

**Lafayette Metropolitan Area**

**Transportation Plan Update**

**2004**

**FINANCIALLY CONSTRAINED PLAN**

**DRAFT REPORT**

**2004**

Prepared for:

*Louisiana Department of Transportation and Development  
Lafayette Metropolitan Planning Organization*

By:

 **NEEL-SCHAFFER**

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## **CHAPTER 1**

### **Introduction**

The Lafayette Metropolitan Transportation Planning Area encompasses Lafayette Parish and portions of Acadia, Vermilion, Iberia and St. Martin Parishes. The metropolitan planning area previously contained only Lafayette Parish. However in the 2000 Census, the *urbanized area* of metropolitan Lafayette grew primarily because of demographic criteria which included two municipalities: the City of Breaux Bridge in St. Martin Parish and the Village of Maurice in Vermilion Parish. Additionally, portions of Acadia and Iberia Parishes were included in the metropolitan area. The study area general boundaries as established by the Lafayette MPO are the St. Landry Parish Line to the north, the Vermilion Parish Line and Maurice Area to the south, the Acadia Parish line and Mire Area to the west, and the Hendeson/Parks/St. Martinville area to the east. The transportation study area is shown in Map 1.

#### **1.1 Historical Background**

In response to the Federal Highway Act of 1962, the Comprehensive Transportation Plan for Lafayette Area was completed in 1967. The improvement program provided a foundation for the development of the transportation system over the past forty years. The Plan was last revised fully in 1990<sup>1</sup> and then reviewed and revised in 1995.<sup>2</sup> However, some of the improvements identified in the plan have not been implemented.<sup>3</sup> The situation has placed severe constraints on significant portions of the street and highway network as it exists today.

The 1967 plan was prepared based on a mainframe computer-model called *Planpac*. This model was developed by the Federal Highway Administration (FHWA) and was subsequently replaced by the Urban Transportation Planning Software (UTPS) model. These models were very time-consuming and costly and required several weeks or months to prepare a traffic assignment. In the late 1980's, LADOTD purchased a multi-location license for the TRANPLAN Travel Demand Forecasting Model. At the time, it was the intent to update all of the urban plans in the State using the software package. In 1992, the Lafayette Metropolitan Area Transportation Plan was completed using TRANPLAN.

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<sup>1</sup> Wilbur Smith and Associates, and Sellers (Baton Rouge, LA) and Dubroc and Associates (Lafayette, LA), Lafayette Transportation Plan, Technical Memos No.1 - No. 5, 1990-1991.

<sup>2</sup> Neel-Schaffer, Inc. (Baton Rouge, LA), Lafayette Parish Metropolitan Transportation Plan, Tranplan Model User Manual, January 1995.

<sup>3</sup>The current state of the completion of the plan is posted on the Lafayette in a Century Web Site, operated by Lafayette Consolidated Government, Department of Traffic and Transportation, Metropolitan Planning Organization and Comprehensive Planning Division. See the Financially Constrained Transportation Plan (FCTP) at <http://www.lafayettelinc.net/Maps/FCTP/intro.asp> as existing as of the date of this publication.

Due to advances in computer technology in the late 1990's, LADOTD decided to convert to the TransCAD Travel Demand Forecasting Model. The computer modeling plan updates conducted by the MPO were performed in version 3.0 and continued through version 4.0. The current plan is being modeled in version 4.7 by the MPO and Neel-Schaffer, Inc.

### **1.2 Purpose**

The purpose of this study is twofold. The first is to update the Metropolitan Transportation Plan (MTP) for the Lafayette Area as required by the Federal Highway Act of 1962 and its congressional revisions. The target years for this plan will be 2010 for the Short Range Stage, 2020 for the Intermediate Stage and 2030 for the Long Range Stage. The second purpose is to develop a PC-based travel demand computer model using the TransCAD software package.

### **1.3 Scope of Work**

This study provides an update of area travel characteristics, an inventory and an evaluation of the existing transportation system. Potential improvements to the system will be developed and analyzed. A transportation plan and staged improvement program will be recommended. A computer travel demand model will be developed. Local planners and LA DOTD staff will be trained in the use of this model. The Caliper Corporation, the developers of TransCAD, are developing, as part of this project, a user friendly inter-face that will significantly enable many different types of users to use this plan on their personal computers.

### **1.40 Advisory Committee Structure**

The Project Steering Committee is composed of two entities: The Study Team and the Consultant Team.

The Study Team is composed of members of the Lafayette Metropolitan Planning Organization (MPO) staff and includes the following individuals:

Tony Tramel, Director of Traffic and Transportation  
Mike Hollier, Planning Manager, Metropolitan Planning Organization Division  
Mike LeBlanc, Planner II, Metropolitan Planning Organization Division  
Vijay Kunada, Engineer II, Metropolitan Planning Organization Division  
Johnny Orgeron, Planner II, Metropolitan Planning Organization Division

The Consultant Team composed of Neel-Schaffer, Inc<sup>4</sup>. as Prime Consultant and Sub-Consultants consisting of Dubroc Engineering, Inc.<sup>5</sup>, Caliper Corporation<sup>6</sup>, Bernardin, Lochmueller Associates<sup>7</sup> and Dr. David C. Johnson<sup>8</sup> and include the following individuals:

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<sup>4</sup>Neel-Schaffer is a regional transportation consultant with offices in Lafayette, and Baton Rouge and throughout the Southeastern United States. . Neel-Schaffer provided the traffic modeling expertise for the project. See <http://www.neel-schaffer.com/> for the internet webpage

<sup>5</sup> Dubroc, Engineering, Inc., 202 Rue Iberville, Lafayette, LA 70508 provided an analysis of local network streets.

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Jerry Trumps, Vice-President, Neel-Schaffer, Inc.

L.P. Ledet, Senior Planner, Neel-Schaffer, Inc.

Raju Porandla, Planner, Neel-Schaffer, Inc.

Gerald Dubroc, Engineer II, Dubroc Engineering, Inc.

Chris Guilbeau, Engineer I, Dubroc Engineering, Inc.

Dr. David A Ripple, Chief of Transp. Land Use Planning, Bernardin, Lochmueller Associates

Dr. David Johnson, Consulting Demographer, University of Louisiana - Lafayette

Paul Ricotta, Transportation Engineer, Caliper Corporation.

The Project Steering Committee and the Consultant Team reported to the three Metropolitan Planning Organization (MPO) committees: Transportation Technical Committee (TTC), The Transportation Policy Committee (TPC), and The Citizens Advisory Committee (CAC).

The Transportation Technical Committee (TTC) provides review and evaluation of the technical aspects of planning activities and is made up of local, State and Federal transportation planners, engineers and other technically qualified persons with an interest in the transportation system.

The Transportation Policy Committee (TPC) provides decision-making with regard to the approval and adoption of transportation plans and programs and is composed of the principal elected officials in the metropolitan area, as well as State and Federal representatives.

Unique to the Lafayette MPO, the Citizens Advisory Committee (CAC) is composed of citizens appointed to review transportation plans from the point of view of a layman.

The review process begins with the CAC, and continues with the TTC. There is then a review by the TPC before submission to the Lafayette City-Parish Planning Commission. Upon review by Planning Commission, the Lafayette-City Parish Council reviews actions taken by the planning process and acts under federal guidelines as the Metropolitan Planning Organization.

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<sup>6</sup>The Caliper Corporation, 1172 Beacon Street, Newton MA 02461-9926 TransCAD is original developer of TransCAD which is a Geographic Information System (GIS) designed specifically for use by transportation professionals to store, display, manage, and analyze transportation data combining GIS and transportation modeling capabilities in a single integrated platform. The Caliper Corporation provided customized programming for the project. See <http://www.caliper.com/tcovu.htm> for the internet webpage.

<sup>7</sup> Bernardin, Lochmueller & Associates, 6200 Vogel Road, Evansville, IN 47715 provided video analysis of license plates for the External Station Survey. See <http://www.blainc.com/home.html> for the internet webpage

<sup>8</sup> Dr. David Johnson, formerly of the History and Geography Dept. of the University of Louisiana at Lafayette provided demographic analysis for the project.

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Public participation in the planning process occurred with the presentation of the preliminary demographic findings of the report in March of 2004 and again with the presentation of this report in October of the same year. The MPO also received comments to the plan both from Committee members and the public at its meeting during the plan preparation beginning in July, 2003.

**1.50 Membership of MPO Committees**

The members of MPO committees as of the date of this document are listed in the next three sections.

**1.51 Transportation Policy Committee Membership**

<i>Representative</i>	<i>Appointing Authority</i>
Chester Alleman	Town of Duson
Don Bertrand	City of Broussard
Mayor Glenn Brasseaux	City of Carencro
Byron Breaux	City-Parish Council Designee
John Broussard	City-Parish President Designee
Vernal Comeaux	City-Parish Council Designee
Bill Fontenot	La Dept of Transportation and Development
Lucien Gastineau	City-Parish Planning Commission
Howard Mczeal	City-Parish Council Designee
Purvis Morrison	City of Scott
Kevin Normand	City-Parish Council Designee
Jamie Setze	Federal Highway Administration
Tom Sammons	Town of Youngsville

**1.52 Technical Transportation Committee**

<i>Representative</i>	<i>Appointing Authority</i>
Tom Carroll	Director of Public Works
Eleanor Buoy	Director of Planning, Zoning and Codes
Tony Tramel	Director of Traffic and Transportation
Dawn Picard	Engineer, Department of Traffic and Transportation
Pat Logan	Associate Director of Public Works
Marie Larriviere	City of Broussard
Lynn Guidry	City of Carencro
Larry Thibodeaux	Town of Duson
Gerald Trahan	City of Scott
Mayor Wilson Viator	Town of Youngsville
Henry Florsheim	Lafayette Economic Development Authority
Rob Guidry	Chamber of Commerce
Greg Roberts	Lafayette Regional Airport

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Dan Broussard	La Dept. of Transportation and Development
Taylor Rock	City-Parish Grant Programs
Xiaoduan Sun	University of Louisiana at Lafayette
Bill Fontenot	La Dept. of Transportation and Development
Carol Cranshaw	La Dept. of Transportation and Development
Ken Villemarette	Lafayette Parish School Board
Brigitte Karr	Southwest Louisiana Independence Living Center
Jamie Sietz	Federal Highway Administration
Norma Dugas	Clerk, City-Parish Council
Cathy Webre	Lafayette Downtown Development Authority

**1.53 Citizens Advisory Committee**

<i>Representative</i>	<i>Appointing Authority</i>
Nelson Falcon	City-Parish Council District 1
James A. Hebert	City-Parish Council District 2
John Gabriel	City-Parish Council District 3
Dr. Raphael Baranco	City-Parish Council District 4
Luther J. Arceneaux	Area Mayors (Broussard, Maurice, Youngsville)
Roger Lehman	City-Parish Council District 6
Grover Dunphy	City-Parish Council District 7
Paul Leberg	City-Parish Council District 8
Elaine D. Abell	City-Parish Council District 9
Nancy Broussard	City-Parish President
William W. Rucks, III	Area Mayors (Breux Bridge, Carencro, Duson, Scott)

**1.6 TEA-21**

The Transportation Equity Act for the 21st Century (TEA-21) continues the requirements for comprehensive transportation planning. It also requires that additional factors be considered in developing transportation plans and programs. These factors are:

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

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- 7) Emphasize the preservation of the existing transportation system; and
- 8) All of these factors were considered in developing the recommendations for this Metropolitan Transportation Plan (MTP).

## **1.7 Goals and Objectives**

One of the first tasks of the study is the formulation of a set of goals and objectives to provide a framework for the MTP and to maintain it as a viable document. The goals and objectives are also used as guidelines in preparing and evaluating potential improvements to the system.

The overall transportation goal is to develop a transportation system which will accommodate present and future needs for mobility of all people and goods traveling within and through the area. In addition, the transportation system must be safe, efficient, economically feasible, and in harmony with the character of the area.

To ensure that the recommended transportation plan meets the desires of the area, the following objectives have been established:

### **1.71 Transportation System Requirements**

The transportation system should:

- 1) Meet the Lafayette Metropolitan Area's long-range transportation needs.
- 2) Be planned as a unified system of roadways based on function and relative importance, providing a proper balance of freeways, arterials, collectors, and local streets.
- 3) Encourage and accommodate through traffic on the classified street system (i.e., freeways, expressways, and arterials) and discourage it on collectors and local neighborhood streets.
- 4) Provide access among all developed areas of the Lafayette Metropolitan Area.
- 5) Improve overall accessibility to employment, education, public facilities, the central business district (CBD), and other major activity centers.
- 6) Make maximum use of existing highway and street facilities.
- 7) Provide for a high degree of safety for both motorists and pedestrians.
- 1) Provide for an orderly improvement and expansion of the roadway system at minimum cost as the need for improvement arises.
- 2) Minimize disruption of existing and planned developments and established community patterns.
- 3) Reduce air pollution, noise, and other environmental impacts associated with transportation improvements and new facility construction.

### **1.72 Metropolitan Transportation Plan**

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The MTP should:

- 1) Be viewed as a document that requires periodic updating and revision.
- 2) Provide sufficient flexibility to accommodate changes in land use planning for the Lafayette Metropolitan Area and other unforeseen changes and conditions.
- 3) Consider development potentials within and beyond the projected limits of the urbanized area to the year 2030.

**1.73 Continuing Transportation Planning Activities**

Continuing transportation planning activities should:

- 1) Be performed within the framework of comprehensive regional planning and support regional growth and development goals.
- 2) Provide continuity and coordination between jurisdictions.

## CHAPTER 2: EXISTING TRANSPORTATION NETWORK

### 2.0 Introduction

For the purpose of this project, the Lafayette Metropolitan Study Area is that area expected to be urbanized by the year 2030. The general boundaries as established by the Lafayette MPO are the St. Landry Parish Line to the north, the Henderson/Parks Area to the east, the Cade/Coteau Area to the southwest, the Vermilion Parish Line and Maurice Area to the South, and the Acadia Parish Line and Mire Area to the West. The transportation study area is shown in Map 1.

### 2.1 Federal and State Highways

Several Federal and State highways serve the study area. These facilities constitute the main network of roadways in the area. The most significant of the facilities are:

- I-10 This freeway is one of the major interstate highways in the United States running from Los Angeles, California to Jacksonville, Florida. It traverses the northern portion of the City of Lafayette in an east-west direction. It connects Lafayette Parish with urban areas in south Louisiana and the southern United States, including Baton Rouge and New Orleans on the east and Lake Charles and Houston, Texas on the west. Access to and from Interstate 10 in the Lafayette area is provided by its interchanges at Austria Rd, Apollo Rd (LA 93), Ambassador Caffery Parkway (LA 3184), University Avenue (LA 82), and Interstate 49/Evangeline Thruway (U.S 167). A new interchange was recently completed at Louisiana Ave.
- I-49 This freeway runs in north-south direction from its interchange with I-10 in Lafayette to Alexandria and Shreveport, Louisiana on the north. It provides access to the northern area of Lafayette Parish with interchanges provided at Pont Des Mouton Rd, Gloria Switch Road (LA 98), North University Avenue (LA 182), as well as Bernard and Hector Conolly.
- US 90 Prior to the construction of the Interstate Highway System, this Federal Highway was the major east/west route in the southern United States. It traverses the Study Area parallel to I-10 East and West of Lafayette through the southern Louisiana cities of Lake Charles, Crowley, New Iberia, Morgan City, Houma, and New Orleans.
- US 167 This principle Highway follows the Interstate 49 alignment, continues south along Evangeline Thruway, and then Johnston Street, which runs in a northeast-southwest direction through Lafayette Parish. U.S. 167 (Johnston St), which

borders the University of Louisiana on the north, continues to the southwest to Abbeville, Louisiana. On the north, U.S.167 connects Lafayette with the Louisiana cities of Opelousas, Alexandria, and Ruston, and continues north to the State of Arkansas.

State Highways- There are numerous state highways, which serve Lafayette Parish and carry relatively high volumes of traffic. The major state highways include: LA 182, LA 3073/3184, LA 3095, LA3025, LA 733, LA 728-3 and LA-98.

## 2.2 Existing Street and Highway Functional Classifications

The street and highway network developed for the project was based on the functional classification system prepared by the Louisiana Department of Transportation and Development. The components of this network are freeways, major arterials, minor arterials, and collectors. The distribution of mileage in these categories is as follows:

<b>Table 2.1 LAFAYETTE PLANNING ORGANIZATION EXISTING STREET AND HIGHWAY FUNCTIONAL CLASSIFICATIONS</b>						
<b>Classification</b>	<b>Urban Miles</b>	<b>Percent Urban Miles</b>	<b>Rural Miles</b>	<b>Percent Rural Miles</b>	<b>Total Miles</b>	<b>Percent Total Miles</b>
Freeway	37.77	15.17	3.70	5.5	56.64	13.6
Major Arterial	63.45	25.48	0.00	0.0	87.94	21.0
Minor Arterial	68.35	27.45	1.97	2.9	100.66	24.1
Collector	79.41	31.90	61.28	91.6	172.58	41.3
<b>Total</b>	<b>248.98</b>	<b>100.00</b>	<b>66.95</b>	<b>100.00</b>	<b>417.82</b>	<b>100.00</b>

Each type of facility provides separate and distinct traffic service functions and is best suited for accommodating particular demands. Their designs also vary in accordance with the characteristics of traffic to be served by the facility.

**Freeways** These facilities are divided highways with full control of access and grade separations at all intersections. The controlled access character of freeways results in high-lane capacities, which are three times greater than the individual lane capacities of standard urban arterial streets.

**Expressways** This type of facility provides for movement of large volumes of traffic at relatively high speed, and is primarily intended to serve long trips. Expressways have some grade-separated intersections while the majority of the intersections are widely spaced and may be signalized.

**Arterials** Arterial streets are important components of the total transportation system. They serve both as feeders to freeways and expressways, and as principal travel ways between major land use concentrations within the study area. Arterials are typically divided facilities with raised or flush medians (undivided where right-of-way limitations exist) with relatively high traffic volumes and traffic signals at major intersections. The primary function of arterials is moving traffic, and they are the main means of local travel. A secondary function of arterials is land access.

**Collectors** This type of facility provides both land service and traffic movement functions. Collectors serve as intermediate feeders between arterials and local streets and primarily accommodate short distance trips. Since collector streets are not intended to accommodate long through trips, they are generally not continuous for any great length.

**Local Streets** The intended sole function of a local street is to provide access to immediately adjacent land. Within the local street classification, three subclasses are established to indicate the type of area served: residential, industrial, and commercial. These streets are not included in the TransCAD modeling network.

## **CHAPTER 3: FUNDING SOURCES**

The implementation of a financially constrained plan for the Lafayette Metropolitan Area will necessarily involve several sources of funding. These sources include various programs at the local, state and federal levels. Since many of the improvement projects are located on the State and Federal Highway System, substantial financial assistance could be obtained through funding programs of the LADOTD, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Several of these funding programs are listed below.

### **Potential Funding Sources - Federal**

#### **TEA-21**

The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) will provide total funding of \$198 billion nationally for fiscal years 1998-2003, and reauthorized by Congress through May 31, 2005. This legislation includes several categories of funding, under which many of the projects in the financially constrained plan will be eligible for Federal funding assistance. These categories are:

#### **National Highway System (NHS)**

This category covers all Interstate routes and a large percentage of urban principal arterials. The Federal/Local funding ratio for arterial routes is 80/20. The Interstate System, although a part of NHS, will retain its separate identity and will receive separate funding at a 90/10 ratio.

#### **Surface Transportation Program (STP)**

The STP is block grant funding program with subcategories for States and Urban Areas. These funds can be used for any road (including NHS) that is not functionally classified as a local road or rural minor collector. The State portion can be used on roads within an urbanized area and the urban portion can only be used on roads within an urbanized area.

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Subcategories of the STP funds are:

STP greater than 200,000 population  
STP less than 200,000 population and  
STP Flexible, Hazard Elimination, and Enhancement.

The funding ratio is 80/20.

**Federal Transit Administration (FTA)**

FTA funding is provided for annual operation and maintenance cost of the system. Funding levels may vary dependent upon variables such as fare revenue and annual federal appropriations. Generally, approximately 50% of the annual cost of operation has been provided by this funding.

Capital funding for equipment and other capital improvements are provided on a funding ratio of 80/20.

**Bridge Replacement and Rehabilitation Program**

These funds can be used to replace or repair any bridge on a public road. The funding ratio is 80/20.

**Potential Funding Sources - Local**

Any costs not covered by Federal and State programs will be the responsibility of the local governmental jurisdictions. Local funding can come from a variety of sources including property taxes, sales taxes, user fees, special assessments and impact fees. Each of these potential sources is important and warrants further discussion.

**Property Taxes**

Property taxation has historically been the primary source of revenue for local units of government in the United States. More than 80 percent of all tax revenues at this level come from this tax. Property is not subject to Federal government taxation, and state governments have in recent years shown an increasing willingness to leave this important source of funding to local governments.

## **General Sales Taxes**

The general sales tax is also an important revenue source for local governments. The most commonly known form of the general sales tax is the retail sales tax. The retail sales tax is imposed on a wide range of commodities, and the rate is usually a uniform percentage of the selling price. The current sales tax varies within the area; for Lafayette, the current rate is 8.5%.

## **User Fees**

User fees are fees which are collected from those who utilize a service or facility. The fees are collected for the purpose of paying for the cost of a facility, financing the cost of operations and/or generating revenue for other uses. Water and sewer services are the most commonly known public improvements for which a user fee is charged. This method of generating revenue to finance public improvements has also been employed to finance the cost of public parks, transit systems and solid waste facilities. The theory behind the user fee is that those who directly benefit from the public improvement pay for the cost of the public improvement.

## **Special Assessments**

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

## **Impact Fees**

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

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**Bond Issues**

Property tax and sales tax funds can be used on a pay-as-you go basis, or the revenues from them can be used to pay off general obligation or revenue bonds. These bonds are issued by local governments upon approval of the voting public. The City of Lafayette, Lafayette Parish and now, the Lafayette Consolidated Government have had a long and successful history in utilizing general obligation and sales tax revenue bonds to fund infrastructure improvements.

## CHAPTER 4: IMPLEMENTATION COSTS

### Implementation Cost Estimate

The estimate of costs to implement the Financially Constrained Transportation Plan for the Lafayette Area is based on historical data collected from LADOTD and local agencies. This data included actual contract amounts for completed projects and projects currently under construction, and programmed amounts from State and local proposed construction programs. Order-of-magnitude cost estimates, in 2004 dollars, for projects not included in any of the above categories were developed based on discussions with the LADOTD Roadway Design Section and local public works officials, and on an average cost per improvement type as listed below.

<u>Improvement Type</u>	<u>Average Cost</u>
Widening (two additional lanes)	\$ 3,000,000/mile
New two lane road	\$ 1,700,000/mile
New four lane road	\$ 4,800,000/mile
Continuous turn lane	\$ 1,700,000/mile
Reconstruction	\$ 775,000/mile
New Interchange	\$18,000,000/each
Traffic Signals	\$ 100,000/signal
Right-of-way (rural)	\$ 200,000/mile
Right-of-way (urban)	\$ 750,000/mile

## **Financial Feasibility**

The financial feasibility of the Financially Constrained Plan can be determined by comparing the estimated cost of the programmed improvements to the projected funds which could be available from the various funding sources referenced earlier. The projection of funding was made by analyzing historical data on expenditures for street and highway construction in Louisiana and the Lafayette Parish area. For this plan update, current funding projections in 2004 dollars were used which were approved by all the agencies involved in the interagency consultation process.

Historical information obtained from LADOTD indicates that, on average, contracts totaling almost \$14.5 million dollars per year, in 2004 dollars, have been let for construction and maintenance of the transportation infrastructure within the Lafayette Metropolitan Area over the past twenty-five (25) years.

To determine the appropriate level of funding to be used for the financially constrained plan the 14.5 million dollar average projected over the 26 year Plan Period indicates that 377 million dollars of State and Federal projects can be programmed.

A summary of the historic funding data and the conversion to 2004 dollars is in Table 41.

**Table 4-1  
Historic State and Federal Funding**

<b>Year</b>	<b>Real Dollars</b>	<b>2004 Dollars</b>
1980	\$12,398,572	\$27,642,617
1981	\$ 8,697,309	\$17,509,423
1982	\$ 3,124,671	\$ 5,912,503
1983	\$11,742,047	\$21,505,559
1984	\$ 6,662,672	\$11,650,604
1985	\$12,093,848	\$20,618,801
1986	\$ 6,860,522	\$11,503,723
1987	\$ 9,755,549	\$15,848,865
1988	\$ 2,997,951	\$ 4,702,885
1989	\$11,880,370	\$17,855,008
1990	\$ 743,331	\$ 1,061,254
1991	\$ 5,995,711	\$ 8,238,107
1992	\$ 530,575	\$ 709,750
1993	\$ 645,491	\$ 837,137
1994	\$ 3,213,938	\$ 4,055,668
1995	\$11,867,218	\$14,543,276
1996	\$ 7,723,845	\$ 9,182,107
1997	\$ 7,880,119	\$ 9,170,882
1998	\$19,823,487	\$22,781,151
1999	\$11,842,930	\$13,349,351
2000	\$22,033,288	\$24,062,554
2001	\$29,558,991	\$31,545,355
2002	\$13,771,623	\$14,511,159
2003	\$37,472,892	\$38,593,331
2004	\$11,737,522	\$11,737,522
<b>TOTAL</b>	<b>\$271,014,471</b>	<b>\$359,128,592</b>
<b>25 Year Average</b>	<b>\$ 10,840,579</b>	<b>\$ 14,365,144</b>

## **CHAPTER 5: FINANCIALLY CONSTRAINED PLAN**

Taking into account the funding limitations, the street and highway projects in the Plan will be allocated to a financially constrained Staged Improvement Program. Projects will be programmed in three stages as follows:

Stage 1	2005-2010
Stage 2	2011-2020
Stage 3	2021-2030

Using the aforementioned \$377 million limit of State and Federal funds expected to be available for the Plan the list of projects were allocated to the stages using the following priorities:

1. DOTD Proposed Construction Program
2. Current MPO Transportation Improvement Program (TIP)
3. Previous MPO Long Range Plan

Based on the current programming, the State and Federal projects listed in the first six years (Stage I) total \$170 million. That leaves a remaining \$207 million to be available for States II & III. The remaining Long Range Plan projects were then allocated to the States based on expected construction time schedule.

Locally funded projects were added to the Stages based on the expected budget and bonding capacity of the local jurisdictions.

The Plan and Stages are shown in Figure 1 and the Staged Project listings are in Tables 5-1, 5-2 and 5-3.

**figure 1**

**PLAN MAP**

**TABLE 5-1**  
**LAFAYETTE METROPOLITAN AREA TRANSPORTATION PLAN**  
**MTP 2030**  
**STAGE I (2005-2010)**

<b>NAME</b>	<b>LOCATION</b>	<b>IMPROVEMENT</b>	<b>COST</b>	<b>SOURCE</b>
Pinhook Rd (LA 182)	@ Bendel Rd	Intersection Improvement	\$ 1,731	State/Fed
Doucet Rd.	Johnston St. to Clara Von Dr.	Continuous Turn Lane	\$ 2,054	Local
Louisiana Ave.	Pont des Mouton Rd to Gloria Switch Rd.	New 4 Lane	\$ 13,541	Local
N. St. Antoine St.	I-10 to Pont des Mouton Rd	New 3 Lane	\$ 7,518	Local
Pont des Mouton Rd.	University Ave to Louisiana Ave	Widen to 4 lanes	\$ 27,864	Local
Eraste Landry Rd.	Sunbeam Coulee to Cameron St.	Widen to 3/5 lanes	\$ 5,200	Local
I-10	Apollo Rd to Louisiana Ave.	Frontage Roads	\$ 40,000	Local
S. College Rd	Pinhook Rd to Kaliste Saloom Rd	New 5 Lane w/Bridge	\$ 15,500	State/Fed
Camellia Blvd	Johnston St to Eastland St.	Reconstruct 4 Lane	\$ 1,500	Local
Camellia Blvd	Starling to Verot School Rd	New 4 Lane	\$ 7,800	Local
Verot School Rd	Pinhook Rd to Vincent Rd	Widen to 4 Lanes	\$ 14,500	State/Fed
Ambassador Caffery	Verot School Rd to US 90	New 4 Lane	\$ 35,000	State/Fed

**TABLE 5-1 (continued)**  
**LAFAYETTE METROPOLITAN AREA TRANSPORTATION PLAN**  
**MTP 2030**  
**STAGE I (2005-2010)**

<b>NAME</b>	<b>LOCATION</b>	<b>IMPROVEMENT</b>	<b>COST</b>	<b>SOURCE</b>
Ridge Rd	W. Broussard Rd to Johnston St	Widen to 4 Lanes	\$ 7,500	State/Fed
Eraste Landry Rd	Provost Rd to Ambassador Caffery	New 3 Lane	\$ 4,670	Local
Rue de Belier	Ridge Rd to Duhon Rd	New 4 Lane	\$ 8,233	Local
Kaliste Saloom Rd	Ambassador Caffery to E. Broussard Rd.	Widen to 4 Lanes	\$ 17,500	State/Fed
I-49	I-10 to South Study Boundary	Corridor Preservation	\$ 18,000	State/Fed
North/South Beltway	Johnston St to US 90	New 2 Lane, Reconstruct 2 Lane	\$ 20,000	Local
Line Item	Various Locations	Bikeway Facilities	\$ 1,250	State/Fed
Line Item	Various Locations	Drainage	\$ 1,800	State/Fed
Line Item	Various Locations	Maintenance	\$ 3,000	State/Fed
Line Item	Various Locations	Signs/Striping	\$ 500	State/Fed
Line Item	Various Locations	Scoping/Environmental	\$ 900	State/Fed
Line Item	Various Locations	Enhancement	\$ 450	State/Fed
Line Item	Various Locations	Hazard Elimination	\$ 1,350	State/Fed
Line Item	Various Locations	Railroad Crossings	\$ 1,740	State/Fed
Line Item	Various Locations	ITS	\$ 22,950	State/Fed
Line Item	Various Locations	Overlay	\$ 24,000	State/Fed
Line Item	Various Locations	Bridge Replacement	\$ 2,400	State/Fed

**Street & Highway**  
**Subtotal STAGE I \$308,451**

**State/Federal**           **\$170,071**

**Local**                       **\$138,380**

**figure 2**

**STAGE I  
MAP**

**Table 5-2**  
**LAFAYETTE METROPOLITAN AREA TRANSPORTATION PLAN**  
**MTP 2030**  
**STAGE II (2011-2020)**

<b>NAME</b>	<b>LOCATION</b>	<b>IMPROVEMENT</b>	<b>COST</b>	<b>SOURCE</b>
Surrey St	Fisher to Pinhook	Widen to 3 Lanes	\$ 1,800	State/Fed
Westgate Rd	Dulles to Rue de Belier	New 4 Lane	\$ 1,000	State/Fed
Ambassador Caffery	I-10 to Ira St	New 3 Lane	\$ 15,000	State/Fed
Lebesque Rd	Ambassador Caffery to University Ave	Reconstruction	\$ 800	State/Fed
Mills St	Delhomme Ave to Cameron St	Reconstruction and New 2 Lane	\$ 3,000	Local
Apollo Rd	Cameron St to Dulles	New 2 Lane	\$ 3,000	State/Fed
I-49	I-10 to South Study Boundary	Corridor Preservation	\$ 30,000	State/Fed
North/South Beltway	LA 98 to Johnston St	Reconstruction and New 2 Lane	\$ 30,000	Local
Line Item	Various Locations	Bikeway Facilities	\$ 1,250	State/Fed
Line Item	Various Locations	Drainage	\$ 3,000	State/Fed
Line Item	Various Locations	Maintenance	\$ 5,000	State/Fed
Line Item	Various Locations	Signs/Striping	\$ 800	State/Fed
Line Item	Various Locations	Scoping/ Environmental	\$ 1,500	State/Fed
Line Item	Various Locations	Enhancement	\$ 800	State/Fed
Line Item	Various Locations	Hazard Elimination	\$ 2,250	State/Fed
Line Item	Various Locations	Railroad crossings	\$ 2,900	State/Fed
Line Item	Various Locations	Overlay	\$ 40,000	State/Fed
Line Item	Various Locations	Bridge Replacement	\$ 4,000	State/Fed
		<b>Street &amp; Highway</b>		
		<b>Subtotal STAGE II</b>	<b>\$146,100</b>	
		<b>State/Federal</b>	<b>\$113,100</b>	
		<b>Local</b>	<b>\$ 33,000</b>	

**figure 3**

**STAGE II  
MAP**

**TABLE 5-3  
LAFAYETTE METROPOLITAN AREA TRANSPORTATION PLAN  
MTP 2030  
STAGE III (2021-2030)**

<b>NAME</b>	<b>LOCATION</b>	<b>IMPROVEMENT</b>	<b>COST</b>	<b>SOURCE</b>
Rue de Belier	Duhon Rd to E. Broussard	New 4 Lane	\$ 5,000	Local
Kaliste Saloom Rd	@ Camellia Blvd	New Interchange	\$ 20,000	Local
Cameron St.	Nelrose to Jenkins Rd	Continuous Turn Lane	\$ 4,000	State/Fed
Johnston St.	@ Camellia Blvd	New Interchange	\$ 20,000	Local
I-10	@ LA 354	New Interchange	\$ 15,000	State/Fed
Ambassador Caffery	Ira St to I-49	New 3 Lane	\$ 15,000	State/Fed
Ira St	Ambassador Caffery to LA 182	Widen to 4 Lanes, New Extension	\$ 5,000	State/Fed
North South Beltway	LA 95 to I-10	Reconstruction, Realignment	\$ 15,000	Local
Line Item	Various Locations	Bikeway Facilities	\$ 1,250	State/Fed
Line Item	Various Locations	Drainage	\$ 3,000	State/Fed
Line Item	Various Locations	Maintenance	\$ 5,000	State/Fed
Line Item	Various Locations	Signs/Striping	\$ 800	State/Fed
Line Item	Various Locations	Scoping/Environmental	\$ 1,500	State/Fed
Line Item	Various Locations	Enhancement	\$ 800	State/Fed
Line Item	Various Locations	Hazard Elimination	\$ 2,250	State/Fed
Line Item	Various Locations	Railroad Crossings	\$ 2,900	State/Fed
Line Item	Various Locations	Overlay	\$ 40,000	State/Fed
Line Item	Various Locations	Bridge Replacement	\$ 4,000	State/Fed
<b>Street &amp; Highway Subtotal STAGE III</b>			<b>\$160,500</b>	
<b>State/Federal</b>			<b>\$100,500</b>	
<b>Local</b>			<b>\$ 60,000</b>	
<b>TOTAL STREET &amp; HIGHWAY PLAN</b>			<b>\$615,051</b>	
<b>State/Federal</b>			<b>\$383,671</b>	
<b>Local</b>			<b>\$231,380</b>	

**figure 4**

**STAGE III  
MAP**

## **CHAPTER 6: SYSTEM MAINTENANCE AND OPERATION**

The maintenance and operation of the transportation system was considered in the development of the plan and staged program. Typically, maintenance costs are applicable to the system as a whole. Where possible, maintenance projects are identified individually. However, it is not possible to develop project specific maintenance schedules for other than the near term. The maintenance costs identified in this plan are the responsibility of various governmental jurisdictions.

The balancing act of meeting identified transportation improvement needs and maintaining the present transportation system will continue to place local decision makers and revenue forecasts somewhat at odds. The conservative recommendations made by this plan fully considered the impact of maintenance cost in the determination of available funding. Some of the existing programs for highway and bridge infrastructure are listed below.

### **Interstate Maintenance Program (IM)**

This federal funding category is intended to "rehabilitate, restore, and resurface" the Federal Interstate system. Two (2) eligible federal interstate highways lie within the Lafayette Urbanized Area, Interstates 10 and 49. Twenty-three point eight Billion (\$23.8B) is authorized nationwide for the 6 years of the TEA-21 for this category. Approximately Seventy-eight Million (\$78M) is available to the State of Louisiana annually under this program.

### **Federal Bridge Replacement Program (FBR)**

This federal funding category is intended to provide funding to any bridge on a public road. Funding under this program amounted to \$20.4 Billion for fiscal years 1998 through 2003. Statewide approximately \$92 Million a year was available through 2003.

**State of Louisiana Overlay, Maintenance and Operations Program**

A variety of both federal and state funds are used to implement the statewide overlay, maintenance and operations program including Surface Transportation Funds, National Highway System Funds, General Louisiana Trust Fund monies, and State of Louisiana general funds.

## **CHAPTER 7: ADDITIONAL TRANSPORTATION CONSIDERATIONS**

The following is a brief overview of the status of other transportation related activities which were considered in the preparation of this Plan.

### **Mass Transportation**

The Lafayette area is provided mass transportation services through the Lafayette Transit System (LTS). The long range vision for LTS is to operate bus, busways, park-and-ride facilities, van pools, demand response and special programs. As the major transit provider, it has been awarded discretionary and demonstration grants by both federal and state agencies to implement public transportation programs in the Lafayette area.

LTS currently operates \_\_\_\_ buses over \_\_\_\_ routes. The service runs from 6:30 AM to 11:30 PM six days a week. Annual passenger miles for the system are approximately 5,000,000.

In addition, LTS currently operates a para-transit, demand response service for qualified patrons. The system operates a maximum of 5 specially equipped vehicles on the same daily schedule as the LTS system.

Transit projects programmed in the TIP are developed from the Transit Development Program prepared by the MPO. That document is incorporated herein by reference.

**CHAPTER 8: METROPOLITAN PLANNING FACTORS**  
**Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21)**

1. *Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.*

The Lafayette Urban Area is located on I-10, and I-49. Interstate Highway 10 is the major east-west route in the southern United States. Improvements to this facility and the routes that interchange with it will allow access to national and international trade routes making land in the corridor more attractive for development. Interstate Highway 49 is a major north-south route in Louisiana, currently existing between Shreveport and Lafayette. There are plans underway to extend this interstate route to Kansas City to the north and New Orleans to the south.

2. *Increase the safety and security of the transportation system for motorized and non-motorized users.*

Intersection Improvements will include cross section and geometric design to improve safety. Signal Systems will increase safety not only for vehicles but for bicycles and pedestrians. Widening improvements will often replace substandard two lane roads with minimal or no shoulders.

3. *Increase the accessibility and mobility options available to people and for freight.*

Many of the improvements in the Plan will provide greater accessibility to the Lafayette Regional Airport.

Many of the improvements in the Plan would allow greater accessibility for the buses of the Lafayette Transit System. This would enhance their ability to move people throughout their service area, especially to and from public facilities.

Many of the recommendations of the Plan are aimed at “catching up” with development which has already occurred. The likely effect of most projects which add additional lanes will be to allow for continued use of existing properties and for in-fill development which may have been postponed or made not financially viable due to limited access.

*Lafayette Metropolitan Area Transportation Plan Update*

- 4. Protect and enhance the environment, promote energy conservation, and improve quality of life.*

The Plan was prepared with the objective of reducing VMT, VHT and vehicle delay which reduces energy consumption. The Plan also reduces congestion which can be a substantial improvement in the quality of life.

- 5. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.*

The Plan recommendations were chosen to greatly enhance the connectivity between the Lafayette Regional Airport, the Greyhound Bus Terminal and the Lafayette Transit Terminal and bus stops. The improvements to routes interchanging with I-10 & I-49 will greatly improve the flow of freight to and from distribution terminals.

- 6. Promote efficient system management and operation.*

The TRANPLAN Model used in the analysis and preparation of the 1995 Plan was calibrated to accurately indicate areas of known congestion. The traffic assignment to the future years could then reasonably be expected to represent congested areas in those years. Alternative improvements were then tested to determine their impact on the expected congestion. The ultimate project mix selected for inclusion in the Plan includes those projects which had the greatest affect on system management and operation.

- 7. Emphasize the preservation of the existing transportation system.*

Of the 31 projects recommended in this Plan, 6 involve the addition of travel lanes. These widening projects will contribute to the alleviation of congestion and provide for increases in the number of trips on the affected corridors. Thirteen of the total projects involve new roadways or roadway extensions. The remainder involves reconstruction of existing facilities and new connections between corridors. These projects will also contribute to the alleviation of congestion, provide for an increase in total trips on the affected corridors, and especially provide for network connectivity, which is much needed for the Lafayette arterial system.