

MISSISSIPPI'S UNIFIED LONG-RANGE TRANSPORTATION INFRASTRUCTURE PLAN



2035



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FINAL REPORT

APPENDIX L: MULTIMODAL FREIGHT CORRIDOR PROFILES

MAY 2011

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1. INTRODUCTION

The importance of freight corridors in trade is explicitly recognized by the Mississippi Department of Transportation (MDOT). Maintaining efficient and effective trade transportation in Mississippi will help support that part of the Mississippi economy that is dependent on national and international markets. This report updates the corridor profiles developed for the *Mississippi Trade and Transportation Assessment* to focus on future investment needs along the six key multimodal corridors that generate the goods and services that are lifelines of Mississippi's communities.

Using 2008 TRANSEARCH data and other analysis currently underway within the *Mississippi Trade and Transportation Assessment*, this analysis reviews truck, rail, water, and air freight movements in conjunction with the various modal options and freight generators along each freight corridor in Mississippi. The link between goods movement and infrastructure capacity provides insight about freight transportation and economic development opportunities in the State of Mississippi. The profiles are enhanced to examine how current economic and trade trends are likely to impact each specific corridor and develop a foundation for corridor master plans looking at infrastructure investment needs across all modes operating in each corridor.

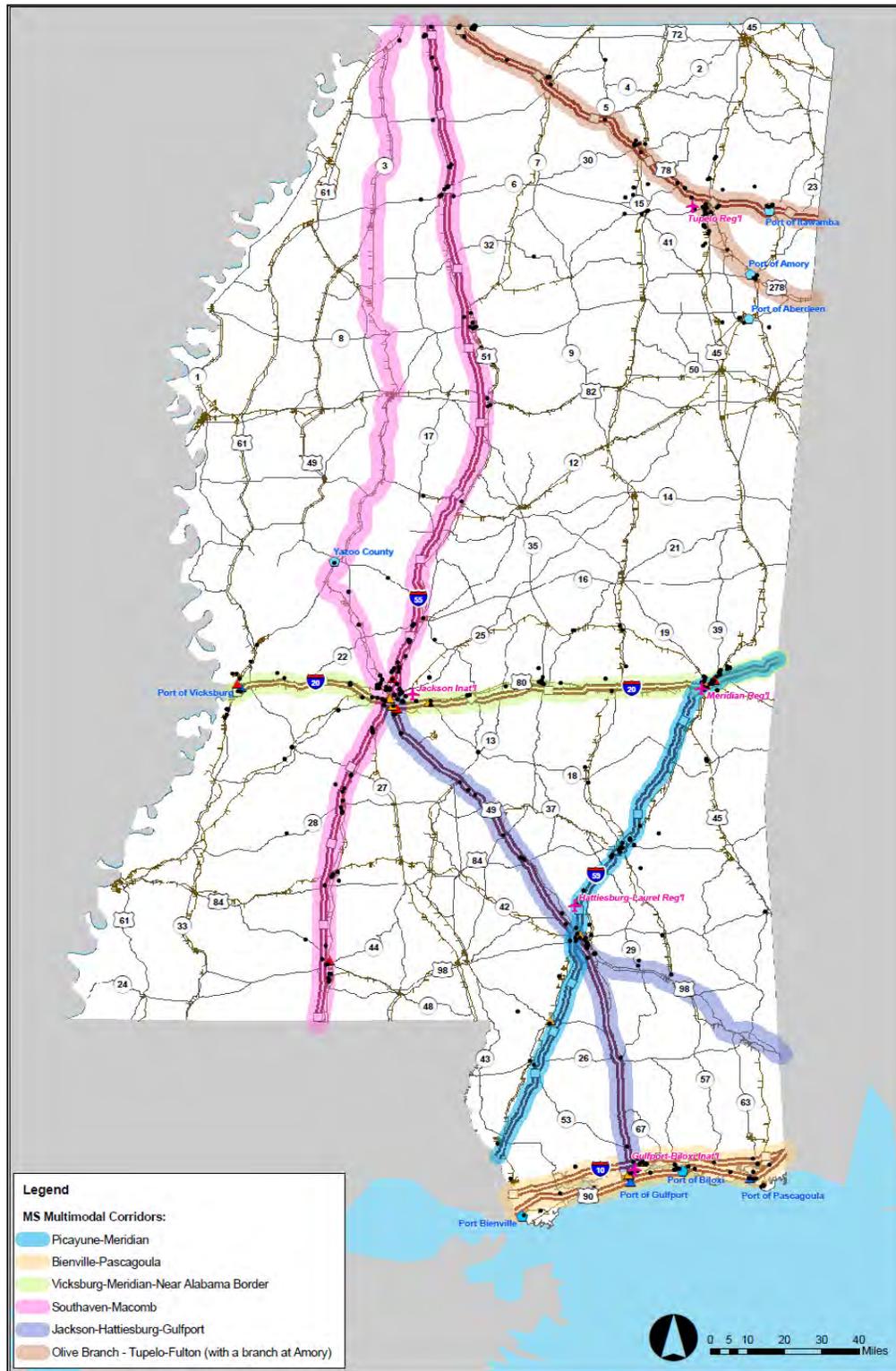
Freight movement in Mississippi occurs across four modes of transportation (i.e., truck, rail, water cargo, and air cargo) and among main freight generators and/or attractors. The understanding of the relationship of these modes with the population and the economy of the state of Mississippi is important to effective future planning for infrastructure investment needs across all modes operating in each corridor.

1.1 Mississippi's Multimodal Strategic Freight Corridors

Mississippi's six strategic freight corridors, shown in **Figure 1-1**, include a variety of freight infrastructure serving the needs of the state's existing industries. The multimodal freight system serving Mississippi includes Gulf Coast and river ports, interstates and highways, Class I and short line railroads, airports, intermodal facilities, and pipelines. IHS Global Insight estimates that 91 percent of all freight that travels in Mississippi uses one or more of these corridors as shown in **Table 1-1**. Each of them has unique freight characteristics that are important to understand when making freight infrastructure planning decisions.

In the future, it will be essential for the state's transportation planners to balance the transportation needs of those existing businesses with the needs of new emerging businesses that will help to generate new jobs and investment for Mississippi's citizens. The following text evaluates each strategic corridor's freight network and the economic development factors that will influence freight and goods movements in each corridor in the future.

Figure 1-1: The Mississippi Multimodal Freight Corridors



Source: Prepared by Wilbur Smith Associates

Table 1-1: Total Freight Tons by Multimodal Corridor with Forecast

Corridor	Annual Tons (Millions)				Average Annual Growth Rate (AAGR)
	2008	2010	2020	2030	
Southaven – McComb	169.7	153	196.7	232.6	1.44%
Gulf Coast	151.9	136.3	173.1	199.8	1.25%
Jackson – Hattiesburg – Gulfport	136.6	124.3	156.9	185.2	1.39%
Vicksburg – Meridian	211.3	191.0	240.0	278.2	1.26%
Picayune – Meridian	156.9	142	179.5	210.8	1.35%
Olive Branch – Tupelo – Fulton	74.8	66.3	84.4	98.0	1.25%
Non-Corridor Traffic	50.8	44.6	54.2	61.5	0.88%
Total Mississippi Traffic	595.9	534.2	670.2	769.5	1.17%

Source: IHS Global Insight Transearch 2008

2. SOUTHAVEN-MCCOMB MULTIMODAL CORRIDOR

2.1 Population and Employment

The Southaven-McComb Corridor consists of 19 counties (**Table 2-1**) and includes Jackson, the largest city in the state. Over a third of the State's population and employment reside in this corridor, particularly in the counties of Hinds, Desoto, Rankin, and Madison. These four counties account for approximately 60% of the total population in the corridor and 89% of its employment.

Over the last four decades, all industrial sectors in the Southaven-McComb Corridor, except farm and forestry, has experienced positive employment growth (**Table 2-2**). As Jackson is the Mississippi state capital, it is not surprising that government is the leading source of jobs in the corridor. The other four leading sectors in the corridor in terms of jobs are:

- *Retail trade* (local-serving sector)
- *Health care and social assistance* (local serving sector)
- *Food services* (trade and local serving sector)
- *Manufacturing* (trade sector)

Table 2-1: Historical Population in the Southaven-McComb Corridor

County	Year (population in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Hinds	215.6	251.3	254.5	250.6	249.2	13.5%	0.4%
Desoto	36.1	54.0	68.6	108.7	149.1	75.8%	2.0%
Rankin	44.5	69.8	87.7	116.2	138.2	67.8%	1.8%
Madison	30.1	41.7	54.3	75.1	89.3	66.4%	1.8%
Pike	32.0	36.3	36.8	39.0	39.8	19.7%	0.5%
Panola	26.7	28.1	30.1	34.4	35.4	24.6%	0.7%
Leflore	42.1	41.5	37.3	37.8	35.2	-19.7%	-0.5%
Lincoln	26.5	30.2	30.3	33.1	34.5	23.4%	0.6%
Copiah	24.7	26.4	27.6	28.8	29.3	15.8%	0.4%
Yazoo	27.6	27.4	25.5	28.1	28.7	3.9%	0.1%
Tate	18.7	20.2	21.5	25.4	26.9	30.3%	0.8%
Grenada	19.9	21.1	21.6	23.2	23.0	13.8%	0.4%
Holmes	23.3	23.0	21.6	21.6	20.5	-13.8%	-0.4%
Yalobusha	11.8	13.2	12.1	13.2	13.7	13.5%	0.4%
Tallahatchie	19.3	17.0	15.2	14.9	13.3	-45.0%	-1.2%
Montgomery	13.0	13.3	12.4	12.1	11.5	-13.0%	-0.4%
Tunica	11.8	9.6	8.2	9.2	10.5	-12.6%	-0.3%
Carroll	9.4	9.7	9.3	10.8	10.3	8.5%	0.2%
Quitman	15.7	12.6	10.4	10.1	8.9	-76.8%	-2.1%
Total	648.6	746.4	785.0	892.2	967.3	32.9%	0.9%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates

Table 2-2: Historical Industry Employment in the Southaven-McComb Corridor

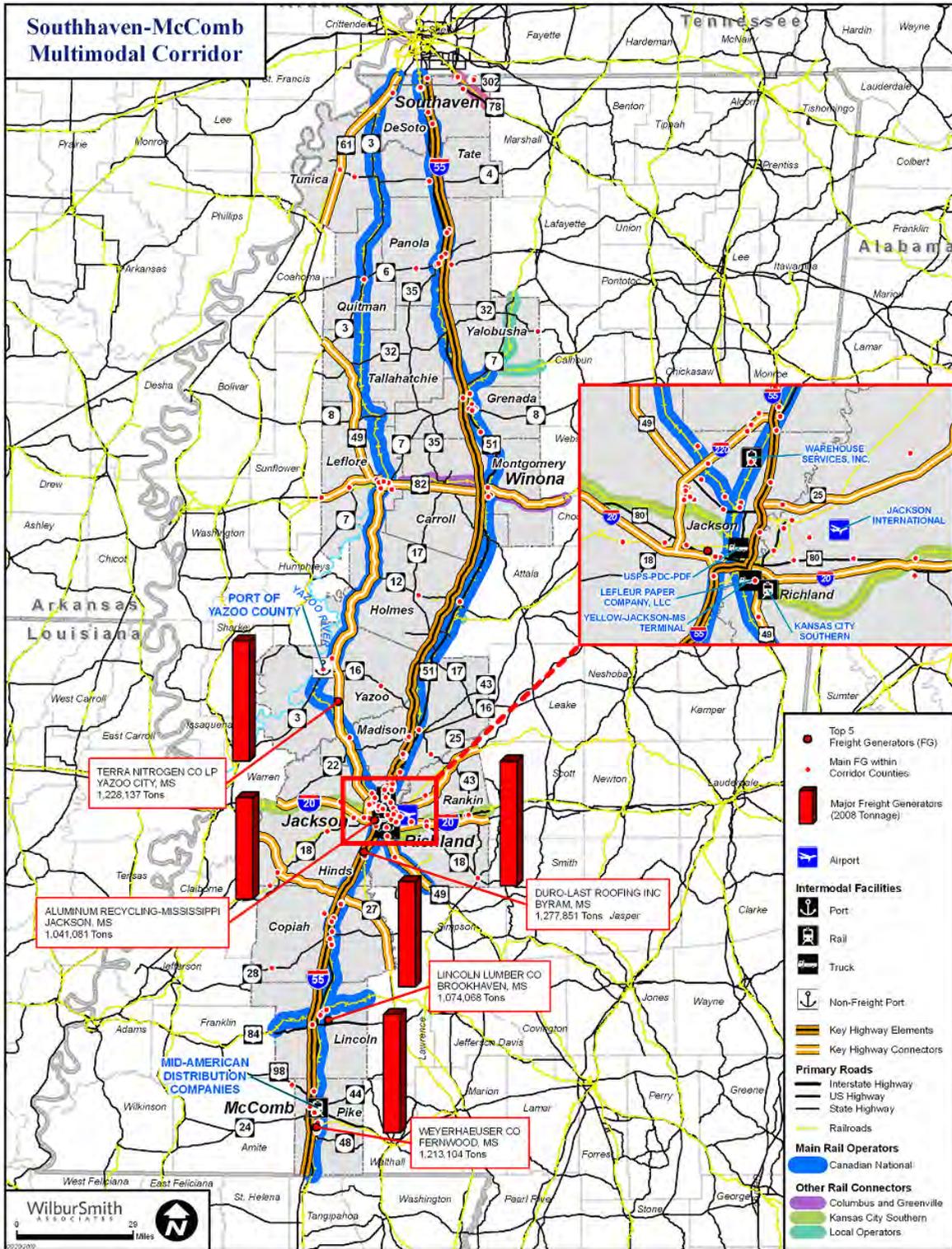
Industry	Year (employment in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Government	49.2	66.2	72.1	86.0	91.2	46.0%	1.2%
Retail Trade	26.8	37.8	46.9	58.8	60.1	55.4%	1.5%
Health Care and Social Assistance	17.5	20.0	25.9	38.2	48.0	63.5%	1.7%
Food Services	10.2	12.8	16.7	37.6	44.9	77.3%	2.1%
Manufacturing	38.3	48.1	52.0	51.6	43.5	11.9%	0.3%
FIRE	17.2	25.2	29.0	35.7	43.5	60.5%	1.6%
Construction	14.9	16.9	18.1	28.1	35.9	58.4%	1.6%
Administrative and Waste Services	8.4	10.5	13.8	22.1	31.3	73.3%	2.0%
Other Services	15.4	17.7	23.4	25.5	30.8	50.0%	1.4%
Professional and Technical Services	9.3	11.0	15.0	19.6	26.5	65.0%	1.8%
Transportation and Warehousing	7.6	10.5	13.4	21.1	23.9	68.2%	1.8%
Wholesale Trade	9.8	16.1	16.0	19.4	20.2	51.4%	1.4%
Farm and Forestry	36.1	28.9	20.0	19.2	17.1	-111.5%	-3.0%
Educational Services	4.0	4.6	6.0	9.1	11.2	64.4%	1.7%
Arts, Entertainment, and Recreation	1.2	1.6	2.0	7.5	7.9	84.6%	2.3%
Information	4.7	5.8	6.8	9.8	6.6	28.6%	0.8%
Management	3.7	4.3	5.7	5.6	5.4	31.5%	0.9%
Mining	2.3	3.1	2.9	2.7	3.3	30.4%	0.8%
Utilities	2.0	2.5	2.5	2.7	2.5	19.6%	0.5%
Total =	278.5	343.4	388.2	500.2	553.6	49.7%	1.3%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

2.2 Infrastructure

Figure 2-1 illustrates the Southaven-McComb Multimodal Corridor. The corridor’s freight network includes: Interstates 55 and 20 and U.S. Highway 49; the Canadian National Railroad and several rail connectors and local short line railroads; the Jackson and Memphis International Airports; and, the Port of Yazoo. Major employers in this corridor that rely on these freight networks include: Nissan North America, Inc.; Advanced Distributor Products; L-3 Communications Vertex Aerospace; Dart Container Corp.; Croft Metals, Inc.; and, Yates Services, Inc.

Figure 2-1: Southaven-McComb Multimodal Corridor



2.3 Freight Overview

The Southaven-McComb Corridor carried approximately 170 million tons of freight in 2008 and is expected to grow an average of 1.4% annually through 2030 (**Table 2-3**), consistent with IHS Global Insight’s projections of national GDP growth. The Corridor's extensive connectivity makes it a significant national link for through freight. In 2008, almost 60% of the Corridor's traffic was through, with this traffic showing the greatest growth through 2030. Much of its growth is due to higher traffic levels between Gulf Coast ports outside of Mississippi (particularly Houston and New Orleans) and points north and east. In addition, the corridor supports traffic to and from Dallas, Atlanta and Los Angeles, all predicted to generate above average freight growth in the future. Locally, the corridor is relatively well balanced between inbound and outbound traffic.

Table 2-3: Detailed Forecast by Direction for the Southaven-McComb Corridor

Direction	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Inbound	33.2	20%	43.4	19%	1.2%
Intra	12.8	8%	17.1	7%	1.3%
Outbound	28.0	17%	38.2	16%	1.4%
Through	95.6	56%	133.8	58%	1.5%
Total	169.7	100%	232.6	100%	1.4%

Source: IHS Global Insight Transearch 2008

Table 2-4 shows current and projected modal split of freight traffic on the Southaven-McComb Corridor. Truck is the dominant mode with its share expected to increase an average of 1.5% annually through 2030. Future shares of rail, water and air freight are anticipated to experience a marginal increase (rail and air) or decrease (water) from 2008 through 2030.

Table 2-4: Detailed Forecast by Mode for the Southaven-McComb Corridor

Mode	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Truck	152.7	90.0%	213.2	91.7%	1.5%
Water	0.8	0.5%	0.6	0.3%	-0.8%
Rail	16.2	9.5%	18.7	8.0%	0.7%
Air	--	0.0%	--	0.0%	0.7%
Total	169.7	100.0%	232.6	100.0%	1.4%

Source: IHS Global Insight Transearch 2008

Lumber or Wood Products is the corridor's primary commodity by weight while plastics and machinery dominate by value (**Table 2-5**). Machinery includes auto parts shipments that support the Nissan plant in Canton. Secondary traffic, defined as local movements to and from distribution centers, is the largest freight category by weight and value.

Table 2-5: Top Freight Commodities in the Southaven-McComb Corridor, 2008

Commodities	Tons (Millions)	% Total
Secondary Traffic	27.6	16.3%
Lumber or Wood Products	23.1	13.6%
Primary Metal Products	16.5	9.8%
Food or Kindred Products	14.8	8.7%
Chemicals or Allied Products	12.9	7.6%
All Others	74.7	44.0%
Total	169.7	100.0%
Commodities	Value (Millions\$)	% Total
Secondary Traffic	32,164	12.7%
Rubber or Misc Plastics	24,804	9.8%
Machinery	24,326	9.6%
Chemicals or Allied Products	22,838	9.0%
Electrical Equipment	22,502	8.9%
All Others	126,115	49.9%
Total	252,749	100.0%

Source: IHS Global Insight Transearch 2008

The primary freight shippers and receivers in the Southaven-McComb Corridor with each facility's long term trend are shown in **Table 2-6**. Most of the corridor's freight generators are in the lumber, woodworking, or chemical industries.

Figure 2-2 shows projection of inbound freight in the Southaven-McComb Corridor by major commodity. Much of the inbound traffic in the corridor is regional; one third of the traffic originates within the State and another quarter comes from New Orleans, Baton Rouge, Birmingham, or Little Rock. The corridor's primary freight, non metallic minerals, is expected to grow after the recession. However, inbound lumber and wood product traffic, currently approximately 11% of freight in this corridor, will remain static in the post-recession forecast period. This is accompanied by higher than average growth in secondary traffic, brought about by increased use of the Jackson intermodal facility and more construction of national retail chain stores with large distribution networks. Nonmetallic minerals are primarily short-haul truck moves of sand, gravel or broken stone used for construction. Inbound freight in this corridor also includes significant volumes of sand and fertilizer shipped by barge via the Yazoo County Port.

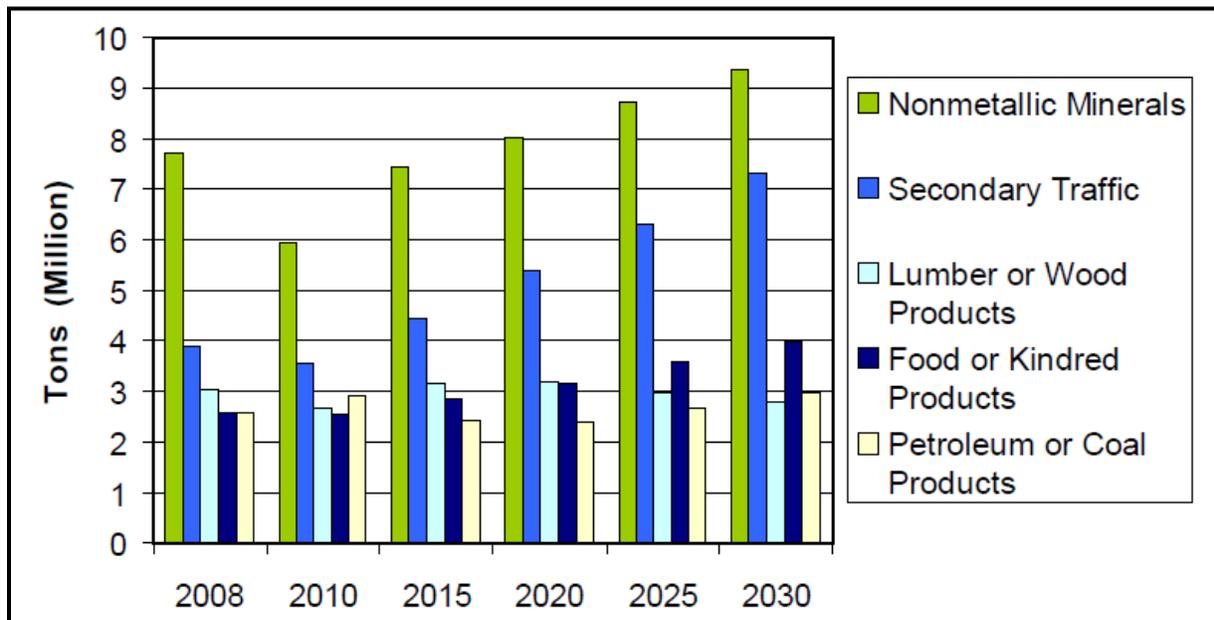
Table 2-6: Major Freight Shippers and Receivers in the Southaven-McComb Corridor

Company Name	City	Industrial Classification (NAICS)	Estimated Tons 2008 (Million)	Long Term Trend
Kitchens Brothers Mfg Co	Utica	Sawmills	3.95	▲
Terra Nitrogen Co Lp	Yazoo City	Nitrogenous Fertilizer Mfg	3.05	▼
Weyerhaeuser Co	Fernwood	Cut Stock, Resawing Lumber, & Planing	1.99	▼
Lincoln Lumber Co	Brookhaven	Cut Stock, Resawing Lumber, & Planing	1.98	▼
Seago Lumber Co	McComb	Cut Stock, Resawing Lumber, & Planing	1.36	▼
J T Shannon Lumber Inc	Horn Lake	Sawmills	1.05	▲
Memphis Hardwood Flooring	Grenada	Cut Stock, Resawing Lumber, & Planing	1.01	▼
Columbus Lumber	Brookhaven	Cut Stock, Resawing Lumber, & Planing	0.95	▼
Hazlehurst Lumber Co	Hazlehurst	Sawmills	0.79	▲
Wallace Lumber Co	Summit	Sawmills	0.71	▲
Terra Industries	Yazoo City	Nitrogenous Fertilizer Mfg	0.57	▼
Scott Penn Inc	Canton	Logging	0.56	—
Color-Box Inc	Pelahatchie	Paperboard Mills	0.52	▲
Marietta American Inc	Olive Branch	Soap & Other Detergent Mfg	0.46	▼
Weyerhaeuser Co	Richland	Corrugated & Solid Fiber Box Mfg	0.36	▲
Nissan North America	Canton	Automobile Mfg	0.36	▲
Caterpillar Inc	Jackson	Construction Machinery Mfg	0.26	▲
Bailey Lumber & Supply Co	Jackson	Engineered Wood Member Mfg	0.25	▲
Pepsi-Cola Bottling Co	Ridgeland	Soft Drink Mfg	0.25	▼

Note: Major freight attractors or generators in a corridor are facilities with more than 50 employees that attract or generate more than 250,000 tons of freight annually.

Source: IHS Global Insight Freight Finder for Mississippi 2008

Figure 2-2: Southaven-McComb Top Five Inbound Commodities Forecast

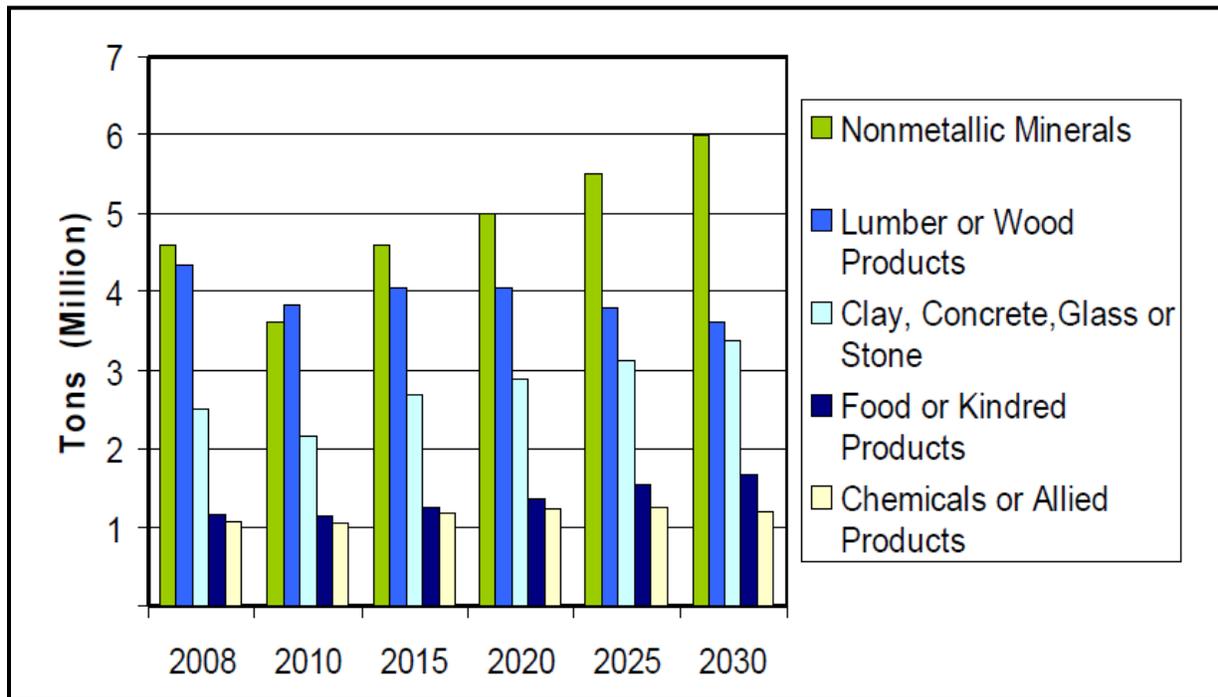


Source: IHS Global Insight Transearch 2008

Of the 17 major freight attractors, over 70% are lumber or wood related establishments. Of these, eight are also major originators of lumber traffic on the corridor. Note that none of the attractors involve non-metallic minerals (including sand, gravel and stone), a major inbound commodity in the corridor. These commodities are generally used in construction and do not terminate at specific commercial facilities.

Figure 2-3 shows projections of outbound freight in the Southaven-McComb Corridor by major commodity. Predominant outbound commodities in the corridor are lumber/wood products, secondary traffic, and non-metallic minerals. Non-metallic minerals are primarily local moves of high-tonnage sand and gravel while the forest products are often short moves between processors of raw materials to local manufacturers of wood products. While lumber/wood products are currently the major outbound commodity from this corridor, the long-term trend for this freight is not promising. Many wood products are being sourced from overseas with a reduction in domestic production, particularly from Mississippi. Over the forecast period, outbound commodities from this corridor will shift from lumber to secondary traffic, i.e. traffic to and from intermodal terminals, airports, and distribution centers. Non-metallic minerals will also grow significantly, but these moves are primarily short-haul moves of sand, gravel, and other bulk materials that begin and end along the corridor.

Figure 2-3: Southaven-McComb Top Five Outbound Commodities Forecast



Source: IHS Global Insight Transearch 2008

Over 95% of the 16 largest shippers in the corridor are lumber or chemical firms. However, as discussed earlier, freight growth rates for these commodities in the corridor is expected to be modest with outbound lumber products actually declining.

3. GULF COAST MULTIMODAL CORRIDOR

3.1 Population and Employment

The Gulf Coast Corridor consists of the three Mississippi' counties bordering the Gulf of Mexico (Table 3-1). These counties, which account for a little over 10% of the State's employment and population, are home to the State's four Gulf ports (Bienville, Gulfport, Biloxi, and Pascagoula).

Table 3-1: Historical Population in the Gulf Coast Corridor

County	Year (population in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Harrison	135.7	158.3	165.5	189.9	176.4	23.1%	0.6%
Jackson	88.8	118.2	115.1	131.8	130.2	31.8%	0.9%
Hancock	17.7	24.7	31.9	43.3	39.7	55.4%	1.5%
Total	242.2	301.1	312.5	365.0	346.3	30.1%	0.8%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

Table 3-2 shows the historical employment by industrial sector for the Gulf Coast Corridor. All sectors, except *manufacturing*, have experienced a positive employment growth over the last four decades. The five leading sectors in this Corridor in terms of jobs are:

- Government
- Food services (trade and local serving sector)
- Retail trade (local-serving sector);
- Manufacturing (trade sector)
- Construction (local serving sector)

3.2 Infrastructure

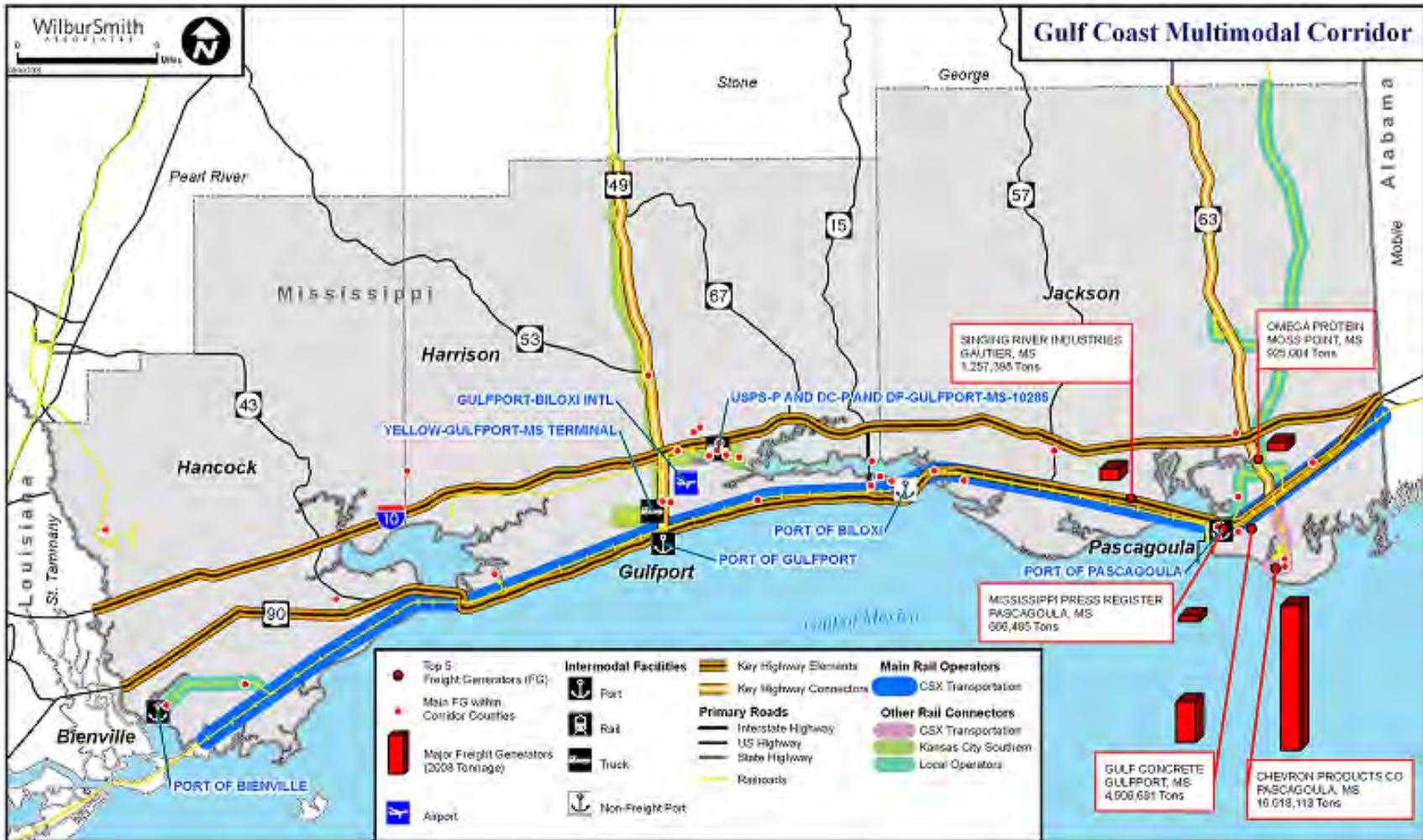
Figure 3-1 illustrates the **Gulf Coast Multimodal Corridor**. The corridor’s freight network includes: the Gulf Coast ports of Pascagoula, Biloxi, Gulfport, and the Port of Bienville connected to the Intercoastal Waterway; Interstates 10 and 110, U.S. Highways 90 and 49, and State Route 63; CSX Railroad and Kansas City Southern (KCS) Railroad and several short line railroads; and, Gulfport-Biloxi International Airport and several freight terminal facilities. The state’s largest employer, Northrop Grumman Ship Systems employs over 13,000 in this corridor. Other significant employers in this corridor who rely on the multimodal freight network serving the region include: Signal International; Chevron Products; Trinity Yachts; and, DuPont de Nemours & Company.

Table 3-2: Historical Industry Employment in the Gulf Coast Corridor

Industry	Year (employment in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Government	38.0	42.8	42.9	46.9	43.3	12.4%	0.3%
Food Services	6.5	9.3	12.1	25.6	24.5	73.4%	2.0%
Retail Trade	9.1	14.6	18.0	23.3	22.7	59.9%	1.6%
Manufacturing	21.7	27.6	28.9	25.4	21.3	-2.2%	-0.1%
Construction	7.2	8.7	7.0	14.2	19.0	61.9%	1.7%
Finance & Insurance and Real Estate, Rental & Leasing	5.5	8.3	8.0	10.8	13.1	58.1%	1.6%
Health Care and Social Assistance	3.3	4.5	6.0	12.2	13.1	74.5%	2.0%
Administrative and Waste Services	2.4	3.4	4.3	8.6	12.8	81.2%	2.2%
Other Services	3.8	5.1	6.9	10.0	10.5	64.1%	1.7%
Professional and Technical Services	2.8	3.6	4.9	8.5	9.1	69.5%	1.9%
Arts, Entertainment, and Recreation	1.7	2.4	3.2	11.3	5.3	67.5%	1.8%
Transportation and Warehousing	2.1	3.4	3.4	4.1	4.8	56.1%	1.5%
Wholesale Trade	1.7	3.0	2.6	2.8	2.9	41.9%	1.1%
Information	0.7	1.0	1.2	2.1	2.5	71.4%	1.9%
Farm and Forestry	0.9	1.7	2.0	2.5	2.2	58.5%	1.6%
Utilities	1.4	2.2	2.2	2.1	1.5	6.2%	0.2%
Educational Services	0.3	0.4	0.5	1.0	1.4	78.9%	2.1%
Management	0.5	0.6	0.8	1.3	0.9	47.7%	1.3%
Mining	0.2	0.2	0.3	0.2	0.2	23.7%	0.6%
Total	109.7	142.6	155.0	213.00	210.9	48.00%	1.30%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

Figure 3-1: Gulf Coast Multimodal Corridor



3.3 Freight Overview

Overall freight traffic in the Gulf Coast Corridor represented about 152 million tons in 2008 and it is anticipated to increase an average of 1.3% annually through 2030 (**Table 3-3**), consistent with HIS Global Insight’s projections of national GDP growth. The Corridor’s relatively high outbound freight percentage (29%) is the result of imports arriving through Mississippi ports and being distributed inland. This traffic is expected to have the highest growth rates (1.4% annually) as seaports continue to increase volumes after rebuilding from Hurricane Katrina.

Table 3-3: Detailed Forecast by Direction for the Gulf Coast Corridor

Direction	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Inbound	28.2	19%	35.7	18%	1.1%
Intrastate	5.0	3%	6.7	3%	1.3%
Outbound	44.8	29%	61.2	31%	1.4%
Through	73.9	49%	96.1	48%	1.2%
Total	151.9	100%	199.8	100%	1.3%

Source: IHS Global Insight Transearch 2008

Table 3-4 shows current and projected modal split of freight traffic on the Gulf Coast Corridor. Truck is the dominant mode with its share expected to increase from 71% to 76% through 2030 due to increases in local inland distribution from the ports. Future shares of rail and water freight are anticipated to experience a marginal increase, while air freight is expected to increase by 1.5% annually from 2008 to 2030.

Table 3-4: Detailed Forecast by Mode for the Gulf Coast Corridor

Mode	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Truck	107.4	70.7%	150.9	75.6%	1.6%
Water	25.9	17.0%	29.8	14.9%	0.7%
Rail	18.7	12.3%	19	9.5%	0.1%
Air	--	0.0%	--	0.0%	1.5%
Total	151.9	100.00%	199.8	100.00%	1.3%

Source: IHS Global Insight Transearch 2008

Petroleum products, rubber, and chemicals are the major commodities in the Gulf Coast Corridor by weight and value (**Table 3-5**). These bulk commodities are primarily import/export traffic handled by the corridor’s ports. The Chevron plant in Pascagoula is the corridor’s dominant

freight facility, dwarfing all other shippers or receivers. The plant, and other primary industries in the area, is expected to growth over 3% annually through 2030.

Table 3-5: Top Freight Commodities in the Gulf Coast Corridor, 2008

Commodities	Tons (Millions)	% Total
Petroleum or Coal Products	41.0	27.0%
Chemicals or Allied Products	18.3	12.1%
Rubber or Misc Plastics	12.4	8.1%
Crude Petroleum or Natural Gas	9.7	6.4%
Secondary Traffic	9.5	6.2%
All Others	61.0	40.2%
Total	151.9	100.0%
Commodities	Value (Million\$)	% Total
Petroleum or Coal Products	41,029	19.2%
Rubber or Misc Plastics	39,231	18.4%
Chemicals or Allied Products	24,136	11.3%
Transportation Equipment	13,876	6.5%
Electrical Equipment	11,328	5.3%
All Others	84,008	39.3%
Total	213,608	100.0%

Source: IHS Global Insight Transearch 2008

The primary freight shippers and receivers in the Gulf Coast Corridor with each facility's long term trends are shown in **Table 3-6**. The major freight shipper and receiver in the corridor is Chevron.

Table 3-6: Major Freight Shippers and Receivers in the Gulf Coast Corridor

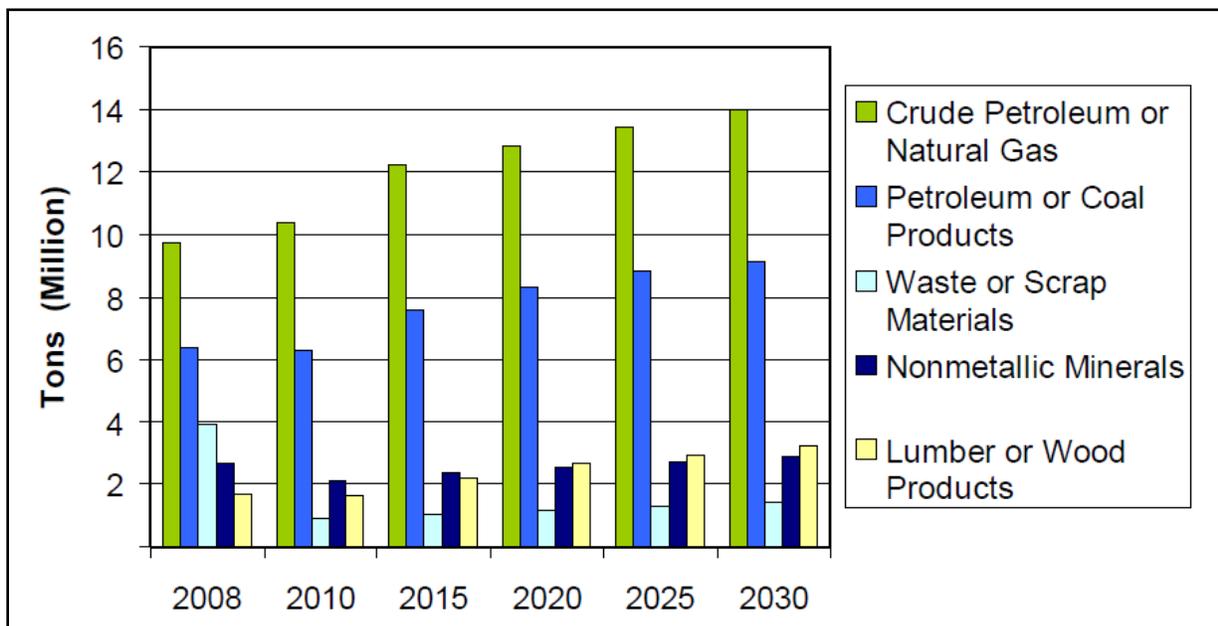
Company Name	City	Industrial Classification (NAICS)	Estimated Tons 2008 (Million)	Long Term Trend
Chevron Products Co	Pascagoula	Synthetic Organic Dye & Pigment Mfg	24.32	▲
Mississippi Phosphates Corp	Pascagoula	Nitrogenous Fertilizer Mfg	1.08	▲
Pavco Industries	Pascagoula	Hardwood Veneer & Plywood Mfg	0.95	▲
Omega Protein	Moss Point	Fats & Oils Refining & Blending	0.82	▲
Du Pont	Pass Christian	Other Misc Chemical Prod Mfg	0.74	—
First Chemical Corp	Pascagoula	Synthetic Organic Dye & Pigment Mfg	0.25	▲

Note: Major freight attractors or generators in a corridor are facilities with more than 50 employees that attract or generate more than 250,000 tons of freight annually.

Source: IHS Global Insight Freight Finder for Mississippi 2008

Figure 3-2 shows projections of inbound freight in the Gulf Coast Corridor by major commodity. The single largest inbound commodity in the Corridor is crude petroleum arriving via tanker ship to Gulf Coast ports from Mexican refineries. Other inbound flows of petroleum and chemicals come from Mobile in Alabama, Houston in Texas, and New Orleans and Lake Charles in Louisiana, in service of the corridor's petrochemical industry. Other inbound commodities include scrap materials, bulk minerals, and lumber, much of it received at ports via land modes and shipped out on water through the Gulf Intracoastal Waterway or to foreign destinations. Inbound crude and processed petroleum products are expected to grow steadily to 2030 and remain the dominant inbound freight in the corridor.

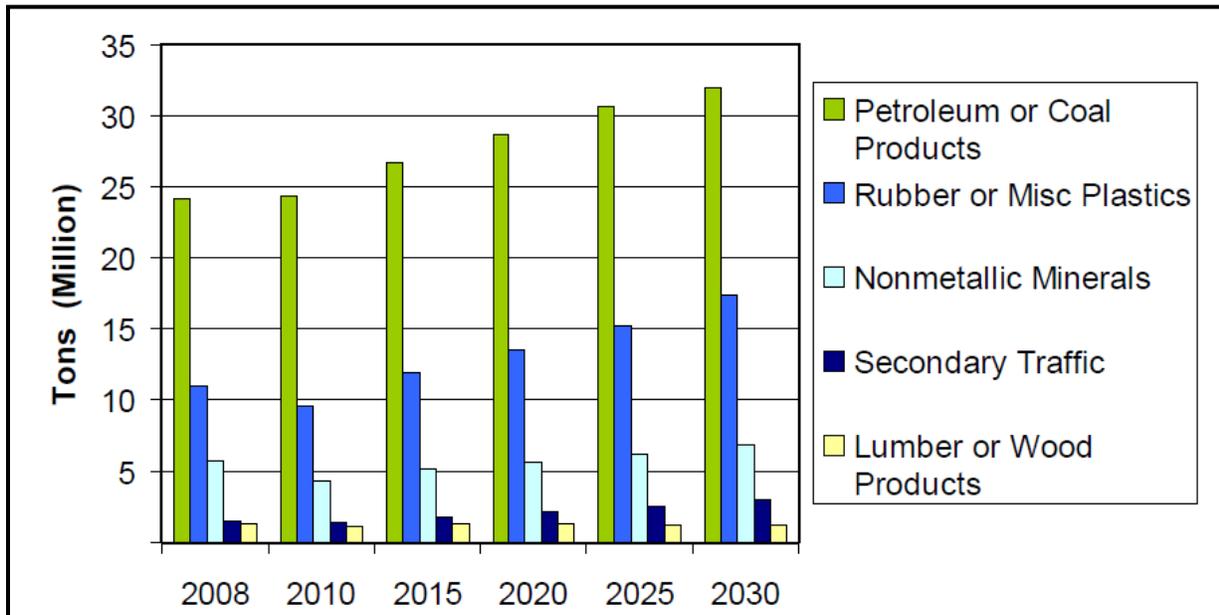
Figure 3-2: Gulf Coast Corridor Top Five Inbound Commodities Forecast



Source: IHS Global Insight Transearch 2008

Figure 3-3 shows projections of outbound freight in the Gulf Coast Corridor by major commodity. Outbound commodities are highly concentrated in petroleum products (50%), rubber and plastics (23%), and non-metallic minerals (12%). Petroleum products are mostly gasoline and refined petroleum products shipped to nearby processing facilities for mixing with other petrochemicals or shipped via truck to retail establishments. Non-metallic minerals are primarily local moves of high-tonnage sand and gravel. Forecasts for the five highest tonnage commodities shipped out of the Corridor are dominated by petroleum products. The growth of these movements slowed during the recession, but is expected to increase significantly during the post-recession period.

Figure 3-3: Gulf Coast Corridor Top Five Outbound Commodities Forecast



Source: IHS Global Insight Transearch 2008

Forecasts for each of the Corridor's major ports are shown in **Table 3-7**. The Port of Pascagoula is the corridor's largest port and primarily receives freight. The ports of Bienville and Gulfport handle much smaller volumes and are primarily outbound. All three ports are expected to increase their tonnage through 2030, although the port of Pascagoula's growth will be slower than the other two ports.

Table 3-7: Inbound and Outbound Forecasts for Gulf Coast Ports

Facility	Inbound Tons (Thousands)						Average Annual Growth Rate
	2008	2010	2015	2020	2025	2030	
Port Bienville	30	34	42	47	50	53	2.3%
Port of Gulfport	1,091	1,085	1,378	1,575	1,719	1,815	2.6%
Port of Pascagoula	14,669	12,640	14,959	15,842	16,658	17,400	1.6%
Facility	Outbound Tons (Thousands)						Average Annual Growth Rate
	2008	2010	2015	2020	2025	2030	
Port Bienville	210	218	215	225	245	260	0.9%
Port of Gulfport	2,709	2,535	2,937	3,311	3,657	3,892	2.2%
Port of Pascagoula	7,155	6,870	6,837	7,005	7,393	7,714	0.6%

Source: IHS Global Insight Transearch 2008

Table 3-8 shows a breakdown of the corridors port traffic by trade type. As world trade rebounds post recession, international traffic (NAFTA and non-NAFTA) will grow faster than domestic port traffic as world trade continues to expand. The majority of the NAFTA trade in the corridor consists of inbound moves of crude oil from Mexico and represents almost 10% of total trade volume at the ports.

Table 3-8: International Trade Profile of the Gulf Coast Corridor

Direction	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Domestic	131.6	86.6%	169.1	84.7%	1.1%
NAFTA	14.4	9.5%	21.8	10.9%	1.9%
Import	3.7	2.4%	5.4	2.7%	1.7%
Export	2.3	1.5%	3.4	1.7%	2.0%
Total	151.9	100.0%	199.8	100.0%	1.3%

Source: IHS Global Insight Transearch 2008

4. VICKSBURG-MERIDIAN MULTIMODAL CORRIDOR

4.1 Population and Employment

The Vicksburg–Meridian Corridor consists of six counties across central Mississippi between the Louisiana border near Vicksburg and Alabama (**Table 4-1**). The corridor includes Jackson, Mississippi, the largest city in the state and two of the top five most populated counties in the state, Hinds and Rankin. This Corridor intersects with the Southaven-McComb Corridor discussed previously. The corridor's six counties account for nearly 14 percent of the total state population and 25 percent of its total employment.

Table 4-1: Historical Population in the Vicksburg–Meridian Corridor

County	Year (population in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Hinds	215.6	251.3	254.5	250.6	249.2	13.5%	0.4%
Rankin	44.6	69.8	87.7	116.17	138.2	67.8%	1.8%
Lauderdale	67.6	77.5	75.6	78.08	77.9	13.3%	0.4%
Warren	45.2	51.7	47.8	49.58	48.8	7.3%	0.2%
Scott	21.6	24.6	24.3	28.4	28.8	25.3%	0.7%
Newton	18.9	19.9	20.3	21.85	22.3	15.3%	0.4%
Total	413.4	494.8	510.2	544.69	565.2	26.9%	0.7%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

Table 4-2 shows the historical employment by industrial sector for the Vicksburg–Meridian Corridor. As Jackson is the Mississippi state capital, it is not surprising that government is the leading source of jobs in the corridor. All sectors, except *manufacturing* and *farm & forestry*, have experienced a positive employment growth over the 1970-2007 period. The five leading sectors in this Corridor in terms of jobs are:

- *Government*
- *Health care and social assistance* (local serving sector)
- *Retail trade* (local serving sector);
- *Finance & Insurance and Real Estate, Rental & Leasing* (local serving sector);
- *Manufacturing* (trade sector)

Table 4-2: Vicksburg – Meridian Corridor - Industry Employment and Growth Rates

Industry	Year (employment in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Government	42.5	57.7	61.1	68.4	68.6	38.0%	1.0%
Health Care and Social Assistance	14.0	16.9	22.7	31.5	38.4	63.5%	1.7%
Retail Trade	21.0	30.3	34.2	39.3	37.7	44.3%	1.2%
Finance & Insurance and Real Estate, Rental & Leasing	15.2	22.8	24.1	25.1	28.0	45.8%	1.2%
Manufacturing	26.6	34.7	35.9	34.9	26.4	-1.0%	0.0%
Food Services	8.2	10.5	13.2	20.9	23.8	65.6%	1.8%
Construction	13.4	14.1	13.1	18.2	21.8	38.4%	1.0%
Administrative and Waste Services	7.4	9.5	12.3	18.6	21.8	65.9%	1.8%
Other Services	9.7	11.8	16.1	16.8	19.1	49.3%	1.3%
Professional and Technical Services	7.0	8.6	11.6	14.4	18.87	62.6%	1.7%
Wholesale Trade	9.3	13.9	12.4	14.6	13.1	29.5%	0.8%
Transportation and Warehousing	5.4	8.5	10.7	13.7	13.1	58.7%	1.6%
Educational Services	2.9	3.5	4.8	6.3	7.8	63.5%	1.7%
Farm and Forestry	9.6	8.4	6.5	6.8	6.00	-60.5%	-1.6%
Information	4.1	5.1	5.9	8.3	4.7	14.1%	0.4%
Arts, Entertainment, and Recreation	1.3	1.6	2.0	5.5	4.5	71.8%	1.9%
Management	2.6	3.1	4.1	3.8	4.1	36.3%	1.0%
Mining	1.7	2.5	2.2	2.0	2.07	13.0%	0.4%
Utilities	1.3	1.8	1.8	1.7	1.5	16.8%	0.5%
Total	203.1	265.4	294.6	350.5	361.0	43.80%	1.20%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

4.2 Infrastructure

Figure 4-1 illustrates the Vicksburg-Meridian Corridor. The corridor’s freight network includes: the Norfolk Southern-Kansas City Southern Meridian Speedway, the Canadian National (CN) Railroad, and several short line railroads; Interstate 20 and many federal state highways; Jackson-Evers International Airports; the Port of Vicksburg; and, several intermodal facilities. Within this corridor there is a diverse employment base that depends upon this freight infrastructure to ship raw materials and finished products for companies including: Cooper Lighting HID, Easton Aerospace, Koch Foods; Tyson Foods, Avery Dennison Corp., and, La-Z-Boy South.

4.3 Freight Overview

The Vicksburg-Meridian Corridor is the most highly trafficked of all of corridors in Mississippi with over 211 million tons of freight in 2008, which is expected to increase an average of 1.3% annually from 2008 to 2030 (Table 4-3). Almost 60% of the Corridor's traffic is through. This traffic is expected to grow faster than other types of movements due in large part to rail improvements and increased rail volumes along the Meridian Speedway. The corridor is a net importer of goods, with nine million more tons of freight entering from outside the state than produced locally and shipped outbound.

Table 4-3: Vicksburg-Meridian Corridor Detailed Forecast by Direction

Direction	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Inbound	42.7	20%	51.5	19%	0.9%
Intrastate	12.5	6%	16.2	6%	1.2%
Outbound	33.6	16%	44.5	16%	1.3%
Through	122.5	58%	166.0	60%	1.4%
Total	211.3	100%	278.2	100%	1.3%

Source: IHS Global Insight Transearch 2008

Figure 4-1: Vicksburg-Meridian Corridor

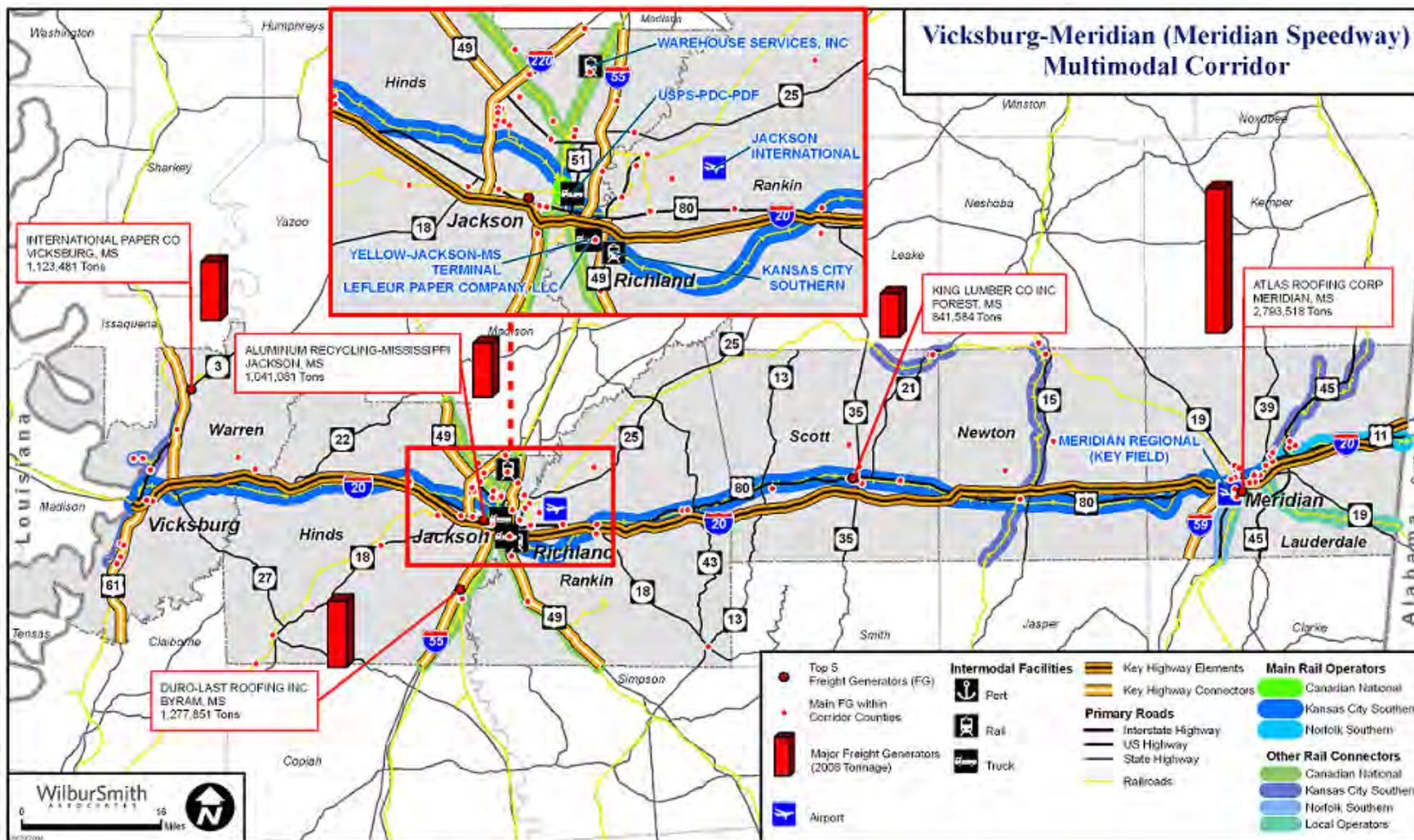


Table 4-4 shows current and projected modal split of freight traffic on the Vicksburg-Meridian Corridor. Truck is the dominant mode with its share expected to increase from 84% to 87% through 2030. Future shares of rail, water, and air freight are anticipated to experience a marginal increase (water and rail) or decrease (water) from 2008 to 2030.

Table 4-4: Vicksburg-Meridian Corridor Detailed Forecast by Mode

Mode	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Truck	178.1	84.3%	242.4	87.1%	1.4%
Water	4.5	2.1%	4.5	1.6%	-0.1%
Rail	28.6	13.6%	31.4	11.3%	0.4%
Air	--	0.0%	--	0.0%	0.7%
Total	211.3	100.0%	278.2	100.0%	1.3%

Source: IHS Global Insight Transearch 2008

The commodity mix in this corridor is highly diversified, with no commodity greater than 15 percent of the total. Secondary traffic and chemicals are the major commodities in this corridor by weight and value (**Table 4-5**).

Table 4-5: Top Freight Commodities in the Vicksburg-Meridian Corridor, 2008

Commodities	Tons (Millions)	% Total
Secondary Traffic	30.2	14.3%
Chemicals or Allied Products	25.3	12.0%
Lumber or Wood Products	24.7	11.7%
Petroleum or Coal Products	21.3	10.1%
Food or Kindred Products	19.7	9.3%
All Others	90.1	42.6%
Total	211.3	100.0%
Commodities	Value (Million\$)	% Total
Chemicals or Allied Products	39,366	13.30%
Secondary Traffic	34,346	11.60%
Rubber or Misc Plastics	28,219	9.50%
Food or Kindred Products	23,339	7.90%
Machinery	23,174	7.80%
All Others	147,158	49.80%
Total	295,601	100.00%

Source: IHS Global Insight Transearch 2008

Table 4-6 shows primary freight shippers and receivers along the Vicksburg-Meridian Corridor. Of the top eighteen, eleven involve wood, lumber, pulp, or paper. Since many of these facilities are in Jackson, they are also listed in other corridors as well.

Table 4-6: Major Freight Shippers and Receivers in the Vicksburg-Meridian Corridor

Company Name	City	Industrial Classification (NAICS)	Estimated Tons 2008 (Million)	Long Term Trend
Kitchens Brothers Mfg Co	Utica	Sawmills	3.95	—
International Paper Co	Vicksburg	Logging	2.10	—
Waring Oil Co	Vicksburg	Petroleum Lubricating Oil & Grease Mfg	1.91	▲
Amaristar Shell	Vicksburg	Other Gasoline Stations	1.51	▼
King Lumber Co Inc	Forest	Sawmills	1.50	—
Jack Batte & Sons	Forest	Sawmills	0.71	—
Atlas Roofing Corp	Meridian	Asphalt Shingle & Coating Materials Mfg	0.53	▼
Color-Box Inc	Pelahatchie	Paperboard Mills	0.52	▲
Mc Cool's Woodyard	Vicksburg	Logging	0.49	—
Tyson Foods Inc	Forest	Poultry Processing	0.46	▲
Koch Foods	Forest	Poultry Processing	0.36	▲
Weyerhaeuser Co	Richland	Corrugated & Solid Fiber Box Mfg	0.36	▲
Batte Lumber Co	Forest	Logging	0.33	—
Avery Dennison Corp	Meridian	Paper, Except Newsprint, Mills	0.31	▲
Tyson Foods Inc	Forest	Poultry Processing	0.27	▲
Caterpillar Inc	Jackson	Construction Machinery Mfg	0.26	▲
Bailey Lumber & Supply Co	Jackson	Engineered Wood Member Mfg	0.25	▲
Pepsi-Cola Bottling Co	Ridgeland	Soft Drink Mfg	0.25	▼

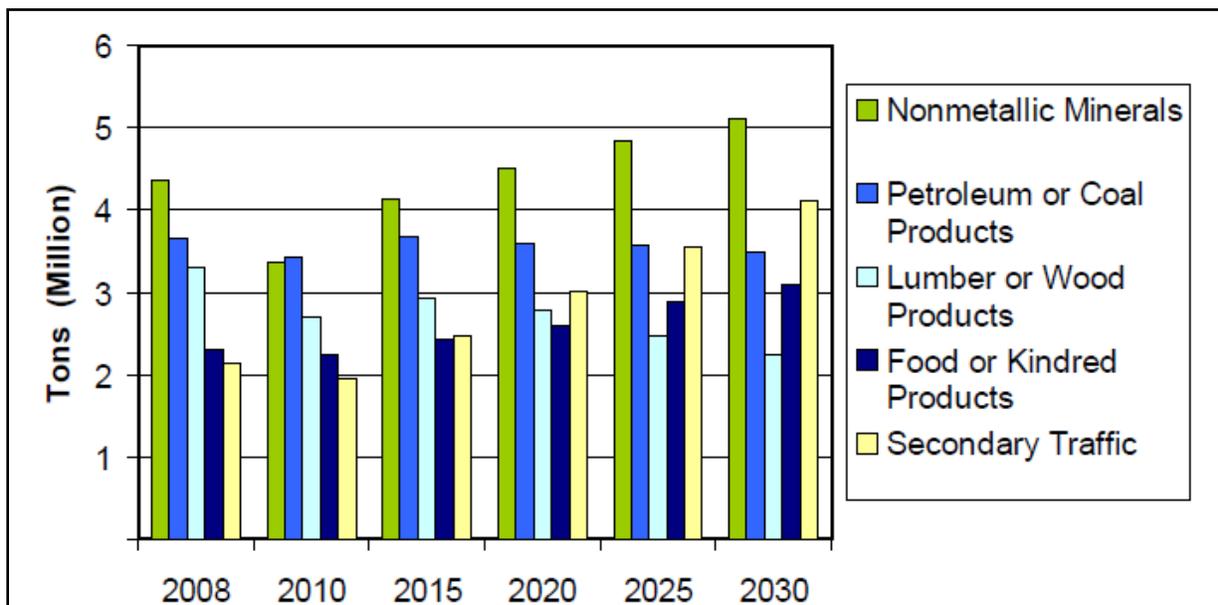
Note: Major freight attractors or generators in a corridor are facilities with more than 50 employees that attract or generate more than 250,000 tons of freight annually.

Source: IHS Global Insight Freight Finder for Mississippi 2008

The Vicksburg-Meridian Corridor receives more inbound freight than outbound; with the dominant inbound commodity being nonmetallic minerals. These shipments are mostly short-haul local moves from other parts of Mississippi. Other important commodities by weight are petroleum products, which largely enter the corridor through the Port of Vicksburg and Gulf Coast ports, and lumber or wood products headed for the corridor's mills and other wood processing facilities.

Figure 4-2 shows projections of inbound freight in the Vicksburg-Meridian Corridor by major commodity through 2030. Of the five largest tonnage commodities shipped into the corridor, nonmetallic minerals, particularly inbound stone, sand and gravel, are expected recover to pre-recession levels before 2020 as construction returns to the region. Petroleum and lumber will remain relatively flat while secondary traffic will increase quickly and substantially due primarily to increases in intermodal traffic and local pick-up and delivery in the Jackson region. Major freight receivers in the corridor are heavily concentrated in two industries, lumber and petroleum.

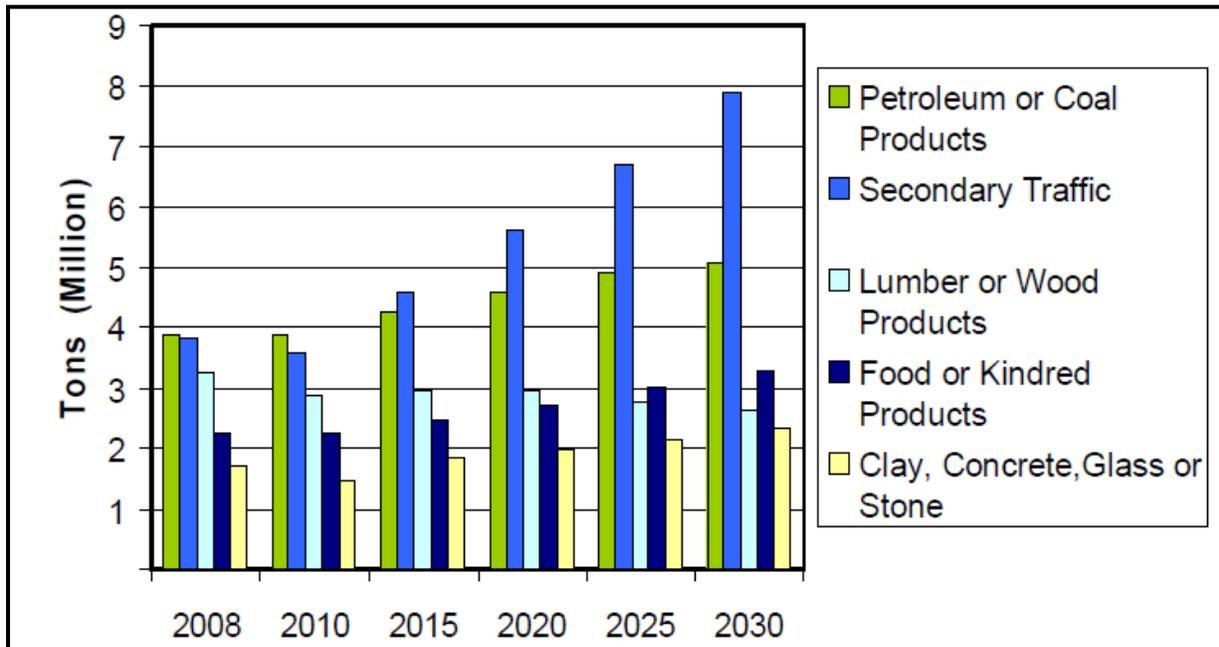
Figure 4-2: Vicksburg-Meridian Top Five Inbound Commodities



Source: IHS Global Insight Transearch 2008

Figure 4-3 shows projections of outbound freight in the Vicksburg-Meridian Corridor by major commodity. Major outbound commodities from the corridor are petroleum products, mostly from the Port of Vicksburg, secondary traffic in the Jackson area, and lumber. However, by 2030 this commodity composition will shift from petroleum to secondary traffic. Similar to inbound, growth in secondary traffic will primarily be due to increases in intermodal traffic as well as greater local pick-up and delivery activity in Jackson. Major freight shippers in the corridor are lumber and food related. These top shippers are expected to change substantially in the future since lumber traffic is expected to decline in this corridor between 2010 and 2030.

Figure 4-3: Vicksburg-Meridian Top Five Outbound Commodities



Source: IHS Global Insight Transearch 2008

Table 4-7 shows freight forecasts for three major freight facilities in the Vicksburg-Meridian Corridor. While freight movements in the Jackson-Evers International Airport and the CN/KCS intermodal terminal in Jackson are both expected to grow in post-recession years, freight movements in the Port of Vicksburg are expected to decline slightly in the next ten years and recover to pre-recession levels by 2025. Growth in intermodal units on the Jackson Terminal will average approximately 1.9 percent annually from 2008 to 2030. This projected intermodal growth is higher than the projected rate of growth for total freight for Mississippi (1.17 percent).

Table 4-7: Freight Forecast for Vicksburg-Meridian Corridor Infrastructure

Facility	Inbound Tons (Thousands)					
	2008	2010	2015	2020	2025	2030
Jackson-Evers International Airport	5.4	5	5.3	5.6	5.9	6.3
Port of Vicksburg	2,599	1,966	2,347	2,338	2,162	1,981
Facility	Outbound Tons (Thousands)					
	2008	2010	2015	2020	2025	2030
Jackson-Evers International Airport	3.5	3	3.5	3.7	3.7	3.8
Port of Vicksburg	2,020	1,726	2,014	2,216	2,393	2,560
Jackson Intermodal Terminal	Number of Intermodal Units (Thousands)					
	2008	2010	2015	2020	2025	2030
Inbound	10.5	9.4	11.2	12.5	13.8	15.2
Outbound	10.6	9.6	11.8	13.4	14.9	16.5
Total	21.1	19	22.9	25.9	28.7	31.6

Source: IHS Global Insight Transearch 2008

5. PICAYUNE-MERIDIAN MULTIMODAL CORRIDOR

5.1 Population and Employment

The Picayune–Meridian Corridor consists of seven counties (Table 5-1), including the cities of Hattiesburg and Meridian, the state's third and sixth largest cities respectively. This Corridor runs from the Louisiana border in southwestern Mississippi near Pearl River, through Hattiesburg and Meridian, to Kewanee, Mississippi at the Alabama border. Approximately 12 percent of the State's population and employment reside along this corridor, with Forrest (Hattiesburg), Lauderdale (Meridian), and Jones (Laurel) counties being the largest.

Table 5-1: Historical Population in the Picayune–Meridian Corridor

County	Year (population in thousands)				Percent Change 1970-2007		
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Forrest	58.0	66.3	68.3	72.8	78.6	26.2%	0.7%
Lauderdale	67.6	77.5	75.6	78.1	77.9	13.3%	0.4%
Jones	56.7	62.3	62.0	65.0	66.7	15.0%	0.4%
Pearl River	27.9	34.0	38.8	48.8	57.0	51.1%	1.4%
Lamar	15.4	24.2	30.5	39.3	47.7	67.7%	1.8%
Jasper	16.0	17.3	17.1	18.1	18.1	11.2%	0.3%
Clarke	15.2	17.0	17.3	18.0	17.4	12.6%	0.3%
Total	256.8	298.4	309.5	340.1	363.3	29.3%	0.8%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

Table 5-2 shows the historical employment by industrial sector for the Picayune-Meridian Corridor. All sectors have experienced a positive employment growth over the 1970-2007 period. The five leading sectors in this corridor in terms of jobs in 2007 are:

- Arts, Entertainment, and Recreation (trade and local serving sector)
- Food services (trade and local serving sector)
- Educational services (trade and local serving)
- Administrative and waste services
- Health care and social assistance (local serving sector)

Table 5-2: Historical Industry Employment in the Picayune-Meridian Corridor

Industry	Year (employment in thousands)				Percent Change 1970-2007		
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Government	22.0	27.0	29.8	35.7	37.0	40.6%	1.1%
Retail Trade	11.7	15.7	18.5	23.9	26.2	55.6%	1.5%
Manufacturing	17.8	20.1	20.5	22.3	19.8	10.2%	0.3%
Health Care and Social Assistance	6.4	8.1	10.4	15.00	18.7	65.9%	1.8%
Construction	6.3	7.2	7.2	11.7	15.1	58.1%	1.6%
Food Services	4.1	5.4	6.6	11.1	14.6	71.9%	1.9%
Finance & Insurance and Real Estate, Rental & Leasing	5.6	8.2	8.0	9.4	11.8	52.3%	1.4%
Other Services	5.4	6.9	8.6	9.5	11.3	51.9%	1.4%
Administrative and Waste Services	3.0	4.0	4.6	7.0	9.4	67.7%	1.8%
Farm and Forestry	5.9	7.0	5.3	6.2	6.0	1.5%	0.0%
Professional and Technical Services	2.5	3.2	3.9	5.1	5.8	57.9%	1.6%
Transportation and Warehousing	4.7	5.9	5.8	6.4	5.5	15.7%	0.4%
Wholesale Trade	3.0	5.1	4.8	5.1	4.9	38.5%	1.0%
Mining	1.6	2.0	1.8	2.3	3.2	50.9%	1.4%
Educational Services	0.7	0.9	1.2	1.6	2.4	68.5%	1.9%
Information	1.0	1.2	1.4	2.1	2.1	50.0%	1.4%
Arts, Entertainment, and Recreation	0.3	0.5	0.5	1.4	2.0	82.7%	2.2%
Management	0.9	1.2	1.4	1.4	1.4	32.5%	0.9%
Utilities	0.6	0.8	1.0	0.8	1.3	51.5%	1.4%
Total	103.6	130.1	141.1	177.9	198.5	47.8%	1.3%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

5.2 Infrastructure

Figure 5-1 illustrates the **Picayune-Meridian Multimodal Corridor**. The corridor’s freight network includes: Interstates 59 and 20; the regional rail infrastructure that includes the Norfolk Southern Railroad and several connecting and local short line railroads. Employers in this corridor that rely on this freight network to remain competitive include: Huey Stackstill Inc.; Heritage Plastics; Lowe’s Distribution; and, Southgate Timber Company.

5.2.1 Freight Overview

The Picayune-Meridian Corridor carried approximately 157 million tons of freight in 2008 and is expected to grow an average of 1.4% annually through 2030 (**Table 5-3**) which is consistent with IHS Global Insight’s projections of national GDP growth. Freight movement is primarily through traffic on I-59 and the NS mainline. Inbound/outbound traffic on the Corridor represents 31% of the overall Corridor's traffic and is relatively balanced. This composition of traffic by direction is not expected to change significantly through 2030.

Table 5-3: Picayune-Meridian Corridor Detailed Forecast by Direction

Direction	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Inbound	25.3	16%	31.3	15%	1.0%
Intrastate	9.5	6%	11.9	6%	1.0%
Outbound	23.4	15%	32.6	15%	1.5%
Through	98.6	63%	135.0	64%	1.4%
Total	156.9	100%	210.8	100%	1.4%

Source: IHS Global Insight Transearch 2008

Table 5-4 shows current and projected modal split of freight traffic on the Picayune-Meridian Corridor. Truck is the dominant mode with its share expected to increase from 71% to 76% through 2030 due to projected growth in short-haul truck moves of non-metallic minerals and similar commodities not easily divertible to rail. Future shares of rail and air freight are anticipated to experience a marginal increase from 2008 through 2030.

Table 5-4: Detailed Forecast by Mode for Picayune-Meridian Corridor

Mode	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Truck	50.7	71.3%	73.8	76.4%	1.7%
Rail	20.4	28.7%	22.8	23.6%	0.5%
Air	0.0	0.0%	0.0	0.0%	1.1%
Total	71.0	100.0%	96.7	100.0%	1.4%

Source: IHS Global Insight Transearch 2008

Figure 5-1: Picayune-Meridian Multimodal Corridor

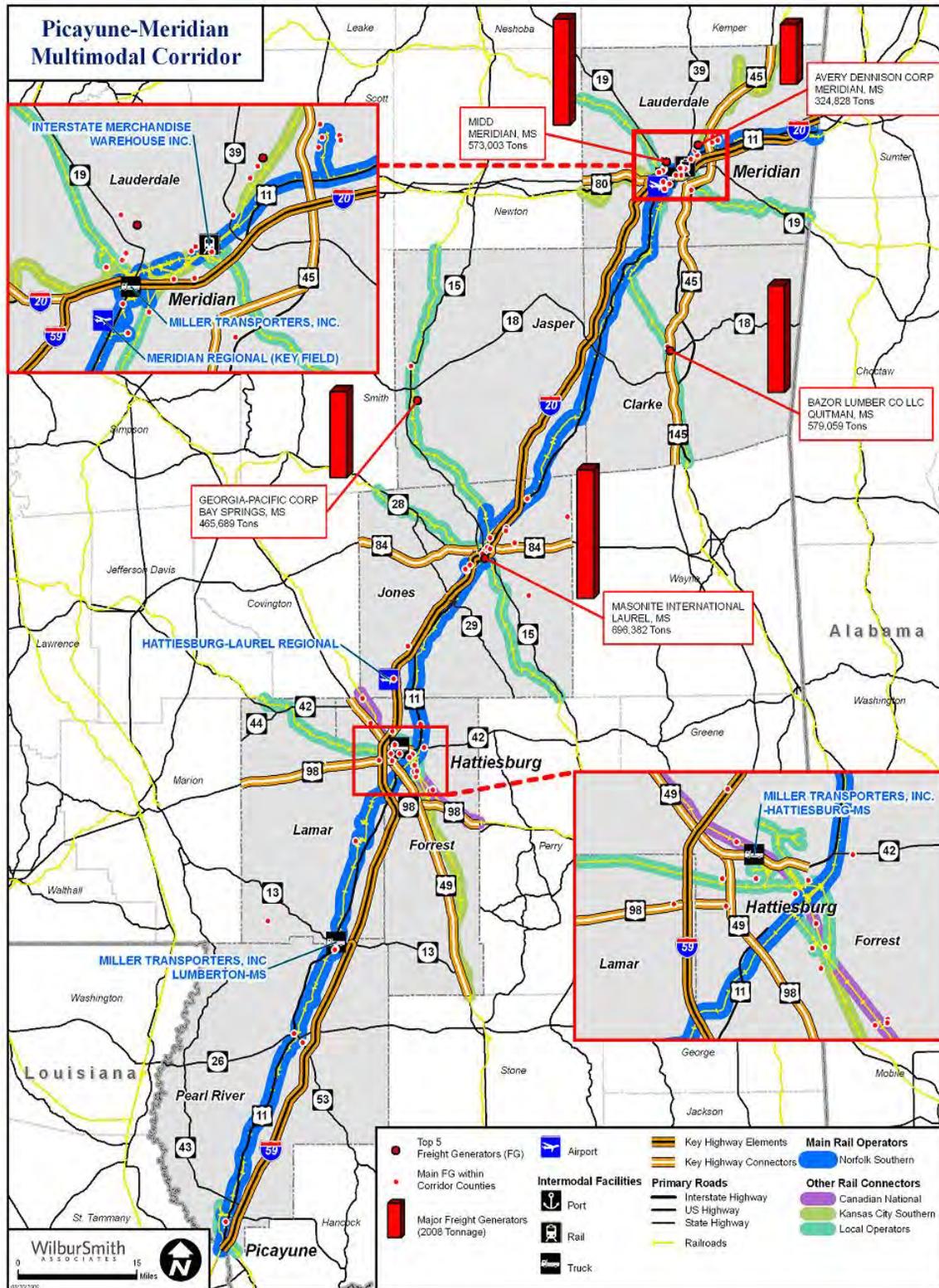


Table 5-5 shows major commodity flows on the Picayune-Meridian Corridor by weight and value. Similar to the Vicksburg-Meridian Corridor, the corridor moves a diverse mix of commodities, with no commodity totaling more than 16% of freight.

Table 5-5: Top Freight Commodities in the Picayune-Meridian Corridor, 2008

Commodities	Tons (Millions)	% Total
Secondary Traffic	21.7	16.1%
Chemicals or Allied Products	20.3	15.0%
Lumber or Wood Products	18.0	13.3%
Food or Kindred Products	14.6	10.8%
Primary Metal Products	13.5	10.0%
All Others	47.1	34.8%
Total	135.1	100.0%
Commodities	Value (Million\$)	% Total
Chemicals or Allied Products	31,502	15.8%
Secondary Traffic	24,577	12.3%
Rubber or Misc Plastics	21,380	10.7%
Machinery	19,801	9.9%
Electrical Equipment	18,733	9.4%
All Others	83,386	41.8%
Total	199,380	100.0%

Source: IHS Global Insight Transearch 2008

Major shippers and receivers in the Picayune-Meridian Corridor primarily move lumber/paper, food or construction (**Table 5-6**). Two freight shippers dominate this corridor in the north: Masonite, a lumber and door manufacturer in Laurel and Bazor Lumber in Quitman. IHS Global Insight expects most of these shippers and receivers to have positive freight growth trends in the long-term.

Table 5-6: Major Freight Shippers and Receivers in the Picayune-Meridian Corridor

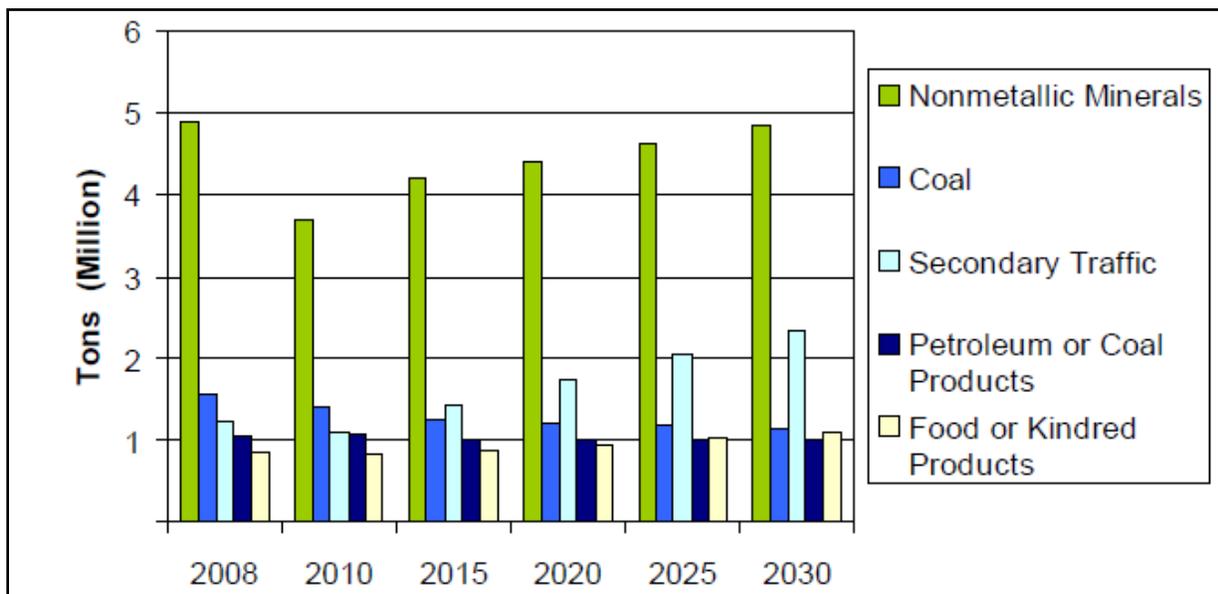
Company Name	City	Industrial Classification (NAICS)	Estimated Tons 2008 (Million)	Long Term Trend
Masonite International	Laurel	Lumber or Wood Products	3.31	▲
Bazor Lumber Co Llc	Quitman	Sawmills	1.14	—
Georgia-Pacific Corp	Bay Springs	Sawmills	0.83	—
Atlas Roofing Corp	Meridian	Asphalt Shingle & Coating Materials Mfg	0.53	▼
Kimberly-Clark	Hattiesburg	Paperboard Mills	0.44	▲
Wayne Farms Llc	Laurel	Poultry Processing	0.36	▲
Custom Crete	Picayune	Poured Concrete Structure Contrs	0.36	▲
Avery Dennison Corp	Meridian	Paper, Except Newsprint, Mills	0.31	▲
F-S Prestress Concrete	Hattiesburg	Other Concrete Prod Mfg	0.28	▲
Marshall Durbin Poultry Co	Hattiesburg	Poultry Processing	0.27	▲

Note: Major freight attractors or generators in a corridor are facilities with more than 50 employees that attract or generate more than 250,000 tons of freight annually.

Source: IHS Global Insight Freight Finder for Mississippi 2008

Figure 5-2 shows projections of inbound freight through 2030 for the five largest inbound commodities in the Picayune-Meridian Corridor. Nonmetallic minerals are the dominant inbound commodity, consisting primarily of crushed stone for use in construction. Coal represents 13% of the inbound tonnage along the corridor and is carried by Norfolk Southern. Inbound coal in the corridor is received by the R.D. Morrow Generating Plant, a coal-fired power station operated by South Mississippi Electric Power Association near Purvis, Mississippi. A review of freight in the corridor shows Birmingham, Alabama, and New Orleans, Louisiana, as major origins for other inbound commodities.

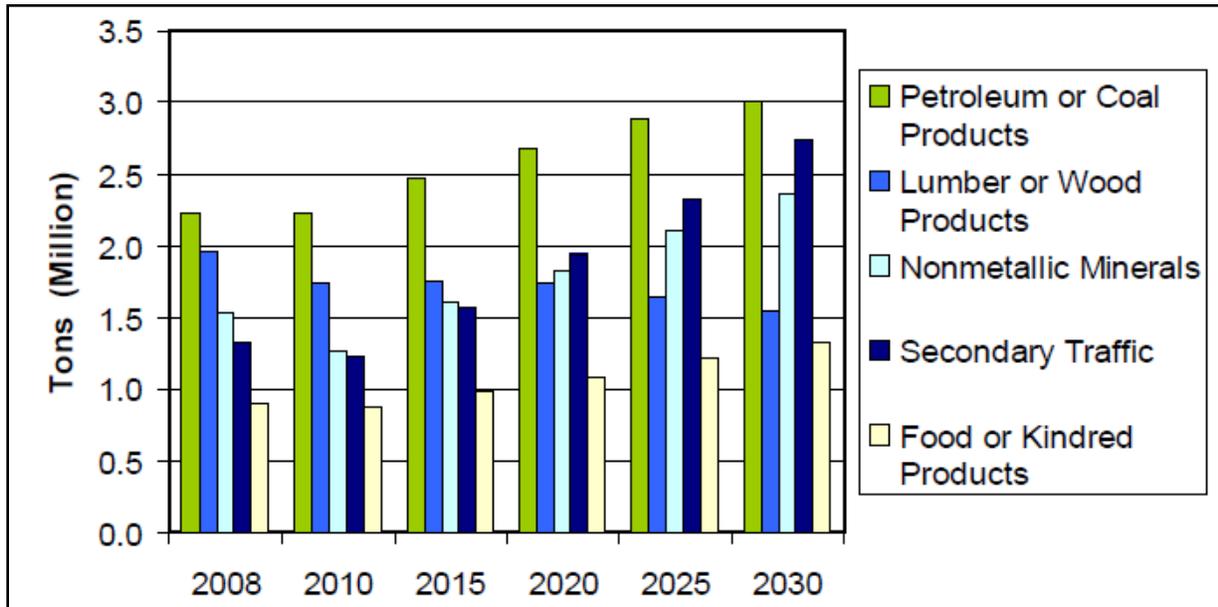
Figure 5-2: Picayune-Meridian Top Five Inbound Commodities



Source: IHS Global Insight Transearch 2008

Figure 5-3 shows projections of outbound freight through 2030 for the five largest outbound commodities in the Picayune-Meridian Corridor. Major outbound commodities are petroleum and lumber/wood products, particularly southwest to New Orleans, Louisiana. While petroleum will continue to be the key outbound commodity in the corridor through 2030, nonmetallic metals and secondary traffic will surpass lumber by 2020 as wood processing activity declines in the State. Secondary traffic in particular will become a significant share of freight in this corridor by 2020. Major freight shippers in the corridor are primarily lumber companies with the exception of Masonite, a lumber and door manufacturing facility in Laurel, Mississippi.

Figure 5-3: Picayune-Meridian Top Five Outbound Commodities



Source: IHS Global Insight Transearch 2008

6. OLIVE BRANCH- TUPELO- FULTON MULTIMODAL CORRIDOR

6.1 Population and Employment

The Olive Branch – Tupelo – Fulton Corridor passes through eight counties in northern Mississippi. The corridor’s population has grown by 48 percent over the 1970-2007 time frame, representing an average annual growth rate of 1.3 percent (Table 6-1). In 2007, counties’ residents accounted for 9 percent of Mississippi’s population.

Table 6-1: Historical Populations in the Olive Branch–Tupelo–Fulton Corridor

County	Year (population in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Desoto	36.1	54.0	68.6	108.7	149.1	75.8%	2.0%
Lee	46.6	57.1	65.8	76.0	80.2	41.9%	1.1%
Monroe	34.1	36.5	36.6	38.0	37.1	8.0%	0.2%
Marshall	24.1	29.3	30.5	35.1	36.7	34.5%	0.9%
Pontotoc	17.5	20.9	22.4	26.8	28.8	39.5%	1.1%
Union	19.2	21.8	22.1	25.5	26.9	28.6%	0.8%
Itawamba	16.9	20.6	20.1	22.9	23.0	26.5%	0.7%
Benton	7.5	8.2	8.0	8.0	8.0	6.4%	0.2%
Total	201.9	248.4	274.1	340.8	389.9	48.2%	1.3%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

Table 6-2 shows the historical employment by industrial sector for the Olive Branch-Tupelo-Fulton Corridor. All sectors, except farm and forestry, have experienced a positive employment growth over the 1970-2007 period. The five leading sectors in this corridor in terms of jobs in 2007 are:

- Manufacturing (trade sector)
- Retail trade (local-serving sector);
- Government
- Health care and social assistance (local serving sector)
- Construction (local serving sector)

6.2 Infrastructure

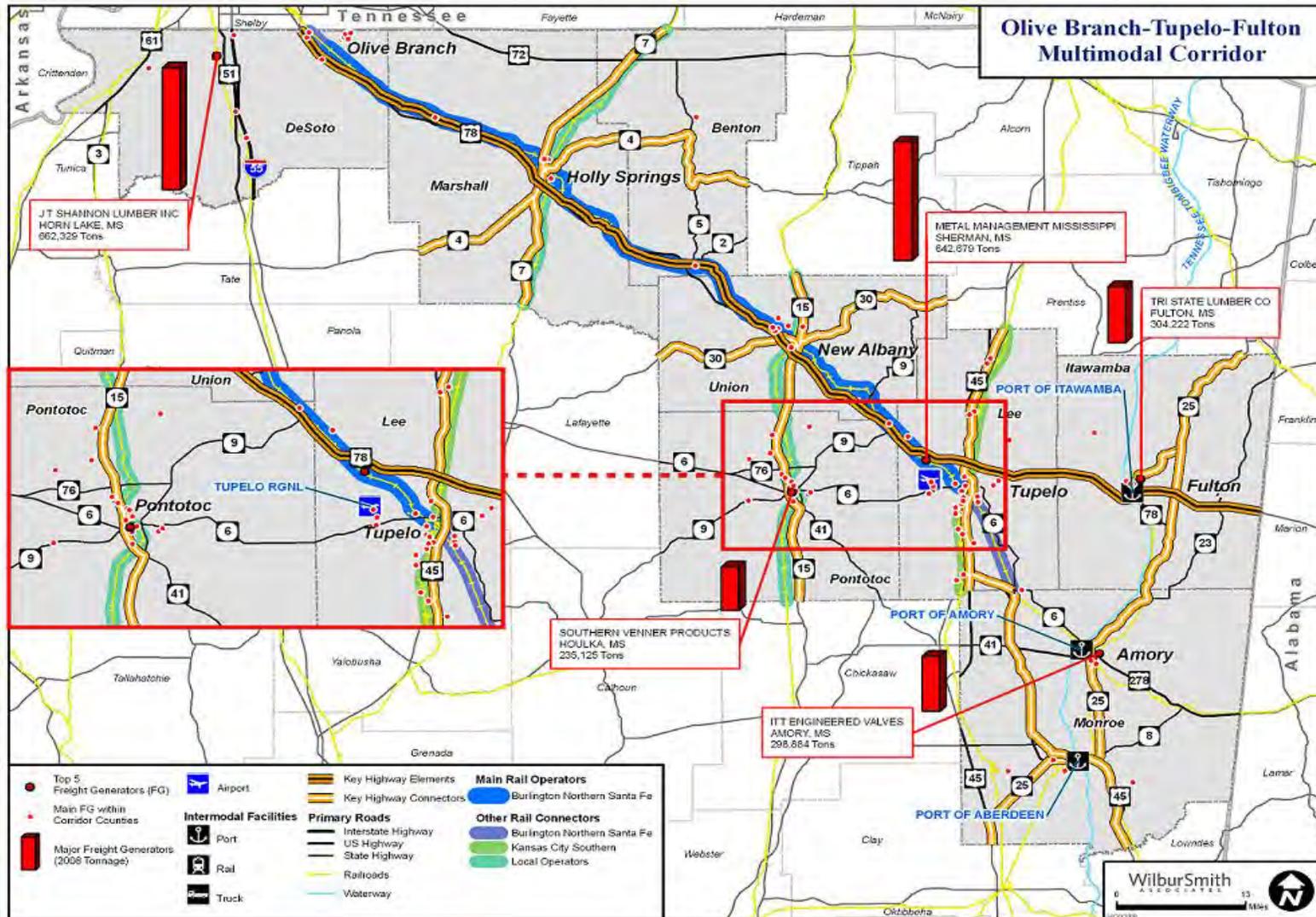
Figure 6-1 illustrates the **Olive Branch-Tupelo-Fulton Multimodal Corridor**. The corridor's freight network includes: Interstate 55 (in Desoto county only) and U.S. Highway 78; Burlington Northern Santa Fe (BNSF) Railway and Kansas City Southern (KCS) Railroad and several local short line railroads; the Tennessee Tombigbee Waterway; the Ports of Itawamba, Amory and Aberdeen; and, Memphis International Airport. The recent announcement that Toyota North America will manufacture the Corolla in their Blue Springs facility in this corridor will generate additional demand for freight services in this region. Other regional employers who depend upon the freight network in this corridor include: Lane Furniture Industries; MTD Products; Quebecor World, Inc.; Cooper Tire & Rubber; and, Leggett & Platt.

Table 6-2: Historical Industry Employment in the Olive Branch-Tupelo-Fulton Corridor

Industry	Year (employment in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Manufacturing	25.5	33.0	42.3	43.9	34.5	26.3%	0.7%
Retail Trade	6.8	10.3	14.1	21.6	24.3	72.1%	1.9%
Government	10.3	12.4	14.1	18.0	20.6	49.8%	1.3%
Health Care and Social Assistance	4.4	5.6	8.3	14.7	18.5	76.1%	2.1%
Construction	2.8	5.0	7.5	11.5	15.2	81.4%	2.2%
Food Services	2.1	3.0	4.5	9.6	13.4	84.4%	2.3%
Finance & Insurance and Real Estate, Rental & Leasing	3.9	5.0	6.0	9.0	13.0	70.8%	1.9%
Transportation and Warehousing	2.3	3.1	4.4	8.2	12.0	80.7%	2.2%
Administrative and Waste Services	2.1	2.8	4.3	8.7	11.9	82.7%	2.2%
Other Services	4.0	4.9	7.3	9.4	11.5	64.9%	1.8%
Professional and Technical Services	1.4	1.9	2.8	4.6	6.7	78.8%	2.1%
Wholesale Trade	2.0	3.9	5.2	5.6	6.5	69.8%	1.9%
Farm and Forestry	12.2	10.2	6.9	6.8	6.2	96.5%	-2.6%
Arts, Entertainment, and Recreation	0.2	0.3	0.4	1.6	2.2	90.9%	2.5%
Educational Services	0.3	0.4	0.5	0.8	1.4	75.8%	2.0%
Information	0.5	0.7	0.9	1.4	1.3	62.6%	1.7%
Management	0.7	1.1	1.7	2.1	1.3	42.7%	1.2%
Utilities	0.3	0.4	0.5	0.5	0.6	55.6%	1.5%
Mining	0.3	0.3	0.3	0.3	0.4	25.8%	0.7%
Total	81.9	104.2	132.0	178.0	201.3	59.3%	1.6%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

Figure 6-1: Olive Branch-Tupelo-Fulton Multimodal Corridor



6.3 Freight Overview

The Olive Branch-Tupelo-Fulton Corridor carried approximately 75 million tons of freight in 2008 and is expected to grow an average of 1.2% annually through 2030 (Table 6-3). This corridor is primarily a through route (75%), dominated by interstate traffic between Memphis and Birmingham on US 78 and the BNSF railroad. Through rail traffic makes up 97% of all traffic on the BNSF mainline. This through traffic was particularly affected by the recession, dropping 10 percent between 2008 and 2010. The corridor's freight composition is not expected to change through 2030.

Table 6-3: Forecast by Direction for Olive Branch-Tupelo-Fulton Corridor

Direction	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Inbound	7.0	9%	8.4	9%	0.9%
Intrastate	2.5	3%	3.2	3%	1.2%
Outbound	9.3	12%	13.4	14%	1.6%
Through	56.0	75%	73.2	75%	1.2%
Total	74.8	100%	98.2	100%	1.2%

Source: IHS Global Insight Transearch 2008

Table 6-4 shows current and projected modal split of freight traffic on the Olive Branch-Tupelo-Fulton Corridor. Truck is the dominant mode with its share expected to increase substantially from 69% to nearly 75% through 2030. This Corridor also has the highest share of rail freight of all Mississippi corridors (31%) but this share is projected to decrease by 2.3% annually as truck oriented secondary traffic becomes a greater share of freight on the corridor.

Table 6-4: Detailed Forecast by Mode for Olive Branch-Tupelo-Fulton Corridor

Mode	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Truck	51.6	69.0%	73.3	74.6%	1.6%
Water	0.1	0.1%	0.0	0.0%	-2.3%
Rail	23.1	30.9%	24.9	25.3%	0.3%
Air	0.0	0.0%	0.0	0.0%	1.0%
Total	74.8	100.0%	98.2	100.0%	1.2%

Source: IHS Global Insight Transearch 2008

Table 6-5 shows major commodity flows on the Olive Branch-Tupelo-Fulton Corridor by weight and value. Coal and machinery are the top commodities moving on the corridor by weight and value, respectively. Coal traffic is primarily shipments from Wyoming's Powder River Basin to power plants in the Birmingham, Alabama area. High value transportation equipment is largely auto parts originating from within Mississippi and moving outbound. The few major shippers and receivers on the corridor are primarily in wood products and furniture (Table 6-6).

Table 6-5: Top Commodities in the Olive Branch-Tupelo-Fulton Corridor

Commodities	Tons (Millions)	% Total
Coal	14.3	19.1%
Lumber or Wood Products	7.3	9.8%
Secondary Traffic	7.3	9.8%
Primary Metal Products	7.1	9.6%
Clay, Concrete, Glass or Stone	7.1	9.5%
All Others	31.5	42.2%
Total	74.8	100.0%
Commodities	Value (Million\$)	% Total
Machinery	17,077	17.4%
Secondary Traffic	9,104	9.3%
Electrical Equipment	8,595	8.8%
Transportation Equipment	8,334	8.5%
Fabricated Metal Products	6,239	6.4%
All Others	48,754.8	49.7%
Total	98,103	100.0%

Source: IHS Global Insight Transearch 2008

Table 6-6: Top Freight Shippers and Receivers in the Olive Branch-Tupelo-Fulton Corridor

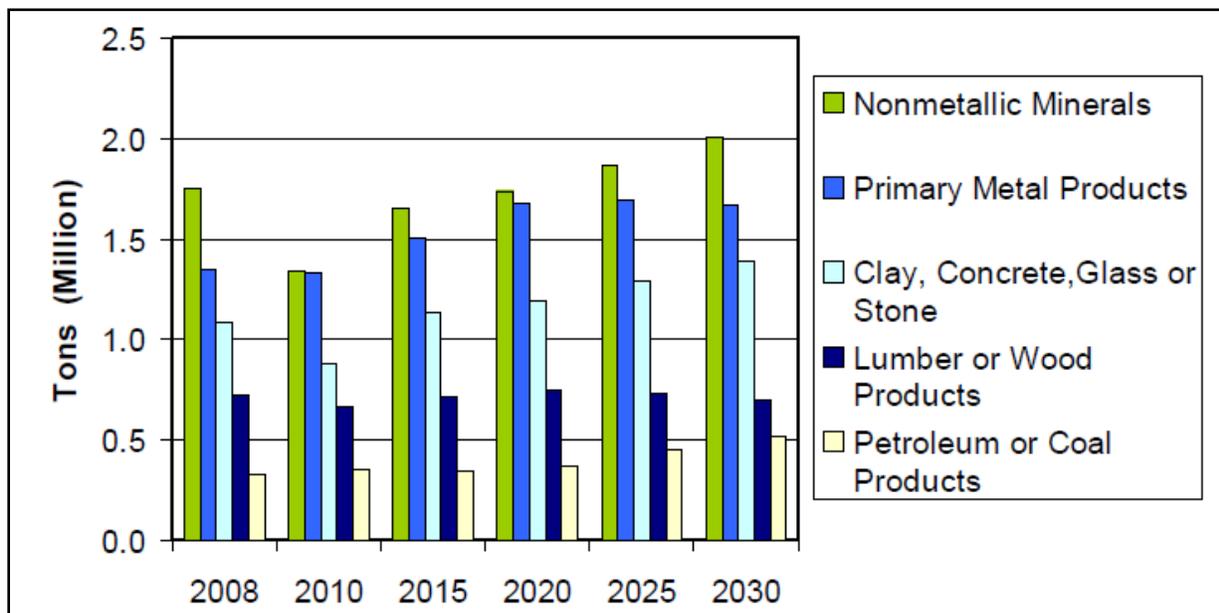
Company Name	City	Industrial Classification (NAICS)	Estimated Tons 2008 (Million)	Long Term Trend
Norbord Mississippi Inc	Guntown	Logging	1.57	▲
J T Shannon Lumber Inc	Horn Lake	Sawmills	1.05	—
Southern Venner Products	Houlka	Misc Wood Prod Mfg	1.03	▲
Tri State Lumber Co	Fulton	Cut Stock, Resawing Lumber, & Planing	0.55	▲
Marietta American Inc	Olive Branch	Soap & Other Detergent Mfg	0.46	▼
Ashley Companies	Ecrú	Upholstered Household Furniture Mfg	0.28	▲
Ashley Upholstery	Ecrú	Institutional Furniture Mfg	0.28	▼

Note: Major freight attractors or generators in a corridor are facilities with more than 50 employees that attract or generate more than 250,000 tons of freight annually.

Source: IHS Global Insight Transearch 2008

Inbound and outbound traffic makes up a small share (11%) of total freight on the Olive Branch-Tupelo-Fulton Corridor. **Figures 6-2 and 6-3** show major inbound/outbound shippers, receivers, and commodities for 2008. Primary inbound commodities are nonmetallic minerals, primarily construction materials, and primary metal products, which represent supplies to the Toyota plant near Tupelo. Half of the inbound freight to the corridor originates within the State or in northern Alabama, particularly Huntsville or Birmingham areas. Inbound traffic is expected to grow very slowly at approximately 1% annually on average between 2008 and 2030. Major receivers in the corridor are lumber and wood products companies, industries that are expected to remain relatively flat through 2030.

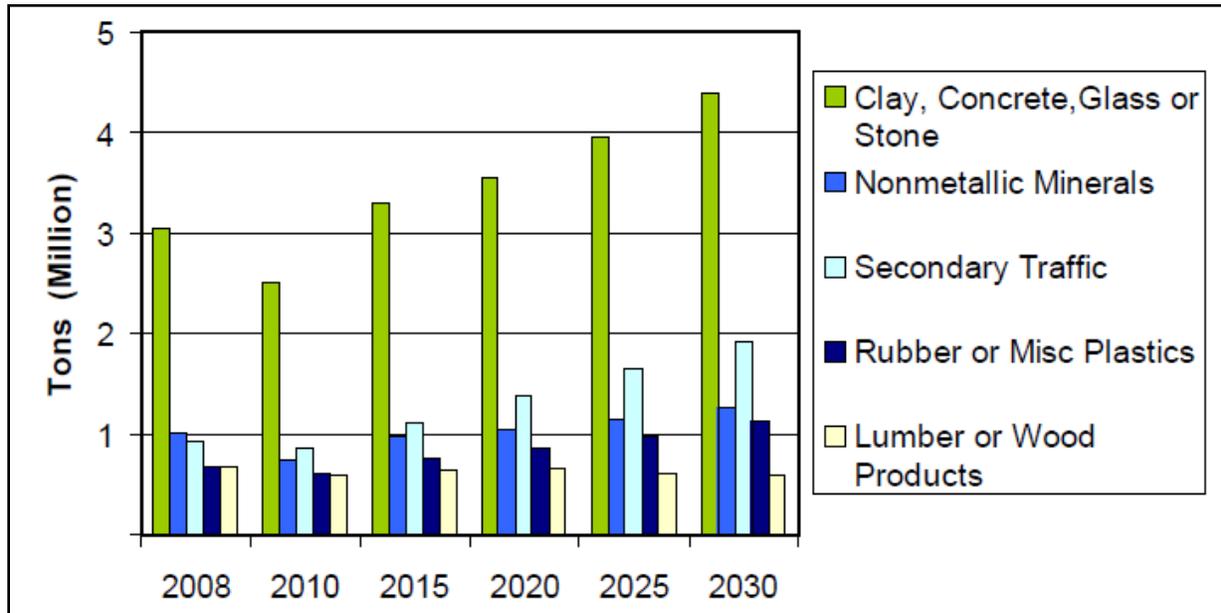
Figure 6-2: Olive Branch-Tupelo-Fulton Top Five Inbound Commodities



Source: IHS Global Insight Transearch 2008

Concrete is the dominant outbound commodity in the Olive Branch-Tupelo-Fulton Corridor, largely short-haul moves for construction purposes, and expected to remain the major freight volume over the study period. Approximately 40 percent of the outbound freight in the corridor goes to Memphis, TN or within Mississippi.

Figure 6-3: Olive Branch-Tupelo-Fulton Top Five Outbound Commodities



Source: IHS Global Insight Transearch 2008

Table 6-7 shows forecasted freight for two inland ports in the corridor. The Ports of Aberdeen and Itawamba are primarily outbound freight facilities with static volumes projected through 2030.

Table 6-7: Inbound and Outbound Forecast for Olive Branch-Tupelo-Fulton Corridor Ports

Facility	Inbound Tons (Thousands)					
	2008	2010	2015	2020	2025	2030
Port of Aberdeen	0.1	0.1	0.1	0.1	0.1	0.1
Port Itawamba	8.6	5.6	7.0	6.2	5.9	5.8
Facility	Outbound Tons (Thousands)					
	2008	2010	2015	2020	2025	2030
Port of Aberdeen	20	15	17	19	20	22
Port Itawamba	34	33	34	34	34	34

Source: IHS Global Insight Transearch 2008

7. JACKSON-HATTIESBURG-GULFPORT MULTIMODAL CORRIDOR

7.1 Population and Employment

The **Jackson–Hattiesburg–Gulfport Corridor** runs through nine counties in central Mississippi, between Jackson, and Gulfport, (**Table 7-1**) and includes the city of Hattiesburg, Mississippi. These nine counties accounted for between 17% and 18% of the State's total population and employment in 2008. The corridor intersects with a number of other key freight corridors in the state; in Jackson, this corridor intersects with the Southaven-McComb and Jackson-Meridian Corridors; in Hattiesburg this corridor intersects with the Picayune-Meridian Corridor; and in Gulfport it intersects with the Gulf Coast Corridor. As such, this corridor shares traffic and freight characteristics with those other corridors.

Table 7-1: Historical Population in the Jackson – Hattiesburg – Gulfport Corridor

County	Year (population in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Covington	14.1	16.0	16.6	19.5	20.4	30.5%	0.8%
Forrest	58.0	66.3	68.3	72.8	78.6	26.2%	0.7%
George	12.6	15.4	16.7	19.2	21.9	42.8%	1.2%
Greene	8.6	9.8	10.3	13.3	13.7	37.4%	1.0%
Harrison	135.7	158.3	165.5	189.9	176.4	23.1%	0.6%
Perry	9.1	9.9	10.9	12.2	12.2	25.6%	0.7%
Rankin	44.6	69.8	87.7	116.2	138.2	67.8%	1.8%
Simpson	19.9	23.5	24.0	27.7	27.8	28.4%	0.8%
Stone	8.2	9.8	10.8	13.7	15.6	47.4%	1.3%
Total	310.7	378.6	410.6	484.4	504.7	38.4%	1.0%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

Table 7-2 shows the historical employment by industrial sector for the Jackson – Hattiesburg – Gulfport Corridor. All sectors have experienced a positive employment growth over the 1970-2007 period. The five leading sectors in this corridor in terms of jobs in 2007 are:

- Government
- Retail trade (local-serving sector);
- Food services (trade and local serving sector)
- Construction (local serving sector)
- Health care and social assistance (local serving sector)

Table 7-2: Historical Industry Employment in the Jackson – Hattiesburg – Gulfport Corridor

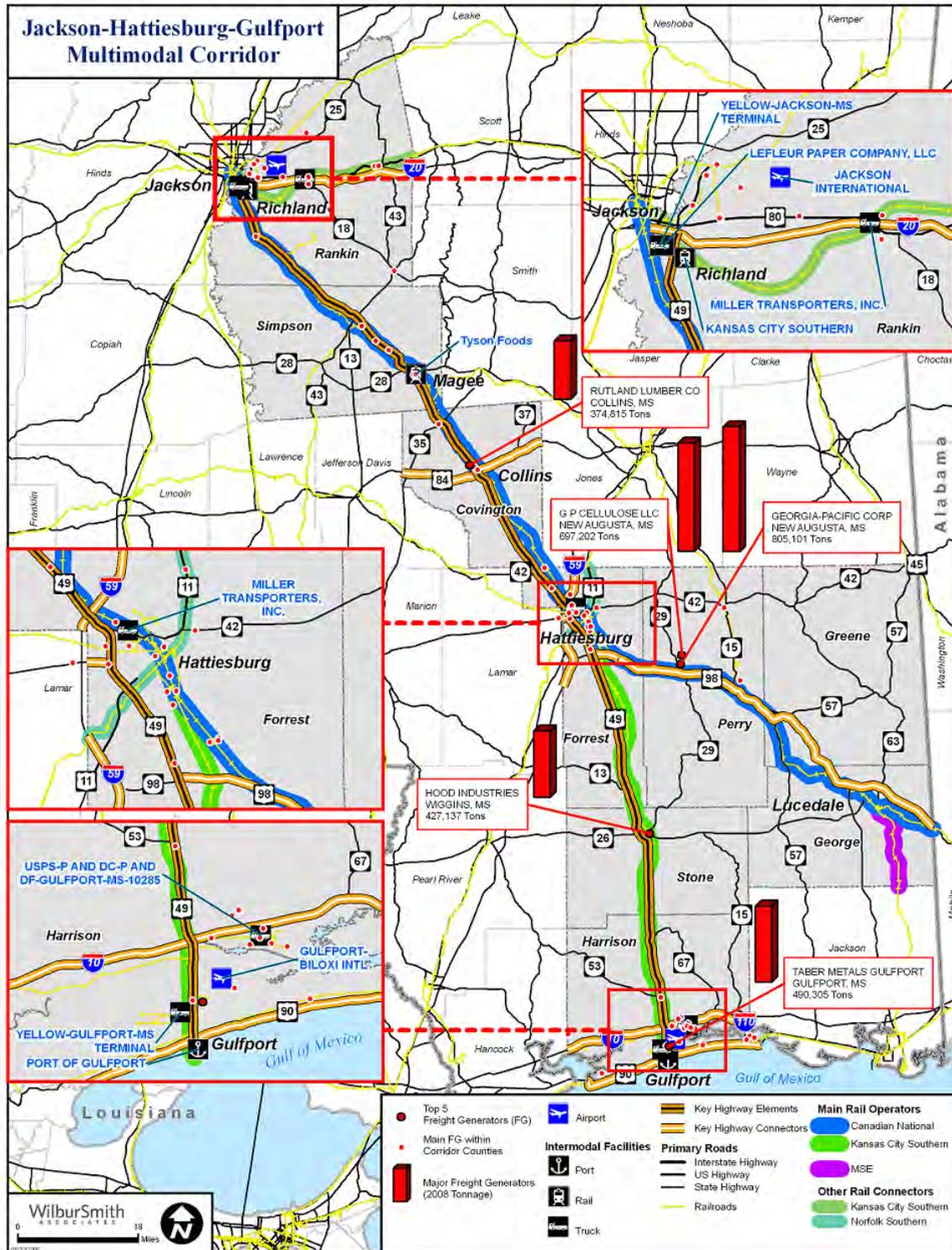
Industry	Year (employment in thousands)					Percent Change 1970-2007	
	1970	1980	1990	2000	2007	Total	Avg. Ann.
Educational Services	0.5	0.9	1.3	2.5	3.9	86.0%	2.3%
Administrative and Waste Services	3.0	4.5	5.9	11.9	16.4	81.9%	2.2%
Health Care and Social Assistance	4.5	6.9	9.1	18.0	23.4	80.7%	2.2%
Professional and Technical Services	2.4	3.8	5.1	9.0	10.7	77.3%	2.1%
Food Services	7.0	10.2	13.3	27.6	29.8	76.6%	2.1%
Finance & Insurance and Real Estate, Rental & Leasing	6.2	10.2	12.0	16.6	21.4	71.1%	1.9%
Information	0.9	1.3	1.5	2.8	3.0	70.3%	1.9%
Arts, Entertainment, and Recreation	1.7	2.5	3.3	11.8	5.8	70.1%	1.9%
Other Services	4.8	7.3	9.8	14.1	16.1	70.1%	1.9%
Wholesale Trade	3.1	6.3	6.1	8.9	9.3	66.8%	1.8%
Construction	8.4	9.3	10.2	18.4	25.3	66.7%	1.8%
Retail Trade	12.0	18.0	23.6	30.1	35.3	66.0%	1.8%
Transportation and Warehousing	4.3	6.5	8.7	11.4	11.8	63.8%	1.7%
Management	0.8	1.2	1.6	2.1	1.9	56.8%	1.5%
Mining	0.8	1.1	1.1	1.0	1.0	24.0%	0.6%
Government	46.0	50.4	53.8	61.1	60.1	23.5%	0.6%
Manufacturing	15.1	21.3	22.6	20.6	16.4	8.3%	0.2%
Utilities	1.6	2.4	2.5	2.4	1.7	7.2%	0.2%
Farm and Forestry	6.0	7.2	6.7	7.8	7.1	3.7%	0.1%
Total	129.9	171.3	198.0	278.1	300.3	56.7%	1.5%

Source: 2008 Woods and Poole Economics, Inc. and Wilbur Smith Associates.

7.2 Infrastructure

Figure 7-1 illustrates the **Jackson-Hattiesburg-Gulfport Multimodal Corridor**. The corridor’s freight network includes: the Port of Gulfport; Kansas City Southern (KCS) Railroad and Canadian Northern Railroad and one short line railroad; Interstate 59 and U.S. Highway 49; Jackson-Evers International Airport; and several freight terminals. Major employers in this corridor that depend upon this multimodal freight network include: Marshall Durbin Food Corporation; Kohler Engines, Inc.; Sanderson Farms; and, Northrop Grumman Ship.

Figure 7-1: Jackson-Hattiesburg-Gulfport Multimodal Corridor.



7.2.1 Freight Overview

Tables 7-3 and 7-4 show projections of freight traffic on the Jackson-Hattiesburg-Gulfport Corridor by direction and mode. The majority of freight in this corridor moves by truck (91 percent) and is through traffic (61 percent). Through traffic is expected to grow an average of 1.5 percent annually through 2030 and increase its share from 61 percent to 63 percent of total traffic. Inbound and outbound freight on the corridor is fairly balanced.

Table 7-3: Detailed Forecast by Direction for Jackson-Hattiesburg-Gulfport Corridor

Direction	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Inbound	22.8	17%	27.4	15%	0.8%
Intrastate	9.3	7%	11.8	6%	1.1%
Outbound	21.2	15%	29.2	16%	1.5%
Through	83.4	61%	116.8	63%	1.5%
Total	136.6	100%	185.2	100%	1.4%

Source: IHS Global Insight Transearch 2008

Table 7-4: Detailed Forecast by Mode for Jackson-Hattiesburg-Gulfport Corridor

Mode	2008		2030		Average Annual Growth Rate
	Tons (Million)	Percent	Tons (Million)	Percent	
Truck	124.8	91%	173.4	94%	1.5%
Water	3.8	3%	4.4	2%	0.7%
Rail	8	6%	7.4	4%	-0.4%
Air	--	0%	--	0%	0.7%
Total	136.6	100%	185.2	100%	1.4%

Source: IHS Global Insight Transearch 2008

The top commodities by weight and value in the corridor are shown in Table 7-4. Since the Jackson-Hattiesburg-Gulfport Corridor encompasses portions of previously discussed corridors, many of the commodities in this corridor are similar. Secondary traffic is the major freight in this corridor followed by lumber, chemicals, petroleum and food. Lumber and wood products firms are the dominant shippers and receivers in the corridor with G.P Cellulose, a pulp mill in New Augusta, being the dominant shipper in the corridor (Table 7-5).

Table 7-5: Top Commodities in the Jackson-Hattiesburg-Gulfport Corridor, 2008

Commodities	Tons (Millions)	% Total
Secondary Traffic	20.6	15.1%
Lumber or Wood Products	15.3	11.2%
Chemicals or Allied Products	14.7	10.8%
Petroleum or Coal Products	14.3	10.5%
Food or Kindred Products	12.9	9.5%
All Others	58.7	42.9%
Total	136.6	100.0%
Commodities	Value (Million\$)	% Total
Secondary Traffic	23,314	11.4%
Chemicals or Allied Products	22,571	11.0%
Rubber or Misc Plastics	20,911	10.2%
Machinery	19,567	9.5%
Electrical Equipment	18,176	8.9%
All Others	100,648	49.1%
Total	205,188	100.0%

Source: IHS Global Insight Transearch 2008

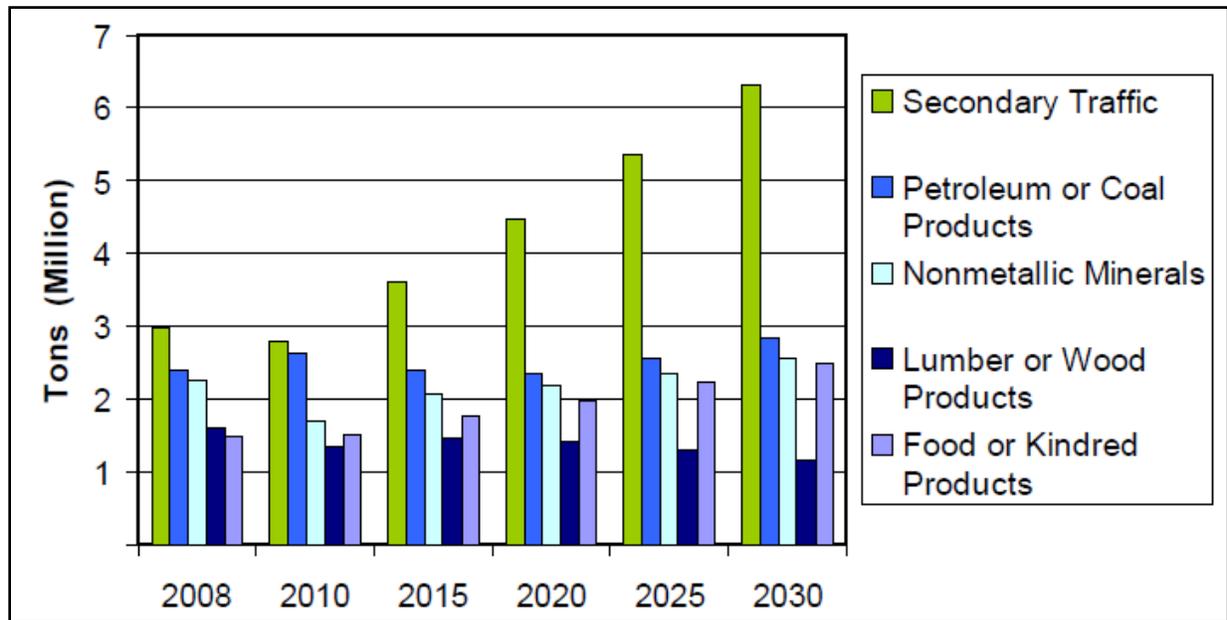
Table 7-6: Top Freight Shippers and Receivers in the Jackson-Hattiesburg-Gulfport Corridor

Company Name	City	Industrial Classification (NAICS)	Estimated Tons 2008 (Million)	Long Term Trend
G P Cellulose Llc	New Augusta	Logging	3.45	—
Hood Industries	Wiggins	Logging	1.38	—
Georgia-Pacific Corp	New Augusta	Cut Stock, Resawing Lumber, & Planing	1.34	▲
Hood Industries	Beaumont	Logging	1.31	—
Hood Industries Inc	Beaumont	Lumber & Wood Merchant	0.87	▲
Du Pont	Pass Christian	Other Misc Chemical Prod Mfg	0.74	▲
Rutland Lumber Co	Collins	Sawmills	0.62	▼
Color-Box Inc	Pelahatchie	Paperboard Mills	0.52	▲
Kimberly-Clark	Hattiesburg	Paperboard Mills	0.44	▲
Ala-Miss Inc	State Line	Logging	0.43	—
Sanderson Farms Inc	Collins	Poultry Processing	0.41	▲
F-S Prestress Concrete	Hattiesburg	Other Concrete Prod Mfg	0.28	▲
Marshall Durbin Poultry Co	Hattiesburg	Poultry Processing	0.27	▲

Source: IHS Global Insight Freight Finder for Mississippi 2008

Figure 7-2 shows projections of major inbound freight commodities in the corridor to 2030. Similar to corridors that connect with the Jackson-Hattiesburg-Gulfport Corridor, the growth of secondary traffic is very pronounced due to the proximity to the intermodal terminal and warehouses in Jackson, as well as freight facilities along Mississippi's Gulf Coast ports. Major inbound freight receivers are lumber products or secondary traffic.

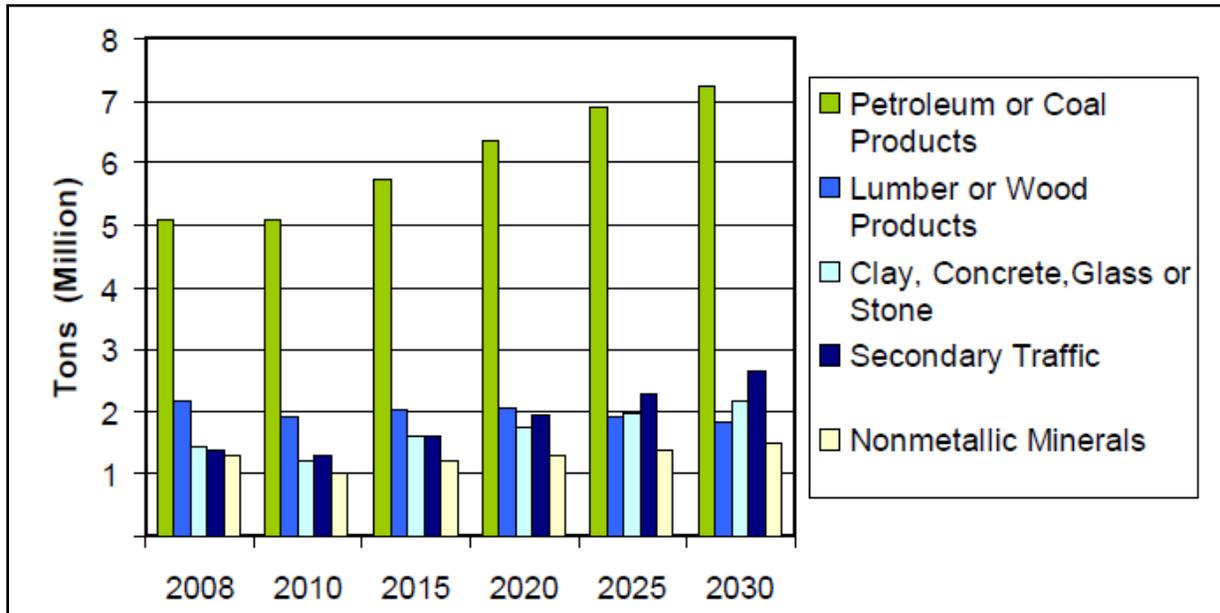
Figure 7-2: Jackson-Hattiesburg-Gulfport Top Five Inbound Commodities



Source: IHS Global Insight Transearch 2008

Over one third of the outbound tons in the Jackson-Hattiesburg-Gulfport Corridor are petroleum products from the Gulf Coast, a share that is not expected to change to 2030. Further analysis shows that one quarter of outbound traffic from this corridor terminates within the state with other major destinations being New Orleans, Houston, Baton Rouge and Mobile. Major shippers in the corridor transport lumber/wood products or concrete with the G P Cellulose pulp mill in New Augusta being the largest shipper on the corridor.

Figure 7-3: Jackson-Hattiesburg-Gulfport Top Five Outbound Commodities



Source: IHS Global Insight Transearch 2008

8. TRANSPORTATION INFRASTRUCTURE DEFICIENCIES

8.1 Highway/Truck Mobility

This section is intended to provide insight into geographic areas served by the multimodal corridors where freight movement experiences relative mobility constraints. Mobility constraints can impact service reliability, that is, the adherence to timetable, the adherence to scheduled frequencies and the ability to reach a destination by a nominated time. For freight transportation, dependable delivery is important for business since delays will cause economic losses in terms of travel time and inventory cost. For instance, the “just in time” manufacturing philosophy is that the manufacturing businesses choose frequent deliveries of components and raw materials, with little stock to buffer against later arrivals.¹

As part of the *Identification of Major Bottlenecks and Chokepoints in Mississippi* developed for the *Mississippi Trade and Transportation Assessment*, truck movements queried from the FHWA-Freight Performance Measures (FPM) database were used to identify specific freight congestion points and truck bottlenecks on interstate and state highways that comprise the key multimodal corridors.

¹ Reliability – *The Dominant Railway Performance Issue of the Next Decade*, W.R.Steinmetz. 1996.

8.1.1 Interstate Corridors

The four Mississippi interstate facilities included in this analysis were:

- Interstate 10 (Gulf Coast Corridor);
- Interstate 20 (Vicksburg-Meridian Corridor);
- Interstate 55 (Southaven-McComb Corridor); and
- Interstate 59 (Picayune-Meridian Corridor).

Figure 8-1 depicts the average speeds of both directions by three mile segment for the four interstate highways included in the ATRI analysis, based on all times and dates in 2007. This figure suggests the following:

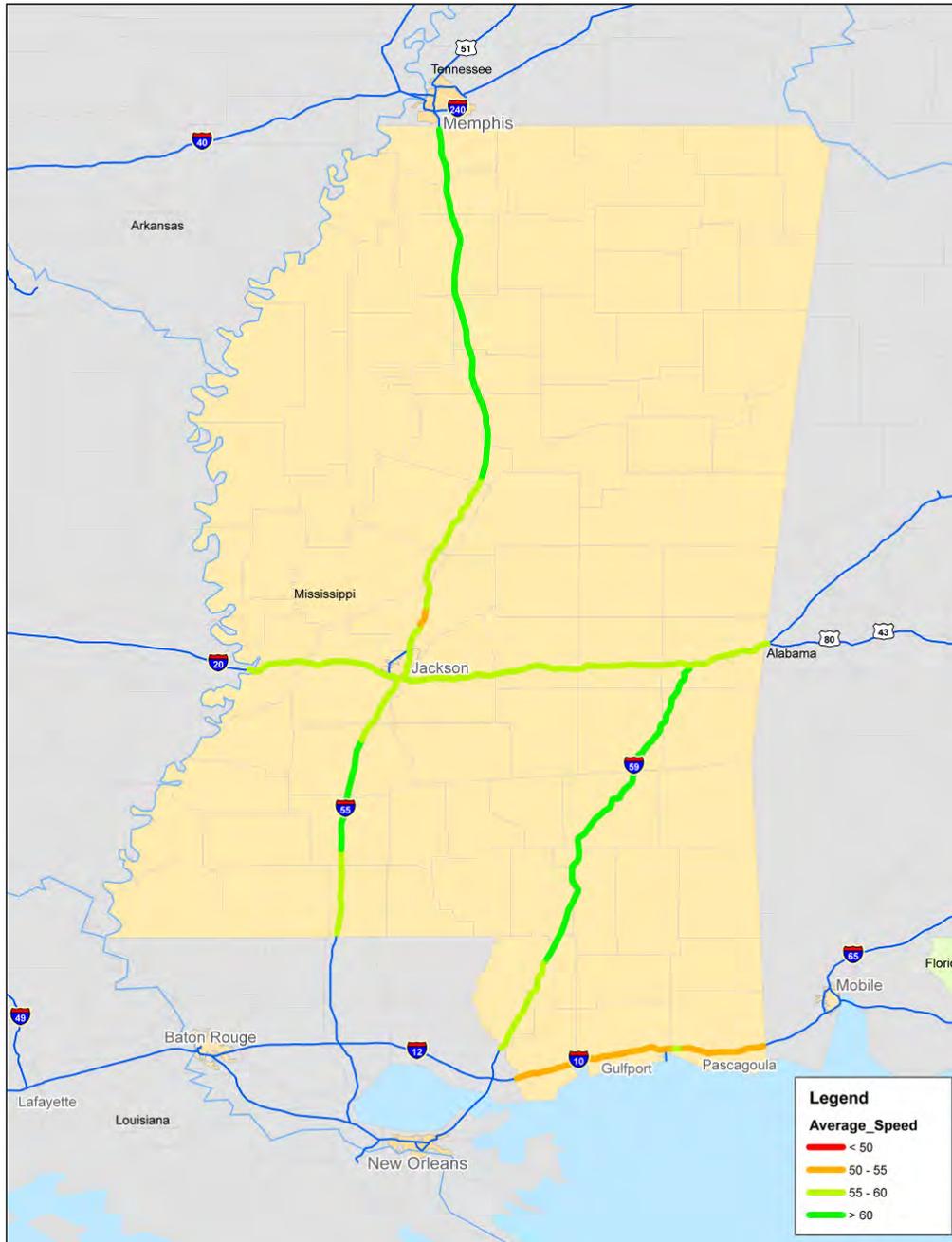
- Interstate 10 – Only one segment located in Jackson County has an average speed greater than 55 mph, but less than 60 mph. In the other segments, average speeds (in both directions) are at or below 55 mph.
- Interstate 20 - Average speeds for all segments of Interstate 20 are significantly higher than those on Interstate 10, with average speeds higher than 55 mph but less than 60 mph.
- Interstate 55 - The large dip in travel speed is located in Madison County, north of Jackson, with an average travel speed between 50 and 55 mph.
- Interstate 59 - Average speeds are equal or higher than 60 mph.

Figure 8-1 also shows travel time reliability and variability for the four analyzed interstate highways. Interstate 10 had the lowest average travel rate, followed by Interstate 20. The “buffer index” is highest on Interstate 55, which indicates that this road had the highest degree of variability when traveling along the entire I-55 corridor. This is not uncommon on corridors through major cities (in this case, Jackson), particularly if there are major construction areas along the route, or if traffic incidents are more prevalent in one area than another.

Interstate 20, on the other hand, had the best reliability score (i.e., the lowest “buffer index”) of the four analyzed interstates since travel rates are predictable and do not vary greatly along the length of the corridor. It should be noted that this low score on I-20 was somewhat surprising considering that the highway bisects Jackson.

Shippers of high-value products in Mississippi require the logistics and transportation system to be built around time-sensitive operations. For them, speed, reliability, and agility, the ability to easily change, are the most important attributes. The infrastructure network and processes must minimize the handling required by the product, even if it requires a slight cost premium to do so.

Figure 8-1: Average Speed and Reliability on Four Mississippi Interstate Highways



Characteristic (2007)	I-59	I-55	I-20	I-10
Average Travel Rate	60.9	60.0	57.9	52.8
Median	61.2	60.5	57.6	53.4
Buffer Index (Reliability)	4.3	7.1	2.1	6.2

Source: Prepared by ATRI based on the FPM database

8.1.2 Major U.S. Highway Corridors

In addition to the four interstates, five U.S. highways in Mississippi were analyzed to identify segments with average truck speeds of less than 50 miles per hour (mph); conceptually, this provides the state of Mississippi with insight on possible U.S. highway areas that may be candidates for lane expansion or other mobility improvement efforts. The five highways included in the study were:

- U.S. 49 (Jackson-Hattiesburg-Gulfport Corridor);
- U.S. 72;
- U.S. 78 (Olive-Brach-Tupelo-Fulton Corridor);
- U.S. 82; and
- U.S. 84.

These highways are located throughout Mississippi in areas that extend from the far northeastern corner of the state to the ports in the south. Several major cities throughout Mississippi influence the flow of freight along these five highways, including Jackson, Richland, Hattiesburg, Gulfport, and Tupelo. Specific segments along each route were identified as areas that operated significantly or extensively below free flow.

Trucks traveling US 49 often use the facility as a link between Interstate 10 in the Southeastern U.S. and points along Interstate 20 west of Jackson (**Figure 8-2**). The southern portion of U.S. 49 is critical to the movement of freight in Mississippi, and is a primary route for trucks traveling to the Richland-Jackson area or further north from the port of Gulfport – one of the top 25 ports in the U.S. for containerized cargo². In addition, Gulfport is located only a few miles from the Inter-Coastal Waterway, which provides additional access to barge carriers³. The northern section is vital to truck transport throughout the state as the road intersects in Jackson with two major interstates: I-20 and I-55. Both of these interstates provide for expanded movement of cargo both east/west and north/south throughout the rest of the state and beyond.

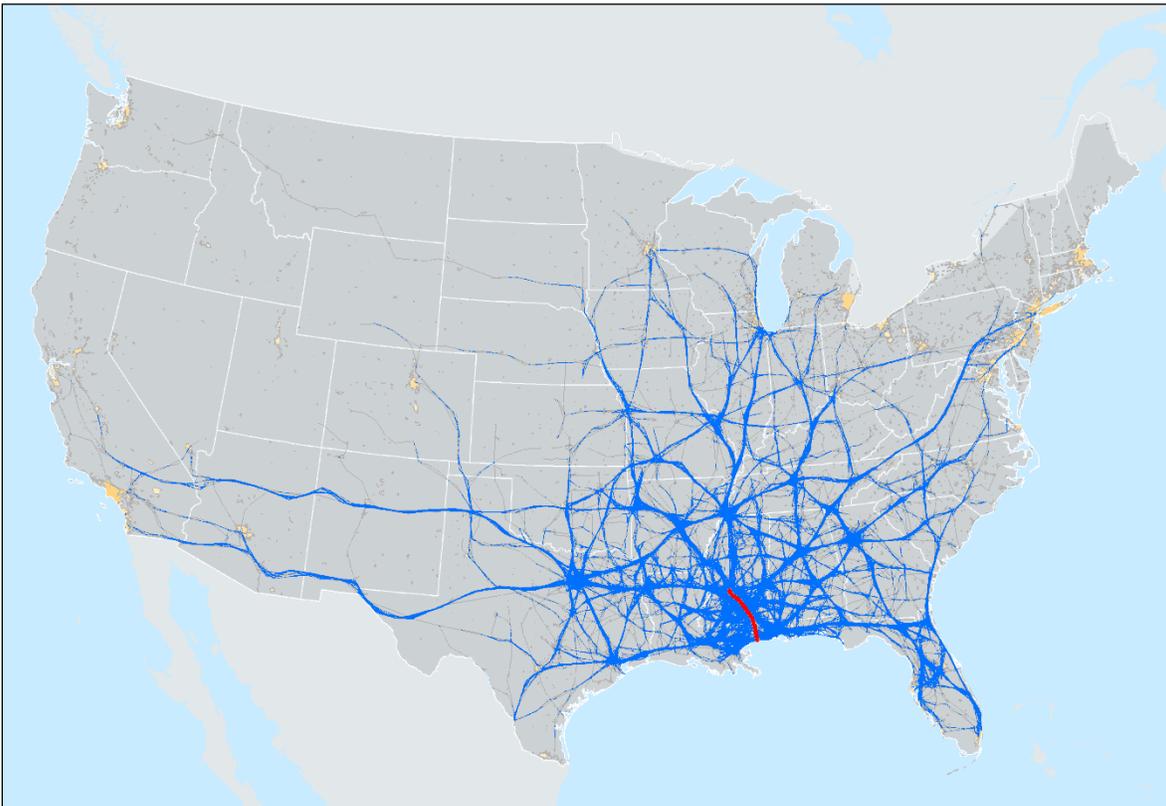
Similar to U.S. 49, U.S. 78 is a critical route for the large volume of trucks traveling into and out of the northern Mississippi/Memphis area, and will be upgraded as part of the new Interstate 22 that will connect Memphis and Birmingham.⁴

² Federal Highway Administration. *Freight Facts and Figures, 2007*. Washington, D.C.

³ Mississippi State Port Authority at Gulfport. 2009. Intermodal Transportation Providers. <http://www.shipmspa.com/>

⁴ Missouri Department of Transportation (MDOT). 2009. Future I-22. <http://www.gomdot.com/Home/Projects/Updates/Northern/Home.aspx>

Figure 8-2: US 49 Freight Flows



Source: Prepared by ATRI

Of the five U.S. highways analyzed, U.S. 49 had the highest percentage of segments (24%) with average speeds less than 50 mph. Of the 54 3-mile segments analyzed, 13 had average truck speeds that were less than 50 mph. The majority of these segments, denoted by a red circle in **Figure 8-3**, are located in urban areas and likely reflect traffic congestion in the following cities: Gulfport-Biloxi, Hattiesburg, and Richland-Jackson.

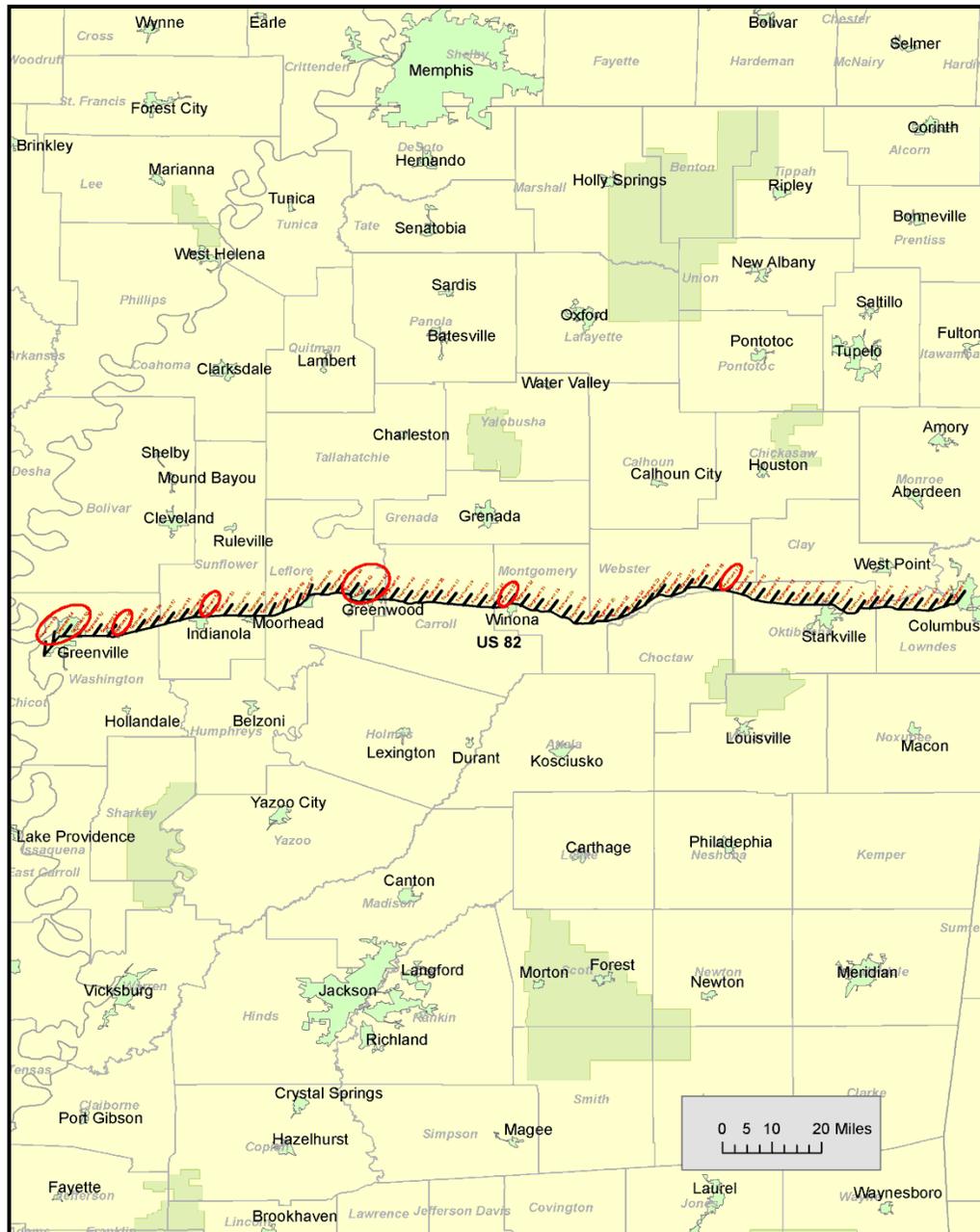
Figure 8-3: U.S. 49 Segments with Average Truck Speeds Below 50 mph



Source: Prepared by ATRI

U.S. 82 had the third highest percentage of segments (15%) with speeds averaging less than 50 mph (**Figure 8-5**), likely due to adjacent locations with dense populations and signalized/signed intersections. Additionally, U.S. 82 had three segments with average speeds less than 30 mph, which is the highest instance of very low average speeds. The urban areas with very low average speeds include Winona, Greenwood, Indianola, and Greenville.

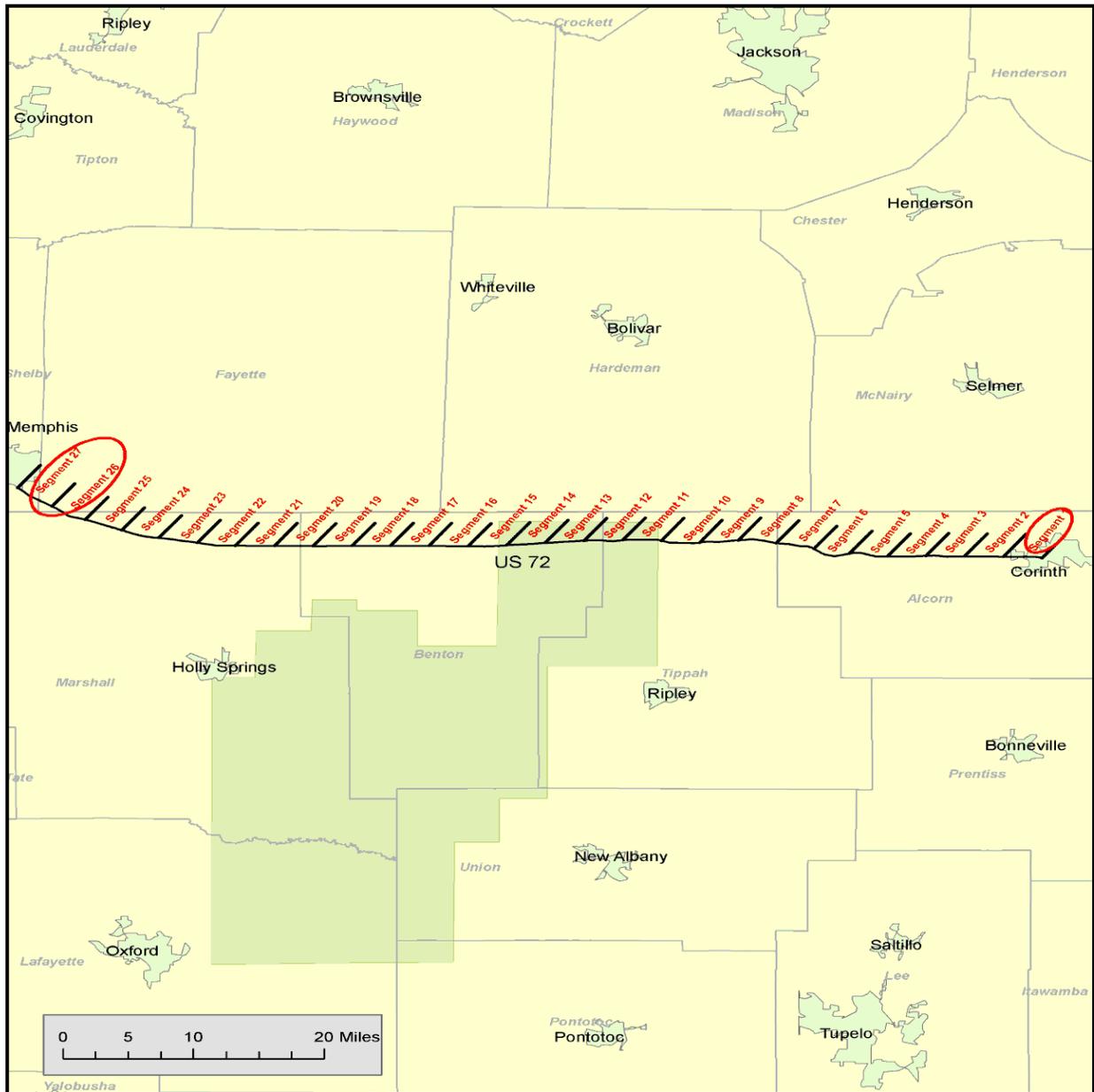
Figure 8-5: U.S. 82 Segments with Average Truck Speeds Below 50 mph



Source: Prepared by ATRI

Of the five study routes, U.S. 72 had the lowest percentage (11%) of segments with average truck speeds less than 50 mph (**Figure 8-6**). Of the three segments with average speeds less than 50 mph, denoted by a red circle, the first was in Corinth (segment 1) while the remaining two were located in the Memphis region (segments 26 and 27). The low speeds within these three segments are likely attributable to urban congestion and a large number of origins/destinations locations.

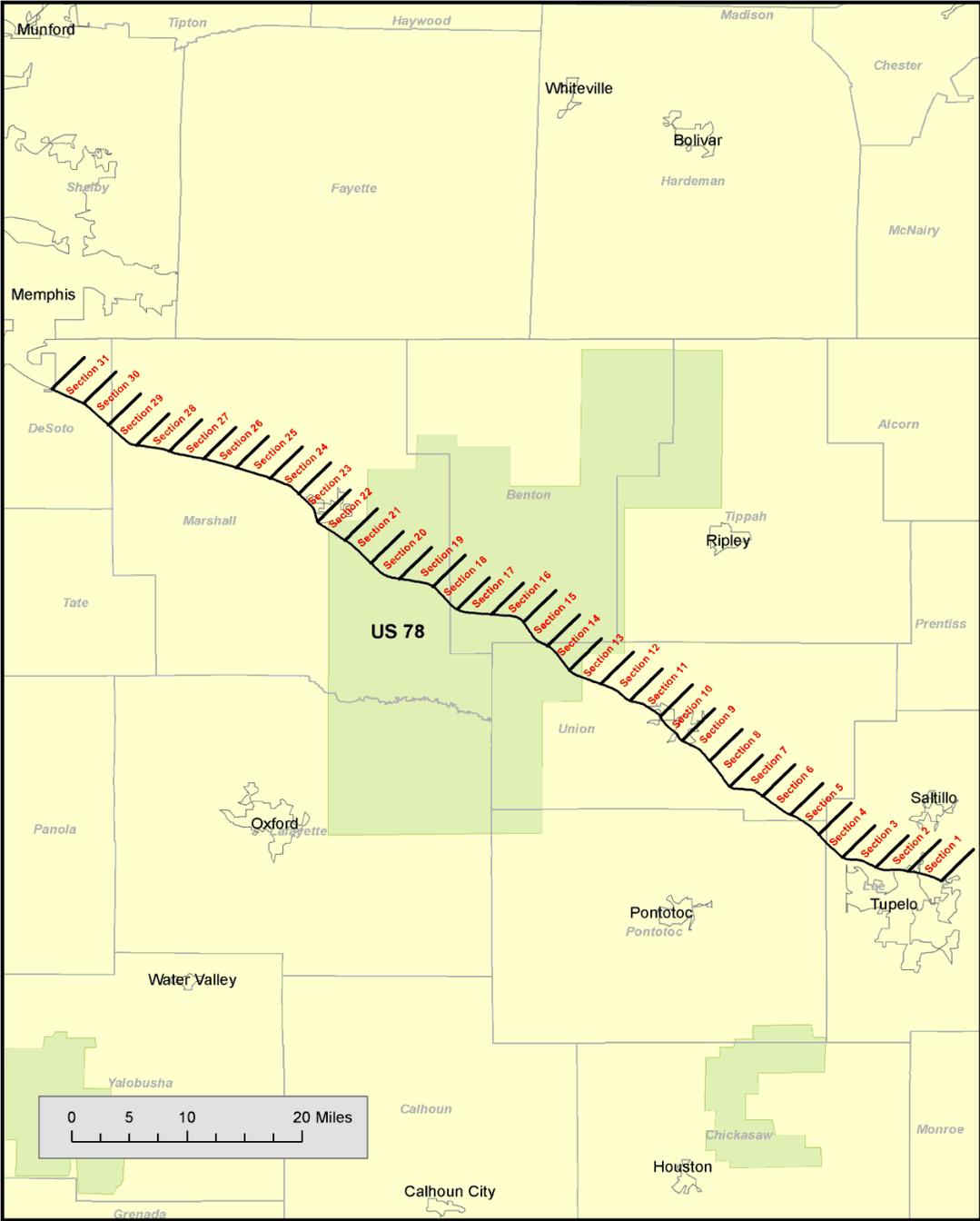
Figure 8-6: U.S. 72 Segments with Average Truck Speeds Below 50 mph



Source: Prepared by ATRI

Though U.S. 78 begins and terminates in larger urban areas and travels through two smaller urban areas, New Albany and Holly Springs, there were no roadway segments with average truck speeds less than 50 mph (**Figure 8-7**). U.S. 78 was the only roadway in the study with all segments averaging speeds of 50 mph or greater.

Figure 8-7: U.S. 78 Segments



Source: Prepared by ATRI

8.1.3 Congested Highway Locations

The top ten congested locations identified by the MDOT were also analyzed as part of the *Identification of Major Bottlenecks and Chokepoints in Mississippi* developed for the *Mississippi Trade and Transportation Assessment*, in an effort to quantify congestion severity. Each of the top ten identified locations is circled in **Figure 8-8**.

Finally, a survey of fifty-two (52) motor carriers in Mississippi that included for-hire carries (81%) and private carries (19%) was meant to give a fairly balanced view of issues within the motor carrier industry. The trucking industry was asked about major issues (within the area of influence of the MDOT) they face when traveling in Mississippi, as well as areas for improvements in the Mississippi routes they use.

As shown in **Figure 8-9**, though nearly all of the carrier responses fell in the midrange, the top three problems identified by respondents were:

- 1) Inadequate highway capacity;
- 2) Inadequate roadway turning radius; and
- 3) Highway congestion.

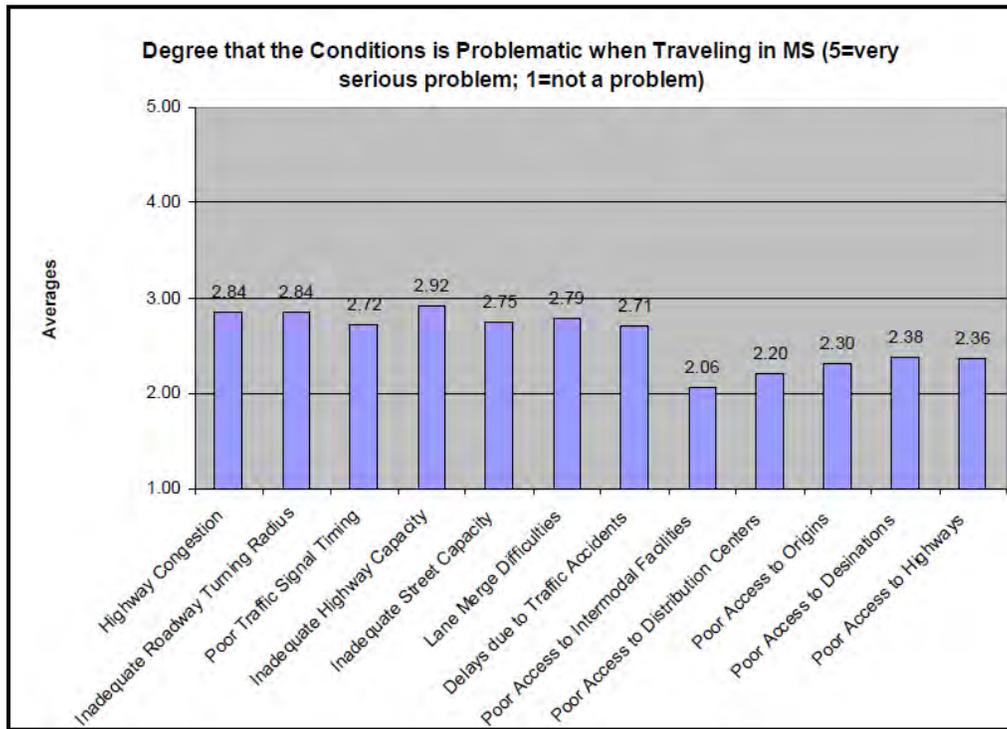
Access to intermodal facilities, distribution centers and origins received the lowest scores.

In regards to route issues that need improvements (**Figure 8-10**), overall, carriers suggested that the top three greatest improvements are needed in:

- 1) Truck parking facilities;
- 2) Highway road capacity; and
- 3) Secondary road capacity.

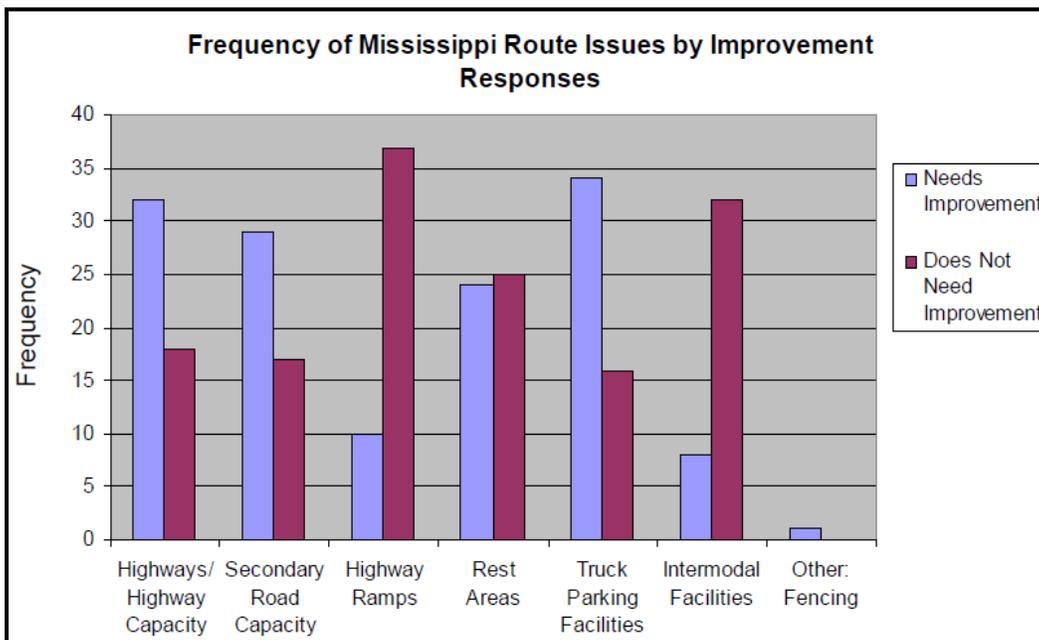
Highway ramps and intermodal facilities received the highest “no improvement needed” scores.

Figure 8-9: Problematic Issues for Trucking Companies Traveling in Mississippi



Source: Prepared by ATRI

Figure 8-10: Route Issues Identified by Trucking Companies Traveling in Mississippi



Source: Prepared by ATRI Rail Access to Ports

8.2 Rail Access to Ports

Many ports on the inland river systems have expressed various concerns regarding rail access and/or service. Their concerns include the rate structure, lack of service, or limited rail service available due to the condition of the rail infrastructure itself.

The ports in the Gulf Coast area, with the exception of Biloxi, would benefit from improving existing rail service and connectivity to other rail carriers. The port operators noted that the current rail service is limited or expensive due to lack of competition. This poses a major obstacle to future development and has been a complaint of existing and prospective port customers.

Rail traffic between New Orleans and Mobile has increased steadily over recent years and port operators noted that New Orleans is a major bottleneck to rail service. They also noted that service on the CSXT5 line is inconsistent and unreliable. While Gulfport and Pascagoula technically have access to other rail carriers, the connecting rail line is deteriorated, which limits the service available. For these reasons, competition with New Orleans and Mobile for rail/sea cargoes is difficult. Viable rail service from Mississippi's Gulf Coast to an inland rail interchange would create a competitive factor not readily available to these ports today.

8.3 Water Access to Ports

Maintaining the water depth of access channels and berth areas are the primary concern for the inland river ports. Water depth and access channel width were listed as the primary concerns for the Gulf Coast port facilities. Many channel widening and deepening projects are currently underway, or are planned for the near future to address water depth issues.

Dredging is required at the Ports of Pascagoula and Gulfport to enhance their marketability and competitiveness vis-à-vis the Ports of New Orleans and Mobile, which can receive larger vessels. The cost of dredging and disposal and environmental issues related to the disposal of dredged material are preventing many of the ports from adequately maintaining the required water depths. Many of the ports in Mississippi would benefit from Long-Term Dredge Management Plans (LTDMP), and funding assistance for maintenance dredging.

8.4 MDOT Planned Improvements Along Freight Corridors

Tables 8-1 thru 8-6 outline the planned operational and infrastructures investments proposed by the Mississippi Department of Transportation (MDOT) that will benefit the six key multimodal corridor as well as additional actions that need to be taken to ensure improved mobility, accessibility and reliability of freight movements along these corridors.

⁵ CSXT provides rail freight transportation to the Mississippi Gulf Coast ports and connects them with the ports of New Orleans and Mobile and major rail hubs served by several mainline railroad companies.

Table 8-1: Identified Improvements along the Southaven-McComb Multimodal Corridor

Road	Location	Problem(s)	Proposed Action(s)
Interstate 55	Hernando to Southaven	I-55 has experienced tremendous growth due to increases in through traffic plus large increases in local area growth.	Capacity improvements and ITS implementation (in design phase). I-55 has recently been widened to the north and this project would continue the widening plan south toward Hernando.
State Route 302	Interstate 55 to U.S. Highway 78	SR 302 is perhaps the most congested urban state route in the state. Very high traffic volumes, many signals per mile and high truck volumes contribute to this situation.	Although widening SR 302 is impractical due to the buildup and development, minor geometric improvements along with signal timing and ITS can be done. Also, I-269 is a new interstate that will provide an alternate for trucks and through traffic parallel to SR 302.
State Route 25	Flowood	Very high traffic volume and many signals per mile along with trucks contribute to congestion in this area	Capacity improvement and Access Management (Environmental Studies in progress)
Interstate 55	North of Jackson	Continued growth north of Jackson in the areas of Ridgeland and Madison has created traffic growth resulting in congestion during the peak periods.	Upcoming construction projects include the Madison/Ridgeland Split Diamond Interchange that will provide improved access to both cities. That project is currently in the final design and right of way stage. Also, the Gluckstadt Road Interchange will be improved and that project is in the design stage.
Interstate 55	South of Jackson	I-55 south of Jackson is in need of capacity and interchange improvements. Currently, the interchanges do not meet design standards.	Capacity and interchange improvements. A planning study is to begin later in 2010 to initiate studies on this section of I-55.
Interstate 220	Jackson	Capacity improvements are needed to the area where I-220 and I-55 connect. A recent environmental study was conducted that identified these improvements.	Improved interchange configuration and capacity improvements. The next step will be the design stage.
U.S. Highway 49	North of Jackson	Portions of US 49 north of Jackson near I-220 could need capacity improvements in the future. This area is heavily traveled by trucks accessing industrial areas nearby.	Capacity improvements.

Source: Neel-Schaffer

Table 8-2: Identified Improvements along the Gulf Coast Multimodal Corridor

Road	Location	Problem(s)	Proposed Action(s)
Interstate 10	Entire Gulf Coast	I-10 has continued to grow both from overall through traffic demand as well as growth on the Gulf Coast itself. Portions of I-10 have been widened and more is needed.	Additional through lanes would be added along I-10, as well as improving the inadequate interchanges along the way.
U.S. Highway 49 South of Interstate 10	Gulfport	This section of US 49 is very congested due to high volumes and the many traffic signals along the way. Access control is an issue as this section is very commercialized near I-10.	This project is in construction and nearing completion. It included installation of a median for access control and signalization and ITS improvements.
U.S. Highway 90	Moss Point, Pascagoula, Ocean Springs	US 90 is congested in these cities as a result of high traffic volumes, high number of traffic signals and access openings.	Provide additional geometric improvements such as spot intersection improvements that would improve capacity by adding lanes in selected areas. Additionally, ITS solutions should be studied.
Interstate 10/Interstate 110	Biloxi	The area of I-10/I-110 is congested due to the very large traffic volumes that circulate thru the area. I-110 provides the main access from I-10 to Biloxi, Mississippi.	MDOT currently has a project in design to provide interchange improvements to the I-10/I-110 interchange. Additional capacity improvements are also needed on I-110 although the existing Bascule Bridge over Biloxi Bay would be complicated to widen.

Source: Neel-Schaffer

Table 8-3: Identified Improvements along the Vicksburg-Meridian Multimodal Corridor

Road	Location	Problem(s)	Proposed Action(s)
Interstate 20	Vicksburg	This stretch of I-20 does not meet current design standards and the interchanges are insufficient to handle the traffic as well. In addition, truck volumes continue to rise, which causes the current geometric condition of the interstate to be an unsafe condition.	Improve the capacity of I-20 by adding lanes. Also improve the vertical alignment by rebuilding the mainline. Rebuild several interchanges to allow all movements and bring up to more standard design.
Washington Ave.	Vicksburg (port to U.S. Highway 61)	Access to the port of Vicksburg is provided along the old Highway 61 and traffic from I-20 is required to travel out of direction to access it. This connector would provide a more direct route to and from the port.	According to MDOT this project is not feasible.
State Route 27	Vicksburg to Interstate 55	Mainly safety concerns as this is a major truck route that also has school access along this route.	Capacity improvement (4-lanes)
Interstate 20 at Interstate 59	Meridian	This was a major congested area during hurricane evacuation and is a consistently congested area from normal truck flows and high volumes.	MDOT recently awarded a design build project to add capacity improvements and widen bridges. This is currently in construction to be complete by 2011.
Interstate 20/59 at State Route 19	Meridian	This project was not included in the current Design Build project, but is a need based on the increased traffic volumes on I-20 and the current interchange geometry.	The project would include added interstate capacity and interchange improvements at SR 19.
Interstate 20	Jackson	Very congested area from I-220 to the Stack due to high truck percentage and poor horizontal alignment and lack of capacity.	Study will begin soon to review the horizontal alignment and capacity deficiencies of this corridor.
Interstate 20 at U.S. Highway 80	Brandon	This is an area of I-20 that is primarily a safety concern with poor horizontal and vertical alignment.	Capacity and interchange improvements (plans in progress).
Interstate 20	Pearl	Continued growth of traffic along I-20 has increased congestion during the peak periods.	MDOT plans on continuing the widening that currently ends at Pearson Road. Additional lanes are needed and would be constructed east toward Brandon.

Source: Neel-Schaffer

Table 8-4: Identified Improvements along the Picayune-Meridian Multimodal Corridor

Road	Location	Problem(s)	Proposed Action(s)
U.S. Highway 98*	Hattiesburg	The MDOT Vision 21 plan calls for US 49 from the coast to Jackson to be an interstate type facility. In doing this, one of the options may be to use portions of US 98 from US 49 south of Hattiesburg over to I-59. This section of US 98 is already full access controlled.	Provide alternative corridor with access control and provide route continuity.
U.S. Highway 84	Laurel	US Hwy 84 is congested within the urban limits of Laurel due to large traffic volumes and a number of traffic signals in town.	Provide a bypass alternative corridor with route continuity.
Interstate 59	Laurel	The I-59 S-Curve was recently improved and more improvement is needed adjacent to that. There are other interchanges that are inadequate and in need of reconstruction as well as the potential for additional lanes on I-59 mainline.	Provide capacity improvements and improve interchange design.
Interstate 59*	Hattiesburg	Portions of I-59 through Hattiesburg are projected to need additional through lane capacity as through traffic continues to grow along with the normal urban area growth of the Hattiesburg Metro area.	Provide additional lanes and improve interchanges where deficient such as US 49 North and I-59.

Note: *These improvements will benefit the Picayune-Meridian and the Jackson-Hattiesburg-Gulfport Multimodal Corridors

Source: Neel-Schaffer

Table 8-5: Identified Improvements along the Olive Branch-Tupelo-Fulton Multimodal Corridor

Road	Location	Problem(s)	Proposed Action(s)
U.S. Highway 45	U.S. Highway 78 to Barnes Crossing Rd.	Congestion exists along US 45 from Barnes Crossing to US 78	Existing US 78/US 45 Interchange is a tight cloverleaf. It does not have collector/distributor (CD) lanes. Interchange also affected by back up caused by 45/Barnes Crossing Road intersection. Redesign of both interchanges. If city builds Coley Road Extension, this will give relief by providing alternate route to US 78.
U.S. Highway 78	Olive Branch: SR 302 to SR 305	This section of US 78 has continued to grow rapidly due to the high development growth in the area.	Capacity Improvements are a projected need in the future. However, nothing is currently on MDOT's schedule.

Source: Neel-Schaffer

Table 8-6: Identified Improvements along the Jackson-Hattiesburg-Gulfport Multimodal Corridor

Road	Location	Problem(s)	Proposed Action(s)
U.S. Highway 49	Richland	Very congested corridor due to high truck volume, very high peak hour volume and traffic signals and access along route.	Capacity improvements and Access Management. Design complete and right of way almost complete. Construction phase will follow soon.
U.S. Highway 49	Florence	Very congested corridor due to high truck volume, very high peak hour volume and traffic signals and access along route.	Capacity improvements and Access Management. Design complete and right of way almost complete. Construction phase will follow soon.
U.S. Highway 49	Hattiesburg	The MDOT Vision 21 plan calls for US 49 from the coast to Jackson to be an interstate type facility.	Either convert existing section of US 49 near Camp Shelby to no access type facility or provide a bypass on new alignment. An EIS will begin soon that will study these options.
U.S. Highway 98*	Hattiesburg	The MDOT Vision 21 plan calls for US 49 from the coast to Jackson to be an interstate type facility. In doing this, one of the options may be to use portions of US 98 from US 49 south of Hattiesburg over to I-59. This section of US 98 is already full access controlled.	Provide alternative corridor with access control and provide route continuity.
Interstate 59*	Hattiesburg	Portions of I-59 through Hattiesburg are projected to need additional through lane capacity as through traffic continues to grow along with the normal urban area growth of the Hattiesburg Metro area.	Provide additional lanes and improve interchanges where deficient such as US 49 North and I-59.
U.S. Highway 49	Collins	As part of the Vision 21 Plan, US 49 would become an access controlled interstate type facility from the Coast to Jackson. Collins is one of the towns that could be impacted by the route being converted thru town or being bypassed around.	An ongoing EIS is to study alternatives to either upgrade existing US 49 thru Collins or provide a new fully controlled access bypass.
U.S. Highway 49	Magee	As part of the Vision 21 Plan, US 49 would become an access controlled interstate type facility from the Coast to Jackson. Magee is one of the towns that could be impacted by the route being converted thru town or being bypassed around town.	An ongoing EIS to study alternatives to either upgrade existing US 49 thru Collins or provide a new fully controlled access bypass.

Note: *These improvements will benefit the Picayune-Meridian and the Jackson-Hattiesburg-Gulfport Multimodal Corridors

Source: Neel-Schaffer

9. CONCLUDING REMARKS

The overall requirements of the high-value product supply chain across the multimodal transportation segments are high reliability, expedited product flow, high agility or flexibility to quickly respond to transportation disruptions and demand adjustments, and end-to-end information management. For the multimodal system meeting these specifications, a moderate cost premium is typically acceptable to the shipper.

For shippers of low-value products, minimizing cost is of the utmost importance and there is less of a priority on speed and reliability. Notably, however, with low inventory logistics practices becoming the norm for businesses over a wide range of product values, this prioritization is a matter of degree and the value of time is part of the cost equation. In addition, there are capacity implications behind the performance requirements for all products: ports, terminals, highways, and rail networks individually and together must be able to meet user expectations while managing significant, growing, and often concentrated throughput volumes.

All of these logistics and consequential transportation implications are of key importance to the State of Mississippi, because, in order for the State to continually maintain a healthy growing economy, the transportation system in the State must necessarily be flexible and sufficiently efficient to enable the region to economically compete, not only with the immediate domestic neighbors, but the world as well.

This report refines the Corridor profiles developed as part of the *Mississippi Trade and Transportation Assessment* Study by examining current freight flows patterns by direction, commodity, and mode using IHS Global insights' 2008 Transearch database. Each corridor's freight flows are forecasted based on IHS Global's Insight's macro-economic state, regional, and national economic models and key trends are uncovered. This analysis is summarized for each corridor below.

9.1 Southaven-McComb Corridor

Major outbound traffic in the corridor is secondary traffic and lumber/wood. Outbound lumber will remain flat through 2030 with secondary traffic growing with the increased use of nearby distribution centers and improvements to the KCS and CN intermodal terminal. As construction, including road repair, returns in the post-recession, non-metallic mineral freight, including sand, stone and gravel, is expected to grow significantly.

The two dominant inbound commodities in the Corridor are non-metallic minerals and lumber/wood (37 percent) with lumber traffic decreasing significantly through 2030, being replaced by secondary freight.

Freight attractors and generators along the corridor are predominantly lumber, wood, and chemical establishments. Of the 26 freight attractors or generators 20 percent handle chemicals,

implying that safety and emergency hazmat procedures should be a priority. Over half (54 percent) of the major freight establishments ship or receive lumber/wood but are not expected to grow significantly.

9.2 Gulf Coast Multimodal Corridor

This corridor is heavily port based and highly influenced by trends in international trade, particularly NAFTA trade, which represents almost 10 percent of all international trade traffic in the corridor. Freight is highly concentrated in petroleum and chemical products and reflects the bulk nature of the State's port activity. The corridor is dominated by the Chevron refinery in Pascagoula, which is the major inbound receiver and outbound shipper in the region.

9.3 Vicksburg-Meridian Multimodal Corridor

This corridor is Mississippi's largest multimodal corridor; 35 percent of all freight in the state travel on some part of this corridor. It is also the heaviest rail corridor in Mississippi by weight primarily due to significant through rail volumes on the KCS Meridian Speedway. Vicksburg-Meridian's close connectivity with the Southaven-McComb Corridor at Jackson means that both share similar characteristics as follows: both corridors have significant portions of through traffic and are heavily truck oriented; both corridors have higher volumes of inbound traffic than outbound due to the large consuming area around Jackson; and the composition of freight in the corridors will shift long-term from paper, wood, and lumber shipments to more "secondary" traffic to and from intermodal terminals, distribution centers, and warehouses.

9.4 Picayune-Meridian Multimodal Corridor

The composition of freight on this corridor is expected to shift from line haul shipments of lumber and wood to shorter haul "secondary" pick-up and delivery movements concentrated around the urban areas of Meridian and Hattiesburg. Two freight shippers dominate this corridor in the north: Masonite, a lumber and door manufacturer in Laurel and Bazor Lumber in Quitman. Coal represents 13 percent of the inbound tonnage along the corridor and is carried by Norfolk Southern.

9.5 Olive Branch-Tupelo-Fulton Multimodal Corridor

This corridor is the smallest of the key Mississippi Multimodal Corridors with 74.8 million tons of freight, approximately 12.5 percent of total Mississippi freight traffic in 2008. It is primarily a through lane with very small volumes of freight originating or terminating within the corridor. Infrastructure improvements are required in this corridor to support the planned Toyota plant being constructed in Tupelo.

9.6 Jackson-Hattiesburg-Gulfport

This corridor connects the Port of Gulfport with Jackson and provides connectivity with a number of other key corridors in the state at Jackson, Hattiesburg, and Gulfport. As a result, it shares many of the same freight characteristics as these other corridors. Approximately 23 percent of all Mississippi freight travels in, out or through this corridor, which is heavily truck oriented. One third of the corridor's freight either originates or terminates on the corridor with petroleum and secondary traffic being the major commodities.

9.7 Summary of Analysis

The analysis of Mississippi's multimodal corridors uncovered some trends in the state's freight system that need to be taken into consideration for future freight infrastructure planning. These are summarized below.

- Truck Share** - Seventy three percent of the freight moving in Mississippi is truck. In some corridors (i.e. Jackson-Hattiesburg-Gulfport), the share is over 90 percent. Truck tonnage in Mississippi is projected to grow faster (at an average of 1.4 percent annually) than other freight modes, especially within its key corridors. High growth and dependence on truck traffic has implications regarding highway maintenance, congestion, environmental quality, and highway financing.
- Through Freight Movement** – The key multimodal corridors constitutes a key link in the national freight system, especially between Atlanta, Houston, New Orleans, Memphis, and Birmingham. As a result, a significant amount of Mississippi's freight tonnage (54 percent) is "through".
- Growth in Intermodal and Secondary Traffic.** In many of Mississippi's corridors (particularly Southaven-McComb, Vicksburg-Meridian, and Jackson-Hattiesburg-Gulfport), secondary traffic, (i.e., traffic to/from warehouses, distribution centers, and intermodal terminal facilities) will become the largest share of freight by 2030. This shift from longer haul line-haul to short haul localized freight in the State has implications for greater congestion, especially around the urban areas of Jackson, Meridian, and Hattiesburg. Contributing to this trend will be greater use of intermodal in Mississippi. IHS Global Insight expects over 2.5 annual growth in the number of rail intermodal units at the Jackson intermodal terminal compared with a 1 percent growth in rail carload traffic.
- High Impact Freight Locations.** - Based on IHS Global Insight industry and state forecasts, firms poised for long term growth are primarily in Jackson, Pascagoula, Laurel, and Brookhaven

Finally, this report analyzes each key corridor to identify and document existing and potential bottlenecks and barriers to efficient freight transportation and logistics services in Mississippi. The analysis includes potential initiatives that would eliminate the barriers or mitigate their interference. This qualitative and quantitative assessment provides the foundation for the development of a master plan for each of the key multimodal corridors that generate the goods and services that are lifelines of Mississippi's communities.

