

MAPPING THE WAY - 2030



NORTHWEST LOUISIANA LONG RANGE TRANSPORTATION PLAN UPDATE (2009-2030)

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Submitted to:

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT (LADOTD)
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NORTHWEST LOUISIANA COUNCIL OF GOVERNMENTS (NLCOG)



Disclaimer

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1.0 INTRODUCTION

1.1 Long-Range Transportation Plan Development Background

In 1999, the Northwest Louisiana Council of Governments, or NLCOG, initiated an effort to rethink its outdated Metropolitan Transportation Plan. The product of that effort was the development of the “Caddo-Bossier Transportation Plan 2001-2025”. This long-range plan effort included the creation of a new regional Travel Demand Model analytical tool, as well as, the utilization of Census 2000 demographic datasets. Further, the region’s principal transportation stakeholders formed a plan steering committee, namely the “Delphi Committee”, to guide the development of the Caddo-Bossier Transportation Plan 2001-2025.

During 2007, NLCOG embarked on the update of the Caddo-Bossier Transportation Plan 2001-2025. This effort has led to the development of the proposed Northwest Louisiana Long-Range Transportation Plan “Mapping The Way – 2030”. The intent of this effort is to thoroughly examine the region’s transportation system to determine deficiencies and bottlenecks, recommended a plan of improvements, facilitated prioritization of the improvement projects with citizens and area decision makers and identified long-range strategies to assure mobility. The intent of this plan is to not only meet the federal requirements of the current transportation regulation, SAFETEA-LU (Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users), but to address the transportation

needs, as documented through our extensive public involvement activities, of the citizens of Northwest Louisiana.

1.2 Northwest Louisiana’s Regional Transportation System

A review of the metropolitan Shreveport—Bossier City transportation system reveals a history of successful transportation planning and network improvements. Over the years, many regionally significant transportation improvement projects have been developed and funded entirely, or in a large portion, through local jurisdictional efforts. Such projects as

- ▶ Clyde Fant Parkway(Shreveport riverfront – 7.1 mi, 4-ln facility) and A.R. Teague Parkway (Bossier City riverfront – 5.2 mi., 4-ln facility)
- ▶ Bike/Pedestrian Paths located adjacent to the Clyde Fant and A.R. Teague Parkways provide non-motorized connectivity along each respective riverfront
- ▶ Airline Dr Widening Project (2-ln to 5-ln section – 3.7 mi)
- ▶ Construction of ramp facilities to serve Shreveport-Barksdale Hwy. and A.R. Teague Parkway
- ▶ Inner Loop Extension (LA 3132 – 2.2 mi, 4-ln freeway facility, between LA 526 and LA 523, 50% funded locally)
- ▶ City of Shreveport’s continued support of the urban area’s primary transit provider - SPorTran

These improvements have not only improved the overall performance of the regional transportation system, but have enhanced the quality of life for our local residents. Due to the high level of local support

regarding the planning and development of transportation infrastructure, the region has laid the groundwork for an efficiently operating transportation network. The region currently enjoys high performing transportation facilities; however, changes are occurring such as new land uses, shifts in population growth and economic activities that call for a fresh examination of the region's transportation needs, goals and investments.

1.3 Why Does NLCOG Prepare a Long Range Transportation Plan?

Regional long-range transportation planning, as conducted by the urban area's designated Metropolitan Planning Organization (MPO), is required by the U.S. Department of Transportation (USDOT) as a prerequisite for federal funding. However, the benefits of planning extend beyond simply complying with federal mandates.

1.3.1 Creating a Regional Vision

The primary outcome of the long-range transportation planning process is the development of a regional vision for surface transportation given the constraints of funding that the region can reasonably expect to receive. This process provides an opportunity for citizens, government officials, planners, and associated stakeholders to come together to visualize the region's future, identify trends taking place within the region, assess system needs, and set goals for what the region hopes to achieve within the next 20 or

more years. Furthermore, the planning process allows for update cycles, to ensure that the vision and goals are consistently revisited and reassessed to address the region's changing needs and support the region's desired transportation direction. Transportation systems are best planned at a regional level because people don't confine their travel behavior to a specific local area. Thus, the MPO develops Long Range Transportation Plans to encompass an entire metropolitan area/region.

1.3.2 Federal Requirements for Long Range Transportation Planning

On August 10, 2005, the successor to TEA-21 (Transportation Equity Act for the 21st Century) was signed into law. The legislation is known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). In an effort to establish a SAFETEA-LU compliant long-range transportation plan and planning process, the MPO must adhere to the guidelines set out in the current regulations.

Statutory Requirements and References

SAFETEA-LU Section(s) under CFR Title 23: 1107, 6001

Long Range Transportation Plan (Plan)

- ▶ Will be updated every 4 years (unless the MPO chooses to do so more frequently) in non-attainment and maintenance areas. Attainment areas remain on a 5-year update cycle. [6001(i)]

- ▶ Intermodal connectors are added as a transportation facility. [6001(i)]
- ▶ Include a discussion of potential environmental mitigation activities along with potential sites to carry out the activities to be included. The discussion is to be developed in consultation with Federal, State, and tribal wildlife, land management, and regulatory agencies. [6001(i)]
- ▶ Transit operators are to be included in the cooperative development of funding estimates for the financial plan section. [6001(i)]
- ▶ MPOs are required to consult with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning development of the Plan. [6001(i)]
- ▶ Representatives of users of pedestrian walkways, bicycle transportation facilities, the disabled are specifically added as parties to be provided with the opportunity to participate in the planning process. [6001(i)]
- ▶ The MPO is to develop a participation plan in consultation with interested parties that provides reasonable opportunities for all parties to comment. [6001(i)]
- ▶ To carry out the participation plan, public meetings are to be: conducted at convenient and accessible locations at convenient times; employ visualization techniques to describe plans; and make public information available in an electronically accessible format, such as on the Web. [6001(i)]
- ▶ The Plan is to be published and made available electronically, such as on the Web. [6001(i)]

SAFETEA-LU requires that the following eight factors be explicitly considered, analyzed as appropriate, and reflected in the long-range transportation plan:

- 1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- 2) Increase the safety of the transportation system for all motorized and non-motorized users;
- 3) Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users;
- 4) Increase accessibility and mobility of people and freight;
- 5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- 6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- 7) Promote efficient system management and operation;
- 8) Emphasize the preservation of the existing transportation system.

Although the long-range plan must consider each of these factors, the broad nature of each factor allows for flexibility in determining how these eight factors align with other planning initiatives.

General Requirements

Northwest Louisiana Council of Governments (NLCOG), the designated MPO for Northwest Louisiana, is required by SAFETEA-LU to develop, adopt, and implement a metropolitan long-range plan that must be updated every five years. Essentially the Long-Range Transportation Plan (LRTP) has identified and developed components that comprise an integrated, multimodal and intermodal metropolitan transportation system. Having defined the transportation system, NLCOG has proposed measures to assure the efficient use of the existing system as a means of reducing congestion and improving mobility. The Northwest Louisiana Long-Range Plan Update 2030 – “Mapping the Way” encompasses a minimum twenty-year time frame and identifies both a short-term (year 2015) and long-term (year 2030) needs. The transportation plan also addresses the eight planning factors outlined in SAFETEA-LU. The intent of this effort is to conduct investigations that identify existing and emerging transportation needs and to recommend improvement strategies to assure long-term regional mobility.

In essence, the Long-Range Transportation Plan (LRTP) update includes the following elements:

- ▶ Encompasses a twenty year planning horizon
- ▶ Updated at least every four years in non-attainment and maintenance areas (i.e., areas that do not meet federal air quality standards) and at least every five years in attainment areas.

- ▶ Defines a transportation system that is integrated, intermodal, and multimodal
- ▶ Includes the eight planning factors required by SAFETEA-LU
- ▶ Includes a short -range and long-range strategy
- ▶ Utilizes existing transportation facilities efficiently to relieve congestion and improve safety and mobility of people and goods
- ▶ Demonstrates the expected revenues that indicate the plan is financially feasible

1.4 Integration of the Regional Long Range Plan Into NLCOG’s Transportation Planning Process

The long-range transportation plan, “Mapping the Way”, is intended to be an integral part of the metropolitan transportation planning process, rather than a stand-alone program or system. Integration of the long-range plan into the planning process will provide decision makers with current information pertaining to the assessment of transportation needs, through the MPO’s planning analysis products (CMP, ITS, etc...), and citizens’ opinions and attitudes towards transportation issues. The development of the long-range plan as it relates to the overarching MPO transportation planning process is presented in Figure 1.1.

Figure 1.1
Long-Range Transportation Plan Development Within the MPO Planning Process

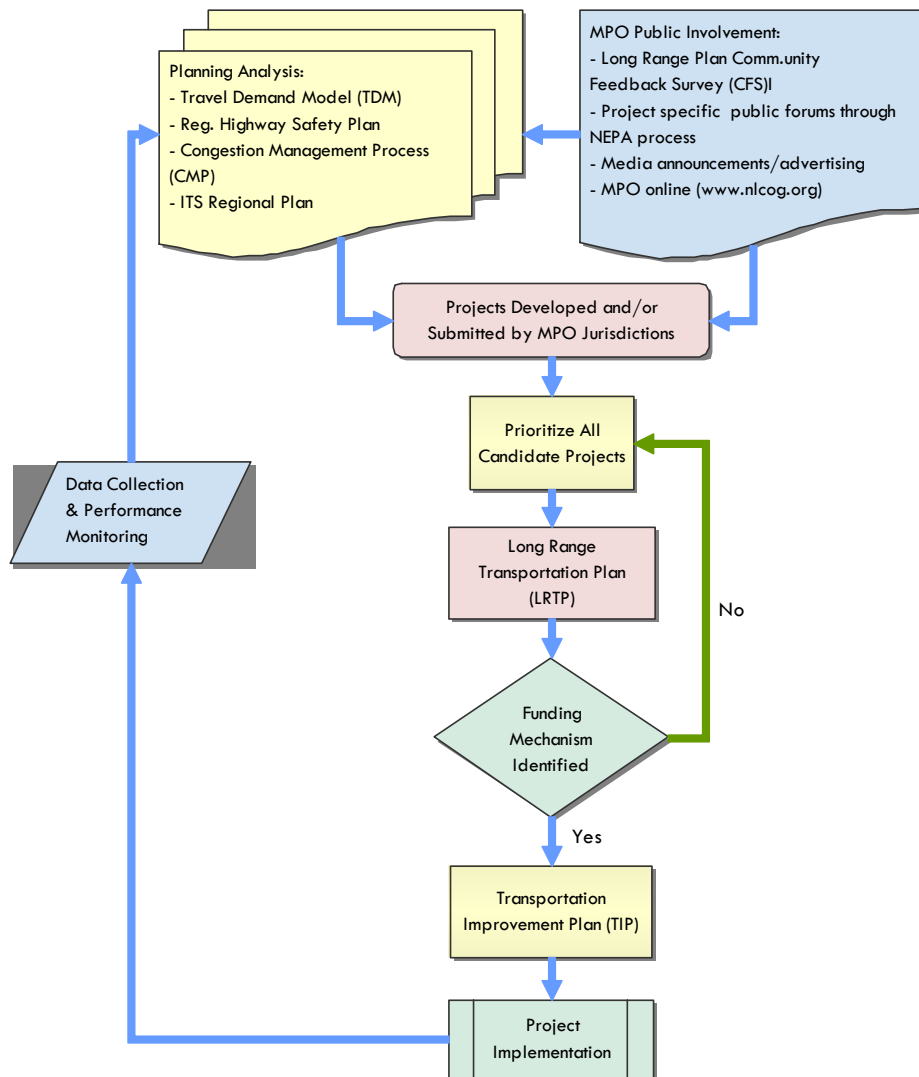


Figure 1.1, illustrates how the Long-Range Transportation Plan (LRTP) is integrated into the overarching MPO transportation planning process. A critical process element, within the overall MPO planning process, occurs during the identification of **all** candidate projects for inclusion into the LRTP. It is at this juncture, that improvement projects/strategies are considered by the MPO's member jurisdictions (i.e. MPO Transportation Policy Committee) utilizing the findings of the various MPO planning analyses, as well as, citizen attitudes and opinions gleaned from the MPO's public involvement process.

Who is Involved in the Long-Range Plan Development?

Federal regulations require that public officials (elected and appointed) and citizens have adequate opportunity to participate in the development of the transportation plan before it is approved and adopted.

Public Officials / Representatives

MPO membership represents locally elected and appointed officials of the cities and Parishes within the Planning Study Area (PSA – Caddo and Bossier Parishes). Other appointed officials include the District 04 Administrator for the Louisiana Department of Transportation and Development (LADOTD), a representative of the Federal Highway Administration (FHWA), and their counterpart from the Federal Transit Administration (FTA).

The Technical Advisory Committee (TAC) provides planning and engineering guidance to the MPO's Transportation Policy Committee in dealing with issues of the MPO's transportation programs. Inclusion of improvement projects into the regional LRTP and discussion of strategic planning issues are brought forth during a typical TAC meeting. Staff support to the Technical Committee is provided by the MPO's staff. Staff from the Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and the Louisiana Department of Transportation and Development (LADOTD) also provides technical assistance and guidance.

TAC Reference:

http://www.nlcog.org/office_info/nlcog/TAC_Comm.htm

MPO Transportation Policy Committee:

http://www.nwlainfo.com/office_info/nlcog/TranPolicy_Comm.htm

Citizens / Interested Parties

The regulations explicitly identify several parties who should be engaged and involved throughout the plan development/update process. These private interests include:

- ▶ Citizens
- ▶ Freight shippers
- ▶ Providers of freight transportation services
- ▶ Private providers of transportation
- ▶ Representatives of users of public transit
- ▶ Tribal organizations

- ▶ Bicycle interests
- ▶ Pedestrian interests
- ▶ Organizations representing the disabled
- ▶ State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation
- ▶ Other interested parties

For a more detailed examination of NLCOG's public engagement process, please refer to "Section 3.0 PUBLIC INVOLVEMENT" of this document.

1.5 LRTP Consistency With Other MPO Planning Processes

Projects contained in the LRTP have evolved through the regions planning process as outlined above (Fig. 1.1). The results of this planning process are a coordinated, comprehensive, intermodal transportation plan for Caddo and Bossier Parishes. All projects contained in the LRTP are included within the financially constrained plan for the area. All projects included were determined through a cooperative effort with the state, local transportation officials, and the public. Priorities are adjusted as deemed appropriate by the MPO's Transportation Policy Committee.

Congestion Management System / Process

SAFETEA-LU mandates Transportation Management Areas (TMAs), of which our Planning Study Area (PSA) meets the TMA designation criteria, to have a Congestion Management Process (CMP) that

provides for effective management and operation to combat congestion. The new CMP is a reworking of the previous requirements for a Congestion Management System ((CMS) – originally mandated through ISTEA). NLCOG developed and implemented, through Transportation Policy Board resolution, the initial CMS during fiscal years 1997-1998.

The CMS identifies congestion based upon field collected travel flow data. The location and level of facility congestion is determined through a calculated performance measure termed a “Speed Deficit”. A “Speed Deficit” provides an acceptable measure of congestion, but it does not address a section’s **need** for improvement. In order to prioritize congested sections for improvement, currently identified Transportation Improvement Program or (TIP) projects, Average Daily Traffic (ADT), and transit measures are considered. For example, roadway sections that are being evaluated for improvement, and are currently programmed, will have a lower priority within the CMS recommended improvement strategies/projects. The findings of the CMS analysis are presented to the MPO’s Technical Advisory Committee (TAC) for review and requested feedback. The prioritized improvement strategies/projects, as outlined through the CMS analysis, are recommended for inclusion in the LRTP/TIP by the Technical Advisory Committee (TAC). Subsequently, the TAC’s improvement project recommendations are presented to the Transportation Policy Committee for their review and resolution regarding LRTP/TIP inclusion.

Northwest Louisiana Intelligent Transportation System Plan (Shreveport / Bossier City Regional ITS Strategic Deployment Plan)

The ITS strategic deployment plan for the Shreveport/Bossier City region was developed through a series of meetings, work sessions, interviews, and close coordination with the region’s stakeholders including (May 2002):

- ▶ DOTD District 04 and Headquarters
- ▶ City of Bossier City
- ▶ City of Shreveport
- ▶ Northwest Louisiana Council of Governments (NLCOG)
- ▶ Louisiana State Police
- ▶ SPORTRAN
- ▶ Transportation Incident Management Committee (TIMs)

The deployment plan identified the region’s primary ITS stakeholders, as well as, a phased program of ITS based infrastructure improvements that adhere, and are consistent with, accepted ITS architecture guidelines. Further, the strategic deployment plan is consistent with the MPO’s LRTP, current TIP and Congestion Management System (CMS), through Technical Advisory Committee (TAC) consultation, and is intended to address transportation system deficiencies within the region.

Environmental Justice Plan / Process

The MPO serves as the primary forum where State DOTs, transit providers, local agencies, and the public develop local transportation plans and programs that address a metropolitan area's needs. MPOs can help local public officials understand how Title VI and environmental justice requirements improve planning and decision making. To certify compliance with Title VI and address environmental justice, MPOs need to:

- ▶ Enhance their analytical capabilities to ensure that the long-range transportation plan and the transportation improvement program (TIP) comply with Title VI.
- ▶ Identify residential, employment, and transportation patterns of low-income and minority populations so that their needs can be identified and addressed, and the benefits and burdens of transportation investments can be fairly distributed.
- ▶ Evaluate and - where necessary - improve their public involvement processes to eliminate participation barriers and engage minority and low-income populations in transportation decision-making.

NLCOG's Environmental Justice (EJ) report considers the relationship between the existing transportation and public transit systems in combination with low-income groups and four minority groups: Blacks; Hispanics; Asian or Pacific Islanders; and American Indians, Eskimos,

or Aleuts. At its broadest level, the purpose of completing an Environmental Justice report is to better understand the potential effects of transportation system changes; especially those changes that might adversely and disproportionately affect low-income and/or minority populations.

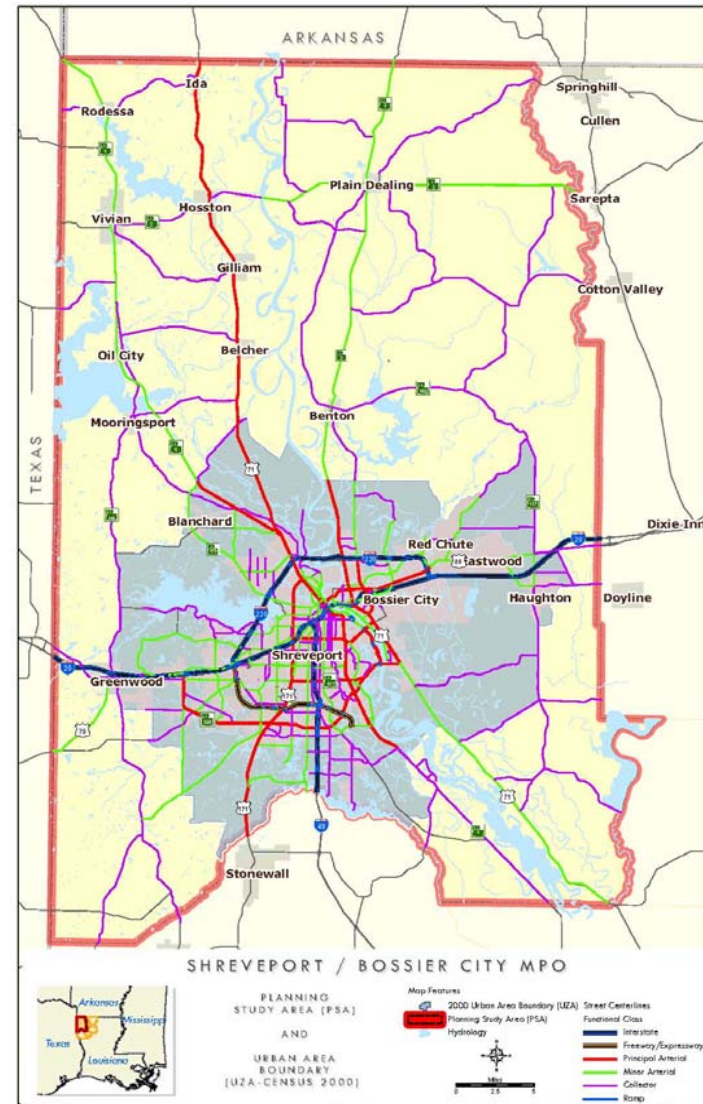
Through the LRTP and TIP development process, projects proposed for inclusion are evaluated, initially by the MPO staff and subsequently by the Technical Advisory Committee (TAC), to determine the project's potential impact upon low income and traditionally minority populations. Further, the EJ report documents the level of transportation investment across the MPO and gauges the level of transportation infrastructure improvement expenditures within disadvantaged areas.

2.0 GROWTH & CHANGE

Northwest Louisiana is growing steadily along a moderately positive trend. Healthcare and education remain two of the strongest industries for employment. Continued growth varies widely with economic fortunes and misfortunes, as history shows with the area's boom in the 1970s and the bust of the 1980s. Recently the area experienced positive growth and change due to the incoming industries of movie production and natural gas exploration in the field of the Haynesville Shale. In order for the region to remain competitive, Caddo and Bossier parishes must continue to attract new industries; good infrastructure and smart planning are key to the attraction.

2.1 LONG RANGE PLAN STUDY AREA

A study area is defined in order to determine the extent of the planning effort, as well as its data requirements. Under federal requirements, the study area must encompass both the existing urbanized area and contiguous area expected to become urbanized during the time period covered by the Long Range Transportation Plan. For this planning effort, both Caddo and Bossier Parishes are identified as the Study Area. This area encompasses 17 municipalities, including the two parish seats and the cities of Shreveport and Bossier City. The two parishes of Caddo and Bossier contain 1719 square miles and have a 2000 census population of 350,471. Additionally the 2000 census indicated that the Shreveport urbanized area has a population of 275,213.



2.2 STUDY AREA DEMOGRAPHIC DATA

Table 2.0 summarizes the 2000 Census demographic statistics for the two Parish MPO study area. Further, the table compares MPO significant socio-economic characteristics alongside U.S. population demographics

TABLE 2.0 – MPO Demographic Comparison U.S. Population

Vital Demographic	MPO Totals	MPO (%)	U.S. Totals	U.S. (%)	MPO v. U.S.
Total Population	350,471		281,421,906		
Total Minority Population	143,644	36%	69,961,280	24.9%	+11.1%
High school graduate or higher (25 or older)	175,915	80.8%	146,496,014	80.4%	0.4%
Disability status (5 years and over)	68,823	21.3%	49,746,248	19.3%	+2.0%
Speak a language other than English at home (5 years and over)	14,107	4.7%	46,951,595	17.9%	-13.2%
In labor force (16 years and over)	165,708	63.4%	138,820,935	63.9%	-0.5%
Population 65 years and over	44,703	12.05%	34,991,753	12.4	-0.35%
Median household income in 1999 (dollars)	\$35,335	n/a	\$41,994	n/a	-\$6,659
Individuals Below Poverty Level	65,087	17.4%	33,899,812	12.4%	+5.0%
Mean travel time to work in minutes (workers 16 years and over)	21.7	n/a	25.50	n/a	-3.8 min

Source: U.S. Census Bureau, Summary File 1 (SF 1) and Summary File 3 (SF 3)

The outcome of this analysis illustrates the stark differences between the MPO's population and U.S. totals regarding some key demographic characteristics. Most notably, the MPO has a much higher minority population (+11.1%) and low income population (+5.0% below poverty level) as compared to U.S. totals. When prioritizing improvement projects, as identified through other planning efforts (e.g. Long Range Transportation Plan, Congestion Management Plan, etc.), determining the MPO's demographic composition is critical to the equitable programming of transportation improvement projects throughout the MPO. The primary intent of NLCOG's Environmental Justice (EJ) effort is to insure that federal and local match support funding is programmed, through a transparent TIP process, in an equitable manner across all underserved/disadvantaged/traditionally minority populations.

Socioeconomic Forecasts

During the development of the Caddo-Bossier Transportation Plan Update 2001-2025, the NLCOG established a Delphi Committee, charged with, among other things, developing a new set of socioeconomic and land use forecasting. Committee members represent a wide spectrum of transportation and planning interests, including elected officials, technical and planning representatives from city and parish governments, DOTD officials, private developers, transit operators and parish-wide educational leaders. The committee members participated in an iterative process and developed socio-economic forecasts for twelve sub-regions of the modeling domain, consisting of Caddo and Bossier Parishes. These forecasts were based on panel members' work experience and in-depth knowledge of local

trends and represented the most probable future growth scenario. The planning horizon year was 2025. The sub-regional forecasts were allocated to the TAZ level. The NLCOG approved the socioeconomic and land use forecasts for use in the travel demand forecasting model. This forecast was incorporated in this expanded model, with some minor changes to account for changes in the socioeconomic data.

A top-down approach was used to develop the TAZ level socioeconomic forecasts. At the parish level, population and employment growth rates were taken from the Louisiana Statewide Transportation Plan Update, which used the Woods & Poole database. The parish level population and employment growth were then allocated to the TAZ level, based on the historical trends (between 1990 and 2000), proximity to the City of Shreveport, and existing distribution of employment by sector. Table 2.1 shows the 2025 socioeconomic forecasts by localities in the modeling domain, and Table 2.2 shows socioeconomic change between 2000 and 2025 by locality.

The base year total population includes approximately 350,500 people living in roughly 134,600 households in the modeling domain. Of the base year regional population, 72 percent is located in Caddo Parish and 28 percent in Bossier Parish. Households had similar distributions among the two parishes. The forecast year 2025 total population includes approximately 400,000 people living in roughly 152,500 households in the modeling domain. Of the forecast year regional population, 67 percent is located in Caddo Parish and 33 percent in Bossier Parish.

**Table 2.1
Summary of Base Year (2025) Socioeconomics**

Locality	Total Population	Households	Basic Jobs	Retail Jobs	Service Jobs	Total Jobs
Bossier Parish	130,403	47,949	27,816	11,561	42,360	81,737
Caddo Parish	268,930	104,562	67,198	31,873	126,559	225,630
Regional Total	399,333	152,511	95,014	43,434	168,919	307,367

Source: Michael Baker Jr., Inc., 2006 and NLCOG travel demand forecasting model data, 2004

**Table 2.2
Summary of Socioeconomic Changes (2000-2025)**

Locality	Total Population	Households	Basic Jobs	Retail Jobs	Service Jobs	Total Jobs
Bossier Parish	32,093	11,321	21,075	2,121	19,991	43,187
Caddo Parish	16,769	6,588	46,042	4,917	59,784	110,743
Regional Total	48,862	17,909	67,117	7,038	79,775	153,930

Source: Michael Baker Jr., Inc., 2006 and NLCOG travel demand forecasting model data, 2004

Households had similar distributions among the two parishes. Between 2000 and 2025, the modeling domain area is projected to grow by 49,000 people and 18,000 households, or 13%. The 2000 total employment includes approximately 153,000 jobs, with 18 percent basic employment, 24 percent retail employment and 58 percent service employment. Of the

2000 regional employment, 75 percent is located in Caddo Parish and percent in Bossier Parish. The forecast year 2025 total employment includes approximately 307,000 jobs, with 31 percent basic employment, 14 percent retail employment and 55 percent service employment. Of the forecast year 2025 regional employment, 73 percent is located in Caddo Parish and

27 percent in Bossier Parish. Between 2000 and 2025, the region is projected to grow by 154,000 jobs, or 100%. Similar trends continue in 2030. Table 2.3 shows the 2030 socioeconomic forecasts by localities in the

modeling domain, and Table 2.4 shows socioeconomic changes between 2000 and 2030 by locality.

Table 2.3
Summary of Base Year (2030) Socioeconomics

Locality	Total Population	Households	Basic Jobs	Retail Jobs	Service Jobs	Total Jobs
Bossier Parish	138,680	50,922	27,816	12,044	45,417	85,277
Caddo Parish	275,023	106,941	67,198	32,967	135,507	235,672
Regional Total	413,703	157,933	95,014	45,011	180,924	320,949

Source: Michael Baker Jr., Inc., 2006

Table 2.4
Summary of Socioeconomic Changes (2000-2030)

Locality	Total Population	Households	Basic Jobs	Retail Jobs	Service Jobs	Total Jobs
Bossier Parish	40,370	14,294	21,075	2,604	23,048	46,727
Caddo Parish	22,862	8,967	46,042	6,011	68,732	120,785
Regional Total	63,232	23,261	67,117	8,615	91,780	164,512

2.3 TRAFFIC FLOW AND TRAVEL DEMAND MODELING

Traffic data is determined by traffic counts. Traffic counts were obtained by the LADOTD, City of Shreveport, and Bossier City. Supplemental counts were also conducted to supply additional information as needed to update the plan. Travel surveys were performed to determine travel patterns. The traffic flow is crucial in calculating the number of trips made in and determining travel patterns.

In this planning process, travel demand modeling was used as a tool to forecast transportation congestion and future potential problems. Modeling uses demographics, behavioral travel patterns, and certain assumptions regarding the future. Modeling requires two data sets: the transportation network and the Traffic Analysis Zones (TAZ). The network comes from input of traffic flow and geometric data. The TAZ input is based on social-economic data. A TAZ is a sub area of the region that is used to geographically summarize land use, demographic and travel data. More information about the travel demand modeling process can be found in Appendix B.

3.1 SAFETEA – LU Public Involvement Requirements

Introduction and Objectives

The Northwest Louisiana 2030 Long Range Transportation Plan (LRTP) Update seeks to examine the region’s socioeconomic conditions, evaluate community needs and current transportation priorities, and develop future transportation projections. The utilization of key communication tools will enhance the public outreach process. It will ensure proper documentation of public responses, educate the public at every phase of the process, and contribute to the development of the final transportation planning strategies.

The LRTP Public Involvement Plan (PIP) objectives are as follows:

- Establish a sense of ownership for the stakeholders in the process;
- Provide timely responses to all written and oral comments;
- Document all comments for inclusion in the final LRTP;
- Engage technical committees in the planning process;
- Incorporate visualization techniques;
- Develop easy-to-understand collateral materials and website;
- Provide adequate notice of all public meetings;
- Extend public comment period if significant revisions are offered;
- Ensure access to persons with disabilities;
- Provide an update of the regional planning process.

With its passage in 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) retained the public involvement provisions of Federal law while aiming to enhance the public involvement experience. The intent of the Public Involvement Plan (PIP) is to outline a course of action, or tasks, which will facilitate public awareness and the solicitation of public input into the development of the Long Range Transportation Plan (LRTP) Update. Further, the PIP will follow the guidelines and requirements of SAFETEA-LU.

As described in SAFETEA-LU:
MPOs must develop and utilize a “Participation Plan” that provides reasonable opportunities for interested parties to comment on the content of

the metropolitan transportation plan and metropolitan TIP. Further, this “Participation Plan” must be developed “in consultation with all interested parties”. This consultation requirement is intended to afford parties who participate in the metropolitan planning process a specific opportunity to comment on the plan prior to its approval.

Notable SAFETEA-LU Requirements

- Adds representatives of bicycle / pedestrians and disabled persons to groups and shall be provided the opportunity to comment on the plan
- Adds requirements for a public participation plan developed in consultation with interested parties
- MPOs must also:
 - hold convenient / accessible public meetings
 - use visualization techniques
 - make information / plans readily available electronically

3.2 MPO’s Public Involvement Plan

MPO’s Public Involvement Plan Statement of Purpose

The purpose of NLCOG’s Public Involvement Plan (PIP) is to foster two-way communication and trust between NLCOG and the residents of Northwest Louisiana. Although a federal requirement, NLCOG feels that local contribution to the decision-making process is vital for the growth of Northwest Louisiana. The residents of this area deserve the advantages of coordinated decision-making that cannot be accomplished without involving the public at an early stage and continually throughout the decision-making process.

This plan is intended to ensure that public participation is an integral and effective part of the activities and decisions that are made with the benefit and consideration of important public perspectives. Early public involvement enables NLCOG to make more informed recommendations, improve quality through collaborative efforts, and build mutual understanding and trust. NLCOG is committed to a comprehensive and inclusive approach by

involving the public in developing plans and programs that fit harmoniously within the community without sacrificing quality of life.

NLCOG's public involvement plan is intended to provide direction for public involvement activities to be conducted by NLCOG and contains the policies, goals, objectives, and techniques used by NLCOG for public involvement.

In its public participation process, NLCOG will:

- Provide timely information about transportation issues and processes to interested parties;
- Provide reasonable public access to technical and policy information used in the development of various plans, programs and projects;
- Give adequate public notice of public involvement activities and allow time for public review and comment at key decision points;
- Respond in writing to all applicable public input;
- Solicit the needs of those traditionally underserved by existing transportation systems, including but not limited to minorities, elderly, persons with disabilities, and low-income households;
- Provide adequate public comment periods as outlined in federal law (30 days for the LRTP) with notice of the comment periods advertised in two newspapers of general circulation, minority community newspapers, and various other publications prior to the commencement of the comment period.
- Coordinate its PIP with Statewide PIP wherever possible to enhance public consideration of the issues, plans and programs, and reduce redundancies and costs.

Incorporating innovative approaches to the community in order to foster a two-way, open line of trust and communication, will not only allow NLCOG to gain input from the residents, it will also give knowledge to the residents to become more active in the decision-making process.

Below is an inclusive, but not exhaustive, list of activities that NLCOG will strive to implement in order to help increase the level of public involvement in the planning and decision-making process for the Long Range Transportation Plan (LRTP):

- Town Hall Meetings/Dialogue Sessions
- Presentations
- Neighborhood/Community Liaisons
- Surveys
- Community meetings
- Transportation Planning Forums
- Charrettes
- Public Review and Comment Periods
- Email and Feedback forms

3.3 LRTP Public Involvement Plan Compliance with the MPO's Public Involvement Plan

LRTP Public Involvement Plan Statement of Purpose

The intent of the LRTP Public Involvement Plan (PIP) is to outline a course of action, or tasks, which will facilitate public awareness and the solicitation of public input into the development of the LRTP Update. Further, the PIP will follow the guidelines and requirements of SAFETEA-LU, focusing on reaching the traditionally underserved communities, disabled persons, low-income communities, and bicycle / pedestrian advocates within the region.

LRTP Public Involvement Strategies

Based upon our past experiences with local public involvement efforts, NLCOG will utilize public participation strategies that are best suited for eliciting response from our local residents. Multiple participation strategies will be employed in order to effectively reach out to as many population segments as feasibly possible. Provided below is a list of public outreach and involvement efforts NLCOG will employ through the LRTP Update effort:

- Community feedback survey – hardcopy and web based distribution
- LRTP information displays – various high traffic locations
- Public awareness campaign – interface with local media outlets

- Reformation and reconfiguration of the 2001 LRTP Delphi Committee for increased citizen involvement

Community Feedback Survey

NLCOG has developed a survey that will collect feedback, and allow for comment/input, from all socio-economic population segments within Northwest Louisiana. The survey is configured in a manner to solicit public input on issues ranging from the condition of our existing transportation infrastructure, to the quality of transportation services. The survey provides ample opportunity for respondents to rate and/or comment on crucial local issues such as transportation funding, environmental concerns, and areas/locations that require transportation improvement(s). From each respondent, the community feedback survey collects data in the following areas (i.e. survey objectives):

- Public awareness of NLCOG and the long range transportation planning effort
- Demographic profile of the respondent (e.g. race, age, etc.)
- Work trip travel behavior
- Other trip travel behavior
- How much travel delay do they incur
- Perception of safety/security using transportation
- Transportation and environmental awareness
- Opinion of the quality of our region's existing transportation infrastructure and service providers
- Opinion of travel and mobility within our area related to our current LRTP stated goals and SAFETEA-LU's eight planning factors
- Other significant regional transportation issues (e.g. how to fund major projects?)

Surveys are accessible through NLCOG's web presence, online at: www.nwlainfo.com/Transport/LRTP2030/LRPUpdate_SurveyForm.asp, and traditional hardcopy surveys are available at the scheduled LRTP information display sites and through mail outs. Survey responses are entered, either automatically while online or manually if it is a hardcopy response, into an MS Access (.mdb) structure database. This database

structure will allow NLCOG to efficiently compile response data and provide survey results.

Community Feedback Survey Distribution at SPORTRAN Central Terminal

On February 28, 2007, NLCOG visited the SPORTRAN Central Terminal on Crockett Street in Shreveport to distribute hardcopy surveys in a high foot-traffic location. At approximately 10:00 a.m., NLCOG staff set up a survey display table inside the terminal building near the pedestrian friendly ticket/information window. The information table was stocked with loose surveys and survey "packets". These packets included the survey along with breath mints, a Louisiana Highway map and a self-addressed stamped envelope.

NLCOG staff approached prospective respondents who were seated within the terminal and asked them if they would be interested in providing feedback to SPORTRAN and NLCOG regarding their attitudes/opinions of SPORTRAN's service, as well as their overall travel experiences utilizing Northwest Louisiana's transportation system. A majority of the prospective respondents politely accepted the survey "packets" and either completed them on-site or took them with them to mail back later. The mail-back option was popular with the public transit patrons who were making quick transfers to other routes.

Results of Effort

Survey Packets Distributed: 49
 On-site Survey Responses: 8
 On-site Did Not Wish To Respond: 2
 Total Survey Responses: 16
 Overall Site Survey Response Rate: 27.1%

Community Feedback Survey Distribution at SPORTRAN Central Terminal

On March 8, 2007, NLCOG visited the SPORTRAN Central Terminal on Crockett Street in Shreveport a second time to distribute hardcopy surveys. Approaching this public involvement effort at a later time in the day to reach different residents, NLCOG staff arrived at approximately 1:00 p.m. to set up a survey display table inside the terminal building near the pedestrian

friendly ticket/information window. The information table was again stocked with loose surveys and survey “packets”.

NLCOG staff approached prospective respondents who were seated within the terminal and asked them if they would be interested in providing feedback to SPORTRAN and NLCOG regarding their attitudes/opinions of SPORTRAN’s service, as well as their overall travel experiences utilizing Northwest Louisiana’s transportation system. A majority of the prospective respondents politely accepted the survey “packets” and either completed them on-site or took them with them to mail back later. The mail-back option was popular with the public transit patrons who were making quick transfers to other routes.

Results of Effort

Survey Packets Distributed: 50

On-site Survey Responses: 19

On-site Did Not Wish To Respond: 3

Total Survey Responses: 25

Overall Site Survey Response Rate: 34.7%

Community Feedback Survey Distribution at Haughton Town Hall

After taking traffic counts for the Haughton Town Council, NLCOG distributed community feedback surveys to the council members. Every council member returned the survey with their attitudes/opinions of the overall travel experiences utilizing Northwest Louisiana’s transportation system, as well as SPORTRAN’s service.

Community Feedback Survey Distribution with students from LSU-S

On numerous occasions, Prof. Doug Bible’s students visited NLCOG’s office as part of their studies. During these visits, community feedback surveys were made available for the students to complete at their convenience.

LRTP Information Displays

The intent of the information display is to increase public awareness of the LRTP process, as well as provide background information pertaining to NLCOG’s service to the residents of Northwest Louisiana. NLCOG will create

LRTP information displays consisting of small map graphics, literature describing NLCOG functions and the LRTP Update effort, and hardcopies of the community feedback survey. These displays are deployed in public, high-pedestrian traffic locations such as university student centers, shopping malls, and public transit terminals so as to maximize exposure. Further, most of the displays are staffed by NLCOG in order to personally answer any questions and to encourage the public to respond to the feedback survey. Prospective locations for LRTP information displays are shown in Table 1.

LRTP Public Awareness Campaign

History has shown that Northwest Louisiana’s residents are not familiar with NLCOG, let alone, the LRTP process. In order to increase the public’s awareness of the LRTP, NLCOG will initiate contact with the region’s primary print media outlets the Shreveport Times (Caddo Parish) and the Bossier Press – Tribune (Bossier Parish). NLCOG’s intent is to develop a news article focusing on the LRTP process and how the public can become involved in this process. A secondary benefit of this effort is an increased awareness of the public service provisions of NLCOG in our capacity as being the designated Metropolitan Planning Organization (MPO) for Northwest Louisiana, as well as an intergovernmental Council of Governments organization.

Reconfigured/Updated Delphi Committee

During the 2001 Long Range Transportation Plan development, a committee consisting of members from local government, academia, education, non-profit organizations, and private sector representatives (refer to Table 2) were brought together in an effort to obtain their collective perspectives concerning future population and employment growth/decline by defined sub- areas (i.e. Delphi zones) of both Caddo and Bossier parishes. The information obtained through this iterative, discussion process is crucial to formulating population and employment projections for the travel demand model.

For this update, we’ll encourage bicycle, pedestrian, and disabled citizens to participate through a reformed Delphi, or citizen’s transportation advisory committee, in order to meet the SAFETEA-LU participation requirements. Additionally, the community feedback survey, hardcopy and electronic versions, provide respondents with an opportunity to participate in a new

advisory committee through the survey's "I'm interested" checkbox and space for contact information.

3.4 Survey Findings and Identified Needs

Since much of our public engagement (e.g. hardcopy survey distribution) took place at SPORTRAN's Central Bus Terminal (downtown Shreveport), we received many comments pertaining to SPORTRAN's service provision. The successful implementation of SPORTRAN's extended hours, fixed route bus service (7pm – 2am) addresses many of the concerns expressed through the survey. One of the primary concerns voiced by transit patrons was the lack of bus service during the evening hours. In the interim period since the hardcopy surveys were distributed, SPORTRAN has gone operational with their Extended Hours Service ("Night Owl Service") and from their fare-box data have found that that evening service patronage is equal to, or greater than in some months, SPORTRAN's Sunday bus service. It is anticipated this ridership trend will continue into the foreseeable future.

Comments regarding the road network ranged from location specific maintenance requests to regionally significant, new bridge and interstate improvement projects (e.g. I-20, I-49 Inner City Connector, and I-69). Typically, the location specific improvement comments pertain to quality of life (e.g. neighborhood streets/sidewalks/bike paths) issues as opposed to the comments regarding the need for large, regionally significant, infrastructure improvements that focus more on congestion mitigation, safety, or economic growth concerns.

The public's input and feedback is critical in the development of Long Range Transportation Plan goals and objectives that represent the far reaching needs of Northwest Louisiana's residents. From the findings of the Community Feedback Survey (CFS), regional transportation based needs are identified.

CFS Identified Transportation System Needs (Northwest Louisiana)

- Congestion is localized along corridor segments, signalized intersections and Red River bridge crossings

- Improvements are needed for infrastructure that supports alternative modes of travel (bicycle and pedestrian)
- There are populations that are not served by public transit
- Higher priority needs to be given to transportation improvement projects that encourage economic growth and development
- Improve the safety features and reduce the delay at poorly performing intersections/at-grade rail crossings

From the identified system needs, long range plan goals are formulated so as to address the primary cause of these transportation system deficiencies. Further, for each goal, quantifiable objectives, which are specific, measurable, realistic and time-bound, are developed in order to successfully implement the recommended transportation improvements as per goal. Section 4.0 establishes the plan's goals and objectives from the public's perceived transportation needs identified through the Community Feedback Survey (CFS) effort, as well as, the system deficiencies found through contributing transportation planning analyses (e.g. Regional Travel Demand Model (RTDM), Congestion Management Process (CMP), etc.).

Detailed responses from the surveys, as well as specific comments received, may be found in Appendix A.

4.0 LRTP GOALS AND OBJECTIVES

Introduction

Goals and objectives for the plan were developed by the Delphi Committee during a special meeting. The process began with a discussion of community values and the transportation decisions that would preserve and enhance the values that were deemed to be important for the community.

In general, the goal—setting process focused on two main themes. First, the members felt that the area's residents valued Shreveport—Bossier City's lack of congestion, ease of mobility, safety considerations and abundant interstate and modal connections. Additionally, an appreciation of the region's lifestyle was expressed and focused on both old and new neighborhoods. A number of the goals and objectives were identified to preserve these values.

Second, a need for transportation improvements that would contribute to economic enhancement for the area was considered important. It was mentioned that essential economic generators, such as manufacturing, the Port and gaming should be considered in establishing objectives.

The following is a list of the goals and objectives that were established for the plan along with a discussion of how they are addressed in the planning process as well as recommendations to be implemented to accomplish the goals.

4.1 Goal 1 – Minimize Congestion

Objectives

- Identify and prioritize improvements to address current and forecasted areas of congestion
- Identify needed transit routes and services
- Identify and prioritize projects to address needs for signal optimization and intersection improvements

- Develop a policy to coordinate maintenance work that requires lane closures to minimize compound congestion

Discussion

Two main aspects of the plan focused on minimizing congestion for the study area. The first is an on-going congestion management system that is conducted by NLCOG. The congestion management system uses a technique that allows a comparison of peak hour and free flow traffic speeds along major routes in the study area. The information from this analysis pinpoints locations of significant congestion and also furnishes data as to the extent of the congestion so that the problem locations can be prioritized. The congested locations are then examined by traffic engineers to determine corrective measures to address the congestion. The results of this analysis are translated into proposed projects, which will be considered in the development of this transportation plan. It should be noted that some of the proposed corrective measures might include traffic signal optimization and intersection improvements.

The second focus centered on current and future congestion as examined through the use of the TransCAD travel demand model. The model is used to study the entire Shreveport—Bossier City roadway network and determine areas for which there are inadequate lanes and/or capacity to accommodate present and forecast traffic. Such areas are analyzed by planning staff to determine projects to alleviate the congestion. Projects range from spot improvements to the addition of lanes to new facilities. The resulting projects, along with their estimated costs, were considered in the plan's recommendations.

More than 59% of respondents to the Community Feedback Survey (CFS) agreed or strongly agreed Northwest Louisiana experiences relatively little or no traffic delay or congestion. Most residents identified causes of traffic congestion as motor vehicle wrecks or train crossings. An anonymous survey respondent noted growth along Airline Drive in Bossier City will lead to congestion if it is not properly addressed. Another anonymous survey respondent noted areas such as the Jimmy David Bridge and Interstate 20 east and westbound at Traffic Street cause "heavy congestion problems" for commuters and residents.

SPORTRAN service routes serve a large portion of both Shreveport and Bossier City as 71.9% of respondents rated transit service as acceptable or above. Residents note expanded service coverage is needed. The “night owl service” that runs from 7:00 p.m. until 2:00 a.m. successfully meets additional needs of residents, though the region would benefit from expanded service options as 38.7% of respondents noted. Most of the comments received from the survey about transit included a request for more transit options.

Recommendations

- Address present congested locations that have been identified by the congestion management system
- Update the area’s congestion management system every three years
- Deploy the new TransCAD travel demand model to identify present and future capacity deficiencies in the study area
- Develop conceptual projects and cost estimates to address the identified deficiencies and consider implementing the projects as part of the financially constrained long-range plan

4.2 Goal 2 – Optimum Use of Existing Transportation Infrastructure

Objectives

- Dedicate adequate resources for maintenance and rehabilitation of existing roads and bridges
- Identify the need for land-use policies that steer new development to areas that presently have adequate or underutilized infrastructure
- Shreveport/Bossier City Regional ITS Strategic Deployment Plan Support and facilitate ITS technology deployment as detailed in the
- Continue implementation and maintenance of Northwest Louisiana’s incident management system through the facilitation of the Traffic Incident Management System (TIMS) Committee.

- Continue implementation and maintenance of the Congestion Management System (CMS) for the Shreveport/Bossier City urban area
- Develop a model access control policy, for new commercial development, that minimizes points of conflict and promotes efficient traffic flow

Discussion

During the study process, the Delphi Committee recommended that the transportation plan address the need to maintain the existing transportation infrastructure before proposing expansions to the system. The recommendations section of the plan identifies federal, state and local funds that are available for maintenance and rehabilitation of roads and bridges within the two-parish area. These account for funds in the development of financially constrained, transportation plan recommendations.

While growth in the study area has remained relatively constant, there have been significant population shifts to fringe areas that require transportation facility improvements. At the same time, there are areas within the two-parish region that presently have under-utilized infrastructure. Members of the Delphi committee expressed a need to consider better use of the region’s existing infrastructure. Area-wide growth strategies are beyond the scope of the present transportation plan. However, the need for an examination of this issue is apparent. Such an effort would require the support of local elected officials and would involve in-depth involvement of both the public and development interests. A recommendation, by the Delphi Committee, for a comprehensive study of this issue has been outlined in the prioritization phase of the plan.

An Intelligent Transportation Systems (ITS) Plan for Caddo and Bossier Parishes has been adopted (Shreveport/Bossier City Regional ITS Strategic Deployment Plan). The ITS Strategic Plan gives strong consideration to issues pertaining to signal optimization, incident management and a regional traffic control center. The projects, detailed in the ITS Deployment Plan, were developed to improve the performance of the region’s transportation network in an integrated and coordinated manner. Currently, ITS

communication and instrumentation projects are being deployed across multiple jurisdictions

Effective incident management procedures reduce the risk of secondary traffic accidents, alleviate much of the “upstream” vehicle delay attributed to the incident and return the facility back to its normal operating conditions in a timely manner. In order to achieve these objectives, an Incident Management System Program has been established through the efforts of the Traffic Incident Management System (TIMS) Committee. The TIMS Committee consists of representatives from local law enforcement and emergency service agencies.

In 1996, the MPO's Transportation Policy Committee adopted the Congestion Management System (CMS) Plan for the Shreveport/Bossier City urban area. The CMS identifies congested facilities, prioritizes their need for improvement, and recommends mitigation strategies. To date, six out of the ten most congested facilities identified, have received improvements. Recommendations from the CMS serve as critical input for the development of long-range improvement strategies.

Finally, the rapid growth in fringe areas of the region have demonstrated the importance of planned curb-cuts, access points as well as street and drive alignment for new residential and commercial developments. Careful planning can coordinate these elements in order to minimize impacts to traffic flow, minimize congestion and greatly reduce the need for future widening and expanded transportation facilities to accommodate growth and development.

Numerous comments received from the CFS addressed the issue of maintenance and rehabilitation of existing roads and bridges. Responses ranged from fixing potholes to demolition and construction of new major thoroughfares. Typical street widenings, turning bays and other intersection improvements also topped the comments. A few respondents requested the installment and use of ITS for signal optimization throughout the region, but especially on major roadways in Caddo and Bossier Parishes. Interestingly, 49.3% of respondents would support a local gas tax option to increase funding for major transportation projects.

Recommendations

- Identify adequate funding to maintain and rehabilitate existing roads and bridges as part of the long-range plan
- Consider initiation of a study to examine future development of under-utilized areas within the central region of the study area
- Continue supporting and facilitating ITS, Incident Management, and Congestion Management efforts
- Develop a “model” access control policy

4.3 Goal 3 – Relate Transportation to Economic Growth

Objectives

- Identify and prioritize projects to address intermodal access needs (port, rail intermodal ramps, key industrial truck routes)
- Identify and prioritize projects to implement needed access improvements to casinos
- Establish high priority for I-49 and I-69 funding
- Coordinate local government's requests for LaDOTD and FHWA transportation funds

Discussion

A review of needs for intermodal connections in the Shreveport—Bossier City area indicates a desire to furnish improved connections between the Port of Shreveport—Bossier and the Inner Loop. This improvement would also involve the four-laning of LA 523 in the area.

Presently, there are two rail-truck intermodal service points within the study area. Kansas City Southern (KCS) maintains their facilities in the central part of the study area. A two-lane route that is currently in need of pavement rehabilitation limits access to this facility. Union Pacific (UP) maintains their facilities at the Reisor Yard near the General Motors plant. While an improvement project has been identified, it has not yet been implemented. Longer-range objectives involve improved connections between the port and I-20 as well as improved rail connection with the KCS.

Planning is currently underway for the construction of I-69 through the study area. As presently envisioned, this route would greatly enhance access for the Port, industrial activities, Barksdale Air Force Base, residents in the south Shreveport and Bossier City regions, and furnish improved connection for the area with I-20 and I-49.

The completion of both I-49 north and I-69 should greatly enhance the region's ability to attract industrial development and economic enhancement. I-49 will link the area with the Kansas City and Minneapolis regions, thus benefiting manufacturing and distribution processes. Additionally, I-69 will funnel rapidly increasing NAFTA related trade through the region, thus expanding access to materials and markets, as well as furnishing opportunities for value-added processes for the region. I-49 and I-69 both furnish improvements in local access, as well as interstate shipping and tourism opportunities, and are important considerations in the area's long-range transportation planning.

Construction began on the northern sections of I-49 to the Arkansas border and the Stage 0 Environmental Study for the Inner City Connector of I-49 where it currently terminates at I-20 to I-220. Residents want I-49 and I-69 completed. In the CFS, 56% of respondents support or strongly support the completion of the Inner City portion of I-49. Respondents stated "complete I-49" on 12 of 65 comments.

Gaming is also a major contributor to the region's economy. The casinos are located in the immediate vicinity of I-20 and the Red River. Access is generally adequate. However, significant improvements in convention and tourism facilities are presently being constructed and will ultimately generate additional traffic. Representatives of both the gaming and tourism interests will be encouraged to participate in the area's ongoing transportation planning efforts in order to assure accurate assessment of future traffic impacts and coordination of access improvements. As more of the new facilities are completed, both vehicular and pedestrian circulation may become problematic and require further study of possible specialized transportation systems to link casinos, hotels, tourist attractions and convention facilities.

Of the areas singled out in the CFS responses, the area of Interstate 20 that gives direct access to the gaming industry was one of the top complaints. Issues cited by respondents include safety concerns as cars enter Interstate 20 westbound. The influx of traffic is compounded due to the opening of the Louisiana Boardwalk, a major shopping and entertainment area along the Red River in Bossier City. Traffic congestion occurs, especially on the weekends and holidays, on Interstate 20 at the Traffic Street exits (both east and westbound), causing traffic to back up onto the interstate.

Recommendations

- Improve the connection between the Inner Loop and the Port of Shreveport—Bossier
- Improve access to the KCS rail/truck intermodal facility
- Completion of I-49 and I-69

4.4 Transportation Safety

Objectives

- Identify and prioritize projects to address rail crossing needs
- Identify and prioritize improvements to address roadway intersections and spot locations that experience abnormal numbers of safety incidents

Discussion

While travel in the study area is relatively safe, the Delphi Committee indicated a concern that problem areas continue to be identified and addressed in a systematic manner. The intensive system of rail tracks and crossings in the region presents opportunities for safety considerations. A rail crossing study has recently been completed for Bossier Parish and the recommendations are included in this study. Additionally, LaDOTD has reviewed rail crossings in the Caddo Parish area and preliminarily identified crossing improvement projects that are also included in the transportation plan development. The responses in the CFS echo the identified railroad

safety needs; 70.2% of respondents agree or strongly agree more resources need to be allocated for safety improvements to the railroad crossings in the area.

Another important safety issue considered was re-occurring crashes. Law enforcement officers who respond to traffic accidents document locations and other details about the occurrence that permit future scrutiny and ultimately, in some cases, the development of safety improvements. Such data is available for the study area and has been examined as a part of the plan development. The results identify safety hot spots that can be addressed as part of the planning effort. The process of using accident data to identify problem areas and to craft appropriate solutions to frequent problems is referred to as “safety management.”

Safety management is an excellent practice for improving regional transportation safety and for prioritizing limited improvement funds. It is recommended that NLCOG in cooperation with LaDOTD district traffic engineering personnel update safety management information on a three-year cycle and include the resulting safety improvement projects in updates of the regional transportation improvement program.

Respondents (81.8%) agree or strongly agree that more resources need to be allocated to improving the region’s high accident intersections. Among the areas identified in the survey results, are Youree Drive, Jimmy Davis Bridge and highway, intersection of Linwood and Bert Kouns Industrial Loop, East Texas Street, Airline Drive, Interstate 20 at Traffic Street and Spring Street, and Swan Lake Road. Many of these areas/intersections see repeat crashes and are excellent candidates for safety management practices.

Recommendations

- Consider projects to address previously identified safety hot spots
- NLCOG, in cooperation with LaDOTD, should update safety management information for the two-parish area on a three year cycle and include resulting safety projects in subsequent transportation improvement programs for the region

4.5 Goal 5 – Quality of Life

Objectives

- Recommend policies to require in-depth public involvement to assure acceptable integration of transportation within existing development
- Recommend funding for a study to determine the need for and acceptability of smart-growth and in-fill land use policies (study should focus on the relationships between transportation improvements and the redevelopment of older/blighted areas and measures to retain and enhance neighborhood integrity)
- Identify, prioritize and request funding for projects that qualify for Transportation Enhancement Funds
- Develop corridor preservation plan for major Shreveport—Bossier City area projects
- Develop transportation modeling ability to evaluate air quality impacts and plan conformity

Discussion

During the goals and objectives setting process, the Delphi Committee emphasized a desirable quality of life in the region and noted the need to preserve present neighborhood conditions. It was suggested that efforts should be taken to assure the public’s involvement in any transportation decisions that could infringe on neighborhood integrity as well as the use of enhancement funds to improve neighborhood quality. There was also a perception that there are under-developed areas with adequate infrastructure closer to the central portion of the study area and that efforts should be considered to use these areas for new growth as opposed to investing in new infrastructure to accommodate development in the fringe areas of the region.

It was mentioned that population shifts have caused traffic increases along some present arterials and such trends may continue. Since there will be improved travel demand modeling ability to forecast where such expansion may take place, it was suggested that corridor preservation in these areas

could reduce future infrastructure costs and minimize environmental impacts. Additionally, new air quality standards being promulgated by the Environmental Protection Agency (EPA) may affect Shreveport—Bossier City's conformity with nationwide air quality requirements. It was noted that NLCOG would need strong travel demand modeling ability to address future air quality issues.

Residents of the area identified numerous concerns in the transportation system that can positively affect quality of life if implemented. When asked about their perception of safety using the streets, 65.3% responded agreed or strongly agreed they felt safe driving. When using walking along public streets and sidewalks, 51.2% agree or strongly agree they feel safe. Bicyclists don't feel as safe as pedestrians and drivers; 36.4% agree or strongly agree they feel safe when biking along public streets and bike paths. Implementing bike trails, paths and lanes throughout the city, will also require education to the public about the proper use. Numerous respondents identified the needs for improved or new sidewalks in neighborhoods, especially around schools. The development walking and biking connections from neighborhoods to existing or planned public spaces will also help increase the quality of life experienced in the region.

Recommendations

- Review and strengthen public involvement policies for all transportation decisions that may affect neighborhood integrity
- Conduct a land use study that will address the desirability and feasibility of in-fill development policies and/or incentives for the region
- Use the new TransCAD travel demand model to forecast the need for new transportation facilities from the present to 2025 and develop a corridor preservation plan to assure clear rights of way for anticipated facilities
- Provide the technical tools and staff ability to address the need to demonstrate conformity with new air quality standards

5.1 Funding Resources

Introduction and Method

On August 10, 2005, President Bush signed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU requires that Each metropolitan planning organization shall prepare and update a transportation plan for its metropolitan planning area. SAFETEA-LU further states that:

“A financial plan that demonstrates how the adopted transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs. The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted transportation plan if reasonable additional resources beyond those identified in the financial plan were available. For the purpose of developing the transportation plan, the metropolitan planning organization, transit operator, and State shall cooperatively develop estimates of funds that will be available to support plan implementation.”

SAFETEA-LU authorizes the federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009. As mandated through SAFETEA-LU, the highway funding components are under the purview of the Federal Highway Administration (FHWA).

Method:

Transportation facilities that are public responsibilities in Caddo and Bossier Parishes include a variety of road types such as the State Highway System, parish roads and city streets. The system also includes a major public transit service in SporTran which provides a

fixed route and paratransit operation services in Shreveport and Bossier City, Louisiana. Funding for construction, capital equipment, operations and maintenance of the facilities and equipment that comprise these facilities comes from a variety of federal, state and local sources. The basic method for assessing financial resources likely to be available involved review of historic data on program funding from each source and the amounts authorized under current legislation. The trends suggested by this review have been extended to 2030 in constant 2009 dollars.

For federal and state programs related to highway funding, the analysis of fiscal resources expected to be available was performed by the Northwest Louisiana Council of Governments. The NLCOG considered allocations of funds under federal programs expected to be available to Louisiana, the availability of funds to match specific federal program allocations, and the proportion of total state and federal funding historically expended on projects within Caddo and Bossier Parishes. The result of this analysis is expressed as an average annual funding under specific programs and as a total of all programs. To estimate funding from local government sources (i.e. cities, parishes, etc.) likely to be available for transportation purposes, an analysis of recent revenues was conducted. Revenues and expenditures for public transportation were based on historical data.

Transportation Funding Sources:

Funding for the broad range of transportation services and facilities provided in a metropolitan area comes from an equally broad and diverse set of sources. The transportation services and facilities commonly found in a metropolitan area include: the road network (freeways, arterials, collector roads and local streets); public transportation services; and human service transportation providers. Funding for the construction, acquisition, maintenance and operation of transportation facilities is derived from a variety of federal, state, local and private sources.

Federal Transportation Funding:

In 2005, the SAFETEA-LU was passed to build on the initiatives established in ISTEA and TEA-21. It is assumed that federal funding levels for the Caddo and Bossier Parish area will at least remain at SAFETEA-LU levels throughout the plan period.

Federal Funding Categories

- American Recovery and Reinvestment Act (ARRA)
- High Priority Programs - DEMO Projects (DEMO)
- Interstate Maintenance (IM)
- National Highway System (NHS)
- Federal Bridge Program
- Surface Transportation Program (STP)
 - STP Flexible Funding (STP Flex)
 - STP Hazardous Elimination (STP HAZ)
 - STP Enhancement (STP ENH)
 - STP Urban Attributable (STP > 200K)

Federal Funding Category	Total	Average/Year	Average Project Cost
ARRA	\$35,000,131	\$3,500,013	\$17,500,066
DEMO	\$81,906,513	\$8,190,651	\$8,190,651
IM	\$40,634,383	\$4,063,438	\$1,847,017
NHS	\$21,387,975	\$2,138,798	\$1,336,748
FBR	\$53,169,816	\$5,316,982	\$2,531,896
STP-FLEX	\$93,072,361	\$9,307,236	\$1,368,711
STP-HAZ	\$6,262,984	\$626,298	\$2,618,524
STP-ENH	\$359,111	\$35,911	\$119,704
STP>200K	\$6,743,047	\$324,728	\$3,553,837
Total Program	\$338,536,321	\$33,853,632	\$2,064,246

1. American Recovery and Reinvestment Act (ARRA) On February 17, 2009 the President signed into law the American Recovery and Reinvestment Act providing \$48.1 billion for transportation projects. Louisiana’s portion of this funding totaled \$430 million for streets and highways. A requirement for expenditure of these funds was that projects had to be “shovel ready” and able to be let for contract in a very short period of time. Local projects that received ARRA funds include:

- I-49 North
- Stockwell Road Rehab & Turn bays
- Greenacres Boulevard Rehab
- Woolworth Road Rehab

2. High Priority Projects (Demo Projects) High Priority Projects are projects specifically designated by congressional action with specific funding assignments. In the Caddo Bossier region the following projects are considered High Priority Projects and have received Federal Funding as such:

- I-49 North
- I-60 SIU 14-16
- Bossier Parish Congestion Relief Program
- I-49 Southern Loop Interchange
- LA 3132 Extension (Inner Loop Expressway)
- Regional Intelligent Transportation Systems Development

3. Interstate Maintenance The interstate maintenance program provides funding for resurfacing, restoring, rehabilitating and reconstructing most routes on the Interstate System. The addition of single occupancy lanes is ineligible for funding under this category. Apportioned funds are based on the following formula:

- 33-1/3% based on total lane miles on Interstate System routes open to traffic in each state as a percent of the total such lane miles in all states.
- 33-1/3% based on total vehicle miles traveled (VMT) on Interstate System routes open to traffic in each state as a percent of such vehicle miles traveled in all states.
- 33-1/3% based on the total of each state's annual contributions to the Highway Account of the HTF attributable to commercial vehicles as a percent of the total such annual contributions by all states.

Up to 50% of the interstate maintenance apportionments may be transferred to NHS, STP, CMAQ or Bridge.

4. National Highway System The program provides funding for improvements to rural and urban roads that are part of the NHS, including the Interstate System and designated connections to major intermodal terminals. Under certain circumstances, NHS funds may also be used to fund transit improvements in NHS corridors.

A State may transfer up to 50% of its NHS apportionment to its Interstate Maintenance, Surface Transportation (STP), Congestion Mitigation and Air Quality Improvement, Highway Bridge Replacement and Rehabilitation, or Recreational Trails apportionment. Up to 100% may be transferred to the STP if approved by the Secretary and if sufficient notice and opportunity for public comment is given.

5. Federal Bridge Program The Highway Bridge Replacement and Rehabilitation Program (FBR) provides funding assistance to replace

or rehabilitate deficient bridges and to seismically retrofit bridges located on any public road. Up to 50% of FBR funding may be transferred to Interstate Maintenance, NHS, STP and /or CMAQ.

6. Surface Transportation Program (STP) The Surface Transportation Program provides flexible funding that may be used by States and localities for projects on any Federal-aid highway, including the NHS, bridge projects on any public road, transit capital projects, and intracity and intercity bus terminals and facilities. The STP program is broken down into four subcategories for purpose of our analysis and expenditures. These programs are described below.

- STP-FLEX: STP-Flex funds can be used for the project types mentioned above in any area.
- STP-HAZ: STP-HAZ funds can be used on projects and activities to resolve safety problems at hazardous locations and sections, and roadway elements which may constitute a danger to motorists, pedestrians, and bicyclists.
- STP-EHN: are transportation-related activities that are designed to strengthen the cultural, aesthetic, and environmental aspects of the Nation's intermodal transportation system. The transportation enhancements program provides for the implementation of a variety of non-traditional projects, with examples ranging from the restoration of historic transportation facilities, to bike and pedestrian facilities, to landscaping and scenic beautification, and to the mitigation of water pollution from highway runoff.
- STP>200K: STP funds which are sub-allocated to areas of over 200,000 in population and can be used towards any projects eligible for federal aid highway funding.

State Transportation Funding:

State transportation funding comes from several sources of revenue. Traditionally this revenue is used to match federal sources, to administer the state TIMED program and to fund the operations of the Department of Transportation and Development. The basic funding source for the state program comes from the State Transportation Trust Fund (TTF) which includes 16 cent gasoline tax, license fees, interest, weights permits and fines and

aviation fuel sales tax. Additional funding comes from the State Highway Improvement Fund (HIF) includes a portion of the truck permit fees beginning with 25% in FY 2008 and increasing to 100% by FY 2011. For analysis purposes state funding will focus on four major categories.

State Funding Categories

- State Bond Monies (ST-BONDS)
- State Cash (ST-CASH)
- State General Fund Revenues (ST-GEN)
- Miscellaneous Revenue Sources
 - Maintenance (MAINT)
 - Overlay Program (OLAY)
 - Other Sources (OTHER)
 - Reimbursable (REIMB)
 - Public Works (PUBWKS)

1. State Bond Monies (ST-BONDS) State Secured Bonds acquired through the Capital Outlay Program. The capital outlay program is a complex program for funding the state’s annual construction budget and the multi-year nature of most projects.

2. State Cash (ST-CASH) State Cash funded primarily through the general fund. Traditionally this source of revenue has been for maintenance type projects.

3. State General Fund Revenues (ST-GEN) State Cash funded primarily through previous years revenue surplus funds. Revenue surplus funds can be recognized by the states Revenue Estimating Committee only at the end of a fiscal year. According to the Louisiana Constitution, any surplus can only be used for capital construction, retirement or payment of debt, providing payments against the unfunded accrued liability of the retirement systems, placed in the Budget Stabilization or "Rainy Day" Fund.

4. Miscellaneous Revenue Sources: Miscellaneous Revenue Sources constitutes the remainder of state funding. These sources include maintenance funds, funding from the state overlay program, reimbursable expenses incurred by other agencies, and public works funding from the departments non transportation section.

Funding Source	Total	Average/Year	Average Project Cost
ST-BONDS	\$13,071,987	\$1,307,199	\$13,071,987
ST-CASH	\$10,978,332	\$1,097,833	\$477,319
ST-GEN	\$74,401,822	\$7,440,182	\$5,723,217
MAINT	\$946,086	\$94,609	\$189,217
OLAY	\$839,580	\$83,958	\$839,580
OTHER	\$10,529,890	\$1,052,989	\$3,509,963
REIMB	\$1,098,624	\$109,862	\$1,098,624
PUBWKS	\$3,271,000	\$327,100	\$3,271,000
Total State Program	\$115,137,321	\$11,513,732	\$2,398,694

5.2 Historical Funding Stream

Background

Legislative requirements contained in SAFETEA-LU stipulate that metropolitan transportation plans be “financially constrained,” meaning costs for improvement projects recommended by the plan must equal financial resources available to pay for them. For the most part, funding for plan implementation will be made available from federal funding categories appropriated by congress and matched by state funds. These funding sources have been outlined above. Annual contract letting costs for the two-parish area over the past ten years has been provided by LaDOTD and examined in order to estimate the amount of funding that will be available for plan implementation.

Review and Analysis of Funding

Funding for transportation facilities is derived from a variety of federal, state, and local sources as outlined above. A review of the 210 projects let over the past ten years reveals a total of slightly over \$477.32 million has been spent within the two parish area of Caddo and Bossier parishes. Further review shows an average project cost of \$2.27 million and average year expenditures of \$47.73 million.

Program Totals by Funding Source

Funding Source	Total	Average/Year	Average Project Cost	Number of Projects
ARRA	\$35,000,131	\$3,500,013	\$17,500,066	2
DEMO	\$81,906,513	\$8,190,651	\$8,190,651	10
FBR	\$53,169,816	\$5,316,982	\$2,531,896	21
IM	\$40,634,383	\$4,063,438	\$1,847,017	22
LOCAL	\$5,321,198	\$532,120	\$2,660,599	2
MAINT	\$946,086	\$94,609	\$189,217	5
NHS	\$21,387,975	\$2,138,798	\$1,336,748	16
OLAY	\$839,580	\$83,958	\$839,580	1
OTHER	\$10,529,890	\$1,052,989	\$3,509,963	3
REIMB	\$1,098,624	\$109,862	\$1,098,624	1
ST-BONDS	\$13,071,987	\$1,307,199	\$13,071,987	1
ST-CASH	\$10,978,332	\$1,097,833	\$477,319	23
ST-GEN	\$74,401,822	\$7,440,182	\$5,723,217	13
STP>200K	\$25,071,797	\$2,507,180	\$3,133,975	8
STP-EHN	\$359,111	\$35,911	\$119,704	3
STP-FLEX	\$93,072,361	\$9,307,236	\$1,368,711	68
STP-HAZ	\$6,262,984	\$626,298	\$2,618,524	17
PUBWKS	\$3,271,000	\$327,100	\$3,271,000	1
Totals	\$477,323,590	\$47,732,359	\$2,272,969	210

Some projects have multiple funding sources.

Number of projects per funding source = number of projects containing that source of funds.

Total Program number of projects = number of unique projects.

Many of these funding sources have some limitation on their use. Even those sources that are “flexible” have traditionally been committed to certain uses and will likely continue as such through this plan period. In addition many of the funding sources are ear-marked towards specific High Priority Projects. These projects must be discounted from the above analysis in order to provide an accurate base by which to determine future funds.

By discounting the programs to remove the High Priority Projects, those one-time earmarks and special funding sources, yields a total program estimate of approximately \$209 Million total. Funding over the 20-year plan period would yield a total of \$418 Million with an annual average of \$20.9 million over 20 years. This funding breaks down into \$333 million federal, \$72.6 million state, and \$12.4 million local funds.

High Priority Projects

- I-49 North Segment A (LA 168 – Ark/LA State Line) \$25.45 million in Demo Funds
- I-49 North Segment B (Mira Myrtis - LA 168) \$42..80 million in ARRA & Demo Funds
- I-49 North Segment C (LA 2 - Mira Myrtis) \$19.43 million in ST-GEN (State Surplus Funds)
- I-49 North Segment D (US 71 - LA 2) \$41.08 million in DEMO & ARRA Stimulus Funds
- I-20 Rehab in Bossier Parish \$20.65 Million ST-GEN (State Surplus Funds)
- I-220 McCain Creek Bridge Repair \$5.98 Million in DEMO & FRB Funds
- LA 3132 Inner Loop Extension \$14.59 Million in DEMO, STP >200K and Local Funds
- LA 523 Reconstruction and Widening \$23.35 Million ST-GEN (State Surplus Funds)
- Miscellaneous DEMO Projects \$7.08 Million

Total High Priority Projects \$206.74 Million

5.3 Financial Constraint

With the passage of SAFETEA-LU, each metropolitan area is required to develop a Long Range Metropolitan Transportation Plan, which has a 20-year horizon and is financially constrained for implementation. Under the analysis above NLCOG has identified an average of \$20.90 million per year in federal, state, and local funding exclusive of any special earmarked funds. For purposes of implementation NLCOG has divided the 20-year plan into three sections; Current, Short Range, and Long Range. For purposes of financial constraint each section will be analyzed separately.

Current Program

The Current Program identifies projects in the Fiscal Year 2009 Transportation Improvement Program (TIP) for Caddo and Bossier Parishes. Transportation projects contained in the TIP for advancement have been fully discussed with the Technical Advisory Committee (TAC) of NLCOG and the Louisiana Department of Transportation and Development (LADOTD) prior to placement in the TIP. Only those projects, which were mutually agreed upon with LADOTD as to overall benefit and funding availability, were selected for TIP inclusion.

Those projects identified with a federal funding source have been derived from the previous 20 year transportation plan for the area and are part of LADOTD's priority program. These projects have been included in the TIP by NLCOG, acting in its capacity as the MPO for the Northwest Louisiana region. Those projects identified as STP >200k funds are financially constrained, reflecting the annual attributable amounts (approximately \$4.25 million per year) plus a 20% local (non-federal) match funds. (Please refer to Appendix XXX)

Short Range Program

The Short Range Program identifies those projects in Fiscal Years 2013, 2014, and 2015. Seventeen projects totaling \$62 million make up the financial constrained program. Included within the Short Range Program is \$12 million in STP>200k projects including \$1.5 million for Stage 0 and Stage 1 Environmental Studies for widening and improvements to US 71 from Sligo Road to LA 527, \$4 million for congestion management projects,

and \$2 million for Regional ITS implementation. All projects identified with a federal funding source have been derived from the previous 20 year transportation plan for the area and are part of LADOTD's priority program.

The Short Range Program also identifies twelve High Priority Projects funded through Federal DEMO Funds, ARRA fund, state surplus funding, and local funds totaling \$260 million. These projects include but are not limited to:

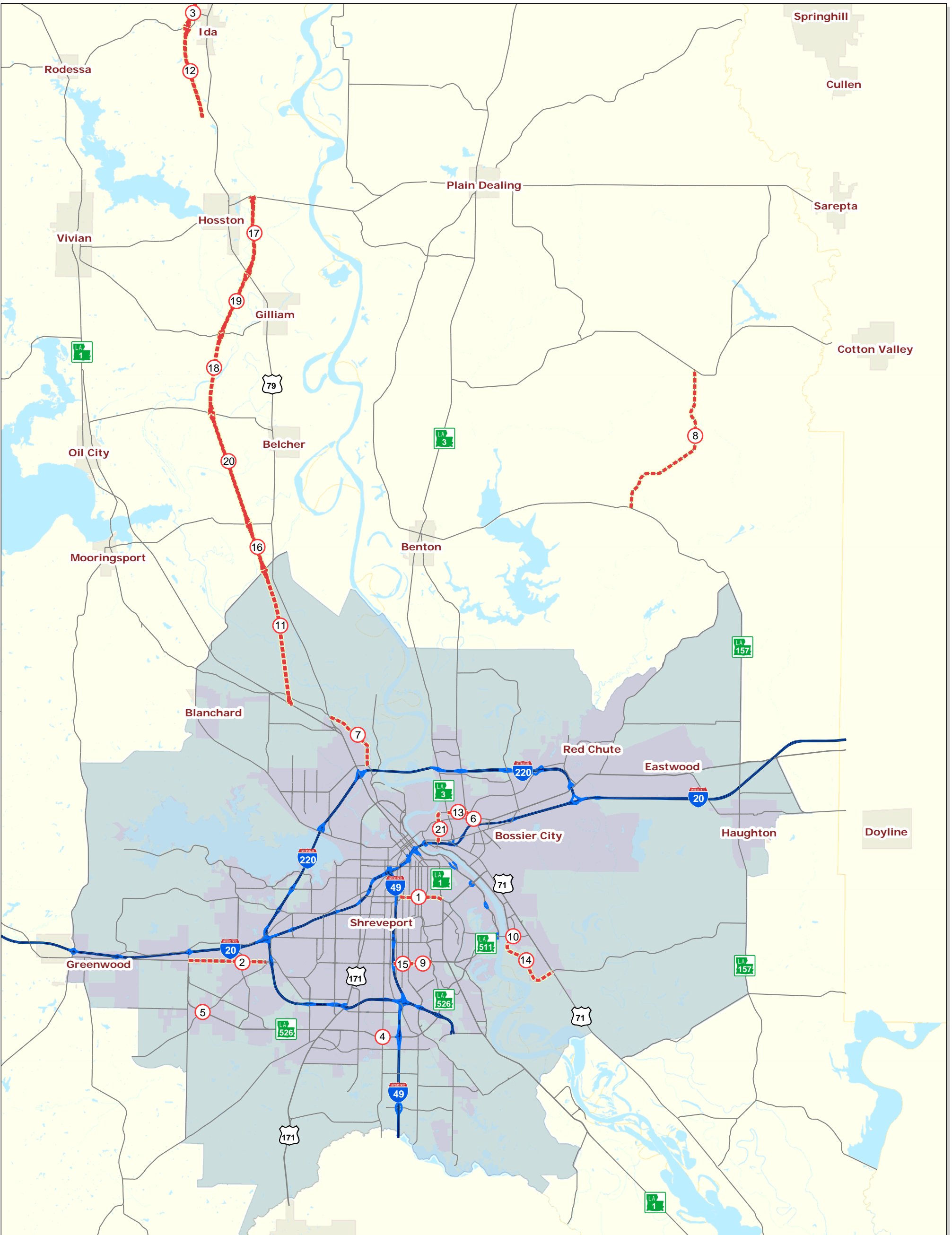
- I-220 @ I-20 Interchange and extension into Barksdale AFB
- I-49 North Segment J
- I-49 North Segment K
- Bossier Parish North-South Corridor
- Bossier Parish East-West Corridor

Long Range Program

The Long Range Program identifies those projects in Fiscal Years 2016 thru 2030. Thirty-one projects totaling \$317 million make up the financial constrained program. Included within the Long Range Program is \$60 million in STP>200k funding. One project of prominence outlined in the Long Range Program is a new bridge structure for the Jimmie Davis Bridge. This structure is estimated at \$65 million. This amount would cover both rehabilitation of the existing two lanes and construction of an additional two lanes, or construction of a new 4-lane structure. All projects identified with a federal funding source have been derived from the previous 20 year transportation plan for the area and several are part of LADOTD's priority program with xxx-xxxx letting dates.

The Long Range Program also identifies several High Priority Projects funded through Federal DEMO Funds with various sources of state and local matching funds totaling \$1.25 billion. These projects include but are not limited to:

- I-69 SIU 15
- I-49 Inner City Connector
- I-20 Red River Bridge (I-49 to Traffic Street)
- I-20 Urban Area Widening (Bossier & Caddo)
- LA 3132 (Inner Loop Extension Phase 2)



L RTP - 2030

Current Transportation Improvement Projects Program

Years 2009-2012

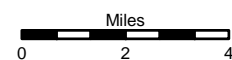
Map Features

- Current Projects
- Shreveport TMA 2000 UZA
- Hydrology

Street Centerlines

Functional Class

- Interstate
- Freeway/Expressway
- Principal Arterial
- Minor Arterial
- Collector
- Map Index Reference



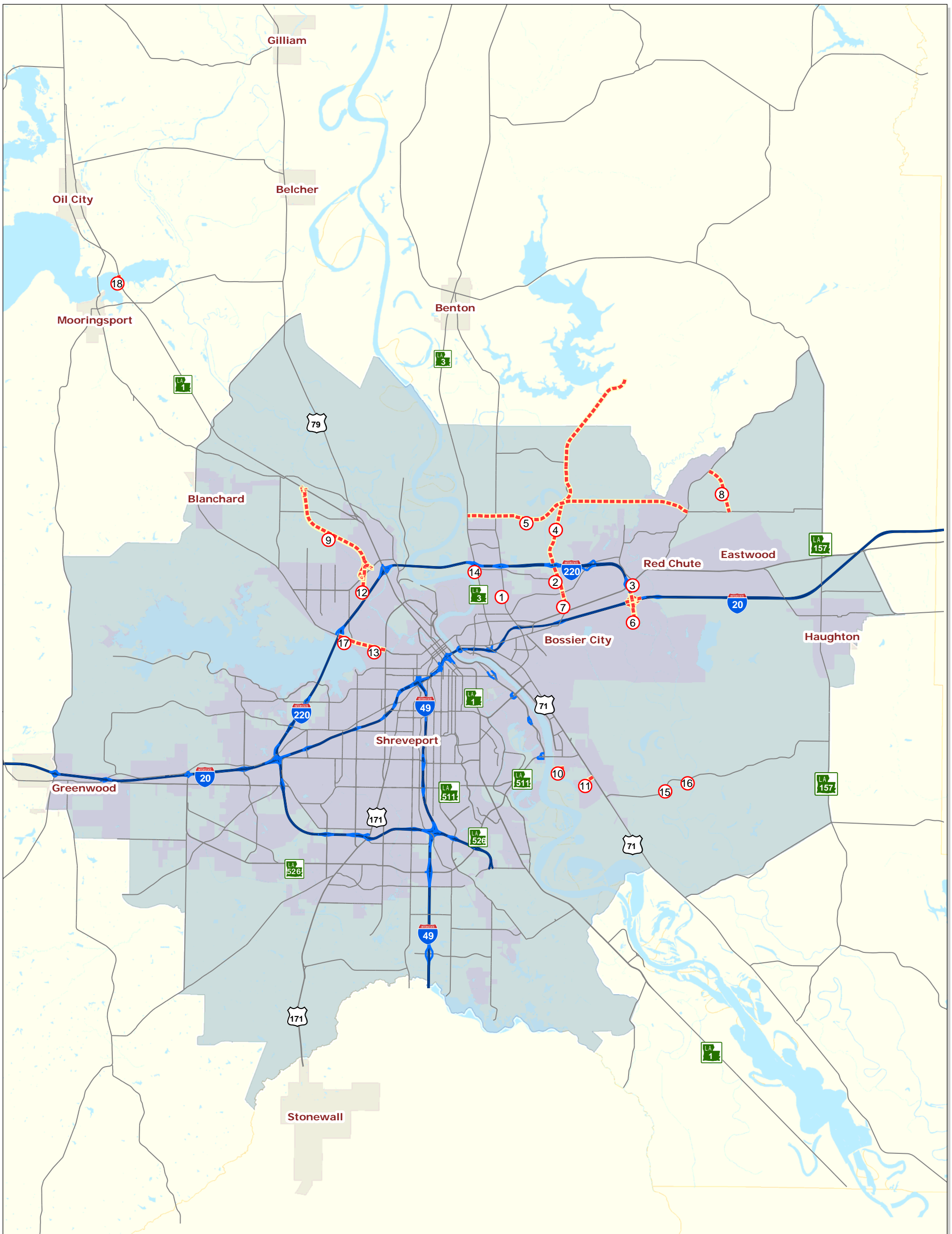
Current Program (TIP Projects – Federal Fiscal Years 2009 - 2012) - Transportation Improvement Projects

Map Index	Name (State Project #)	Route	Limits	Improvements	Plan Phase (Year)	Cost Estimate (000's)	Primary Funding Source
1	Kings Hwy at LA 1 (053-09-0053)	LA 1 at LA 3032	LA 1/LA 3032 intersection and LA 3032 section east to E. Kings Hwy intersection	Intersection Realign. and Widen to 5-ln. section	TIP (2009)	9,275.00	STP >200k / S'Port (ROW)
2	LA 511 Improvements (102-01-0034)	LA 511	LA 526 to Pines Rd	Various capacity and safety improvements	TIP (2009)	17,761.00	STP Flex
3	I-49 North - Segment A (455-09-0023)	I-49	LA 168 to Arkansas State Line	New 4-ln interstate construction	TIP (2009)	24,720.00	NCIIP
4	LA 526 Add Turn Lanes (809-08-0048)	LA 526	LA 526 at Linwood Av intersection	Add turn lanes	TIP (2009)	243.00	STP HAZ
5	LA 526 Add Turn Lanes (809-08-0049)	LA 526	LA 526 at Buncomb Rd. intersection	Add turn lanes	TIP (2009)	152.00	STP HAZ
6	LA 3105 at US 79/80 Add Right Turn Lane (808-07-0051)	US 79/80 at LA 3105	US 79/80 at LA 3105 intersection	Add dedicated Right Turn Lane	TIP (2009)	253.00	STP HAZ
7	LA 538 AC Widening & Overlay (078-02-xxxx)	LA 538	Ravendale Dr to US 71	Widen and overlay	TIP (2010)	863.00	STP Flex
8	LA 157 AC Widening & Overlay (082-05-0007)	LA 157	Midway (Census Place (CP)) to Ivan (C.P.)	Widen and overlay	TIP (2010)	2,440.00	STP Flex
9	LA 511 Median Turn Lane (102-02-0031)	LA 511	Line Av to Fern Av	Add center/median turn lane	TIP (2010)	3,615.00	STP HAZ
10	LA 511 Jimmie Davis EB Off Ramp (102-03-0013)	LA 511	LA 511 at J Davis Bridge approach	Construct new eastbound off-ramp to serve A.R. Teague Parkway	TIP (2010)	1,195.00	STP HAZ
11	I-49 North - Segment I (455-09-0003)	I-49	LA 1 to LA 173	New 4-ln interstate construction	TIP (2010)	65,140.00	State Surplus/ARR A
12	I-49 North - Segment B (455-09-0024)	I-49	Mira-Myrtis Rd to LA 168	New 4-ln interstate construction	TIP (2010)	52,134.01	LADOTD ARRA
13	Shed Road Phase VII (742-08-0001)	Local	LA 3 (Benton Rd) to LA 3105 (Airline Dr)	Widen to 5-ln section	TIP (2010)	8,007.00	STP > 200k / Bossier (ROW)

Current Program (TIP Projects – Federal Fiscal Years 2009 - 2012) - Transportation Improvement Projects

Map Index	Name (State Project #)	Route	Limits	Improvements	Plan Phase (Year)	Cost Estimate (000's)	Primary Funding Source
14	A.R. Teague Parkway Extension	Local	Current south terminus (Reeves Marine Dr) to LA 612 (Sligo Rd)	New 2-ln divided parkway construction	TIP (2011)	9,500.00	Local Funding Bossier City and Parish
15	LA 511 - Add Center Turn Lane (102-02-0032)	LA 511	I-49 interchange to LA 523 (Line Av)	Add center/median turn lane	TIP (2011)	3,500.00	STP HAZ
16	I-49 North - Segment H (455-09-0004)	I-49	LA 173 to LA 169	New 4-ln interstate construction	TIP (2011)	13,194.00	NCIIP
17	I-49 North - Segment D (455-09-0007)	I-49	US 71 to LA 2	New 4-ln interstate construction	TIP (2011)	49,952.00	NCIIP
18	I-49 North - Segment F (455-09-0005)	I-49	LA 170 to LA 530	New 4-ln interstate construction	TIP (2012)	31,887.00	NCIIP
19	I-49 North - Segment E (455-09-0006)	I-49	LA 170 to US 71	New 4-ln interstate construction	TIP (2012)	51,531.20	NCIIP
20	I-49 North - Segment G (455-09-0011)	I-49	LA 169 to LA 530	New 4-ln interstate construction	TIP (2012)	45,281.60	NCIIP
21	Hamilton Rd Improvments (742-08-0003)	Local	US 79/80 (E Texas St) to LA 3	New construction and widen existing to 4-ln sect.	TIP (2012)	5,624.32	STP > 200k
Total Financially Constrained Program						\$52,928.32	
Total High Priority Program						\$333,839.81	
Total Major Local Program						\$9,500.00	
GRAND TOTAL CURRENT PROGRAM						\$396,268.13	

Source: updated by NLCOG staff (2009)






LRTP - 2030

Short Range Transportation Improvement Projects Program








Years 2012-2015

Map Features

-  Short Range Projects
-  Shreveport TMA 2000 UZA
-  Hydrology



Street Centerlines

- Functional Class**
-  Interstate
 -  Freeway/Expressway
 -  Ramp
 -  Principal Arterial
 -  Minor Arterial
 -  Collector
 -  Map Index Reference

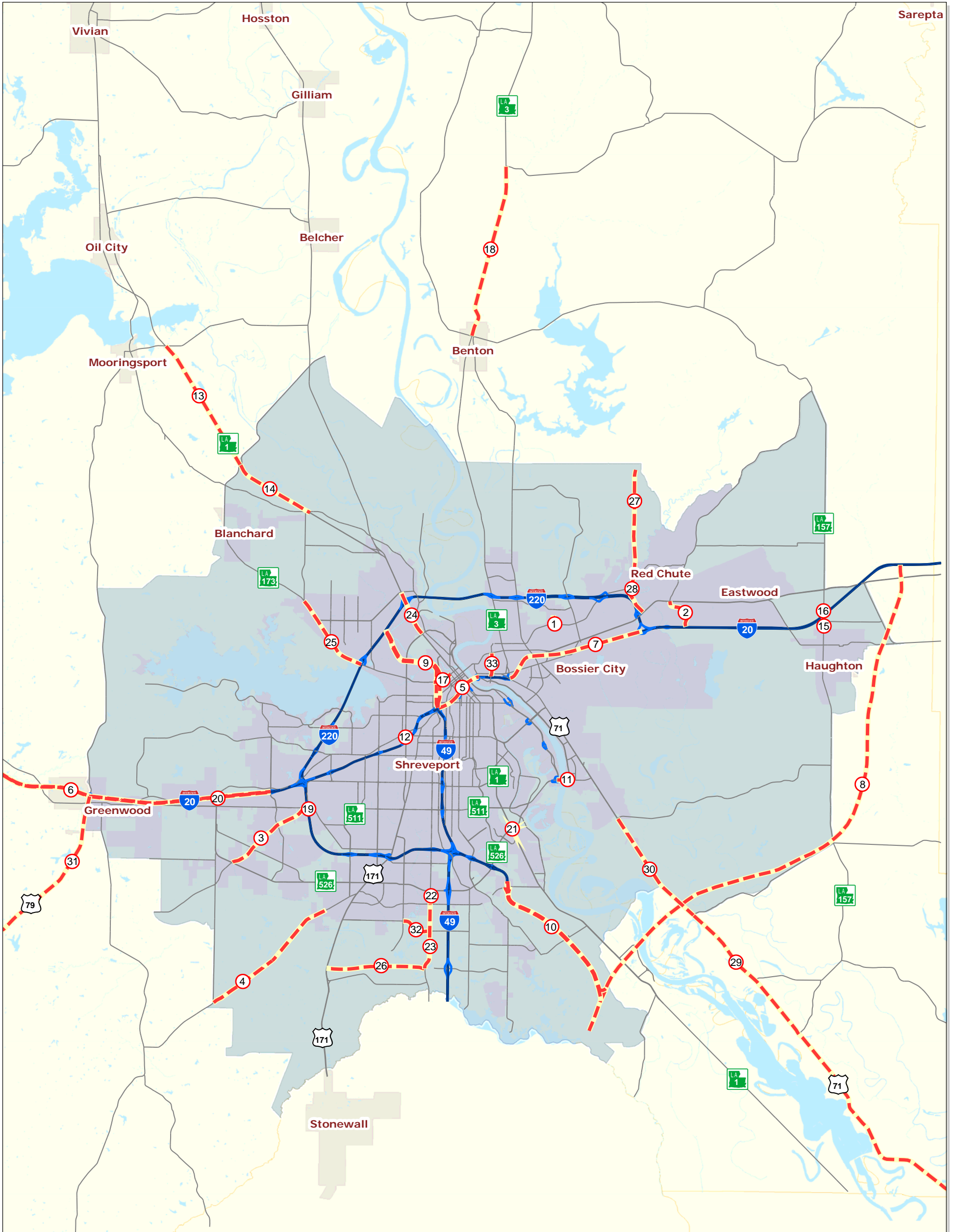
Short Range Program (Federal Fiscal Years 2013 - 2015) - Transportation Improvement Projects

Map Index	Name (State Project #)	Route	Limits	Improvements	Plan Phase (Year)	Cost Estimate (000's)	Primary Funding Source
1	Airline at Douglas add LT Lane	LA 3105	Airline Dr at Douglas Dr intersection	Add left-turn lanes to Douglas Dr intersection approaches	SRP (2012)	100.00	Local Funding Bossier City
2	Swan Lake Rd Widening and Improvements	Local	Shed Rd to I-220	Widen to a 5-ln minor arterial section and improve at-grade RR-crossing	SRP (2012)	10,000.00	Local Funding Bossier City
3	Stockwell Rd at US 80 add LT Lane	US 80	Stockwell Rd at US 80 intersection	Add left-turn lane to Stockwell Rd intersection approach	SRP (2012)	100.00	ARRA STP >200k
4	North-South Corridor (Swan Lake Rd widen and Extension)	Local	Phase I: I-220 north to (along Swan Lake Rd.) 3.8 miles Phase II: end Phase I to tie-in with Crouch	Phase I: widen to 3-ln urban collector section Phase II: new 2-ln rural collector section	SRP (2012)	20,100.00	Federal DEMO / BPPJ
5	East-West Corridor (Winfield Rd Extension)	Local	East terminus at Winfield Rd/Bellevue Rd intersection west to LA 3	new 2-ln urban collector section	SRP (2012)	15,000.00	Federal DEMO / BPPJ
6	I-220 South Extension	I-220	I-220 at I-20 interchange (Bossier City) and south to Barksdale A.F.B. property	New 4-ln interstate construction; 4 ramps and new C-D road	SRP (2012)	37,500.00	LADOTD Econ. Dev./Bossier City-BPPJ
7	Swan Lake Rd Widening and Improvements	Local	US 80 (E Texas St) to Shed Rd	Widen to a 5-ln minor arterial section	SRP (2012)	8,500.00	Local Funding Bossier City
8	Wafer Rd Extension	Local	Current Wafer Rd/Winfield Rd intersection north to Bellevue Rd	New 2-ln urban collector section	SRP (2013)	2,000.00	Federal DEMO / BPPJ
9	I-49 North - Segment J (455-09-0002)	I-49	Dr. M.L.K. Jr Dr. to LA 1	New 4-ln interstate construction	SRP (2013)	62,384.00	NCIIP
10	Sunflower Blvd Extension	Local	Existing Sunflower Blvd. to new A.R. Teague Pkwy Extension	New 2-ln urban collector extension to the ART Pk	SRP (2014)	750.00	Local Funding Bossier City
11	Golden Meadows Dr Extension	Local	US 71 to new A.R. Teague Pkwy Ext	New 4-ln local boulevard section	SRP (2015)	3,500.00	Local Funding Bossier City
12	I-49 North - Segment K (455-09-0002)	I-49	I-220 to Dr. M.L.K. Jr Dr.	New 4-ln interstate construction	SRP (2015)	99,120.00	NCIIP

Short Range Program (Federal Fiscal Years 2013 - 2015) - Transportation Improvement Projects

Map Index	Name (State Project #)	Route	Limits	Improvements	Plan Phase (Year)	Cost Estimate (000's)	Primary Funding Source
Total Financially Constrained Program						\$61,699.00	
Total Federal DEMO and ARRA Program						\$37,200.00	
Total Special State Program						\$37,500.00	
Total High Priority Program						\$161,504.00	
Total Major Local Program						\$22,850.00	
GRAND TOTAL SHORT RANGE PROGRAM						\$320,753.00	

Source: updated by NLCOG staff (2009)






LRTP - 2030

Long Range Transportation Improvement Projects Program








Years 2016 - 2030

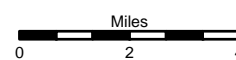
Map Features

-  Long Range Projects
-  Shreveport TMA 2000 UZA
-  Hydrology

Street Centerlines

Functional Class

-  Interstate
-  Freeway/Expressway
-  Principal Arterial
-  Minor Arterial
-  Collector
-  Ramp
-  Map Index Reference



Long Range Program (Federal Fiscal Years 2016 - 2030) - Transportation Improvement Projects

Map Index	Name (State Project #)	Route	Limits	Improvements	Plan Phase (Year)	Cost Estimate (000's)	Primary Funding Source
1	Alpine Blvd Connector	Local	Current north terminus Alpine Blvd (Bossier City) north to St Lucy St	New 2-In local road connector; improvements to at-grade RR-crossing	LRP	500.00	Fed/St/Loc
2	Bodcau Station Rd Widening	Local	I-20 to US 80 (E Texas St)	Widen to 4-In local road section	LRP	750.00	Fed/St/Loc
3	Buncomb Rd Widening	Local	LA 511 (W 70 th St) to LA 526	Widen to 3-In urban minor arterial section	LRP	1,250.00	Fed/St/Loc
4	Colquitt Rd Widening	LA 525	Dean Rd to Woolworth Rd	Widen to 4-In urban minor arterial section	LRP	2,000.00	Fed/St/Loc
5	I-20 Red River Bridge / Approaches	I-20	I-20 Red River crossing between I-49 and Traffic St (Bossier) interchanges	New Red River Bridge structure/improve approaches/reconfigure ent./exit ramps	LRP	250,000.00	High Priority
6	I-20 Widening	I-20	Texas State Line to Pines Rd	Widen to 6-In interstate section	LRP	25,000.00	Fed/St/Loc
7	I-20 Widening (Bossier City Urban Section)	I-20	US 71-LA 3 interchange to I-220 (east)	Widen and realign to 6-In interstate section	LRP	105,000.00	High Priority
8	I-69 (SIU-15)	I-69	I-20 to US 71 (SIU-15: Shreveport Urban Section)	New 4-In interstate construction w/Red River Bridge structure	LRP	500,000.00	High Priority
9	I-49 Inner City Connector	I-49	I-49/I-20 interchange (south) to I-220/new I-49 North interchange (north)	New 4-In interstate section	LRP	350,000.00	High Priority
10	Inner Loop Ext. Ph 2	LA 3132	LA 523 to I-69 (Port)	New 4-In Freeway Expressway	LRP	40,000,000	High Priority
11	Jimmie Davis Bridge	LA 511	LA 511 (J Davis Hwy) Red River crossing	New 4-In bridge structure w/Bike-Ped. facilities	LRP	65,000.00	Fed/St/Loc
12	Kings Hwy intersection improvements	US 171	Kings Hwy at Hearne Av (US 171) intersection	Intersection realignment and improvements	LRP	750.00	Fed/St/Loc
13	LA 1 Widening	LA 1	LA 173 to LA 169	Widen to 4-In rural arterial section	LRP	23,500.00	Fed/St/Loc
14	LA 1 Widening	LA 1	LA 538 to LA 173	Widen to 4-In urban arterial section	LRP	20,500.00	Fed/St/Loc
15	LA 157 at LA 3227 Intersection Improvements	LA 157 / LA 3227	LA 157 at LA 3227 intersection (Haughton)	Add left-turn lane from eastbound LA 3227 to LA 157 ; Add right-turn lane from westbound LA 3227 to LA 157 ; Widen LA 157 to 6-In between LA 3227 and I-20 entrance ramps	LRP	5,500.00	Fed/St/Loc
16	LA 157 Bridge Widening overpass at I-20	LA 157	LA 157 overpass at I-20 (Haughton)	Widen existing bridge structure and approaches to accommodate 4- travel lanes	LRP	17,500.00	Fed/St/Loc
17	LA 173 (Ford/Caddo St) Widening	LA 173	Marshall St west to Pierre Av	Widen to 4-In urban minor arterial section	LRP	4,500.00	Fed/St/Loc
18	LA 3 Widening	LA 3	LA 160 to LA 162	Widen to 4-In rural arterial section	LRP	18,500.00	Fed/St/Loc

Source: updated by NLCOG staff (2009)

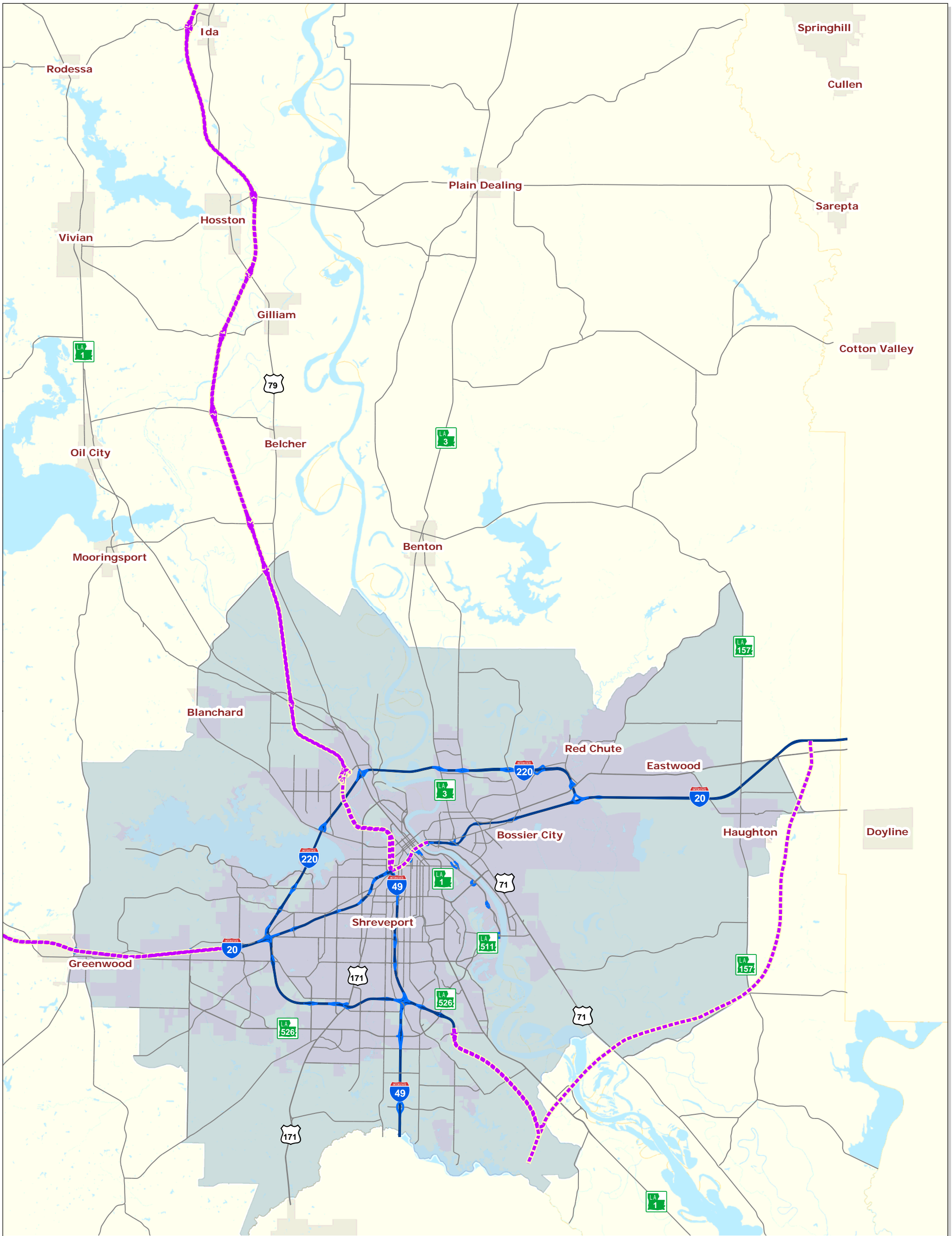
Long Range Program (Federal Fiscal Years 2016 - 2030) - Transportation Improvement Projects

Map Index	Name (State Project #)	Route	Limits	Improvements	Plan Phase (Year)	Cost Estimate (000's)	Primary Funding Source
19	LA 511 (W 70 th St) intersection improvements	LA 511	LA 511 at Buncomb Rd	Intersection realignment and improvements	LRP	500.00	Fed/St/Loc
20	LA 526 Bridge Widening overpass at I-20	LA 526	LA 526 (Bert Kouns Ind. Loop) overpass at I-20 (Shreveport)	Widen existing bridge structure and approaches to accommodate 4- travel lanes	LRP	17,500.00	Fed/St/Loc
21	LA 1 (Youree Dr) at LA 526 Intersection Improvements	LA 1 / LA 526	LA 1 at LA 526 intersection (Shreveport)	New interchange	LRP	9,000.00	Fed/St/Loc
22	Linwood Av Widening	Local	LA 526 to Flournoy-Lucas Rd	Widen to 4-ln urban minor arterial section	LRP	2,500.00	Fed/St/Loc
23	Linwood Av Widening	Local	Flournoy-Lucas Rd to Southern Loop Rd	Widen to 4-ln urban minor arterial section	LRP	4,000.00	Fed/St/Loc
24	N. Market St. Widening	US 71	N. Hearne to bridge at 12 mile bayou	Widen to 6-ln principal arterial section	LRP	8,500.00	Fed/St/Loc
25	Shreveport-Blanchard Hwy Widening	LA 173	Roy Rd. to I-220	Widen to 4-ln urban minor arterial section	LRP	15,000.00	Fed/St/Loc
26	Southern Loop Rd Extension	Local	Linwood west to US 171 (Mansfield Rd)	New 4-ln collector extension	LRP	10,000.00	Local Funding Caddo
27	Stockwell Rd Extension	Local	Current north terminus to new E-W Corridor Rd (Winfield Rd Extension)	New extension 2-ln urban minor arterial section	LRP	2,000.00	Fed/St/Loc
28	Stockwell Rd Widening	Local	US 80 to Dogwood Trail	Widen to 4-ln urban minor arterial section	LRP	2,000.00	Fed/St/Loc
29	US 71 (Barksdale Blvd) Widening	US 71	LA 527 to Red River Parish Line	Widen to 4-ln rural arterial section	LRP	6,500.00	Fed/St/Loc
30	US 71 Widening	US 71	LA 612 (Sligo Rd) to LA 527	Widen to 4-ln rural arterial section	LRP	2,500.00	Fed/St/Loc
31	US 79 Widening	US 79	I-20 to Texas State Line	Widen to 4-ln rural arterial section	LRP	35,000.00	Fed/St/Loc
32	Williamson Way Extension	Local	Kingston Rd to Linwood Rd	New extension 2-ln urban minor arterial section	LRP	2,500.00	Fed/St/Loc
	Clyde Fant Parkway Extension	Local	Current south terminus LA 511 (E 70 th St) to LA 1	New 4-ln parkway extension	LRP	12,500.00	Local Funding Shreveport
	Bike/Pedestrian Shared Use Trails	Other	As identified through Statewide and Locally derived Bike/Ped Plans	Systematic development of new neighborhood Bike/Ped facilities that provide linkage to existing park/trail infrastructure	LRP	2,500.00	Fed/St/Loc
33	Hamilton Rd Improvements (742-08-0003)	Local	I-20 to US 79/80 (E Texas St)	Reconstruction and widen existing to 4-ln sect.	LRP	50,000.00	Local Funding Bossier City

Source: updated by NLCOG staff (2009)

Long Range Program (Federal Fiscal Years 2016 - 2030) - Transportation Improvement Projects

Map Index	Name (State Project #)	Route	Limits	Improvements	Plan Phase (Year)	Cost Estimate (000's)	Primary Funding Source
Total Financially Constrained Program						\$292,250.00	
Total High Priority Program						\$1,245,000.00	
Total Major Local Program						\$72,500.00	
GRAND TOTAL LONG RANGE PROGRAM						\$1,562,750.00	






LRTP - 2030

High Priority Transportation Improvement Projects Program






Years 2009-2030

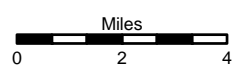
Map Features

-  High Priority Projects
-  Shreveport TMA 2000 UZA
-  Hydrology

Street Centerlines

Functional Class

-  Interstate
-  Freeway/Expressway
-  Principal Arterial
-  Minor Arterial
-  Collector



High Priority Program

Map Index	Name (State Project #)	Route	Limits	Improvements	Plan Phase	Cost Estimate (000's)	Primary Funding Source
3	I-49 North - Segment A (455-09-0023)	I-49	LA 168 to Arkansas State Line	New 4-ln interstate construction	Current	24,720.00	NCIIP
11	I-49 North - Segment I (455-09-0003)	I-49	LA 1 to LA 173	New 4-ln interstate construction	Current	65,140.00	State Surplus/ARRA
12	I-49 North - Segment B (455-09-0024)	I-49	Mira-Myrtis Rd to LA 168	New 4-ln interstate construction	Current	52,134.01	LADOTD ARRA
16	I-49 North - Segment H (455-09-0004)	I-49	LA 173 to LA 169	New 4-ln interstate construction	Current	13,194.00	NCIIP
17	I-49 North - Segment D (455-09-0007)	I-49	US 71 to LA 2	New 4-ln interstate construction	Current	49,952.00	NCIIP
18	I-49 North - Segment F (455-09-0005)	I-49	LA 170 to LA 530	New 4-ln interstate construction	Current	31,887.00	NCIIP
19	I-49 North - Segment E (455-09-0006)	I-49	LA 170 to US 71	New 4-ln interstate construction	Current	51,531.20	NCIIP
20	I-49 North - Segment G (455-09-0011)	I-49	LA 169 to LA 530	New 4-ln interstate construction	Current	45,281.60	NCIIP
9	I-49 North - Segment J (455-09-0002)	I-49	Dr. M.L.K. Jr Dr. to LA 1	New 4-ln interstate construction	Short	62,384.00	NCIIP
12	I-49 North - Segment K (455-09-0002)	I-49	I-220 to Dr. M.L.K. Jr Dr.	New 4-ln interstate construction	Short	99,120.00	NCIIP
5	I-20 Red River Bridge / Approaches	I-20	I-20 Red River crossing between I-49 and Traffic St (Bossier) interchanges	New Red River Bridge structure/improve approaches/reconfigure ent./exit ramps	Long	250,000.00	High Priority
7	I-20 Widening (Bossier City Urban Section)	I-20	US 71-LA 3 interchange to I-220 (east)	Widen and realign to 6-ln interstate section	Long	105,000.00	High Priority
8	I-69 (SIU-15)	I-69	I-20 to US 71 (SIU-15: Shreveport Urban Section)	New 4-ln interstate construction w/Red River Bridge structure	Long	500,000.00	High Priority
9	I-49 Inner City Connector	I-49	I-49/I-20 interchange (south) to I-220/new I-49 North interchange (north)	New 4-ln interstate section	Long	350,000.00	High Priority
10	Inner Loop Ext. Ph 2	LA 3132	LA 523 to I-69 (Port)	New 4-ln Freeway Expressway	Long	40,000,000	High Priority
Total High Priority Program						\$333,839.81	

Source: updated by NLCOG staff (2009) Map Index Number refers to Program Year Map Index (Current, Short, Long)

7.0 Plan Outcomes / Conclusion

Freedom from traffic congestion is a major contributor to quality of life in the Caddo/Bossier Parish region. An important objective of this plan was to identify emerging congestion and develop cost effective measures to address it. However, the study sought more than a one-time snapshot of traffic problems and a prioritized list of remedial projects. Clearly the plan provides such a list but good urban transportation planning is a dynamic process. The “Mapping The Way – 2030” Transportation Plan provides the means for continued updates that can be accomplished by NLCOG’s staff.

The analytical tools, such as the Travel Demand Model (TDM), provides reliable analysis for future transportation decisions for the region. More importantly, it is an effective planning tool that allows the technical staff to communicate transportation needs and evaluate proposed solutions in ways that can be understood by local elected officials and agency decision makers.

The plan also emphasizes the importance of continued deployment of congestion and safety management systems that offer a structured approach to identification and remediation of many of the region’s more serious transportation problems. Elements of the plan contain recommendations for railroad and ITS solutions that will greatly improve the safety and efficiency of the area’s existing transportation infrastructure.

While the work has been primarily focused on local needs, it also addressed the eight factors required by the US Dept. of

Transportation (USDOT). Furthermore, the plan reflects and responds to local goals and objectives through the MPO’s public involvement and engagement mechanisms.

Finally, the plan furnishes a “roadmap” for longer-range implementation of higher cost freeway and other infrastructure improvements, such as I-49 and I-69, which can enable the region to compete more effectively for economic development and expansion.

APPENDIX A

COMMUNITY FEEDBACK SURVEY (CFS) FINDINGS AND TRANSPORTATION NEEDS

Public Involvement Plan Statement Of Purpose

The intent of the Public Involvement Plan (PIP) is to outline a course of action, or tasks, that will facilitate public awareness and the solicitation of public input into the development of the Long Range Transportation Plan (LRTP) Update. Further, the PIP will follow the guidelines and requirements of SAFETEA-LU.

As described in SAFETEA-LU: MPOs must develop and utilize a “Participation Plan” that provides reasonable opportunities for interested parties to comment on the content of the metropolitan transportation plan and metropolitan TIP. Further, this “Participation Plan” must be developed “in consultation with all interested parties”. This consultation requirement is intended to afford parties who participate in the metropolitan planning process a specific opportunity to comment on the plan prior to its approval.

Notable SAFETEA-LU Requirements

- i. Adds representatives of bicycle/pedestrians and disabled persons to those groups shall be provided opportunity to comment on the plan
- ii. Adds requirements for a public participation plan developed in consultation with interested parties
- iii. MPOs **must** hold convenient / accessible public meetings, use visualization techniques, make information / plans readily available electronically

LRTP Public Involvement Strategies

Based upon our past experiences with local public involvement efforts, NLCOG will utilize public participation strategies that are best suited for eliciting response from our local residents. Multiple participation strategies will be employed in order to effectively reach out to as many population segments as feasibly possible. Provided below, is a list of public outreach and involvement efforts NLCOG will employ through the LRTP Update effort.

- Community Feedback Survey (CFS) – hardcopy and web based distribution
- LRTP information displays – various high traffic locations (CFS distributed at these locations)
- Creation and facilitation of a Bicycle/Pedestrian Citizens Advisory Committee (BPAC) and the utilization of the MPO’s standing Technical Advisory Committee (TAC)

The proceeding sections of this plan will describe, in detail, the previously listed involvement strategies.

Community Feedback Survey (CFS)

The primary means to engage the public will be through the creation and dissemination of a hardcopy and electronic survey. NLCOG has developed a survey that will collect feedback, and allow for comment/input, from all socio-economic population segments within Northwest Louisiana.

CFS Research Design

The survey is configured in a manner to solicit public input on issues ranging from the condition of our existing transportation infrastructure, to the quality of transportation services. The survey provides ample opportunity for respondents to rate and/or comment on crucial local issues such as transportation funding, environmental concerns, and areas/locations that require transportation improvement(s).

From each respondent, the community feedback survey collects data in the following areas (i.e. survey objectives):

Survey Objectives

- Public awareness of NLCOG and the long range transportation planning effort
- Demographic profile of the respondent (e.g. race, age, etc...)
- Work trip travel behavior
- Other trip travel behavior
- How much travel delay do they incur
- Perception of safety/security using transportation
- Transportation and environmental awareness
- Opinion of the quality of our region's existing transportation infrastructure and service providers
- Opinion of travel and mobility within our area related to our current Long Range Plan stated goals and SAFETEA-LU's planning factors (8)
- Other significant regional transportation issues (e.g. how to fund major projects?)

The survey questions (survey is provided on page) were developed in a manner so as to efficiently collect measurable attitudinal data concerning most, if not all, of the aforementioned objectives. Surveys are accessible through NLCOG's web presence, online at: www.nlco.org/Transport/LRTP2030/LRPUpdate_SurveyForm.asp , and traditional hardcopy surveys are available at the scheduled LRTP

information display sites and through mail outs. Survey responses are entered, either automatically while online or manually if it is a hardcopy response, into an MS Access (.mdb) structure database. This database structure will allow us to efficiently compile response data and provide survey results.

LRTP Information Displays

The intent of the information display is to increase public awareness of the LRTP process, as well as, provide background information pertaining to NLCOG's service to the residents of Northwest Louisiana. NLCOG will create LRTP information displays consisting of small map graphics, literature describing NLCOG functions and the LRTP Update effort, and hardcopies of the community feedback survey. These displays are deployed in public, high pedestrian traffic locations such as university student centers, shopping malls, and public transit terminals so as to maximize our exposure. Further, most of the displays are staffed by NLCOG in order to personally answer any questions and to encourage the public to respond to the feedback survey. Table 1, lists the prospective locations of the LRTP information displays.

LRTP Public Awareness Campaign

History has shown that Northwest Louisiana's residents are not familiar with NLCOG, let alone, the Long Range Transportation Plan (LRTP) process. In order to increase the public's awareness of the LRTP, NLCOG will initiate contact with the region's primary print media outlets the Shreveport Times (Caddo Parish) and the Bossier Press Tribune (Bossier Parish). Our intent is to develop a news article focusing on the LRTP process and how the public can become involved in this process. A secondary benefit of this effort is an increased awareness of the public service provisions of NLCOG in our capacity as being the designated Metropolitan Planning Organization (MPO) for Northwest Louisiana, as well as, an intergovernmental Council of Governments organization.

Summary of Community Feedback Survey Results

Provided below, are the compiled and summarized results of the Community Feedback Survey (CFS). Throughout the Northwest Louisiana Region, the CFS has been distributed through NLCOG's online presence (www.nlco.org), onsite high-traffic locations, and from NLCOG's office.

The Survey's results are organized by first presenting the community's response rates and demographics, or survey metrics, to the distributed survey. Following the survey metrics is a summary of attitudinal responses to survey questions 14 through 19. The final results section presents the comments received through both online and hardcopy survey distribution.

Survey Metrics

Total Survey Responses: 121

Total Distributed Hardcopy Surveys: 221

Hardcopy Responses: 55

Hardcopy Response Rate: 24.9%

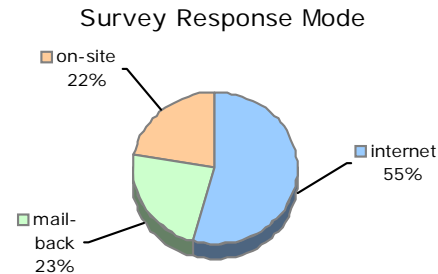
By Site

SporTran Central Terminal (2/28/07): 57

SporTran Central Terminal (3/08/07): 70

Houghton Town Hall - Council Meeting (4/02/07): 9

Direct contact from NLCOG's Office, via member email, newsletters, and student groups (LSUS) (1/2007 – 1/2009): 85



2) Where is your primary place of work? Responses Percentage

Work Outside of Home: 79 65.3%

Work from Home: 10 8.3%

Not Applicable: 28 23.1%

No response to question: 4

4) Have you ever heard of Northwest Louisiana Council of Governments?

	<u>Responses</u>	<u>Percentage</u>
Yes	31	25.6%
No	79	65.3%

No response to question: 11

5) What is your gender?

	<u>Responses</u>	<u>Percentage</u>
Female	53	43.8%
Male	64	52.9%

No response to question: 4

6) What is your age?

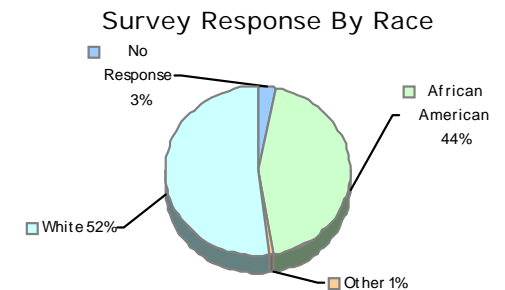
	<u>Responses</u>	<u>Percentage</u>
Under 16	0	0.0%
16 – 24	17	14.0%
25 – 39	32	26.4%
40 – 54	44	36.4%
55 – 64	17	14.0%
65+	9	7.4%

No response to question: 2

7) What is your race?

	<u>Responses</u>	<u>Percentage</u>
Black or African American	53	44.0%
Native American	0	0.0%
Asian	0	0.0%
Pacific Islander	0	0.0%
White	63	52.0%
Other (+2 or more races)	1	3.0%

No response to question: 4



8) Are you Spanish/Hispanic/Latino?	<u>Responses</u>	<u>Percentage</u>
Yes	5	4.1%
No	103	85.1%
No response to question: 13		

9) Which of the following best describes your primary place of residence?	<u>Resp.</u>	<u>%</u>
Detached Single Family Home	73	60.3%
Attached Single Family Home	3	2.5%
Condominium	2	1.7%
Apartment	30	24.8%
Mobile Home	7	5.8%
Group Home (e.g. dorms., nursing home)	2	1.7%
No response to question: 4		

10) Which of the following best describes your occupation?	<u>Resp.</u>	<u>%</u>
Management	9	7.4%
Professional	13	10.7%
Service	15	12.4%
Sales	4	3.3%
Office Administration	9	7.4%
Construction / Maintenance	8	6.6%
Transportation	2	1.7%
Farming / Fishing / Forestry	0	0.0%
Government / Public	7	5.8%
Student	9	7.4%
Homemaker	4	3.3%
Retired	11	9.1%
Other	21	17.4%
No response to question: 9		

11) Which of the following best describes your primary mode for commuting to work?	<u>Resp.</u>	<u>%</u>
Public Transit (bus or van)	39	32.2%
Taxi	1	0.8%
Automobile - driver only	58	47.9%
Automobile - multiple passengers	0	0.0%
Bicycle	2	1.7%
Walk	0	0.0%

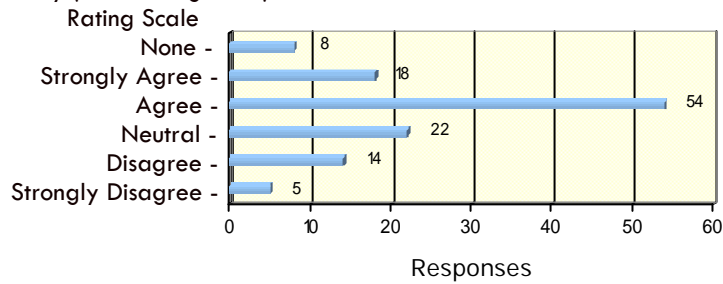
No response to question: 9

12) How many minutes does it take you to get home from work?	<u>Resp.</u>	<u>%</u>
Less than 10 minutes	13	10.7%
10 - 20 minutes	35	28.9%
20 - 30 minutes	20	16.5%
30 - 45 minutes	10	8.3%
More than 45 mins.	10	8.3%

No response to question: 33

Survey Response Results - By Question (questions 14 to 19)

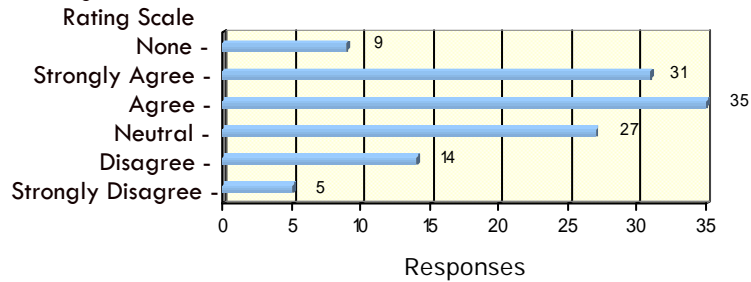
14-A) Within Shreveport-Bossier City, I can reach my destination without experiencing too much delay (traffic congestion).



Agree and Strongly Agree Responses: 59.5%

Disagree and Strongly Disagree: 15.7%

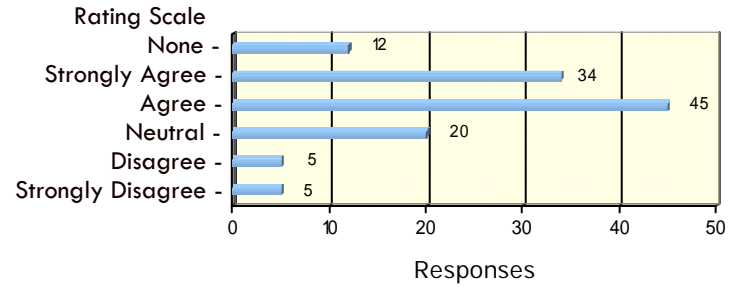
14-B) If I do experience traffic/trip delay, it is usually as a result of an accident or train crossing.



Agree and Strongly Agree Responses: 54.5%

Disagree and Strongly Disagree: 15.7%

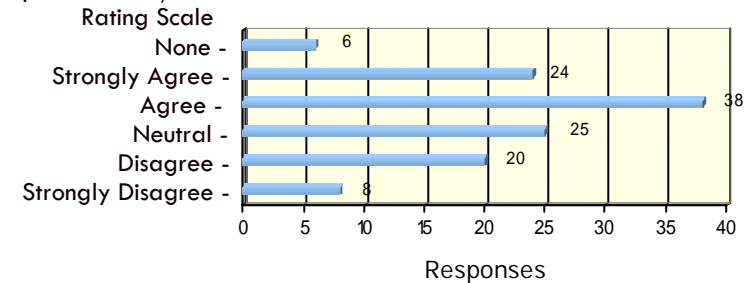
14-C) When I drive, I feel safe using our public streets.



Agree and Strongly Agree Responses: 65.3%

Disagree and Strongly Disagree: 8.3%

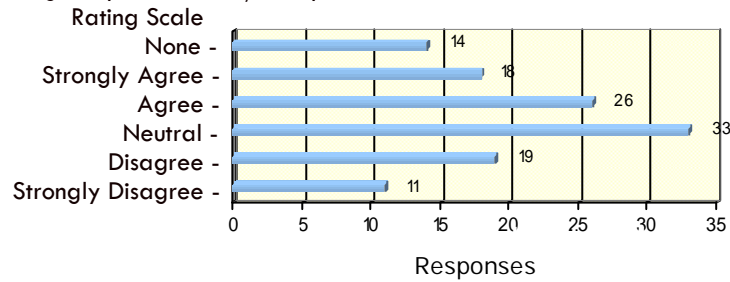
14-D) When I'm out walking, I feel safe using our public streets/sidewalks.



Agree and Strongly Agree Responses: 51.2%

Disagree and Strongly Disagree: 23.1%

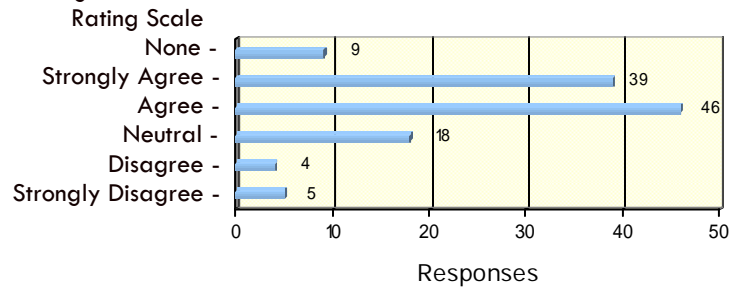
14-E) When I'm using my bicycle, I feel safe using our public streets/bike paths.



Agree and Strongly Agree Responses: 36.4%

Disagree and Strongly Disagree: 24.8%

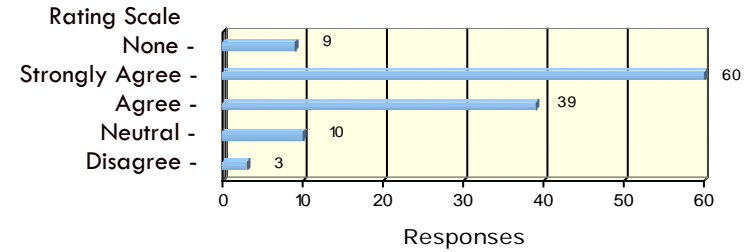
14-F) More resources need to be allocated for safety improvements of our region's railroad crossings.



Agree and Strongly Agree Responses: 70.2%

Disagree and Strongly Disagree: 7.4%

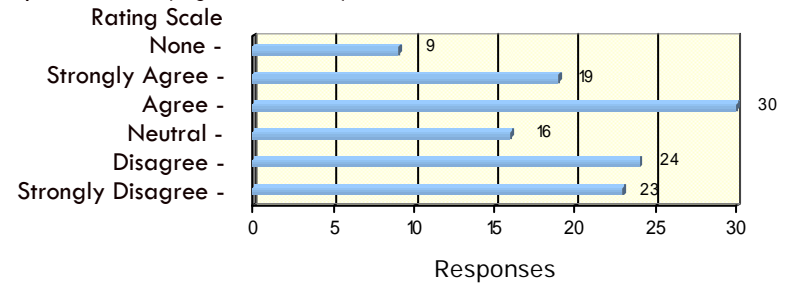
14-G) More resources need to be allocated towards improving the region's high accident intersections.



Agree and Strongly Agree Responses: 81.8%

Disagree and Strongly Disagree: 2.5%

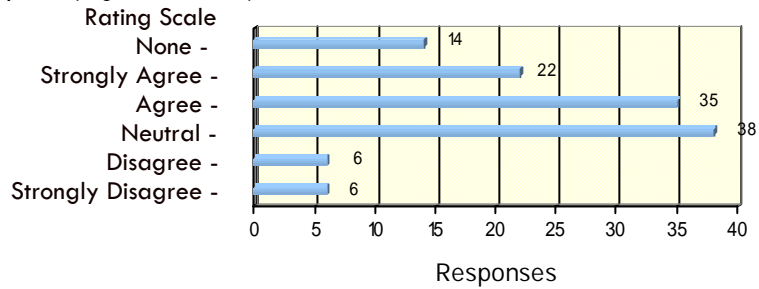
14-H) My neighborhood is adequately served by public transit (e.g. SPORTRAN).



Agree and Strongly Agree Responses: 40.5%

Disagree and Strongly Disagree: 38.8%

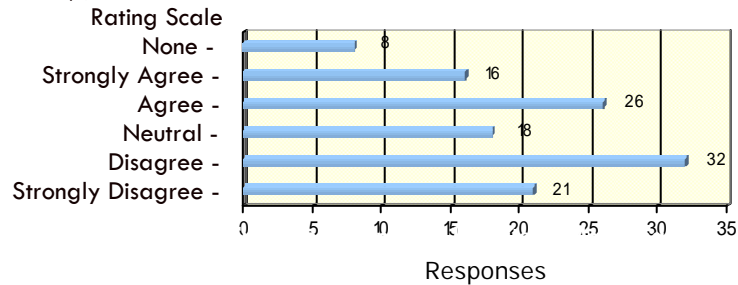
14-I) I feel safe using our public transit system (e.g. SPORTRAN).



Agree and Strongly Agree Responses: 47.1%

Disagree and Strongly Disagree: 9.9%

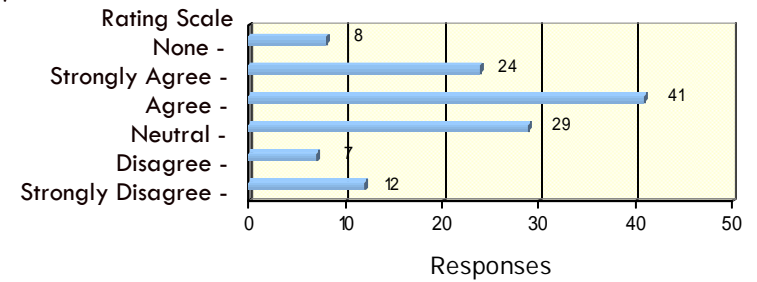
14-J) Our neighborhood is adequately served by properly maintained sidewalks and/or bike routes/paths.



Agree and Strongly Agree Responses: 34.7%

Disagree and Strongly Disagree: 43.8%

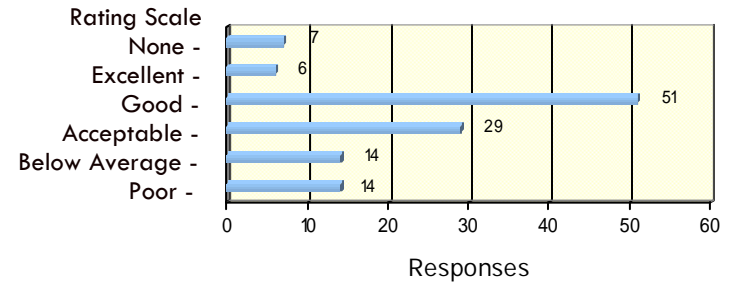
14-K) Northwest Louisiana's environment is a high priority when planning for major transportation improvement projects (e.g. I-49 North, I-69, Inner Loop Extension, etc...)



Agree and Strongly Agree Responses: 53.7%

Disagree and Strongly Disagree: 15.7%

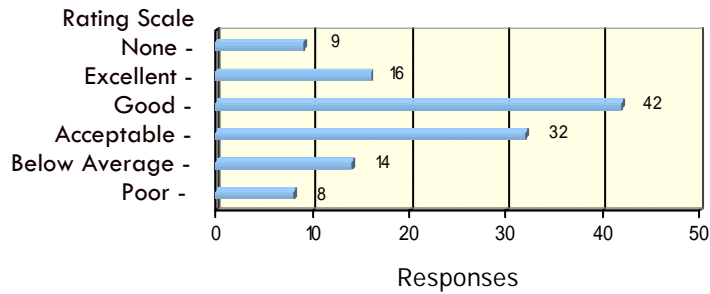
15-A) The overall condition of our region's roads



Acceptable Rating and Above Responses: 71.1%

Below Average and Poor Ratings: 23.1%

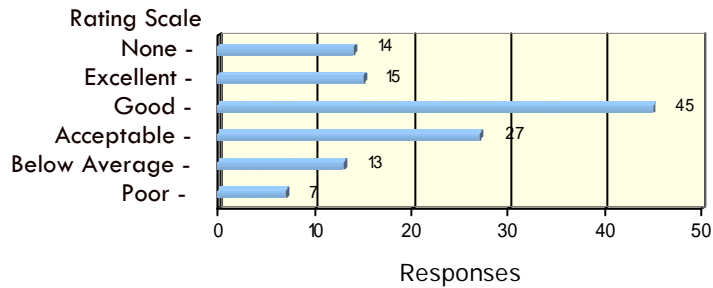
15-B) Transportation improvements and maintenance activities within my neighborhood or area of town



Acceptable Rating and Above Responses: 74.4%

Below Average and Poor Ratings: 18.2%

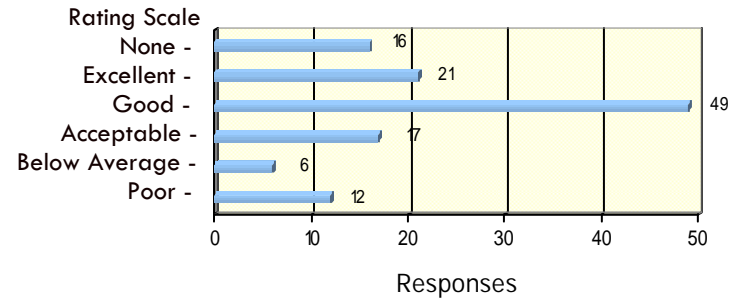
15-C) Your personal mobility options (e.g. auto, bus, van, bike, and walk) to travel throughout the region



Acceptable Rating and Above Responses: 71.9%

Below Average and Poor Ratings: 16.5%

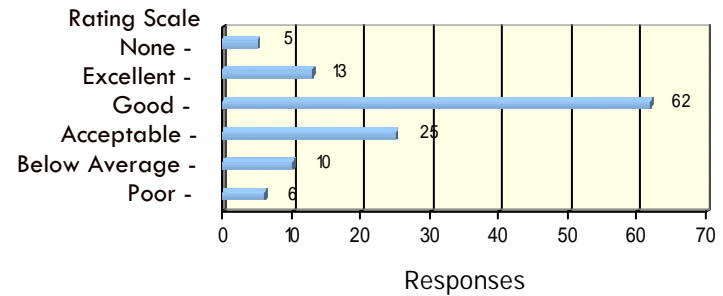
15-D) Public transit service (e.g. SPORTRAN)



Acceptable Rating and Above Responses: 71.9%

Below Average and Poor Ratings: 14.9%

15-E) Your overall travel experience(s) throughout northwest Louisiana

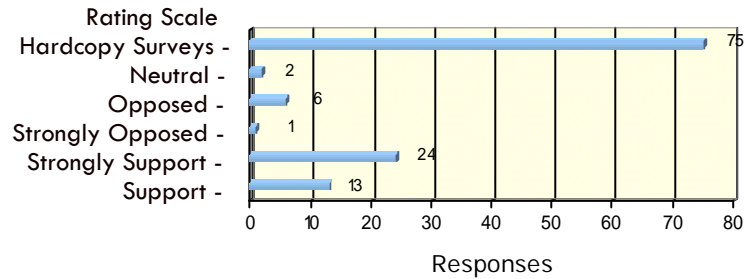


Acceptable Rating and Above Responses: 82.6%

Below Average and Poor Ratings: 13.2%

Survey Attitudinal Responses (online questions 16 – 19)

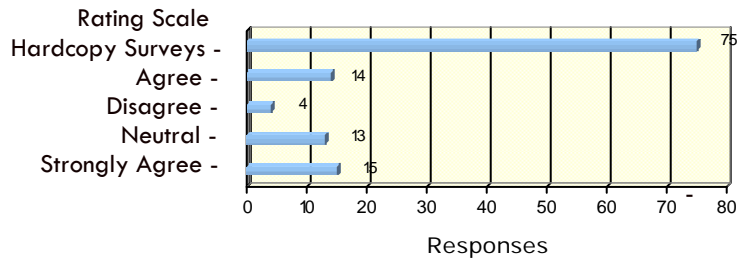
16) Would you support a local option gas tax to help fund major transportation improvements?



Support and Strongly Support Responses: 49.3%

Oppose and Strongly Oppose: 9.3%

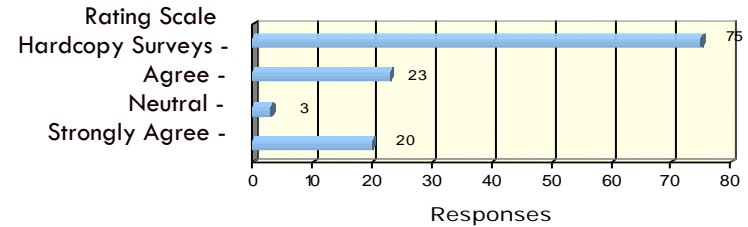
17) The region will benefit from new transit options like extended hours transit service (SPORTRAN's 7p-2a "Night Owl Service").



Agree and Strongly Agree Responses: 38.7%

Disagree and Strongly Disagree: 5.3%

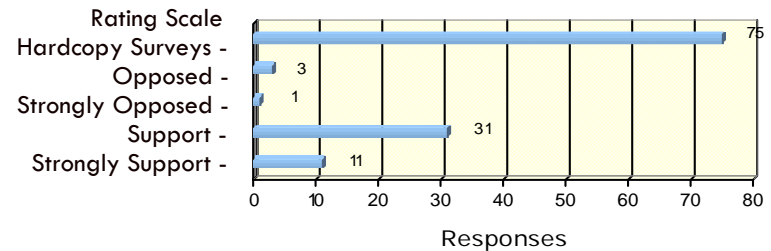
18) The Motorists Assistance Patrol (M.A.P.), which provides aid to motorists along our region's interstates (I-20, I-49, and I-220), is a good use of taxpayer money.



Agree and Strongly Agree Responses: 57.3%

Disagree and Strongly Disagree: 0.0%

19) Would you support the extension of I-49 North to the new I-220/I-49 North-South interchange (known as the I-49 Inner City Connector)?



Support and Strongly Support Responses: 56.0%

Oppose and Strongly Oppose: 5.3%

Who Responded? - Survey Demographics

The first ten demographic based questions (q.1 through q.10) produced findings that reasonably represented the population composition of the Planning Study Area (PSA). Approximately, two-thirds of the respondents (65.3%) work outside of the home, while 8.3% work from home. Responses by gender were nearly evenly split with 52.9% being male responses and 43.8% being female (4 did not respond). The respondent's age, question 6, yielded results that one would find along a "bell curve" within a normal distribution.

	<u>Responses</u>	<u>Percentage</u>
Under 16	0	0.0%
16 – 24	17	14.0%
25 – 39	32	26.4%
40 – 54	44	36.4%
55 – 64	17	14.0%
65+	9	7.4%

The racial breakout of the CFS's respondents provided an acceptable representation of the racial composition of the Planning Study Area (PSA). Black or African Americans accounted for 44.0% of the survey's respondents, while 52.0% of the respondents stated their race as White. 4.1% of the respondents have Spanish, Hispanic or Latino heritage. Other demographic characteristics of the CFS respondents included questions regarding their primary place of residence and their occupation. Most respondents (60.3%) resided in a "detached, single family home" ("Apartment" dwellers had the second highest response at 24.8%) and are employed in either a "Service" (12.4%) or "Professional" (10.7%) occupational category or consider themselves "Retired" (9.1%). The findings show that respondents felt that the occupation question's categories are too vague or are confusing since the "Other" occupational category was chosen (17.4%).

The respondents' demographics are largely driven by the method of survey distribution. Since a large portion (127 SPORTRAN / 221 hardcopy total), or 57.5%, of the hardcopy surveys were distributed on-site at SPORTRAN's Downtown Terminal the demographics will be skewed towards transit users.

Combined with the hardcopy survey response percentage of 24.9% for the 127 SPORTRAN surveys distributed, equates to approximately 32 transit patrons responded to our Community Feedback Survey (CFS). Further, a high number of transit patron responses bias the results for the question (q. 11) pertaining to their primary mode of travel used for commuting to work. The survey metrics show that 39 respondents (32.2%) utilize public transit (bus or van). Additionally Question 12, which pertains to home to work travel time, is influenced by the high percentage of transit respondents. A typical transit trip, via a transfer through or originating from the Downtown Terminal, will take more than 20 minutes to complete. Thus, transit users skew the home to work travel time responses towards the more than 20 minutes time categories and in many cases they don't respond to question 12 (i.e. high no response rate to the question: 27.3%).

Responses to Attitudinal and Opinion Questions Findings

CFS questions 14 through 19, provided for respondents' attitudes and opinions towards a myriad of regional transportation issues. Some questions elicited either strong positive or negative attitudes while most of the questions resulted in neutral or indifferent response.

One of the underlying premises of a Regional Long Range Transportation Plan is to identify system deficiencies, either perceived (e.g. surveys) or quantified (e.g. travel demand model). The attitudinal findings will focus on the issues survey respondents exhibited the highest negative response. The questions that brought forth the most negative responses, survey respondents selected "Disagree", "Strongly Disagree", "Opposed", or "Strongly Opposed", were found in the topic areas of neighborhood safety, as it pertains to walking or bicycling, and neighborhoods having transit service. The questions that provided the highest negative response, by percentage, are ranked below (negative shown in red/positive is green).

HIGHEST NEGATIVE RESPONSE QUESTIONS (1 THROUGH 5)

1) Q. 14-J: Our neighborhood is adequately served by properly maintained sidewalks and/or bike routes/paths.

Disagree and Strongly Disagree: 43.8% Positive Response: 34.7%

2) Q. 14-H: My neighborhood is adequately served by public transit (e.g. SPORTRAN).

Disagree and Strongly Disagree: 38.8% Positive Response: 40.5%

3) Q. 14-E: When I'm using my bicycle, I feel safe using our public streets/bike paths.

Disagree and Strongly Disagree: 24.8% Positive Response: 36.4%

4) Q. 14-D: When I'm out walking, I feel safe using our public streets/sidewalks.

Disagree and Strongly Disagree: 23.1% Positive Response: 51.2%

5) Q. 15-A: The overall condition of our region's roads.

Below Average and Poor: 23.1% Acceptable and Above: 71.1%

By ranking, the transportation issues and/or system improvements that the Long Range Transportation Plan needs to address come to the forefront. From this survey, the respondents identified the lack of, or deficient, bicycle/pedestrian paths and walkways as an area of concern. This is not only an infrastructure need, but to take it a step further, the respondents felt that this is a neighborhood safety, or quality of life, issue. It is obvious that many of the respondents do not feel safe bicycling, and walking to a lesser degree, along our public streets and sidewalks.

Respondents are also concerned about the provision of transit service. A large number of respondents (32 responses or 24.9%) originated from our public engagement efforts at SPORTRAN's Central Bus Terminal (downtown

Shreveport), it is interesting to see neighborhood transit service responses nearly split between those that are adequately served (40.5%) and those that feel they aren't served (38.8%). This may be an instance where online respondents, who live within the jurisdictional boundaries of Shreveport and Bossier City, aren't aware of the nearest SPORTRAN fixed-route, bus service (within ¼ mile walking distance) or they reside in one of the rural communities outside SPORTRAN's service area. In the future, SPORTRAN may need to embark upon a more visible public information campaign in order to reduce the public's misperception and confusion regarding this critical alternative mode of travel.

The only rating based question to elicit a significant negative response dealt with the respondents' evaluation of the overall condition of the region's roads (Question 15-A). The wording of this question, within this survey as well as other surveys, tends to produce polarized findings. In our region, nearly one respondent out of four considers our roads to be in below average or worse condition.

OTHER NOTABLE FINDINGS

Survey respondents agree (55% to 65%) that they experience little delay when traveling and if they do encounter delay it is attributable to non-recurring congestion (i.e. accidents or train crossings). Further, respondents feel safe while using our public roadways (65%) and transit system (SPORTRAN – 47%).

Feedback concerning general attitudes towards various aspects of our transportation system, except for the previously discussed road condition question, produced decidedly positive ratings. From local maintenance issues to personal mobility options to the respondent's overall travel experience, respondents returned an "Acceptable and Above Rating" on 71% of their surveys.

Attitudinal responses to specific regional transportation issues (Questions 16 – 19), resulted in across the board support for all the issues presented. Quite surprising were the survey results from question 18, none of the respondents (0.0%) disagreed with the use of tax payers' money to fund the Motorist Assistance Patrol (M.A.P.) program. Survey respondents overwhelmingly supported the issues presented below (ranked order of support).

Respondents Support of Specific Regional Transportation Issues

1) Q. 18: The Motorists Assistance Patrol (M.A.P.), which provides aid to motorists along our region's interstates (I-20, I-49, and I-220), is a good use of taxpayer money.

Agree and Strongly Agree: 57.3% Negative Response: 0.0%

2) Q. 19: Would you support the extension of I-49 North to the new I-220/I-49 North-South interchange (known as the I-49 Inner City Connector)?

Strongly Support and Support: 56.0% Negative Response: 5.3%

3) Q. 16: Would you support a local option gas tax to help fund major transportation improvements?

Strongly Support and Support: 49.3% Negative Response: 9.3%

4) Q. 17: The region will benefit from new transit options like extended hours transit service (SPORTRAN's 7p-2a "Night Owl Service").

Agree and Strongly Agree: 38.7% Negative Response: 5.3%

CFS Comments Summary

Since much of our public engagement (e.g. hardcopy survey distribution) took place at SPORTRAN's Central Bus Terminal (downtown Shreveport), we received many comments pertaining to SPORTRAN's service provision. The successful implementation of SPORTRAN's extended hours, fixed route bus service (7pm – 2am) addresses many of the concerns expressed through the survey. One of the primary concerns voiced by transit patrons was the lack of bus service during the evening hours. In the interim period since the hardcopy surveys were distributed, SPORTRAN has gone operational with their Extended Hours Service ("Night Owl Service") and from their fare-box data have found that that evening service patronage is equal to, or greater

than in some months, SPORTRAN's Sunday bus service. It is anticipated this ridership trend will continue into the foreseeable future.

Comments regarding the road network ranged from location specific maintenance requests to regionally significant, new bridge and interstate improvement projects (e.g. I-20, I-49 Inner City Connector, and I-69). Typically, the location specific improvement comments pertain to quality of life (e.g. neighborhood streets/sidewalks/bike paths) issues as opposed to the comments regarding the need for large, regionally significant, infrastructure improvements that focus more on congestion mitigation, safety, or economic growth concerns.

CFS Findings in the Formation of Overall Plan Goals and Objectives (Section 4.0)

The public's input and feedback is critical in the development of Long Range Transportation Plan goals and objectives that represent the far reaching needs of Northwest Louisiana's residents. From the findings of the Community Feedback Survey (CFS), regional transportation based needs are identified.

CFS Identified Transportation System Needs (Northwest Louisiana)

- Congestion is localized along corridor segments, signalized intersections and Red River bridge crossings
- Improvements are needed for infrastructure that supports alternative modes of travel (bicycle and pedestrian)
- There are populations that are not served by public transit
- Higher priority needs to be given to transportation improvement projects that encourage economic growth and development
- Improve the safety features and reduce the delay at poorly performing intersections/at-grade rail crossings

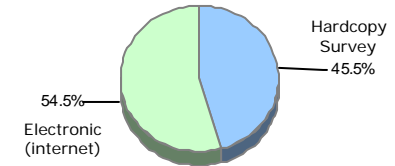
From the identified system needs, long range plan goals are formulated so as to address the primary cause of these transportation system deficiencies.

Further, for each goal, quantifiable objectives, which are specific, measurable, realistic and time-bound, are developed in order to successfully implement the recommended transportation improvements as per goal. Section 4.0 establishes the plan's goals and objectives from the public's perceived transportation needs identified through the Community Feedback Survey (CFS) effort, as well as, the system deficiencies found through contributing transportation planning analyses (e.g. Regional Travel Demand Model (RTDM), Congestion Management Process (CMP), etc.).

Community Feedback Survey Comments Received

Respondents Commenting: 65

Surveys Received By Media



1) More sidewalks *Anonymous*
2) More biking options
3) Law banning cell phone use in cars

1) Passenger train service (Amtrack like service). *Anonymous*
2) Rail service between North LA (Shreveport) and New Orleans
3) Better air line passenger service from Shreveport Regional (National/International)

1) OUR STREETS AND HWYS NEED TO BE KEPT FREE OF DEBRIS THAT CAN CAUSE ACCIDENTS. *BARBARA SHREVEPORT*
2) DOTD NEED TO PERHAPS USE BETTER MATERIALS SO THAT THE STREETS DON'T BREAKDOWN SO MUCH.
3) PEOPLE THAT DRIVE BIG RIGS (18 WHEELERS) SHOULD BE MORE CAREFUL TO NOT CAUSE ACCIDENTS OR DEATHS.

1) more regional transit *Anonymous*
2) widening of linwood south of BK Ind. Loop
3) frontage roads along I-49 from Southern Loop to the Inner Loop

1) Streets and sidewalks need to be improved especially for the handicapped and elderly *Anonymous*

1) More understanding of passenger disabilities by some bus drivers *Anonymous*

1) replace the jimie davis bridge and widen the highway *MARY BOSSIER CITY*

1) widen linwood to 4 lanes and improve the intersection at BK loop *Anonymous*

1) fix I-20 between LA 157 and bossier city *Anonymous*

1) repair and install MLK neighborhood sidewalks and repair the streets *Anonymous*

1) connect neighborhoods to the Clyde Fant walk/bike path - same on the bossier side *Anonymous*

1) Attitudes of some of the bus drivers are terrible, when they are late they are flying like an airplane *Anonymous*

1) It would be nice if SporTran could run all night *Anonymous*

1) The night time bus needs to run the same route as it does during the daytime. I work 4p-12a and I have to walk 4x longer to get to the bus. *Mary Shreveport*

1) Night service bus routes need to be the same as daytime bus routes *Joseph Shreveport*

1) More busses for Bossier; more sidewalks laid where there isn't any; sidewalks repaired; roads/bridges repaired especially on Old Minden/E. Texas St and down Hamilton; burnt out *Anonymous*

1) Everything is just fine *Anonymous*

1) I would like to have night services on Sunday also *Anonymous*

1) Continuing night service - Expand day and night service as needed by area *Anonymous*

1) I like SporTran busses; that all I will right; I like the way they run *Anonymous*

1) They can provide two busses at night on each line and leave the night buses like the daytime buses *Anonymous*

1) Anyone Thank You *Anonymous*

1) Excellent *Anonymous*

1) The night route is not safe because you have to walk 1 mile to get back and forth from the bus stop *Anonymous*

1) Be on time and honor the handicap; baby be out of the carriage when bus arrives *Anonymous*

1) Update all the buses; let the buses run all night on Sunday; run more buses on the night shift *Anonymous*

1) Better bus routes and times for day and night services *Anonymous*

1) To run 24hrs. M-F *Anonymous*

1) Complete I-49 *Beth Shreveport*
2) Complete La 3132 to the Port
3) Amtrak rail service

1) More 4 lane highways in rural areas *Anonymous*

1) Complete I-49 *Anonymous*

1) Completion of I-49 *Anonymous*

1) With the growth of Bossier City, especially along Airline, improvements will be needed to take care of the additional traffic. I'm interested in I-49 & I-69, and will be happy to see I-49

Anonymous

1) To improve the sidewalk, and faster response to broken down roads; where the buses travel

Anonymous

1) SporTran

Anonymous

1) SPORTRAN - to go down all the main street in all parts of Shreveport and Bossier

Anonymous

1) Finish the Shreveport-Barkdale Bridge!

Anonymous

1) dangerous intersections need work (I-20 near Spring St; LSUS @ Youree Dr); heavy congestion problems (J. Davis Br. And I-20 ramp near Bossier Boardwalk)

Anonymous

1) Improve Flournoy Lucas before opening 3132 - It is very substandard, not prepared for 18 wheelers, etc.

Jean Shreveport

1) Red River bridge between downtown Shreveport/Bossier City; More walking/jogging paths; I-49 North; Safer access to I-220 West from Red River Chevy (Boardwalk)

Anonymous

2)) - dangerous to merge onto I-20 at this point

1) six lane airline drive in Bossier City

Anonymous

2) Airline and E Texas intersection improvement

1) More transit options in addition to sportran

Anonymous

2) A bicycle friendly downtown and city core (possibly bike sharing)

3) More pedestrian friendly neighborhoods

1) 6 to 8 lane highway

Anonymous

2) fewer potholes

3) more sidewalks

1) fix drainage and rough roads especially along Youree *Anonymous*

1) need more transit options - bike racks on the bus *Anonymous*

1) complete I-49 north to Arkansas *Anonymous*

1) Complete I-49 North; Construct a new 4lane Jimmie Davis bridge with ped/bike facility; regional traffic signal coordination/improvements *Anonymous*

1) construct I-49 to Ark *Anonymous*

1) sportran needs to run at night *Anonymous*

1) less traffic along Bert Kouns and Youree *Anonymous*

1) build interstate 49 *Anonymous*

1) construct another base access (extend I220 south to the base) - this will relieve congestion at the other gates *Anonymous*

1) need better roads in haughton - to much traffic *Erlene Haughton*

1) we need to build the inner city portion of I-49 immediately *Anonymous*

1) add 2 lanes and fix la 173 *Anonymous*

1) we need a new jimie davis bridge and improve roadways leading up to the new bridge *Anonymous*

1) repair sidewalks and roads around the neighborhood schools of Bossier-make them safer for school age children *Anonymous*

1) make school crossing zones safer

Anonymous

1) develop new walking and biking connections from our neighborhoods to existing walk/bike paths

Anonymous

1) finish the repairs to I20 around haughton asap

Robert Haughton

1) widen Swan Lake Rd heading into Bossier City

Anonymous

1) tear down the J Davis bridge and construct a new 4 lane bridge

Anonymous

1) improve the I20 bridge downtown

Anonymous

1) I support extending swan lake road north to Ia 162

Anonymous

1) start building 49 and the inner city portion of I-49

Anonymous

NLCOG "Mapping the Way - 2030" Long Range Transportation Plan Survey

*** Your opinion can make a difference! ***

This survey collects community feedback to be utilized within NLCOG's Long Range Transportation Plan update effort... "Mapping the Way - 2030". The current Long Range Transportation Plan for Northwest Louisiana is available through our website www.nwlainfo.com. Your feedback is also encouraged at the various public information displays located throughout the Northwest Louisiana region. Contact the or 318.841.5957 for more information.

Please note, your information will be kept confidential, and will only be used for the purposes of this study. Individual responses will not publically published or sold to third party sources.

1) What zip code do you live in?

2) Where is your primary place of work?

- Work Outside of Home
 Work from Home
 Not Applicable

3) If you work outside of your home, please provide the zip code of your place of work (leave blank if you don't know)

4) Have you ever heard of Northwest Louisiana Council of Governments (NLCOG)?

- Yes
 No

5) What is your gender?

- Male
 Female

6) What is your age?

- Under 16
 16 - 24
 25 - 39
 40 - 54
 55 - 64
 65+

7) What is your race?

- White
 Black or African American
 American Indian or Alaskan Native
 Asian
 Pacific Islander
 Other or More than one

Community Feedback
Survey – Page 2 of 4

8) Are you Spanish/Hispanic/Latino?

- Yes
 No
-

9) Which of the following best describes your primary place of residence?

- Detached Single Family Home
 Attached Single Family Home (for example - townhomes)
 Condominium
 Apartment
 Mobile Home
 Group Home (for example - dormitories, nursing homes)
-

10) Which of the following best describes your occupation?

- Management
 Professional
 Service
 Sales
 Office Administration
 Construction/ Maintenance
 Transportation
 Farming/ Fishing/ Forestry
 Government/ Public Service
 Student
 Homemaker
 Retired
 Other
-

11) Which of the following best describes your primary mode for commuting to work?

- Public Transit (bus or van)
 Taxi
 Automotive vehicle with driver only
 Automotive vehicle with multiple passengers (car pool)
 Bicycle
 Walk
-

12) How many minutes does it take you to get home from work?

- Less than 10 minutes
 10 - 20 minutes
 20 - 30 minutes
 30 - 45 minutes
 More than 45 minutes
-

13) In a typical week, how many trips do you make to the destinations listed below (If none, input a "0"):

- Place of work
 Retail Store/Grocery Store
 School/Educational Institution
 Park/Bike Path/Recreational Area
 Casino/Gaming/Horse Racing
 Hospital/Doctors Office/Medical Service Providers

14) Please rate your responses to the following questions regarding travel and transportation issues. Please use the following scale to rate the statements below:

- 1 - Strongly Agree
- 2 - Agree
- 3 - Neutral
- 4 - Disagree
- 5 - Strongly Disagree

Within Shreveport-Bossier City, I can reach my destination without experiencing too much delay (traffic congestion).	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
If I do experience traffic/trip delay, it is usually as a result of an accident or train crossing.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
When I drive, I feel safe using our public streets.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
When I'm out walking, I feel safe using our public streets/sidewalks.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
When I'm using my bicycle, I feel safe using our public streets/bike paths.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
More resources need to be allocated for safety improvements of our region's railroad crossings.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
More resources need to be allocated towards improving the region's high accident intersections.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
My neighborhood is adequately served by public transit (e.g. SPORTRAN).	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
I feel safe using our public transit system (e.g. SPORTRAN).	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Our neighborhood is adequately served by properly maintained sidewalks and/or bike routes/paths.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Northwest Louisiana's environment is a high priority when planning for major transportation improvement projects (e.g. I-49 North, I-69, Inner Loop Extension, etc...)	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

If you have any other comments or information regarding these statements, please write it below.

15) Please rate your responses to the following issues. Note: The intent of this section is to determine the public's perception of our transportation system within the northwest Louisiana region. Please use the following scale to rate transportation facilities / services and your travel experiences below:

- 1 - Excellent
- 2 - Good
- 3 - Acceptable
- 4 - Below Average
- 5 - Poor

The overall condition of our region's roads	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Transportation improvements and maintenance activities within my neighborhood or area of town	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Your personal mobility options (e.g. auto, bus, van, bike, and walk) to travel throughout the region	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Public transit service (e.g. SPORTRAN)	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Your overall travel experience(s) throughout northwest Louisiana	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

If you have any other comments or information regarding these ratings, please write it below.

16) Would you support a local option gas tax to help fund major transportation improvements? (e.g. I-49 North, I-69, Jimmie Davis Bridge, or public transit services)

(Note: A local option gas tax would provide local governments the ability to impose an additional \$0.01 to \$0.05 cent tax upon each gallon of gas sold.)

Strongly Support Support Don't Care Opposed Strongly Opposed

17) The region will benefit from new transit options like extended hours transit service (SPORTRAN's proposed 7p-2a "Night Owl Service").

Strongly Agree Agree Neutral Disagree Strongly Disagree Not aware of any transit options

18) The Motorists Assistance Patrol (M.A.P.), which provides aid to motorists along our region's interstates (I-20, I-49, and I-220), is a good use of taxpayer money.

Strongly Agree Agree Neutral Disagree Strongly Disagree Not familiar with the M.A.P.

19) Would you support the extension of I-49 to the new I-220/I-49 North-South interchange (referred to as the Inner City Section - proceeds North from its current terminus at Murphy St. and will provide for a continuous, North to South, interstate facility through our region)?

Strongly Support Support Don't Care Opposed Strongly Opposed

20) What transportation improvements would you like to see our region undertake?

1.

2.

3.

21) If you have any other comments concerning the "Mapping the Way - 2030" Long Range Transportation Plan effort or other transportation concerns, please write it below.

1.

2.

22) If you would like to be involved (e.g. citizens steering committee) in Northwest Louisiana's Long Range Transportation Plan effort, please complete the contact information below (Not interested - leave blank):

First Name	<input type="text"/>	Last Name	<input type="text"/>
Organization	<input type="text"/>		
Address	<input type="text"/>		
City	<input type="text"/>	State	<input type="text"/>
ZIP/Postal Code	<input type="text"/>	Country	<input type="text"/>
Phone	<input type="text"/>	Fax	<input type="text"/>
Email	<input type="text"/>		

Hardcopy Survey Response

Submit Survey

APPENDIX B

REGIONAL TRAVEL DEMAND MODEL STRUCTURE, SCENARIOS, AND FINDINGS

MPO's Transportation Planning Requirements and Regional Travel Demand Model (RTDM) Overview

The Northwest Louisiana Council of Governments (NLCOG) is the designated Metropolitan Planning Organization (MPO) for transportation planning in Northwest Louisiana. Travel demand forecasts provide the basis for the region's transportation plans and must reflect the most recent planning assumptions. The study process significantly included technical and policy level participants from the Shreveport—Bossier City region. This group provided:



- ▶ Input into the establishment of improvement goals
- ▶ Identification of growth areas and policy measures to assure future mobility as well as in the prioritization of needs
- ▶ The determination of projects to address identified deficiencies

Other study activities included the provision of accurate data for traffic, land use, and other variables that were used as a basis for the analysis.

The analysis and study efforts thoroughly examined the region's transportation system to determine deficiencies and bottlenecks, recommended a plan of improvements, facilitated prioritization of the improvement projects with area decision makers and identified long-range strategies to assure mobility.

RTDM Development Background

The basis for many of the investigations for the study was the development of an effective, properly validated travel demand model and an effective combination of the model's results with sound transportation planning. The model was developed within the TransCAD travel demand modeling software. The forecasting effort must be useful in examining and communicating model results in a concise and rational manner. Likewise, the process must produce reasonable and defensible forecasts for each alternative under consideration.

Model Development

A custom interface, developed through the TransCAD travel demand model software, facilitates the development and management of scenarios representing model horizon years and the capability to quickly and efficiently model proposed projects. TransCAD's unique

graphic abilities assist transportation decision makers (such as the MPO's Transportation Policy Committee), in comprehending projected mobility needs for the area and in understanding the conditions that are causing the problems.

The modeling effort is further improved through the use of the most current data available. All traffic information used in the model has been developed through recently obtained traffic counts or updated traffic information from previous counting activities. Demographic data is based upon the 2000 US Census. Origins and destinations of motorists entering and exiting the area were obtained from travel surveys recently conducted for the plan update. The combination of a state-of-the-art travel model and an extensive use of current traffic and demographic data offer the most accurate projection methods available to identify and forecast regional transportation needs, as well as, examine proposed solutions.

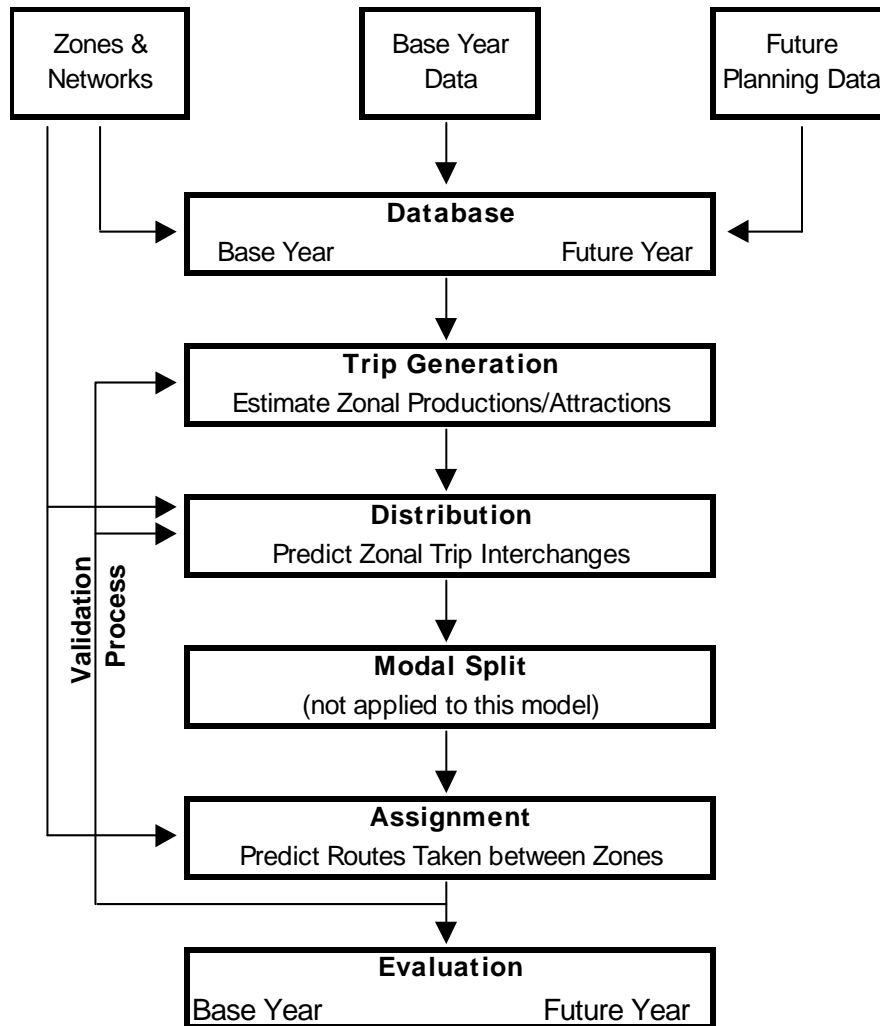
Transportation Network Modeling

Travel demand modeling is a complex relationship between identified demographics, behavioral patterns and certain assumptions regarding the future. The travel demand model requires two primary geographic data sets for input. These data sets include the transportation network and the Traffic Analysis Zones (TAZ). The two basic inputs come from traffic flow and geometric data, which is associated with the transportation network, and the socio-economic data, which is associated with the TAZs.

To accurately model the road network, a series of interconnected links (lines), connected through nodes (begin and end points), are created within TransCAD. These link-node combinations form the shape of the road feature that is being modeled. Traffic flow and geometric characteristics are tied to the modeled links.

Another primary geographic feature is the Traffic Analysis Zone (TAZ). TAZs serve the purpose of organizing socio-economic data by homogenous geographic areas. TAZs are analogous to neighborhoods or U.S. Census Block Group geography. It is from the TAZ where the Trip Generation component, the first step in the Four—Step Urban Transportation Modeling Process, is initiated. Figure B.1, outlines the basic components of the Four-Step Urban Transportation Modeling Process.

Figure B.1: Four-Step Urban Transportation Modeling Process



Identify Study Area / Base Year Model

A study area is defined in order to determine the extent of the modeling effort, as well as, its data requirements. The modeling domain will mirror the MPO's Planning Study Area (PSA) boundary. For this modeling effort, both Caddo and Bossier Parishes are identified as the modeling domain. According to the 2000 Census, the population of the modeling domain is 350,000.

The existing travel demand forecasting model was developed for the base year 2000. Data used for model calibration and validation include Census 2000, traffic count data collected in 2000, an Origin-Destination Survey for external stations, and regional GIS centerline data. This resulted in additional roadways being added to the network and the TAZ structure being modified. Since the previous area boundary had changed, new external stations (the points where major highways or arterials cross the boundary) had to be selected and additional data collected.

Figure B.2: Planning Study Area with External Stations Locations

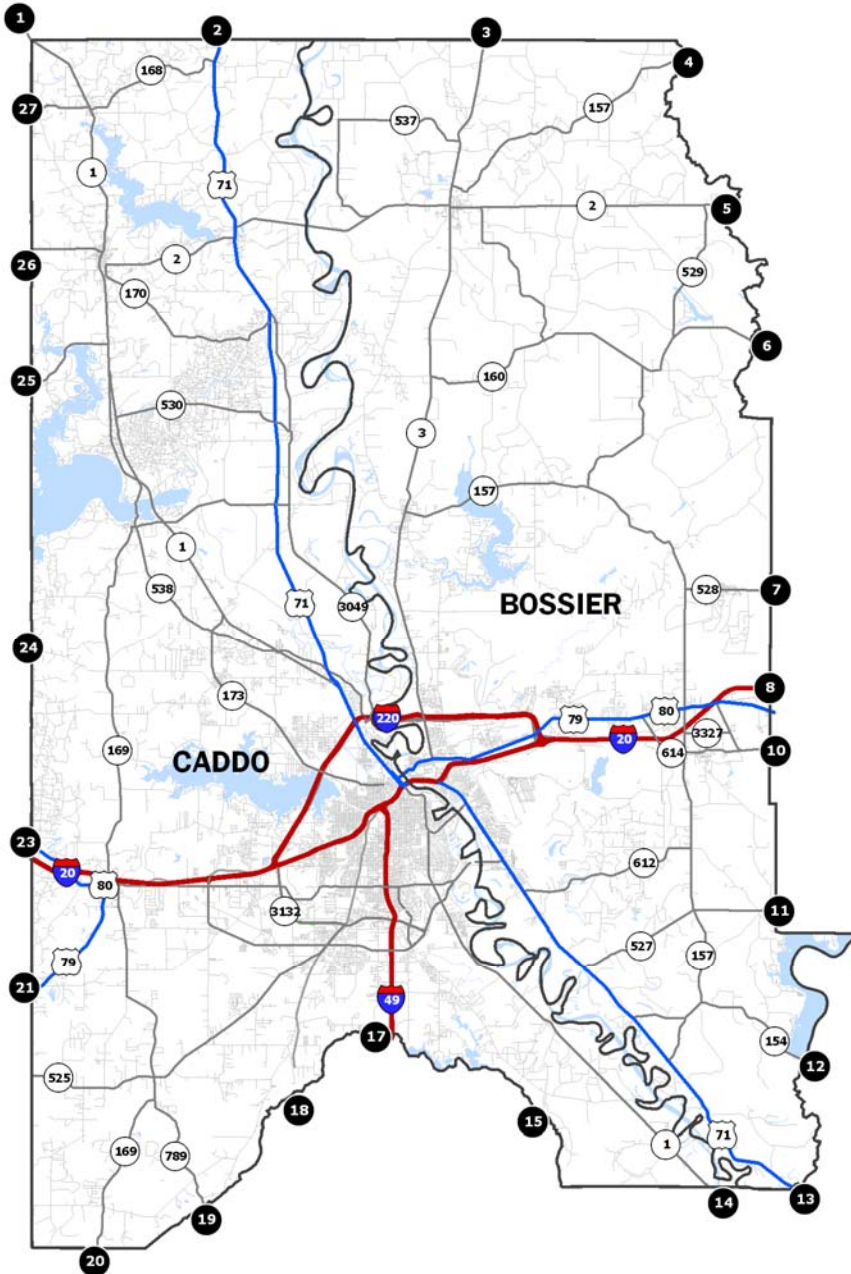


Table B.1 provides a list of the 27 external survey stations, the respective parish, number of lanes and 1999 average daily traffic (ADT) for each location.

Table B.1: Average Daily Traffic (ADT) Counts by External Station

Sta.	Location	Parish	Lns	1999 ADT
1	SH 1 North – at the state line	Caddo	2	2,200
2	US 71 North – at the state line	Caddo	2	3,650
3	SH 3 North – at the state line	Bossier	2	3,830
4	SH 157 NE – at Webster Par. line	Bossier	2	1,400
5	SH 2 East – at Webster Par. line	Bossier	2	1,750
6	SH 160 East – at Webster Par. line	Bossier	2	700
7	SH 528 East – at Webster Par. line	Bossier	2	430
8	IH 20 East – at Webster Par. line	Bossier	4	26,300
9	US 79/80 East – at Webster Par. line	Bossier	4	2,500
10	SH 164 East – at Webster Par. line	Bossier	2	3,920
11	SH 527 East – at Webster Par. line	Bossier	2	1,400
12	SH 154 East – at the Bienville Par. line	Bossier	2	2,370
13	US 71 South – North of SH 515	Bossier	2	2,380
14	SH 1 South – at the Bienville Par. line	Caddo	2	1,220
15	SH 175 South – at the DeSoto Par. line	Caddo	2	630
16	IH 49 South – at the DeSoto Par. line	Caddo	4	19,000
17	Linwood Ave. S. – at the DeSoto Par. line	Caddo	2	2,800
18	US 171 South – at the DeSoto Par. line	Caddo	2	7,280
19	SH 789 South – at the DeSoto Par. line	Caddo	2	920
20	SH 169 South – at the DeSoto Par. line	Caddo	2	420
21	US 79 West – at the state line	Caddo	2	8,600
22	IH 20 West – at the state line	Caddo	4	28,700
23	US 79/80 – at the state line	Caddo	4	3,300
24	County Road connecting Texas FM 1999	Caddo	2	900
25	SH 2 connecting SH 49 at state line	Caddo	2	1,470
26	County Rd W. connecting Texas FM 125	Caddo	2	700
27	SH 168 West – at the state line	Caddo	2	50

Source: Parsons Brinckerhoff, 2000

Transportation Network Data

Traffic Flow Data

The sequence of technical steps aimed at refining and updating the travel forecasting procedures began with review of the Comprehensive Plans for Shreveport and Bossier City and a review of the NLCOG Long Range Transportation Plan. Traffic data for state highways was obtained from the LaDOTD and reviewed. Traffic count information was obtained from the City of Shreveport and the City of Bossier City. Supplement counts were conducted by NTB Associates in order to verify and update previously collected traffic data and to supply additional information as needed to update the plan. Traffic counts were conducted at all twenty-seven (27) external stations locations. Travel survey interviews were performed at selected external stations and the data were used to determine travel patterns. Table B.2, summarizes the results of the external station, travel survey

Traffic Count Data

Study activities were conducted to assure accurate data for traffic, land use, and other variables to be used as a basis for the analysis. During the study, traffic count information was obtained from LaDOTD as well as local governments in the study area. All counts were reviewed by an experienced traffic technician from the consulting team for accuracy and were updated to reflect current use. Areas in which traffic counts were questionable or missing were noted and supplementary 24-hour counts were conducted. Approximately,

175 additional traffic counts were performed. Demographic information was developed from data obtained from the 2000 census and the Louisiana Department of Labor. An external travel survey to account for trips through the two-parish area, as well as, into and out of the area was conducted as part of the study. Table 3 summarizes the external station count information. Twenty-seven locations were surveyed to obtain this information.

Travel Times

Link speed used in the Trip Distribution model and initial iteration of Traffic Assignment represents a free-flow condition. The free-flow speeds were assigned to the links based on the functional classification of the facility. Travel times, in minutes, were then derived from the speeds by dividing the length in miles by the speeds in miles per hour and multiplying by a factor of 60 minutes per hour. All link attributes were stored in the table associated with the geographic database. Therefore, a speed lookup table was not required.

Network Geometric Data

The Long Range Plan Development Team traveled the roadways, designated in the model network, to confirm the functional classification of the roadway, the number of lanes, whether or not the roadway was divided or undivided, the posted speed limit or limits (for various sections), and locations for centroid connectors.

Table B.2: Station Summary of External-Through and External-Local Trips

Station No.	Zone No.	Location	Passenger Vehicle Surveys	Through	Local	Commercial Vehicle Surveys	Through	Local
1	515	SH 1 North – at the state line	263	13	250	26	12	14
2	516	US 71 North – at the state line	229	36	193	30	7	23
3	517	SH 3 North – at the state line	148	11	137	97	27	70
4	518	SH 157 NE – at Webster Parish line	213	9	204	10	4	6
5	519	SH 2 East – at Webster Parish line	178	5	173	56	13	43
6	520	SH 160 East – at Webster Parish line	Count only	Count only	Count only	Count only	Count only	Count only
7	521	SH 528 East – at Webster Parish line	Count only	Count only	Count only	Count only	Count only	Count only
8	522	IH 20 East – at Webster Parish line	304	47	257	55	22	33
9	523	US 79/80 East – at Webster Parish line	285	24	261	25	0	25
10	524	SH 164 East – at Webster Parish line	324	12	312	24	3	21
11	525	SH 527 East – at Webster Parish line	265	19	246	2	0	2
12	526	SH 154 East – at the Bienville Parish line	297	2	295	12	0	12
13	527	US 71 South – North of SH 515	267	10	257	46	7	39
14	528	SH 1 South – at the Bienville Parish line	186	2	184	15	2	13
15	529	SH 175 South – at the DeSoto Parish line	Count only	Count only	Count only	Count only	Count only	Count only
16	530	IH 49 South – at the DeSoto Parish line	462	54	408	45	19	26
17	531	Linwood Ave. South – at the DeSoto Parish line	Count only	Count only	Count only	Count only	Count only	Count only
18	532	US 171 South – at the DeSoto Parish line	357	8	349	22	3	19
19	533	SH 789 South – at the DeSoto Parish line	115	6	109	21	7	13
20	534	SH 169 South – at the DeSoto Parish line	40	4	36	11	10	1
21	535	US 79 West – at the state line	250	25	225	79	16	63
22	536	IH 20 West – at the state line	406	66	340	33	17	16
23	537	US 79/80 at the state line	136	4	132	105	34	71
24	538	County road connecting Texas FM 1999	Count only	Count only	Count only	Count only	Count only	Count only
25	539	SH 2 connecting SH 49 at the state line	198	13	185	31	13	18
26	540	County Road W connecting Texas FM 125	Count only	Count only	Count only	Count only	Count only	Count only
27	541	SH 168 West – at the state line	Count only	Count only	Count only	Count only	Count only	Count only

Source: Parsons Brinckerhoff, 2000

Link Capacity

Roadway capacity heavily influences the results of the Traffic Assignment. The link capacities used in the NLCOG model relied upon functional classification of roadways and other characteristics such as access control. The capacities were developed using guidance from the *Highway Capacity Manual* (HCM) for prevailing Level of Service (LOS) E traffic flow. The initial capacities were hourly and converted to daily by applying a factor of 10.

Supply Factors

Highway supply characteristics that were required by the travel forecasting procedures include estimation of the highway level of service E (LOS E) (i.e., travel speed or time) and daily capacity.

Socio-Economic Data

Zone System (TAZ) Definition

The initial TAZ structure for the Shreveport-Bossier City area was based upon the 1990 model (TRANPLAN). This structure was modified to include new areas in Caddo Parish and Bossier Parish that were not in the original study boundaries.

Acquire Base Year Data

The development of the travel demand model required an update of the area's socio-economic database. Base year socio-economic variables such as zonal (small geographic units) population, households, income and employment was the primary database used to estimate travel conditions. Changes over time at both the regional and zonal level for these variables provide the impetus for predicting future travel conditions. The accuracy of traffic forecasts was very dependent upon the quality of socio-economic projections. Base year Socio-Economic data is based on information available from the US Census Bureau 2000 Census and the Louisiana Department of Labor.

The Delphi method was used to obtain and apply the opinions of a group of experts known as the Delphi Committee. The participants, who represent a cross section of transportation interests in the Shreveport/Bossier City area, are listed as the Delphi Committee shown in section 4.0. Panel members used their work experience and in-depth knowledge of local trends and events to develop the most probable future growth scenario. The members participated in an iterative process that furnished predictions for socio-economic variables for twelve sub-regions of the study area. The resulting information was incorporated in the travel demand model in order to influence forecasts of future travel need for the region.

Travel Forecasting Procedures

The Four-Step Urban Transportation Modeling Process

The travel demand model is fashioned after the four-step urban transportation modeling process, as depicted in Figure B.1. This modeling structure consists of sequential sub-processes of Trip Generation, Trip Distribution, Mode Split, and Traffic Assignment. The model does not include Mode Split because auto/vehicular traffic is the predominant mode of travel (a mode split model is necessary particularly in communities where transit is in extensive use or bicycle/pedestrian travel is significant). Because of the amount and level of technical detail associated with each step, this document will briefly summarize the primary function of each sub-process.

A general advantage of the four-step modeling process is its relative simplicity in concept and application. In Trip Generation, the study area's demographic and employment information is used to estimate (or forecast for future scenarios) the trip productions and attractions for each zone in vehicle-trips by trip purpose. Trip generation estimates are developed for six trip purposes:

- Home-based work person trips (HBW);
- Home-based non-work person trips (HBNW);
- Non-home-based person trips (NHB);
- Truck and taxi vehicle trips (TRTX);
- External-Internal vehicle trips (EI);
- External-External (through vehicle trips) (EE).

With the following sub-process, Trip Distribution, the productions and attractions are distributed among zone pairs (i.e. determining that

some number productions in a particular zone correspond to a number of attractions in another zone). In Traffic Assignment, the routes of each of the trips are determined and from these figures, the totals are "loaded" (assigned) onto each link of the roadway network.

The model does not distinguish between person trips and vehicle trips. Normally the model trips are considered to be vehicle trips and, if necessary, the person trips can be determined by applying vehicle occupancy rate to the number of vehicle trips.

An inherent deficiency of this process is its linearity as it pertains to trip making behavior. For example, a person's decision to make a trip or not is not as simple as the sequential process from Trip Generation to Traffic Assignment implies. The reality is that the choice whether or not to make a trip (the Trip Generation step) can be influenced by factors accounted for in the model in later steps, for instance route and travel time (Traffic Assignment stage) and the distance of the destination (Trip Distribution). Despite this limitation, the four-step urban transportation modeling process remains the preferred modeling approach due to its relative simplicity and because it has been shown to reliably forecast traffic for communities in a cost effective manner.

Model Calibration and Adjustment

The process of calibration is undertaken in order to have the base model reproduce existing conditions within rationally established assignment thresholds. The completed base year (2000) model is

invoked to predict link volumes, which are compared to actual traffic counts at selected locations throughout the modeled network (i.e. screen lines and cut lines). A detailed examination of the model calibration effort is outside this document's scope. Model calibration and adjustments will follow the guidelines set forth from both the Calibration and Adjustment of System Planning Models (Dane Ismart; FHWA – Pub. # FHWA-ED-90-015; December, 1990.) and the validation process outlined in the Shreveport-Bossier Metropolitan Area Transportation Plan Update (RBA Group; June 1991).

Graphic Representation of System Performance Measures

Performance Measures provide a general indicator of the overall travel conditions within Northwest Louisiana's regional transportation system. The proceeding maps display the current and forecasted Volume to Capacity (V/C) on specific road segments and corridors. These maps are sometimes called "V/C" maps (V over C maps) because the level of service, or existence of congestion, is derived by dividing the traffic volume by the traffic capacity of the road segment. For example, a volume of 8,500 vehicles on a road that is capable of carrying 10,000 vehicles will produce a V/C of 0.85. A V/C of 1.0 is equal to a Level of Service (LOS) of "E", which can be described as: Limit of acceptable delay, unstable flow, poor signal progression, traffic near roadway capacity, frequent cycle failures.

Although the term traffic congestion is subjective in that it means different levels of delay to different people, it can be said that any road segment approaching a V/C of 1.0 (0.85 to 1.00), which is indicated on the maps with an **orange color**, experiences some delays. A V/C greater than 1.0, which is indicated on the maps by the **red color**, means frequent delays and unacceptable travel delay for the motorist.

Each map represents one of the transportation improvement program scenarios modeled through the Travel Demand Model (TDM). Review and comparison of these maps for the various modeled transportation options will show how well a particular improvement scenario addresses travel demand on the key roadway segments and corridors in the MPO Planning Study Area (PSA).

System Performance Maps – Modeled Transportation Scenarios

On the following pages, the system performance maps are presented in the following order:

Fig. B.3 Base Year Network (used as a benchmark)

Fig. B.4 Current Program (TIP: 2009 to 2012)

Fig. B.5 Identify Performance Deficiencies on Current Network

Fig. B.6 Short-Range Program (2013 to 2015)

Fig. B.7 Long-Range Program (2016 to 2030)

Scenario Development and Analysis

To gain a better understanding of the transportation system's current and future needs, four scenarios are modeled; Base Year Network, Current Program (2009-2012), Identify Deficient Performing Facilities on the Current Network, Short-Range Program (SRP: 2013-2015) and the Long-Range Program (LRP: 2016-2030). The scenarios reflect different combinations of land uses and transportation networks.

Base Year Network

The Base Year Network Scenario, shown in Figure B.3, provides a snapshot of the region's transportation system baseline performance. NLCOG's base year modeled network represents travel conditions found in year 2000. This network scenario provides the basis for the development of subsequent modeled scenario network structures. Further, the process of proper model calibration and validation (i.e.

model produces defensible results when compared to field observed travel behavior) is initiated through the base year modeled network. Psyched

Current Program (TIP: 2009 to 2012)

A Current Program Scenario, Figure B.4, reflects network conditions under system improvements modeled through year 2012. In essence, this scenario represents network performance under the MPO’s implemented Transportation Improvement Program (TIP). Further, decisions regarding future transportation improvements, out to year 2030, are tested against this network since the funding mechanism, to complete the Current Program’s projects, has been established.

Identification of Network Performance Deficiencies

Of particular importance is the utilization of projected 2030 demographics, as a basis for travel demand within the **Current Program Network**, to calculate network performance indicators (Volume to Capacity (V/C)). This model approach is analogous to travel demand being experienced in the year 2030, if no additional roadways improvements or transit services are implemented, and thus helps to answer the question, “When we make our next transportation investment decision, where do we need to focus our investment?” Furthermore, by comparing the Current Program Network Map with the planned transportation improvement options, you can see how well the transportation investments in that option address congestion. Utilizing this approach, the modeled scenario provides staff the ability to easily identify, through the modeled output, network

segments that are exhibiting poor performance. These poorly performing facilities are categorized as Areas of Deficient Performance (ADPs).

Table B.3: TDM Identified Areas of Deficient Performance (ADP); Proposed Improvements and Modeled Performance Impacts

Areas of Deficient Performance	Current Program V/C (24hr. Vols.*)	Proposed: Short-Range or Long-Range Program (SRP/LRP) Improvements	2030 LRP (V/C)	V/C Change
1 I-20 Bridge crossing the Red River	1.14 (90,068)	LRP: new adjoining bridge; reconfig. exit and entrance ramps	1.03	- 0.11
2 LA 173 – Caddo / Ford St. west of Allen Av	1.03 (12,954)	SRP: rehab./widen to 4-lane section (STPFlex)	0.75	- 0.28
3 LA 511 Bridge (J. Davis Br.) crossing the Red River	1.17 (31,468)	LRP: new 4-lane bridge and approaches and Bike/Ped. facilities	0.64	- 0.53
4 I-20 – Bossier City (Hamilton to Airline)	0.94 (60,168)	LRP: realign. and widen to 6-lane section	0.72	- 0.22
5 Swan Lake – US 80 to Shed Rd	1.37 (13,956)	SRP: widen to 5-lane section (Local)	0.91	- 0.46
6 LA 511 (E. 70 th St.) – Gilbert to Youree Dr	1.12 (33,735)	No Planned Improvements	1.21	+ 0.09
7 Gilbert approach to Kings Hwy. intersection	1.24 (6,524)	No Planned Improvements	1.10	- 0.14
8 LA 511 (W. 70 th St.) – Buncomb to LA 3132 Ramps	1.09 (14,832)	LRP: intersection realignment and improvements	1.13	+ 0.04
9 Hamilton Rd – US 80 to LA 3	1.30 (10,706)	SRP: realign./widen to 4-lane section (STP >200k and Local)	0.90	- 0.40

(24hr. Vols.*): Source is current LADOTD observed 24hr. volume counts adjusted to ADT or local depts. of traffic engineering collected counts

Short-Range Program (2013 to 2015) Performance

Even though the Short-Range Program consists of three fiscal years, as many as 28 improvement projects have been identified, most with a funding mechanism in place, for this scenario. As outlined in Table B.3, nine Areas of Deficient Performance (ADP) are identified throughout the modeled travel network. However, all the ADPs are located within the Urbanized Area (UA) of the MPO’s Planning Study Area (PSA). Through staff’s review of the network deficiencies and understanding of federal funding and programmatic issues, the Short-Range Program recommended improvement projects intended to relieve congestion occurring in ADP #2, #5, and #9. Table B.4, summarizes each ADP’s primary factor contributing to its modeled deficient performance, as well as, its proposed improvement project and/or strategy.

Figure B.6, presents the network performance incorporating all the Short-Range Program improvement projects. Please note, from the map, where improvements were located and the change in performance (as shown by the V/C color). A detailed determination of the improvements impact upon facility performance is found in Table B.3 (“V/C Change”).

B.4: Areas of Deficient Performance and Recommended Short-Range Program (SRP) Improvement Projects

Areas of Deficient Performance	Primary Factor Contributing to Congestion	Proposed: Short-Range Program (SRP) Improvements
2 LA 173 – Caddo / Ford St. west of Allen Av	Narrow lane widths; primary E-W surface street; high % of heavy vehicle usage	SRP: rehab./widen to 4-lane section (STPFlex)
5 Swan Lake – US 80 to Shed Rd	Original designed to serve as a 2-ln residential collector; with high growth to the north, it serves arterial volumes/speeds	SRP: widen to 5-lane section (Local)
9 Hamilton Rd – US 80 to LA 3	Narrow, limited sight distance, 2-ln; at-grade RR-xing in poor condition; links to primary E-W thoroughfare	SRP: realign./widen to 4-lane section (STP >200k and Local)

Long-Range Program (2016 to 2030) Performance

The fifth scenario represents the Design Year Scenario and is shown in Figure B.7. In this modeled scenario, all improvement projects in the Long Range Transportation Plan (LRTP) are assumed to be built. When modeled with forecasted 2030 socio-economic data, results show a significant improvement over the Current Program or TIP scenario. The Long-Range Program recommended improvement

projects are expected to relieve congestion occurring in ADP #1, #3, #4, and #8. Table B.5, summarizes each ADP’s primary factor contributing to its modeled deficient performance, as well as, its proposed improvement project and/or strategy.

B.5: Areas of Deficient Performance and Recommended Long-Range Program (LRP) Improvement Projects

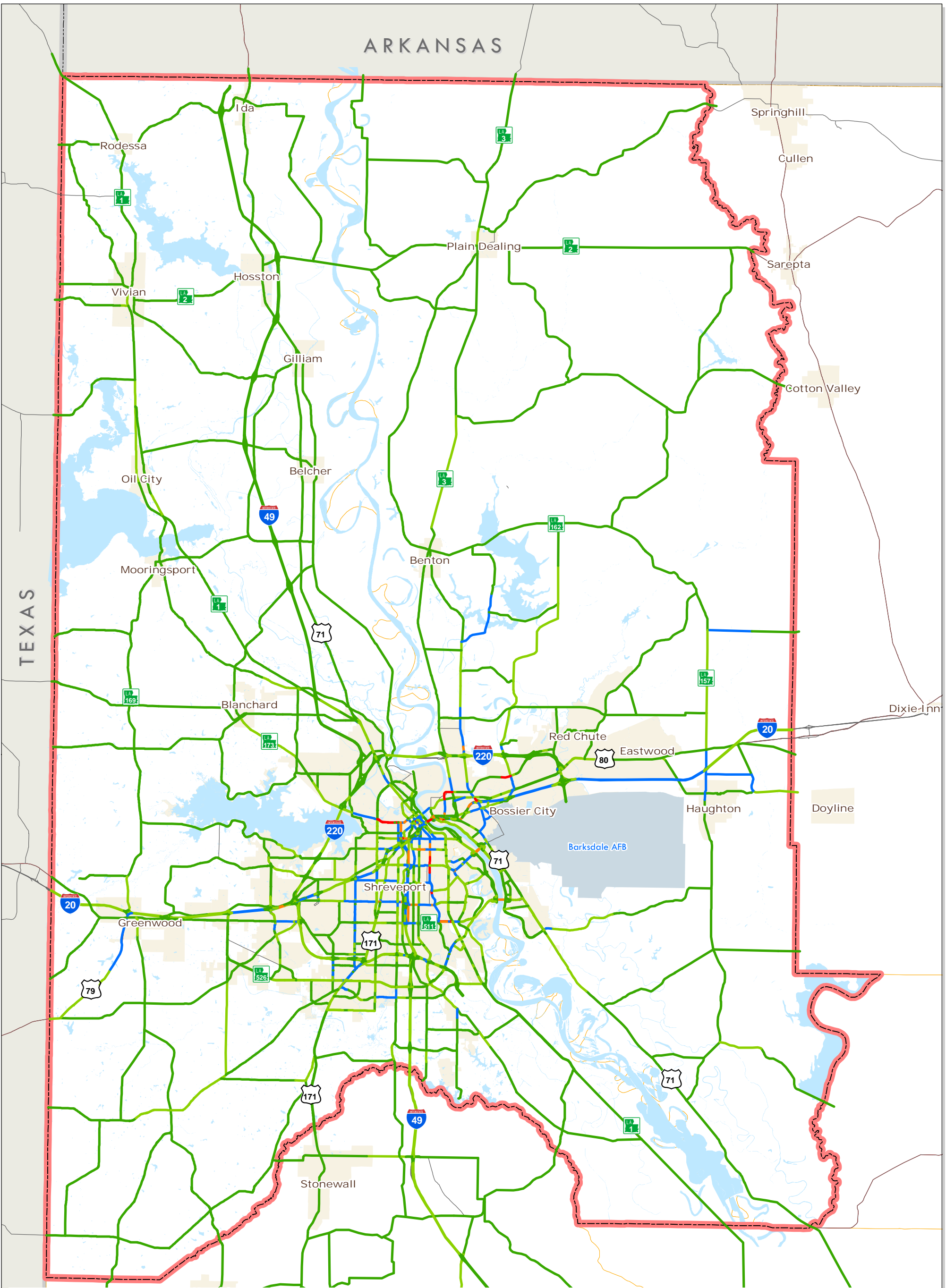
Areas of Deficient Performance	Primary Factor Contributing to Congestion	Proposed: Long-Range Program (LRP) Improvements
1 I-20 Bridge crossing the Red River	Insufficient capacity and outdated entrance/exit ramp access/weave sections	LRP: new adjoining bridge; reconfig. exit and entrance ramps
3 LA 511 Bridge (J. Davis Br.) crossing the Red River	Narrow, 2-ln bridge structure and awkward approach facilities can’t accommodate current volumes	LRP: new 4-lane bridge and approaches and Bike/Ped. facilities
4 I-20 – Bossier City (Hamilton to Airline)	Excessive vertical curvature limits sight distance, mainline capacity, and ramp weave sections	LRP: realign. and widen to 6-lane section
8 LA 511 (W. 70 th St.) – Buncomb to LA 3132 Ramps	LA 511 at Buncomb intersection is skewed and unbalanced – reducing throughput	LRP: intersection realignment and improvements

Figure B.7, presents the network performance incorporating all the Long-Range Program improvement projects. Please note, from the map, where improvements were located and the change in

performance (as shown by the V/C color). A detailed determination of the improvements impact upon facility performance is found in Table B.3 (“V/C Change”).

Future Travel Needs

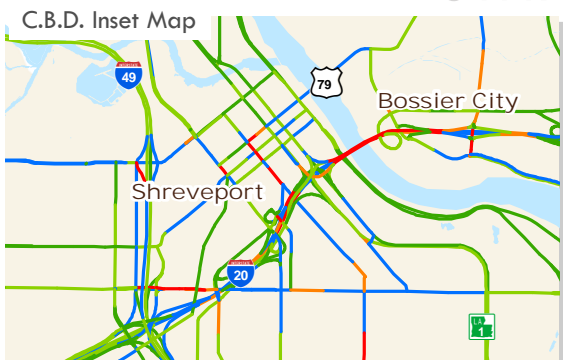
Federal rules require the NLCOG to produce a Long Range Transportation Plan that covers predicted transportation needs for a twenty years horizon. The Long Range Transportation Plan must be reviewed and updated at least once every five years. With a validated travel demand model, this process is easier. As previously indicated, socio-economic data and highway networks are needed to run the travel demand model. The planned/approved changes to the network can be added based on the last Long Range Transportation Plan or Transportation Improvement Program (TIP). The socio-economic data for the required year(s) is inputted and the travel demand model is run. By looking at congestion on the future year networks (i.e. level of service/forecasted volumes), specific corridors and/or roadways that need improvement can be identified.



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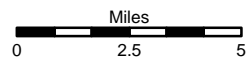
SHORT RANGE PROGRAM
 YEARS - 2012 to 2015
 IMPROVEMENT PROJECTS
 TDM ANALYSIS

VOLUME TO CAPACITY (VoC)
 PERFORMANCE MEASURE



Map Features

- Planning Study Area
- Hydrology

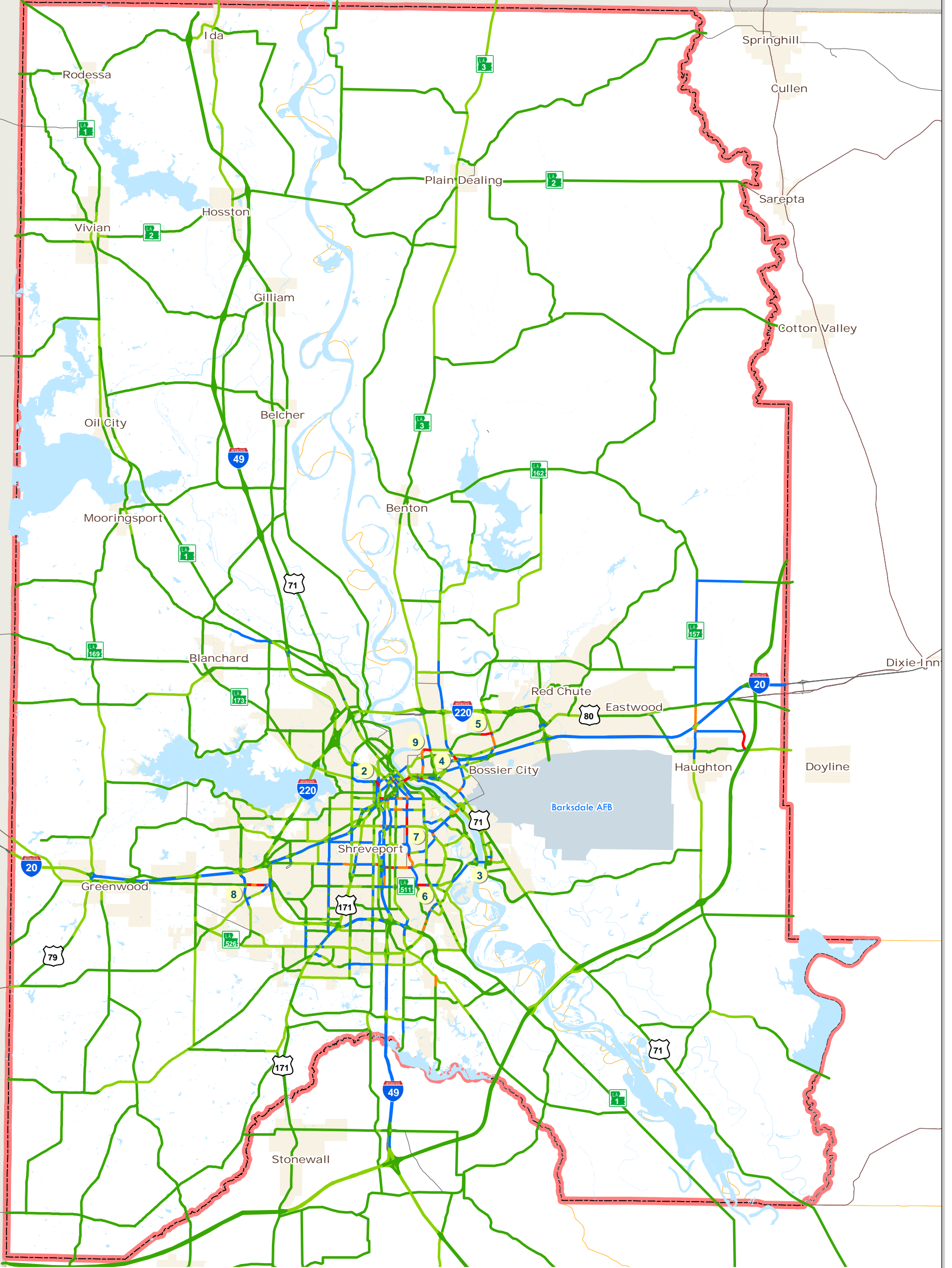


System Performance (VoC)

- MAX_VOC**
- 0.00 - 0.25 V/C
 - 0.25 - 0.50
 - 0.50 - 0.85
 - 0.85 - 1.00
 - 1.00 - 10.00

ARKANSAS

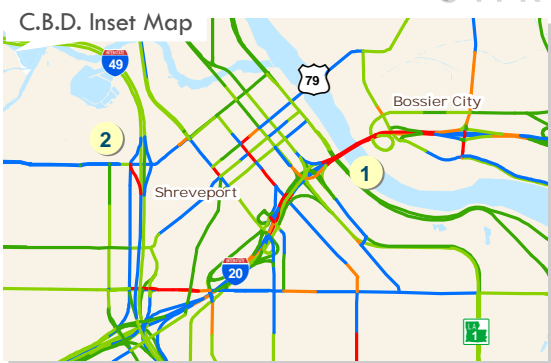
TEXAS



SHREVEPORT / BOSSIER CITY MPO

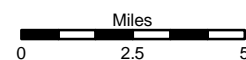
LONG RANGE PROGRAM
 YEARS - 2016 to 2030
 IMPROVEMENT PROJECTS
 TDM ANALYSIS

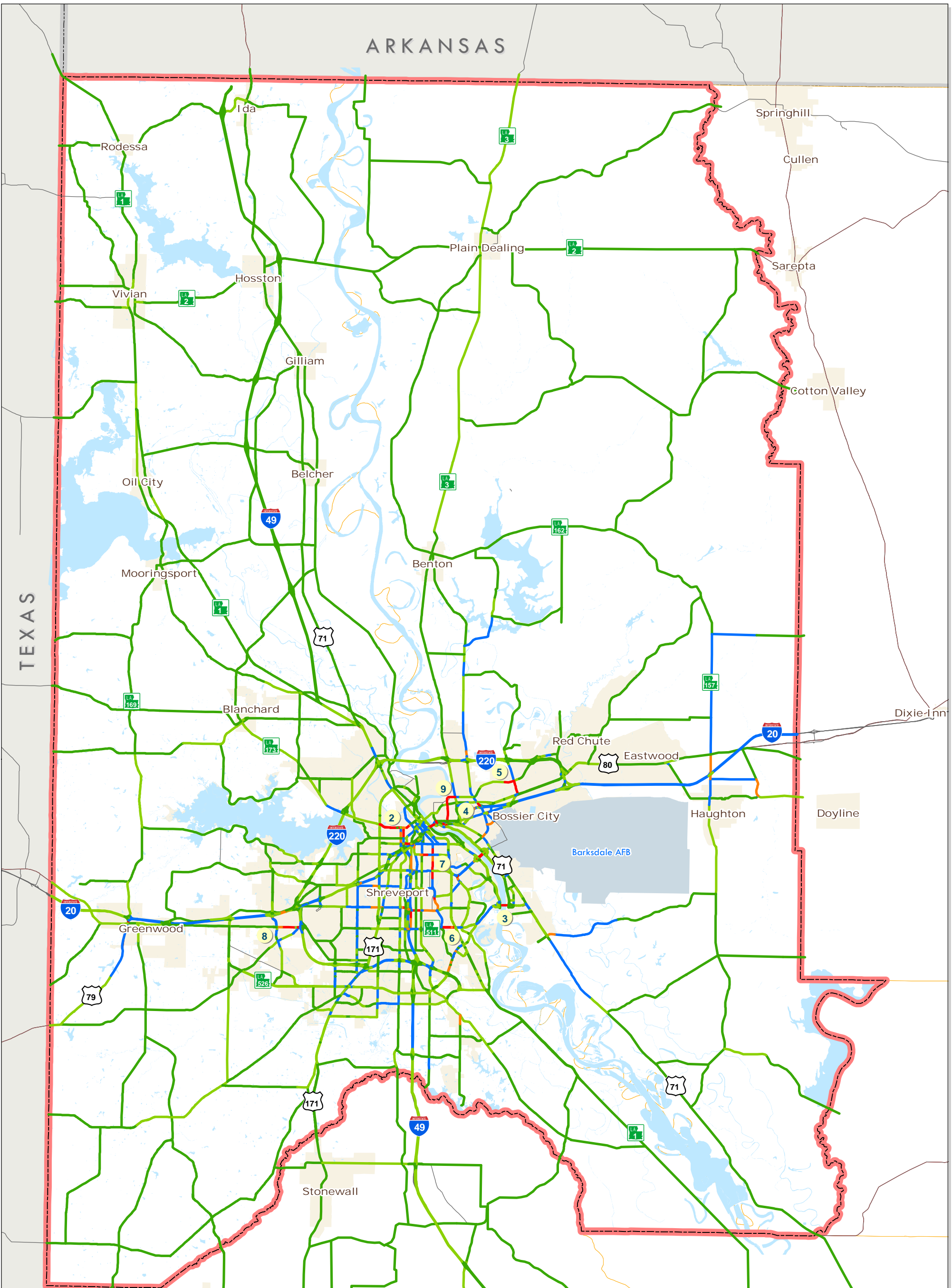
VOLUME TO CAPACITY (V/C)
 PERFORMANCE MEASURE



Map Features

- Planning Study Area
- Hydrology
- Areas of Deficient Performance
- System Performance (VoC) MAX_VOC
- 0.00 - 0.25 V/C
- 0.25 - 0.50
- 0.50 - 0.85
- 0.85 - 1.00
- 1.00 - 10.00



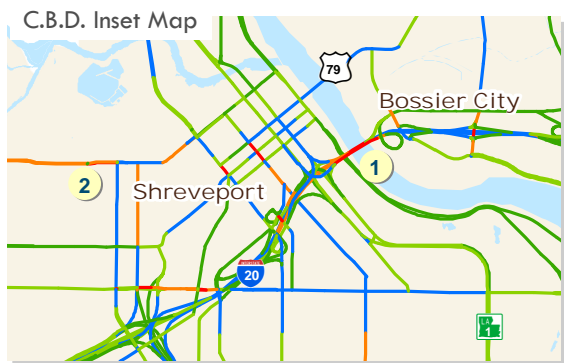


SHREVEPORT / BOSSIER CITY MPO

IDENTIFY DEFICIENT PERFORMANCE

YEAR 2030 DEMOGRAPHICS
LOADED ONTO THE
CURRENT (TIP) PROGRAM
IMPROVEMENT PROJECT
SCENARIO

VOLUME TO CAPACITY (V/C)
PERFORMANCE MEASURE

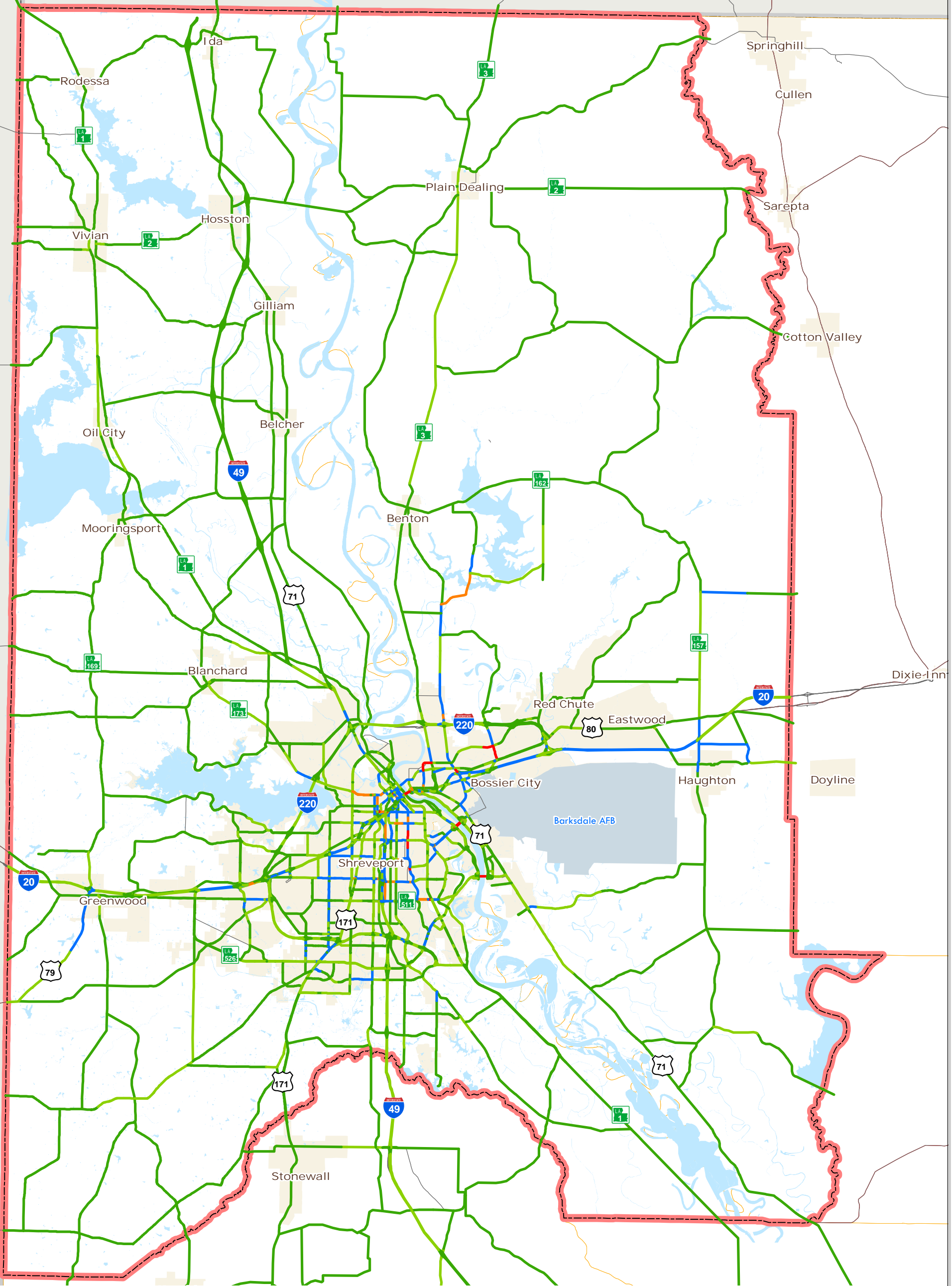


Map Features

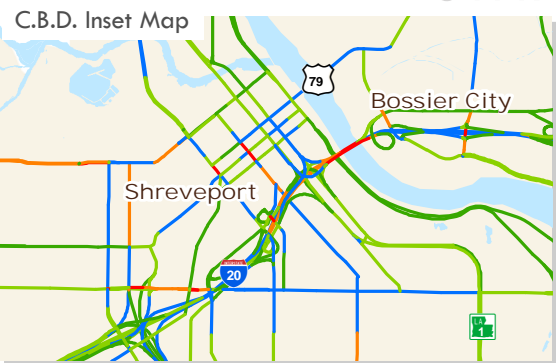
Planning Study Area	Hydrology	System Performance (V/C)
Areas of Deficient Performance	North	MAX_VOC
	Miles	0.0000 - 0.25 V/C
		0.25 - 0.50
		0.50 - 0.85
		0.85 - 1.00
		1.00 - 10.00

ARKANSAS

TEXAS



SHREVEPORT / BOSSIER CITY MPO



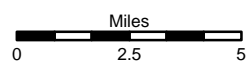
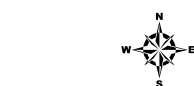
CURRENT (TIP) PROGRAM
 YEARS - 2009 to 2012
 IMPROVEMENT PROJECTS
 TDM ANALYSIS

VOLUME TO CAPACITY (V/C)
 PERFORMANCE MEASURE

Map Features



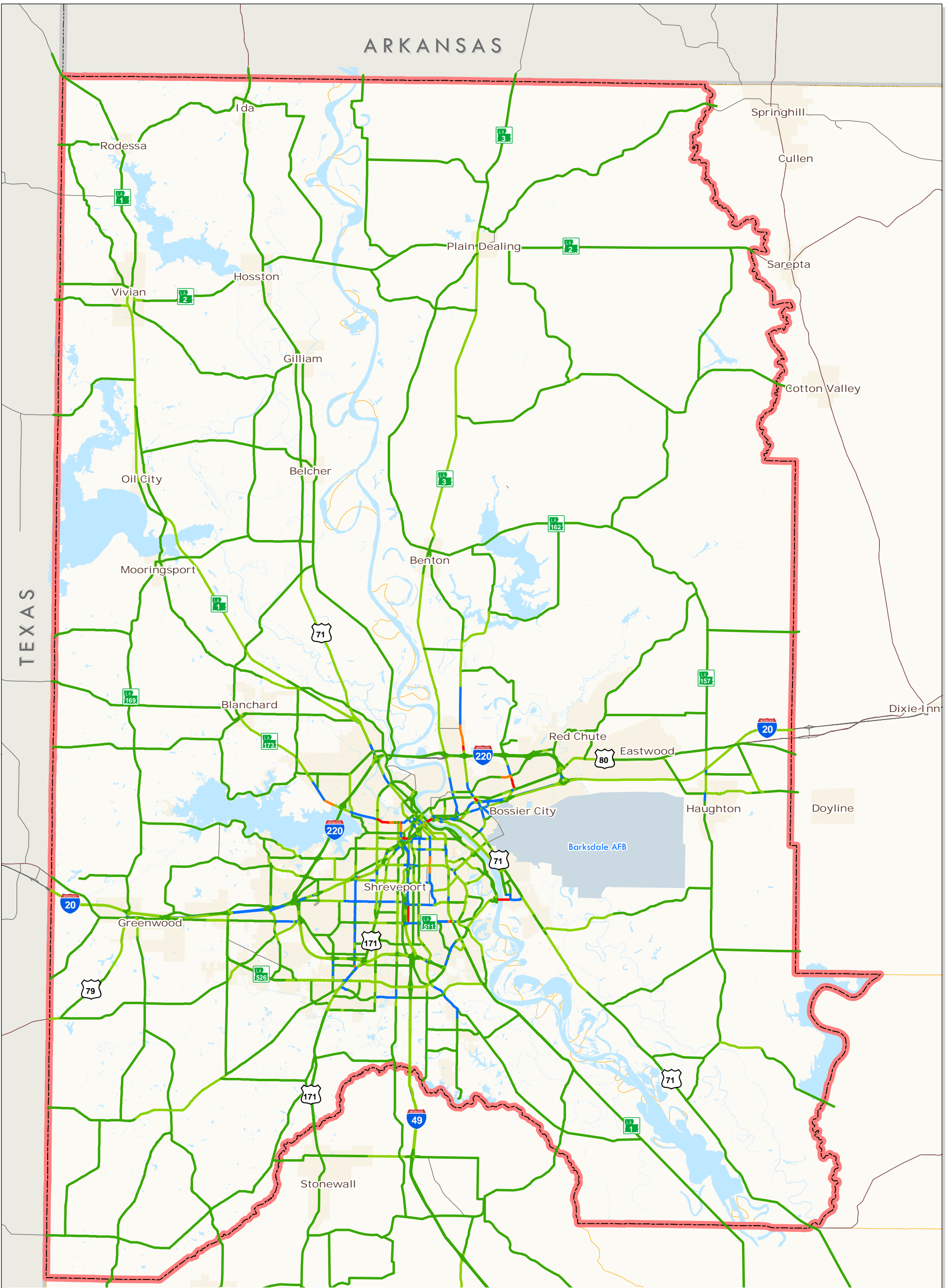
Hydrology



System Performance (Voc)

MAX_VOC

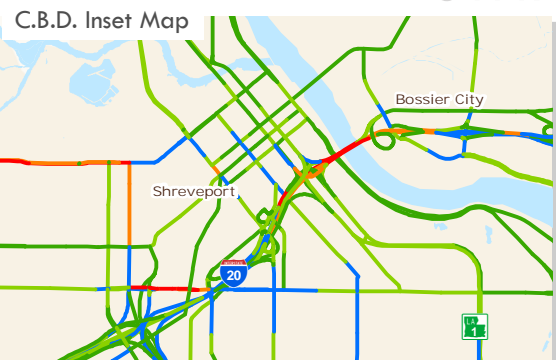
- 0.00 - 0.25 V/C
- 0.25 - 0.50
- 0.50 - 0.85
- 0.85 - 1.00
- 1.00 - 10.00



SHREVEPORT / BOSSIER CITY MPO

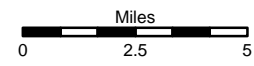
BASE YEAR NETWORK
YEAR 2000
TDM ANALYSIS

VOLUME TO CAPACITY (VoC)
PERFORMANCE MEASURE



Map Features

- Planning Study Area
- Hydrology



System Performance (VoC)

- MAX_VOC**
- 0.00 - 0.25 V/C
 - 0.25 - 0.50
 - 0.50 - 0.85
 - 0.85 - 1.00
 - 1.00 - 10.00

Appendix C - Historical Improvement Project Lettings

Appendix C
LADOTD Project Lettings

PROJECT	ROUTE	LENGTH	PROJECT_NAME	TYPE IMPROVEMENT	LETTING_COST	COST CAT 1	FUND_CAT1	COST CAT 2	FUND_CAT2	COST CAT 3	FUND_CAT3
455-09-0024	I 49	4.66	I-49 N(MIRA MYRTIS RD.-LA 168)SEG B	PAVING AND BRIDGES	\$31,126,131	\$31,126,131	ARRA	\$0			\$0
455-09-0007	I 49	3.15	I-49 NORTH (US 71(S) TO LA 2) SEG D	NEW INTERSTATE	\$41,077,892	\$3,874,000	ARRA	\$37,203,892	DEMO		\$0
				Sub-Total	\$31,126,131	\$35,000,131		\$37,203,892			\$0
				Average/Year	\$3,112,613	\$3,500,013		\$3,720,389			\$0
				Average Proj.	\$31,126,131	\$17,500,066		\$18,601,946			\$0
737-94-0027		0	SHREVEPORT IMMEDIATE TERM ITS PH 1	ITS DEPLOYMENT (LA 1,LA 511,LA 526)	\$1,002,958	\$1,002,958	DEMO	\$0	NHS		\$0
455-09-0009	I 49	4.66	I-49 NORTH (MIRA-MYRTIS TO LA 168)	NEW INTERSTATE CLEARING & GRUBBING	\$576,880	\$576,880	DEMO	\$0			\$0
427-01-0029	LA3132	1.25	INNER LOOP EXTENSION(LA 526-LA 523)	I'CHANGE @ LA526 W/CONNECT TO LA523	\$14,588,232	\$10,000	DEMO	\$10,500,000	STP>200K	\$4,088,000	STPFLEX
455-09-0022	I 49	4.66	I-49 NORTH(MIRA-MYRTIS RD TO LA 168)	DRAINAGE AND EMBANKMENT	\$11,093,485	\$11,093,485	DEMO	\$0			\$0
455-09-0010	I 49	1.68	I-49 NORTH (LA 168 - ARK STATE LN)	NEW INTERSTATE(CLEARING & GRUBBING)	\$4,538,925	\$4,538,925	DEMO	\$0			\$0
713-09-0017		0	GUARD RAIL REPLACEMENT	BRIDGE REPAIR	\$96,485	\$96,485	DEMO	\$0			\$0
455-09-0023	I 49	1.68	I-49 NORTH(LA 168-ARKANSAS LN)SEG A	NEW CONCRETE PAVEMENT	\$20,907,780	\$20,907,780	DEMO	\$0			\$0
455-09-0007	I 49	3.15	I-49 NORTH (US 71(S) TO LA 2) SEG D	NEW INTERSTATE	\$41,077,892	\$37,204,000	DEMO	\$3,874,000	ARRA		\$0
451-30-0026	I 220	0.75	MCCAIN CREEK BRIDGE REPLACEMENT	REPLACEMENT	\$12,313,551	\$3,694,000	DEMO	\$8,619,000	FBRON		\$0
737-94-0028		0	S'PORT NEAR TERM PH.1 (I-20,LA3132)	PART OF 2002 EARMARK-	\$5,983,480	\$2,782,000	DEMO	\$3,201,000	NHS		\$0
				Sub-Total	\$93,882,637	\$81,906,513		\$26,194,000			\$4,088,000
				Average/Year	\$9,388,264	\$8,190,651		\$2,619,400			\$408,800
				Average Proj.	\$11,735,330	\$8,190,651		\$2,619,400			\$408,800
713-09-0009		0.1	BRIDGES IN CADD0	BRIDGE REPLACEMENT	\$122,389	\$122,389	FBROFF	\$0			\$0
713-09-0007		0.1	BRIDGES IN CADD0	BRIDGE REPLACEMENT	\$612,328	\$612,328	FBROFF	\$0			\$0
713-09-0001		0.02	BRIDGES IN CADD0	BRIDGE REPLACEMENT	\$1,059,537	\$1,059,537	FBROFF	\$0			\$0
713-08-0100		0	BRIDGES IN BOSSIER	BRIDGE REPLACEMENT	\$264,682	\$264,682	FBROFF	\$0			\$0
713-08-0105		0	BRIDGES IN BOSSIER	BRIDGE REPLACEMENT	\$312,130	\$312,130	FBROFF	\$0			\$0
713-08-0106		0	MERRITT & LEILA ROAD BRIDGES	BRIDGE REPLACEMENT	\$350,328	\$350,328	FBROFF	\$0			\$0
713-09-0006		0	CYPRESS & CROSS BAYOU & GLENLEAF DR	BRIDGE REPLACEMENT	\$979,636	\$979,636	FBROFF	\$0			\$0
713-08-0108		0	PARKS ROAD BRIDGE	BRIDGE REPLACEMENT	\$2,317,148	\$1,784,000	FBROFF	\$533,000	LOCAL		\$0
713-08-0109		0	CROUCH RD.BR. OVER WHITE OAK BRANCH	BRIDGE REPLACEMENT	\$391,728	\$391,728	FBROFF	\$0			\$0
094-02-0016	LA 173	0.02	LA 538 - LA 3049	BRIDGE REPLACEMENT	\$767,807	\$767,807	FBRON	\$0			\$0
011-04-0020	US 71	0.04	KELLY BAYOU BR. AND APPROACHES	BRIDGE REPLACEMENT	\$1,065,854	\$1,065,854	FBRON	\$0			\$0
420-01-0035	LA3032	0.8	SHREVEPORT - BARKSDALE HWY	BRIDGE RECONDITIONING (E.B. SIDE)	\$2,998,438	\$2,998,438	FBRON	\$0			\$0
001-03-0062	US 80	1.23	CADD0 LINE - WEBSTER LINE	BRIDGE REPLACEMENT	\$2,840,786	\$2,840,786	FBRON	\$0			\$0
085-01-0017	LA 530	0.4	HORSESHOE BAYOU	CULVERT	\$994,978	\$994,978	FBRON	\$0			\$0
078-02-0016	LA 538	0.1	TWELVE MILE BAYOU	BRIDGE REPLACEMENT	\$5,079,081	\$5,079,081	FBRON	\$0			\$0
809-10-0008	LA3194	0.9	MCCAIN CREEK	DRAINAGE STRUCTURE	\$1,440,992	\$1,440,992	FBRON	\$0			\$0
083-02-0005	LA 2	12.24	US 71 - BOSSIER LINE	BRIDGE REPLACEMENT (2)	\$2,601,231	\$2,601,231	FBRON	\$0			\$0
420-01-0034	LA3032	0.8	SHREVEPORT - BARKSDALE HWY	BRIDGE RECONDITIONING (W.B. SIDE)	\$19,699,720	\$19,699,720	FBRON	\$0			\$0
090-01-0020	LA 154	0.4	CROSS BAYOU BRIDGE	BRIDGE REPLACEMENT	\$728,851	\$728,851	FBRON	\$0			\$0
451-30-0026	I 220	0.75	MCCAIN CREEK BRIDGE REPLACEMENT	REPLACEMENT	\$12,313,551	\$8,619,000	FBRON	\$3,694,000	DEMO		\$0
455-08-0078	I 49	6.62	I-49 BRIDGES OVER VARIOUS CROSSINGS	BRIDGE DECK JOINT REPAIR	\$456,320	\$456,320	FBRON	\$0			\$0
				Sub-Total	\$57,397,515	\$53,169,816		\$4,227,000			\$0
				Average/Year	\$5,739,752	\$5,316,982		\$422,700			\$0
				Average Proj.	\$2,733,215	\$2,531,896		\$201,286			\$0

Appendix C
LADOTD Project Lettings

PROJECT	ROUTE	LENGTH	PROJECT_NAME	TYPE_IMPROVEMENT	LETTING_COST	COST CAT 1	FUND_CAT1	COST CAT 2	FUND_CAT2	COST CAT 3	FUND_CAT3
451-30-0023	I 220	0.01	CROSS LAKE BR. REVETMENT REPAIRS	REVTMENT REPAIRS	\$359,937	\$359,937	IM	\$0		\$0	
451-31-0023	I 220	6.78	I-220 EMBANKMENT SLIDE REPAIR	EMBANKMENT SLIDE REPAIR	\$112,751	\$112,751	IM	\$0		\$0	
451-30-0024	I 220	2.86	I-220 EMBANKMENT SLIDE REPAIRS	EMBANKMENT SLIDE REPAIRS	\$472,689	\$472,689	IM	\$0		\$0	
737-94-0021		0	DIST 04 RUMBLE STRIPS(DISTRICTWIDE)	SHOULDER RUMBLE STRIPS	\$334,984	\$334,984	IM	\$0	NHS	\$0	STPFLEX
451-30-0028	I 220	0.01	I-220 SIGNING (LA 173-SWAN ROAD)	INTERSTATE SIGNING	\$258,621	\$258,621	IM	\$0		\$0	
451-01-0108	I 20	3.01	PINES ROAD - MONKHOUSE DRIVE	PAVEMENT REPLACEMENT	\$21,100,235	\$21,100,235	IM	\$0		\$0	
455-08-0070	I 49	0.1	SOUTH TO WEST EXIT RAMP AT LA 3132	EMERGENCY RETAINING WALL REPAIR	\$1,467,540	\$1,467,540	IM	\$0		\$0	
451-30-0032	I 220	3.08	CROSS LAKE BR.DRAINAGE CONDUIT REP.	BRIDGE RCND	\$999,168	\$999,168	IM	\$0		\$0	
694-14-0008	I 20	0.01	GREENWOOD WESTBOUND WEIGH STATION	INSTALL DIGITAL LOAD CELLS	\$51,828	\$51,828	IM	\$0		\$0	
694-13-0007	I 20	0.01	GREENWOOD EASTBOUND WEIGH STATION	INSTALL DIGITAL LOAD CELLS	\$51,828	\$51,828	IM	\$0		\$0	
451-02-0049	I 20	3.47	FILLMORE - WEBSTER PH. LINE	RUBBLIZE AND OVERLAY	\$4,159,724	\$4,159,724	IM	\$0		\$0	
451-01-0115	I 20	9.38	I-20 PAVEMENT MARKING REPLACEMENT	NEW PAVEMENT MARKINGS	\$474,669	\$474,669	IM	\$0		\$0	
427-01-0031	LA3132	0.21	WIDEN NORTH-WEST RAMP I-49-LA 3132	WIDEN NORTHWEST RAMP	\$375,515	\$375,515	IM	\$0		\$0	
694-13-0009	I 20	0.01	GREENWOOD PIT SCALES REHAB	PIT SCALES EAST AND WEST BND REHAB	\$510,355	\$510,355	IM	\$0		\$0	
451-01-0116	I 20	0.01	MONKHOUSE - LAKESHORE (SHREVEPORT)	MINOR PCCP PATCHING	\$806,690	\$806,690	IM	\$0		\$0	
451-02-0083	I 20	17.5	I-20 PAVEMENT MARKING REPLACEMENT	NEW PAVEMENT MARKINGS	\$298,430	\$298,430	IM	\$0		\$0	
455-08-0076	I 20	9.1	I-49 PAVEMENT MARKING REPLACEMENT	NEW PAVEMENT MARKINGS	\$486,551	\$486,551	IM	\$0		\$0	
451-30-0038	I 220	17.62	I-220 PAVEMENT MARKING REPLACEMENT	PAVEMENT MARKING REPLACEMENT	\$824,762	\$824,762	IM	\$0		\$0	
694-13-0011	I 20	0.61	GREENWOOD HIGH MAST LIGHTING	PIT SCALES LIGHTING	\$470,041	\$470,041	IM	\$0		\$0	
694-01-0005	I 20	0.01	GREENWOOD TOURIST AND INFO. CENTER	UPGRADE INFO CENTER & REST AREA	\$6,561,000	\$6,561,000	IM	\$0		\$0	
451-01-0123	I 20	10.4	PAVEMENT MARKING REPLACEMENT	STRIPING, RAISED PAVEMENT MARKERS	\$210,325	\$210,325	IM	\$0		\$0	
451-01-0127	I 20	0.01	I-20(TEXAS ST LINE-.37 MI E LA 3132	PVT. MARKING REPLACEMENT(E & W BND)	\$246,740	\$246,740	IM	\$0		\$0	
				Sub-Total	\$40,634,383	\$40,634,383		\$0		\$0	
				Average/Year	\$4,063,438	\$4,063,438		\$0		\$0	
				Average Proj.	\$1,847,017	\$1,847,017		\$0		\$0	
								\$0		\$0	
420-01-0025	LA3032	0.08	SHREV./BARKSDALE I'CHANGE	ADD RAMPS(AT A.R. TEAGUE)	\$4,788,198	\$4,788,198	LOCAL	\$0		\$0	
713-08-0108		0	PARKS ROAD BRIDGE	BRIDGE REPLACEMENT	\$2,317,148	\$533,000	LOCAL	\$1,784,000	FBROFF	\$0	
				Sub-Total	\$4,788,198	\$5,321,198		\$1,784,000		\$0	
				Average/Year	\$478,820	\$532,120		\$178,400		\$0	
				Average Proj.	\$478,820	\$2,660,599		\$892,000		\$0	
809-10-0004	LA3194	0.86	BRIDGE REPAIR AT MCCAIN CREEK	MINOR BRIDGE REPAIR (CM)	\$499,015	\$499,015	MAINT	\$0		\$0	
082-03-0022	LA 157	0.22	HAUGHTON MIDDLE SCHOOL TURN LANES	TURN LANES ADDED (CM)	\$124,087	\$124,087	MAINT	\$0		\$0	
451-02-0076		0	REMOVAL OF REST AREAS @ FILLMORE	REST AREAS PARKS	\$95,600	\$95,600	MAINT	\$0		\$0	
082-03-0023	LA 157	6.57	OAKLAND - HAUGHTON	ASPH SURF TREATMENT	\$78,152	\$78,152	MAINT	\$0		\$0	
082-04-0017	LA 157	7.37	LA 528 - LA 162	ASPH SURF TREATMENT	\$149,232	\$149,232	MAINT	\$0		\$0	
				Sub-Total	\$946,086	\$946,086		\$0		\$0	
				Average/Year	\$94,609	\$94,609		\$0		\$0	
				Average Proj.	\$189,217	\$189,217		\$0		\$0	
								\$0		\$0	
085-04-0014	LA 157	5.16	LA 157 NORTH - LA 157 SOUTH	OVERLAY	\$696,889	\$696,889	NFA	\$0		\$0	
010-06-0061	US 71	1.88	LA 3032 - I-20	OVERLAY	\$981,290	\$981,290	NHS	\$0		\$0	
011-01-0051	US 71	0.01	CROSS BAYOU BR. AT SPRING ST.	RIP RAP REPAIR	\$261,645	\$261,645	NHS	\$0		\$0	
011-01-0050	US 71	1.3	JCT LA 3194 - JCT WINTER GARDEN DR	CONTINUOUS TURN LANE	\$537,720	\$537,720	NHS	\$0		\$0	
737-94-0023		0	SHREV./BOSSIER M.A.P.	MOTORIST ASSISTANCE PATROL	\$644,000	\$644,000	NHS	\$0		\$0	
025-08-0054	US 171	1.95	BAIRD ROAD - LA 3132	RUBBLIZE AND OVERLAY	\$2,377,475	\$2,377,475	NHS	\$0		\$0	
737-94-0029		0	S'PORT/BOSSIER CITY M.A.P.	MOTORIST ASSISTANCE PATROL (M.A.P.)	\$932,250	\$932,250	NHS	\$0	STP>200K	\$0	
694-13-0008	I 20	0.01	GREENWOOD WEIGH STAT. WIM CAMERA	CAMERA UPGRADES	\$69,350	\$69,350	NHS	\$0		\$0	
737-94-0028		0	S'PORT NEAR TERM PH.1 (I-20,LA3132)	PART OF 2002 EARMARK-	\$5,983,480	\$3,201,000	NHS	\$2,782,000	DEMO	\$0	
011-04-0026	US 71	4.93	GILLIAM - HOSSTON	ASPHALTIC CONC. OVERLAY	\$1,594,707	\$1,594,707	NHS	\$0		\$0	
053-09-0070	LA 1	0.2	LA 1 @ LA 511	TURN LANES	\$152,989	\$152,989	NHS	\$0		\$0	
809-08-0040	LA 1	0.01	TURN LANE AT YOUREE DRIVE	W.B. TO N.B. RIGHT TURN AT LA 1	\$98,592	\$98,592	NHS	\$0		\$0	
025-08-0059	US 171	0.2	US 171 @ ARDIS TAYLOR ST.INT.	N.BND.LEFT & S.BND.RIGHT TURN LANES	\$96,206	\$96,206	NHS	\$0		\$0	
053-09-0046	LA 1	1	YOUREE DR.(SANDBEACH-LA 3032)	REHAB & DRAINAGE IMP. PHASE 1	\$10,793,511	\$7,522,000	NHS	\$3,271,000	PUBWKS	\$0	
427-01-0037	LA3132	9.26	I-20 - LA 1 (SHREVEPORT)	CONCRETE PATCHING	\$282,125	\$282,125	NHS	\$0		\$0	
451-01-0113		0	SHREVEPORT(I-220 - BOSSIER PH.LINE)	SHREVEPORT ITS I-20 SIGNALS	\$1,939,737	\$1,939,737	NHS	\$0		\$0	
				Sub-Total	\$27,441,966	\$21,387,975		\$6,053,000		\$0	
				Average/Year	\$2,744,197	\$2,138,798		\$605,300		\$0	
				Average Proj.	\$1,715,123	\$1,336,748		\$378,313		\$0	

Appendix C
LADOTD Project Lettings

PROJECT	ROUTE	LENGTH	PROJECT_NAME	TYPE_IMPROVEMENT	LETTING_COST	COST CAT 1	FUND_CAT1	COST CAT 2	FUND_CAT2	COST CAT 3	FUND_CAT3
078-03-0021	LA 538	3.47	S. JCT LA 530 - NORTH JCT LA 1	PATCH & OVERLAY	\$839,580	\$839,580	OLAY	\$0		\$0	
				<i>Sub-Total</i>	<i>\$839,580</i>	<i>\$839,580</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average/Year</i>	<i>\$83,958</i>	<i>\$83,958</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average Proj.</i>	<i>\$839,580</i>	<i>\$839,580</i>		<i>\$0</i>		<i>\$0</i>	
737-94-0032		0	DISTRICT 04 GUARD RAIL REPLACEMENT	GUARD RAIL REPLACEMENT	\$1,636,323	\$1,636,323	OTHER	\$0		\$0	
809-13-0001	LA3231	0.87	JEFF.PAIGE (I-220 - US 80)	WIDEN TO 5 LANES	\$5,599,951	\$5,599,951	OTHER	\$0		\$0	
451-02-0081	I 20	2.64	I-20 @ INDUSTRIAL DRIVE (LA 782-2)	RAMP RECONSTR. W/GEOMETRIC IMPROV.	\$3,293,616	\$3,293,616	OTHER	\$0		\$0	
				<i>Sub-Total</i>	<i>\$10,529,890</i>	<i>\$10,529,890</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average/Year</i>	<i>\$1,052,989</i>	<i>\$1,052,989</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average Proj.</i>	<i>\$3,509,963</i>	<i>\$3,509,963</i>		<i>\$0</i>		<i>\$0</i>	
455-08-0079	I 49	0.06	REIMB. REPAIRS BERT KOUNS OVERPASS	REPAIRS TO O'PASS I-49 SB OV LA 526	\$1,098,624	\$1,098,624	REIMB	\$0		\$0	
				<i>Sub-Total</i>	<i>\$1,098,624</i>	<i>\$1,098,624</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average/Year</i>	<i>\$109,862</i>	<i>\$109,862</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average Proj.</i>	<i>\$1,098,624</i>	<i>\$1,098,624</i>		<i>\$0</i>		<i>\$0</i>	
455-08-0061	I 49	0.79	I-49 AT CADDOPH E/W RD.(CONST)	NEW INTERCHANGE	\$13,071,987	\$13,071,987	STBONDS	\$0	DEMO	\$0	IM
				<i>Sub-Total</i>	<i>\$13,071,987</i>	<i>\$13,071,987</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average/Year</i>	<i>\$1,307,199</i>	<i>\$1,307,199</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average Proj.</i>	<i>\$13,071,987</i>	<i>\$13,071,987</i>		<i>\$0</i>		<i>\$0</i>	
010-30-0024	LA 72	1.48	OLD MINDEN RD(I-20 - US 80)	WIDEN TO 5 LANES	\$6,441,008	\$6,441,008	STCASH	\$0		\$0	
451-30-0031	I 220	1.95	CROSS LAKE BR.DRAINAGE SYS. REPAIR	REPAIR 6 TEST JOINTS IN DRAIN SYS.	\$66,000	\$66,000	STCASH	\$0		\$0	
079-01-0036	LA3049	1.17	THOMAS RD. - 1.17 MILES NORTH	CONC PAVEMENT REHAB.	\$83,750	\$83,750	STCASH	\$0		\$0	
427-01-0030	LA3132	0.94	LA 3132 WBL SIGN TRUSS & GUARDRAIL	SIGN TRUSS & GUARDRAIL REPAIR	\$55,213	\$55,213	STCASH	\$0		\$0	
737-94-0024		0	RAISED PAVEMENT MARKERS DIST. WIDE	RAISED PAVEMENT MARKERS	\$333,000	\$333,000	STCASH	\$0		\$0	
079-01-0038	LA3049	5.56	LA 530 - US 71	ASPHALT SURFACE TREATMENT	\$82,526	\$82,526	STCASH	\$0		\$0	
737-94-GR02		0	GUARDRAIL REPAIR IN DIST. 04	GUARDRAIL REPAIR OR REPLACEMENT	\$128,425	\$128,425	STCASH	\$0		\$0	
808-05-0011	LA 537	2.03	LA 2 - 2.03 MI. WEST	OVERLAY	\$149,032	\$149,032	STCASH	\$0		\$0	
737-94-0034		0	GUARDRAIL REPAIR IN DIST. 04	GUARDRAIL REPAIR OR REPLACEMENT	\$361,160	\$361,160	STCASH	\$0		\$0	
001-03-0077	US 80	0.6	US 80(TEXAS ST.)BRIDGE OVER RED RIV	RED RIVER BRIDGE CAP REPAIRS	\$267,320	\$267,320	STCASH	\$0		\$0	
096-01-0012	LA 170	9.8	LA 2 (VIVIAN) - US 71 (GILLIAM)	CHIP SEAL SINGLE	\$156,135	\$156,135	STCASH	\$0		\$0	
809-08-0038	LA 526	0.01	LA 526 @ RR CROSSING	SAFETY PROJECT @ RR CROSSING	\$43,968	\$43,968	STCASH	\$0		\$0	
737-94-0022		0	GUARDRAIL MAINTENANCE IN DIST. 04	GUARDRAIL MAINTENANCE	\$128,425	\$128,425	STCASH	\$0		\$0	
107-01-0008	LA 528	4.1	LA 157 - WEBSTER PARISH LINE	CHIP SEAL	\$83,655	\$83,655	STCASH	\$0		\$0	
090-01-0024	LA 154	5.05	N. JCT LA 157 - LAKE BISTINEAU BR.	CHIP SEAL	\$116,649	\$116,649	STCASH	\$0		\$0	
102-02-0039	LA 511	0.23	LA 511 ACCELERATION LANE	ACCELERATION LANE	\$222,203	\$222,203	STCASH	\$0		\$0	
053-09-0075	LA 1	1.4	SOUTHFIELD - STRATFORD ST.	2" COLD PLANE AND 2" AC OVERLAY	\$773,191	\$773,191	STCASH	\$0		\$0	
082-30-0021	LA 162	0.01	CROSS DRAIN INSTALLATION	DRAIN INSTALLATION	\$197,917	\$197,917	STCASH	\$0		\$0	
079-01-0039	LA3049	4.6	DIXIE - BELCHER	CHIP SEAL	\$106,572	\$106,572	STCASH	\$0		\$0	
010-06-0066	US 71	0.01	BOSSIER CITY DRAINAGE REPAIR	CROSS DRAIN, JACK PCCP & DRAINAGE	\$666,705	\$666,705	STCASH	\$0		\$0	
053-09-0069	LA 1	0.58	LA 1 E.FRONT RD (LM 7.57 - LM 8.15)	MINOR OVERLAY	\$99,416	\$99,416	STCASH	\$0		\$0	
010-06-0067	US 71	7.9	LA 154 - LA 612	CHIP SEAL	\$300,534	\$300,534	STCASH	\$0		\$0	
102-02-0041	LA 511	0.06	LA 511 E.B. @ LA 1 SB TURN LANE EXT	LENGTHEN RIGHT TURN LANE	\$115,528	\$115,528	STCASH	\$0		\$0	
				<i>Sub-Total</i>	<i>\$10,978,332</i>	<i>\$10,978,332</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average/Year</i>	<i>\$1,097,833</i>	<i>\$1,097,833</i>		<i>\$0</i>		<i>\$0</i>	
				<i>Average Proj.</i>	<i>\$477,319</i>	<i>\$477,319</i>		<i>\$0</i>		<i>\$0</i>	

Appendix C
LADOTD Project Lettings

PROJECT	ROUTE	LENGTH	PROJECT_NAME	TYPE_IMPROVEMENT	LETTING_COST	COST CAT 1	FUND_CAT1	COST CAT 2	FUND_CAT2	COST CAT 3	FUND_CAT3
451-01-0118	I 20	8.75	I-20 SIGNING (MONKHOUSE - US 79)	INTERSTATE SIGNING	\$421,915	\$421,915	STGEN	\$0		\$0	
121-01-0024	LA 527	4	JCT LA 157 - WEBSTER P/L	PATCHING AND OVERLAY	\$1,245,377	\$1,245,377	STGEN	\$0		\$0	
045-31-0024	LA 169	7.18	LA 767 - US 71	CT BASE AND AC OVERLAY	\$2,074,614	\$2,074,614	STGEN	\$0		\$0	
451-02-0048	I 20	5.87	FIFI BAYOU BRIDGE - FILLMORE*	REHAB SE	\$12,952,021	\$12,952,021	STGEN	\$0		\$0	
094-01-0042	LA 173	6.84	ROY ROAD - LA 1	AC WIDENING AND OVERLAY	\$2,634,795	\$2,634,795	STGEN	\$0		\$0	
103-01-0025	LA 523	2.67	EXISTING 5 LANE - JCT. LA 1	RECONSTRUCT AND WIDEN - SE FUNDS	\$23,348,707	\$23,348,707	STGEN	\$0	STGEN	\$0	
455-09-0008	I 49	3.03	I-49 NORTH (LA 2 TO PARISH RD)SEG C	NEW INTERSTATE SE FUNDS	\$19,430,012	\$19,430,012	STGEN	\$0		\$0	
451-30-0042	I 220	0.76	DETOURS FOR MCCAIN CREEK BRIDGE	INSTALL CROSSEOVERS - EMERGENCY	\$889,681	\$889,681	STGEN	\$0		\$0	
078-02-0028	LA 538	2.89	RAVENDALE DR. - US 71	WIDENING AND OVERLAY	\$772,034	\$772,034	STGEN	\$0		\$0	
001-03-0085	US 80	2.51	BENTON RD. - OLD MINDEN RD.	CP & OVERLAY; WHITETOP @ AIRLINE	\$1,445,359	\$1,445,359	STGEN	\$0		\$0	
451-02-0051	I 20	3.7	INDUSTRIAL - FIFI BAYOU BRIDGE	REHAB SE	\$7,700,846	\$7,700,846	STGEN	\$0		\$0	
713-09-0021		0	WHITE SPRINGS ROAD BRIDGE	BRIDGE REPLACEMENT	\$948,386	\$948,386	STGEN	\$0		\$0	
102-03-0015	LA 511	0.53	JIMMIE DAVIS BRIDGE REPAIRS	STRUCTURAL REPAIRS	\$538,075	\$538,075	STGEN	\$0		\$0	
				Sub-Total	\$74,401,822	\$74,401,822		\$0		\$0	
				Average/Year	\$7,440,182	\$7,440,182		\$0		\$0	
				Average Proj.	\$5,723,217	\$5,723,217		\$0		\$0	
742-07-0012		0	SHED RD (I-220 - STOCKWELL RD	IMPROVEMENTS	\$2,666,980	\$2,666,980	STP>200K	\$0		\$0	
001-02-0026	US 80	0.5	GREENWOOD @ PINES	INTERSECTION IMPROVEMENT	\$692,287	\$692,287	STP>200K	\$0		\$0	
427-01-0024	LA3132	2.33	LA 3132 @ ELLERBE/BRUSH BAYOU	LIGHTING (PHASE II)	\$477,772	\$477,772	STP>200K	\$0		\$0	
097-01-0020	LA 525	1.36	COLQUITT ROAD	CLEARING FOR RECONSTRUCTION	\$113,146	\$113,146	STP>200K	\$0		\$0	
097-01-0022	LA 525	1.36	COLQUITT ROAD	RECONSTRUCTION	\$6,743,047	\$6,743,047	STP>200K	\$0		\$0	
742-09-0108		0.75	LAKESHORE DRIVE	(CLEARING & GRUBBING)	\$324,728	\$324,728	STP>200K	\$0		\$0	
742-07-0024		0.75	LAKESHORE DRIVE	RECONSTRUCTION	\$3,553,837	\$3,553,837	STP>200K	\$0		\$0	
427-01-0029	LA3132	1.25	INNER LOOP EXTENSION(LA 526-LA 523)	I'CHANGE @ LA526 W/CONNECT TO LA523	\$14,588,232	\$10,500,000	STP>200K	\$1,000	DEMO	\$4,088,000	STPFLEX
				Sub-Total	\$14,571,797	\$25,071,797		\$1,000		\$4,088,000	
				Average/Year	\$1,457,180	\$2,507,180		\$100		\$408,800	
				Average Proj.	\$2,081,685	\$3,133,975		\$125		\$511,000	
744-08-0002	LA3105	0.01	MCDADE ST.(RIVER ST.-BARKSDALE BLVD	CORRIDOR LANDSCAPE ENHANCEMENT	\$78,915	\$78,915	STPENH	\$0		\$0	
744-08-0003		0.01	LOUISIANA BOARDWALK ALONG RED RIVER	LANDSCAPE ALONG R.R.WATERFRONT B.C.	\$181,796	\$181,796	STPENH	\$0		\$0	
744-09-0017	LA3194	0.12	SUSL CAMPUS GATEWAY SIGNS	SUSL CAMPUS SIGNING	\$98,400	\$98,400	STPENH	\$0	LOCAL	\$0	
				Sub-Total	\$359,111	\$359,111		\$0		\$0	
				Average/Year	\$35,911	\$35,911		\$0		\$0	
				Average Proj.	\$119,704	\$119,704		\$0		\$0	
082-30-0020	LA 162	6.49	MIDWAY - BENTON HWY (EAST SECTION)	WIDEN & OVERLAY	\$1,564,516	\$1,564,516	STPFLEX	\$0		\$0	
048-01-0010	US 79	6.32	TEXAS STATE LINE - US 80	OVERLAY	\$1,578,115	\$1,578,115	STPFLEX	\$0		\$0	
001-03-0067	US 80	7.92	JCT LA 72 - EASTWOOD	OVERLAY	\$3,193,717	\$3,193,717	STPFLEX	\$0		\$0	
090-01-0015	LA 154	1.14	LAKE BIST SPWY	BRIDGE REPLACEMENT	\$13,933,738	\$13,933,738	STPFLEX	\$0	FBRON	\$0	
011-01-0053	US 71	0.19	SCOUR REPAIRS TWELVE MILE BAYOU BR	SCOUR REPAIRS	\$580,058	\$580,058	STPFLEX	\$0		\$0	
025-08-0053	US 171	4.7	LA 511 - JCT LA 173	OVERLAY	\$1,242,989	\$1,242,989	STPFLEX	\$0		\$0	
025-09-0004	LA3094	0.84	12-MILE BAYOU - JCT LA 1/US 71	TURN LANES	\$654,539	\$654,539	STPFLEX	\$0		\$0	
083-04-0018	LA 2	5.36	PLAIN DEALING - SAREPTA HWY (W SEC)	OVERLAY	\$876,372	\$876,372	STPFLEX	\$0		\$0	
083-04-0019	LA 2	0.9	JCT LA 3 - EAST	CONCRETE PATCHING (CM)	\$251,600	\$251,600	STPFLEX	\$0		\$0	
084-01-0039	LA 157	8.69	JCT LA 2 - NORTH 8.69 MI.	OVERLAY	\$1,648,842	\$1,648,842	STPFLEX	\$0		\$0	
102-03-0011	LA 511	0.2	RED RIVER BRIDGE @ SHREVEPORT	SCOUR REPAIR (PIER #2)	\$649,729	\$649,729	STPFLEX	\$0		\$0	
044-02-0019	LA 3	7.02	7.87MI.N. OF LA 162-0.11M.N.OF LA 2	2" SUPERPAVE ASP. CONCRETE W.C.	\$820,954	\$820,954	STPFLEX	\$0		\$0	
083-04-0020	LA 2	6.57	CSLM 6.36 - WEBSTER PARISH LINE	ASPHALT SURFACE TREATMENT	\$113,584	\$113,584	STPFLEX	\$0		\$0	
808-07-0044	LA3105	1.87	US 71 - US 80	CONCRETE PATCHING	\$54,250	\$54,250	STPFLEX	\$0		\$0	
044-01-0040	LA 3	2.92	LA 72 - I-220	CONCRETE PATCHING	\$54,250	\$54,250	STPFLEX	\$0		\$0	
010-05-0032	US 71	6	POOLE ROAD - LA 154	ASPHALT SURFACE TREATMENT	\$115,111	\$115,111	STPFLEX	\$0		\$0	
010-06-0064	US 71	0.3	US 71 @ LA 612 INTERSECTION	INTERSECTION IMPROVEMENTS	\$29,233	\$29,233	STPFLEX	\$0		\$0	
078-02-0027	LA 358	0.95	LA 3049 - RAVENDALE ST.	OVERLAY	\$40,471	\$40,471	STPFLEX	\$0		\$0	
085-01-0020	LA 530	7.83	N. JCT. LA 538 - US 71	ASPHALT SURFACE TREATMENT	\$131,837	\$131,837	STPFLEX	\$0		\$0	
079-01-0037	LA3049	0.45	BARTON DR. - LA 538	OVERLAY	\$29,807	\$29,807	STPFLEX	\$0		\$0	
297-03-0011	LA 169	1.05	LA 789 - LA 525	OVERLAY	\$78,820	\$78,820	STPFLEX	\$0		\$0	
095-02-0014	LA 168	7.24	LA 1 - US 71	ASPHALT SURFACE TREATMENT	\$105,993	\$105,993	STPFLEX	\$0		\$0	
001-03-0071	US 80	0.19	US 80 @ LA 157 INTERSECTION IMPR.	INTERSECTION IMPROVEMENTS	\$174,901	\$174,901	STPFLEX	\$0		\$0	
045-01-0028	LA 1	5.2	LA 173 - LA 169 (C&G)	CL & GRUBBING (INCL OVERLAY)	\$1,755,621	\$1,755,621	STPFLEX	\$0		\$0	
035-06-0012	LA 175	4.06	DESOTO P/L - LA 1	OVERLAY	\$1,094,946	\$1,094,946	STPFLEX	\$0		\$0	
044-03-0009	LA 3	8.01	PLAIN DEALING - ARKANSAS ST LINE	COLD PLANE, OVERLAY & SHOULDERS	\$2,020,039	\$2,020,039	STPFLEX	\$0		\$0	
045-30-0008	LA 2	4.67	TEXAS STATE LINE - LA 1	WIDEN & OVERLAY	\$1,292,605	\$1,292,605	STPFLEX	\$0		\$0	

Appendix C
LADOTD Project Lettings

PROJECT	ROUTE	LENGTH	PROJECT_NAME	TYPE IMPROVEMENT	LETTING_COST	COST CAT 1	FUND_CAT1	COST CAT 2	FUND_CAT2	COST CAT 3	FUND_CAT3
001-02-0028	US 80	4.66	JCT LA 526 - LA 3231	COLD PLANE & OVERLAY	\$1,119,255	\$1,119,255	STPFLEX	\$0		\$0	
083-01-0010	LA 2	6.41	JCT LA 170 - US 71	OVERLAY	\$1,932,757	\$1,932,757	STPFLEX	\$0		\$0	
102-01-0038	LA 511	6.21	T&P RR - US 171	CONCRETE PATCHING	\$278,800	\$278,800	STPFLEX	\$0		\$0	
122-30-0018	LA 614	0.01	RE-ALIGNMENT OF LA 614 @ LA 164	INTERSECTION RE-ALIGNMENT	\$99,597	\$99,597	STPFLEX	\$0		\$0	
122-01-0012	LA 164	3.92	JCT US 80 TO WEBSTER PARISH LINE	OVERLAY	\$765,245	\$765,245	STPFLEX	\$0		\$0	
095-01-0004	LA 168	2.86	TEXAS STATE LINE - LA 1	ASPHALT SURFACE TREATMENT	\$50,672	\$50,672	STPFLEX	\$0		\$0	
102-01-0037	LA 511	0.29	LA 511 @ BUNCOMB ROAD	INTERSECTION IMPROVEMENT	\$118,002	\$118,002	STPFLEX	\$0		\$0	
808-01-0017	LA 529	6.71	JCT LA 160 - LA 2	STABILIZE BASE & OVERLAY	\$1,738,275	\$1,738,275	STPFLEX	\$0		\$0	
044-01-0041	LA 3	0.16	LA 3 @ I-220	ADD ACCELERATION LANE	\$135,255	\$135,255	STPFLEX	\$0		\$0	
097-01-0027	LA 525	8.6	LA 169 - GILMER BAYOU	PATCHING AND OVERLAY	\$1,938,535	\$1,938,535	STPFLEX	\$0		\$0	
082-03-0025	LA 157	0.19	LA 157 @ LA 614	INSTALL LEFT TURN LANES	\$310,951	\$310,951	STPFLEX	\$0		\$0	
808-07-0040	LA3105	1.4	I-220 - BOSSIER CITY URBAN LIMITS	WIDEN TO 5 LANES	\$10,889,677	\$10,889,677	STPFLEX	\$0		\$0	
102-01-0040	LA 511	2.57	LA 511(HOLLYWOOD AVE-MERIWETHER RD)	OVERLAY	\$231,189	\$231,189	STPFLEX	\$0		\$0	
078-04-0003	LA 538	6.85	JCT LA 173 - JCT LA 767	PATCHING AND OVERLAY	\$1,872,639	\$1,872,639	STPFLEX	\$0		\$0	
048-03-0014	LA 169	8.94	LONGWOOD - MOORINGSPOINT	WIDENING AND OVERLAY	\$2,133,288	\$2,133,288	STPFLEX	\$0		\$0	
084-01-0041	LA 157	5.27	LA 2 - WEBSTER PH.LN.(EAST SECTION)	WIDENING AND OVERLAY	\$1,294,805	\$1,294,805	STPFLEX	\$0		\$0	
809-08-0039	LA 526	5.75	US 80(FLOURNOY) - FLOURNOY LUCAS RD	PCC PATCHING	\$134,000	\$134,000	STPFLEX	\$0		\$0	
048-02-0020	LA 169	0.44	US 80 - .44 MI. NORTH	MINOR OVERLAY	\$78,411	\$78,411	STPFLEX	\$0		\$0	
108-01-0021	LA 612	3.6	US 71 - SLIGO (SLIGO ROAD)	CHIP SEAL SINGLE	\$87,126	\$87,126	STPFLEX	\$0		\$0	
090-01-0022	LA 154	3.56	LA 154 (ELM GROVE) - LA 157	CHIP SEAL SINGLE	\$80,372	\$80,372	STPFLEX	\$0		\$0	
809-07-0010	LA 789	6.15	DESOTO PH. LINE - LA 169	CHIP SEAL SINGLE	\$117,917	\$117,917	STPFLEX	\$0		\$0	
094-02-0021	LA 173	4.62	LA 1 - US 71	CHIP SEAL SINGLE	\$100,809	\$100,809	STPFLEX	\$0		\$0	
083-03-0018	LA 2	6.69	RED RIVER BRIDGE - LA 3	WIDENING AND OVERLAY	\$1,328,303	\$1,328,303	STPFLEX	\$0		\$0	
011-02-0018	US 71	7.56	LA 1 - LA 173	COLD PLANE AND AC OVERLAY	\$2,144,499	\$2,144,499	STPFLEX	\$0		\$0	
044-01-0037	LA 3	8.33	BOSSIER CITY - BENTON HWY(SB LANES)	OVERLAY	\$1,225,578	\$1,225,578	STPFLEX	\$0		\$0	
082-03-0026	LA 157	4.57	LA 614 - OAKLAND	ASPHALTIC CONCRETE OVERLAY	\$1,187,713	\$1,187,713	STPFLEX	\$0		\$0	
102-02-0033	LA 511	0.01	70 TH STREET & THORNHILL INT.	FLOODING IMPROVEMENT	\$308,750	\$308,750	STPFLEX	\$0		\$0	
082-02-0010	LA 157	7.4	N.JCT.LA 154 - OAKLAND	CHIP SEAL	\$206,240	\$206,240	STPFLEX	\$0		\$0	
053-09-0074	LA 1	0.01	SHREVEPORT TRAFFIC SIGNAL SYSTEM	ITS/EMERGENCY OPERATION	\$1,907,887	\$1,907,887	STPFLEX	\$0		\$0	
102-01-0041	LA 511	0.72	W 70TH ST (PINES RD - BUNCOMBE RD)	ASPHALTIC CONCRETE OVERLAY	\$433,198	\$433,198	STPFLEX	\$0		\$0	
094-01-0038	LA 173	3	I-220 - ROY ROAD	AC WIDENING AND OVERLAY	\$1,272,031	\$1,272,031	STPFLEX	\$0		\$0	
122-30-0019	LA 614	5.75	US 80 - LA 164	WIDENING AND OVERLAY	\$1,748,891	\$1,748,891	STPFLEX	\$0		\$0	
808-08-0005	LA3227	2.17	LA 157 -LA 614	AC WIDENING AND OVERLAY	\$848,740	\$848,740	STPFLEX	\$0		\$0	
102-01-0044	LA 511	2.1	LA 526 - PINES RD C&G	CLEARING AND GRUBBING	\$189,116	\$189,116	STPFLEX	\$0		\$0	
083-04-0023	LA 2	5.46	.9 MI. E.OF LA 3-4.9 MI.E.OF LA 157	CHIP SEAL	\$153,207	\$153,207	STPFLEX	\$0		\$0	
082-04-0018	LA 157	5.65	FILMORE - LA 528	CHIP SEAL	\$158,873	\$158,873	STPFLEX	\$0		\$0	
737-94-0044		0	DISTRICT 04 SIGNAL UPGRADES	SIGNAL UPGRADES	\$707,946	\$707,946	STPFLEX	\$0		\$0	
427-01-0038	LA3132	0.01	LA 3132(I-20 - .47 MI. W OF LA 526)	PVT.MARKING REPLACEMENT E & W BND)	\$255,900	\$255,900	STPFLEX	\$0		\$0	
102-01-0034	LA 511	2.1	LA 526 - PINES RD	CAPACITY AND SAFETY IMPROVEMENTS	\$13,328,888	\$13,328,888	STPFLEX	\$0		\$0	
427-01-0029	LA3132	1.25	INNER LOOP EXTENSION(LA 526-LA 523)	I'CHANGE @ LA526 W/CONNECT TO LA523	\$14,588,232	\$4,088,000	STPFLEX	\$1,000	DEMO	\$10,500,000	STP>200K
025-08-0060	US 171	6.56	DESOTO PH LINE - BAIRD RD	OVERLAY	\$1,984,387	\$1,984,387	STPFLEX	\$0		\$0	
				Sub-Total	\$103,572,593	\$93,072,361		\$1,000		\$10,500,000	
				Average/Year	\$10,357,259	\$9,307,236		\$100		\$1,050,000	
				Average Proj.	\$1,523,126	\$1,368,711		\$15		\$154,412	
011-02-0016	US 71	0.64	SOUTHBOUND LANE WIDENING	RECONSTRUCTION	\$282,272	\$282,272	STPHAZ	\$0		\$0	
094-01-0036	LA 173	0.56	LA 173 @ LA 3094	INTERSECTION IMPROVEMENT	\$74,632	\$74,632	STPHAZ	\$0		\$0	
809-08-0033	LA 526	0.09	LA 526 @ LINWOOD	INTERSECTION IMPROVEMENTS	\$207,281	\$207,281	STPHAZ	\$0		\$0	
001-03-0078	US 80	0.1	US 80 & STOCKWELL ROAD	INCREASE LENGTH OF STORAGE LANE	\$61,382	\$61,382	STPHAZ	\$0		\$0	
094-01-0039	LA 173	0.4	I-20 EB ON RAMP - I-220 WB OFF RAMP	ACCELERATION & DECELERATION LANES	\$79,348	\$79,348	STPHAZ	\$0		\$0	
808-06-0015	LA 7822	0.94	LA 72 - EAST	3-LANE WITH CURB & GUTTER	\$2,308,029	\$2,308,029	STPHAZ	\$0		\$0	
102-01-0043	LA 511	0.01	LA 511 MODIFY RAISED MEDIAN	UPGRADE ROAD FROM 4-LANE TO 5-LANES	\$115,660	\$115,660	STPHAZ	\$0		\$0	
420-01-0037	LA3032	0.1	LA 3032 @ DEE ST.	TURN LANES (WB LEFT TURN LANES)	\$113,208	\$113,208	STPHAZ	\$0		\$0	
011-01-0060	US 71	0.65	US 71 NORTH BOUND RT TURN LANES	SOUTH BOUND RT TURN LANES @ 4 INTR.	\$174,490	\$174,490	STPHAZ	\$0		\$0	
011-02-0019	US 71	0.24	US 71 @ PINE HILL ROAD TURN LANE	TURN LANE ADDITIONS	\$105,735	\$105,735	STPHAZ	\$0		\$0	
808-07-0051	LA3105	0.1	LA 3105 @ US 80	RIGHT TURN LANE	\$289,826	\$289,826	STPHAZ	\$0		\$0	
010-30-0030	LA 72	0.01	LA 72 WEST BOUND RIGHT TURN LANE	RIGHT TURN LANE	\$229,701	\$229,701	STPHAZ	\$0		\$0	
809-08-0049	LA 526	0.13	TURN LANES AT BUNCOMBE ROAD	TURN LANES	\$310,229	\$310,229	STPHAZ	\$0		\$0	
082-03-0027	LA 157	0.41	LA 157 IMPROVEMENTS	INCREASE LEFT TURN STORAGE	\$799,035	\$799,035	STPHAZ	\$0		\$0	
809-08-0048	LA 526	0.15	TURN LANES AT LINWOOD AVENUE	TURN LANES	\$429,311	\$429,311	STPHAZ	\$0		\$0	
001-02-0035	US 80	0.22	US 80 ADD CENTER TURN LANES	TURN LANES	\$682,845	\$682,845	STPHAZ	\$0		\$0	
102-03-0013	LA 511	0.12	JIMMY DAVIS E.B. OFF RAMP	NEW CONC PAVEMENT	\$0	\$0	STPHAZ	\$0		\$0	
				Sub-Total	\$6,262,984	\$6,262,984		\$0		\$0	
				Average/Year	\$626,298	\$626,298		\$0		\$0	

Appendix C
LADOTD Project Lettings

PROJECT	ROUTE	LENGTH	PROJECT_NAME	TYPE_IMPROVEMENT	LETTING_COST	COST CAT 1	FUND_CAT1	COST CAT 2	FUND_CAT2	COST CAT 3	FUND_CAT3
				<i>Average Proj.</i>	<i>\$2,949,941</i>	<i>\$2,618,524</i>		<i>\$32</i>		<i>\$331,409</i>	
053-09-0046	LA 1	1	YOUREE DR.(SANDBEACH-LA 3032)	REHAB & DRAINAGE IMP. PHASE 1	\$10,793,511	\$3,271,000	PUBWKS	\$7,522,000	NHS	\$0	
				<i>Sub-Total</i>	<i>\$10,793,511</i>	<i>\$3,271,000</i>		<i>\$7,522,032</i>		<i>\$331,409</i>	
				<i>Average/Year</i>	<i>\$1,079,351</i>	<i>\$327,100</i>		<i>\$752,203</i>		<i>\$33,141</i>	
				<i>Average Proj.</i>	<i>\$3,229,201</i>	<i>\$3,271,000</i>		<i>\$114,002</i>		<i>\$341,452</i>	
								\$0		\$0	
					\$502,697,147	\$477,323,590		\$82,985,924		\$19,007,409	

Program Totals by Funding Source

Funding Source	Total	Average/Year	Average Project Cost	Number of Projects
ARRA	\$35,000,131	\$3,500,013	\$17,500,066	2
DEMO	\$81,906,513	\$8,190,651	\$8,190,651	10
FBR	\$53,169,816	\$5,316,982	\$2,531,896	21
IM	\$40,634,383	\$4,063,438	\$1,847,017	22
LOCAL	\$5,321,198	\$532,120	\$2,660,599	2
MAINT	\$946,086	\$94,609	\$189,217	5
NHS	\$21,387,975	\$2,138,798	\$1,336,748	16
OLAY	\$839,580	\$83,958	\$839,580	1
OTHER	\$10,529,890	\$1,052,989	\$3,509,963	3
REIMB	\$1,098,624	\$109,862	\$1,098,624	1
ST-BONDS	\$13,071,987	\$1,307,199	\$13,071,987	1
ST-CASH	\$10,978,332	\$1,097,833	\$477,319	23
ST-GEN	\$74,401,822	\$7,440,182	\$5,723,217	13
STP>200K	\$25,071,797	\$2,507,180	\$3,133,975	8
STP-EHN	\$359,111	\$35,911	\$119,704	3
STP-FLEX	\$93,072,361	\$9,307,236	\$1,368,711	68
STP-HAZ	\$6,262,984	\$626,298	\$2,618,524	17
PUBWKS	\$3,271,000	\$327,100	\$3,271,000	1
Totals	\$477,323,590	\$47,732,359	\$2,272,969	210

Some projectes have multiple funding sources.

Number of projects per funding souce = number of projects containing that source of funds.

Total Program number of projects = number of unique projects.

Federal Program

Funding Source	Total	Average/Year	Average Project Cost	Number of Projects
ARRA	\$35,000,131	\$3,500,013	\$17,500,066	2
DEMO	\$81,906,513	\$8,190,651	\$8,190,651	10
IM	\$40,634,383	\$4,063,438	\$1,847,017	22
NHS	\$21,387,975	\$2,138,798	\$1,336,748	16
FBR	\$53,169,816	\$5,316,982	\$2,531,896	21
STP-FLEX	\$93,072,361	\$9,307,236	\$1,368,711	68
STP-HAZ	\$6,262,984	\$626,298	\$2,618,524	17
STP-ENH	\$359,111	\$35,911	\$119,704	3
STP>200K	\$25,071,797	\$2,507,180	\$3,133,975	8
Total Federal Program	\$356,865,071	\$35,686,507	\$2,176,007	164

Some projectes have multiple funding sources.

Number of projects per funding souce = number of projects containing that source of funds.

Total Federal Program number of projects = number of uniqe projects with federal funding.

Discounted Federal \$166,324,044

State Program

Funding Source	Total	Average/Year	Average Project Cost	Number of Projects
ST-BONDS	\$13,071,987	\$1,307,199	\$13,071,987	1
ST-CASH	\$10,978,332	\$1,097,833	\$477,319	23
ST-GEN	\$74,401,822	\$7,440,182	\$5,723,217	13
MAINT	\$946,086	\$94,609	\$189,217	5
OLAY	\$839,580	\$83,958	\$839,580	1
OTHER	\$10,529,890	\$1,052,989	\$3,509,963	3
REIMB	\$1,098,624	\$109,862	\$1,098,624	1
PUBWKS	\$3,271,000	\$327,100	\$3,271,000	1
Total State Program	\$115,137,321	\$11,513,732	\$2,398,694	48

Some projectes have multiple funding sources.

Number of projects per funding souce = number of projects containing that source of funds.

Total State Program number of projects = number of uniqe projects with state or local funding.

Discounted State \$42,565,875