Louisiana Statewide Transportation Plan

Executive Summary

Prepared for

Louisiana Department of Transportation and Development

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Executive Summary

Louisiana's Department of Transportation and Development (DOTD) began an effort in mid-2000 to update the State's transportation plan. Louisiana is a model for how each transportation mode plays a vital role in moving both passengers and freight, and the DOTD hoped to build upon recent studies that articulated this point.

Louisiana's water ports, some of the largest in the country, are critical for the movement of raw materials and finished products in support of the agricultural, mining, and industrial base of the State and other areas of the United States, particularly the Midwest. The State's aviation sector provides vital air service for business travel and tourism, and for the movement of time-sensitive, high-value cargo. Public transportation in Louisiana is imperative in workforce development and the State faces an increasing segment of the population that is becoming transit-dependent. Further, the DOTD has recognized the importance of providing choices in transportation modes to as much of the population as practicable. The State's railroads are key players in moving freight and to some extent passengers. The interaction between modes is critical to the efficiencies needed to move the State's economy forward. The highway mode continues to be the cornerstone mode with which all others interact. In addition to providing door-to-door service, trucking provides the connectivity with ports, rail, and aviation. The highway system directly impacts the entire population due to its implications for personal mobility, the standard of living, and economic security. Highways are crucial to both tourism and to commerce, and their condition directly impacts the economy.

Finally, Louisiana needs to foster growth in the economy and in overall population. A safe, efficient, and well-maintained transportation system can be a catalyst for economic growth, while a poor system can be an impediment.

PLANNING CONTEXT

Customer Involvement

The Work Plan for updating Louisiana's Statewide Transportation Plan recognized the importance of building upon the body of work that had already been accomplished. The 1996 Transportation Plan was widely considered to be a strong document, and the DOTD's widespread public involvement process was regarded as the starting point for the Plan update. The Department leaned heavily on a group of Advisory Councils, each responsible for a particular mode. The Councils are, in effect, independent bodies charged with formulating recommendations for inclusion in the Plan. Each met separately but also had the opportunity on several occasions to listen to what the other Councils were considering. Each Council named its own chair, and it is this chairperson that advanced the Advisory Council's recommendations to the Intermodal Advisory Council (IAC).

The IAC is the receptor of recommendations from the other Councils, and was charged with accepting, revising, rejecting, and prioritizing a wide variety of inputs. The IAC worked directly with the DOTD staff and consultant team to assemble a recommended plan that is fiscally constrained, addresses the State's transportation deficiencies in an effective manner, helps

achieve the proper modal balance, and satisfies the transportation system goals and objectives adopted by the LIIEP Commission.

The Louisiana Investment in Infrastructure for Economic Prosperity (LIIEP) Commission is charged with overseeing the plan development and serves as the final decision-maker in the planning process. It is comprised of 13 individuals from a wide range of experience and backgrounds, helping ensure a balanced view that considers every possible perspective.

The DOTD also incorporated additional efforts to reach its customers and stakeholders. The agency conducted two large Statewide Conferences, one to kick off the study and one to present the draft Plan. A comprehensive website was established and updated regularly. In addition, several newsletters were mass mailed, along with the aforementioned Advisory Council interaction. Further, the DOTD conducted nine regional public meetings to present the draft Plan and provided copies of the document to every library in the State for public review and comment.

The DOTD's public involvement process is extensive and sincere. The Department went to great lengths to listen and consider all points of view regarding what transportation policies, programs and projects should be enacted in Louisiana.

Transportation System Goals

The Values, Goals, and Objectives adopted for the update of the Louisiana Statewide Transportation Plan are based upon those contained in the 1996 Plan with revisions as appropriate. The revisions resulted from a consultant team review, a review of *Louisiana: Vision 2020*, the 2000 Louisiana Transportation Conference, the first round of Advisory Council meetings, a review by the LIIEP Commission, and from a review of the most recent federal transportation planning requirements. The goals for Louisiana's transportation system are:

Goal 1: To develop and maintain an innovative, balanced, safe, equitable, integrated system of transportation facilities and services.

Goal 2: To provide essential passenger-transportation services at reasonable public expense, meeting the diverse needs of the people of Louisiana regardless of their geographic location, physical condition, economic status or service requirements.

Goal 3: To provide a transportation system that fosters diverse economic and job growth, international and domestic commerce, and tourism through prudent investment in facilities and services that improve mobility and access. The system should be responsive to free markets, to user needs and expectations, through flexibility and choice, in a competitive, multimodal environment.

Goal 4: To provide a regulatory and comprehensive policy framework that promotes partnerships, coordination, and cooperation among transportation users and providers in a competitive multimodal environment.

Goal 5: To improve safety in all transportation modes through timely maintenance of existing infrastructure, development of new infrastructure, enhancement of operational controls of both passenger and freight movements, and through expanded public education and awareness.

Goal 6: To develop an efficient transportation system that improves air, water and noise indices to acceptable levels as defined by regulatory standards, reduces dependency on foreign energy sources, preserves historic, cultural, and environmentally sensitive sites, promotes the natural beauty of the State, raises the quality of life for Louisiana's citizens, use land resources efficiently by incorporating smart growth development principles, and promote and implement the context-sensitive design of transportation infrastructure.

Goal 7: To develop stable but flexible transportation financing that provides adequate funds for both the preservation of existing and the construction/ implementation of new facilities and services.

Technical Analysis

Louisiana's DOTD wanted the update of the Statewide Transportation Plan to be technically

grounded. That is, the basis of prioritizing investments and projects for inclusion in the Plan should be as technical as possible. A technical analysis will quantify miles of rough roads, number of deficient bridges, miles of congested roadways, number of aged transit vehicles, over-capacity runways, rail line obstacles, etc. Once there is a sound technical basis for considering a project, other factors can be introduced into the prioritization process (like geographic balance, equity, local support, etc.). There is nothing wrong with sound political support for a project, but the technical analysis should drive the process.

To that end, the DOTD directed the consultant team to be performance-oriented in its approach. Output from the DOTD's pavement and bridge management systems are important components of developing the investment strategies.

The Department also contracted to develop a Statewide Travel Demand Forecasting Model, which is a computerized model that simulates traffic movements, both now and in the future. The Louisiana Model is for highways only, but covers all major roadways (arterials) for both autos and trucks. The model is populated with current traffic counts, then it simulates future movements based on population growth, economic activity, and traffic generators. The model can show which roadway segments become congested and when. This is obviously a significant tool in prioritizing complex, high-cost congestion relief projects.

The model output became the primary indicator of priority for Louisiana's "Mega" highway projects — those high cost capacity enhancement projects that are of major interest.

Funding Scenarios

Another important aspect of transportation planning is to array priorities in line with the revenues that can reasonably be expected. In that way, the capital program does not become over-subscribed and, subsequently, irrelevant. All states face the issue of over-programming — it's okay to identify some additional projects that the DOTD would undertake with additional money or if some projects become delayed (many often do), but this must be a manageable number. Many states are unable to control their over-programming because of political pressure to add projects that they cannot afford. When this occurs, the Plan and capital program become irrelevant, as they cannot realistically be delivered. People's expectations rise ("well, the project is in the Plan"), only to be dashed when reality sets in.

Sound fiscal constraint was used as the foundation of this Plan. Four scenarios were developed, with allocations from programmatic categories identified for each. However, two of the four scenarios involve generating additional transportation revenues, and the DOTD has made it clear that it cannot proceed to implement these scenarios unless additional revenues are made available.

The four scenarios advanced in this Plan:

- **Scenario 1A** (baseline) — no additional revenues, but all current funding stays in place at existing levels. Some growth is assumed in each of the revenue types, which differentiates this scenario from a "status quo" scenario that would assume no growth. However, no adjustments for inflation are assumed to occur during the 30-year planning period.
- **Scenario 1B** (baseline with adjustment) — this scenario is exactly the same as 1A except that inflation adjustments are made in the revenue stream in year 11 and again in year 21 of the 30-year planning period. This assumes the Louisiana Legislature, Congress, or both will take some unspecified action in the future to stabilize the buying power of the transportation program, as has happened historically. The Plan assumptions at year 11 and 21 restore lost buying power due to assumed inflation, resulting in about $2.9 billion (Base 2002 dollars) in additional revenues over 1A.
- **Scenario 2** ($250 million increase) — Scenario 2 assumes $250 million in new revenues in year 1 from State sources. The revenues in this scenario are also adjusted for inflation in years 11 and 21 (restore buying power), resulting in about $5 billion additional 2002 dollars for highways over Scenario 1B, and $1.6 billion (Base 2002 dollars) for non-highway modes.

- **Scenario 3** ($150 million increase) — Scenario 3 adds $150 million in federal highway aid to Scenario 2 revenues, which is also adjusted for inflation. This generates $3.4 billion in increased revenues over Scenario 2. An increase of approximately $90 million in federal transit aid is also included under this scenario.

Thus, the clear identification of these four scenarios and the programmatic implications of each are the cornerstone of this Plan. Each scenario is fiscally constrained, with specific program elements identified.

Multimodal Scope

Louisiana wanted this transportation plan to be truly multimodal. With the Advisory Councils leading the way, each mode was offered the opportunity to become a player at the financial table, depending upon the costs and potential benefits of each initiative. As the reader will see later in this document, the recommended Plan increases support for aviation, public transit, rail/highway crossings, ports, light rail, railroads, as well as highways. The issue of providing modal choices and efficiency was paramount.

In order to position the State to seize upon future federal funding opportunities, the DOTD also specified that new, stand-alone Freight Rail and Aviation Plans be prepared as input to the overall Plan. These modes had not had new inventories conducted for some time, so it made sense to incorporate this effort.

Consideration of Both Passengers and Freight

Transportation planning efforts have traditionally focused on the movement of people. While tourism, business trips, and personal travel are of the utmost importance, freight transportation is critical as well.

Louisiana has been a participant in several visionary transportation planning projects over the past few years. As part of the Southeastern Alliance engaged in the *Latin American Trade and Transportation Study (LATTS)*, Louisiana confirmed the importance of freight transportation to economic growth. The LATTS study also warned that states which do not accommodate increased trade will lose economic opportunity. This principle applies to domestic freight movement also.

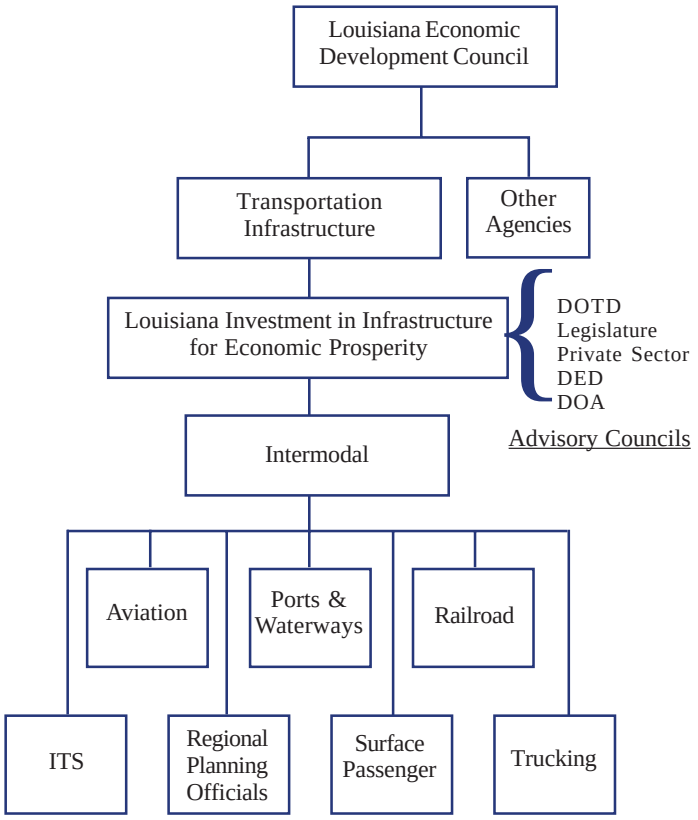
The recommendations of this Plan are truly multimodal in nature and are reflective of the way DOTD intends to do business over the next several decades.

PLAN DEVELOPMENT AND COORDINATION

As mentioned under the Customer Involvement section, the coordination and development of this Plan update was undertaken in close cooperation with the eight transportation Advisory Councils. The Advisory Councils are comprised of 20-30 individuals each, with many representatives from the private sector:

- Aviation
- Freight Railroad
- Intelligent Transportation Systems
- Ports and Waterways
- Regional Planning Officials (highways)
- Surface Passenger (transit, passenger rail, intercity bus)
- Trucking
- Intermodal

Each Council conducted sessions during the development of the Plan to identify issues important, but not limited to, its core area of transportation. Each Council began its deliberations with an examination of the Plans goals and objectives, followed by an examination of issues. These issues ranged from Statewide policy declarations ("support passenger rail") to DOTD initiatives ("hire staff for Rail Division") to capital recommendations. Each Council advanced its recommendations to the Intermodal Advisory Council. The Intermodal Advisory Council was charged with receiving the recommendations, hearing testimony from the various Councils, and then formulating a draft Plan. Once the Intermodal Advisory Council finalized the draft Plan, it was presented to the LIIEP Commission for consideration. The relationship among the Advisory Councils and the LIIEP Commission is illustrated below:



The LIIEP Commission, as called for in the enacting legislation (Act 437 of 2001), is composed of 13 members as follows:

- The governor or his designee
- An assistant chief of staff, appointed by the governor, from the Office of the Governor
- The secretary of the DOTD or his designee (Chair)
- The commissioner of the Division of Administration or his designee
- The secretary of the Department of Economic Development or his designee
- The president of the Louisiana Senate or his designee
- The speaker of the Louisiana House of Representatives or his designee
- The chairman of the Senate Transportation, Highways and Public Works Committee or his designee
- The chairman of the House Transportation, Highways and Public Works Committee or his designee
- The chairman of the Senate Commerce Committee or his designee
- The chairman of the House Commerce Committee or his designee
- Two commissioners, appointed by the governor, selected from the State at large who are representatives of Louisiana business

The final Plan reflects input from the Commission, as well as consideration of input from Statewide information meetings and a formal public review and comment process.

The Statewide Transportation Plan is built from the input of those that know the system best. The Plan, as it evolved through this process, became a vision of the Advisory Councils that shaped it.

RELATIONSHIP WITH OTHER PLANS

Louisiana: Vision 2020 is the State's long-term economic development strategy. Adopted in March 1999, *Vision 2020* establishes specific benchmarks designed to develop Louisiana into a "vibrant, balanced economy; a fully engaged, well-educated workforce; and

a quality of life that places it among the top ten states in the nation to live, work, visit and do business." The Plan is based upon three primary goals:

- Learning Enterprise — providing learning opportunities for the pursuit of knowledge
- Culture of Innovation — developing a diverse and thriving set of technology-driven industries
- Top Ten State — elevating Louisiana's standard of living for all citizens

Each goal has an identified set of objectives. Transportation is an important component of both Goals 2 and 3. Objective 2.3 states "To improve and sustain Louisiana's physical infrastructure, including highways, waterways, ports, and rail." The objective contains 22 separate benchmarks for infrastructure quality and extent, ranging from implementation of the TIMED Program to pavement/bridge condition, parishes with a public transportation system, rail/highway crossings with active warning devices, airport performance, and water port performance.

Objective 2.4, development of the State's information and telecommunications infrastructure, has three benchmarks related to transportation. Objective 3.3 ("to have safe homes, schools, and streets …") lists three safety-related benchmarks for transportation.

Even Goal 1 has implications for public transportation by providing access to education and job training and enabling all citizens to fully participate in the workforce.

The transportation objectives and benchmarks identified in *Vision 2020* are readily apparent as one reviews this document. The DOTD was ever mindful of the objectives established in *Vision 2020*, and the Plan's scenarios are crafted to implement these important benchmarks.

TRANSPORTATION SYSTEM ANALYSIS

Existing conditions on the transportation system were thoroughly reviewed to identify current needs. Forecasts were then made to provide a basis for identifying future transportation needs and improvements in the State. An overview of the system analysis is provided below.

Population and Employment

Future year forecasts serve as inputs into the Statewide travel demand model which is used to estimate future trip generation and traffic volumes for roadways and to evaluate highway improvement options. Forecasts utilized in this study were obtained from Woods & Poole Economics, who develop long-term economic and demographic regional projections for every county (parish) in the United States. Woods & Poole projections were only available to the year 2025 and therefore were extrapolated to the year 2030 based on projected growth rates. Projections for population and employment are shown in Table 1. Population in Louisiana is expected to grow from 4.5 million in 2000 to 5.4 million in 2030. This represents an annual growth rate of 0.6 percent. With regard to employment, over 900,000 jobs are expected to be added to the Louisiana economy by the year 2030, increasing employment from 2,416,492 in the year 2000 to 3,345,073 in the year 2030. This represents an annual increase of 1.1 percent.

Table 1
Population and Employment Forecasts

	Population		Employment	
	2000	2030	2000	2030
Arkansas	2,673,400	3,645,132	1,508,746	2,218,439
Louisiana	4,468,976	5,437,145	2,416,492	3,345,073
Mississippi	2,844,658	3,627,795	1,512,021	2,139,201
Texas	20,851,820	32,035,969	12,164,883	19,376,875

Source: U.S. Census Bureau, Woods and Poole, WSA.

Highways

Pavement Preservation

The DOTD has adopted several strategic goals pertaining to the condition of highway pavements. The goal for interstate highways is to eliminate pavements classified as "poor" or "very poor." The goal for State roads on the National Highway System (NHS) and those on the Statewide Highway System (SHS) is to hold the proportion classified as poor or very poor to no more than 5 percent at any given time. There is no strategic goal for the Regional Highway System (RHS), composed mostly of lower-order, low-volume rural and urban roads; therefore, the focus is on keeping the system from deteriorating.

An extensive analysis of pavement preservation needs was conducted using the DOTD Pavement Management System. A summary of the recommended pavement preservation investment levels is provided in Table 2.

Table 2
Pavement Preservation and Rehabilitation Needs Summary

Highway System	Cost ($M/year)
Interstate System	$55
National Highway System	$36
Statewide Highway System	$72
Regional Highway System	$56
Total Pavement Rehabilitation Needs	**$219**

Figures 1-4 display pavement condition information for each highway system at the recommended investment level.

Bridge Preservation

There are more than 13,000 bridges on public roads in Louisiana. Well over half are on State highways. Currently 3.4 percent of all deck area on State bridges is in poor condition, while 18.4 percent is projected to be in poor condition by the year 2030, as shown in Figure 5. The largest percentage of bridge deck area currently in poor condition consists of timber (25.5 %). Forty-eight percent of bridge deck area composed of timber is projected to be in poor condition by the year 2030. It should be noted that although current and projected bridge deck area composed of timber consists of the highest percentage in poor condition, timber bridge deck area only represents 1 percent of total deck area.

Figure 1
Pavement Preservation and Rehabilitation - Interstate

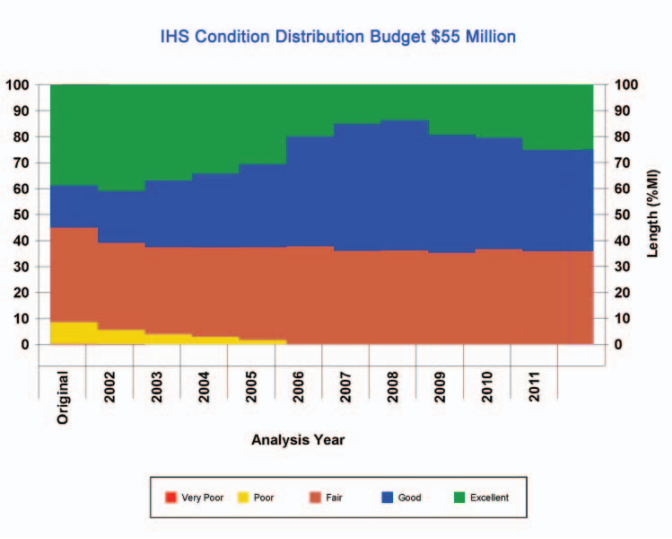


Figure 2
Pavement Preservation and Rehabilitation - NHS

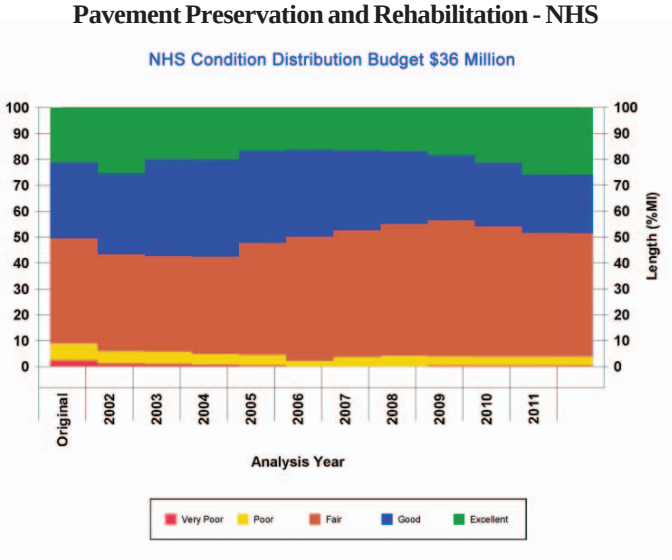


Figure 3
Pavement Preservation and Rehabilitation - SHS

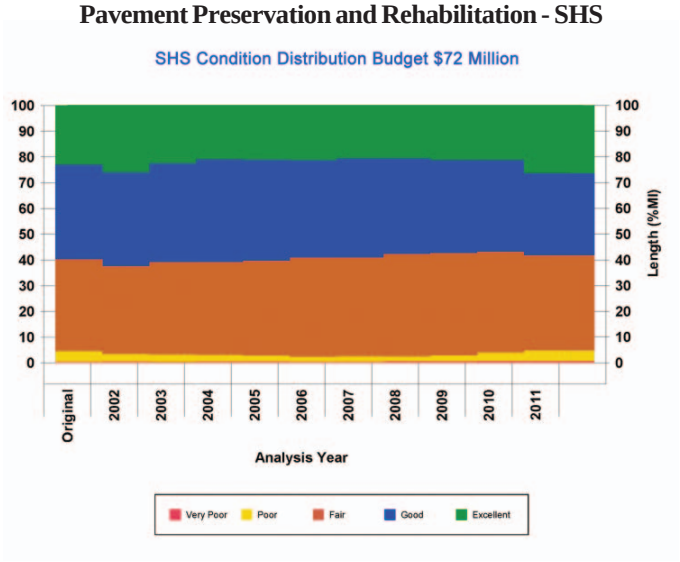


Figure 4
Pavement Preservation and Rehabilitation - RHS

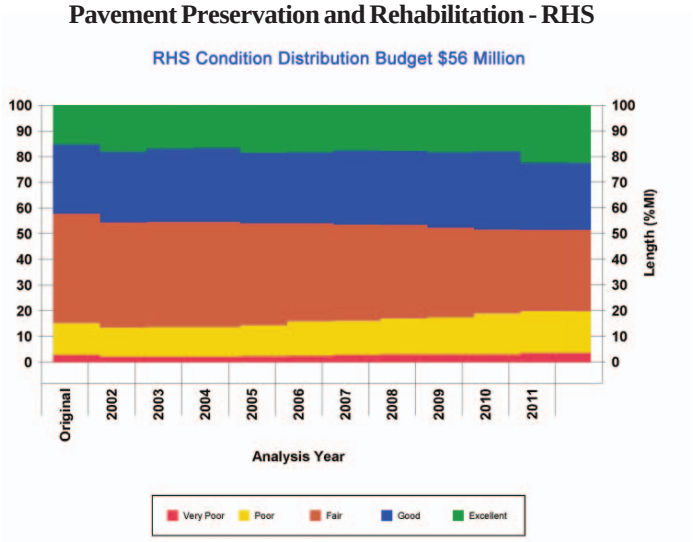


Figure 5
Louisiana Bridges in Poor Condition By Type

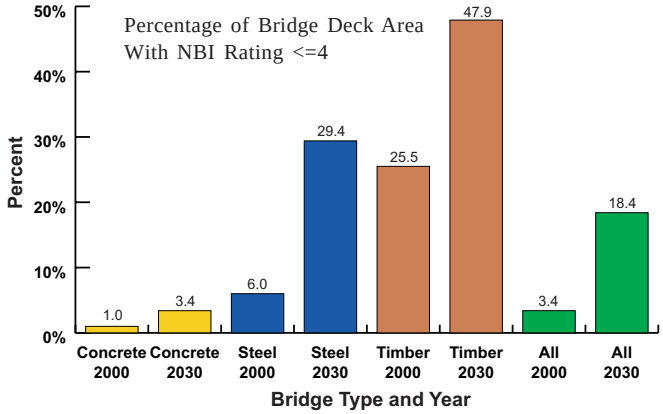
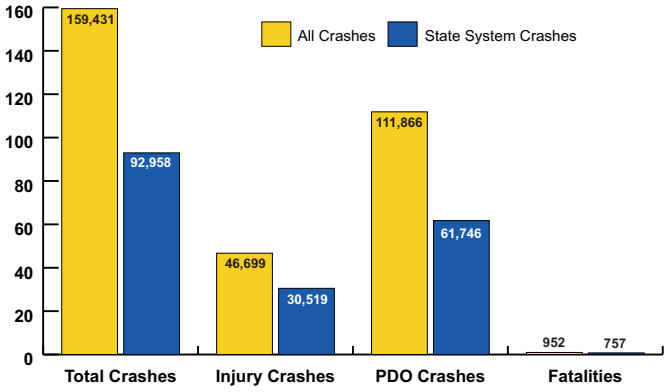


Figure 6
2001 Crashes: Total vs. State System
(in thousands)



Safety

Based on 2001 traffic crash data, there were a total of 92,958 crashes along the State-maintained highway system in Louisiana. Of the total crashes, 693 were fatal (757 fatalities), resulting in Louisiana having the third highest fatality rate in the country. Injury crashes accounted for 33 percent of total crashes and resulted in 53,433 injuries. The largest percentage of crashes, 66 percent, were property damage only. Figure 6 shows total crashes in Louisiana versus the State system. Crashes along the State system accounted for 58 percent of total crashes in Louisiana. Fatalities along the State system accounted for 80 percent of total fatalities, while injury crashes and property damage only accounted for 65 percent and 55 percent respectively. The majority of crashes, 31 percent, consisted of rear-end collisions followed by other collisions and right angle collisions at 21 percent and 16 percent respectively.

Mobility

Figure 7 displays current (2000) Level of Service (LOS). The majority of the highways in the State have a LOS of A-C, meaning they are operating below capacity, resulting in acceptable traffic operation. However, segments of several highways have a LOS of D-F, which is considered unacceptable on the rural highway system. The majority of capacity problems are occurring in urban areas where volume-to-capacity ratios are equal to or greater than 1.0 (traffic volumes exceeding highway capacity).

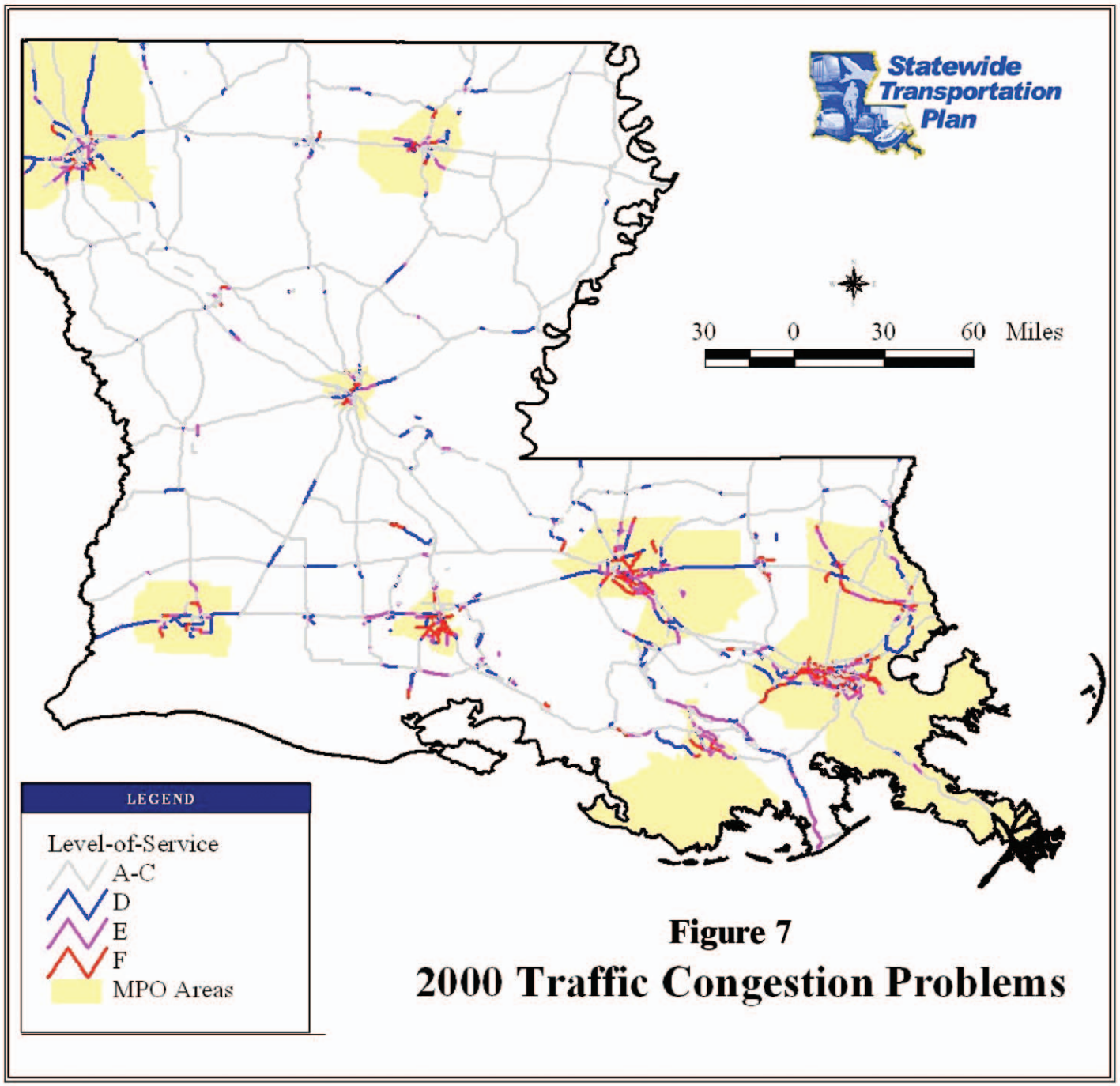


Figure 7
2000 Traffic Congestion Problems

Figures 8 and 9 displays LOS in the Year 2030 without and with the implementation of the TIMED projects respectively. Improvements in LOS occur along those segments of highways where TIMED projects are implemented. For example, segments of US 171 improve from a LOS D to a LOS A-C and segments of US 165 improve from a LOS D and E to a LOS A-C.

The Transportation Infrastructure Model for Economic Development is a long-range transportation plan that includes extensive improvements to the highway system. Louisiana's TIMED projects include improvements to US 61, US 90, US 165, US 167, US 171, LA 15, LA 3241 and other highways and bridges in the State. TIMED projects are funded by a dedicated four-cent per gallon fuel tax.

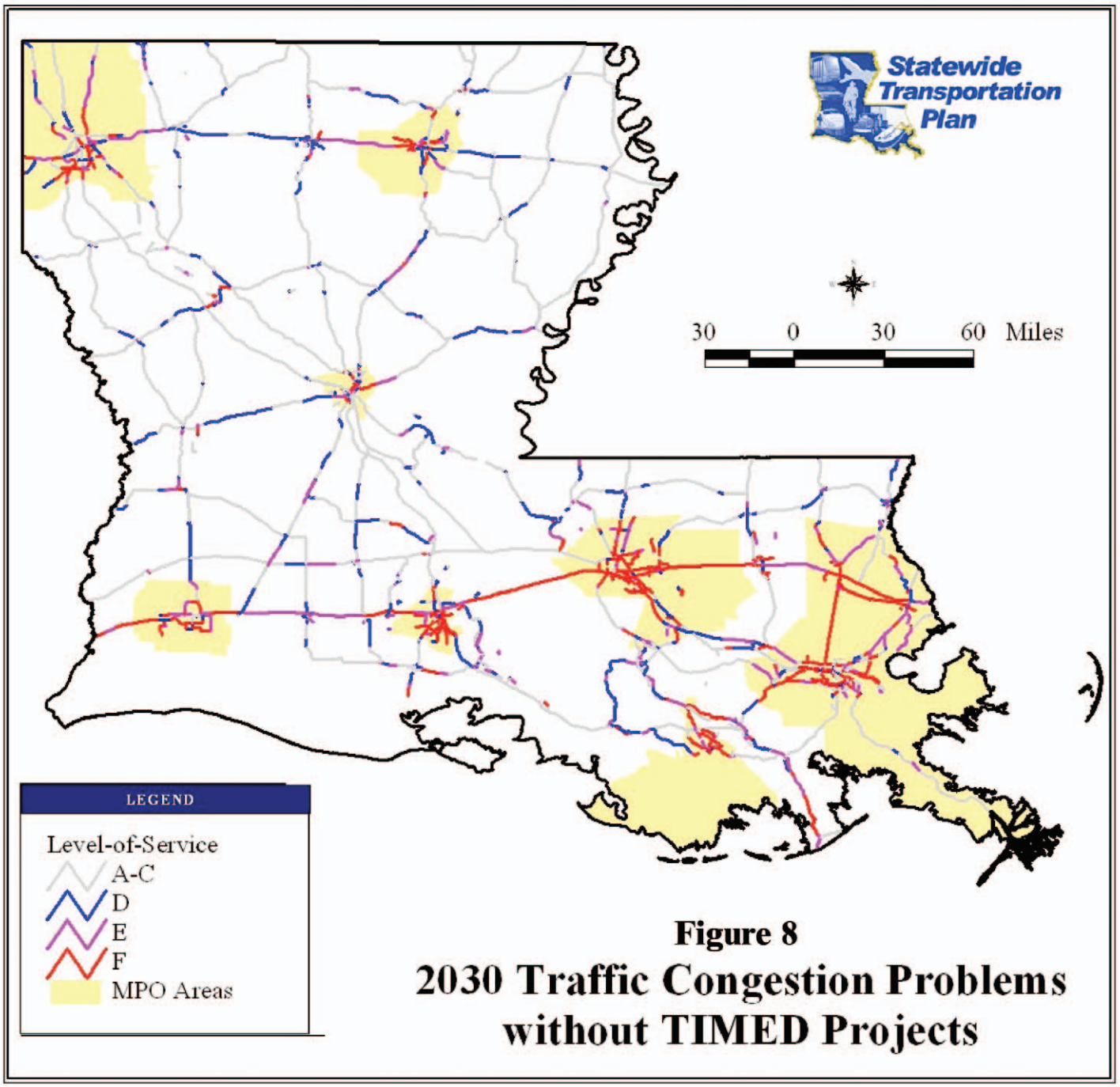


Figure 8
2030 Traffic Congestion Problems without TIMED Projects

In 2030, the congestion problems have spread from the urban areas into the rural areas of the State. On the rural highway system, most of the capacity problems are occurring along I-10 and I-12 where the majority of segments along these highways have a LOS of E or F. I-20 also has congestion problems as the majority of segments along this highway have a LOS between D and F. Sections of other roadways experiencing some capacity problems, with a LOS D or E include: I-49 (north of Lafayette), I-55, US 84, LA 3 (north of Bossier City), LA 1 (north and south), LA 2, LA 28 (west of Alexandria) and LA 70.

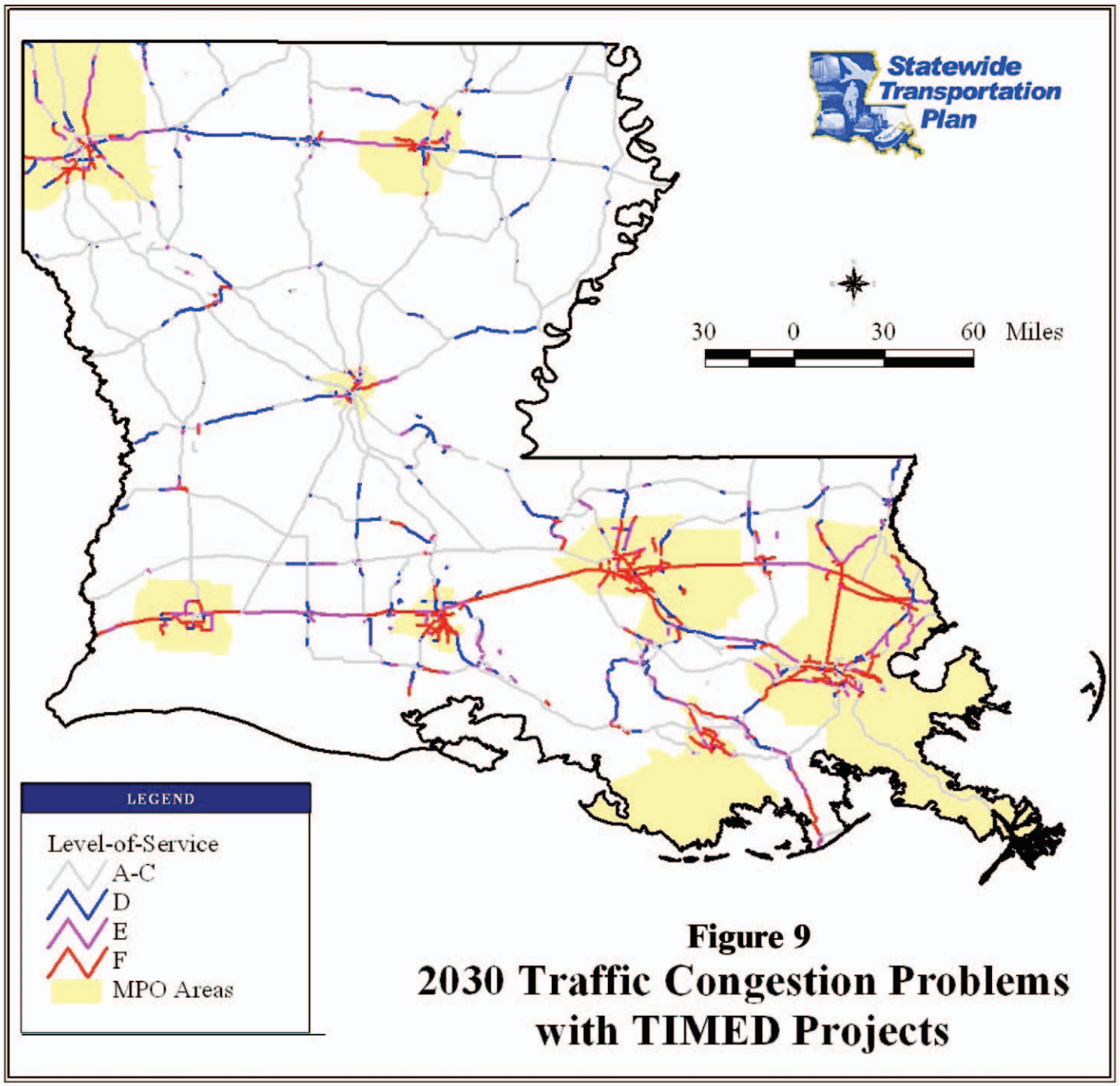


Figure 9
2030 Traffic Congestion Problems with TIMED Projects

In addition to conventional, commuter- and shopping-based automobile traffic, two classes of auto trip warrant special attention: Business Trips and Tourist Trips. These trips comprise a significant portion of long-distance travel in Louisiana. The Louisiana Statewide Travel Demand Model forecasts these trips as part of its overall function. Figures 10 and 11 depict daily business and tourist traffic forecasts on Louisiana highways.

Figure 10
Total Daily Auto Business Trips

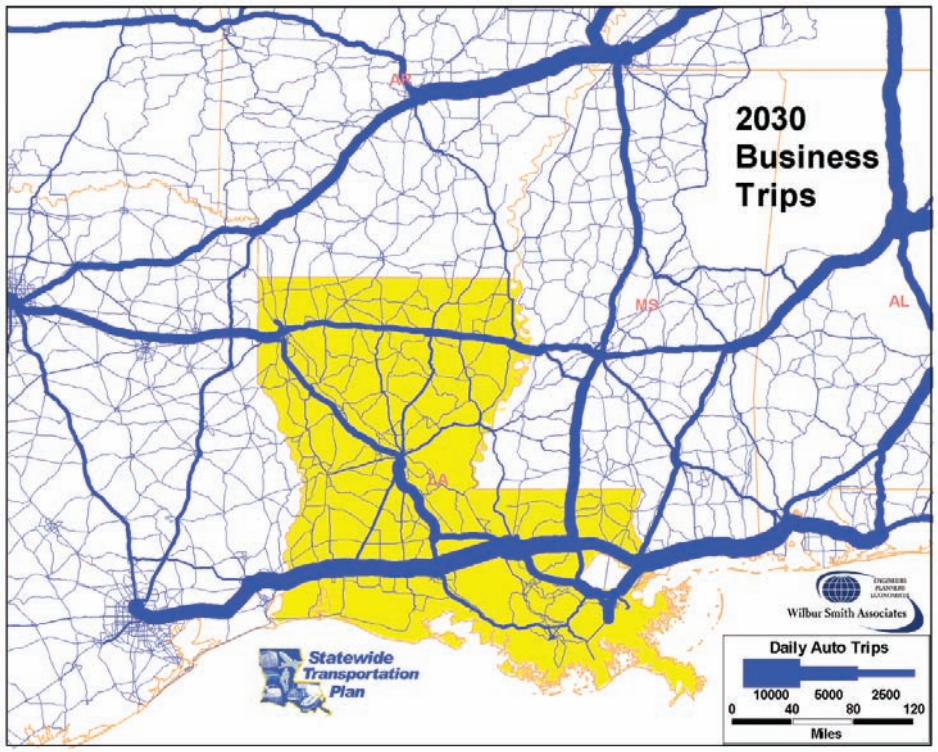
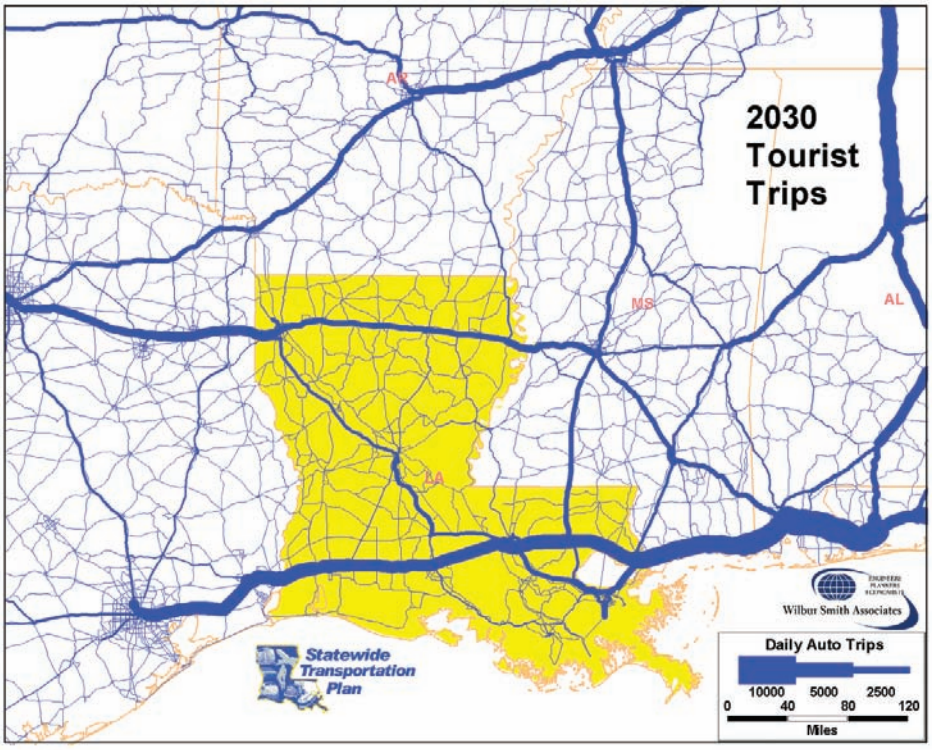


Figure 11
Total Daily Tourist Trips

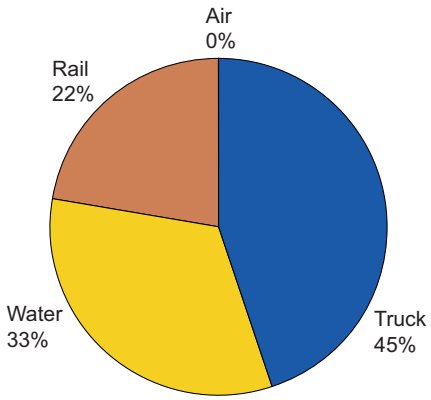


Trucking

Truck Volumes

In the year 2000, 384 million tons of freight valued at $526 billion moved to, from, within, or through Louisiana by truck. This accounts for 45 percent of domestic tonnage by mode as shown in Figure 12.

Figure 12
Domestic Tonnage by Mode (LA)

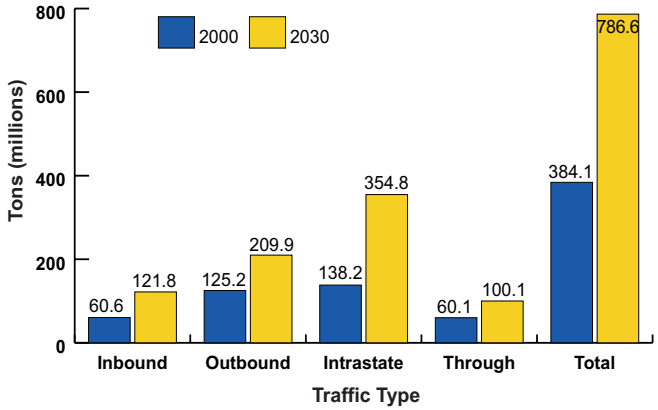


Source: TRANSEARCH 2000

Truck Movements

Truck traffic is projected to grow by 105 percent by the year 2030 (Figure 13). Inbound truck tonnage is projected to grow by 101 percent, outbound by 68 percent, intrastate by 157 percent, and through truck traffic by 67 percent. These growth rates are determined by a combination of commodity and geographical forecast factors. The large growth in intrastate truck volumes is driven by growth in food (191%), lumber (141%), clay/concrete/glass (227%), and secondary traffic (264%). These four groups make up half of the intrastate truck tonnage. The lower growth rate for outbound truck movements is largely due to a modest 31 percent increase projected for chemical shipments. Inbound trucks from Arkansas, Mississippi, and the Mountain Region (AZ, CO, ID, MT, NV, NM, UT, WY) are expected to increase by more than 150 percent, while inbound truck shipments from the Pacific Region (AK, CA, HI, OR, WA) are only projected to increase 26 percent. Arkansas and New England (CT, ME, MA, NH, RI, VT) are the only outbound regions expected to grow at more than 100 percent, while outbound truck tonnage to the East North Central (IL, IN, MI, OH, WI) and Mid Atlantic (DE, DC, MD, NJ, NY, PA, WV) show 32 percent and 29 percent growth, respectively.

Figure 13
Forecasts of Louisiana Truck Tonnages By Traffic Type



Source: TRANSEARCH 2000, DRI-WEFA Forecasts.

Aviation

Commercial Service Activity Projections

As shown in Table 3, the State's busiest commercial service airport is New Orleans International, with nearly 5 million enplanements in 2000. By 2030, this number is projected to grow to 14.4 million, an average annual

Table 3
Commercial Enplanements Forecast

Airport Name	2000	2015	2030
Alexandria	134,000	247,000	432,100
Baton Rouge	435,200	494,600	687,500
Lafayette	189,200	341,500	589,300
Lake Charles	82,900	138,300	230,700
Monroe	126,900	153,100	235,700
New Orleans	4.94 m	8.63 m	14.4 m
Shreveport	379,600	447,500	707,000

** US Total Enplanement data for 2020 and 2030 based on WSA growth rate estimates.
Sources: FAA Terminal Area Forecasts, FAA Aerospace Forecast, FY 2000-2011, Airport Management Records, WSA.

increase of 3.6 percent over the 30-year period. Baton Rouge Regional Airport registered the next-highest number of enplanements in 2000, with just over 435,000. By 2030, this is expected to grow by an average of 1.5 percent, to 687,500.

The airport projected to have the largest growth in enplanements is Alexandria Regional Airport. With 134,000 enplanements in 2000, and 432,100 in 2030, this represents an average annual growth rate of 4.0 percent. Lafayette Regional Airport registered the next-highest projected average annual growth rate over the 30-year period (3.9%), with 189,200 enplanements in 2000 and 341,500 projected in 2030.

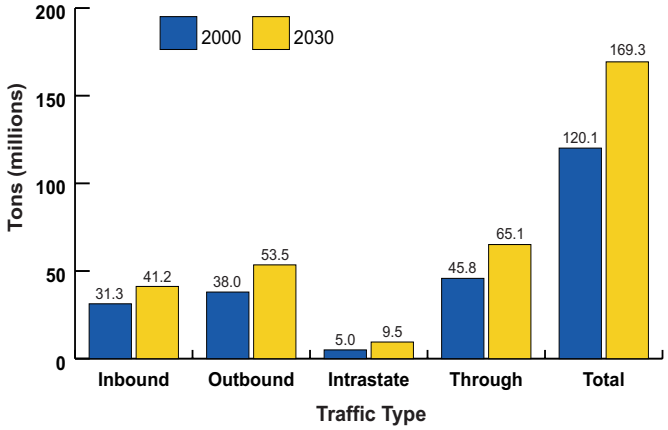
Air Cargo Tonnage Projections

Air cargo tonnage was identified for those system airports that accommodate air cargo on a regular basis. Air cargo is measured in metric tons. One metric ton is the equivalent of 2,204 pounds. The volume of air cargo tonnage at Louisiana airports is projected to increase at an annual average rate of 3.9 percent. This is considered a moderate annual growth rate when in the early 1990s the air cargo industry was experiencing double-digit growth rates. The growth rate used for this analysis is based on Boeing's 1999 World Air Cargo Forecast and is applied throughout the forecast period. This growth rate is slightly lower than the US Gross Domestic Product (GDP) 1995-2000 annual growth rate of 4.4 percent. Projections of air cargo tonnage are presented in Table 4.

Freight Railroad

Figure 14 contains the forecasted rail tonnage for the year 2030. Overall, rail is projected to grow by 40 percent, though there is a great variance across commodities and regions. Food is projected to grow by

Figure 14
Forecasts of Louisiana Rail Tonnages By Traffic Type*



Source: TRANSEARCH 2000, DRI-WEFA Forecasts.

* As through rail tonnages were not provided through the TRANSEARCH database, the 2030 through tonnage shown in Figure 14 were derived from applying the proportion of through to total tonnage in 1999 (the year of the STB Waybill sample [which does include through rail tonnage] used in the Louisiana Statewide Rail Plan) to total tonnage in 2030. A new total tonnage value for 2030 was then calculated, reflecting the addition of through tonnage.

Table 4
Air Cargo Tonnage Forecast

Associated City	Airport Name	2000	AAGR	2005	2010	2015	2020	2030
Alexandria	Alexandria International	71	3.90%	73	91	114	142	222
Baton Rouge	Baton Rouge Regional	3,106	3.90%	3,211	3,995	4,972	6,191	9,707
Lafayette	Lafayette Regional	1,211	3.90%	1,252	1,558	1,938	2,414	3,785
Lake Charles	Lake Charles Regional	161	3.90%	166	207	258	321	503
Monroe	Monroe Regional	79	3.90%	82	102	126	157	247
New Orleans	New Orleans International	85,815	3.90%	89,271	111,090	138,337	172,362	70,245
Shreveport	Shreveport Regional	30,020	3.90%	31,039	38,610	48,054	59,838	93,819
Total		**120,463**		**125,095**	**155,652**	**193,799**	**241,424**	**378,528**

Sources: Airports Council International, airport management, WSA.

130 percent, chemicals by 35 percent, miscellaneous mixed shipments by 23 percent, and clay/concrete/glass by 180 percent. Commodities moving by rail and expecting a decline from current volumes include farm products (-45%) and coal (-11%). The largest growth in inbound rail traffic is expected to come from Mississippi (112%), with growth in inbound also from New England (101%), East South Central (74%), and Arkansas (71%). A decline of 15 percent is anticipated from the West Central Region (IA, KS, MN, MO, NE, ND, OK, SD) due to a reduction in grain moves. Outbound growth is expected for all regions with Arkansas (103%), West Central (75%), Texas (70%), and Mountain (60%) being the fastest growing. Intrastate rail tonnage is forecast to grow by 91 percent.

Ports and Waterways

Waterborne Freight

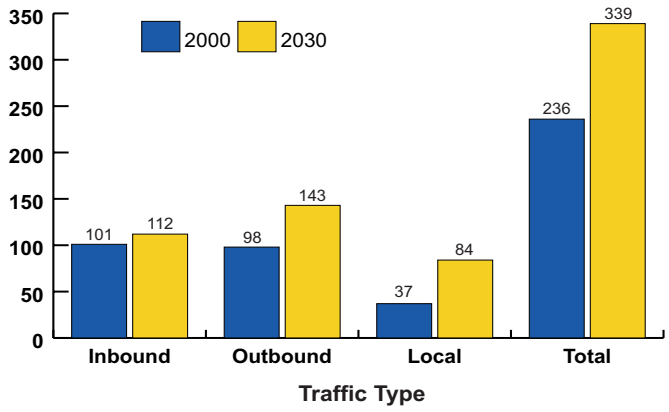
The forecasts for domestic waterborne freight are contained in Figure 15. Overall, tonnage is projected to grow by 44 percent between 2000 and 2030. This includes growth of 11 percent for inbound, 46 percent for outbound, and 124 percent for intrastate. Intrastate growth is fueled by a projected 97 percent growth in petroleum tonnage. Inbound and outbound growth is slowed by a 2 percent projected increase in agriculture/ grain and an 11 percent increase in coal.

The forecasts for international waterborne traffic are given in Figure 16. A very robust increase in international trade is projected, with imports increasing by 195 percent and exports growing by 129 percent.

Containerized Cargo Terminals

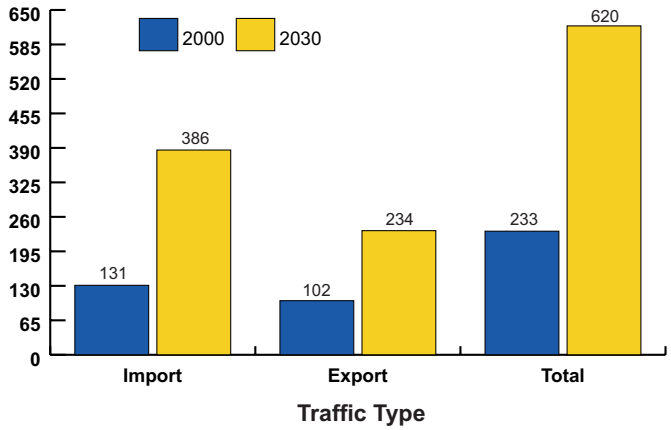
Figure 17 illustrates projected container shipments and capacities at the Port of New Orleans. Container handling capacities at the Port of New Orleans, (Napoleon Terminal Phase I and Phase II) are adequate to facilitate short and medium term needs. Timing for implementation of Phase II expansion depends on how long and to what extent container operations will continue at the France Road terminal. It is expected that these operations will be phased out by 2010 or possibly sooner. In the latter case, the Port of New Orleans may experience capacity deficits as early as 2005. Accordingly, Phase II of the Napoleon Terminal needs to be initiated without delay. In the year 2015, the utilization of the Port of New Orleans container terminal will amount to about 96 percent. This indicates that additional container handling capacities will have to be created in the Lower Mississippi River in the long term to

Figure 15
Forecasts of Louisiana Domestic Waterborne Tonnages



Source: TRANSEARCH 2000, DRI-WEFA Forecasts.

Figure 16
Forecasts of Louisiana International Waterborne Tonnages

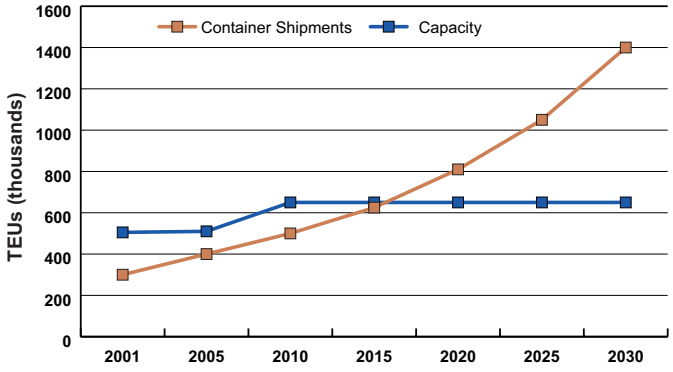


Source: P.I.E.R.S. 2001, LATTS †

†The international forecasts factors were taken from the Latin America Trade and Transportation Study (LATTS).

accommodate the projected demand. This new terminal should eventually provide additional capacity equal to both phases of the Napoleon Terminal.

Figure 17
Port of New Orleans
Container Exports and Imports, 2001-2030



Surface Passenger

In 1999, the State adopted *Louisiana: Vision 2020* as its economic development master plan. *Vision 2020* has three primary goals and nearly 30 objectives. Progress is measured through benchmarks, some of which are directly related to transportation. Benchmark 2.3.7 is especially focused on surface passenger transportation, and is summarized in Table 5.

The number of transit systems in the table includes both urban and rural systems. Urban systems include fixed route bus, streetcar and demand response services. *Vision 2020* calls for every parish to have a transit system by 2018. However, the number of transit systems has declined to 39 (as of 2001): 10 urban and 29 rural systems (there are four parishes who have both an urban and rural system). Currently, there are 29 parishes, primarily rural, without a system, many of them are located in the northeast part of the State. The total population in parishes without transit is 1,014,447 (2000 census). The parishes without rural or urban transportation systems are shown in Figure 18.

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) is a broad term that describes a wide variety of technology-driven techniques to improve traffic and transportation operations. Implementation of ITS improvements can improve utilization of existing transportation networks, and enhance their efficiency and safety.

DOTD has developed a Statewide ITS plan. Implementation of this plan will cost approximately $17 million annually for 10 years (the Fiscal Year 2003 budget for ITS is $10 million). This cost includes the implementation of a Commercial Vehicle Information Systems Network (CVISN) in Louisiana. CVISN comprises a subset of ITS technologies that focuses on maximizing the efficiency of commercial vehicle operations.

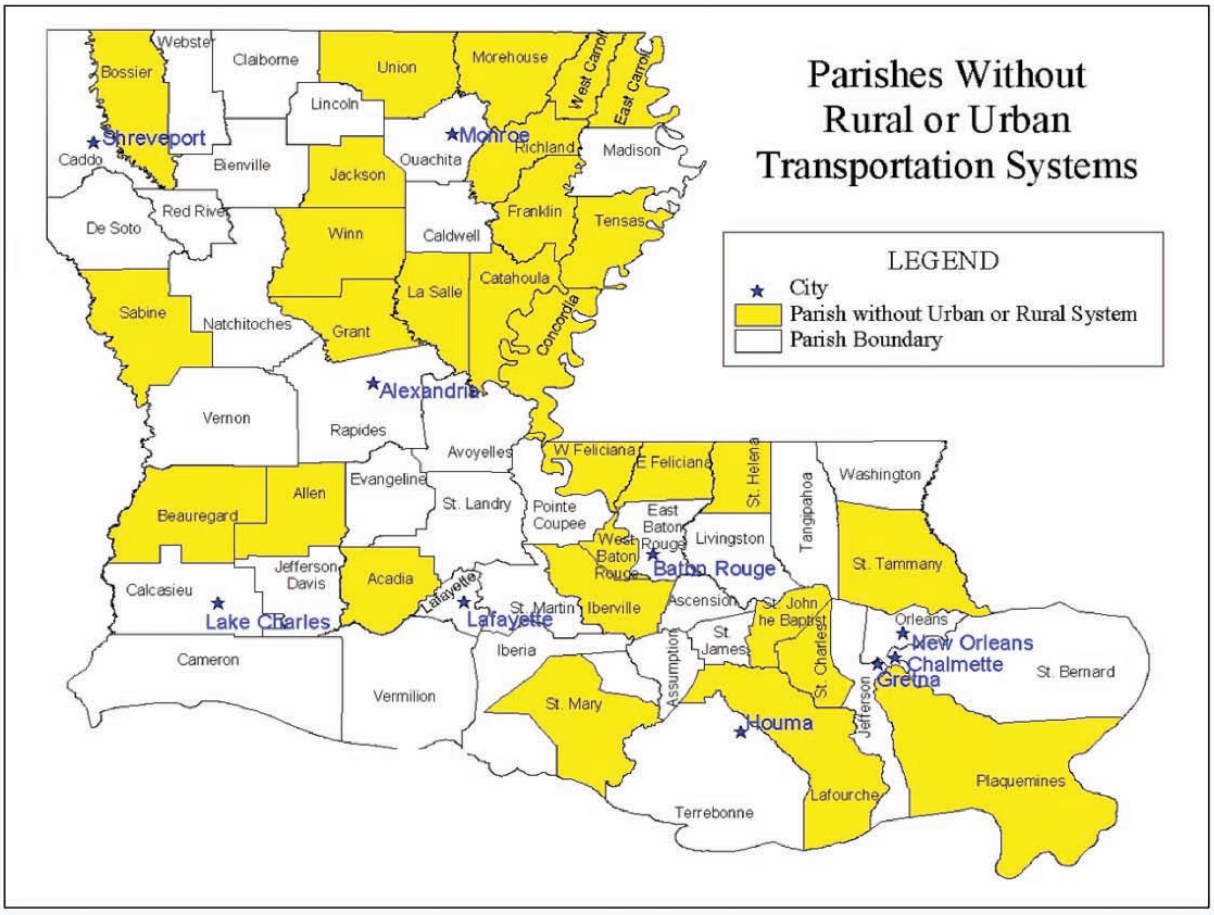
While highly effective at increasing the operational efficiency of transportation networks, ITS alone cannot overcome the current or projected congestion problems on Louisiana's highway system.

Table 5
Louisiana Vision 2020 Benchmark 2.3.7

	Baseline Statistic Used 1997	2003	2008	2013	2018
Number of parishes with a public transportation system	42	47	52	58	64

Source: *Vision 2020 Master Plan for Economic Development.*

Figure 18
Parishes Without Rural or Urban Transportation Systems



Bicycle and Pedestrian

One of the provisions of TEA-21 is to make bicycling and walking a safer and more viable way of travel. States have been using the funding available through the Federal Transportation Enhancement Program to make considerable improvements to their bicycle and pedestrian infrastructure. Louisiana has only recently begun to address these issues. DOTD has a staff person who coordinates bicycle projects at the State level; Metropolitan Planning Organizations (MPOs) and various municipalities have been increasing their efforts to acquire TEA-21 Enhancement Funds to provide bicycle and pedestrian facilities in their areas. Stronger efforts should be made to acquire funds available for bicycle and pedestrian uses and to continue efforts at providing the necessary infrastructure. Improving bicycle and pedestrian facilities relates to a planning factor of TEA-21; protecting and enhancing the environment, promoting energy conservation, and improving quality of life.

An important element in improving bicycle and pedestrian facilities in the State is the consideration of bicycle and pedestrian infrastructure, where feasible, as an integral part of the design process for highways and transit projects. In other words, consideration of those for whom bicycling and walking are their main forms of transportation should be routine procedure. For many states, this is already standard policy. For example, State

highway projects should consider the feasibility of wide shoulders for use by bicycles; the replacement of bridges should consider dedicated bike lanes and pedestrian walkways; transit projects should consider getting bicycles onto buses or improving bicycle facilities at transit hubs. Doing so might encourage more Louisiana citizens to make trips by bicycle or on foot.

RECOMMENDATIONS

As discussed earlier, the Louisiana Statewide Transportation Plan has been developed around four revenue scenarios. Two of the four scenarios involve generating additional transportation revenues; these scenarios cannot be implemented unless additional funding is made available.

The financial baseline referred to as Scenario 1A assumes some growth in revenues, expenses and inflation, but also assumes no other transportation revenues will be enacted over the life of the Plan period. It is from this baseline that other financial scenarios have been developed, along with the programmatic decisions that formulate a Plan. It is widely believed that Scenario 1A is very unlikely, as legislative bodies have historically taken actions to provide new revenues at key points. However, the Scenario 1A baseline identifies the basement, or lowest expected revenue availability, over the 30-year Plan horizon.

Gross federal and State highway funds expected to be available under Scenario 1A total $21.54 billion, which is equivalent to $12.96 billion in base 2002 dollars. The Scenario 1A for highways targets these resources toward pavement preservation ($6.55 billion), bridge preservation ($3.46 billion), safety ($1.25 billion), and operations ($1.1 billion), leaving just $870 million for small capacity projects ($125 million per year for seven years, with none thereafter). This essentially reduces the DOTD to a maintenance agency, as virtually no revenues are available for modernization or expansion. This is in keeping with the preservation goal for infrastructure and recognizes the importance of preserving the transportation system.

With no increase in safety funding, no progress can be expected against reducing Louisiana's fatality rate (third highest in the nation), and congestion would continue virtually unchecked. Although funding is continued to implement the TIMED program, the economy would certainly suffer as no revenues would be available to expand the transportation system in support of business and industry.

Scenario 1A makes no advances for the non-highway modes, though the Aviation and Port Priority programs are continued at current levels. Thus, the State would not be able to finance improvements to airports, railroads, public transportation, and water ports to accommodate the expected growth in tourism, trade, and the transit-dependent population. Louisiana can expect to lose market share in domestic and international trade to competing states and suffer from a decline in transportation services to the poor, elderly, and disabled.

The economic outlook under Scenario 1A is bleak, to say the least. Louisiana could not expect to achieve Top Ten State status with transportation investment at this level. Virtually none of the benchmarks identified under *Vision 2020* for transportation would be met.

Scenario 1B is a slightly more realistic view of the future, even assuming no significant increase in transportation revenues. Under Scenario 1B, it is assumed that adjustments would take place twice during the 30-year period that restore the lost buying power of transportation revenues. Thus, Scenario 1B assumes an infusion of new revenue in years 11 and 21 that essentially "net out" the effects of inflation over the Plan period. The base year highway funding increases by nearly $3 billion over the 30 years, which allows the State to implement some modest capacity improvements. Under Scenario 1B, the level of investment in preservation, operations, and safety is identical to Scenario 1A.

The increase in small capacity funding allows the DOTD to implement a $125 million annual capacity expansion program for the first seven years, decreasing to about $100 million annually thereafter. Thus, Scenario 1B approximates the current capital program and extends it for the 30-year period.

There is a host of no-cost recommendations that are to be implemented at the Scenario 1 level. They require little in the way of new money and are part of the individual Advisory Council reports.

Significant additional transportation revenues are assumed under Scenario 2. This increase amounts to $250 million annually in State-generated revenues beginning in year 1 and continuing throughout the period. Several examples of how such revenue could be raised are presented in Chapter 8 of the main Plan document. In addition, new revenues to offset inflation (lost buying power) are added to the revenue stream in years 11 and 21, similar to Scenario 1B. The net effect of this assumption is to add $6.6 billion (base year) to the revenue stream, with the following highlights:

- Increase pavement preservation to $235 million annually; this 47 percent increase allows the DOTD to keep pace with pavement deterioration and improve all roadways in poor condition on the Interstate system and most on the NHS, and Statewide systems.
- Increase bridge preservation funding to $119 million annually, allowing the DOTD to keep pace with bridge deterioration for both on-and off-system bridges.
- Increase the safety program to $75 million annually — this nearly doubling of the safety effort will allow the State to make significant safety advances.
- Increase operations by $9 million annually — enables more attention to flooding problems, traffic signal replacement, rest area rehabilitation, etc.
- Target an additional $70 million over ten years to increase the ITS program — allows implementation of the ITS Plan, which focuses on early action traffic flow and information programs.
- Create a $20 million/year Intermodal Connector program, which enables the DOTD to implement projects that improve access to ports, airports, etc.
- Fund small capacity projects at $125 million per year through 2010 and then $85 million per year thereafter.
- Create a Jurisdictional Transfer program, which identifies highways that should logically be under local jurisdiction and provides resources for their continued maintenance once transferred off the State system.
- Implement Priority A "Mega" highway projects, which were selected through a process that considered future travel demand, as estimated by the Statewide Travel Demand Model, economic impacts, safety, etc. In this way, the most needed projects are implemented first.
- Provide $1.6 billion over 30 years to enact the following programs and projects for other modes:
  - $6 million annually to help local agencies match Federal Transit Authority funds, which represents 25 percent of the total cost, with the balance coming from federal and local sources.
  - $175 million to help finance the proposed light rail connection between New Orleans International Airport and downtown New Orleans — this would be combined with $200 million in Federal New Starts money and $25 million from local agencies — the local agencies would operate and maintain the system once constructed.
  - Establish a One-Stop Truck Center in North Louisiana ($20 million total — $5 million construction and $500,000 annual operating costs).
  - Provide $5 million annually to establish State funding assistance for railroads — to address bottlenecks, "286,000 pound" improvements, upgrading lines to help with agricultural shipments, and circuitry upgrades, and to match federal passenger rail funding, if available.
  - $5 million annually for grade separating highways and railroads at key crossing locations.
  - Increase Louisiana's Port Priority program by $15.5 million annually — gradual increase to $40 million annually by 2008, then protected from inflation.
  - Implement a Statewide Maritime Marketing program (take-down from the Port Priority program) — $500,000 annually.
  - Implement new Aviation Marketing program — $2 million annually to attract additional air service to the State.
  - Increase State funding for the Aviation Infrastructure program by $10 million annually.
  - Provide State support for a new runway at New Orleans International Airport — $100 million State, to be added to $200 million federal and $150 million local funding.

Scenario 3 implements another layer of new revenues for transportation in Louisiana, assuming that more federal funding will flow Louisiana's way. This could happen through the implementation of new user fees at the federal level, increasing the overall level of transportation funding, Louisiana getting a larger share of federal funding through changes in apportionment formulas or a shift to help donor states, or a combination. Regardless of the mechanism, an additional $150 million annually in federal highway funding, adjusted for inflation at year 11 and 21, was assumed for Scenario 3. This results in an additional $3.37 billion being available over the 30-year period, which is recommended to implement Priority B "Mega" highway projects.

The recommended transportation Plan for Louisiana is identified below for each mode of transportation.

Highways

Transportation improvements pertaining to highways are summarized in Tables 6a, through 6c. Many of the policy-related recommendations, including increasing funding for pavement and bridge preservation, highway safety and highway operations are identified in funding Scenarios 1A and 1B (Table 6a). The "Megaproject" improvements are included in funding Scenarios 2 and 3. For purposes of this planning effort, a Megaproject is defined as a high-cost project or a project of high significance when viewed from a Statewide perspective. Priority A Megaprojects (Table 6b) which scored and ranked high in both the quantitative (travel demand model results) and qualitative (plan goals and objectives) evaluation, were considered highest priority and included in funding Scenario 2. Priority B Megaprojects (Table 6c), which scored and ranked high in either the quantitative or qualitative evaluation were included in funding Scenario 3. Priority C and D Megaprojects (Tables 6d and 6e) are included in the Plan but are not included in funding Scenarios 1, 2, or 3.

The recommended improvements for Priority A, which include a total of 22 projects with an estimated total cost of $3.1 billion, are shown in Figure 19. Projects in this scenario include improvements along I-49 North, I-49 South, I-10, I-20, US 61, LA 1, LA 23 and LA 28

Table 6a
Highway Policy Recommendations

Funding Scenario	Recommendation	Cost ($millions)
1A	Development and implement a Statewide Access Management Policy	$0.20
1A	Develop and implement a Statewide Traffic Impact Policy	$0.10
1A	Allow Local Option Gas Tax (exempt diesel)	
1A, 1B, 2, 3	Support regional transportation planning initiatives in rural areas on a test basis	$0.1/yr.
1A, 1B, 2, 3	Increase funding for Pavement Preservation	1A/B: $218/yr., 2/3: $235/yr.
1A, 1B, 2, 3	Increase funding for Bridge Preservation	1A/B: $115/yr., 2/3: $119/yr.
1A, 1B, 2, 3	Maintain regular capacity Enhancement Program through 2010	Existing Revenues
1B, 2, 3	Continue regular capacity Enhancement Program beyond 2010	$85/yr - $100/yr.
2, 3	Increase funding for Highway Safety	$75/yr.
2, 3	Increase funding for Highway Operations	$35/yr.
2, 3	Implement the Statewide ITS Plan	$17/yr. (for 10 yrs.), then 10/yr.
2, 3	Create Intermodal Connector Program to improve access to ports, airports, etc.	$20/yr.
2, 3	Transfer 5,000 miles of State highways to local governments	$35/yr*

*Taken from pavement preservation funding.

West. The recommended improvements for Priority B, which include a total of 11 projects with an estimated total cost of $2.9 billion, are shown in Figure 20. Projects in this scenario include improvements along I-49 South, I-69, US 165/US 425 Bypass, US 167, US 190, LA 1 South, LA 511, LA 3139, the Pontchartrain Causeway and other improvements. Note: Project ID Numbers are not assigned or listed in any order of priority.

Table 6b
Priority A Megaprojects (Scenario 2)

Project ID	Area	Highway	Limits	Improvement Type	Total Project Cost ($m)	Unfunded Project Cost ($m)
LSTP - 001	Shreveport	I-49 North	I-220 to AR Line	New 4-lane Freeway	$363	$363
LSTP - 002a	I-49 Lafayette	I-49 South	Lafayette Urban	Upgrade to Freeway	$350	$350
LSTP - 004*	Lafourche Parish	LA 1 South	Port Fourchon to US 90	Phase 1 (Leeville Bridge)	$125	$115
LSTP - 005*	Houma	N-S Hurricane	US 90 to LA 3127 Route	Build New 2 Lanes	$150	$150
LSTP - 011	Leeville/Alexandria	LA 28 West	US 171 to Alexandria	Widen 2 to 4 Lanes	$80	$40
LSTP - 020a	Shreveport	I-20	TX Line to I-220 W, Red River Bridge, LA 3 to I-220 E	Widen 4 to 6 Lanes	$175	$175
LSTP - 020b	Monroe	I-20	LA 546 to LA 594	Widen 4 to 6 Lanes	$150	$150
LSTP - 020c	Sulphur/Lake Charles	I-10	TX Line to Sulphur	Widen 4 to 6 Lanes	$80	$80
LSTP - 020d	Lake Charles	I-10	I-210W to Ryan St.	Replace Bridge/ Widen Road	$200	$200
LSTP - 020e	Lake Charles/Iowa	I-10	US 171 to US 165	Widen 4 to 6 Lanes	$50	$50
LSTP - 020f	Lafayette	I-10	LA 93 to Louisiana Ave.	Widen 4 to 6 Lanes	$60	$60
LSTP - 020g	Baton Rouge	I-10	I-110 to I-12	Widen 6 to 8 Lanes	$250	$250
LSTP - 020h	Baton Rouge	I-10	I-12 to LA 22 (includes new interchange bet. LA 42 and LA 73)	Widen 4 to 6 Lanes	$185	$145
LSTP - 020i	Baton Rouge	I-12	O'Neal to Denham Springs	Widen 4 to 6 Lanes	$60	$60
LSTP - 020j	New Orleans	I-10	Williams Blvd. to Causeway Blvd.	Widen 6 to 8 Lanes	$85	$0
LSTP - 020k	New Orleans	I-10	Bullard Ave. to Elysian Fields Ave.	Widen; implement ITS	$185	$185
LSTP - 20l	Hammond	I-12	LA 16 to I-55	Widen 4 to 6 Lanes	$150	$150
LSTP - 20m	Slidell	I-12	LA 21 to I-10/I-59	Widen 4 to 6 Lanes	$150	$150
LSTP - 028	New Orleans	LA 23	Belle Chase Tunnel	Build 4-Lane Bridge	$50	$50
LSTP - 031	St. Francisville	US 61	Thompson Creek to Baines	Widen 2 to 4 Lanes	$40	$20
LSTP - 034	Baton Rouge	US 61 (Airline)	Gonzales to US 190 (Florida Blvd)	Widen 4 to 6 Lanes	$60	$40
LSTP - 047	New Orleans	I-10 Twin Span	US 11 to North Shore - Lake Pontchartrain	Widen 4 to 6 Lanes	$100	$100
				TOTAL COST	**$3,098**	**$2,883**

* Magnitude of original proposed Megaproject modified, or separated into two separate funding scenarios.

Table 6c
Priority B Megaprojects (Scenario 3)

Project ID	Area	Highway	Limits	Improvement Type	Total Project Cost ($m)	Unfunded Project Cost ($m)
LSTP - 002b	Lafayette/New Orleans	I-49 South	Lafayette to I-310	Upgrade to Freeway	$865	$865
LSTP - 003*	Shreveport	I-69	US 171 to 1-20	New 4-Lane Freeway	$380	$380
LSTP - 004*	Lafourche Parish	LA 1 South	Port Fourchon to US 90	Phase 2 (Four-Lane)	$545	$545
LSTP - 006*	New Orleans	LA 3139 (Earhart)	Hickory, Orleans Parish Line	Add Ramps at Each Limit to Airline Hwy. (US 61)	$125	$125
LSTP - 012*	Monroe	New Bridge	Ouachita River in Monroe Metro area	New Bridge	$50	$50
LSTP - 013	Bastrop	US 165/US 425 Bypass	US 425 to US 165	Build 4 Lanes	$20	$20
LSTP - 024	Abbeville/Esther	US 167	Abbeville to Esther	Build/Upgrade 0/2 to 4/2 Lanes	$25	$25
LSTP - 038	Shreveport/Bossier City	LA 511 (Jimmie Davis Bridge)	70th St. to Barksdale Blvd.	Replace 2-Lane Bridge with 4-Lane Bridge	$50	$50
LSTP - 041**	New Orleans	Pontchartrain Causeway	US 190 to I-10	Widen 4 to 6 Lanes/Transit	$425	$425
LSTP - 044	St. Tammany Parish	US 190	Pontchartrain Causeway to US 11	Widen 2 to 4 Lanes	$100	$75
LSTP - 051	Baton Rouge	North Bypass	I-10 to I-12	Build/Upgrade to 4-Lane Interstate Standards	$800	$800
				TOTAL COST	**$2,960**	**$2,935**

* Magnitude of original proposed Megaproject modified, or separated into two separate funding scenarios.
** Cost of LSTP 041 not included in total cost. This project is assumed to be totally financed by Toll Authority funds.

Table 6d
Priority C Megaprojects

Project ID	Area	Highway	Limits	Improvement Type	Total Project Cost ($m)	Unfunded Project Cost ($m)
LSTP - 002c	New Orleans	I-49 South	New Orleans Urban (I-310 to W. Bank Expwy)	Upgrade to Freeway	$750	$750
LSTP - 003*	Shreveport	I-69	TX to I-49/I-20 to AR	Build 4-Lane Freeway	$600	$600
LSTP - 005*	Houma	N-S Hurricane Route & LA 3127	LA 70 to LA 641 US 90 to LA 3127	Widen 2 to 4 Lanes Add Other 2 Lanes	$250	$250
LSTP - 006*	New Orleans	LA 3139 (Earhart)	Hickory to I-310	Build New 6-Lane Freeway	$300	$300
LSTP - 8a	Baton Rouge	LA 1	LA 30	New Bridge	$500	$500
LSTP-010*	West Central LA	LA 6/US 84	Prioritization Tier I Projects from the El Camino Corridor Masterplan	Widen 2 to 4 Lanes	$100	$100
LSTP - 017	SW Louisiana	US 190/LA 12	TX to Basile	Widen 2 to 4 Lanes	$230	$230
LSTP - 018*	W Central Louisiana	LA 117	LA 8 to Military Training Ground	Reconstruct 2 Lanes with Full Shoulders	$20	$20
LSTP - 019	Rustin/Grambling	LA 149 & Tarbutton Rd. Interchange (No Frontage Rds)		Interchange/Widen	$30	$30
LSTP - 022*	NW Louisiana	LA 1 (Tri-State Corridor)	LA 169 to LA 538	Widen 2 to 4/5 Lanes	$40	$40
LSTP - 023	E Central Louisiana	US 84	Archie to Ferriday	Widen 2 to 4 Lanes	$80	$55
LSTP - 027	Houma	LA 30/40	Houma Tunnel	Build 4-Lane Bridge	$50	$50
LSTP - 033	Central Louisiana	LA 28 East	Alexandria to Archie	Widen 2 to 4 Lanes	$85	$79
LSTP - 037	N of Baton Rouge	LA 67 (Plank Rd)	Baker to Clinton	Widen 2 to 4 Lanes	$70	$70
LSTP - 045	Lafayette	Lafayette Beltway	I-10 to US 90	Build 4-Lane	$300	$300
LSTP - 046	W Baton Rouge Parish	I-10 - LA 1 Connector	I-10 to LA 1	Build 4-Lane	$75	$75
LSTP - 048a	Gonzales	Industrial Access Corridor	I-10 to LA 30	Build 4-Lane	$35	$35
LSTP - 049	Alexandria	McArthur Drive	I-49N to I-49S	Upgrade to Freeway	$60	$60
LSTP-053	Shreveport	I-49	I-20 to I-220	New 6-Lane Freeway	$150	$150
LSTP-054	West Central LA	LA 8	TX to US 171	Widen 2 to 4 Lanes	$65	$65
LSTP-055	New Orleans	I-12	I-55 to LA 21	Widen 4 to 6 Lanes	$125	$125
LSTP-056	W. of Baton Rouge	US 190	I-49 to Baton Rouge Bypass	Upgrade to Freeway	$500	$500
LSTP-057	NW of Lafayette	US 165/US 190	I-10 to US 190 US 190 to I-49	Upgrade to Freeway	$650	$650
				TOTAL COST	**$5,065**	**$5,034**

*Magnitude of original proposed Megaproject modified, or separated into two separate funding scenarios.

Table 6e
Priority D Megaprojects

Project ID	Area	Highway	Limits	Improvement Type	Total Project Cost ($m)	Unfunded Project Cost ($m)
LSTP - 007	New Orleans	Florida Ave. Expressway	I-10 to LA 47	Build 6-Lane Freeway	$350	$350
LSTP - 009	Alexandria/Bogalusa	Zachary Taylor Blvd.	I-49 to I-59	Widen 2 to 4 lanes	$970	$970
LSTP - 010*	West Central LA	LA 6/US 84 El Camino	TX to Archie	Widening 2 to 4 Lanes	$384	$384
LSTP - 012	Monroe	Ouachita Loop	I-20 to I-20	Build 2 Lanes	$245	$245
LSTP - 014	NW Louisiana	US 371 (Bi-State Corridor)	LA 6 to AR Line	Widen 2 to 4 Lanes	$295	$295
LSTP - 016	NE Louisiana	US 65	LA 15 to AR Line	Widen 2 to 4 Lanes	$225	$225
LSTP - 018*	W Central Louisiana	LA 117	LA 8 to LA 6	Widen 2 to 4 Lanes	$130	$130
LSTP - 021	Monroe/Lake Charles	US 165	I-20 to I-10	Upgrade to Freeway	$1,000	$1,000
LSTP - 022*	NW Louisiana	LA 1 (Tri-State Corridor)	LA 173 to AR Line	Widen 2 to 4 Lanes	$105	$88
LSTP - 025	Baton Rouge	LA 408 (Hooper Rd.)	LA 37 to LA 16	Build 2-Lane	$35	$35
LSTP - 029	New Orleans	Chalmette Bridge/ I-510	MRGO to Westbank Expressway	Extend Fwy; Build new Bridge	$1,000	$1,000
LSTP - 032	Natchitoches	East Bypass	LA 1 to LA 6	Build 2-Lane	$20	$20
LSTP - 048b	Gonzales	Industrial Access Corridor	LA 30 to LA 942	Build 4-Lane	$35	$35
LSTP - 050	New Orleans	Donner Rd.	Westbank Expwy. to Peters Rd.	Build 4-Lane	$80	$80
LSTP - 052	Monroe	LA 137/133	I-20 to Bastop	Widen 2 to 4 lanes	$100	$100
				TOTAL COST	**$4,934**	**$4,917**

* Magnitude of original proposed Megaproject modified, or separated into two separate funding scenarios.

Figure 19
Priority A Projects (Funding Scenario 2)
Developed for the Louisiana Statewide Transportation Plan

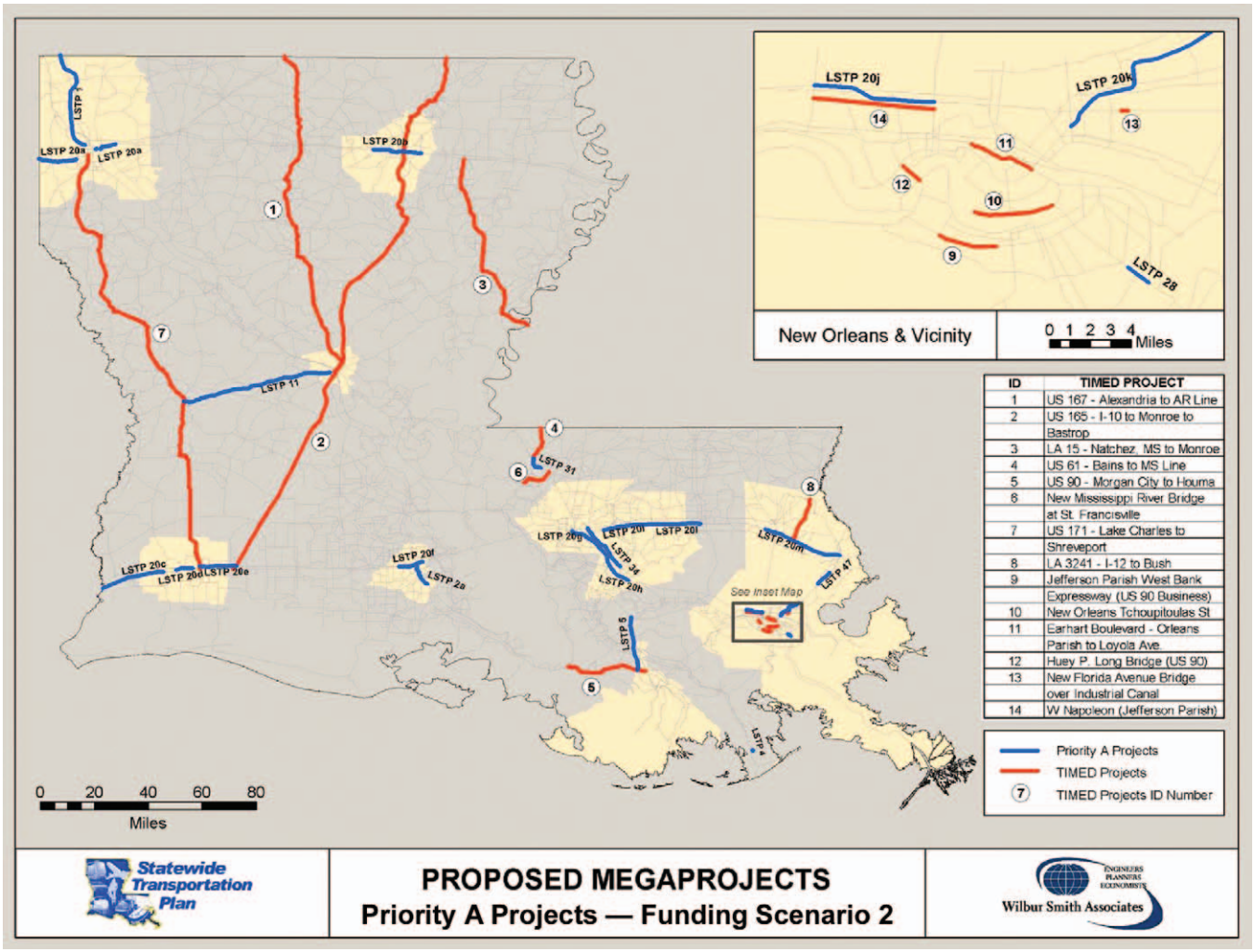
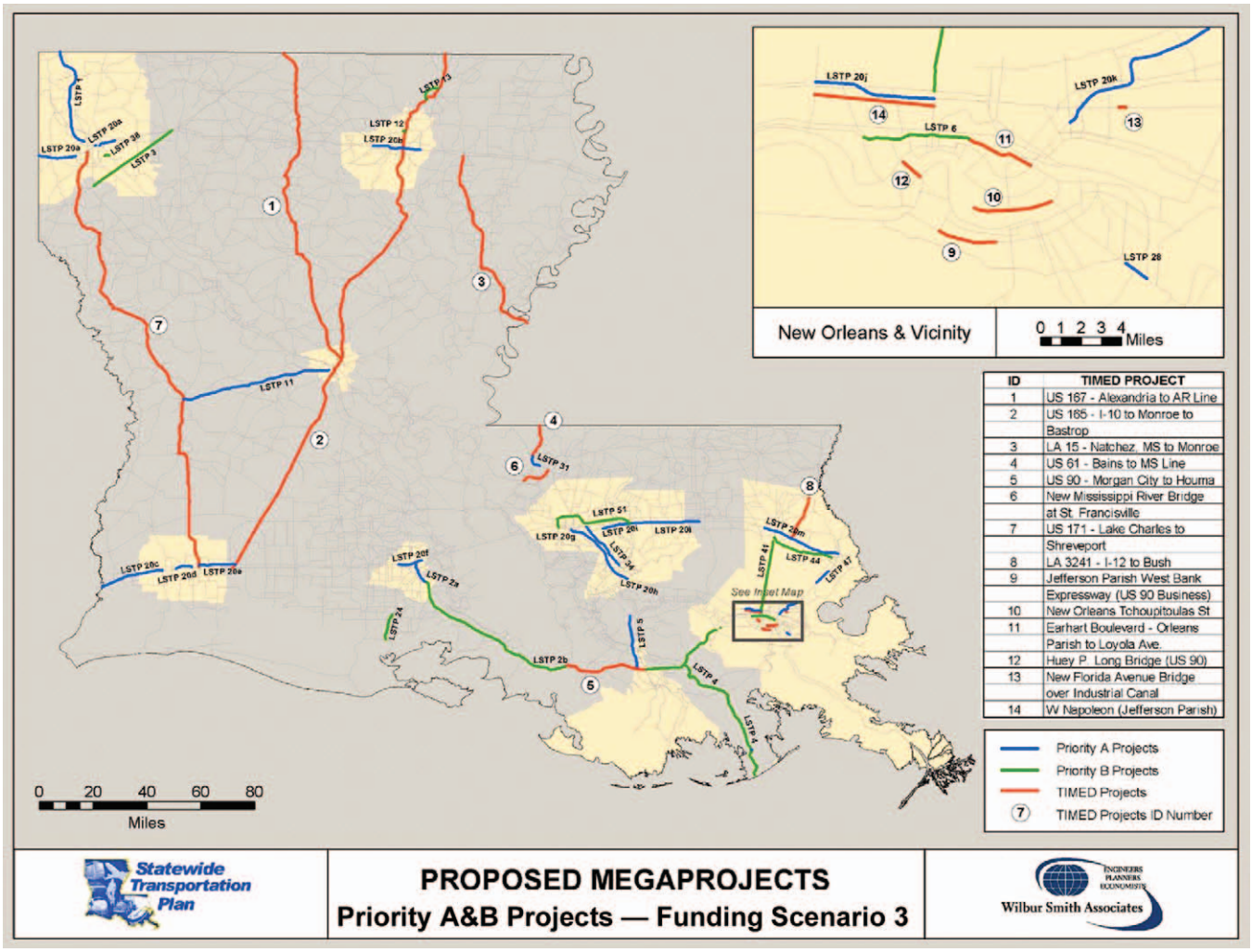


Figure 20
Priority A and B Projects (Funding Scenario 3)
Developed for the Louisiana Statewide Transportation Plan †



† The alignments shown for LSTP-3, LSTP-51 and other "Build" projects are for illustrative purposes only and will likely change as the project(s) proceed through the initial engineering and environmental evaluation processes.

The projects listed below in Table 6f are projects that could be funded under the proposed Intermodal Access Connector Program.

Table 6f
Preliminary List of High Priority Projects to be Funded Under the Proposed Intermodal Access Connector Program

Project ID	Area	Highway	Limits	Improvement Type	Total Project Cost ($m)	Unfunded Project Cost ($m)
LSTP - 030	Hammond	LA 3234 (University Ave.)	LA 1065 to Hammond Airport	Build 2-Lane	$8	$8
LSTP - 035	New Orleans	Almonaster Br.		New Bridge	$45	$12
LSTP - 039	Monroe	Garrett Rd.	I-20 to Kansas Lane	Widen 2 to 4 Lanes	$25	$25
LSTP - 040	Lake Charles	Port Access Rd.	Prien Lake Rd. to Marine St.	Build 4 Lanes	$25	$25
LSTP - 042a	LaPlace	Port of S. LA Connector	LA 44 to Airline Hwy.	Build 2 Lanes	$10	$10
LSTP - 042b	LaPlace	Port of LA Connector	Airline Hwy. to I-10	Build 4 Lanes	$25	$25
LSTP - 043	New Orleans	LA 3017 (Peters Rd.)	Westbank Expwy. to LA 23	Widen/Build 2/0 to 3/2 Lanes	$80	$80
				TOTAL COST	**$218**	**$185**

Trucking

Table 7 identifies transportation improvements related to trucking. All trucking recommendations are included in the 1A and 1B funding scenarios with the exception of recommendation T-2, which involves establishing a one-stop State truck

Table 7
Trucking Recommendations

Funding Scenario	Recommendation	Cost ($millions)
1A, 1B, 2, 3	Establish Regional Operations Advisory Councils	
1A, 1B, 2, 3	Modify port zone permitting to address distance issue	
1A, 1B, 2, 3	Automate weigh stations (WIM and AVI)	Incorporated in existing capital budget for Operations/Motorist Services
1A, 1B, 2, 3	Pursue uniformity in permitting and enforcement of overweight and oversize vehicles	
1A, 1B, 2, 3	Create economic development incentives to encourage extended hours at truck terminals, including public port facilities	
1A, 1B, 2, 3	Develop model truck facility site access design standards	
2, 3	Establish one-stop State truck permitting/processing center in North Louisiana	$5 one time & $0.5 annually

permitting/processing center in North Louisiana. This recommendation will involve an initial investment of up to $5 million and $0.5 million annually, and is included in Scenario 2.

Aviation

Recommended aviation improvements are identified in Table 8 Major aviation initiatives in funding Scenarios 2 and 3 include an aviation marketing program ($2 million/year), airfield and terminal capacity improvements, a new runway at New Orleans International Airport ($450 million) and an increase in State support for aviation.

Freight Railroad

Recommended improvements for freight rail are identified in Table 9. Major freight rail initiatives are included in funding Scenarios 2 and 3 and include establishing State funding for railroads ($5 million/year) and increased support for rail/highway grade crossings ($5 million/year).

Ports & Waterways

Table 10 identifies ports and waterways recommendations. Major initiatives in funding Scenarios 2 and 3 include increasing the State's Port Priority Program, and dedicating $0.5 million/year for a Statewide maritime marketing program.

Table 8
Aviation Recommendations

Funding Scenario	Recommendation	Cost ($millions)
1A, 1B, 2, 3	Rehabilitate infrastructure deficiencies identified in the Louisiana Airport System Plan to minimum standards*	$97.6
1A, 1B, 2, 3	Continue program of land acquisition/aviation easements for obstruction removal	$3.0
1A, 1B, 2, 3	Update intrastate air service study to reflect current conditions in airline industry	$0.1
1A, 1B, 2, 3	Study feasibility and role of vertical take off aircraft in Louisiana aviation	$0.25
1A, 1B, 2, 3	Support the private development of a new air cargo airport and intermodal transportation center in southeast Louisiana	
1A, 1B, 2, 3	Support an ongoing annual appropriation from the general fund to support the General Aviation and Reliever Airport Maintenance Program	$0.2
1A, 1B, 2, 3	Support reauthorization of the Federal Airport Improvement Program	
1A, 1B, 2, 3	Support continued development of passenger and air cargo facilities at all commercial service airports	
1A, 1B, 2, 3	Fund airfield and passenger terminal capacity improvements Statewide**	$1,000
2, 3	Market aviation program to attract additional air service	$2.0 per year
2, 3	Participate in the funding of an additional air carrier runway at New Orleans International Airport (Total Cost = $450M)	$100 State Share
2, 3	Increase the level of funding from $5 million to $15 million annually for Louisiana's aviation program	$10/Year

* Long-term goal as part of DOTD annual budget process.
** Total for all LASP deficiencies and short-term projects (5-10 years) for all airports in the State, including New Orleans International, is estimated at $1.4 billion.

Table 9
Freight Rail Recommendations

Funding Scenario	Recommendation	Cost ($millions)
1A, 1B, 2, 3	Educate the State's Congressional delegation on the need for federal funding for the State's 11 small railroads	
1A, 1B, 2, 3	Continue and expand Louisiana's Freight Rail Advisory Council	$0.01 per year
1A, 1B, 2, 3	Support the interests of rail shippers and small railroads	
1A, 1B, 2, 3	Help small railroads secure grants and loans from existing and future federal assistance programs	
1A, 1B, 2, 3	Add three positions to the Rail Section of DOTD, including a Rail Safety Compliance Officer and two program managers	$0.3 per year
1A, 1B, 2, 3	Monitor, study and potentially fund ongoing rail-related projects that may be important to the economic competitiveness of Louisiana, including the Millennium Port project, North Shore Freight Distribution Rail Shuttle, Rail Connectivity to the proposed LA Transportation Center, and rail connectivity to sugar cane mills	
2, 3	Establish State funding for railroads	$5 per year
2, 3	Establish highway/rail grade separation program	$5 per year
2, 3	Research incentive programs for closures of public and private grade crossings	$0.3

Table 10
Ports and Waterways Recommendations

Funding Scenario	Recommendation	Cost ($millions)
1A, 1B, 2, 3	Address the backlog in improvements to Federally-maintained waterways	$250-$300M,2003-07 (from State capital outlay bonds)
1A, 1B, 2, 3	Continue to work through the Gulf Rivers Intermodal Partnership (GRIP) to increase utilization of the inland waterway system and of coastal shipping	
1A, 1B, 2, 3	Support development of the Millennium Port through public/private partnership	
2, 3	Grow combined public and private investments in port facility expansion to accommodate expected growth in demand to $535 million/year by 2007. Increase the State's Port Priority Program contribution to these improvements by $5 million/year, resulting in contributions of $40 million/yr by 2008.	Increase to $40 million/yr by 2008 and sustain thereafter
2,3	Dedicate $0.5 million/year to the development of a Statewide Maritime Marketing Program (take-down from Port Priority Program)	$0.5 million/year (included in recommendation

Surface Passenger

Table 11 identifies surface passenger recommendations. Most of the recommendations in funding Scenarios 1A and 1B are policy-oriented initiatives including promoting the National Passenger Rail System, supporting the Southern Rapid Rail Transit Commission, creating an Intercity Bus Task Force, and other initiatives. Major initiatives included in funding Scenarios 2 and 3 include increasing the availability of rural public transportation services ($6 million/yr.), which addresses *Vision 2020* Benchmark 2.3.7 with regards to increasing the number of parishes with a public transportation system, and supporting the Airport to New Orleans CBD light rail link ($175 State contribution).

Intelligent Transportation Systems

Intelligent Transportation System recommendations are shown in Table 12. ITS recommendations include implementing the Statewide ITS Plan, implementing the LA Commercial Vehicle Information and Systems Network (CVISN) plan, and other policy-related initiatives.

Table 11
Surface Passenger Recommendations

Funding Scenario	Recommendation	Cost ($millions)
1A, 1B, 2, 3	Educate elected officials about the need for, and benefits of, public transportation	
1A, 1B, 2, 3	Create new funding sources for public transportation	
1A, 1B, 2, 3	Market/promote public transportation	
1A, 1B, 2, 3	Promote and implement Transit-Oriented Developments	
1A, 1B, 2, 3	Develop programs to enhance the safety and security of public transportation systems through ITS	
1A, 1B, 2, 3	Support improvements to increase passenger rail ridership and fare box recovery ratios	
1A, 1B, 2, 3	Continue to study existing and potential passenger rail corridors where ridership levels can be sustained or increased	$0.2 per year
1A, 1B, 2, 3	Promote and develop connectivity between public transportation systems	
1A, 1B, 2, 3	Develop alternatives to traditional rural transit systems	
1A, 1B, 2, 3	Coordinate planning of federal funding sources for specialized transit	
1A, 1B, 2, 3	Utilize Intelligent Transportation Systems	
1A, 1B, 2, 3	Promote public transportation service with centers of higher learning	
1A, 1B, 2, 3	Promote the National Passenger Rail System	
1A, 1B, 2, 3	Continue financial support for the activities of the Southern Rapid Rail Transit Commission (SRRTC)	$0.07
1A, 1B, 2, 3	Create an intercity bus task force	
1A, 1B, 2, 3	Develop a Statewide intercity bus needs assessment	$0.125
1A, 1B, 2, 3	Support pending federal legislation to fund essential bus service	
1A, 1B, 2, 3	Continue to partner with FRA to develop Maglev technologies	
1A, 1B, 2, 3	Develop comprehensive transit master plan for the entire Baton Rouge metropolitan area	$0.5
2, 3	Increase availability of basic public transportation services; State share @ 25% (balance from federal & local sources)	$6 per yr.
2,3	Construct the Airport - New Orleans CBD light rail line	$175 (State contribution)

Table 12
ITS Recommendations

Funding Scenario	Recommendation	Cost ($millions)
1A, 1B, 2, 3	Incorporate ITS projects that support the ability of rural transit systems to respond to users and improve safety into the Statewide ITS Implementation Plan	
1A, 1B, 2, 3	Support the standardization of ITS Technologies being implemented at ports in Louisiana	
1A, 1B, 2, 3	Amend the policy on Management and Operations of TMCs to address the issues of collection and archiving of ITS data	
1A, 1B, 2, 3	Include user representatives on the regional ITS Policy Committees	
2, 3	Support the implementation of the Statewide ITS Plan	Additional $7M per year for 10 years
2, 3	Support the implementation of the LA Commercial Vehicle Information and Systems Network (CVISN) plan	$12M over 5 years

Table 13
Bicycle/Pedestrian

Funding Scenario	Recommendation	Cost ($millions)
1A, 1B, 2, 3	Develop a comprehensive policy for non-motorized transportation	
1A, 1B, 2, 3	Develop Statewide bicycle suitability map	
1A, 1B, 2, 3	Develop Statewide bicycle goals map	
1A, 1B, 2, 3	Provide for routine accommodation of bicycle/pedestrian needs in DOTD planning and design processes	
1A, 1B, 2, 3	Support incorporation of bicycle and pedestrian improvements in transportation planning and in highway and transit projects	

Bicycle and Pedestrian

Bicycle and pedestrian recommendations are shown in Table 13. The majority of recommendations are policy-oriented initiatives including developing a comprehensive policy for non-motorized transportation and supporting the incorporation of bicycle and pedestrian improvements in transportation planning and in highway and transit projects.

Multimodal Recommendations

The Advisory Councils developed several recommendations that applied across the board in a multimodal sense. These recommendations have been extracted from the individual Advisory Councils and listed here to apply to each mode:

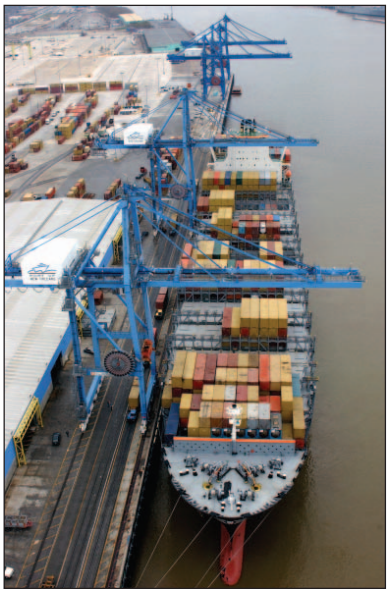
- Educate/inform Louisiana's Congressional Delegation concerning the status of transportation in the State, especially concerning:

- Louisiana's transportation needs, including the extent, shortfall, and funding needed to maintain existing performance levels and improve performance.
- Louisiana's transportation priorities — the delegation must be familiar with the results and recommendations contained in the updated Plan to guide their federal agenda for Louisiana.
- Advance special funding requests — the delegation will be presented with numerous opportunities to pursue/secure special federal funding, both on a regular basis and as the reauthorization of federal transportation legislation is developed. The delegation must be informed concerning those high priority projects that the State believes should be advanced.

• Continue/expand the various Advisory Councils — the forum they provide is beneficial to transportation in Louisiana.
• Identify Strategic Freight Transportation System — in recognition of the importance of freight, identify the multimodal system of greatest importance to the State's economy.

Coordination with Metropolitan Planning Organizations

This Transportation Plan focuses primarily on Statewide transportation corridors, facilities, programs, and initiatives. However, it should be noted that the fiscally constrained long-range metropolitan transportation plans, developed by the respective MPOs for each of the nine metropolitan areas in Louisiana, are incorporated into this Plan by reference, and without modification. As a result of the 2000 Census, a tenth metropolitan area (Mandeville-Covington) has been designated. A fiscally constrained long-range plan will be developed for this new metropolitan area and upon its completion, will be incorporated into this Plan.

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