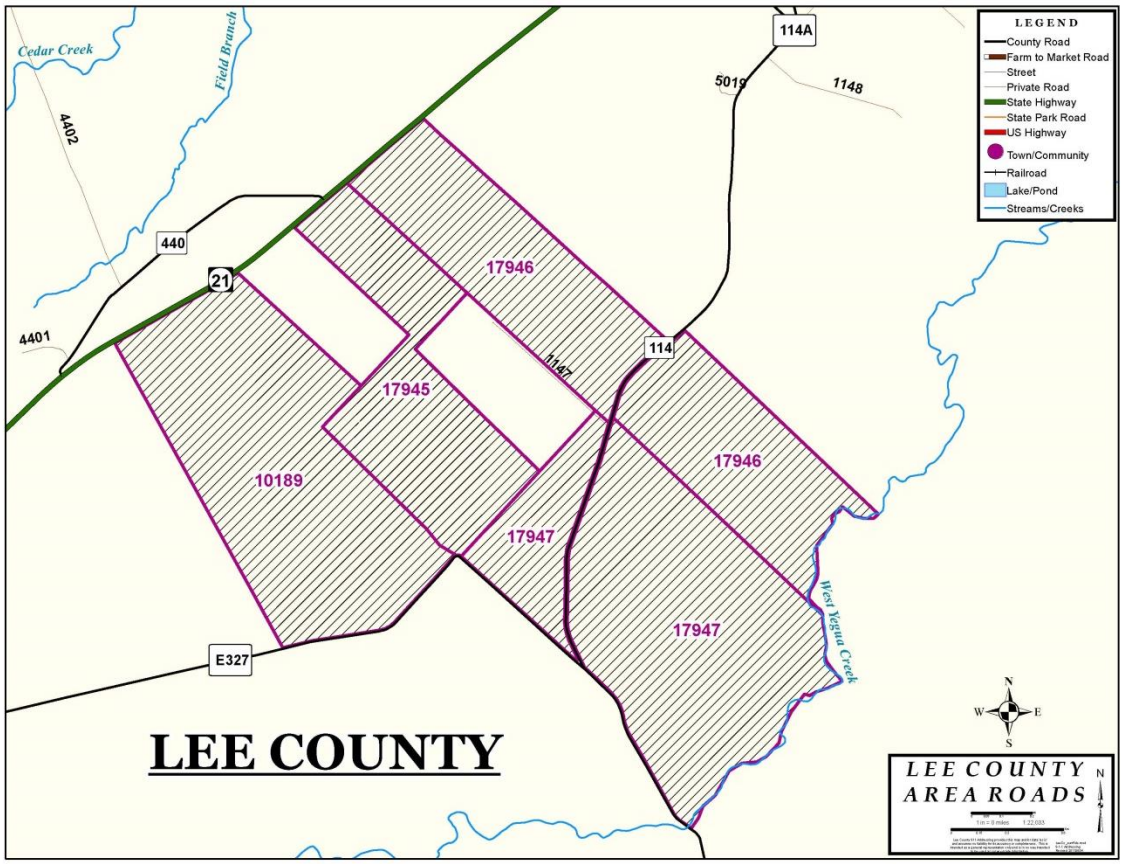


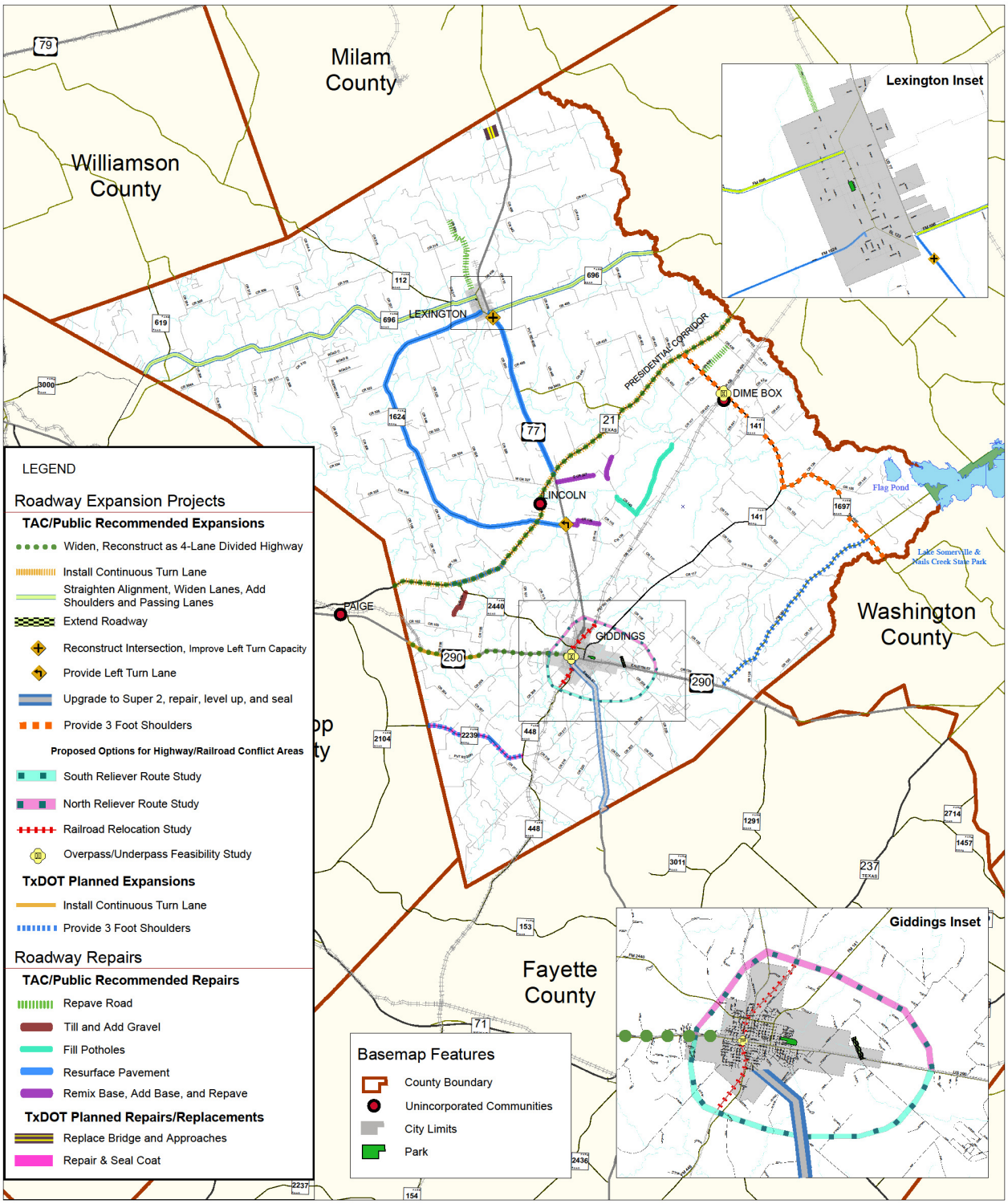
Figure 59. Lee County Energy Transportation Reinvestment Zone (Source: Lee County).

5.4 Maps of Recommended Transportation and Economic Development Improvements

In an effort to visualize how the recommended improvements would create a comprehensive strategic plan for future growth and development of Lee County, four maps were designed that summarize the proposed transportation and economic development initiatives of the public involvement process. The maps identified below are shown on the following pages:

- Proposed Thoroughfare Improvements (refer to Figure 60).
- Proposed Transportation Safety Improvements (refer to Figure 61).
- Proposed Pedestrian, Tourism, and Transit Improvements (refer to Figure 62).
- Proposed Airport Improvements (refer to Figure 63).

These four graphic illustrations cumulatively represent the official Transportation and Economic Development Plan for Lee County. Upon adoption by the Lee County Commissioners' Court, this plan will serve as a legal foundation on which the county can make future decisions on transportation and development issues. As with any plan, the county will need to periodically revisit the recommended projects and other elements of the plan in order to update it with current information and innovative improvements that address new issues that arise in the future.



Lee County

Transportation and Economic Development Plan

Proposed Thoroughfare Improvements

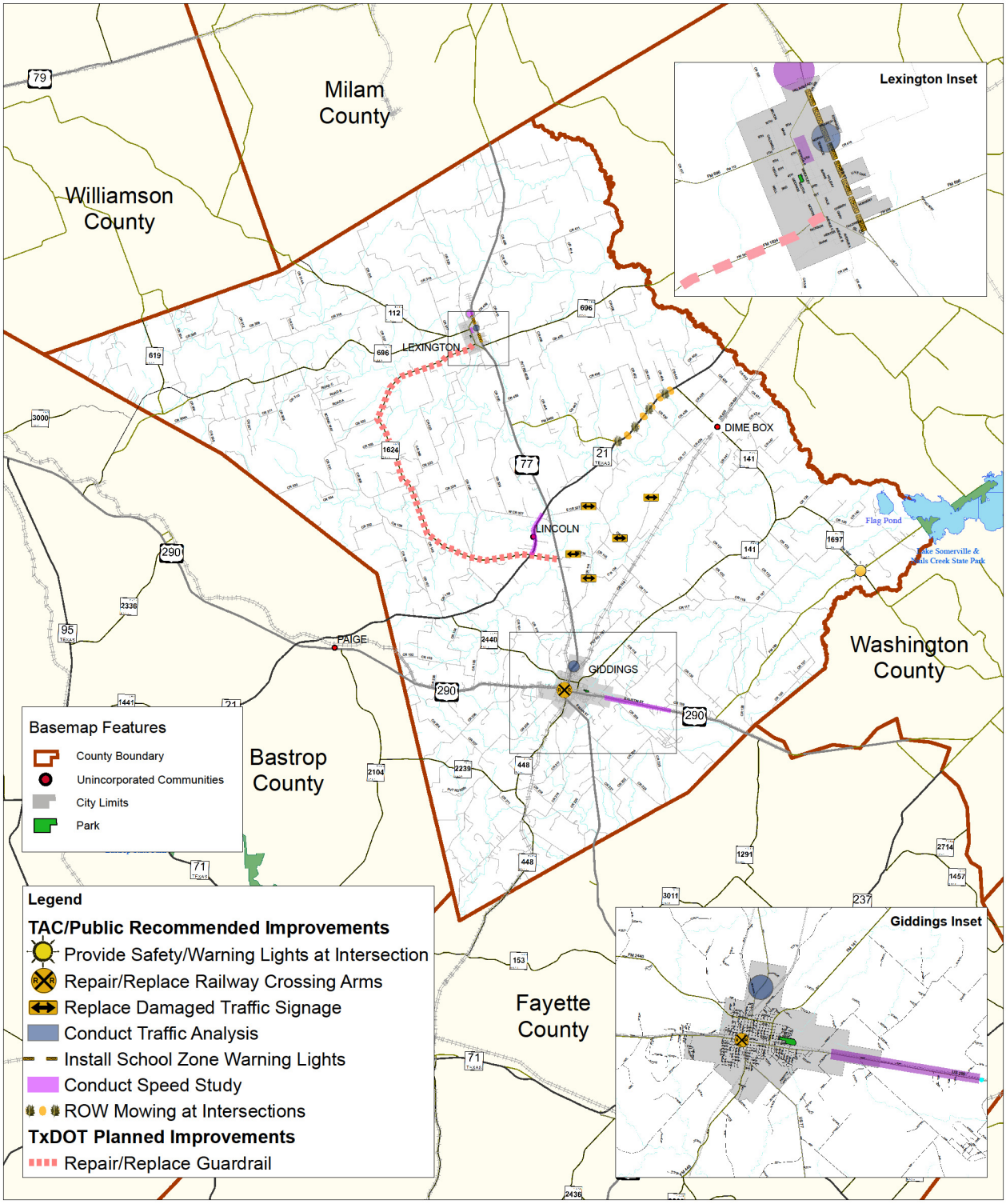
(Transportation Advisory Committee and Public Recommendations)

Capital Area Council of Governments

0 2.5 5 10 Miles

N

For information on this map, contact the CAPCOG GIS department at (512) 916-6000 or online at www.capcog.org.
Disclaimer:
The Capital Area Council of Governments (CAPCOG) provides this map and data "as is" and assumes no liability for its accuracy or completeness. This map is intended as a representation of the data being presented and is in no way intended to be survey grade information. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or survey purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.



Lee County

Transportation and Economic Development Plan

Proposed Transportation Safety Improvements

Transportation Advisory Committee (TAC) & Public Recommendations

0 2.5 5 10 Miles

N

For information on this map, contact the CAPCOG GIS department at (512) 916-6000 or online at www.capcog.org.
Disclaimer:
The Capital Area Council of Governments (CAPCOG) provides this map and data "as is" and assumes no liability for its accuracy or completeness. This map is intended as a representation of the data being presented and is in no way intended to be survey grade information. This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or survey purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

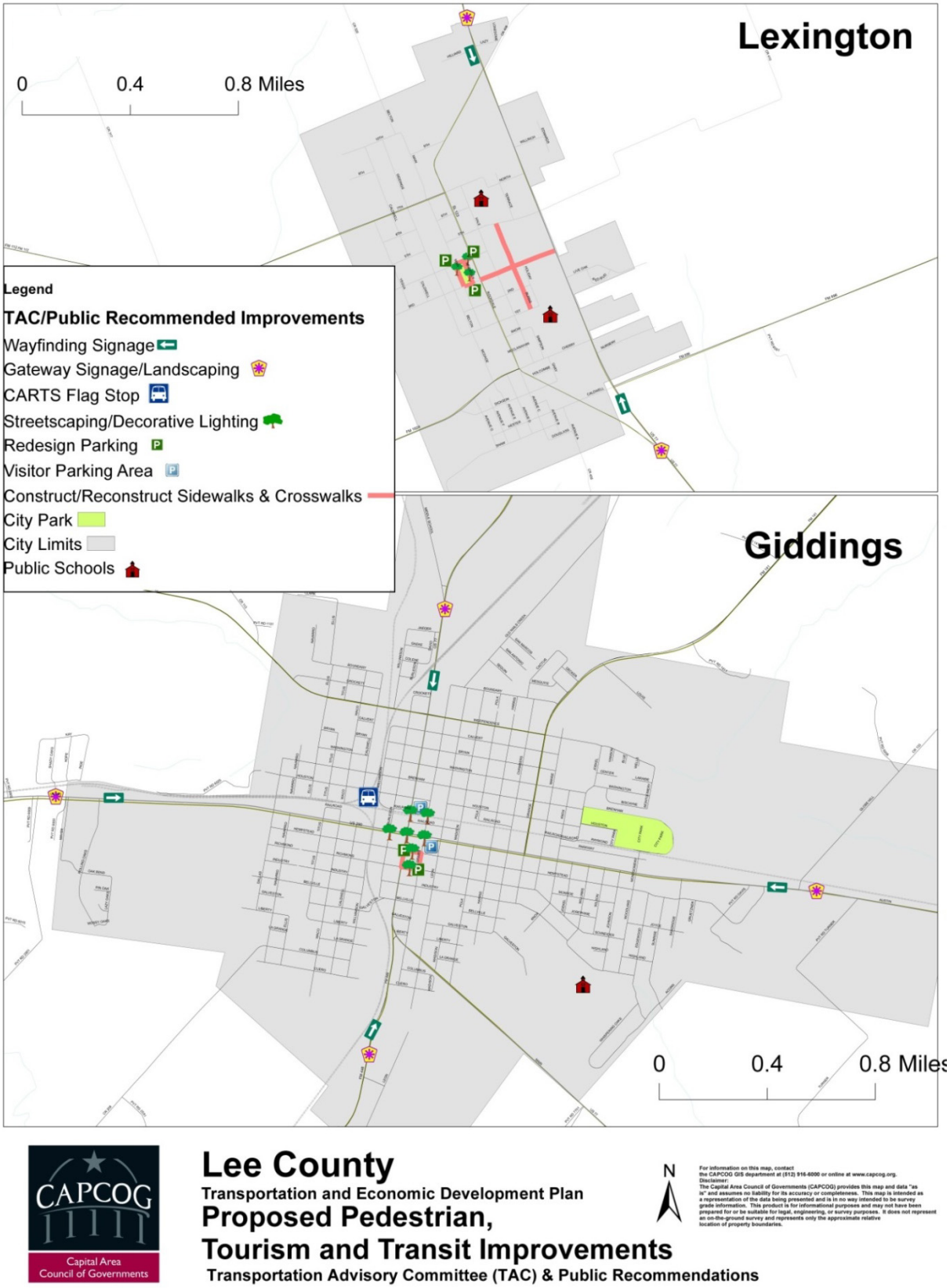


Figure 62. Proposed Pedestrian, Tourism, and Transit Improvements.

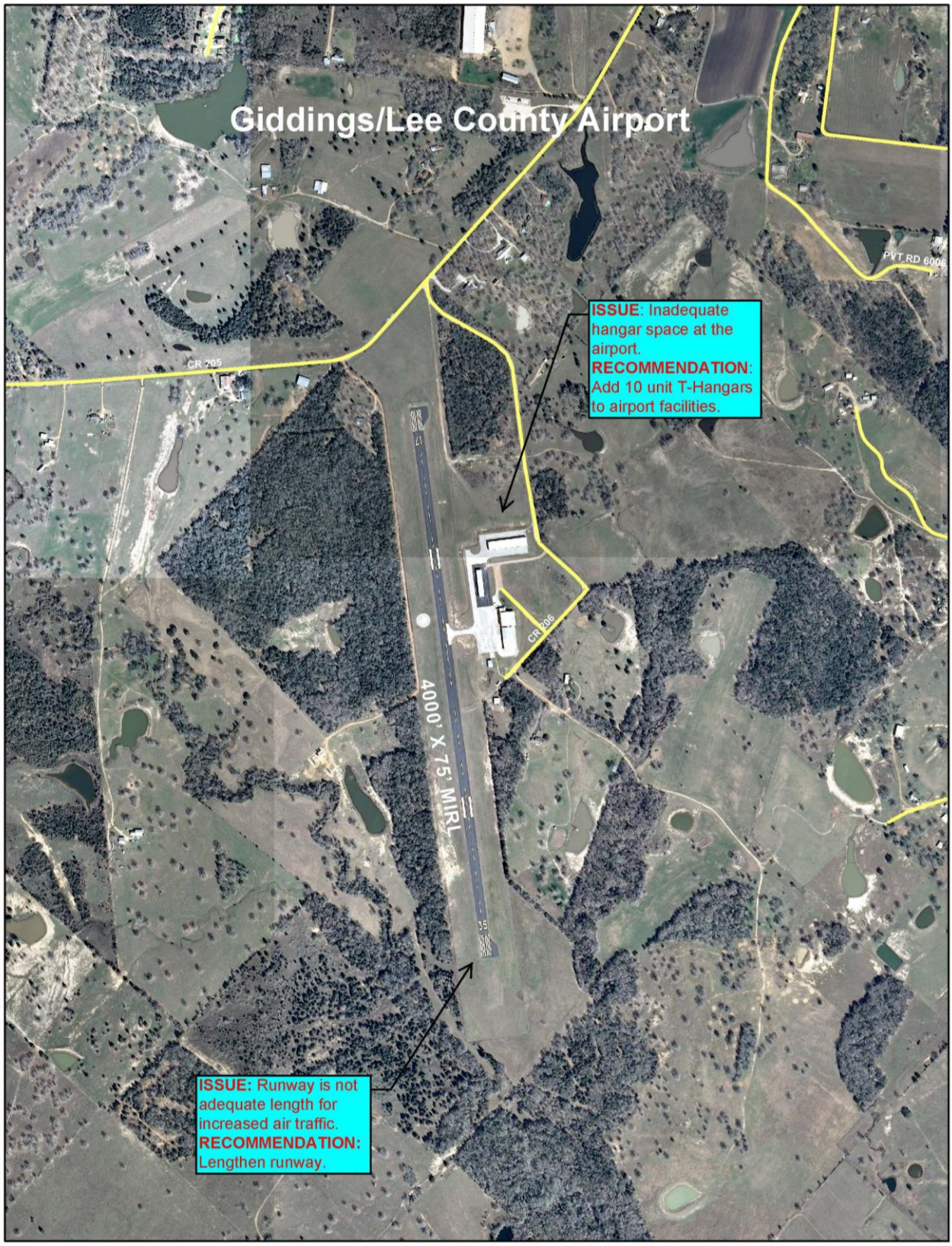


Figure 63. Proposed Airport Improvements.

Chapter 6—Recommendations and Plan Implementation Strategies

6.1 Findings and Recommendations

The Lee County Transportation and Economic Development Plan process provided insight into the potential future transportation conditions in Lee County. This insight, along with input from the Transportation Advisory Committee and public, was instrumental in developing the transportation improvement project list shown in Chapter 5. The priority of any given project may change over time as conditions change and funding becomes available. To keep the plan relevant, it should be reviewed periodically. How often this occurs will be dependent on how much the conditions in Lee County change.

6.2 Project Prioritization

Project prioritization may be based on a needs assessment of the entire county with input from the public playing a large role. The Lee County Transportation and Economic Development Plan does not prioritize the current list of potential projects but rather provides insight into the many factors that affect the prioritization process.

6.2.1 Transportation Advisory Committee Prioritization Exercise

The Lee County Transportation Advisory Committee was asked to identify its top three priorities within each section of improvements (safety related, expansion, repairs, etc.). Table 20 through Table 26 provide the results of the Transportation Advisory Committee's exercise. Please note that this process was an exercise of the Transportation Advisory Committee, and the results are not reflective of overall community preferences.

Table 20. TAC Ranking of TAC/Public Recommended Roadway Repairs-Replacements.

TAC/PUBLIC RECOMMENDED ROADWAY REPAIRS-REPLACEMENTS				
RANK	LOCATION	ISSUES	PROPOSED IMPROVEMENTS	RESPONSIBLE ORGANIZATION
1	SH 21 (Manheim to Elm Creek)	Slick pavement	Pavement resurfacing	TxDOT
2	US 77 (SH 21 to FM 696)	Rough pavement conditions	Pavement resurfacing	TxDOT
3	FM 1624	Rough pavement conditions	Pavement resurfacing	TxDOT
4	CR 143 - from intersection of CR 114 and CR 143 eastward for 1.24 miles	Oil field traffic has caused bad potholes and soft areas in the road	Fill large potholes and dig out soft areas and fill with new base and premix	Lee County
5	CR 114 - from intersection of E CR 327 and CR 114 northward 3 miles	Oil field traffic has destroyed this road	Remix base, add base, and repave	Lee County
5	CR 117 - from intersection of CR 143 and CR 117 eastward/southeastward 3.811 miles	Oil field traffic has caused bad potholes and soft areas in the road	Fill large potholes and dig out soft areas and fill with new base and premix	Lee County

Table 21. TAC Ranking of TAC/Public Recommended Roadway Expansions-Operational Improvements.

TAC/PUBLIC RECOMMENDED ROADWAY EXPANSIONS-OPERATIONAL IMPROVEMENTS				
RANK	LOCATION	ISSUES	PROPOSED IMPROVEMENTS	RESPONSIBLE ORGANIZATION
1	SH 21 (Burleson County Line to Bastrop County Line)	Traffic level exceeds current capacity. Difficult ingress and egress from county roads	On an interim basis construct continuous center turn lane Fully implement Presidential Corridor Plan - 4-lane divided highway	TxDOT
1	US 290 from Bastrop County Line to Navarro Street	High volume of traffic on a major undivided highway	Widen and reconstruct US 290 as a 4-lane divided highway	TxDOT
1	US 290 and UP Railroad	Heavy roadway traffic flow and high volume of trains coming through town creates frequent traffic jams on US 290	Study traffic mobility, economic impact and cost of constructing the following options: overpass, underpass, reliever route around Giddings, or relocate railroad line	TxDOT, City of Giddings and UP
2	FM 696 (East and west of US 77)	Increased commuter traffic on a narrow, curvy roadway	Add shoulders, widen lanes, straighten alignment, and provide turn lane and passing lanes	TxDOT
2	US 77 and Loop 123 - south side of Lexington	Short turn lane and deficient stripping of existing lanes	Reconstruct intersection providing improved left turn lane capacity and restriping	TxDOT
3	US 77 from US 290 to Fayette County Line	Increasing truck traffic and deteriating pavement conditions	Provide pavement repair, level up and seal, and reconstruct highway into a Super 2	TxDOT
4	US 77 and FM 1624	No left turn lane for traffic accessing roadway off of US 77	Provide left turn lane	TxDOT
5	US 77 and US 290	Increasing truck traffic from Brenham and College Station to/from points south on US 77 and west on US 290	Study feasibility of constructing a highway connector between US 77 and US 290 southeast of Giddings	TxDOT
6	CR 226 and US 290	Inadequate access to proposed industrial park on the north side of US 290	Extend CR 226 north of US 290 into proposed industrial park	City of Giddings, EDC and Lee County
7	FM 141 and UP Railroad in Dime Box	Roadway traffic flow and high volume of trains coming through Dimebox creates frequent traffic delays on FM 141	Study traffic mobility and cost of constructing an overpass or underpass to circumvent the railroad	TxDOT

Table 22. TAC Ranking of TAC/Public Recommended Safety-Related Improvements.

TAC/PUBLIC RECOMMENDED SAFETY-RELATED IMPROVEMENTS				
RANK	LOCATION	ISSUES	PROPOSED IMPROVEMENTS	RESPONSIBLE ORGANIZATION
1	US 290 East of Giddings	Low speed limit on divided section of US 290	Conduct traffic speed study to determine appropriate speed limit	TxDOT
2	US 290 and UP Railroad	Railroad crossing arms often fail and block traffic flow	Repair railroad crossing arms	UP Railroad Co.
3	US 77 in Lexington	Limited visibility of school zone warning lights	Install school zone warning lights that are visible while traveling both north and south along US 77	TxDOT
3	US 77 and North Avenue in Lexington	Dangerous intersection with no traffic regulation	Traffic analysis to determine if a traffic light is needed	City of Lexington and TxDOT
4	SH 21 in Lincoln	Speed limit too high going through Lincoln	Conduct traffic speed study to determine appropriate speed limit	TxDOT
5	FM 1697 and FM 180	Frequent violation of traffic stop sign	Provide safety lights at intersection	TxDOT
6	SH 21 Right-of-Way (ROW)	Visibility limited by high grass in ROW	Increase frequency of ROW mowing at key intersections	TxDOT
6	Hale Street and 5th Street in Lexington	No posted school zone or speed limit change for road behind school that wraps around the student pick up area	Conduct traffic speed study to determine appropriate speed limit and verify need for a designated school zone	City of Lexington and Lexington ISD

Table 23. TAC Ranking of TAC/Public Recommended Tourism Signage Improvements.

TAC/PUBLIC RECOMMENDED TOURISM SIGNAGE IMPROVEMENTS				
RANK	LOCATION	ISSUES	PROPOSED IMPROVEMENTS	RESPONSIBLE ORGANIZATION
1	US 290 - east and west sides of Giddings and US 77 - north and south sides of Giddings	Limited signage to direct visitors to downtown Giddings and other sites of interest	Install way-finding signage for both north and south bound traffic along US 77, and for east and west bound traffic along US 290	City of Giddings and TxDOT (ROW)
2	US 77 - north of SL 123 and south of SL 123 in Lexington	Limited signage to direct visitors to downtown Lexington and other sites of interest	Install way-finding signage for both north and south bound traffic along US 77	City of Lexington and TxDOT (ROW)
3	US 290 east and west of Giddings, and US 77 north and south of Giddings	Minimal designation signage for Giddings	Construct gateway signage feature with landscaping on the north and south sides of Giddings on US 77, and on US 290 on the east and west sides of Giddings	City of Giddings and TxDOT (ROW)
4	US 77 north and south of Lexington	Minimal designation signage for Lexington	Construct gateway signage feature with landscaping on the north and south sides of Lexington on US 77	City of Lexington and TxDOT (ROW)

Table 24. TAC Ranking of TAC/Public Recommended Pedestrian and other Infrastructure Improvements.

TAC/PUBLIC RECOMMENDED PEDESTRIAN AND OTHER INFRASTRUCTURE IMPROVEMENTS				
RANK	LOCATION	ISSUES	PROPOSED IMPROVEMENTS	RESPONSIBLE ORGANIZATION
1	Downtown Lexington - From 3rd Street to 4th Street and from Rockdale Street (SL 123) to Main Street (including Wheatley Street and the City Park)	Unleveled and missing sidewalks throughout portions of downtown; outdated parking design and limited streetscaping amenities	Construct/reconstruct sidewalks, crosswalks, parking areas, and install streetscaping amenities (restore and add to existing decorative lighting, provide updated signage and landscaped areas along with other pedestrian features)	City of Lexington and TxDOT
2	Courthouse Square in Giddings - South Main Street (US 77), East Hempstead Street, South Grimes Street and East Richmond Street	The streets around the courthouse have incomplete sidewalks, outdated parking design and lack streetscaping	Construct/reconstruct sidewalks, crosswalks, parking areas, and install streetscaping amenities (add to existing decorative lighting, provide updated signage, landscaped areas and other pedestrian features)	City of Giddings and TxDOT
3	Downtown Giddings	Inadequate visitor parking downtown	Provide designated visitor parking area with convenient pedestrian access to downtown businesses	City of Giddings
4	US 77 from East Hempstead Street to Railroad Street; South Grimes Street from East Hempstead Street to Railroad Street; and US 290 from Burleson Street to South Grimes Street	Unattractive and under utilized sidewalks connecting the courthouse square with downtown and along the two major highways	Install streetscaping elements - street furniture, coordinated lighting, street trees, awnings and decorative crosswalks	City of Giddings and TxDOT
5	Burns Street from 5th Street to 1st Street and 3rd Street from US 77 to SL 123 (Rockdale Street)	No sidewalks provided for students at the school campuses and limited pedestrian linkage to downtown	Construct sidewalks linking all of school buildings, activity areas and downtown along with properly marked crosswalks and signage	City of Lexington and TxDOT

Table 25. TAC Ranking of TAC/Public Recommended Transit Service Improvements.

CARTS RECOMMENDED TRANSIT SERVICE IMPROVEMENTS				
RANK	LOCATION	ISSUES	PROPOSED IMPROVEMENTS	RESPONSIBLE ORGANIZATION
1	Giddings	Inadequate intercity bus service	CARTS flag-stop interurban transit facility centrally located near US 77 and US 290 (refer to Appendix B)	CARTS (Coordination with City of Giddings and TxDOT)

Table 26. TAC Ranking of TAC/Public Recommended Airport Improvements.

TAC/PUBLIC RECOMMENDED AIRPORT IMPROVEMENTS				
RANK	LOCATION	ISSUES	PROPOSED IMPROVEMENTS	RESPONSIBLE ORGANIZATION
1	Giddings/Lee County Airport	Runway is not long enough to accommodate increasing air traffic	Lengthen existing runway	TxDOT, Lee County and City of Giddings

6.2.2 Potential Project Costs

Of the 52 recommended and planned projects listed in Chapter 6, Lee County, TxDOT, and CAPCOG worked together to provide cost estimates for 13 roadway projects in Lee County. Table 27 provides the location, project limits, scope, estimated cost, and scheduled let date of these transportation projects. Please note that the estimated costs are shown in present value and only represent construction costs. They do not account for additional costs that the project may incur, such as acquiring additional right of way, design costs, utility adjustments, etc.

Table 27. Lee County Recommended and Planned Transportation Improvement Cost Estimates (Source: TxDOT).

TxDOT PLANNED ROADWAY REPAIRS/REPLACEMENTS					
Location	**From**	**To**	**Scope**	**Estimated $**	**Scheduled Let**
CR 314 Allen Creek	Allen Cr	Allen Cr	Replacement Bridge and Approach	$327,000	May 2017
AC/PUBLIC RECOMMENDED ROADWAY REPAIRS/REPLACEMENTS					
Location	**From**	**To**	**Scope**	**Estimated $**	**Scheduled Let**
US 77	SH 21	FM 696	Pavement Resurfacing	$2,695,200	N/A
FM 1624	FM 696	SH 21	Pavement Resurfacing	$2,647,600	N/A
TXDOT PLANNED ROADWAY EXPANSIONS / OPERATIONAL IMPROVEMENTS					
Location	**From**	**To**	**Scope**	**Estimated $**	**Scheduled Let**
FM 2239	FM 448	Bas C/L	Widen Pavement to Add 3' Shldr	$2,320,400	December 2016
FM 180	US 290	FM 1697	Widen Pavement to Add 3' Shldr	$3,350,400	May 2015
US 290	Bas C/L	3.88 Mi E of C/L	Install TWLTL	$3,625,300	September 2015
AC/PUBLIC RECOMMENDED ROADWAY EXPANSIONS					
Location	**From**	**To**	**Scope**	**Estimated $**	**Scheduled Let**
FM 696	8 Mi W of FM 112	Burleson C/L	Widen Pavement to 3' Add Shldr	$6,800,000	N/A
SH 21	Bastrop C/L	Burleson C/L	Install TWLTL	$23,588,000	N/A
SH 21	Bastrop C/L	Burleson C/L	Const Divided Hwy	$72,419,000	N/A
US 77	At FM 1624		Extend TWLTL	$286,000	N/A
US 290	Bastrop C/L	Navarro St.	Const Divided Hwy	$31,100,000	N/A
US 77	At LP 123		Realign Intersection	$255,500	N/A
US 77	At Giddings HS		Accel Lane	Not feasible according to current design standards	

6.3 Possible Funding Sources

This section of the transportation and economic development plan presents basic material covering funding sources for transportation programs and discusses traditional transportation funding sources, such as fuel taxes, property taxes, and sales taxes. Newer, more innovative funding mechanisms such as pass-through financing and regional mobility authorities are also discussed.

6.3.1 Funding Availability and Opportunities

Lee County is adjacent to but not part of the Capital Area Metropolitan Planning Organization (CAMPO) and does not belong to any other MPO. Therefore, Lee County cannot access transportation funding programs that are administered through or with the cooperation of the MPO. Should Lee County join CAMPO in the future, funding opportunities through the MPO should be considered.

However, there are a variety of funding opportunities from regional planning partners and stakeholders. CAPCOG provides regional planning support to Central Texas counties, including Lee County. The Capital Area Regional Transportation Planning Organization (CARTPO) is a branch of CAPCOG that supports rural transportation planning. CARTPO serves as a forum for elected officials to come together on transportation issues to recommend changes in policy and practice, advocate for legislation, recommend regional priorities, direct certain planning and data initiatives, oversee the federally prescribed local consultation process, and collaborate with CAMPO. CARTPO and TxDOT often work together in planning transportation projects.

6.3.2 Fuel Tax

The fuel tax is the most common source of transportation funding at the state and federal level. The current federal fuel tax on gasoline is $0.184 per gallon, and the state tax is $0.20 per gallon. For diesel fuel, the federal tax rate is $0.244 per gallon, and the state tax is $0.20 per gallon. Of the $7.6 billion in revenues for the Texas State Highway Fund for the fiscal year ending August 31, 2013, 62 percent came from state fees, taxes, and other revenues, including 31 percent from fuel tax revenues. This $7.6 billion accounts for federal reimbursements as well. Portions of federal fuel taxes are remitted back to states through various programs using formulas that allocate the remittals based on several factors, which vary depending upon the program.

In Texas, 25 percent of the state fuel tax is dedicated to public schools by constitutional amendment.

6.3.3 Local Sales Tax

Local sales taxes are used in other parts of the country for the funding of transportation projects. In addition to the fact that revenues are fairly consistent and predictable from year to year, they have the added advantage of being inflation sensitive when applied as a percentage of the cost of the goods being purchased. They are relatively easy to administer, especially in situations where they can be piggybacked on a state sales tax. Many local governments use sales tax revenue to pay for local transportation projects. The major drawback to using these types of taxes as a revenue source for transportation projects is that it is not possible to link payment of the tax with the use of the transportation network.

In Texas, the state imposes a sales tax of 6.25 percent per purchase and allows local taxing jurisdictions, such as cities and counties, to impose an additional 2 percent combined minimum on top of the state rate for a maximum sales tax of 8.25 percent. However, current Texas state law does not allow the assessment of sales tax on fuel purchases.

6.3.4 Vehicle Registration Fees

Vehicle registration fees are a substantial part of transportation financing in the state, accounting for an estimated 18 percent of revenue deposited into the Texas State Highway Fund in the 2012/2013 biennium. County and municipal governments are free to impose vehicle registration fees for the funding of transportation and other programs within their jurisdictions. Such fees are stable revenue generators from year to year and require minimal additional administrative expense. They are generally perceived as a user-based tax, even though the assessment is not

made on a trip-by-trip basis. Depending on how often assessment rates are adjusted, vehicle registration fees are likely to be insensitive to inflation and decline in purchasing power.

The Texas Comptroller of Public Accounts estimates that the state took in approximately $1.8 billion in motor vehicle registrations for FY 2012–2013, of which 24 percent, or $425.6 million, is retained by county governments. Vehicle registration fees are collected at the county level, and each county retains the first $60,000 collected and receives an additional $350 for each mile of county road maintained by the county up to 500 miles. The Texas Constitution prohibits revenues from vehicle registration fees being used for purposes other than acquiring rights of way; constructing, maintaining, and policing public roadways; or administering laws pertaining to the supervision of traffic and safety on public roadways.

6.3.5 Property Taxes

In Texas, local governments, such as counties, school districts, cities, and special purpose districts, are authorized to levy property taxes. The value of appraised property is determined by each county's appraisal district. Property taxes are among the most common in the state, accounting for 47.8 percent of all taxes collected within the state in 2009 according to the Texas State Comptroller of Public Accounts. School districts collect the most in property taxes each year, accounting for 54.4 percent of property taxes collected in the state in 2009 compared to 16.5 percent for cities, 16.3 percent for counties, and 12.8 percent for special districts.

6.4 Implementation of the Plan

As future development occurs within the extra-territorial jurisdictions of the City of Giddings and the City of Lexington, this plan will provide a blueprint for the future transportation system, which developers will need to consider when planning new communities. There is a direct relationship between land use, economic development, and transportation, and the impacts on the transportation system need to be considered as each new community is developed.

As stated in the introduction of this document, the plan is intended to be a tool for the county, the cities, the developers, the chambers of commerce, and the general public as Lee County continues to grow over the next 25 years. It is particularly important that residents within the county had the opportunity to identify transportation and economic development needs during the development of the plan.

The plan should be reviewed and updated on a regular basis to see if the assumptions are still valid. Likewise, if there are jurisdictional changes, the plan should be reviewed to make sure the priorities still make sense or to take advantage of new opportunities.

Adopted by majority vote of the Lee County Commissioner's court on this 8th day of December, 2014.

Paul E. Fischer, Lee County Judge

Maurice Pitts Jr., Precinct 1

Ronny Bradshaw, Precinct 3

Douglas Hartfield, Precinct 2

Linda Kovar, Precinct 4

Attest:

Sharon Blasig

Sharon Blasig, County Clerk

Appendix A—Demographic and Traffic Trends Technical Memo

TECHNICAL MEMORANDUM

1. Introduction

This technical memorandum serves as a chapter ("Demographic and Traffic Trends") to be included in the Lee County Transportation and Economic Development Plan. The chapter includes three major sections:

- "Base Year (2010) Demographic Trends."
- "Forecast Year (2040) Demographic Trends."
- "Traffic Growth Analysis."

Detailed separate technical memorandums have been submitted outlining the base and forecast year demographic trends at the county-level and the traffic growth analysis. This memorandum presents a compact documentation of the work done under different subtasks, providing information on the base and forecast year demographic trends (both at the county and zonal levels) as well as the traffic trends.

2. Base Year (2010) Demographic Trends

2.1. County-Level Analysis

This section presents population, household, income, and employment information for Lee County, Texas, at the county level. These data reveal demographic trends that can be used to validate the plausibility of forecast year projections.

2.1.1. Population

Population data were obtained from the U.S. Census Bureau for Bastrop, Caldwell, Fayette, Hays, Lee, Travis, and Williamson Counties, and Texas as a whole. Table 7 shows the 2010 population for Lee and nearby counties, as well as for the state, along with the compound annual average growth in population for the 30-year period between 1980 and 2010.

Table 1. Base Year Population and Compound Annual Average Growth for Bastrop, Caldwell, Fayette, Hays, Lee, Travis, and Williamson Counties and Texas.

Area	Population
	2010
Bastrop County	74,171
Caldwell County	38,066
Fayette County	24,554
Hays County	157,107
Lee County	16,612
Milam County	24,757
Travis County	1,024,266
Williamson County	422,679
Texas	25,145,561
Area	Compound Annual Average Growth
	1980–2010
Bastrop County	3.7%
Caldwell County	1.6%
Fayette County	0.9%
Hays County	4.6%
Lee County	1.4%
Milam County	0.3%
Travis County	3.0%
Williamson County	5.9%
Texas	1.9%

Census household data were obtained for Lee County and Texas; the number of households and average household size from 1980 to 2010 are provided in Table 8. Though experiencing an increase in households over the 40-year period, Lee County is growing at a slower rate than the state as a whole. This trend may be expected to continue given that much of the state's population growth has been driven by an influx of younger Hispanics, whereas the county's population is primarily older and Anglo. The greater increase in the Hispanic population across the state has been a major factor driving the increase in average household size. And, while the percentage of Hispanic population is increasing in Lee County, it is increasing at a much slower rate than in the state as a whole. Average household size for the state and county peaked in 1980 but since 1990 has remained fairly consistent.

Table 2. Number of Households and Average Household Size for Lee County and Texas.

Area	Number of Households				
	1980	1990	2000	2010	Percent Change (1980–2010)
Lee County	3,901	4,706	5,663	6,151	57.7
Texas	4,934,936	6,070,937	7,393,354	8,922,933	80.8
Area	Average Household Size				
	1980	1990	2000	2010	Percent Change (1980–2010)
Lee County	2.7	2.62	2.65	2.62	−3.1
Texas	2.81	2.73	2.74	2.75	−2.2

2.1.2. Employment

Employment levels are dependent on numerous factors including population, labor force, labor force participation, educational attainment, economic conditions, and technology changes. It is difficult to foresee, much less project, many of these factors, but reasonable estimates of employment can be made based on population and analysis of past trends. The ratio of population to employment, for example, is effective in estimating the total future employment for an area. Generally, counties that contain urban employment centers have a higher ratio of population to employment than surrounding rural or residential counties. Additionally, urban regions consisting of multiple counties typically have a core county, which has a higher density of population and employment than the other counties within the urban area. Because of their economic advantages, core counties tend to attract employees from surrounding counties. Despite this loss of workers, outlying counties often increase their population-to-employment ratio over time as population increases due to the corresponding growth in retail and service employment.

Population estimates for 2005 through 2009 from the U.S. Census Bureau and total employment estimates from the Bureau of Labor Statistics (2005–2009 employment) and Texas Workforce Commission (TWC) (2010 employment) are provided in Table . Also provided are the calculated population-to-employment ratios for the same years. During the period from 2005 to 2010, the population-to-employment ratio for Lee County generally ranged from 31 percent in 2005 to 34 percent in 2010. These ratios are reasonable for a rural county that is not an integral part of an urbanized area.

Table 3. Lee County Population and Total Employment from 2005 to 2010.

Population and Employment	2005	2006	2007	2008	2009	2010
Population	16,526	16,573	16,356	16,400	16,231	16,612
Employment	5,195	5,407	5,519	5,541	5,305	5,771
Employment/Population	31.4%	32.6%	33.7%	33.8%	32.7%	34.7%

The distribution of employment by type (basic, retail, service, and education) can change as industry, technology, and economic conditions change. Over the past 20–30 years, many urban areas have experienced a decline in the proportion of basic employment and an increase in service employment. The downward trend in basic employment is largely due to the loss of manufacturing jobs, the loss of

agricultural land as a result of development, and increases in productivity. The increase in service employment can generally be attributed to improvements in technology, increased government programs, and generally favorable economic conditions. The proportion of retail and education jobs has remained relatively constant in most areas, except in quickly growing suburban areas, where they tend to decline as population and supporting employment increase. The number and percentage of 2010 employment by type for Lee County are provided in Table 4.

Table 4. Lee County Employment by Type.

Employment Type	Jobs	Percentage
Basic	2,705	46.9
Retail	882	15.3
Service	1,609	27.9
Education	575	10.0
Total	5,771	100.0

2.1.3. Income

Table 5 reveals the median household income in nominal and 2010 constant dollars for Lee County and Texas for 1980 through 2010. Figures for 1980 through 2000 come from the decennial census, while 2010 median household income is derived from American Community Survey (ACS) 2012 5-year estimates, which were adjusted to 2010 dollars. The ACS 2012 5-year median household income data were used, rather than the 2010 5-year data, because the median household income for Lee County found in the 2010 data was unreasonably low. The difference is likely due to the difference in sample size. Median household income in nominal dollars has increased over the 30-year period for both the county and state. When adjusted for inflation (constant 2010 dollars), the median household income in Texas has remained relatively flat, while the median in Lee County has increased, more closely mirroring the statewide median income.

Table 5. Median Household Income for Lee County and Texas from 1980 to 2010.

Median Household Income	1980	1990	2000	2010
Nominal Dollars				
Lee County	$14,101	$22,718	$36,938	$48,416
Texas	$18,963	$28,476	$41,269	$49,646
Constant 2010 Dollars				
Lee County	$37,402	$37,989	$46,883	$48,416
Texas	$50,299	$47,618	$52,380	$49,646

2.1.4. Summary

Table 6 presents a summary of the demographics obtained for Lee County for 2010.

Table 6. Summary of Demographic Data for 2010.

Population and Households	2010	2020	2030	2040
Population	16,612	18,076	19,632	20,581
Households	6,151	6,840	7,639	8,041
Median Household Income				
Nominal Dollars	$48,416	$65,801	$76,745	$92,937
Constant 2010 Dollars	$48,416	$53,068	$51,484	$51,213
Employment				
Basic	2,705	2,902	3,092	3,188
Retail	882	978	1,099	1,195
Service	1,609	1,830	2,027	2,174
Education	575	599	653	688
Total	5,771	6,309	6,871	7,245

2.2. Zonal-Level Analysis

Traffic analysis zones (TAZs) are the geographic units used to inventory existing and future demographic data at a more disaggregate level, and are traditionally used in travel modeling. For this analysis, Lee County was divided into 121 TAZs (i.e., internal zones). Figures 1 and 2 present population density and employment density, respectively, for each TAZ for the base year 2010. Census block data were used to initially compute the 2010 base year zonal estimates of population and households. TAZ employment was then computed using 2010 TWC employment data. The TWC data were associated with the appropriate TAZs using the XY coordinates and/or physical address provided in the data. Then, the TWC employment data were aggregated for each employment type (basic, retail, service, and education) to obtain the initial zonal-level employment data for 2010.

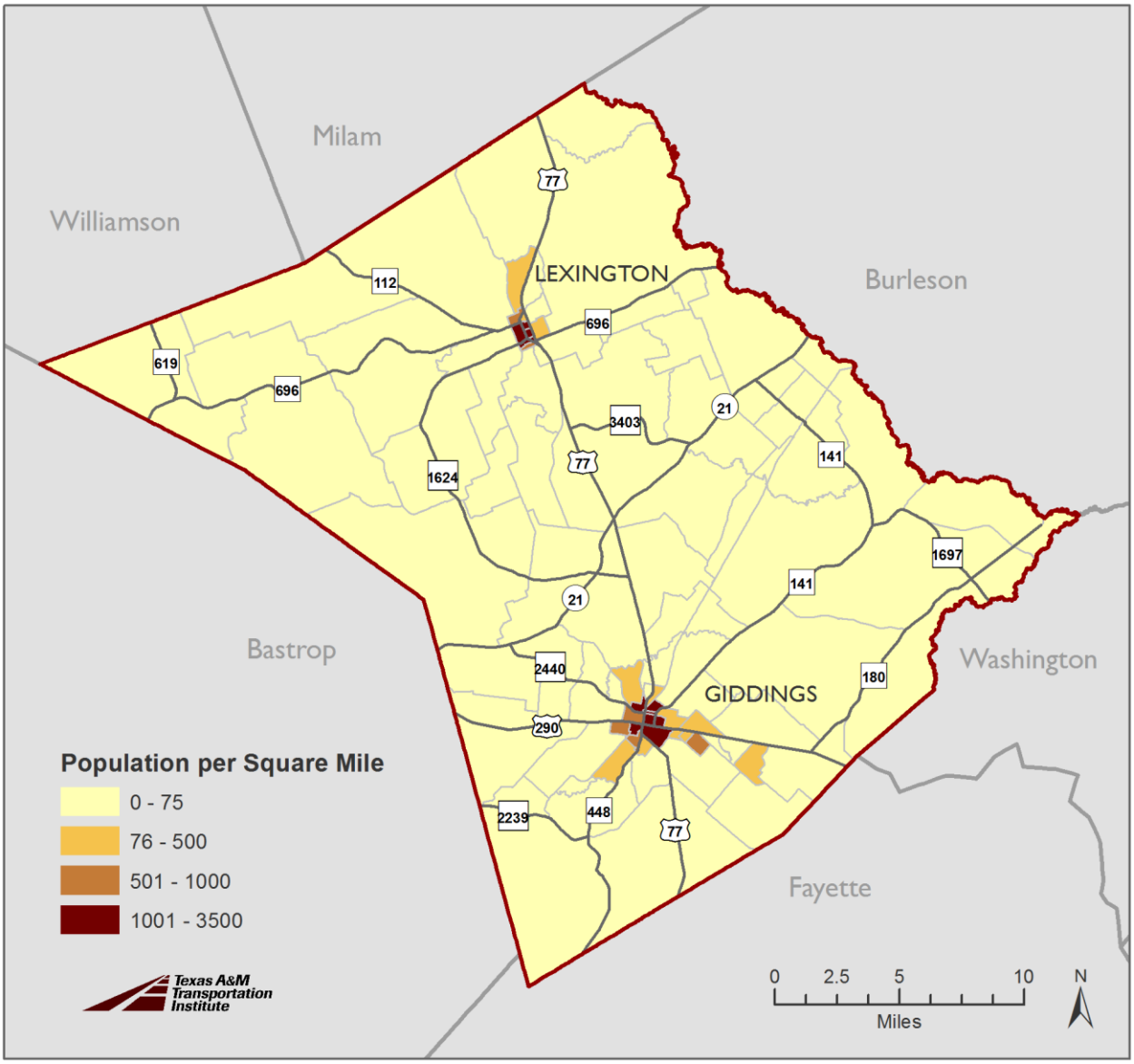


Figure 1. 2010 Lee County Population Density by TAZ.

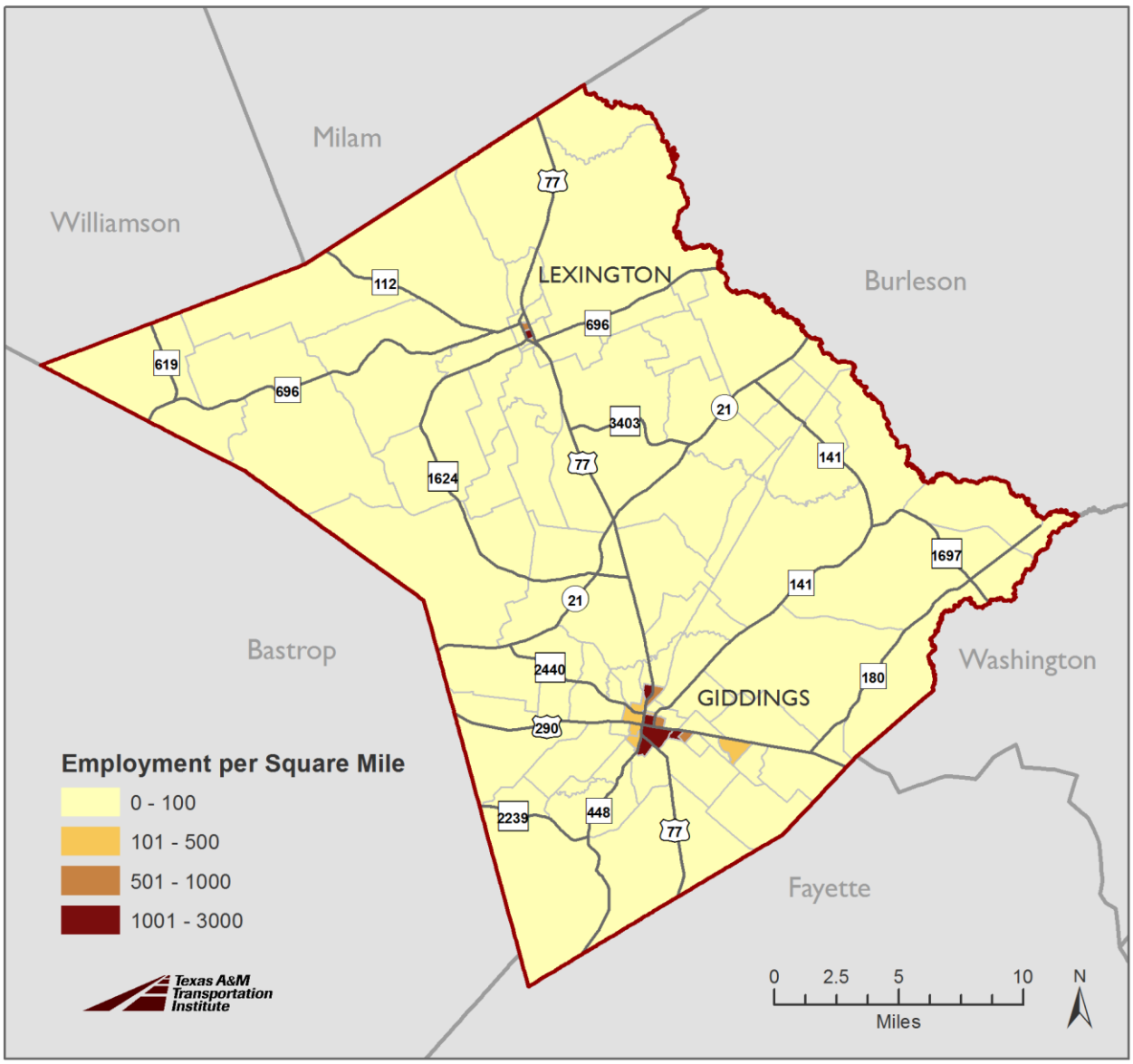


Figure 2. 2010 Lee County Employment Density by TAZ.

3. Forecast Year (2040) Demographic Trends

3.1. County-Level Analysis

For the past three decades, population in Lee County has been increasing at an annual rate of between 0.5 and 2.0 percent per year—a rate less than that of the state as a whole, and less than the growth experienced in the core urban counties of Hays, Travis, and Williamson and the nearby county of Bastrop. Comparatively, the growth in Lee County has been most similar to that of Caldwell County. Lee County's rate of growth exceeded only one county, Fayette, over the 30-year period.

3.1.1. Population

Population projections were obtained from the Texas State Data Center (TSDC) for Lee County for three migration scenarios:

- The 0.0 migration scenario represents the projected natural increase in population (births and deaths) with zero in or out migration.
- The 0.5 migration scenario represents population growth at half the 2000–2010 migration rate.
- The 1.0 scenario represents migration equal to that of the 2000–2010 period.

The 2010 population and 2020–2040 population projections for each migration scenario are provided in Table 13. 7.

Table 7. Lee County Projected Population and Population Change from 2010 to 2040.

Projection Scenario	2010 Census Population	Projected Population			Change 2010–2040	
		2020	2030	2040	Number	Percent
0.0 Migration	16,612	17,204	17,692	18,255	1,643	9.9
0.5 Migration	16,612	18,076	19,632	20,581	3,969	23.9
1.0 Migration	16,612	19,131	21,511	22,877	6,265	37.7

Projections under the 0.0 migration scenario show slow population growth between 2010 and 2040. This scenario is not recommended for use but is useful to illustrate the impact that migration plays in future population change. The 0.5 scenario results in a total population increase of 3,969 persons, or about 24 percent. Population under the 1.0 migration scenario increases by 6,265 persons, representing a 38 percent increase.

For comparison, the 0.5 and 1.0 migration scenario population projections for Bastrop, Caldwell, Fayette, Hays, Travis, and Williamson Counties and Texas were also obtained from TSDC. The compound annual average growth rates for the 1980–2010 and 2010–2040 30-year periods are provided in Table 8 for the 0.5 and 1.0 migration scenarios. Under the 0.5 migration scenario, the compound annual average rate of growth is lower than that experienced during the previous 30-year period for all areas. The 1.0 scenario also indicates a slower rate of growth for all areas except Caldwell, Fayette, and Hays Counties and the state. For these regions, the 2010–2040 annual rate of growth is expected to be similar to that experienced during the 1980–2010 period.

Table 8. Compound Annual Average Population and Total Percent Population Change from 2010 to 2040 for Selected Areas.

Area	Compound Annual Average Growth			Total Percent Change		
	Historic	Projected 2010–2040		Historic	Projected 2010–2040	
	1980–2010	0.5 Scenario	1.0 Scenario	1980–2010	0.5 Scenario	1.0 Scenario
Bastrop County	3.7%	1.9%	3.4%	200.0%	73.5%	170.4%
Caldwell County	1.6%	1.4%	2.4%	61.0%	52.5%	104.7%
Fayette County	0.9%	0.6%	1.2%	30.4%	19.8%	43.0%
Hays County	4.6%	2.9%	4.7%	287.0%	135.4%	299.9%
Lee County	1.4%	0.7%	1.1%	51.7%	23.9%	37.7%
Travis County	3.0%	1.3%	1.8%	144.1%	45.0%	69.2%
Williamson County	5.9%	2.3%	4.1%	452.4%	98.7%	232.9%
Texas	1.9%	1.3%	2.0%	76.7%	47.2%	80.5%

Projections of age and race/ethnicity assist in assessing the reasonableness of population projections relative to the differences in growth between areas. Notable for Lee County is its increase in population for older cohorts (45–64, and 65 and older) compared to the state. In 2010, approximately 16 percent of the population in Lee County was 65 or older, and the median age was 39.8 years. By 2040, nearly 23 percent of the population in Lee County is expected to be 65 or older, and the median age is estimated to be 42.9 years. In contrast, in 2010 only 10 percent of the Texas population was 65 or older, and the median age was 33.6 years. By 2040, the median age in Texas is expected to be 35.8 years, with 18 percent of the population 65 or older.

Lee County is projected to remain primarily Anglo (56 percent) in 2040, in contrast to the rest of the state, where Hispanics are expected to become the majority (50 percent), with Anglos representing only 31 percent of the total population. Race/ethnicity affects population growth because Anglos have lower birth rates than Hispanics and Blacks, and represent a higher percentage of the older age cohorts. With the population in Lee County expected to remain largely Anglo, the population will age and grow more slowly if migration rates remain as they were from 2000 to 2010. The projected age and race/ethnicity distributions for Lee County found under the 0.5 migration scenario appear reasonable and do no suggest the need to further consider the 1.0 projection data.

Review and analysis of the TSDC population projections for Lee County indicate that both the 0.5 and 1.0 migration projections are reasonable. The two projections differ by fewer than 2,300 persons, representing a difference of approximately 930 households. Both migration scenarios reflect a slower growth rate between 2010 and 2040 than that which occurred over the past 30 years. Although neighboring Bastrop and Williamson Counties are expected to experience considerable growth, Lee County's largest city, Giddings, lost population between 2000 and 2010, and 2012 population estimates indicate that Giddings' population has not returned to 2000 levels. Unless there are obvious or compelling reasons otherwise, the 0.5 migration scenario is recommended for long-term projections. In the case of Lee County, there do not appear to be any major reasons to support the 1.0 migration scenario. As a result, it is recommended that the 0.5 migration population projections be used as the

2040 control total. Table 9 presents the 2010 census count and the projected population for 2020, 2030, and 2040 under 0.5 migration scenario.

Table 9. Recommended Population Control Totals for Lee County.

Projection Scenario	2010	2020	2030	2040
0.5 Scenario	16,612	18,076	19,632	20,581

TSDC produces county-level projections of the number of households for each migration scenario. These projections, as well as 2010 census figures and projections for average household size under the 0.5 migration scenario, are provided in Table . Household projections based on 2000–2010 migration rates indicate that household size is expected to continue to decline in Lee County. Given the projected age and race/ethnicity of the future population of Lee County, a slight but continued decline in average household size is reasonable.

Table 10. 2010 Census and Projected Households and Average Household Size for Lee County from 2010 to 2040.

Number of Households and Household Size	Census 2010	TSDC 2020	TSDC 2030	TSDC 2040
Number of Households	6,151	7,088	7,916	8,346
Average Household Size	2.62	2.55	2.48	2.47

3.1.2. Employment

Future estimates of the total employment for Lee County were based on the 2010 base year population-to-employment ratio and the population projections under the TSDC 0.5 migration scenario. It is expected that the population-to-employment ratio in Lee County will increase very little over the next 30 years and could, in fact, decrease slightly if more future residents are employed outside the county. Population projections, estimated population-to-employment ratios, and total employment estimates for 2010 and the forecast years 2020, 2030, and 2040 are provided in Table 1.

Table 28. Lee County Population and Employment Data from 2010 to 2040.

Population and Employment	2010	2020	2030	2040
Population	16,612	18,076	19,632	20,581
Employment	5,771	6,309	6,871	7,245
Employment/Population	34.7%	34.9%	35.0%	35.2%

It is expected that over the forecast period, basic employment will continue to comprise the highest percentage of employment within the county, but this percentage will decrease slightly as service employment increases. The percentage of education and retail employment is expected to remain relatively constant. Estimated employment for the forecast years is provided in Table 162.

Table 292. Lee County Base Year and Suggested Employment Control Totals from 2010 to 2040.

Employment Type	2010	2020	2030	2040
Percentage				
Basic	46.9	46.0	45.0	44.0
Retail	15.3	15.5	16.0	16.5
Service	27.9	29.0	29.5	30.0
Education	9.9	9.5	9.5	9.5
Number				
Basic	2,705	2,902	3,092	3,188
Retail	882	978	1,099	1,195
Service	1,609	1,830	2,027	2,174
Education	575	599	653	688
Total	5,771	6,309	6,871	7,245

3.1.3. Income

TSDC prepares forecasts of household income for the various migration scenarios. These forecasts are provided as the projected number of households by a specific income range. From these data, median household income is estimated. The median income forecasts for Lee County for 2020 through 2040 for the 0.5 migration scenario are provide in nominal and 2010 constant dollars in Table 13. Historic 2000 and 2010 median household incomes and the projected median household incomes provided for the 0.5 scenario are illustrated in Figure 3. These data demonstrate how median household income in nominal dollars is expected to continue to increase at a rate similar to that in the previous 30 years and, in constant 2010 dollars, decline slightly. This trend is consistent with the majority of counties in Texas and is dependent on the trends found for the base projection (2000 through 2010).

Table 303. Lee County Median Income Projections from 2020 to 2040 under the 0.5 Migration Scenario.

Median Household Income	2020	2030	2040
Nominal Dollars	$65,801	$76,745	$92,937
Constant 2010 Dollars	$53,068	$51,484	$51,213

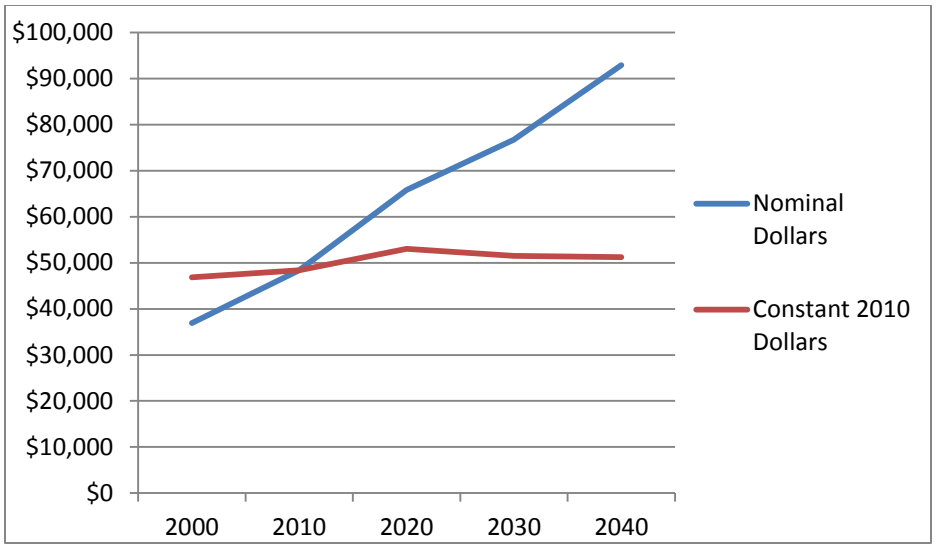


Figure 3. Historic and Projected Median Household Income for Lee County in Nominal and Constant 2010 Dollars from 2000 to 2040.

3.1.4. Summary

The recommended Lee County population, household, median household income, and employment (total and by type) control totals for the 2010 base year and the forecast years of 2020, 2030, and 2040 are summarized in Table 14.

Table 31. Recommended Lee County Control Totals from 2010 to 2040.

Population and Households	2010	2020	2030	2040
Population	16,612	18,076	19,632	20,581
Households	6,151	6,840	7,639	8,041
Median Household Income				
Nominal Dollars	$48,416	$65,801	$76,745	$92,937
Constant 2010 Dollars	$48,416	$53,068	$51,484	$51,213
Employment				
Basic	2,705	2,902	3,092	3,188
Retail	882	978	1,099	1,195
Service	1,609	1,830	2,027	2,174
Education	575	599	653	688
Total	5,771	6,309	6,871	7,245

3.2. Zonal-Level Analysis

The Lee County Advisory Group provided local input relative to the level of growth anticipated for each TAZ in the county. The household and employment change provided for each zone does not equal the total anticipated growth for the county. And, for some TAZs, the suggested growth provided appeared higher than what might be anticipated based on the existing development within those TAZs. As a result, the suggested numerical change was used as a relative scale for directing future growth among the various TAZs. This guidance was used in conjunction with the 2040 control totals to disaggregate and

allocate future growth in households and employment within each TAZ. Figure 4 and Figure 5 present population density and employment density, respectively, for each TAZ for the forecast year 2040.

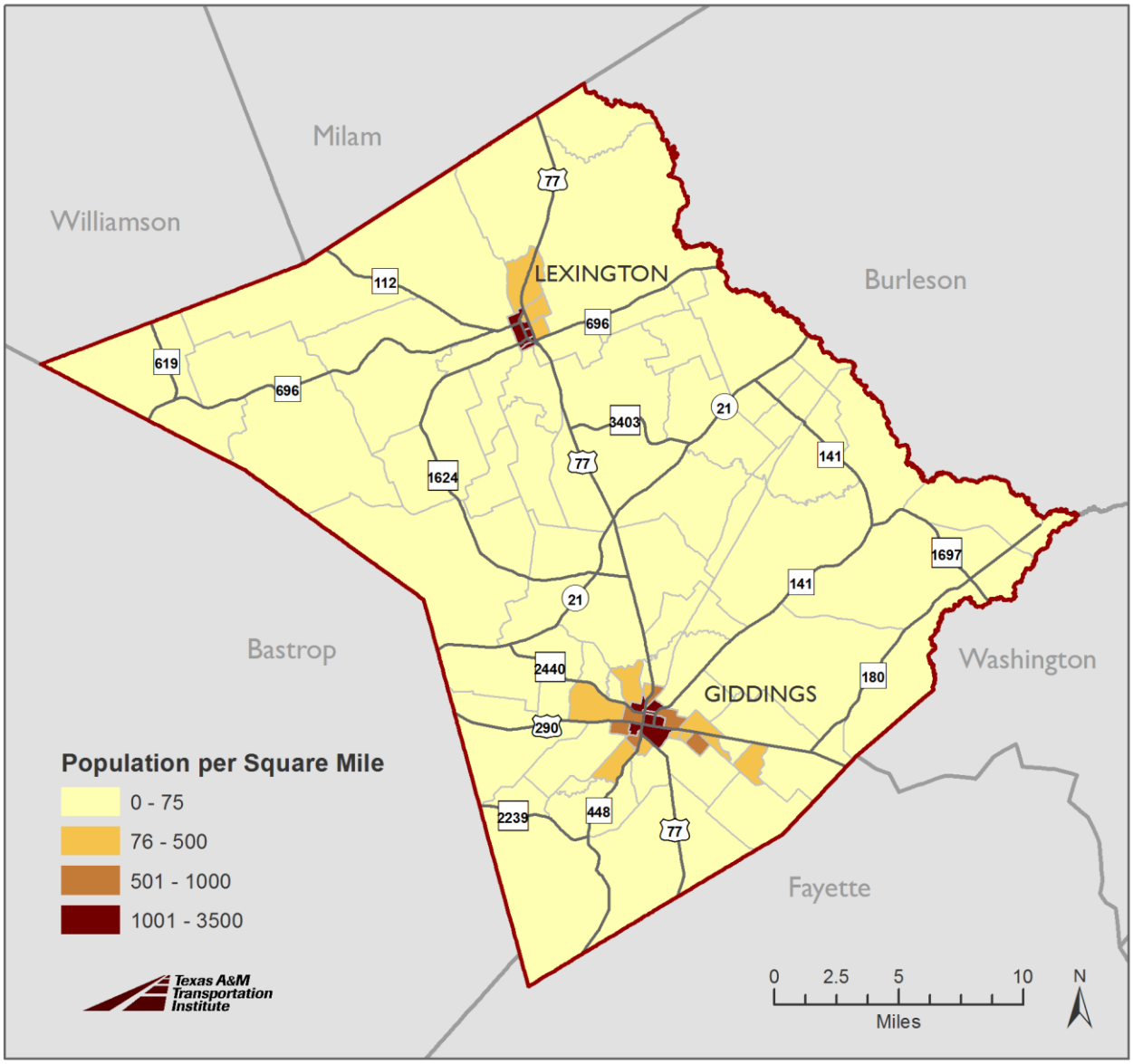


Figure 4. 2040 Lee County Population Density by TAZ.

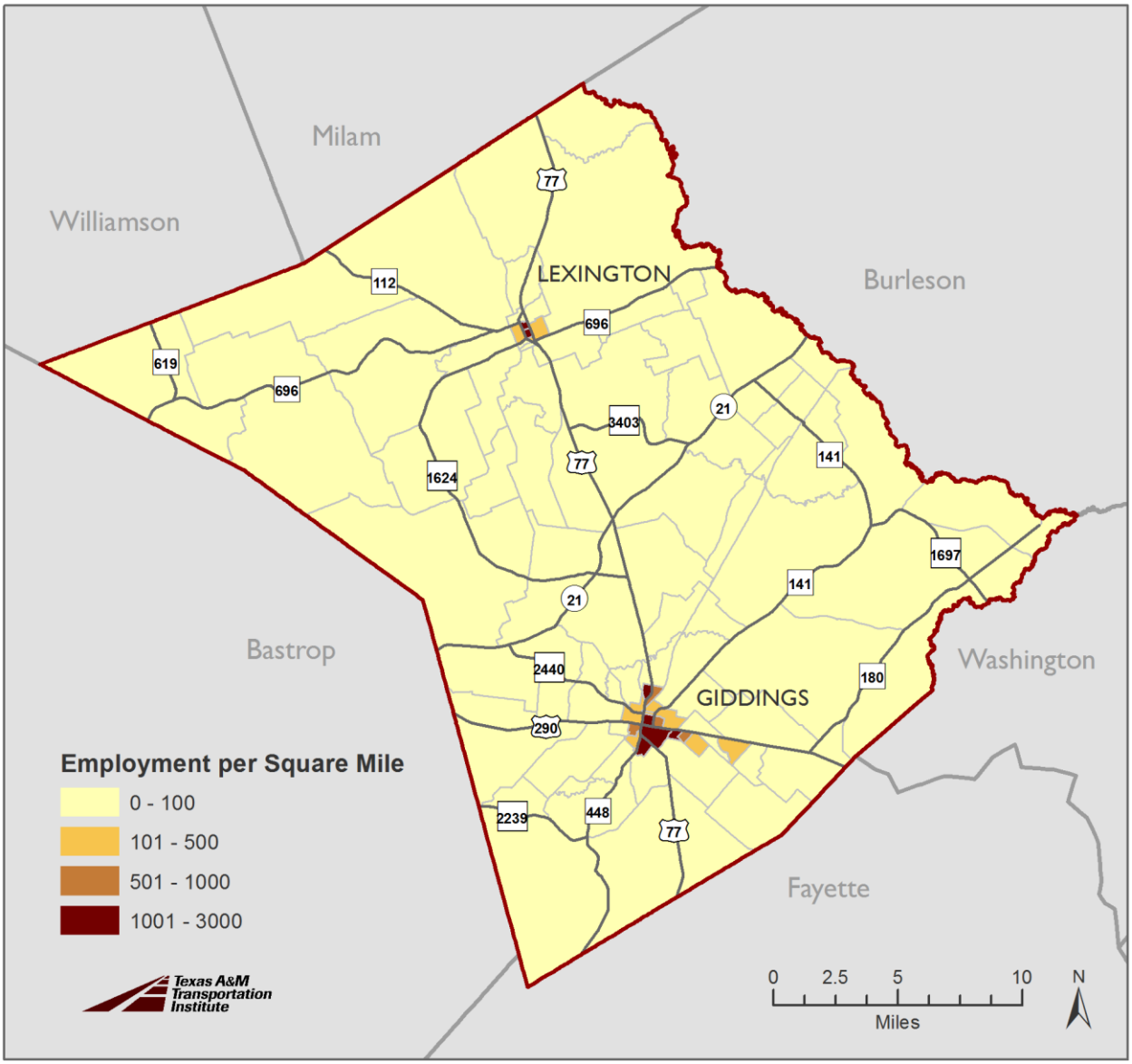


Figure 5. 2040 Lee County Employment Density by TAZ.

4. Traffic Growth Analysis

The objective of this section is to estimate current and projected traffic growth for Lee County. As discussed in the previous sections, the county had a population of less than 20,000 in 2010 and is not expecting major growth over the next 30 years. Typically, small regions with populations under 50,000 do not use the standardized transportation modeling process, and instead analyze existing and projected traffic counts in evaluating current conditions, projecting traffic congestion, and identifying potential improvements to the existing transportation system. This analysis therefore aims to assess traffic trends in the county to develop a better understanding of needs.

The traffic growth analysis conducted here is based on two primary sources of data:

- A geographic information system (GIS) of the roadway network.
- Traffic counts.

A GIS roadway network is an electronic representation of the transportation system made up of links and nodes. Generally, facilities functionally classified as an arterial or higher, along with a sub-set of collectors, are included in the network database. Local streets are typically excluded from regional networks used in travel models. Keeping this in mind, the researchers developed the roadway network and the corresponding network attribute data for Lee County in Subtask A. State highways, farm-to-market roads, and significant county roads were included in the network, as well as some smaller-capacity rural roads to provide adequate network connectivity. Attributes for the network (e.g., speed, number of lanes, and directionality) were then annotated and ground-truthed through site visits. Roadways in the network were additionally defined by functional class (FUNCL), which is a broader definition of roadway facility types. Figure 6 presents a functional classification thematic map of the Lee County network.

Saturation and annual traffic counts were available for 2010 and obtained from the Texas Department of Transportation Planning and Programming Division (TxDOT TPP). The remaining historic counts (from 2001 to 2009) were obtained from previous work conducted by researchers for the TxDOT Austin District under Task 11 in 2012. For the consistency and completeness of the traffic count information, only annual counts (measured in annual average daily traffic volumes [AADT]) were used in this analysis.

In the development of the roadway network, the network was divided into numerous links (via nodes), including distinct network attribute information. While all links were annotated with general facility characteristics (e.g., facility type and number of lanes), only some of the links had traffic count data available. Overall, there were 67 traffic count locations annotated to the Lee County network links, which were collected as a part of TxDOT TPP's 2010 statewide annual traffic counting program.

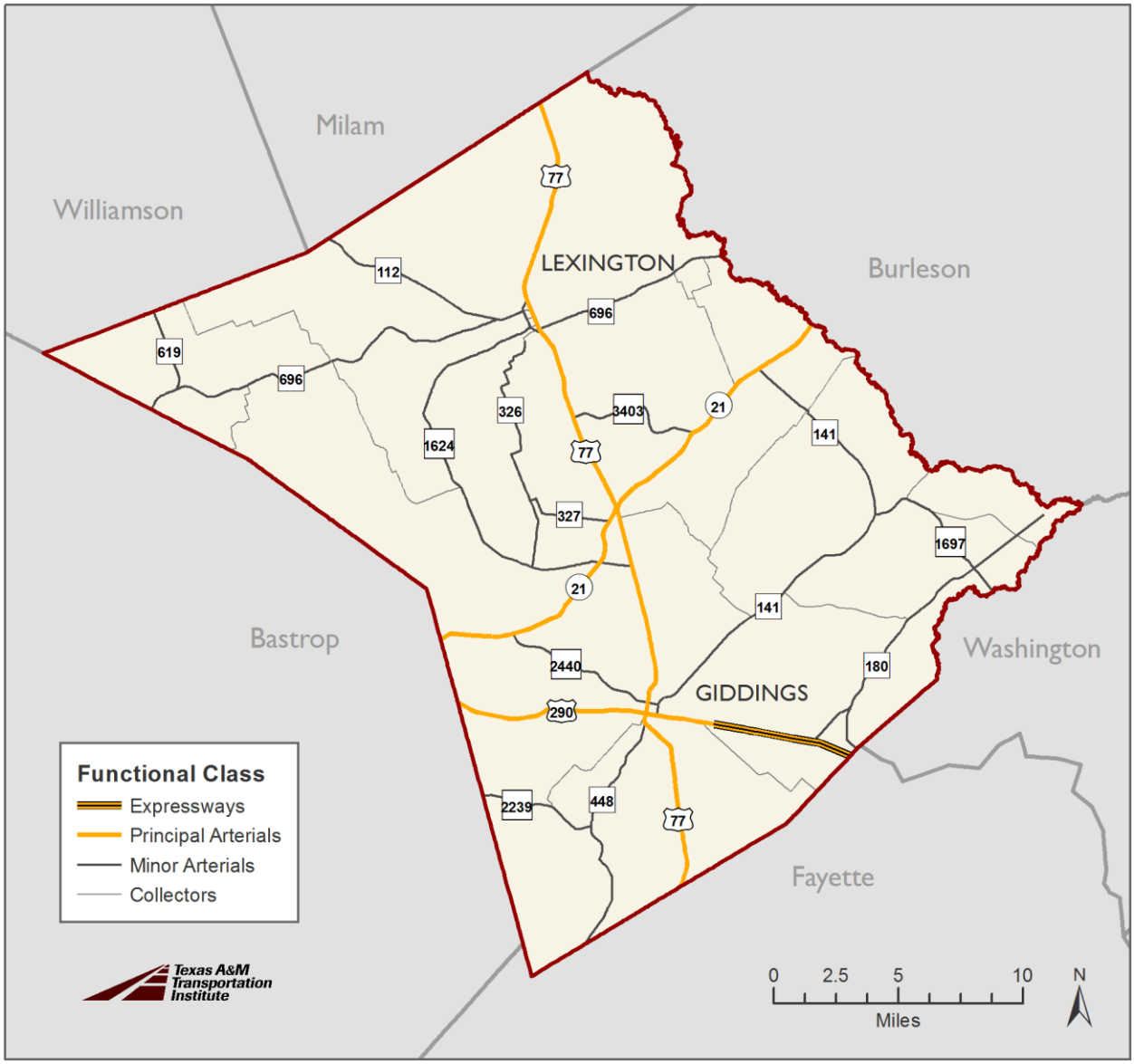


Figure 6. Lee County Network Functional Classification.

4.1. Base Year Analysis Results

Table 15 presents the traffic count data for 2001–2010, as well as the change in AADT between 2001 and 2010.

Table 15. AADT between 2001 and 2010 in Lee County.

Site ID	Roadway Name	Location	AADT across Years										Percent Change (2001–2010)
			2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
H 31	CR 448	North of FM 2239	1,600	1,600	1,500	1,450	1,650	1,600	1,650	1,700	1,650	1,650	3.1%
H 11	E. State Hwy. 21	South of FM 141	5,500	6,000	5,600	5,700	5,710	5,700	6,400	5,900	5,500	6,700	21.8%
H 10		North of Hwy. 77	5,200	5,000	5,300	5,400	5,800	5,700	6,200	6,000	5,200	6,500	25.0%
H 51	FM 112	North of FM 696	1,000	890	940	940	980	990	1000	920	700	930	−7.0%
H 47		West of Loop 123	2,600	2,600	2,500	2,400	2,680	2,500	2,600	2,500	2,600	2,600	0.0%
H 23	FM 141	North of FM 2440	2,600	2,300	2,100	2,200	2,570	2,500	2,600	2,200	1,850	2,100	−19.2%
H 22		West of CR 119	1,300	1,400	1,300	1,350	1,570	1,600	1,600	1,500	1,200	1,300	0.0%
H 15		North of FM 1697	1,100	1,300	1,200	1,050	1,150	1,200	1,250	1,000	1,000	950	−13.6%
T 18		West of CR 424	1,700	1,750	1,500	1,400	1,430	1,450	1,500	1,400	1,400	1,400	−17.6%
H 14		East of CR 439	1,450	1,450	1,300	800	1,320	1,350	1,400	1,150	1,050	1,050	−27.6%
H 21		South of FM 1697	1,450	1,500	1,150	1,200	1,140	1,300	1,350	1,200	1,100	1,100	−24.1%
T 17		West of CR 425	1,550	1,600	1,450	1,300	1,400	1,450	1,300	1,300	1,250	1,350	−12.9%
H 13		South of Hwy. 21	1,300	1,450	1,200	970	1,240	1,250	1,350	1,150	1,050	1,150	−11.5%
H 43	FM 1624	North of CR 309	230	290	230	230	260	230	220	230	200	200	−13.0%
H 42		South of CR 323	410	360	320	230	300	310	340	290	240	270	−34.1%
H 44		West of Loop 123	510	580	580	580	580	600	620	670	620	690	35.3%
H 41		West of Hwy. 21	640	690	610	610	590	600	580	520	440	490	−23.4%
H 38		West of Hwy. 77	740	830	710	640	690	700	760	640	600	590	−20.3%
H 16	FM 1697	East of FM 141	710	930	740	820	860	730	750	880	710	700	−1.4%
H 19		South of FM 180	540	650	660	700	720	610	630	490	500	470	−13.0%
H 17	FM 180	North of FM 1697	310	490	410	410	380	390	350	320	310	280	−9.7%
H 18		End of Road	90	180	120	120	120	130	150	90	80	120	33.3%
H 20		South of FM 1697	670	640	600	490	530	550	560	530	420	400	−40.3%
H 26		North of Hwy. 290	1,100	1,000	1,100	950	1,050	1,100	1,200	960	840	890	−19.1%

Site ID	Roadway Name	Location	AADT across Years										Percent Change (2001–2010)
			2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
H 30	FM 2239	West of FM 448	1,050	920	880	870	1,030	920	1,100	980	900	910	−13.3%
H 34	FM 2440	East of CR 113	1,300	1,350	1,350	1,300	1,200	1,250	1,600	1,350	1,300	1,500	15.4%
H 35		South of Hwy. 21	560	540	550	670	790	750	740	590	540	570	1.8%
H 10A	FM 3403	West of Hwy. 21	340	350	350	340	320	330	290	250	320	290	−14.7%
H 3A		East of Hwy. 77	530	600	570	520	510	530	500	450	440	440	−17.0%
H 29	FM 448	South of FM 2239	900	860	860	810	920	890	940	920	960	890	−1.1%
H 32		North of CR 216	2,800	2,500	2,200	2,600	2,380	2,400	2,300	1,800	1,900	2,100	−25.0%
T 8		South of Hwy. 77	3,200	2,800	2,600	3,100	3,090	2,700	2,700	3,300	3,400	3,300	3.1%
H 9	FM 696	West of Burleson County Line	740	660	660	640	630	650	720	600	670	790	6.8%
H 8		East of Hwy. 77	1,050	1,050	1,050	1,050	1,010	1,100	1,100	940	1,000	1,100	4.8%
H 48		West of FM 112	1,550	1,500	1,500	1,400	1,610	1,400	1,550	1,450	1,400	1,600	3.2%
T 11	Independence St. E.	East of Hwy. 77	3,300	4,500	4,200	3,500	3,800	3,900	4,000	4,700	3,800	4,200	27.3%
T 10	Independence St. W.	West of Hwy. 77	3,000	2,700	2,700	2,600	2,710	2,700	2,800	3,000	2,600	2,800	−6.7%
T 4	Orange St. N.	North of Hwy. 290	4,700	4,800	4,900	4,200	4,800	4,700	5,400	4,700	4,000	4,500	−4.3%
T 13A	Rockdale St. N.	North of FM 1624	3,000	2,800	2,700	2,400	2,690	2,600	2,800	2,600	2,600	2,500	−16.7%
T 14		South of FM 696	2,800	2,800	2,700	2,500	2,880	2,600	2,800	2,600	2,600	2,600	−7.1%
H 46		West of Hwy. 77 N.	1,100	1,050	950	1,050	1,100	1,150	1,300	1,200	1,050	1,100	0.0%
H 45	Rockdale St. S.	West of Hwy. 77 S.	1,350	1,000	1,050	920	1,050	1,150	960	940	830	930	−31.1%
H 36	Texas State	West of FM 2440	4,000	4,700	5,300	5,300	4,760	4,900	5,400	5,300	4,900	5,500	37.5%

Site ID	Roadway Name	Location	AADT across Years										Percent Change (2001–2010)
			2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
T 19	Hwy. 21 W.	North of CR 338	4,600	4,500	5,200	5,100	5,200	5,300	5,400	4,600	4,800	5,100	10.9%
H 39		North of FM 1624	4,000	4,500	5,200	5,200	5,400	5,300	5,100	4,800	4,900	5,200	30.0%
H 12		North of FM 141	5,800	5,800	5,500	5,700	5,900	5,900	6,500	6,000	5,600	6,900	19.0%
H 37		East of FM 2440	3,800	4,500	5,100	4,900	5,310	5,300	5,200	5,300	4,700	4,900	28.9%
H 40		South of Hwy. 77	4,200	4,300	5,000	4,800	4,900	5,000	5,000	4,600	4,700	5,000	19.0%
H 25	US 290	West of FM 180	13,000	12,500	13,100	13,700	14,380	14,500	19,500	13,200	12,300	12,500	−3.8%
T 5	US 290/ E. Austin Street	East of FM 141	18,900	19,400	20,000	22,000	24,320	24,000	26,000	23,000	23,000	23,000	21.7%
H 24		West of Sandridge Dr. in Giddings	21,000	21,000	20,000	25,000	22,340	23,000	25,000	22,000	20,000	20,000	−4.8%
T 3		East of Hwy. 77	16,100	16,500	17,000	18,000	20,120	19,500	22,000	20,000	18,900	18,200	13.0%
H 33		West of Giddings Cemetery	15,100	13,900	14,500	15,600	17,240	17,500	17,700	15,600	15,000	14,000	−7.3%
T 9		West of Hwy. 77	15,100	15,100	15,700	16,700	16,880	16,500	16,900	17,400	15,700	15,700	4.0%
H 28	US 77	North of Fayette County Line	5,000	5,100	5,000	5,400	5,390	5,400	5,600	4,700	4,800	4,900	−2.0%
H 7		South of Milam County Line	3,700	3,500	3,900	4,400	4,610	4,300	4,100	4,300	3,700	3,800	2.7%
H 6		North of Loop 123	4,400	4,500	4,700	4,800	4,900	4,800	5,100	5,300	4,600	4,800	9.1%
T 2		North of FM 2440	8,800	10,700	10,100	9,000	10,650	10,500	10,300	10,500	10,500	11,000	25.0%
T 7		East of FM 448	5,400	5,900	5,600	5,900	5,800	5,700	6,300	5,800	5,800	6,000	11.1%
H 1		North of Middle School Rd. in Giddings	7,500	7,500	7,800	6,900	7,100	7,100	7,300	8,200	7,300	9,000	20.0%
H 27		North of CR 223	5,700	6,400	5,900	6,300	7,050	6,800	6,900	6,000	5,300	6,300	10.5%

Site ID	Roadway Name	Location	AADT across Years										Percent Change (2001–2010)
			2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
H 5		South of Loop 123	6,000	5,500	5,800	5,600	6,280	6,000	6,100	6,700	5,600	6,600	10.0%
H 4		South of FM 696	5,100	5,100	5,000	5,100	5,380	5,200	5,300	5,500	4,600	4,300	−15.7%
H 2		South of Hwy. 21	5,100	5,000	5,000	5,000	5,500	5,200	5,400	5,600	4,700	5,100	0.0%
H 3		North of Hwy. 21	4,300	4,400	4,000	4,400	4,870	5,300	5,500	4,900	4,200	4,900	14.0%
T 1		North of Hwy. 290	9,000	8,400	8,600	8,500	8,480	8,500	8,600	9,500	9,500	10,000	11.1%
T 6		South of Hwy. 290	8,200	9,000	8,600	9,100	8,810	8,700	8,800	9,600	9,500	11,500	40.2%

As can be observed from the table, the rate of traffic growth between 2001 and 2010 is quite low, with negative growth seen in many cases. This result is consistent with an earlier analysis conducted by other Texas A&M Transportation Institute researchers[1] using off-system traffic counts for the period of 1992 to 2002. Figure 7 presents a scattergram plotting 2001 versus 2010 AADT. In the scattergram, the diagonal line represents no growth, values above the line represent positive growth, and values below the line represent negative growth. Specifically, 32 locations experienced negative growth, 4 locations were unchanged, and the remaining 31 locations demonstrated low growth.

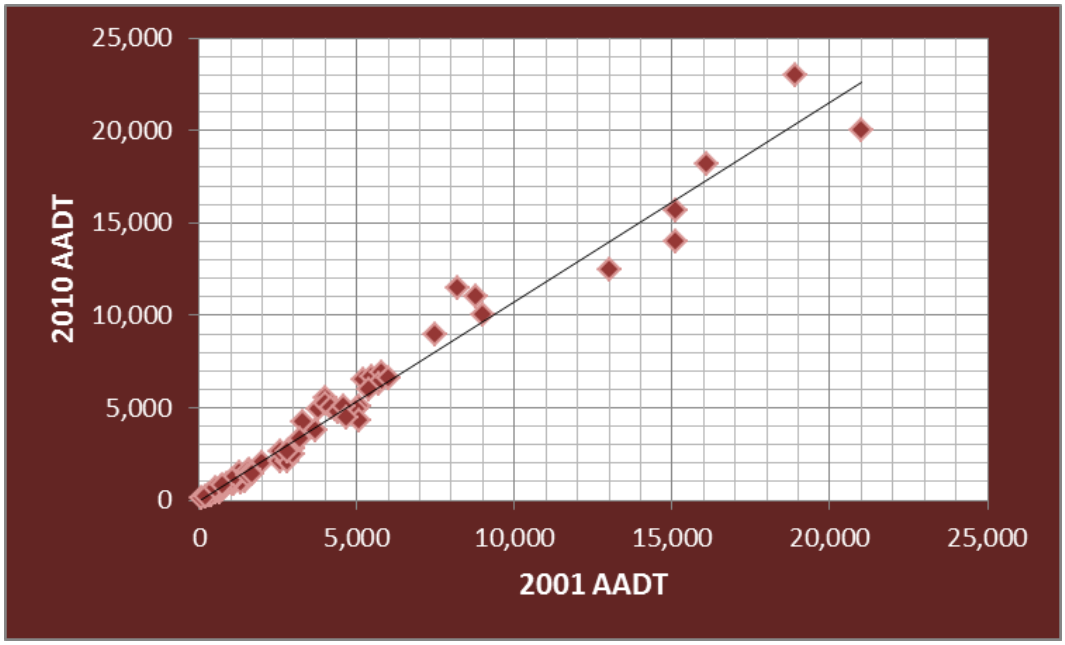


Figure 7. Scattergram of 2001 AADT to 2010 AADT.

Figure 8 provides the geographic distribution of AADT growth rates between 2001 and 2010, indicating relatively higher growth in traffic volume around Giddings, especially along the stretch of U.S. Highway 77 passing through the city, although the total rate of growth is still below 40 percent. In particular, it appears that State Highway 21 and U.S. Highway 77 have a relatively higher rate of traffic growth than the rest of the roadways in Lee County. Farm-to-Market 141 and 180 experienced the greatest declines in traffic volume over the 10-year period.

[1] Source: Schrank, D. L. (2004). *Traffic Growth on Off-System Roadways in Bastrop, Caldwell, Fayette, and Lee Counties.* Texas A&M Transportation Institute. A technical report for the Texas Department of Transportation.

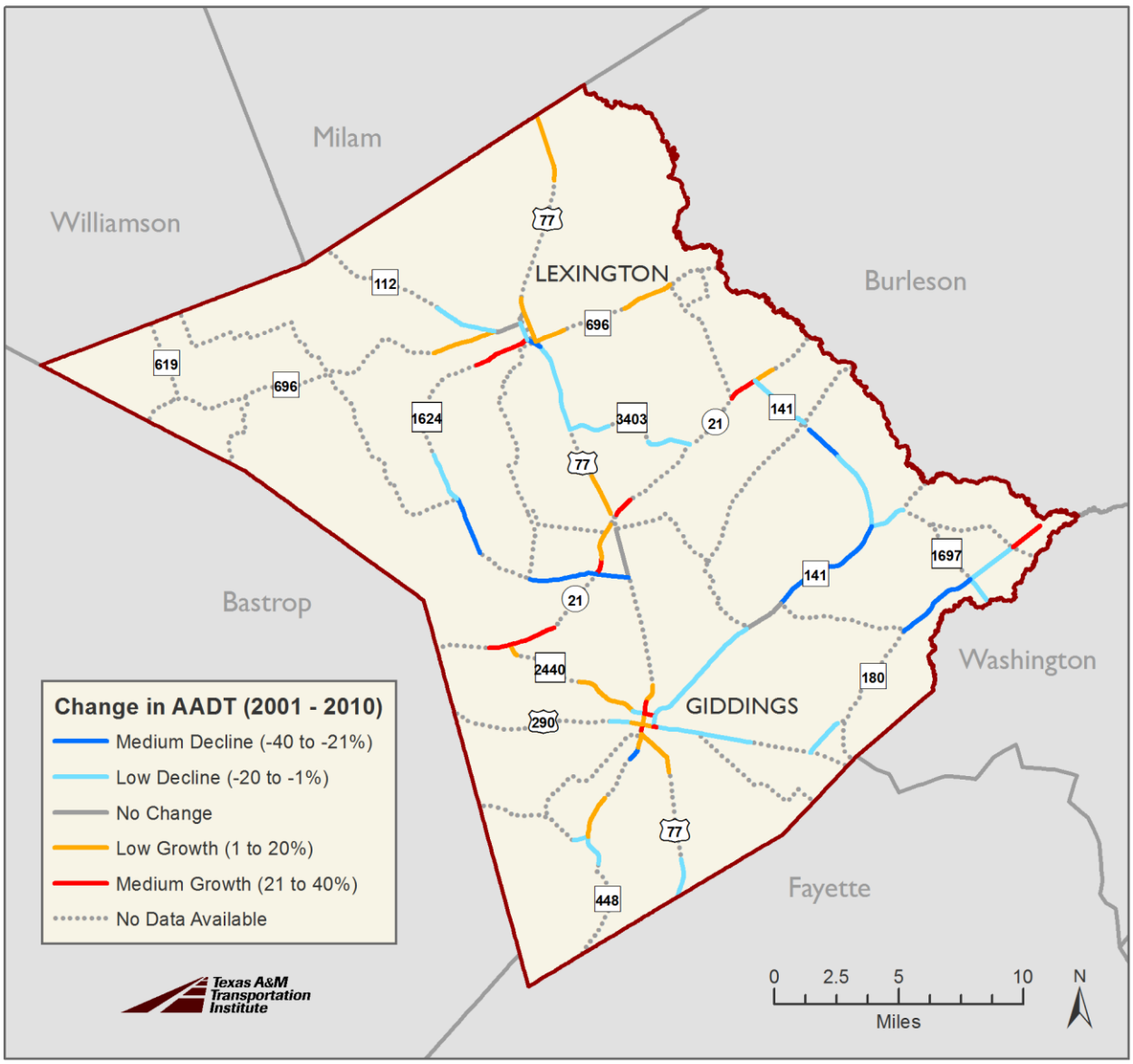


Figure 8. Traffic Growth in Lee County (between 2001 and 2010).

Finally, 2010 AADT values were compared to roadway capacities acquired from the speed-capacity table for Lee County. The speed-capacity look-up table is a two-way cross-classification table stratified by functional type and area type. To assist in the delineation of area types to identify the corresponding capacity values, an area type model was employed for Lee County. Initial area types were delineated based on a measure of the zone's activity density. The initial estimates were then manually smoothed to group zones by area type, primarily to prevent illogical or erratic changes in the network that might occur with discontinuous area-type definitions.

Figure 9 provides a graph comparing 2010 AADT values to roadway capacity for each count location. Overall, the graphic indicates no traffic volumes exceeding their roadway capacity (AADT to roadway capacity ratio > 1.0), with only two (sites H 24 and T 5 on US 290 and E. Austin Street) having a value

between 0.7 and 0.85, corresponding to level of service (LOS) D. All remaining sites have a ratio below 0.7, corresponding to LOS A to C.

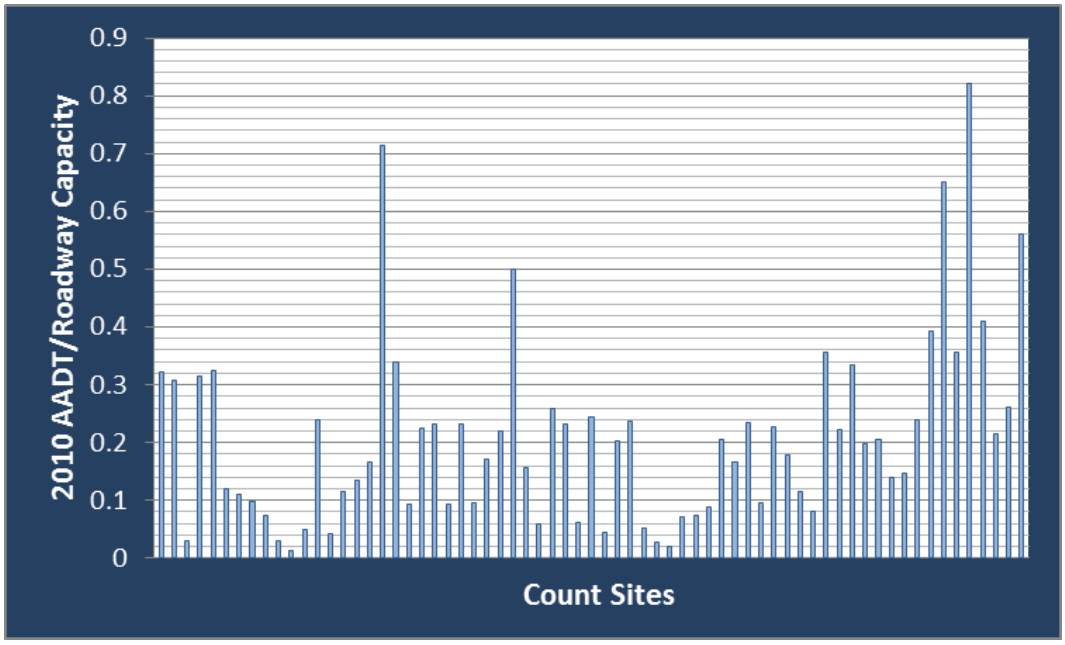


Figure 9. 2010 AADT-to-Roadway-Capacity Ratio.

4.2. Forecast Year Analysis Results

Following the base year traffic growth analysis, an additional analysis was conducted to evaluate the potential future scenarios. To achieve this, two different scenarios were developed for the 2040 forecast year:

- Scenario I: Forecasted growth factors were developed for each site using 2010 and projected 2040 demographic data. Two sets of growth factors were developed, based on either household or employment data, and the resulting forecast volumes obtained were ranked for each site. The maximum projected volumes for each site were chosen as a potential worst-case demographic-based scenario.
- Scenario II: Historic traffic trend formulations were developed for each site using the 20-year AADT count data. These trends were developed using both straight-line and exponential formulations, resulting in two sets of forecast volumes. Again, the maximum projected volume was selected for each site as a potential worst-case traffic-trend-based scenario.

The demographic-based scenario might be likelier to occur than the traffic-trend-based scenario, particularly for roads influenced by local traffic, because it is not reasonable to assume that traffic will steadily grow independently of regional demographic characteristics. However, both scenarios are presented for evaluation purposes. Additionally, 2040 projections were obtained from TxDOT's Statewide Analysis Model (SAM) for a few sites and evaluated whenever appropriate.

Table 16 provides a summary of past (2001 and 2005), current (2010), and forecast scenario (2040) volumes as well as growth rates for each site. Figures 10 and 11 then provide graphical distributions of the 2040 scenario volumes and roadway capacity values for each site for Scenarios I and II, respectively.

Table 16. Current and Projected Traffic Volumes in Lee County.

Site ID	Roadway Name	Location	AADT across Years					Percent Change			
			2001	2005	2010	2040		2001–2005	2005–2010	2010-2040	
						Scenario I	Scenario II			Scenario I	Scenario II
H 31	CR 448	North of FM 2239	1,600	1,650	1,650	1,674	2,183	3.1	0.0	1.5	32.3
H 11	E. State Hwy. 21	South of FM 141	5,500	5,710	6,700	6,843	8,490	3.8	17.3	2.1	26.7
H 10		North of Hwy. 77	5,200	5,800	6,500	6,592	11,187	11.5	12.1	1.4	72.1
H 51	FM 112	North of FM 696	1,000	980	930	941	578	−2.0	−5.1	1.2	−37.8
H 47		West of Loop 123	2,600	2,680	2,600	2,651	2,650	3.1	-3.0	2.0	1.9
H 23	FM 141	North of FM 2440	2,600	2,570	2,100	2,167	1,291	−1.2	−18.3	3.2	−38.5
H 22		West of CR 119	1,300	1,570	1,300	1,334	1,491	20.8	−17.2	2.6	14.7
H 15		North of FM 1697	1,100	1,150	,950	983	536	4.5	−17.4	3.4	−43.6
T 18		West of CR 424	1,700	1,430	1,400	1,416	726	−15.9	−2.1	1.2	−48.1
H 14		East of CR 439	1,450	1,320	1,050	1,054	517	−9.0	−20.5	0.4	−50.7
H 21		South of FM 1697	1,450	1,140	1,100	1,111	543	−21.4	−3.5	1.0	−50.7
T 17		West of CR 425	1,550	1,400	1,350	1,366	671	−9.7	−3.6	1.2	−50.3
H 13		South of Hwy. 21	1,300	1,240	1,150	1,187	702	−4.6	−7.3	3.2	−38.9
H 43	FM 1624	North of CR 309	230	260	200	201	98	13.0	−23.1	0.5	−51.2
H 42		South of CR 323	410	300	270	283	88	−26.8	−10.0	4.7	−67.2
H 44		West of Loop 123	510	580	690	700	1,429	13.7	19.0	1.4	107.1
H 41		West of Hwy. 21	640	590	490	505	148	−7.8	−16.9	3.0	−69.9
H 38		West of Hwy. 77	740	690	590	595	279	−6.8	−14.5	0.8	−52.7
H 16	FM 1697	East of FM 141	710	860	700	7,24	560	21.1	−18.6	3.4	−20.0
H 19		South of FM 180	540	720	470	475	205	33.3	−34.7	1.2	−56.3
H 17	FM 180	North of FM 1697	310	380	280	283	107	22.6	−26.3	1.2	−61.8
H 18		End of Road	90	120	120	120	53	33.3	0.0	0.0	−55.8
H 20		South of FM 1697	670	530	400	402	105	−20.9	−24.5	0.5	−73.8
H 26		North of Hwy. 290	1,100	1,050	890	890	534	−4.5	−15.2	0.0	−39.9

Site ID	Roadway Name	Location	AADT across Years					Percent Change			
			2001	2005	2010	2040		2001–2005	2005–2010	2010-2040	
						Scenario I	Scenario II			Scenario I	Scenario II
H 30	FM 2239	West of FM 448	1,050	1,030	910	916	893	−1.9	−11.7	0.7	−1.9
H 34	FM 2440	East of CR 113	1,300	1,200	1,500	1,634	1,915	−7.7	25.0	8.9	27.7
H 35		South of Hwy. 21	560	790	570	584	730	41.1	−27.8	2.5	28.1
H 10A	FM 3403	West of Hwy. 21	340	320	290	292	132	−5.9	−9.4	0.8	−54.5
H 3A		East of Hwy. 77	530	510	440	444	174	−3.8	−13.7	0.8	−60.4
H 29	FM 448	South of FM 2239	900	920	890	900	1,203	2.2	-3.3	1.1	35.2
H 32		North of CR 216	2,800	2,380	2,100	2,219	667	−15.0	−11.8	5.6	−68.2
T 8		South of Hwy. 77	3,200	3,090	3,300	3,348	4,841	−3.4	6.8	1.5	46.7
H 9	FM 696	West of Burleson County Line	740	630	790	795	776	−14.9	25.4	0.7	−1.7
H 8		East of Hwy. 77	1,050	1,010	1,100	1,162	1,001	−3.8	8.9	5.6	−9.0
H 48		West of FM 112	1,550	1,610	1,600	1,650	1,442	3.9	−0.6	3.1	−9.9
T 11	Independence St. E.	East of Hwy. 77	3,300	3,800	4,200	4,209	6,000	15.2	10.5	0.2	42.9
T 10	Independence St. W.	West of Hwy. 77	3,000	2,710	2,800	2,816	2,678	−9.7	3.3	0.6	−4.3
T 4	Orange Street N.	North of Hwy. 290	4,700	4,800	4,500	4,515	3,666	2.1	−6.3	0.3	−18.5
T 13A	Rockdale St. N.	North of FM 1624	3,000	2,690	2,500	2,549	1,783	−10.3	−7.1	2.0	−28.7
T 14		South of FM 696	2,800	2,880	2,600	2,624	2,117	2.9	−9.7	0.9	−18.6
H 46		West of Hwy. 77 N.	1,100	1,100	1,100	1,100	1,623	0.0	0.0	0.0	47.5
H 45	Rockdale St. S.	West of Hwy. 77 S.	1,350	1,050	930	969	355	−22.2	−11.4	4.2	−61.8
H 36	Texas State Hwy. 21 W.	West of FM 2440	4,000	4,760	5,500	5,629	9,823	19.0	15.5	2.3	78.6
T 19		North of CR 338	4,600	5,200	5,100	5,152	6,072	13.0	−1.9	1.0	19.1
H 39		North of FM 1624	4,000	5,400	5,200	5,349	8,301	35.0	−3.7	2.9	59.6
H 12		North of FM 141	5,800	5,900	6,900	7,123	9,315	1.7	16.9	3.2	35.0
H 37		East of FM 2440	3,800	5,310	4,900	5,022	9,061	39.7	−7.7	2.5	84.9
H 40		South of Hwy. 77	4,200	4,900	5,000	5,143	7,080	16.7	2.0	2.9	41.6
H 25	US 290	West of FM 180	13,000	14,380	12,500	12,546	16,402	10.6	−13.1	0.4	31.2

Site ID	Roadway Name	Location	AADT across Years					Percent Change			
			2001	2005	2010	2040		2001–2005	2005–2010	2010-2040	
						Scenario I	Scenario II			Scenario I	Scenario II
T 5	US 290/ E. Austin St.	East of FM 141	18,900	24,320	23,000	23,030	52,945	28.7	−5.4	0.1	130.2
H 24		West of Sandridge Dr. in Giddings	21,000	22,340	20,000	20,026	20,817	6.4	−10.5	0.1	4.1
T 3		East of Hwy. 77	16,100	20,120	18,200	18,223	38,063	25.0	−9.5	0.1	109.1
H 33		West of Giddings Cemetery	15,100	17,240	14,000	15,050	17,681	14.2	−18.8	7.5	26.3
T 9		West of Hwy. 77	15,100	16,880	15,700	15,821	20,542	11.8	−7.0	0.8	30.8
H 28	US 77	North of Fayette County Line	5,000	5,390	4,900	5,192	4,328	7.8	−9.1	6.0	-11.7
H 7		South of Milam County Line	3,700	4,610	3,800	3,824	4,783	24.6	−17.6	0.6	25.9
H 6		North of Loop 123	4,400	4,900	4,800	5,122	6,823	11.4	−2.0	6.7	42.2
T 2		North of FM 2440	8,800	10,650	11,000	11,097	17,031	21.0	3.3	0.9	54.8
T 7		East of FM 448	5,400	5,800	6,000	6,072	7,448	7.4	3.4	1.2	24.1
H 1		North of Middle School Rd. in Giddings	7,500	7,100	9,000	9,426	11,161	−5.3	26.8	4.7	24.0
H 27		North of CR 223	5,700	7,050	6,300	6,308	6,213	23.7	−10.6	0.1	-1.4
H 5		South of Loop 123	6,000	6,280	6,600	6,978	8,965	4.7	5.1	5.7	35.8
H 4		South of FM 696	5,100	5,380	4,300	4,542	3,536	5.5	−20.1	5.6	−17.8
H 2		South of Hwy. 21	5,100	5,500	5,100	5,128	5,536	7.8	-7.3	0.5	8.6
H 3		North of Hwy. 21	4,300	4,870	4,900	4,983	8,047	13.3	0.6	1.7	64.2
T 1		North of Hwy. 290	9,000	8,480	10,000	10,021	14,519	−5.8	17.9	0.2	45.2
T 6		South of Hwy. 290	8,200	8,810	11,500	11,588	20,492	7.4	30.5	0.8	78.2

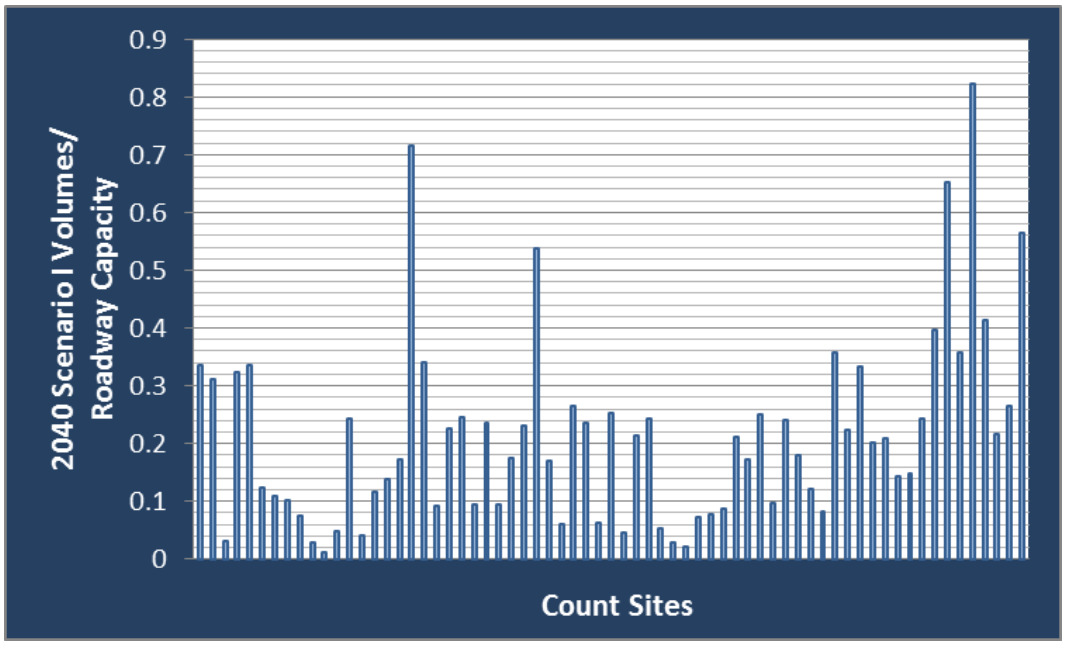


Figure 10. 2040 Scenario I Projected Volume-to-Roadway-Capacity Ratio.

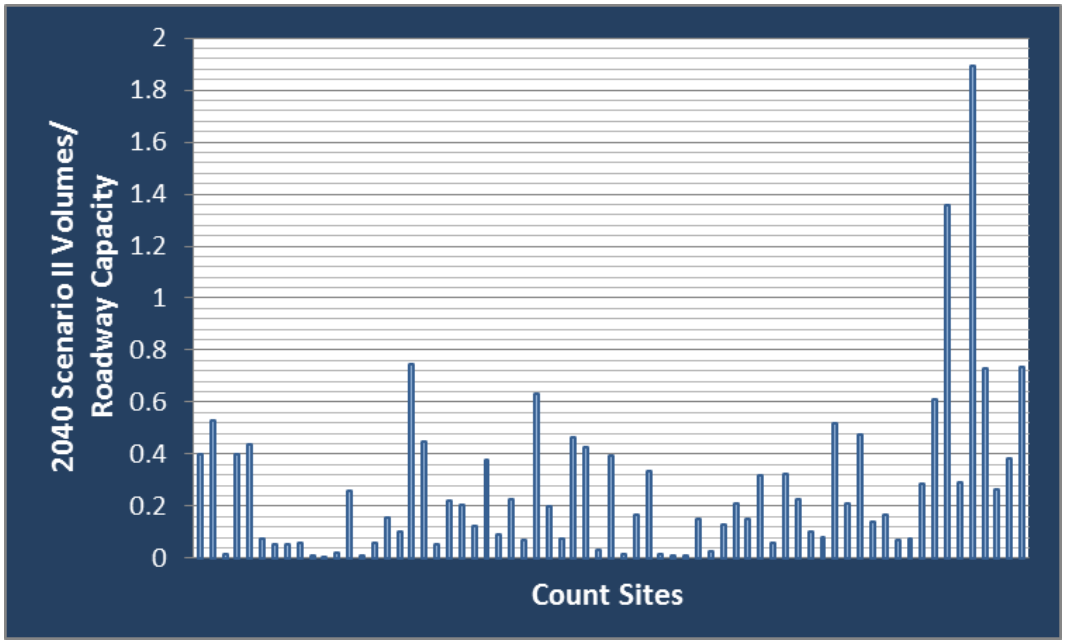


Figure 11. 2040 Scenario II Projected Volume-to-Roadway-Capacity Ratio.

Despite differences in methodologies and forecasts, current and projected levels of service for Lee County are similar and reasonable when compared to roadway capacities. Nearly the entire network falls within the range of LOS A–C for 2010 and both 2040 scenarios, with the exception of a portion of US 290 passing through Giddings (Figure 12). Similar to the year 2010, the results indicate no traffic volumes exceeding their roadway capacity under Scenario I. Under Scenario II, a small stretch of this

road segment near the center of the city (specifically at sites T 3 and T 5) is forecasted to be over capacity (LOS F), but otherwise the current and projected scenarios do not deviate from each other.

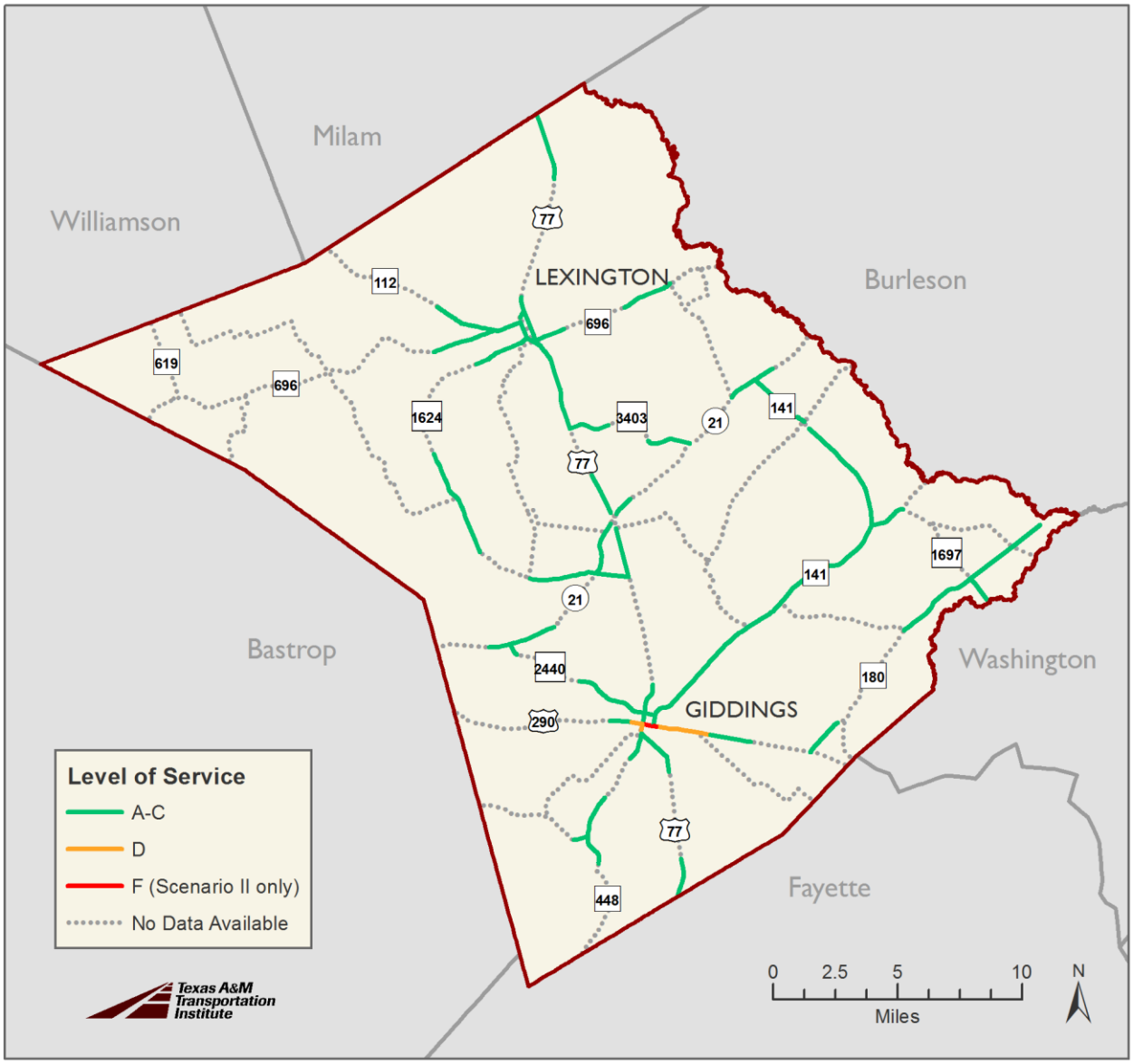


Figure 12. Current and Projected Levels of Service for the Lee County Network.

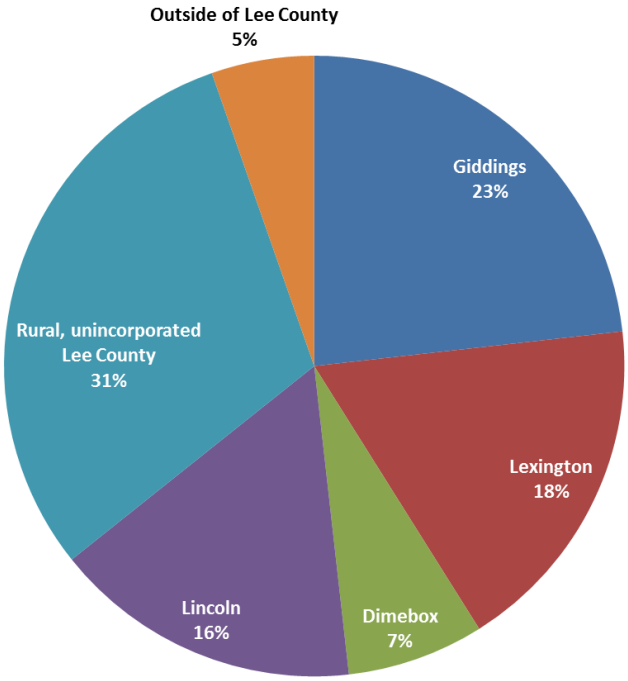
Based on the projection and analysis of traffic count trends, no roadways show an immediate or forecast need for expansion because of traffic growth. However, traffic should be monitored for impacts from localized land development. Also, roadway improvements may be needed for safety purposes and for periodic special traffic-producing events, such as hurricane evacuations.

Appendix B—Lee County Transportation and Economic Development Plan Questionnaire Results

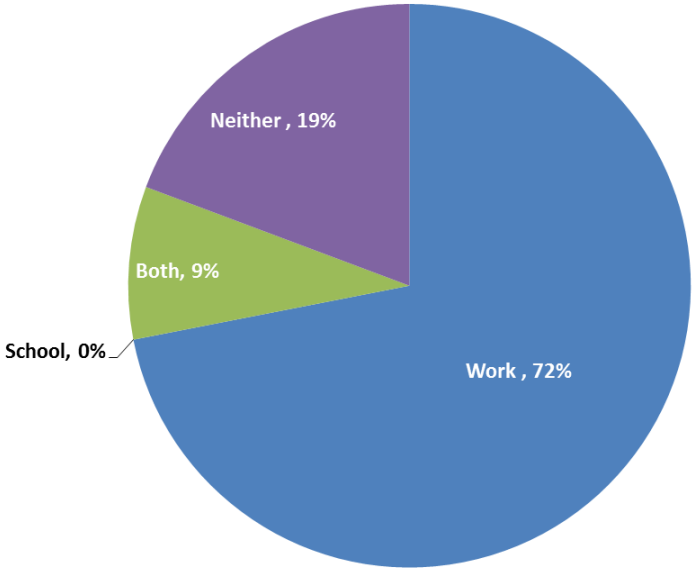
Lee County Transportation and Economic Development Plan Questionnaire Results

This questionnaire was open for responses from May 15 through July 15, 2014. A total of 59 responses were received. Respondents completed paper questionnaires at public meetings, local community facilities and businesses as well as digital questionnaires on the project website (www.leecountyplan.org). Results will be used in developing transportation and economic development proposals in the draft plan. For more information on the questionnaire, contact Ben Ettelman with the Texas A&M Transportation Institute at (512) 407-1166 or b-ettelman@tti.tamu.edu. For more information on the plan, contact Chad Coburn with the Capital Area Council of Governments at (512) 916-6012 or ccoburn@capcog.org.

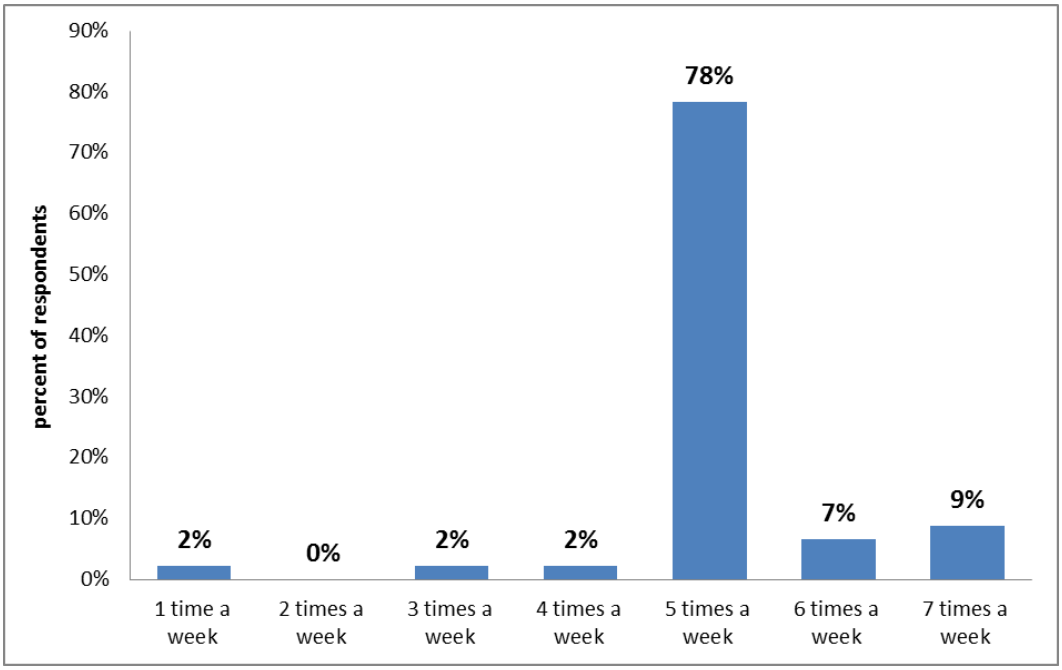
1. What is your primary residence?
N = 56 respondents



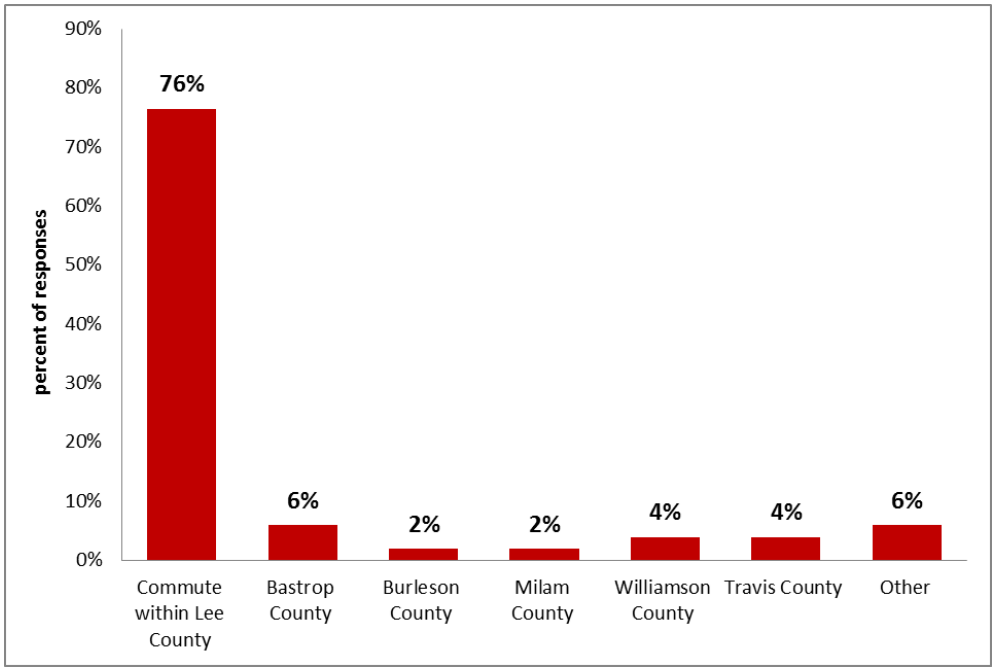
2. Do you commute to work or school?
N = 57 respondents



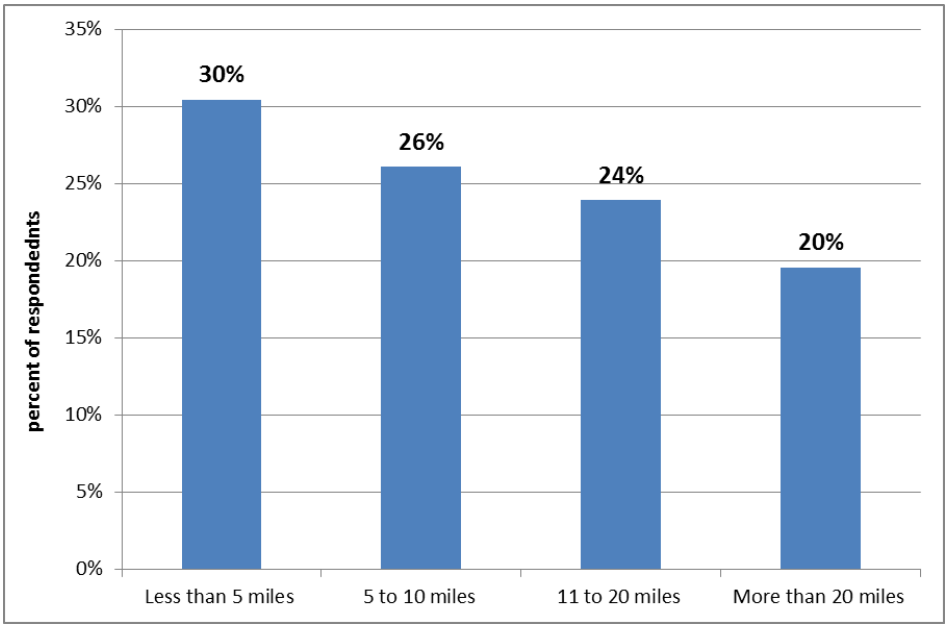
3. How many times a week do you commute to these locations?
N = 46 respondents



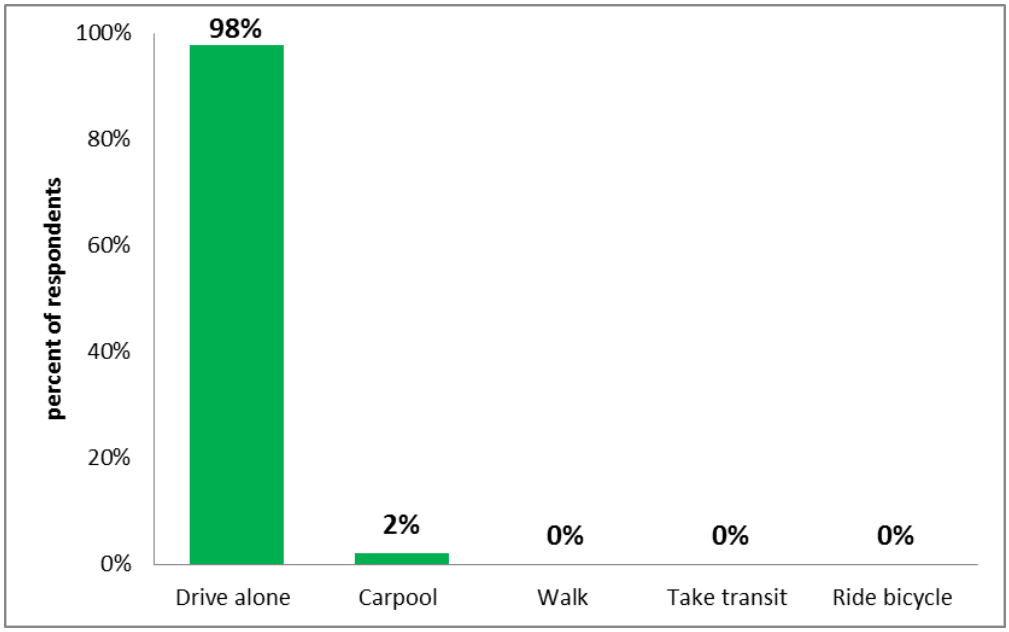
4. During your commutes, to which county or counties do you commute?
N = 51 responses



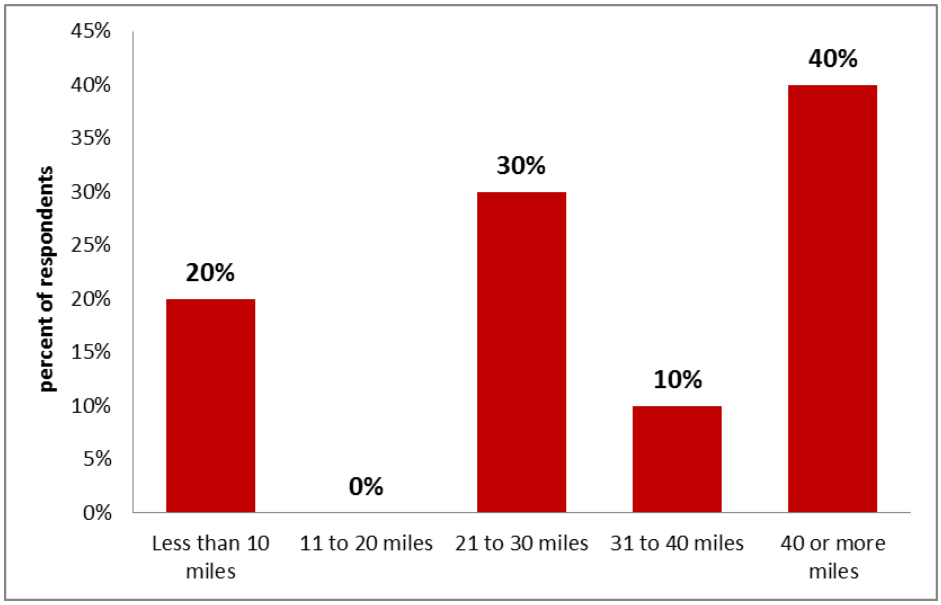
5. How many miles is your one-way commute to work or school?
N = 46 respondents



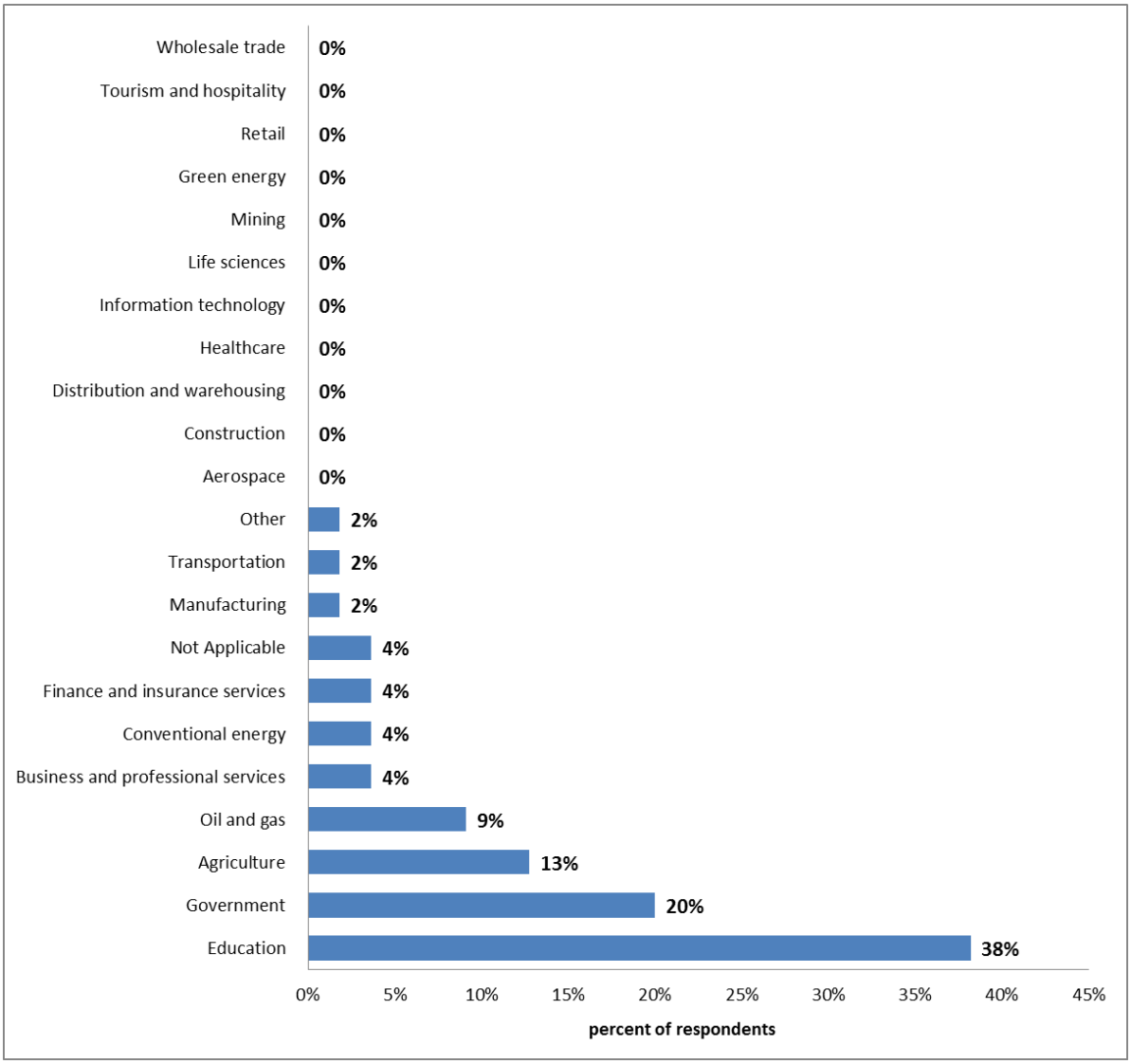
6. How do you make your commute the majority of the time?
N = 46 respondents



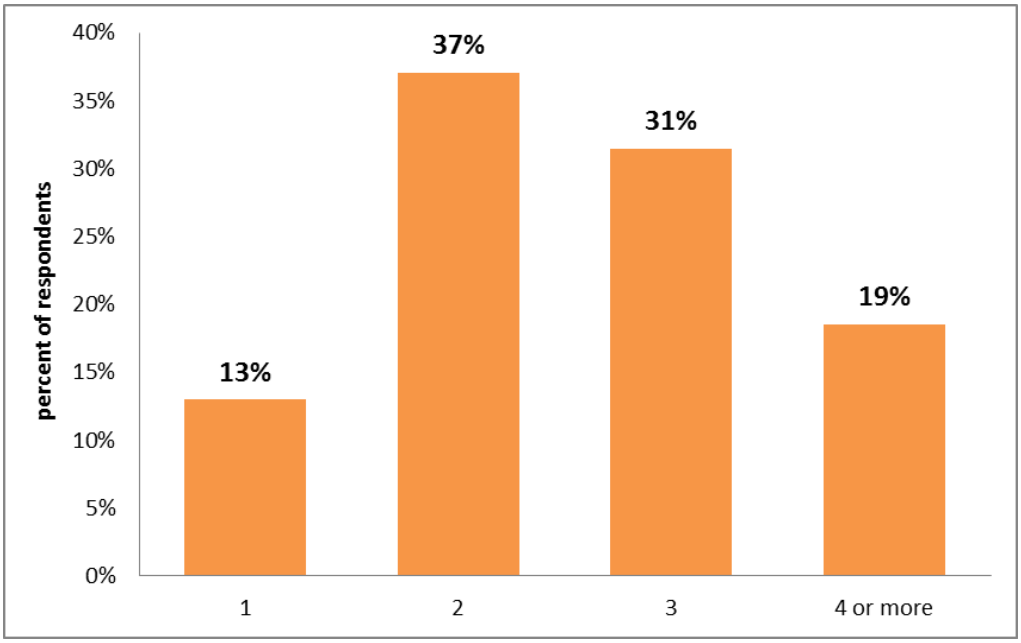
7. If you do not commute for work or school, how many miles do you typically drive in a single day for other trips such as shopping or errands?
N = 10 respondents



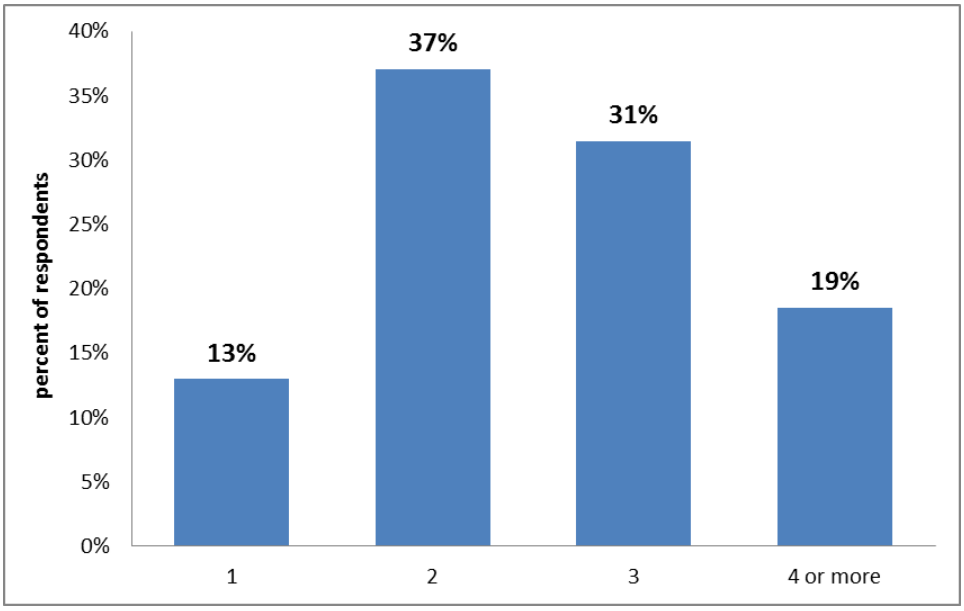
8. Which best describes the primary industry focus of the company you work for?
N = 55 respondents



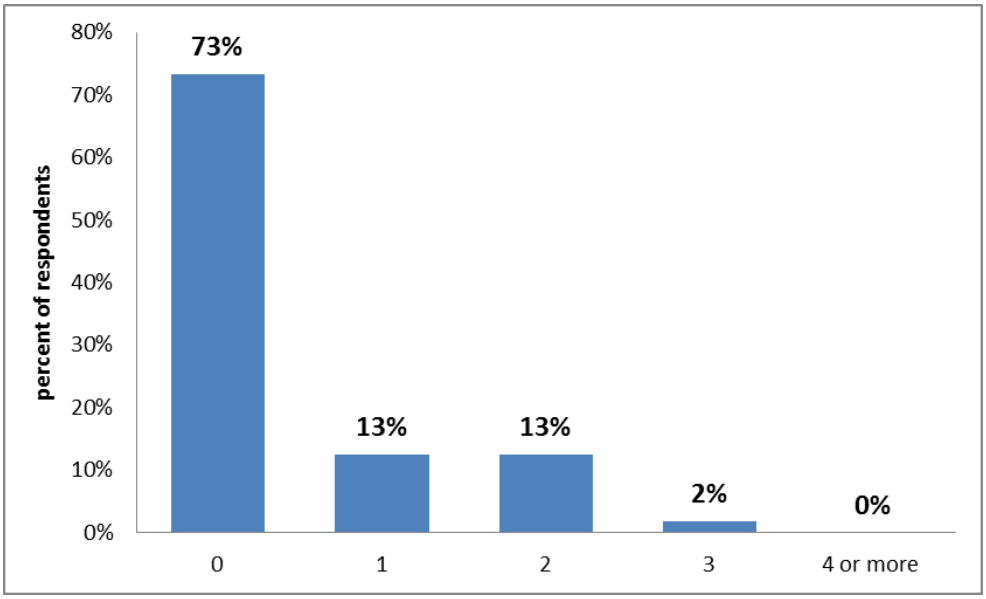
9. How many vehicles are driven by members of your household?
N = 55 respondents



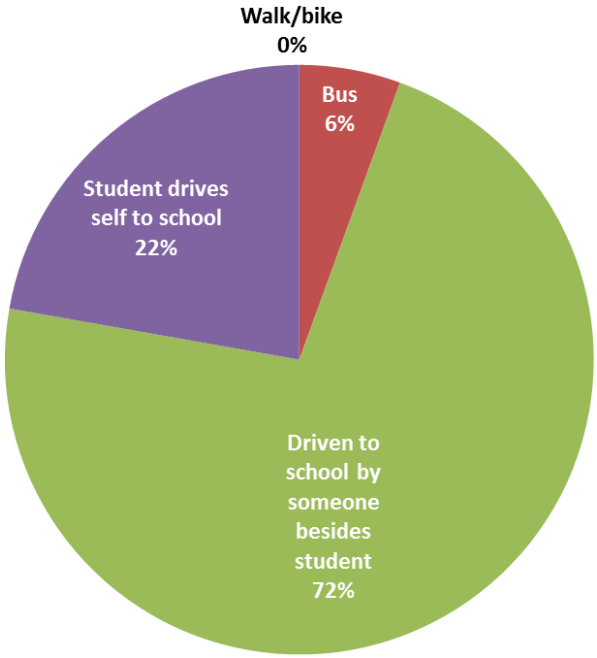
10. How many licensed drivers are in your household?
N = 56 respondents



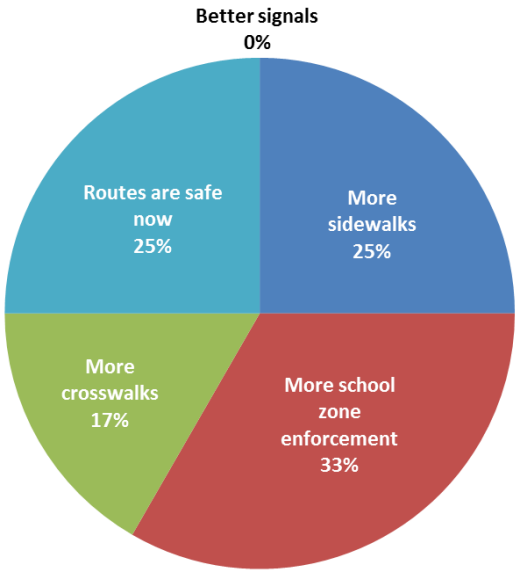
11. How many children in your household are attending grades K-12 in Lee County?
N = 56 respondents



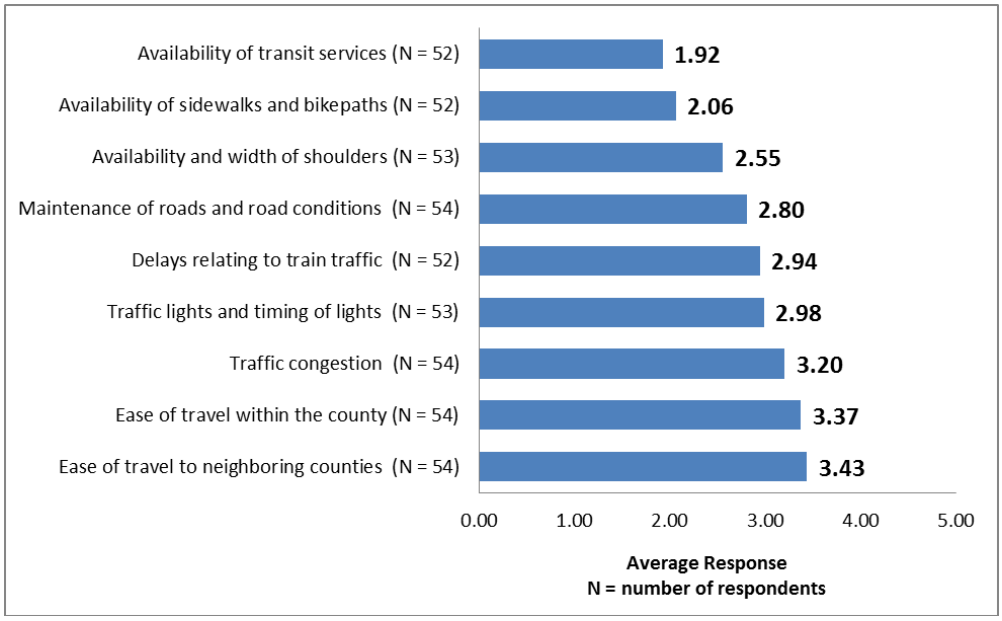
12. If you have children in your household attending grades K-12, please check all of the ways that they travel to school.
N = 18 responses



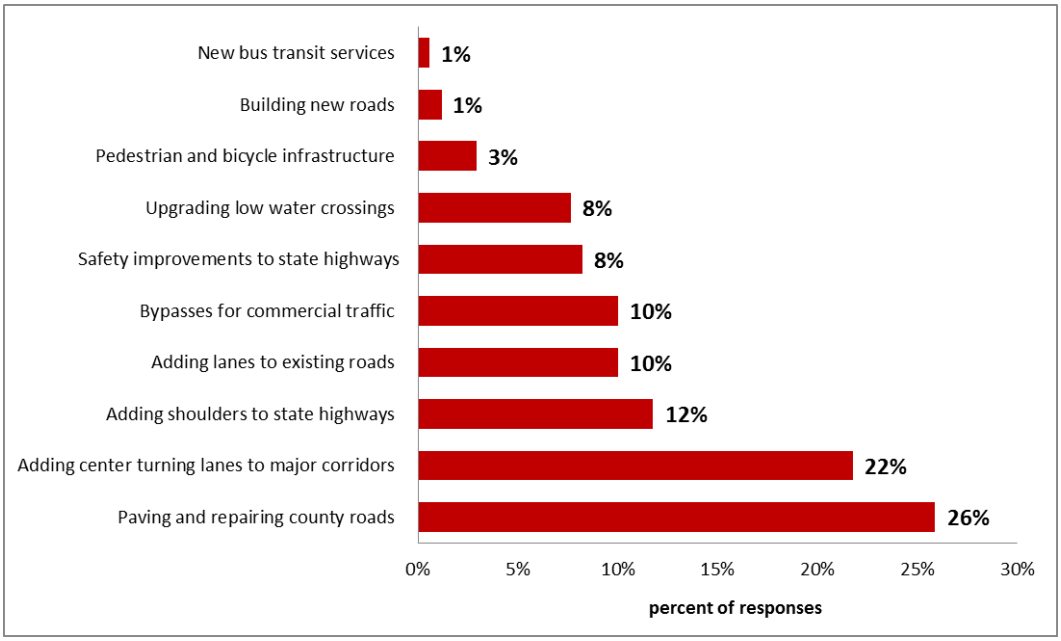
13. Please check all of the ways that we could make transportation routes to school safer.
Note: In addition to the provided answers 4 respondents noted that widening roadways (particularly Route 112 and Route 696) could make transportation routes to school safer.
N = 16 responses



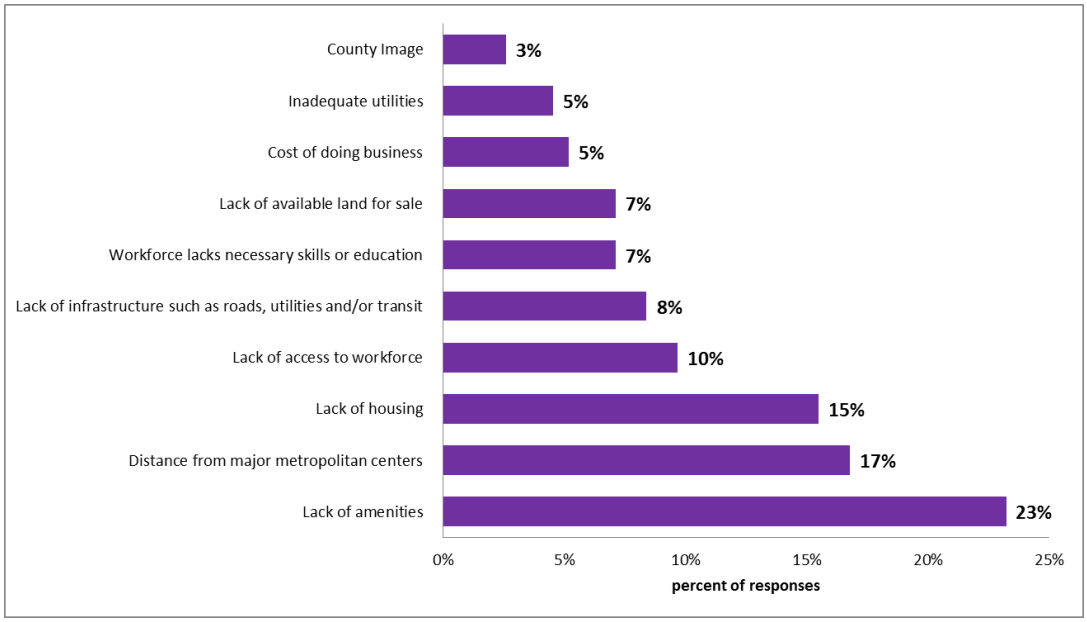
14. Using a scale of 1 to 5, where 1 is poor and 5 is excellent; please rate the following aspects of the local transportation system:
Note: Indicated universe (N) represents number of respondents for each aspect of transportation system



15. From the list below, please choose your top three priorities over the next ten years:
N = 170 responses

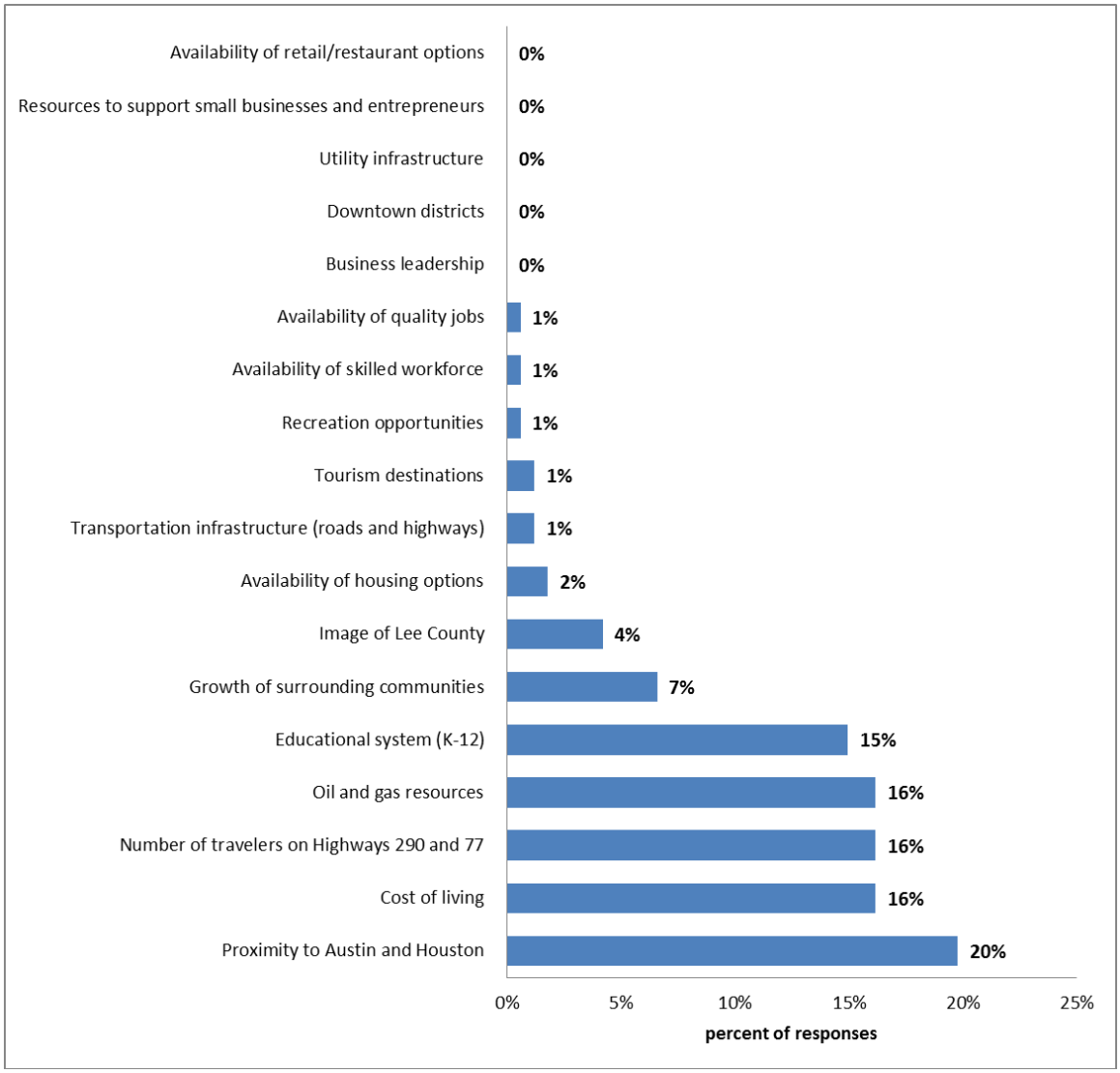


16. From the list below, please choose the top three biggest challenges to attracting businesses to Lee County:
N = 155 responses

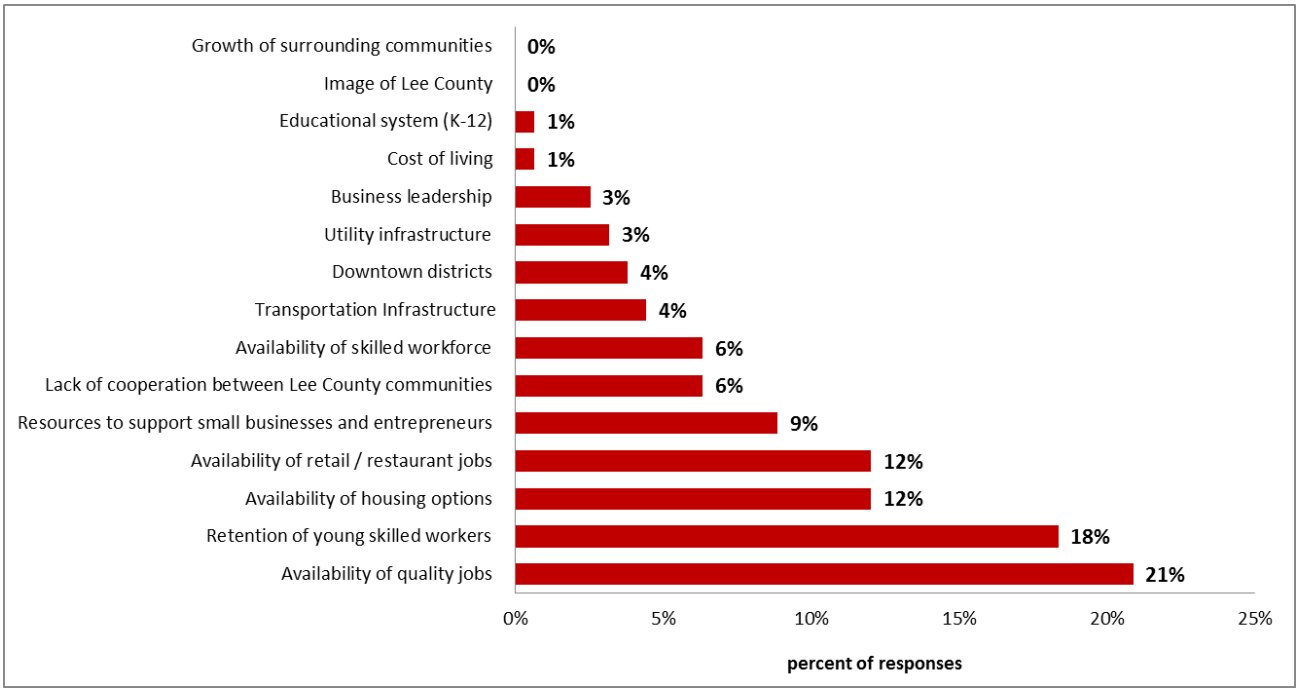


17. From the list below, please choose Lee County's top three greatest assets that can contribute to future or continued economic growth:

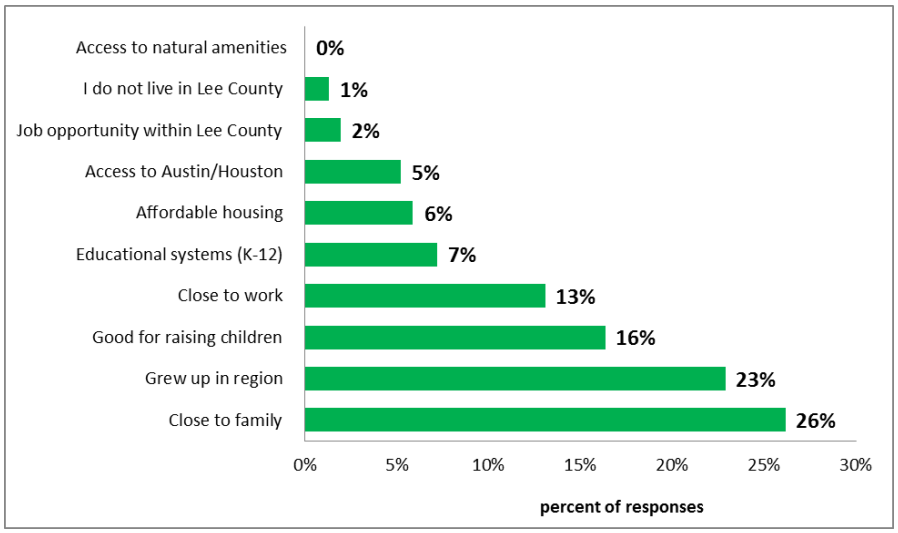
N = 167 responses



18. From the list below, please choose the top three most significant challenges facing Lee County's economic growth potential:
N = 158 responses



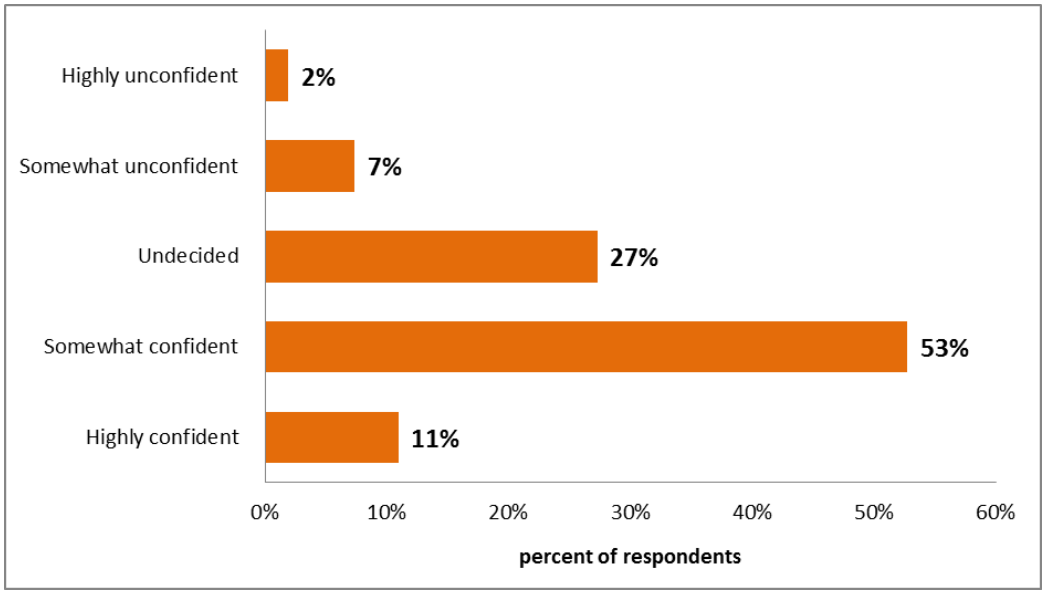
19. Please choose three of the primary reasons you have chosen to live in Lee County:
Note: In addition to the provided answers, 2 responses indicated quality of life as a primary reason.
N = 153 responses



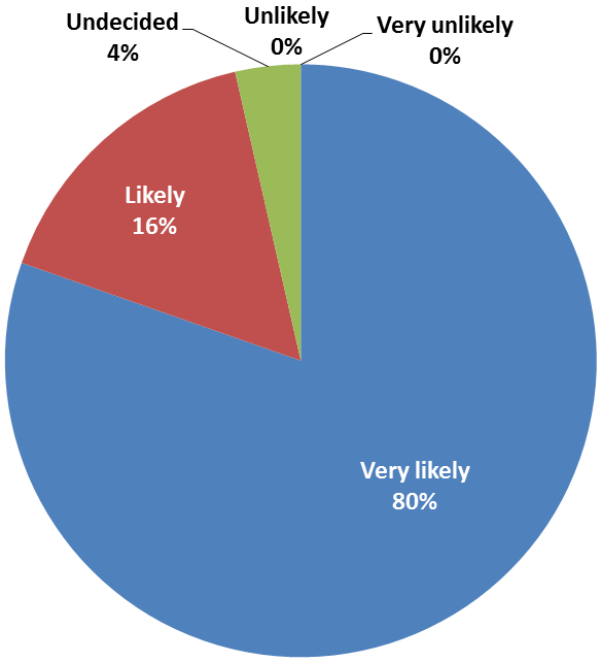
20. As it has become increasingly common for economic developers to turn to tourism as a tool to boost economic activity, what, if anything, has affected the willingness of communities in Lee County to support tourism as an economic development strategy?
N = 19 respondents

- *Lee County Fair needs to be developed to attract outsiders.*
- *Planned events supported by businesses working together to provide successful profitable events.*
- *Tourists willing to spend, middle to upper class tourists, polite tourists.*
- *Support for destination shopping and regular events like the rodeo, and various auto related gatherings.*
- *In the City of Giddings, the EDC does not consider tourism as a tool to bring business into the community.*
- *Coming from another community that turned to tourism, I don't think it should be Lee County's #1 goal as it does not offer enough quality jobs to high school graduates. Also when the economy suffers a down turn then the economy of the county suffers.*
- *Fear of outsiders taking over*
- *I don't think it's communicated with the communities the true impact tourism dollars make and how easy they are to get compared to bringing industry in and having to put up with a larger population.*
- *In the past, support has been very good for tourism. Unfortunately that has disappeared.*
- *Lee County doesn't have enough things to attract tourist to the county.*
- *Funding*
- *Leadership*
- *Besides the courthouse and log cabins in Lexington, there's no tourism. I think it's a waste of time and money!*
- *Government festivals*
- *Lack of water venues (Lakes, creeks, rivers).*
- *The desire to keep the small town feel*
- *The multiple uses of the Lee County Rodeo Arena can be expanded with more facilities in the county.*
- *I think our Economic Development Board needs to be reconstructed. I would like an affordable grocery store like HEB or Super Walmart.*
- *Small Town Mindset.*

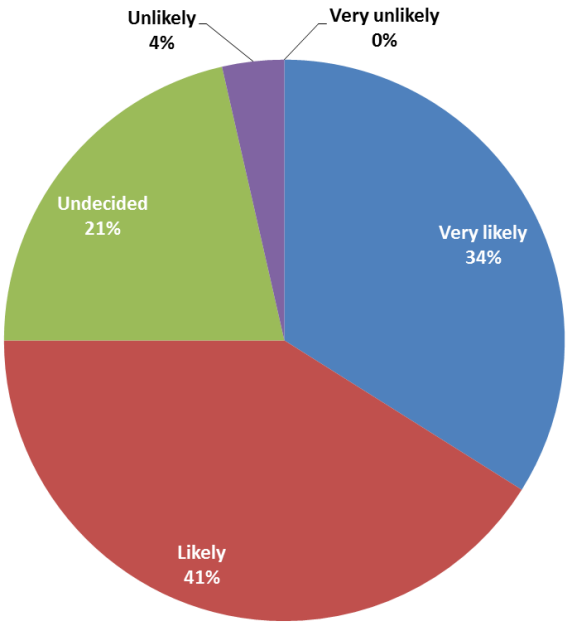
21. How confident are you that activity relating to the Eagle Ford Shale will have a positive and long-lasting impact on the economies of communities in Lee County?
N = 55



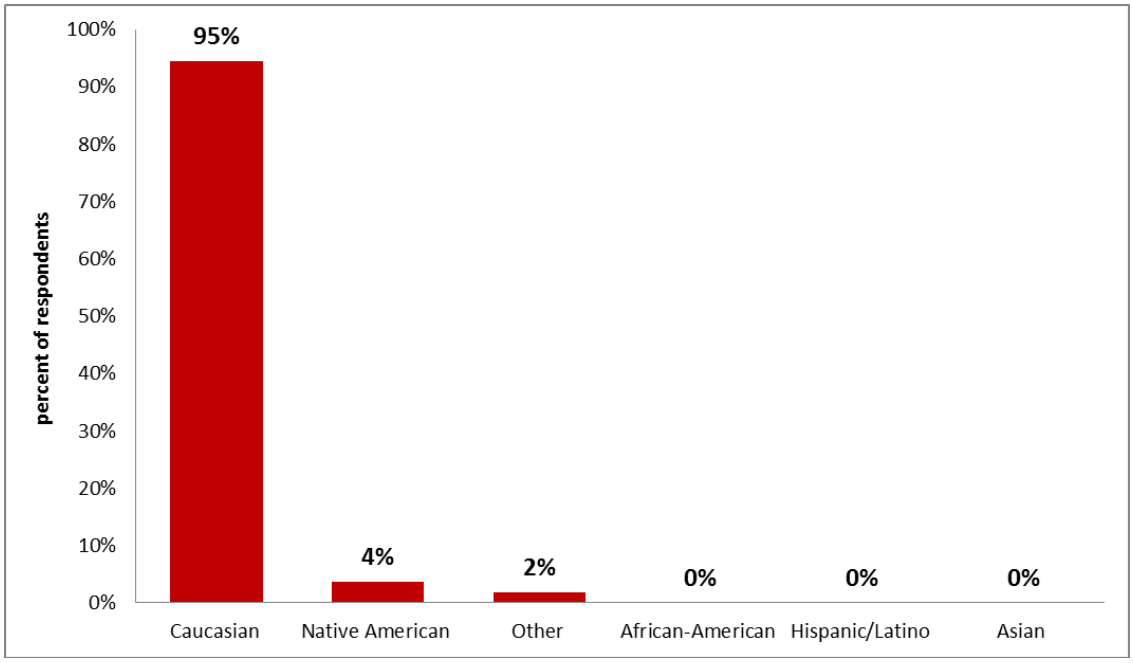
22. How likely are you to stay in Lee County over the next five years?
N = 56 respondents



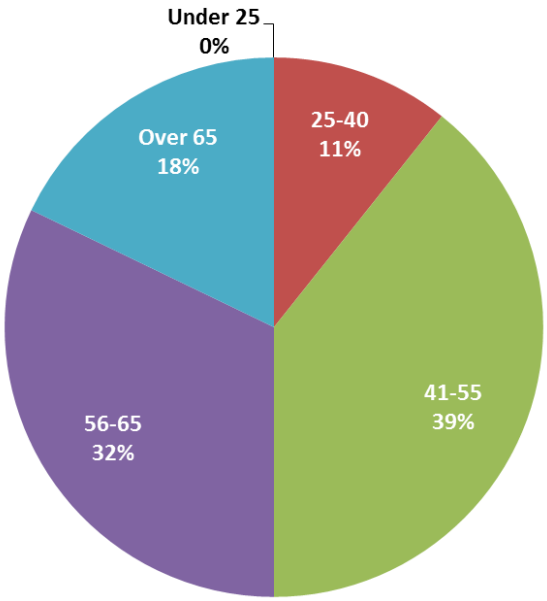
23. How likely are you to recommend Lee County to others as a place to live?
N = 56 respondents



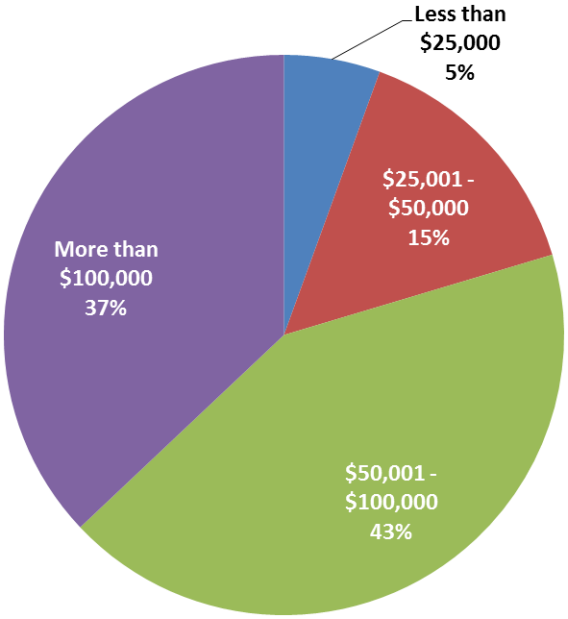
24. What is your race/ethnicity?
N = 55 respondents



25. What is your age group?
N = 55 respondents



26. What was the combined annual household income of all household members in 2013?
N = 54 respondents



27. What transportation issues not mentioned in this survey do you think are most impactful to the transportation infrastructure of Lee County?
N = 25 respondents

- *Maintenance of existing transportation facilities*
- *Bypass for commercial traffic*
- *The blocks on US 290 going N/S that prevents drivers from going to business to business, and a turning lane on HWY 21, especially for trailers.*
- *More amenities and parking in DT Giddings for tourists to visit potential shops, amenities.*
- *290 Bypass around Giddings proper*
- *City of Giddings allowing businesses to narrow streets adjacent to their business.*
- *Lack of convenient parking in DT Giddings.*
- *The need for a forward looking approach to providing new roads and maintenance of existing roads in response to increase wear and tear related to expected increased oil activity.*
- *Improvement of streets*
- *An affordable way for seniors to get into town to go to doctors/shop without having to drive.*
- *It would be of great benefit to have one road built between US290 and 77. Much gas and diesel is being wasted every day by trucks and other vehicles which must drive a great distance into Giddings from the LaGrange area, all the way to the 290/77 intersection, in order to travel onward to Brenham or College Station. And the reverse, from Brenham and College Station to/from points south on 77 (LaGrange, 71, 10). Building a major highway originating in the area near the South Forty RV Park and terminating at 290 would be key in assisting commerce, and would open-up a new corridor for business development!*
- *The impact oil traffic will have on the farm to market and county roads*
- *Downtown, Highway 290*
- *Dividing US290 W and what to do with increasing train traffic.*
- *More wrecks and injuries have occurred on US21 than is shown in maps.*
- *Turn lane; divided highway; lots of different speed ranges (60-75 mph)*
- *Upgrades to all 3 major highways.*
- *Transportation law enforcement increase*
- *US 290 west*
- *Awful county roads in north part of county.*
- *Commuter rail service to Houston/Austin (long term plan)*
- *US290 & 77 through downtown.*
- *Weekend traffic makes it difficult to shop or eat out due to college football, holidays, and graduation.*
- *Narrow FM Roads*
- *More transportation options for the elderly to doctors and shopping for their needs.*
- *Lack of public transit to major cities*
- *Rapid Rail from Austin to Giddings*

28. What transportation issues not mentioned in this survey do you think are important for the future of Lee County?
N = 21 respondents

- *Maintenance of existing facilities and transportation safety enhancements*
- *290 Bypass around Giddings proper*
- *Oversized speed limit and school zones. Over exuberant enforcement of speed zones.*
- *Learn from other counties with high oil development activity on what works and what does not work with respect to construction and maintenance of roads to better withstand heavy truck traffic.*
- *If 290 and 77 continue to grow in the number of vehicles on the road, something will have to be done.*
- *Rural transportation improvements*
- *I would like to see consistent enforcement of the speed limits along highway US290 west of Giddings. The highway has been under construction for over a year, is posted as a 55 mph stretch of road for several miles, and as I drive along that road at 55 I have yet to pass anyone, with everyone passing me while they typically speed along at 65 to 75 mph. Where is law enforcement in Texas?*
- *Is it feasible to put an overpass over the railroad tracks crossing 290?*
- *Improvements to train crossings*
- *Further improvement / hanger space at airport*
- *Connecting US21 to US290 on the east side of town or even a connecting loop is needed for 141 to 77. On Hwy 77 in Lexington, where North Ave. (school route) and Dollar General of CEFCO traffic enter Hwy 77 needs some kind of traffic light.*
- *Alternative transportation expansion*
- *CARTS needs more vans etc. with more days available to transport that would be affordable to elderly.*
- *Rapid Rail from Austin to Giddings*
- *Carpools and vanpools or some system to get to Austin without each individual driving*
- *FM 494 from Lexington to Elgin needs shoulders, turn lane, etc.*

29. What economic development issues not mentioned in this survey do you think are important for the future of Lee County?
N = 21 respondents

- *Recruiting businesses to move their operations to Lee County*
- *Target and attract small to medium sized business to benefit from excellent schools and cost of living.*
- *Provide training and workshops for business leaders to aid in economic development goals.*
- *290 Bypass around Giddings proper*
- *What must we do to acquire major retailers as surrounding cities have done?*
- *Securing big box stores and allowing Lee County residents to shop in Giddings and in Lee County.*
- *I think it is extremely important to not sit and bask in the glow of a temporary influx of oil workers. Revenues will increase across the board for a period of years, and it is imperative to provide those workers with a multitude of reasons to permanently relocate to Lee County. From jobs for them after the wells run dry, to entertainment, schools, and jobs for their children.*
- *The city/county could negotiate with developers to make it attractive to build a new subdivision in the area.*
- *The city could pay for some of the demolition costs of old homes so that new ones can be constructed in town.*
- *What is going to happen with our water resources?*
- *Quality jobs are needed to attract young people to live and work here, i.e. Tech companies, Engineering firm, etc.*
- *Clean shopping place and easy access to get to them.*
- *Keeping water in Lee county*
- *Opportunities for the youth*
- *Tax abatements*
- *Some manufacturing enterprises not necessarily tied to agriculture.*
- *A Starbucks at 77/290 in the SE corner where the bank is would bring in revenue if a loop is not built.*
- *HEB or Super Walmart*
- *Support for small businesses and construction contractors support*
- *Bypass of Giddings*
- *A quality grocery store like HEB or Super Wal-Mart*

Appendix C—Summary of Public Input at Public Meetings

Summary of Public Input

Public Meeting #1: May 22, 2014

The first public meeting for the Lee County Transportation and Economic Development plan was held May 22, 2014, at the St. John Lutheran Church Family Life Center in Lincoln. The meeting was held in an open house format with no formal presentation. The purpose of the meeting was to provide members of the public their first opportunity to learn about the plan development process and review the early plan findings such as existing conditions for transportation, economic and demographic characteristics. In addition, members of the public were asked to mark locations within the county on large maps where transportation improvements should be made. Finally, members of the public were asked fill out surveys on transportation and economic development issues. The following is a summary of the feedback heard from members of the public:

- A member of the public commented that the map of oil and gas activity in Lee County was incomplete.
- Several members of the public commented on the increase in truck traffic along US 77.
- Several members in attendance were also interested in learning more about the planned improved being proposed under the County Transportation Infrastructure Fund Grant Program.
- A member of the public asked to speak to someone regarding passing lanes along US 77.

Public Meeting #2: October 6, 2014

The second public meeting was held on Monday, October 6, 2014, at the Lee County Courthouse in Giddings. The meeting was held in an open house format with a short presentation made by project representatives. The purpose of the meeting was to present the plan's findings and seek feedback from the public on those findings such as population projections, traffic growth projections and to present the list of recommended transportation and economic development improvements. The following is a summary of the feedback heard from members of the public:

- A member of the public commented that there was a Lexington City Comprehensive plan
- A member of the public commented that they believed Milam County should be included in any county comparisons.
- A member of the public commented that they believe that Hays County should not be included in the county comparisons.
- Members of the public expressed concern that the population projections presented understated what they believed the future population growth would be.
- Members of the public expressed concern with the plan using 2010 census data as the base year for demographic analyses because they believed that a lot has changed since 2010 and the use of 2010 census data may understate the growth that they perceive to have occurred since 2010.
- Members of the public expressed concern that the plan did not take into account economic growth occurring in regions outside of Lee County as they believed that this growth could affect Lee County.

- Members of the public expressed concern that the most recent traffic counts from TxDOT were not used for the traffic growth analysis as they believed the use of the 2010 AADT volumes would understate the growth in traffic that Lee County has experienced since 2010.
- Members of the public expressed concern with the traffic growth analysis, stating that they believed that the traffic growth was understated and that they don't believe that their current experiences with congestion on roadways within Lee County were represented in the analysis.

Comments Received by Email, Mail, Telephone

The following email was received on October 3, 2014, in reference to the preliminary draft version of the Lee County Transportation and Economic Development Plan that was provided to the public for input:

> I have had a chance to look over the Preliminary Draft of the Report, and I have some concerns.
>
> 1. First - I am struck by the fact that nowhere in the document except on the maps is there any reference to any data concerning Milam County. I see this as a major hole that makes the entire report questionable, especially as this relates to any comparisons with surrounding Counties. In reading the commentary, there is no discussion of the impact that the recent events in Milam County have had and continue to have on the Economy and Transportation needs of Lee County. As one who lives in the area, I can attest to the fact that the Alcoa shutdown was and continues to be felt throughout the area – yet this was completely ignored.
> 2. Second - the statement was made that Lexington does not have any sort of Plan. That is simply not true. Copies exist of one that was put together within the past few years and is rather comprehensive for the North part of Lee County. From the way things are discussed, it is obvious that the data in this was not considered.
> 3. Third - The inclusion of Hays County data is more that a bit puzzling. Hays does not border Lee County, while Williamson does (granted, a rather small border), yet Hays is included and Williamson (and as mentioned above, Milam) is not even mentioned. I fail to see any good reason why comparisons with Hays County are relevant.
>
> The draft I read is a relatively good start – but only a start. Addressing the points mentioned above needs to be included as well as any implications and consequences of these need to be covered. If the items mentioned above are intentional, then the rationale for them should be explained.
>
> Rainey Owen
> Grandfather of a Restored from TBI Veteran

Appendix D—Capital Area Rural Transit System (CARTS)

ADDRESSING THE TRANSPORTATION NEEDS FOR THE FUTURE OF LEE COUNTY

CARTS delivers transportation tailored specifically for each of the one hundred & sixty-nine communities it serves. Serving the Texas counties of Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, & non-urbanized areas of Travis & Williamson.

Current Lee County Service

CURB-TO-CURB SERVICES RESERVED BY PHONE

Enjoy the convenience of having a CARTS bus pick you up at your home, take you to your destination, and then back home again. Ideal for disabled individuals or others requiring special assistance, Community Transit service provides curb-to-curb transportation throughout Central Texas. To schedule your ride call **1-800-456-RIDE (7433)** Rides are scheduled Monday thru Friday, from 7:00am to 4:00pm. 24-hours advance notice recommended. Local vehicles serve neighboring towns, so ride times may vary. We'll set up a time for pickup within our time slots of general availability. On your first call we will request information to enter into your customer profile, and after that we will know you when you call. It's that simple. The CARTS Community Transit service can help you or someone you know who needs a ride for shopping, city business, medical appointments, work, nutrition visits or any other purpose.

Currently, CARTS is providing Lee County with our curb to curb service or our Country Bus. Giddings, Lexington, Dimebox and Doak Springs residents can call and get service to places like Elgin, Austin, Brenham, La Grange, Rockdale, Paige etc.

What's next for the future of Lee County?

Interurban Coach with service to Austin, San Marcos, Round Rock, Georgetown, Taylor, Burnet, Bertram, Liberty Hill, Marble Falls, Lockhart and Luling.

Interurban Coach

The Interurban Coach is a regional intercity route providing connections between Austin, San Marcos, Round Rock, Georgetown, Taylor, Lockhart, Luling, Burnet, Bertram, Liberty Hill, and Marble Falls. This service also makes connections to Greyhound and Capital Metro.

Registered CARTS customers age 65+ or with a CARTS disability certification who ride into Austin can schedule a connecting ride to medical appointments/other businesses. Local rides must be booked in advance & passenger must meet eligibility requirements. Connecting rides subject to availability & offered at all CARTS stations

CARTS Grasshopper

Registered Country Bus customers may connect with the CARTS Grasshopper service at the Austin Bus Station to continue their curb-to-curb journey to their destination. This trip should be scheduled when the customer makes their original trip reservation. There is no additional charge for the Grasshopper Service.

FARES

Zone 1 - Local/Intra-County $2.00 *
Trips wholly within one county or on a Metro Connector Route
Zone 2 - Regional/Inter-County $4.00 *
Trips anywhere in the CARTS district
Regional/All Day Pass $6.00 (all day) Ride all day on any Interurban or Metro Connector Route
** Zone 1 and Zone 2 fares quoted are one-way fares*

CARTS
2010 E. 6th Street
Austin, Tx 78702

For More information **512/478 RIDE (7433)** or go to our new website at **RideCARTS.com**

CARTS SERVICES

Interurban Coach

Country Bus

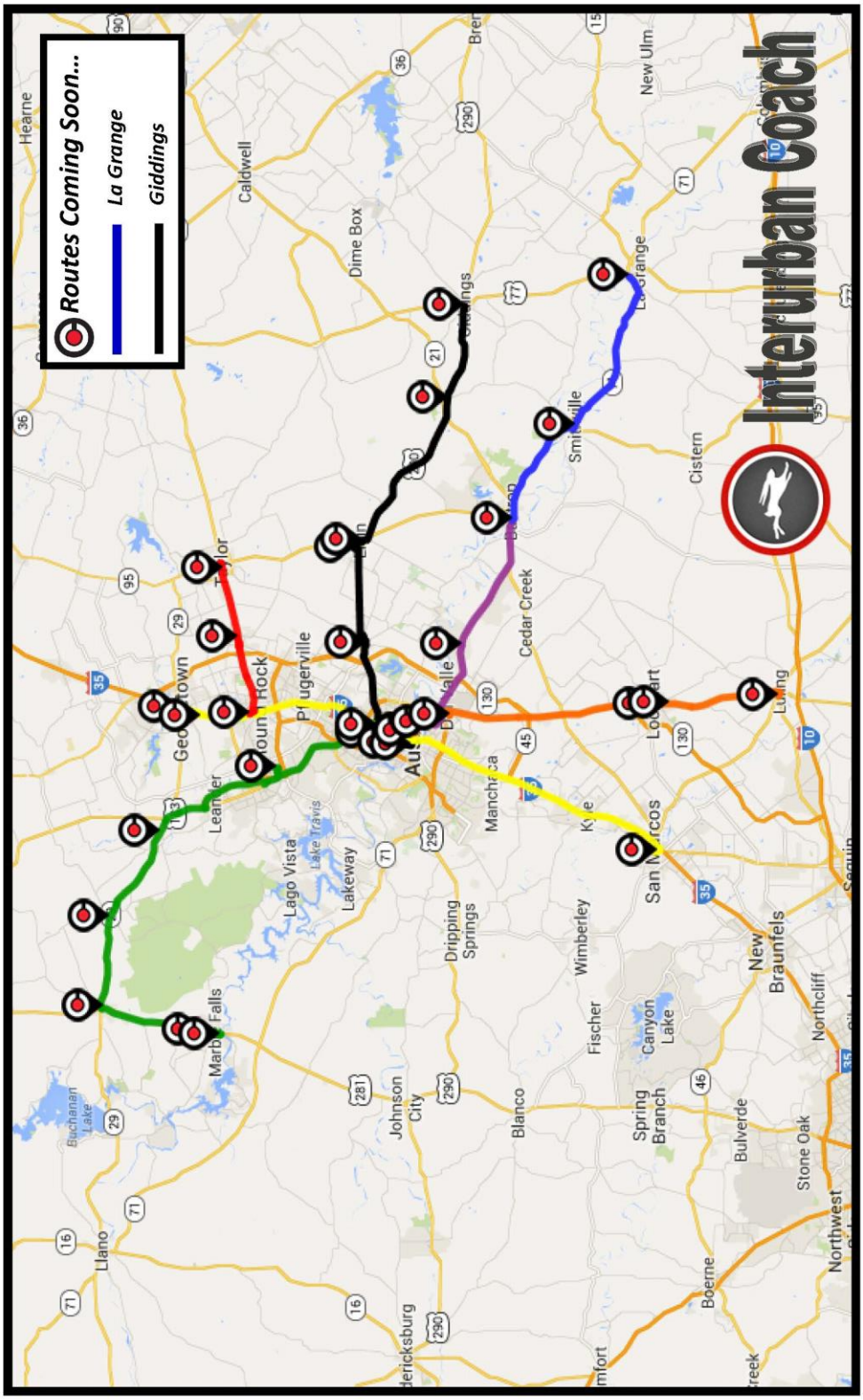
Metro Connector

Municipal Bus

National Intercity

Commuter Routes

Medical Transportation


Routes Coming Soon...
La Grange
Giddings
Interurban Coach
Hearne
Caldwell
Dime Box
New Ulm
Cistern
Cedar Creek
Lago Vista
Lake Travis
Lakeway
Dripping Springs
Wimberley
Fischer
Canyon Lake
Spring Branch
Bulverde
New Braunfels
Northcliff
Stone Oak
Northwest
Boerne
Blanco
Johnson City
Llano
Buchanan Lake
Luling