

CHAPTER III

TRANSPORTATION PLAN

INTRODUCTION

According to Section 17-1-1 of the Mississippi Code, the Transportation Plan must include a Thoroughfares Plan "...depicting *in map form* the proposed functional classification of all existing and proposed streets, roads, and highways for the area encompassed by the Land Use Plan and for the same time period as covered by the Land Use Plan. Functional classifications shall consist of arterial, collector and local streets...and these functional classifications shall be defined as to right-of-way and surface width requirements; these requirements shall be based upon traffic projections."

THOROUGHFARES PLAN: FUNCTIONAL CLASSIFICATIONS INSIDE THE HATTIESBURG URBANIZED AREA

Concurrently with preparation of the Land Use Plan for Lamar County (Chapter II), the Southern Mississippi Planning and Development District (SMPDD), the Central Mississippi Planning and Development District (CMPDD), and Eco-Systems, Inc. (ESI)—referred to as "the consultants"—developed a **Thoroughfares Plan** classifying roads, streets and highways according to the function that they can be expected to perform by the target year of the plan, 2030. According to the Federal Highway Administration (FHWA), "functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide" (Highway Functional Classification, U. S. Department of Transportation, July 1974).

The proposed Lamar County Thoroughfares Plan is shown on **Map II-1, the Land Use Plan/Thoroughfares Plan**. Each highway, road or street was functionally classified by the consultants according to criteria prescribed by the Federal Highway Administration (FHWA).

The following are FHWA definitions of each classification; the color codes on the Thoroughfares Plan are the colors prescribed by the FHWA in classifying roadways:

1. **Urban Interstate Highways (Blue on the Thoroughfares Plan):** These are the controlled-access highways on the Interstate system. In Lamar County, the only Interstate highway is I-59.
2. **Other Urban Freeways and Expressways (Also Blue on the Thoroughfares Plan):** These are the non-Interstate controlled-access facilities. The U. S. Highway 98 Bypass is proposed as a controlled-access highway from the present U. S. Highway 98 to I-59.
3. **Urban Principal Arterials (Red on the Thoroughfares Plan):** This system of streets serves the major centers of activity, has some of the highest traffic volumes and the longest trips.

4. **Urban Minor Arterials (Green on the Thoroughfares Plan):** The minor arterial street system interconnects with and augments the principal arterial system. It provides service to trips of moderate length and includes facilities that place more emphasis on land access than the principal arterial system.
5. **Collectors (Purple on the Thoroughfares Plan):** The collector street system provides land access service and traffic circulation within residential neighborhoods, commercial and industrial areas. It distributes traffic from the arterials to the ultimate destinations.
6. **Urban Locals (No color on the Thoroughfares Plan):** These roads and streets provide direct access to adjoining land and to higher systems; they provide the lowest level of mobility, and through traffic movement is discouraged on local facilities. By definition, local streets and roads are not thoroughfares.

MINIMUM RIGHTS-OF-WAY AND SURFACE WIDTH REQUIREMENTS

The *general* minimum right-of-way and surface width requirements for non-Interstate and non-freeway roadways shown on the Thoroughfares Plan are specified below:

Principal Arterial (Red): Generally, proposed *minimum* of four basic lanes (48 foot surface width or more); generally, a minimum 100 foot right-of-way. However, some roadways may be classified as principal arterials because of their function, but the projected traffic may not necessitate the widening of the roadway to four or more lanes.

Minor Arterial (Green): At least 3-12 foot lanes; minimum of 70 foot right-of-way.

Collector (Purple): 28-36 foot surface width; minimum of 60 foot right-of-way.

Local (No Color): 2 lanes; minimum of 50 foot right-of-way.

RELATIONSHIP BETWEEN THIS TRANSPORTATION/ THOROUGHFARES PLAN AND THE HATTIESBURG METROPOLITAN TRANSPORTATION PLAN 2030

As stated in Chapter II of this Comprehensive Plan regarding the development of population and employment projections, the consultants reviewed the year 2000 population and employment data and 2010-2030 projections compiled by the Hattiesburg Metropolitan Planning Organization (MPO) as part of the development of the *Hattiesburg Metropolitan Transportation Plan 2030*. The Hattiesburg MPO is responsible for coordinating a federally-mandated Transportation Planning Process for the "Hattiesburg Urbanized Area" which is comprised of the cities of Hattiesburg and Petal, portions of the City of Purvis, and portions of Lamar and Forrest Counties, and includes the Hattiesburg Urbanized Area as defined by the U. S. Bureau of the Census.

In accordance with Mississippi law, the Lamar County *Thoroughfares Plan* depicts in map form (see Map II-1 in the pocket in the front of this Comprehensive Plan) the proposed functional classifications (principal and minor arterial, collector and local) for existing and proposed streets, roads and highways for the same time period as that covered by the Land Use Plan (i. e., to the year 2030).

Computer-simulated traffic projections were prepared in connection with the development of the *Hattiesburg Metropolitan Transportation Plan 2030*. These 2030 traffic projections were compared to the generalized roadway capacities shown in Table III-1 to assist the consultants in determining where future roadway improvements will be needed.

TABLE III-1 : GENERALIZED ROADWAY CAPACITIES

Functional Classification	24 Hour Capacity (Vehicles Per Day)
Freeways (Interstate Highways and Other Controlled-Access Freeways or Expressways)	
4 lane	68,000
6 lane	102,000
Arterial Highways, Roads or Streets	
2 lane (without left turn lanes)	11,000
2 lane (with left turn lanes)	15,000
4 lane undivided	23,000
4 lane divided	27,000
6 lane divided	39,000
8 lane divided	51,000
Collector Streets	
2 lane (without left turn lanes)	10,000
2 lane (with left turn lanes)	12,000
4 lane undivided	20,000
4 lane divided	24,000
One Way Streets	
2 lane arterial	12,500
3 lane arterial	20,000
2 lane collector	10,000
3 lane collector	18,000

Source: *Hattiesburg Metropolitan Transportation Plan 2030.*

PROPOSED THOROUGHFARE IMPROVEMENTS

Table III-2 presents major proposed thoroughfare improvements for Lamar County through 2030. The improvements proposed in the *Hattiesburg Metropolitan Transportation Plan 2030* are presented first in three phases: 2007-2011; 2012-2020; and 2021-2030. Traffic projections are shown for each phase for the target years 2010, 2020 and 2030. These projections are based upon the population, housing, employment and school enrollment forecasts developed by the consultants who prepared the *Hattiesburg Metropolitan Transportation Plan 2030*. They are NOT based upon the Land Use Plan presented in this *Lamar County Comprehensive Plan*.

**TABLE III-2
PROPOSED THOROUGHFARE IMPROVEMENTS
LAMAR COUNTY**

NAME	TERMINI OR LOCATION	PROPOSED IMPROVEMENT	2006 AVERAGE DAILY TRAFFIC	PROJECTED 2010 TRAFFIC
Improvements Included in the <i>Hattiesburg Metropolitan Transportation Plan 2030, Stage I (2007-2011)</i>				
West 4 th St.	Hattiesburg Corp. Limits to Weathersby Rd.	Construct center turn lane	Not Available	12,649
Weathersby Rd.	U. S. Highway 98 to Lincoln Rd.	Construct center turn lane	Not Available	7,522
Jackson Rd.	U. S. Highway 98 northward to Forrest County Line	Construct new 4-lane roadway	Not Applicable	5,386
West 4 th St.	Sam Rayburn Dr. to Jackson Rd.	Construct center turn lane	Not Available	8,437
Old U. S. Highway 11	Richburg Rd. to intersection of Slade Rd. and Old Okahola School Rd.	Construct center turn lane	Not Available	6,907

TABLE III-2 CONTINUED ON NEXT PAGE

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PROPOSED THOROUGHFARE IMPROVEMENTS
LAMAR COUNTY**

NAME	TERMINI OR LOCATION	PROPOSED IMPROVEMENT	2006 AVERAGE DAILY TRAFFIC	PROJECTED 2010 TRAFFIC *
Improvements Included in the Hattiesburg Metropolitan Transportation Plan 2030, Stage I I(2012-2020):				
Old MS Highway 24	Old U. S. Highway 11 to Burnt Bridge Rd.	Construct center turn lane	Not Available	2,244
U. S. Highway 98-Bypass-Phase I	Interstate 59 to Hedgwood Rd. Extension ("Western Bypass")	Construct new 4-lane at grade roadway	Not Applicable	13,394
Richburg Rd.	Hedgwood Rd. Extension to Carter Cir.	Widen to 4-lane roadway	Not Available	7,325
Richburg Rd. Extension	Carter Cir. to Interstate 59 at new interchange	Construct new 4-lane roadway	Not Applicable	7,214
Interstate 59	Richburg Rd. Extension	Construct New Interchange	Not Applicable	---
Hedgwood Rd. Extension ("Western Bypass")	Oak Grove Rd. To U. S. Highway 98 Bypass	Construct new 4-lane roadway	Not Applicable	9,277
Weatherby Rd.	West 4 th St. to Turtle Creek Mall	Widen to 4 lanes	Not Available	6,806

TABLE III-2 CONTINUED ON NEXT PAGE

**TABLE III-2-CONTINUED
PROPOSED THOROUGHFARE IMPROVEMENTS**

Improvements Included in the <i>Hattiesburg Metropolitan Transportation Plan 2030, Stage III (2021-2030)</i>:				
NAME	TERMINI OR LOCATION	PROPOSED IMPROVEMENT	2006 AVERAGE DAILY TRAFFIC	PROJECTED 2030 TRAFFIC
U. S. Highway 98	Weathersby Rd. to King Rd./ Cole Rd.	Widen to 6 lanes	36,000	53,048
U. S. Highway 98-Bypass-Phase II	Hedgwood Rd. Extension ("Western Bypass") to U. S. Highway 98	Construct new 4-lane <i>at grade</i> roadway	Not Applicable	17,982
ADDITIONAL IMPROVEMENTS NOT INCLUDED IN <i>HATTIESBURG METROPOLITAN TRANSPORTATION PLAN 2030</i> (BUT INCLUDED IN THIS LAMAR COUNTY THOROUGHFARES PLAN)				
NAME	TERMINI OR LOCATION	PROPOSED IMPROVEMENT	2006 AVERAGE DAILY TRAFFIC	PROJECTED 2030 TRAFFIC
U. S. Highway 98 Bypass, Phase I	Interstate 59 to Old U. S. Highway 11	<i>Construct new 4-lane limited access roadway</i>	Not Applicable	66,000
U. S. Highway 98 Bypass, Phase I	Hedgwood Rd. Extension and Old U. S. Highway 11	<i>Construct split diamond interchanges with connecting frontage roads</i>	Not Applicable	66,000
U. S. Highway 98 Bypass, Phase II	Old U. S. Highway 11 to MS Highway 589	<i>Construct new 4-lane limited access roadway</i>	Not Applicable	56,400

TABLE III-2 CONTINUED ON NEXT PAGE

**TABLE III-2-CONTINUED
PROPOSED THOROUGHFARE IMPROVEMENTS**

ADDITIONAL IMPROVEMENTS NOT INCLUDED IN <i>HATTIESBURG METROPOLITAN TRANSPORTATION PLAN 2030</i> (BUT INCLUDED IN THIS LAMAR COUNTY THOROUGHFARES PLAN)				
NAME	TERMINI OR LOCATION	PROPOSED IMPROVEMENT	2006 AVERAGE DAILY TRAFFIC	PROJECTED 2035 TRAFFIC
U. S. Highway 98 Bypass, Phase II	MS Highway 589	<i>Construct new interchange</i>	Not Applicable	56,400
U. S. Highway 98 Bypass, Phase II	MS Highway 589 to U. S. Highway 98	<i>Construct new 4-lane limited access roadway</i>	Not Applicable	Over 30,000
U. S. Highway 98 Bypass, Phase II	U. S. Highway 98	<i>Construct new interchange</i>	Not Applicable	Over 30,000
Interstate 59 Frontage Road	Purple Heart Freeway (Lincoln Rd. Extension) to Richburg Rd.	Construct new four-lane, two-way frontage road (with turn lanes) on west side of Interstate 59, west of electrical powerline and substation.	Not Applicable	Over 20,000

PROPOSED U. S. HIGHWAY 98 BYPASS

The consultants who prepared the *Hattiesburg Metropolitan Transportation Plan 2030* recommended that the proposed U. S. Highway 98 Bypass be constructed at-grade with engineering to begin during Phase I of the Plan (2007 to 2011), followed by construction in Phase II (2012 to 2020) and continuing into Phase III (2021 to 2030). A limited access Interstate-type facility called the "Outer Bypass" was proposed as part of the "Vision Plan": that

is, projects proposed for which no specific source of funds could be identified. Federal regulations governing transportation planning for urbanized areas require "financial constraint" in the development of long-range transportation plans; a specific source of potential funding must be identified in the plan.

Highway 98 Bypass as a Limited Access "Freeway" with Frontage Roads Linking Interchanges

In reviewing the *Hattiesburg Metropolitan Transportation Plan 2030*, the consultants who prepared this Comprehensive Plan for Lamar County determined that constructing the proposed U. S. Highway 98 would simply relocate the traffic congestion now being experienced on the existing Highway 98 due to the demand for numerous intersecting driveways for residences and businesses. There was concern, however, that if the proposed U. S. Highway 98 Bypass were constructed as a limited access (Interstate-type) facility rather than at-grade, lack of access to the highway would impede economic development along the corridor. Therefore, the consultants who developed this Comprehensive Plan proposed that the Highway 98 Bypass be constructed as a limited access roadway, but that frontage roads be constructed along sections of the highway linking several proposed interchanges. In addition to the new interchange at Interstate 59, the consultants have recommended that interchanges be constructed at the following locations:

1. Hedgwood Road Extension (called the "Western Bypass" in the *Hattiesburg Metropolitan Transportation Plan 2030*): Since federal regulations require that interchanges be constructed at least one mile apart in urban areas, this interchange would be constructed as a "split diamond" interchange with frontage roads connecting it to the other "half" of the interchange at Old U. S. Highway 11.
2. Old Highway 11: The proposed other "half" of the split diamond interchange with Hedgwood Road Extension. A two-way frontage road could be constructed on the north side of the highway connecting Old Highway 11 with McMahon Road and Burnt Bridge Road.
3. Mississippi Highway 589: This would be a full diamond-type interchange.
4. U. S. Highway 98: The Bypass would connect to existing U. S. Highway 98 between WPA Road and J. M. Burge Road.

Funding for Construction of the Proposed U. S. Highway 98 Bypass and Frontage Roads

If the proposed U. S. Highway 98 Bypass is part of the National Highway System (NHS), then federal NHS funds can be used to construct the bypass. Although federal funds are not normally made available for construction of frontage roads, they can be used to construct one-way frontage roads built as part of a "split-diamond" interchange. However, in order to provide access to proposed commercial development along the bypass, other financing mechanisms, such as Tax Increment Financing (TIF) bonds, can be used to finance the construction of frontage roads.

FUNCTIONAL CLASSIFICATION AND IMPROVEMENTS ON ROADWAYS OUTSIDE OF THE HATTIESBURG URBANIZED AREA

Map III-1 on the next page reflects the functional classification of rural roadways outside of the Hattiesburg Urbanized Area (see dashed line on Map III-1 indicating boundaries of the urbanized area). Map III-2 reflects the 2007 traffic volumes (Average Daily Traffic) on roadways both inside and outside the urbanized area. As can be seen from Map III-2, no roadway outside of the urbanized area is currently experiencing traffic capacity problems according to the Generalized Roadway Capacities shown in Table III-1.

The development of the **Land Use Plan** (Chapter II) includes rural areas of the County for which no traffic projections could be performed because of the lack of significant traffic generators. Therefore, no major roadway improvements (new roads or widened roads) are proposed for these rural areas. Suffice it to say that *maintenance of these existing roadways and bridges* in these areas should be the primary focus of the County Board of Supervisors now and in the future.

BICYCLE AND PEDESTRIAN FACILITIES

Longleaf Trace Multipurpose Trail

At 41 miles, the Longleaf Trace is the longest rail-trail in the south central United States, connecting Mississippi's third-largest city, Hattiesburg, with the timber town of Prentiss to the northwest. Most of the trail - more than 39 miles beginning just west of Hattiesburg - opened on Labor Day 2000 along with a 26-mile equestrian trail paralleling the Trace. Recently, a two-mile stretch was constructed that brings the trail to the University of Southern Mississippi campus in Hattiesburg.

Surfaced with asphalt, the trail cuts through the heart of Piney Woods country, named for the vast forests of longleaf and slash pine that once crowned the low hills between Jackson and the Gulf Coast. As trail users pedal along, evergreens dominate the scenery. Flanking the straight-aways and sweeping turns, their top branches reach 50 feet or more above the ground. At rhythmic intervals the trees recede, revealing a savannah of deep-green rye grass dotted with tan hay bales, a cow or two and an occasional long gravel driveway ending at the carport of a well-tended brick farmhouse.

The Trace winds through small farm towns such as Bassfield, where a general store stocks washboards and canning supplies and sells eggs and produce from nearby truck gardens. The scenery changes subtly in Prentiss. The trail drapes across the broad, sandy Jaybird Creek hugged by a dense forest of hardwood trees. Climbing from the creek bottom into Prentiss may leave bicyclists huffing and puffing, just as freight trains running this route years ago struggled to make the grade.

The development of the Trace was assisted immeasurably by the railbanking provision that was added to the National Trails System Act in 1983, which allows for interim trails use on railroad corridors and preserves the corridor for possible rail use in the future. In addition, the Trace also

benefitted immensely from the creation in 1994 of the Pearl to Leaf Rivers Rails-to-Trails Recreational District, which is managed by a local board of directors and is responsible today for managing and maintaining the trail.

Recommendations for Additional Multipurpose Trails in Lamar County

Lamar County should build upon the success of the Longleaf Trace trail by designing a trail that would connect Longleaf Trace to Jackson Road and the extension of Jackson Road. From this centrally-located multipurpose trail, additional trails should be designed and built to connect residential areas to parks, schools, shopping facilities and other destinations.

MASS TRANSPORTATION

The Hattiesburg Area Redit Transit (H.A.R.T.) operates both fixed routes and demand-response services. There are three fixed routes inside the City of Hattiesburg, which include the Dabbs Street route, the Hardy Street route, and the Mobile Street route. The demand-response service is strictly for citizens with special needs, and operates on a twenty-four-hour advance notice system. People with special needs are identified as anyone who is not physically able to reach a designated bus stop on one of the fixed routes. There is no fixed route/ fixed schedule transit service in Lamar County.

Pearl River Valley Opportunity, Inc. (PRVO) provides transportation services to the general public, elderly, disabled and head start children in the following counties: Amite, Covington, Forrest, Jones, Lamar, Marion, Perry, Pike and Walthall. PRVO's Transportation Program is a rural transportation program financed in part through Federal Transit Administration Section 5311 for rural areas. The agency has a transportation fleet of 66 vehicles. PRVO also receives funding from through contracts, fare box revenue and funding from some of the local boards of supervisors.

RIDESHARING

With the increased cost of fuel, many counties and cities and Metropolitan Planning Organizations (MPO's) are considering establishing ridesharing services if they don't already provide the service. This can include a range of services from simply matching potential carpoolers in terms of destination and work schedules to actual operation of vanpools.

It is recommended that Lamar County establish a ridesharing-matching program for residents and locate suitable park and ride sites for carpoolers and vanpoolers. The staff of the Lamar County Planning Department and Geographic Information Systems Department should cooperate in establishing the ridesharing program. The first step in establishing a ridesharing program is to issue a Request for Proposals to selected vendors who can provide software and other services to assist the County in getting started. Below are some web-based programs (with their websites) to which RFP's could be issued.

Goose Networks – Free of Charge. Uses text messaging to help locate others to rideshare with.
www.goosenetworks.com

Erideshare.com – Free of Charge to individuals and Employers with less than 200 employees.
www.erideshare.com

Carpoolworld.com – \$10.00 per month for up to 500 trips in the group.
\$2.00 USD per month for each additional 100 trips in the group or fraction thereof. Allows for a customizable site that will display our banner. *“We will create a dedicated log-in page for your carpool group on our web site, or we can provide you with the html code for you to build your own carpoolworld.com log-in page on your web site, your choice.”*

www.carpoolworld.com

Greenride – Pricing is not listed. The following website provides a demonstration of their product: www.greenride.com

Trapeze Ridepro 3 – http://www.trapezegrup.com/solutions/ride_share.php

Rideshark – Appears to be a customizable site for a host agency. <http://www.rideshark.com/>

Viva Commute – Appears to be another site that allows for a customizable site to a host agency.
<http://www.vivacommute.com/>

AIRPORTS

The Hattiesburg - Laurel Regional Airport serves a ten-county region from its convenient location just off of Interstate 59 between Hattiesburg and Laurel Mississippi. The Airport offers both commercial and general aviation services.

The Hattiesburg-Bobby L. Chain Municipal Airport also provides air service to the greater Hattiesburg area. Though commercial air service is no longer available at the municipal airport, the facility maintains a vital role in the transportation infrastructure of the metropolitan Hattiesburg area, serving as the preferred business airport for Forrest, Lamar and Perry Counties, as well as parts of Pearl River, Stone and Greene counties. With increased usage by corporate, military and general aviation, the municipal airport continues to satisfy the air transportation needs of southern Mississippi. It is located in the Hattiesburg-Forrest County Industrial Park, adjacent to U.S. Highways 49 and 98, and within two miles of Interstate 59. The airport is located only four miles, or about a five-minute drive, south of the center of Hattiesburg.