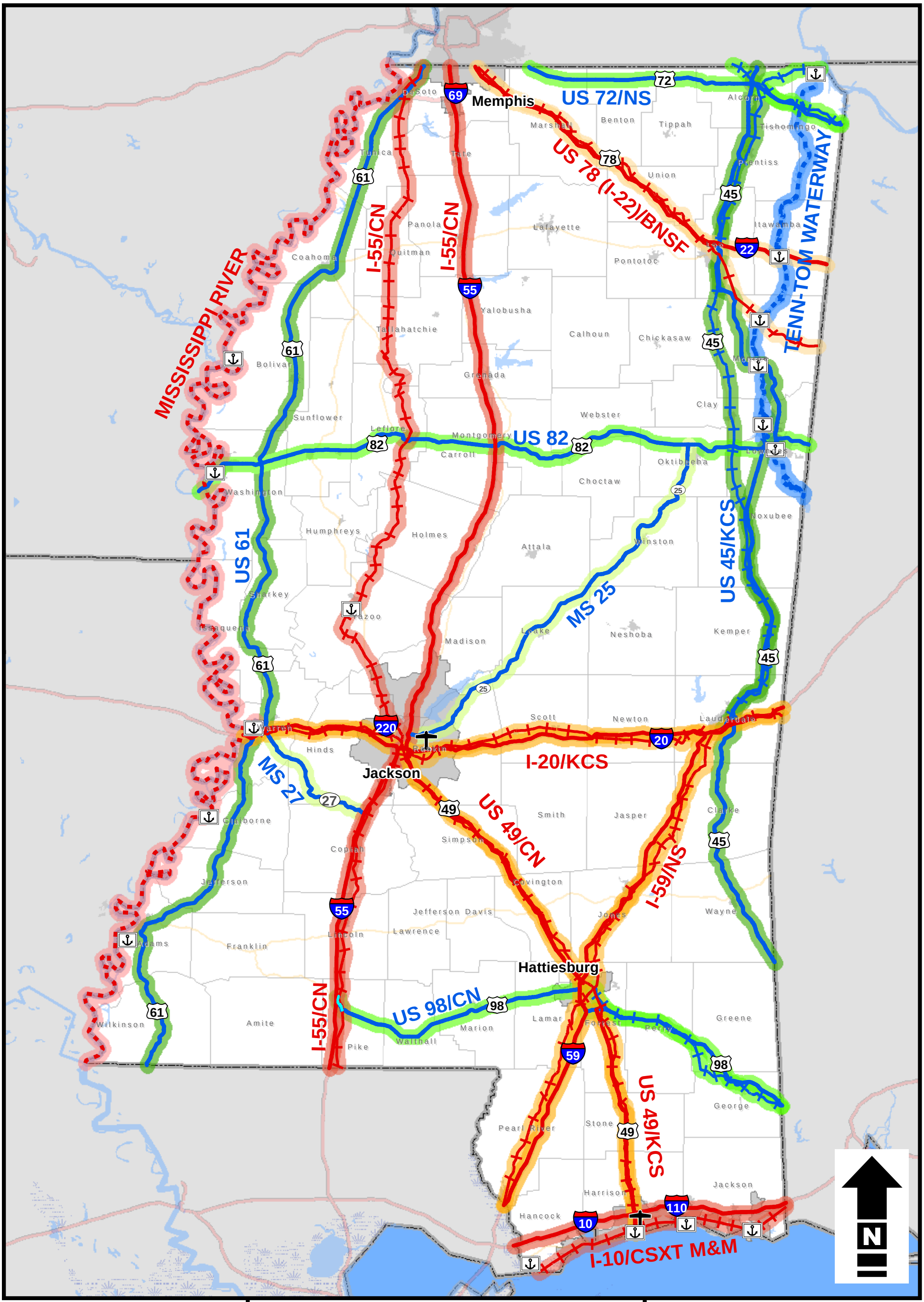


MISSISSIPPI STATEWIDE FREIGHT PLAN

MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

LEGEND

- Tier I Highway
- Tier I Railway
- Tier I Water
- Tier II Highway
- Tier II Railway
- Tier II Water
- Other Interstates
- US Highway
- Airport
- Port

Source: ESRI, MDOT.

MISSISSIPPI FREIGHT NETWORK CORRIDORS

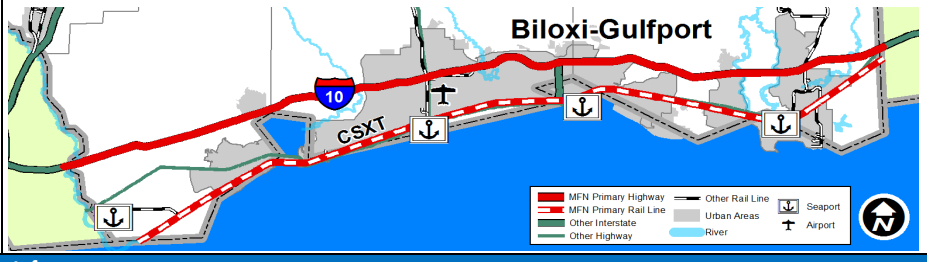
FIGURE C.1

Tier I: I-10 / CSXT (Gulf Coast) Corridor

General Description

The Gulf Coast Corridor covers southern Mississippi, including two of the top five most populated counties in the state, Harrison and Jackson. The three counties in the corridor account for 13% of both population and employment in MS. The five leading employment sectors in the corridor include government, food services, retail trade, manufacturing, and construction. Northrop Grumman Ship Systems, the state's largest employer with over 13,000 employees, is located in this corridor. The corridor serves three major Gulf Coast ports, including two deep water ports: Pascagoula and Gulfport. Truck freight is the dominant mode in the corridor and is expected to grow from 61% of total freight in 2011 to 65% in 2040. The Gulf Coast Corridor includes two major highways, I-10 and US 90 between the Louisiana and Alabama borders. The major intersecting highways are US 49 in Pascagoula (connection to Jackson-Hattiesburg-Gulfport Corridor) and MS 63 in Gulfport. The major rail mainline is the CSXT M&M subdivision, parallel to I-10. Freight flows to and from Mississippi along this corridor reflect important industry segments along the Gulf Coast, chemicals and petroleum.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	I-10 from Louisiana border to Alabama border (78 miles)	CSXT M&M Subdivision mainline from Louisiana border to Alabama border that parallels the Gulf Coast (74 miles)	Port of Gulfport, Port of Pascagoula, Port of Bienville	Gulfport-Biloxi International Airport
Key Connectors	I-110 from I-10 to Biloxi	CSXT connection to Chevron Pascagoula Refinery and Mississippi Phosphates	To Port of Gulfport from I-10 via US 90: south on port access road (NHS Intermodal Connector)	US 49 and Airport Rd / 34th Street in Gulfport connecting I-10 to Gulfport-Biloxi International Airport (NHS Intermodal Connector)
	US 49 connecting I-10 to US 90 at Port of Gulfport. (US 49 is also a Tier I corridor, projects captured in US 49 corridor profile)	KCS Hattiesburg to Gulfport mainline's branch to DuPont and Bayou Concrete Plant	To Port of Gulfport from I-10 via US 90: West Pier Gate to 27th Avenue (NHS Intermodal Connector)	
	MS 63 connecting I-10 to Chevron Pascagoula Refinery and Mississippi Phosphates	Mississippi Export Railroad (MSE) - connecting CN and east-west CSXT M&M subdivision	To Port of Pascagoula (east) via I-90: south on MS 611 (NHS Intermodal Connector)	
	MS 57 between I-10 and US 90 / Mallette Brothers Construction Co	Port Bienville Railroad (PBVR) - serving Port Bienville Industrial Park	To Port of Pascagoula (west) via US 90: south on MS 617 to MS 619, east on River Edge Rd (NHS Intermodal Connector)	
	MS 609/Tucker Road between I-10 and Daisy Vestry Road to Allied Waste Svc		To Port of Bienville from I-10 via US 90/MS 607, southwest on US 90, south on Ansley Rd (NHS Intermodal Connector)	
	Kiln Delisle Road (Pass Christian) between I-10 and DuPont Plant			
Existing ITS Deployments	WIM PrePass Gulf Region Incident Management System: - CCTV cameras - Dynamic Message Signs			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	60.9 / $117.3	16.4 / $27.6	23.0 / $14.3	< 1 / < $0.1
	2040	91.7 / $243.5	24.1 / $50.7	25.2 / $13.4	< 1 / < $0.1
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	33.0 / 18.5 / 3.4			
	2040	38.5 / 20.1 / 5.7			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$27.2 / $22.2 / $3.4			
	2040	$39.1 / $25.5 / $4.7			
% Freight Flows by Mode	2011	61%	16%	23%	< 1%
	2040	65%	17%	18%	< 1%
Average % Truck Mix / Average Total Daily Volume	2011	14% / 47,400			
Major Bottlenecks as identified	ATRI (1)	None			
	FAC / Freight User Survey (2)	I-10: Pascagoula River bridge (from Exit 61 to 68)	None identified	None identified	None identified
Top Commodities	Tonnage	Chemicals Petroleum, Coal Minerals, Crude petrol Gas, Secondary Traffic Others, Food Tobacco, and Concrete Glass Primary Metal			
	Value	Chemicals Petroleum, Fabricated Metal Machinery Equipment, Concrete Glass Primary Metal, Secondary Traffic Others, and Food Tobacco			
Major Freight Generators	Tonnage (3)	Chevron Pascagoula Refinery, Holden Earth Moving & Construction, Mississippi Phosphates Corp, Du Pont, Mallette Brothers Construction Co, Allied Waste Svc			
Top 10 Statewide Freight Counties Served		Jackson, Harrison			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	15 miles (19%) congested: - Exit 24 (Firetower Rd) to Exit 28 (County Farm Rd) - Exit 50 (Washington Ave) to Exit 68 (MS 613)	100% of CSX M&M Subdivision supports 286k	Authorized channel depth vs actual depth	64% in 2008 (MSGM&TS)
	2040	72 miles (93%) congested: - Exit 2 (LA Stateline) to Exit 28 (County Farm Rd) - Exit 31 (Canal Rd) to Exit 45 (I 110) - Exit 50 (Washington Ave) to Exit 75 (AL Stateline)			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 75 8 miles (10%) across the corridor with high crash segments.	35 crossings of 72 (49%) do not have Active 2 warning devices.		
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 95% 4 miles (5%) of I-10 unacceptable. High IRI > 95 segments: - From Louisiana Stateline to Shuttle Pkwy/Exit 1 - From US 49/Exit 34 to Shriners Blvd/Exit 41 - Entire I-110 connector unacceptable	100% of track meets freight rail speed standards		
	Vertical clearance	1 of 9 bridges (11%) deficient			
	Weight-restricted bridges	0 of 66 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service**: Today I-10 provides acceptable LOS outside of a few short congested segments (most notably I-10/US 49 interchange), but is forecast to experience growing congestion and delay along the entire corridor by 2040. Portions of I-10 have been widened but more capacity expansion is needed to accommodate freight and passenger travel demand. Additional capacity improvements are needed on I-110 given its high congestion levels. **Safety**: I-10 overall is a safe highway corridor. **Operations**: ITS deployments contribute to relatively smooth corridor operations today. **Physical Condition**: Only a few I-10 miles are unacceptable with capacity rather than condition posing more challenges. Low vertical clearance might impact interstate freight flows at one bridge location. **Primary Access Routes**: I-110 pavement condition is unacceptable.	**Capacity**: The CSXT mainline and key connectors within the corridor can all handle 286k weight limit. **Safety**: Half of the railroad crossings on the CSXT mainline do not have Active 2 warning devices. **Physical Condition**: CSXT mainline track meets freight rail speed standards.	For MS Gulf Coast ports to remain competitive, need for new or improved last-mile access roads to ports, with particular focus on physical and operating conditions at the 6 existing and 1 proposed NHS Intermodal Connectors.	Last-mile roadway access improvements can improve freight flows in and out of Gulfport-Biloxi International Airport. V/C need to be maintained below 100% to avoid capacity shortfall - currently GPT comfortably meets the criteria.
Potential Freight Improvement Projects	I-10: add 2 lanes each direction for entire length (MDOT STIP/Preliminary Priority List). I-10/I-110 and I-10/US 49 interchanges: capacity and interchange improvements. I-110: pavement reconstruction. I-110: construct new interchanges at Stewart Rd, Old Fort Bayou Rd, and Stone crest Rd (Gulf Coast MTP). Construct East Harrison County connector (from US 90 to I-10) to enhance freight access (MDOT Preliminary Priority List). Raise I-10 bridges (1) to provide 16' clearance. Finalize deployment of the Gulf Region Incident Management System ITS improvements along the Gulf Coast.	Improve operating speeds, reliability, and safety along the CSXT mainline: upgrade warning devices with signals and gates in Biloxi: crossings at Iroquois, Seal, Magnolia, and Nixon; and Long Beach: crossing at N. Lang Ave. (MS State Rail Plan). Upgrade all public corridor crossings along the CSXT mainline with Active 2 warning devices.	Construct new road access to Port of Gulfport : from I-10 via MS 601/Canal Rd - to Port of Gulfport (MULTIPLAN 2035). Consider and prioritize improvements to the identified corridor NHS connectors in highway project programming due to their role in providing roadway access to ports. Replace CSXT bridge over Pearl River - access to Port of Bienville (MS State Rail Plan).	None identified

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

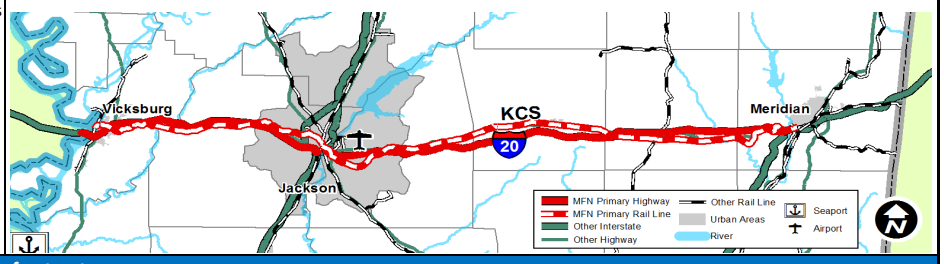
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier I: I-20 / KCS (Vicksburg-Jackson-Meridian) Corridor

General Description

The I-20 / KCS Corridor runs east-west across the state along I-20. Of all MFN corridors, the Vicksburg-Jackson-Meridian Corridor is projected to experience the largest percentage increase in annual freight flows until 2040. The corridor spans six counties in Mississippi between the Louisiana border near Vicksburg and Alabama and includes two of the top five most populated counties in the state, Hinds and Rankin. The six counties accounted for 19% of the total state population and 23% of total employment in 2013. The primary east-west highways within the corridor are I-20 and US 80. The corridor includes the KCS rail line running parallel to I-20. The Meridian Speedway extends 320 miles from Meridian to Shreveport, Louisiana. The Port of Vicksburg is the corridor's primary river port, located at the confluence of the Mississippi and Yazoo rivers. Jackson-Evers International Airport is the commercial airports serving the Vicksburg-Jackson-Meridian Corridor. The corridor freight flows are expected to grow at annual rate of 1.6% until 2040. Truck and rail freight dominate the total corridor freight tonnage. Truck mode is expected to grow from 47% in 2011 to 52% in 2040. The primary commodities shipped in the corridor are chemicals, petroleum, and coal.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	I-20 from Louisiana border to Meridian (141 miles)	KCS mainline (Meridian Speedway) from Louisiana border to Meridian, parallel to I-20 (138 miles)	Port of Vicksburg	Jackson International Airport
Key Connectors	I-220 between I-55 and I-20 in Jackson	Mississippi Southern Railroad (MMS) from junction with KCS at Newton to Bay Springs	To Port of Vicksburg : from I-20, west on Clay St, Cherry St, & 1st East St, north on Washington, west on Haining Rd, and northwest on Industrial Dr to port (NHS Intermodal Connector)	MS 475 / Airport Rd (north) connecting I-20 to Jackson International Airport (NHS Intermodal Connector)
	US 51 between I-55 and I-20	Meridian and Bigbee Railroad (MNBR) - 145-mile line bridges the Alabama-Mississippi state line and provides direct connections with major carriers: KCS, NS, CSXT, and BNSF.		
	MS 27 between US 80 and I-20 (MS 27 is also its own Tier II corridor)	Vicksburg Southern Railroad (VSOR) - connection to Port of Vicksburg		
Existing ITS Deployments	WIM; PrePass; Jackson Metro Incident Management I / Hurricane Response Project: - CCTV cameras - Dynamic Message Signs Mississippi River I-20 bridge in Vicksburg ITS monitoring: - Surveillance cameras - Traffic volumes/speeds on approaches - Real Time River Current data sensors - Dynamic Message signs - Detour monitoring			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	45.0 / $78.1	48.1 / $55.5	3.4 / $1.8	< 1 / $1.6
	2040	80.3 / $166.6	69.9 / $101.2	3.2 / $1.2	< 1 / $4.4
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	21.4 / 13.7 / 8.8			
	2040	29.5 / 22.4 / 13.5			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$22.2 / $21.4 / $4.6			
	2040	$41.6 / $43.5 / $7.2			
% Freight Flows by Mode	2011	47%	50%	3%	< 1%
	2040	52%	46%	2%	< 1%
Average % Truck Mix / Average Total Daily Volume	2011	21% / 28,700			
Major Bottlenecks as identified	ATRI (1)	I-55 at I-20 in Jackson I-59 at I-20 in Meridian			
	FAC / Freight User Survey (2)	I-59 at I-20 in Meridian I-20 at the Pearl River Bridge	None identified	None identified	None identified
Top Commodities	Tonnage	Chemicals Petroleum, Coal Minerals, Crude petrol Gas, Secondary Traffic Others, Food Tobacco, and Agriculture			
	Value	Chemicals Petroleum, Fabricated Metal Machinery Equipment, Secondary Traffic Others, Concrete Glass Primary Metal, and Misc Freight			
Major Freight Generators	Tonnage (3)	N Runyon WJ & Son Inc, Akzo Nobel Coatings Inc.			
Top 10 Statewide Freight Counties Served		Hinds, Warren, Rankin			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	3 miles (2%) congested: - Exit 47 (US 49) to Exit 48 (S Pearson Rd) - Exit 40 (MS 18) to Exit 42 (Ellis Ave)	100% of KCS mainline supports 286k	Recovery time from flood or drought to 12' minimum depth	21% in 2008 (MSGM&TS)
	2040	64 miles (41%) congested: - Exit 1 (LA Stateline) to Exit 31 (Williamson Rd) - Exit 35 (Clinton Raymond Rd) to Exit 56 (W Government St) - Exit 59 (US 80) to Exit 68 (MS 43) - Exit 150 (US 11) to Exit 153 (Roebuck Dr)			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 104. 26 miles (17%) across the corridor with high crash segments.	20 crossings of 43 (47%) do not have Active 2 warning devices.		
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 70% 41 miles (26%) unacceptable. High IRI > 95 segments: - US 61/Exit 5 to Brownsville Rd/Exit 27 - Springridge Rd/Exit 36 to Spearson Rd/Exit 48 - Blossom Hill Rd to Lake Norris Rd/Exit 96 - I-59/Exit 149 to US 11/Exit 154	100% of track meets freight rail speed standards.		
	Vertical clearance	11 of 80 bridges (14%) deficient			
	Weight-restricted bridges	0 of 143 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service**: I-20 provides acceptable LOS outside of a few congested segments in the Jackson area. ATRI identified the I-20/I-55 interchange as a major nationwide bottleneck, along with I-20/I-59 interchange in Meridian. Growing congestion is forecasted by 2040, with 41% of the corridor congested. I-20 west and east of Jackson is already in need of capacity and interchange improvements based on congestion analysis and also according to the FAC. No segments of I-20 are programmed to be widened. **Safety**: I-20 overall is a relatively safe highway corridor. **Operations**: The corridor is a significant national and regional freight link for through and regional freight, with freight destined for Jackson area and Meridian, and through freight travelling between northeastern states in the U.S. to Texas, New Orleans, and beyond. The recently implemented ITS bridge and detour monitoring across Mississippi River in Vicksburg increase truck volumes/speeds on approaches. **Physical Condition**: I-20 does not meet Tier I pavement condition criteria, with IRI rating better than 95 for less than 75% of primary route miles - 70%. 26% of I-20 pavement miles are unacceptable but overall condition is not an issue. Low vertical clearance might impact interstate freight flows, with 14% of I-20 bridges deficient.	**Capacity**: The KCS mainline handles 286k weight limit. **Safety**: Half of the railroad crossings on this busy freight rail corridor do not have Active 2 warning devices. **Physical Condition**: KCS mainline track meets freight rail speed standards.	I-20 via US 61 provides critical access to the Port of Vicksburg.	Last-mile roadway access improvements can improve freight flows in and out of Jackson International Airport. V/C need to be maintained below 100% to avoid capacity shortfall - currently Jackson airport comfortably meets the criteria.
Potential Freight Improvement Projects	I-20 widening projects: - Mississippi River west to Brownsville Rd/Exit 27 (MDOT Preliminary Priority List) - I-220 interchange to Pearl River Bridge (MDOT Preliminary Priority List) - I-59/Exit 149 to US 11/Exit 154 Raise I-20 bridges (11) to meet 16' clearance performance standard. Leverage Jackson Metro Incident Management II/Hurricane Response Project to include expanded commercial vehicle elements.	KCS: rail crossings in Vicksburg at Crawford St and Depot St: upgrade warning devices with signals and gates (MS State Rail Plan). Upgrade all public corridor crossings along the KCS mainline with Active 2 warning devices.	None identified	None identified

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

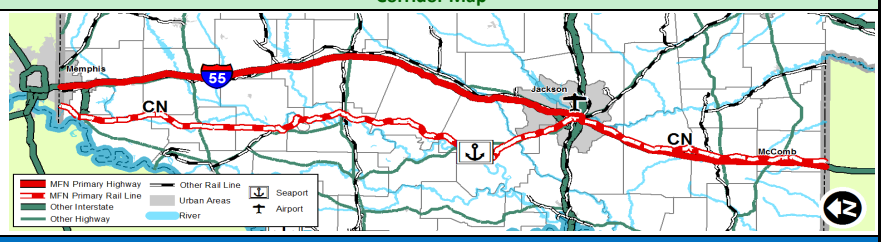
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier I: I-55 / CN (Southaven-Jackson-McComb) Corridor

General Description

The I-55 / CN Corridor consists of 19 counties and includes Jackson, the largest city in Mississippi and its capital. One-third of Mississippi's population and available jobs are located within this corridor, particularly Hinds, Desoto, Madison, and Rankin counties that alone account for 66% of the total population within the corridor and 73% of its employment force. With the state capital located within the corridor, the government is the leading source of jobs. The I-55 / CN Corridor is the most heavily traveled freight corridor in Mississippi, with 139 million tons moved by truck or rail along the corridor's counties in 2011. Truck is the dominant freight mode in the corridor and is expected to grow from 58% share in 2011 to 65% in 2040. The rail share is expected to decline from 42% to 35%. To facilitate the freight flows, the corridor's major freight network elements include: Interstate 55 and US 49; the CN rail line; the Jackson and Memphis International Airports; and the Yazoo County Port served by CN rail line. The primary commodities shipped through the corridor are chemical petroleum products and coal.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	I-55 from Tennessee border to Louisiana border (290 miles).	CN mainline between Memphis and New Orleans, entering Mississippi near Memphis and exiting near McComb (305 miles)	Port of Yazoo	Jackson International Airport
Key Connectors	I-69 between I-55 and US 61	IC Railroad in Jackson connectors : -North Connector: from I-55 via N. Mill St, Woodrow Wilson to facility (NHS Intermodal Connector) -South Connector: from I-55 via Pearl/Pascagoula St to Mill St to facility (NHS Intermodal Connector)	To Port of Yazoo: from I-55 via MS 3, River Rd, and Levee Rd to port (NHS Intermodal Connector)	
	I-220 between I-55 and I-20 in Jackson			
	MS 27 between I-55 and Hopewell Road			
	MS 28 between I-55 and Bailey Road			
	MS 7 between I-55/ Grenada and Greenwood	The Grenada Railway, LLC (GRYR) from Tennessee state line to Canton (runs parallel to I-55)		
	MS 315 between US 51 and I-55	CN Class I line from Jackson to Canton (parallel to I-55)		
	US 278 between MS 35 and I-55			
	Paper Mill Road (Grenada) between Resolute Forest Products Plant and I-55			
	MS 6 / US 278 west of US 61 to I-55			
Existing ITS Deployments	WIM Jackson Metro Incident Management I / Hurricane Response Project: - CCTV cameras - Dynamic Message Signs Desoto County Incident Management Project: Phase 1: - CCTV cameras - Dynamic Message Signs			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	80.6 / $116.9	58.9 / $62.7	< 1 / < $1	< 1 / $1.6
	2040	134.7 / $216.1	71.0 / $115.2	< 1 / < $1	< 1 / $4.4
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	22.0 / 17.6 / 15.7			
	2040	31.7 / 31.5 / 29.3			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$26.7 / $27.5 / $5.9			
	2040	$50.1 / $57.5 / $9.5			
% Freight Flows by Mode	2011	58%	42%	< 1%	< 1%
	2040	65%	35%	< 1%	< 1%
Average % Truck Mix / Average Total Daily Volume	2011	16% / 26,200			
Major Bottlenecks as identified	ATRI (1)	I-55 at I-20 in Jackson			
	FAC / Freight User Survey (2)	Tier I: I-55/I-20 interchange in Jackson I-55: between Ridgeland and Madison; between McDowell Rd and Savanna St. in Jackson MS 6 / US 278 west to US 61 from I-55/Batesville.	CN line from Jackson to Memphis via Grenada (short rail line parallel to I-55)	None identified	None identified
Top Commodities	Tonnage	Coal Minerals, Crude petrol Gas, Chemicals Petroleum, Food Tobacco, Secondary Traffic Others, and Agriculture			
	Value	Chemicals Petroleum, Fabricated Metal Machinery Equipment, Misc Freight, Food Tobacco, and Concrete Glass Primary Metal			
Major Freight Generators	Tonnage (3)	Oddee Smith & Sons Construction, Green Brothers Gravel Co, Krystal Gravel Co, Krystal Gravel Pit, Blain Sand & Gravel Inc, Hammett Gravel Co Inc, D & B Sand & Gravel Inc, Memphis Stone & Gravel, Smith Brothers Sand & Gravel, Eaton Corp, H H Petermann Jr Sand & Gravel, Resolute Forest Products, MMC Materials Inc.			
Top 10 Statewide Freight Counties Served		Hinds, Copiah, Rankin, Yazoo			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	8 miles (3%) congested: - Exit 104 (I-220) to Exit 105 (Natchez Rd) - Exit 92 (E McDowell Rd) to Exit 98 (Lakeland Dr)	100% of CN mainline supports 286k	Recovery time from flood or drought to 12' minimum depth	21% in 2008 (MSGM&TS)
	2040	66 miles (23%) congested: - Exit 265 (E Main St) to Exit 287 (Church Rd) - Exit 91 (Wynndale Rd) to Exit 119 (W Peace St) - Exit 72 (MS 27) to Exit 78 (Green Gold Rd) - Exit 61 (MS 28) to Exit 65 (W Gellman)			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 109 38 miles (13%) across the corridor with high crash segments.	29 crossings of 81 (36%) do not have Active 2 warning devices		
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 69% 90 miles (31%) unacceptable. High IRI > 95 segments: - E. Commerce St./Exit 280 to MS 740/Exit 263 - MS 35 N/Exit 245 to Exit 233 - MS 35/Exit 174 to MS 12/Exit 156 - I-220/Exit 104 to E. County Line Rd/Exit 103 - E Woodrow Wilson Ave/ Exit 98 to Green Gable Rd/Exit 78 - US 98/Exit 20 to MS 584/Exit 1	Does not meet track speed standards in Greenwood area and north of Jackson.		
	Vertical clearance	26 of 113 bridges (23%) deficient			
	Weight-restricted bridges	0 of 237 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service:** I-55 provides acceptable LOS outside of some congested segments in the Jackson area, notably its interchanges with I-20 and I-220. Growing congestion by 2040, with nearly one quarter of the corridor congested. Completion of the I-69/I-269 should relieve congestion in the southern Memphis area, especially west to US 61 from I-55/Batesville, identified by the FAC as a bottleneck. I-55 south and north of Jackson is in need of capacity and interchange improvements, based on congestion analysis. Portions of I-55 are programmed to be widened. This should alleviate congestion for both passenger and freight traffic, but more widening will be needed in the future to accommodate freight demand. **Safety:** I-55 overall is a relatively safe highway corridor. **Operations:** The corridor's extensive connectivity makes it a significant national link for through freight, with connections between Memphis, Jackson, and down to New Orleans. The percentage of trucks as a used freight mode in the corridor is forecasted to increase by 2040. The I-55/I-20 interchange is a critical interchange in the region, and is also identified as one of the top highway bottlenecks nationwide by ATRI. **Physical Condition:** The corridor does not meet Tier I pavement condition criteria, with IRI rating better than 95 for less than 75% of primary route miles - 69%. Condition of 31% of I-55 pavement miles is unacceptable - the most percentage of all Tier I Corridors, but overall capacity rather than condition is posing more challenges. Low vertical clearance might impact interstate freight flows, with 23% of I-55 bridges deficient.	**Capacity**: The CN mainline handles 286k weight limit. **Safety**: 36% the railroad crossings on this busy freight rail corridor do not have Active 2 warning devices, but the mainline does not intersect many busy highways since it does not run parallel to I-55. **Physical Condition**: FRA track speed standards are not met north of Jackson and in Greenwood area.	Last mile rail access to Port of Yazoo is an issue.	Last-mile roadway access improvements can improve freight flows in and out of Jackson International Airport. V/C need to be maintained below 100% to avoid capacity shortfall - currently Jackson airport comfortably meets the criteria.
Potential Freight Improvement Projects	I-55 - widening and repaving: - I-220/Exit 104 to E. County Line Rd/Exit 103 in Jackson - Hernando/Exit 283/I-269 to South Haven/TN State Line (MDOT STIP / Preliminary Priority List & MULTIPLAN 2035) Raise I-55 bridges (26) to meet 16' clearance performance standard. Leverage Desoto County Incident Management Project to include expanded commercial vehicle elements. Installation of additional ITS Phases of the Desoto County Incident Management Project, including expanded commercial vehicle elements.	CN mainline core track improvements in Greenwood and north of Jackson to to raise line speed. Upgrade all public corridor crossings along the CN mainline with Active 2 warning devices.	Implement Port of Yazoo rail access improvements: resurface grade crossings and rehabilitate trackage. (MS State Rail Plan).	None identified

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

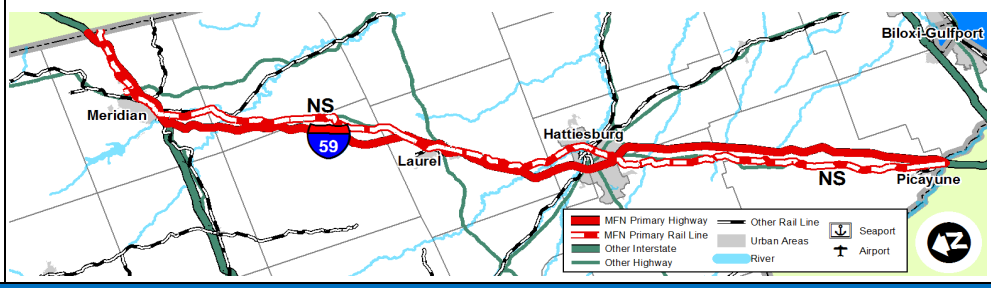
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier I: I-59 / NS (Picayune-Hattiesburg-Meridian) Corridor

General Description

The I-59 / NS Corridor spans seven Mississippi counties including the cities of Hattiesburg and Meridian, the state's third and sixth largest city, respectively. In 2013, an estimated 13% of the state's total population resided within the corridor, compared to 12% of the total statewide employment. Through freight accounts for 75% of the total corridor freight, the highest share of all the MFN corridors. Freight flows along the Picayune-Hattiesburg-Meridian Corridor are expected to grow at 1.2% annually until 2040. Truck is the dominant mode with 75% of the total corridor freight tonnage, with the rest associated with the rail mode. The primary highways running through this corridor are I-59 and US 11. By 2040 nearly half of the corridor's length along I-59 is expected to be congested. Major rail lines serving the corridor include the NS mainline, which parallels I-59 and has major interchanges with the CN at Hattiesburg and with KCS in Meridian, where it interchanges with the Meridian Speedway. The primary commodities shipped through the corridor are chemical petroleum products, followed by coal and crude oil.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	I-59 from Louisiana border to Alabama border (170 miles)	NS Crescent Corridor mainline between Meridian and New Orleans, exiting Mississippi near Picayune, parallel to I-59 (171 miles)		
Key Connectors	MS 43 between Pine Grove Road and I-59	Meridian Southern Railway (MDS) - former KCS branch line between Meridian and Waynesboro		
Existing ITS Deployments	WIM			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	86.2 / $124.3	28.8 / $36.4		
	2040	119.9 / $207.5	41.8 / $64.5		
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	13.6 / 10.4 / 5.4			
	2040	18.5 / 14.1 / 8.4			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$10.9 / $14.1 / $4.1			
	2040	$19.8 / $21.9 / $6.2			
% Freight Flows by Mode	2011	75%	25%		
	2040	74%	26%		
Average % Truck Mix / Average Total Daily Volume	2011	16% / 17,400			
Major Bottlenecks as identified	ATRI (1)	I-59 at I-20 in Meridian			
	FAC / Freight User Survey (2)	I-59 at I-20 in Meridian	None identified		
Top Commodities	Tonnage	Chemicals Petroleum, Coal Minerals, Crude petrol Gas, Secondary Traffic Others, Food Tobacco, and Concrete Glass Primary Metal			
	Value	Chemicals Petroleum, Fabricated Metal Machinery Equipment, Concrete Glass Primary Metal, Food Tobacco, and Misc Freight			
Major Freight Generators	Tonnage (3)	Johnston's Sand & Gravel, Hutchinson Island Mining Corp, John L Sanford Jr Inc, Sei Seal Enterprises Inc, Huey Stock Still, Hover Gravel Co, Sanderson Farms Inc, Customs Abrasives LLC, American Sand & Gravel Co.			
Top 10 Statewide Freight Counties Served		None			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	0 miles (0%) congested	100% of NS mainline supports 286k.		
	2040	35 miles (22%) congested: - Exit 1 (LA Stateline) to Exit 6 (Sycamore Rd) - Exit 59 (US 98) to Exit 85 (MS 590) - Exit 93 (Ellisville Blvd) to Exit 95 (US 11)			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 95 21 miles (14%) across the corridor with high crash segments.	7 crossings of 30 (23%) do not have Active 2 warning devices.		
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 88% 19 miles (12%) unacceptable. High IRI > 95 segments: - Louisiana Stateline to Exit 1 - Monroe Rd/Exit 73 to Moselle Seminary/Exit 80 - Ellisville Blvd/Exit 93 to US 11/Exit 99	Does not meet track speed standards in Laurel and Picayune areas.		
	Vertical clearance	7 of 48 bridges (15%) deficient			
	Weight-restricted bridges	0 of 89 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service**: I-59 provides acceptable LOS with no existing congestion. By 2040, the facility is forecasted to experience congestion along 35 miles (22%): in the Hattiesburg, Laurel, and Picayune areas. ATRI also identified the I-59/I-20 interchange in Meridian at the northern terminus of this corridor as one of the major nationwide bottlenecks. No segments of I-59 are programmed to be widened. **Safety**: I-59 overall is a relatively safe highway corridor. **Operations**: The corridor is a significant national freight link for through freight, with freight destined for New Orleans and states northeast of Mississippi. The I-59/I-20 interchange is one of the critical interchanges in the region, and also identified as one of the top highway bottlenecks nationwide by ATRI. **Physical Condition**: 12% of I-59 pavement miles are unacceptable but overall condition is not an issue. Overall, the I-59 corridor is in the best physical shape of all Tier I corridors. Low vertical clearance might impact interstate freight flows - 15% of I-59 bridges are deficient.	**Capacity**: The NS mainline is part of the Crescent Corridor that extends from Louisiana to New Jersey. The NS mainline handles 286k weight limit. **Safety**: A relatively small percentage of railroad crossings along this rail corridor, 23%, do not have Active 2 warning devices. **Physical Condition**: FRA track speed standards are not met in Laurel and Picayune areas.		
Potential Freight Improvement Projects	Raise I-59 bridges (7) to meet 16' clearance performance standard. Leverage deployment of the Hattiesburg region ITS Incident Management System & TMC Operations to include expanded commercial vehicle elements.	NS mainline core track improvements in Laurel and Picayune areas to raise line speed. Upgrade all public corridor crossings along the NS mainline with Active 2 warning devices.		

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

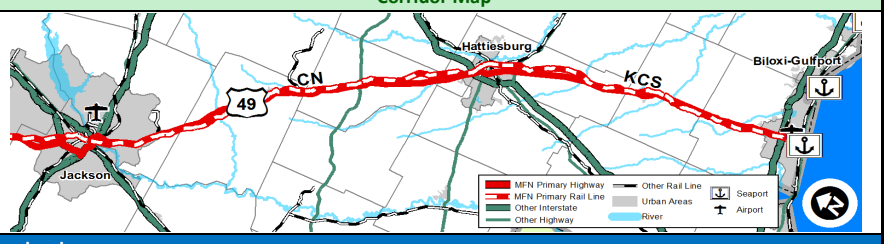
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger). Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier I: US 49 / CN / KCS (Jackson-Hattiesburg-Gulfport) Corridor

General Description

The US 49/CN Corridor runs through central Mississippi, between Jackson and Gulfport, and includes Hattiesburg. The nine counties within the corridor account for 18% of both the total population and statewide employment. Rail is the dominant mode in this corridor and accounts for over 50% of total freight tonnage, followed by truck with 42%. Significant increase in congestion is expected along the corridor's primary highway, US 49, with 57% of the facility's length becoming congested by 2040. The corridor includes the CN rail line running along US 49 between Jackson and Hattiesburg (it continues along US 98 from Hattiesburg to the Alabama border). The KCS line runs between Hattiesburg and Gulfport along US 49. The Jackson-Evers International Airport provides freight aviation services while the Port of Gulfport is the deep water port serving the area. Corridor freight flow is expected to grow at 1.5% annually until 2040. The primary commodities shipped through the corridor are chemical petroleum products and coal.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	US 49 from Jackson to Gulfport via Hattiesburg (154 miles)	CN Beaumont Subdivision between Jackson and Hattiesburg. KCS Gulfport Subdivision between Hattiesburg and Gulfport. (161 miles total).	Port of Gulfport	Gulfport-Biloxi International Airport Jackson International Airport
Key Connectors	NHS Connector to the corridor's Port of Gulfport (listed under 'Ports & Waterways')	KCS branch to DuPont and Bayou Concrete Plant	To Port of Gulfport from I-10 via US 90: port access road (NHS Intermodal Connector) To Port of Gulfport from I-10 via US 90: West Pier Gate to 27th Avenue (NHS Intermodal Connector)	To Gulfport-Biloxi International Airport: US 49 and Airport Rd/34th Street to airport (NHS Intermodal Connector)
Existing ITS Deployments	Jackson Metro Incident Management I / Hurricane Response Project: - CCTV cameras - Dynamic Message Signs Gulf Region Incident Management System: - CCTV cameras - Dynamic Message Signs			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	32.7 / $53.6	42.5 / $62.0	3.6 / $0.3	< 1 / $1.6
	2040	51.7 / $102.7	63.4 / $113.0	7.3 / $1.5	< 1 / $4.4
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	20.4 / 10.6 / 7.6			
	2040	30.8 / 16.9 / 12.3			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$18.3 / $15.8 / $6.3			
	2040	$35.8 / $27.2 / $8.7			
% Freight Flows by Mode	2011	42%	54%	5%	< 1%
	2040	42%	52%	6%	< 1%
Average % Truck Mix / Average Total Daily Volume	2011	10% / 20,700			
Major Bottlenecks as identified	ATRI (1)	None			
	FAC / Freight User Survey (2)	US 49: between I-20 and Star; between Hattiesburg and Port of Gulfport	None identified	None identified	None identified
Top Commodities	Tonnage	Chemicals Petroleum, Coal Minerals, Crude petrol Gas, Food Tobacco, Concrete Glass Primary Metal, and Agriculture			
	Value	Chemicals Petroleum, Fabricated Metal Machinery Equipment, Misc Freight, Concrete Glass Primary Metal, and Food Tobacco			
Major Freight Generators	Tonnage (3)	John L Sanford Jr Inc, Sanderson Farms, Hover Gravel Co, Hood Industries, American Sand & Gravel Co.			
Top 10 Statewide Freight Counties Served		Harrison, Rankin			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	9 miles (6%) congested: - I-20 to E Main St/MS 469 - Oneal Rd north of I-10 to Airport Rd south of I-10	CN Beaumont Subdivision and KCS Gulfport Subdivision both support 286k limits.	Authorized channel depth vs actual depth	Jackson: 21% in 2008 (MSGM&TS) Gulfport: 64% in 2008 (MSGM&TS)
	2040	46 miles (30%) congested: I-20 to Star Rd; Old Hwy 49 N to Richland Cir; Gunter Rd to E Main St; Zion Hill Rd to Pinola Rd; Rock Hill Rd to US 84; Main St to Kola Rd; MS 42 to Old HWY 42/Campbell Dr; Hardy St to Elks Lake Rd/Edwards St; E. Wrotham Rd to Dedeaux Rd; Landon Rd to Beach Blvd/US 90			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 364 Corridor does not meet Tier I safety performance criteria. 40 miles (26%) across the corridor with high crash segments.	38 crossings of 49 (78%) do not have Active 2 warning devices.		
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 70% 46 miles (30%) unacceptable. High IRI > 95 segments: - I-20 to MS 149 - Cascio Rd to Peps Point Rd - W 7th St to MS 198 - Southgate Rd to Carnes Rd - Old Hwy 49 to MS 53/N Swan Rd - I-10 to US 90	Sections of CN mainline and sections of KCS mainline in Wiggins and south of I-10 in Gulfport do not meet track speed standards.		
	Vertical clearance	10 of 13 bridges (77%) deficient			
	Weight-restricted bridges	2 of 71 (3%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service**: US 49 provides acceptable LOS today, with only short congested segments. The FAC identified multiple sections of the highway as existing bottlenecks though, including Jackson, Richland, Hattiesburg, and Port of Gulfport areas. The FAC also recommended that US 49 should be upgraded to Interstate standards from Hattiesburg to Gulfport. By 2040, the facility is forecasted to experience congestion along 46 miles (30%). Segments of US 49 are programmed to be widened, most notably in the Florence area south of Jackson. **Safety**: US 49 is the only Tier I corridor that does not meet safety performance criteria. Crash rate is very high - more than triple Tier I corridor average. **Operations**: The corridor is a significant statewide and regional freight link with freight destined for Jackson area from the Gulf Coast and vice-versa. There are no existing ITS deployments outside of Jackson area. **Physical Condition**: The corridor does not meet Tier I pavement condition criteria, with IRI rating better than 95 for less than 75% of primary route miles - 70%. 26% of US 49 pavement miles are unacceptable but overall condition is not an issue. This is the worst faring Tier I corridor by bridge clearance, with 77% of bridges deficient and potentially impacting freight flows. US 49 is the only Tier I corridor with weight-restricted bridges, although small (2 of 71 bridges).	**Capacity**: the CN and KCS mainlines handle 286k weight limit. **Safety**: 78% the railroad crossings on this busy freight rail corridor do not have Active 2 warning devices. **Physical Condition**: the CN mainline and sections of KCS mainline do not have active or passive warning devices.	Last mile roadway and rail connection is critical for the Port of Gulfport to remain competitive, need for new or improved last-mile access roads to ports, with particular focus on their physical and operating conditions. US 49 provides the critical link between I-10, US 90, and to the Port of Gulfport. KCS provides rail access to the port's vicinity, but not directly to the facility.	Last-mile roadway access improvements can improve freight flows in and out of Gulfport-Biloxi International Airport and Gulfport-Biloxi International Airport. V/C need to be maintained below 100% to avoid capacity shortfall - currently both airports within the corridor comfortably meet the criteria.
Potential Freight Improvement Projects	Repaving and widening of US 49 from I-10 to US 90 (MDOT STIP/Preliminary Priority List). Repaving and widening of US 49 from I-20 to Star Rd in Star (MDOT STIP/Preliminary Priority List). Repaving and widening US 49 from School Rd to O'Neal Rd in Gulfport - to 6 lane divided. I-10/US 49 interchange: capacity and interchange improvements. Safety improvements along US 49. Raise US 49 bridges (10) to meet 16' clearance performance standard. Reconstruct two US 49 bridges to lift weight restrictions. Leverage deployment of Hattiesburg region ITS Incident Management System & TMC Operations to include expanded commercial vehicle elements. Finalize deployment of the Gulf Region Incident Management System ITS improvements along the Gulf Coast.	CN mainline and KCS mainline in Gulfport and Wiggins track improvements to raise line speed. Upgrade all public corridor crossings along the KCS and NS mainlines with active 2 warning devices.	Develop rail access directly into Port of Gulfport facility (MS State Rail Plan).	None identified

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

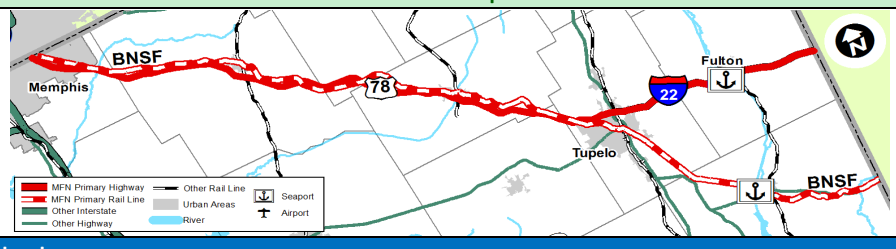
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier I: US 78 (I-22) / BNSF (Olive Branch-Tupelo-Fulton) Corridor

General Description

The US 78 (I-22) / BNSF Corridor runs from Olive Branch to the Alabama border along US 78 (I-22) and the BNSF rail line, passing through eight counties in northern Mississippi. These counties account for 14% of total population and 13% of total employment across the state. The corridor freight tonnage is expected to grow 1.3% annually. Rail freight was the dominant mode in 2011, accounting for 66% of the total corridor freight. However, truck freight is expected to grow its modal share from 33% in 2011 to 51% in 2040. By 2040, it is expected that 88% of US 78 within the corridor will be congested. Key transportation infrastructure in this corridor includes I-22 and US 78. The corridor runs parallel to BNSF main line that connects to the KCS in Tupelo and CN in Memphis. The primary commodities shipped through the corridor are coal, crude oil, and chemicals.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	US 78 / I-22 from Tennessee border to Alabama border (118 miles)	BNSF mainline between Memphis, TN and Birmingham, AL (130 miles)	Port of Amory, Port of Itawamba	
Key Connectors	US 278 between Amory and US 78	Mississippi Central Railroad Company (MSCI) from Oxford, connecting with BNSF at Holly Springs and NS at Grand Junction, Tennessee	To Port of Amory: I-22 to US 45: east on US 278, north on Waterway Dr, west on Port Access Road to port (NHS Intermodal Connector)	
	MS 15 between US 78 and Blue Mountain	Mississippi Tennessee Railroad (MTNR) runs from connections with BNSF and KCS at New Albany to Falkner.	To Port of Itawamba: from US 78: north on MS 25, west on South Access Route to port (NHS Intermodal Connector)	
	MS 302 from I-55 to US 78	R.J. Corman-Tennessee Terminal (RJCK) running east from junction and interchange with BNSF at Olive Branch		
		The Mississippian Railway Cooperative (MMSW) - northeast from BNSF connection in Amory to Fulton		
Existing ITS Deployments	PrePass; WIM			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	24.7 / $37.7	48.7 / $44.4	0.4 / $0.2	
	2040	54.9 / $80.9	52.8 / $78.7	0.8 / $0.2	
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	12.4 / 8.1 / 2.4			
	2040	21.4 / 16.2 / 5.3			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$8.4 / $12.5 / $2.3			
	2040	$14.6 / $25.9 / $2.5			
% Freight Flows by Mode	2011	33%	66%	1%	
	2040	51%	49%	1%	
Average % Truck Mix / Average Total Daily Volume	2011	11% / 18,400			
Major Bottlenecks as identified	ATRI (1)	None			
	FAC / Freight User Survey (2)	None identified	None identified	None identified	
Top Commodities	Tonnage	Coal Minerals, Crude petrol Gas, Chemicals Petroleum, Agriculture, Secondary Traffic Others, and Food Tobacco			
	Value	Fabricated Metal Machinery Equipment, Chemicals Petroleum, Misc Freight, Secondary Traffic Others and Food Tobacco			
Major Freight Generators	Tonnage (3)	Axiall Corp, Profile Products LLC, Mississippi Gravel Sales Inc			
Top 10 Statewide Freight Counties Served		Monroe			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	0 miles (0%) congested	100% of BNSF mainline supports 286k.	Recovery time from flood or drought to 12' minimum depth	
	2040	37 miles (31%) congested: - Exit 1 (Craft Rd) to Exit 4 (Cockrum Rd) - Exit 6 (Bethel Rd) to Exit 26 (Landfill Rd) - Exit 30 (MS 4) to Exit 37 (CCC Rd) - Exit 76 (MS 9) to Exit 81 (MS 178) - Exit 85 (Natchez Trace Pkwy) to Exit 94 (MS 371)			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 65 13 miles (11%) across the corridor with high crash segments.	10 crossings of 21 (48%) do not have Active 2 warning devices.		
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 70% 36 miles (30%) unacceptable. High IRI > 95 segments: - Red Bank Rd to Landfill Rd - Sawmill Rd to MS 178 - MS 30 to MS 15 - MS 25 to Alabama Stateline	Meets track speed standards outside of one track segment in Tupelo.		
	Vertical clearance	1of 51 bridges (2%) deficient			
	Weight-restricted bridges	0 of 113 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service**: Today US 78 provides acceptable LOS, but is forecast to experience growing congestion and delay by 2040, with 31% of the corridor congested, notably in the Memphis area, and around Tupelo. Conversion of US 78 to I-22 west all the way to Memphis should improve future LOS for both passenger and freight traffic. **Safety**: US 78 is a very safe highway corridor. It is the safest Tier I corridor overall. **Operations**: The corridor is an important regional freight link from Memphis, a major national freight hub, to northeastern MS, including Tupelo, and to points east in Alabama. Converting US 78 to interstate standards will improve operations along the corridor, with average truck travel speed bound to increase. **Physical Condition**: The corridor does not meet Tier I pavement condition criteria, with IRI rating better than 95 for less than 75% of primary route miles - 70%. Large portion of the corridor, 30%, has unacceptable pavement condition. Low vertical clearance might slightly impact freight flows, with only one bridge not meeting this performance measure.	**Capacity**: Rail freight flows are more dominant on a percentage basis than truck freight flows within the corridor (66% vs. 33%). 100% of the BNSF mainline can handle 286k weight limit. **Safety**: 48% of the railroad crossings along this rail corridor do not have Active 2 warning devices. **Physical Condition**: FRA track speed standards are met outside of one section in the Tupelo area.	Last mile rail and roadway access is critical for the two river ports located within the corridor. The river ports are not served directly by US 78, but rather via collectors - in both cases NHS Intermodal Connectors. Rail access to Port of Itawamba is provided by the Mississippian Railway Cooperative connecting to the BNSF mainline, while Port of Amory currently has no rail access. The quality of last mile access rail service provided by the MMSW depends on the quality of its connection to the BNSF.	
Potential Freight Improvement Projects	US 78 repaving projects: - Exit 1 (Craft Rd) to Exit 37 (CCC Rd) - Exit 76 (MS 9) to Exit 94 (MS 371) Raise one US 78 bridge to meet 16' clearance performance standard. Development and deployment of the ITS Projects in the Tupelo area, including commercial vehicle elements. Complete conversion of US 78 to I-22 (long term).	BNSF mainline core track improvements in Tupelo to raise line speed. Upgrade all public corridor crossings along the BNSF mainline with Active 2 warning devices.	Port of Amory - BNSF spur: upgrade 12 rail bridges between Amory and Columbus to permit 286K loads and extend rail spur to US 278 bridge (MULTIPLAN 2035 and MS State Rail Plan). Port of Itawamba (MMSW): rehabilitate 23 miles of rail line from Fulton to Amory to handle 286k carload weights (MS State Rail Plan). US 278 - US 45: widen to 4 lanes to Port of Amory (MULTIPLAN 2035).	

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier I: Mississippi River (Port of Rosedale-Port of Natchez) Corridor

River

Waterborne freight movement along Mississippi River provide Mississippi with access to one of the most affordable forms of freight transportation that tends to relieve highways and rail congestion, has high throughput, is energy efficient, and is a relatively safe way of moving large amounts of freight. The Mississippi portion of the Mississippi River includes the Port of Greenville, Port of Natchez, Port of Rosedale, Port of Vicksburg, Port of Yazoo, and Port of Claiborne County. Nearly 9 million tons of freight flowed through the Mississippi River between Port of Rosedale to Port of Natchez in 2011, of which about 4 million tons originated or terminated in one of six ports in Mississippi. Agriculture, and grain shipments specifically, comprise the largest share of Mississippi River commerce in Mississippi overall, but petroleum products are the largest commodity group handled by Mississippi's ports. Coal, crude oil, concrete glass metals, and fabricated machinery equipment are other primary commodities handled by the six Mississippi River ports in the state.

Corridor Map

Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	US 61 (also Tier II corridor) from Port of Rosedale to Port of Natchez		Mississippi River, Yazoo River; Port of Greenville, Port of Natchez, Port of Rosedale, Port of Vicksburg, Port of Yazoo, and Port of Claiborne County	
Key Connectors	To Port of Greenville: from US 82: 2.8 mi on Harbor Front Road to port (NHS Intermodal Connector)	The Columbus and Greenville Railway (CAGY) serves Port of Greenville		
	To Port of Rosedale: Port Access Rd to Russell Crutcher to MS 8 to US 61 (NHS Intermodal Connector)	The Great River Railroad (GTR) serves Port of Rosedale.		
	To Port of Vicksburg : from US 61/I-20 interchange, west on Clay St, Cherry St, 1st East St, north on Washington, and west on Haining Rd to port (NHS Intermodal Connector)	Vicksburg Southern Railroad (VSOR) - connection to Port of Vicksburg		
	To Port of Natchez: from U.S. 84 / MS 425: Government Fleet Rd to Magnolia Bluff Rd, L.E. Barry Rd to port (NHS Intermodal Connector)	Natchez Railway, LLC (NTZR) - former CN branch to Port of Natchez.		
	To Port of Yazoo: from I-55 via MS 3, River Rd, and Levee Rd to port (NHS Intermodal Connector)	CN mainline to Port of Yazoo		
Existing ITS Deployments	PrePass (US 84 Mississippi River crossing) Four Mississippi River bridges monitoring: US 49 bridge in Lula, Mississippi / Helena, Arkansas; US 82 bridge in Greenville, Mississippi / Lake Village, Arkansas; I-20 bridge in Vicksburg, Mississippi; and US 84 bridge in Natchez, Mississippi / Ferriday, Louisiana: - Surveillance cameras - Traffic volumes/speeds on approaches - Real Time River Current data sensors - Dynamic Message Signs - Detour monitoring			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011			8.7 / $4.0	
	2040			11.4 / $4.9	
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	4.5 / 4.0 / 0.3			
	2040	5.1 / 5.9 / 0.3			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	2.2 / 1.6 / 0.2			
	2040	2.0 / 2.7 / 0.2			
% Freight Flows by Mode	2011			100%	
	2040			100%	
Average % Truck Mix / Average Total Daily Volume	2011				
Major Bottlenecks as identified	ATRI (1)				
	FAC / Freight User Survey (2)	None identified	None identified	None identified	
Top Commodities	Tonnage	Agriculture, Chemicals Petroleum, Coal Minerals, Crude petrol Gas, Concrete Glass Primary Metal, and Fabricated Metal Machinery Equipment			
	Value	Agriculture, Chemicals Petroleum, Coal Minerals, Crude petrol Gas, Concrete Glass Primary Metal, and Fabricated Metal Machinery Equipment			
Major Freight Generators	Tonnage (3)	N Runyon WJ & Son Inc, Monsanto Co, Mars Food US			
Top 10 Statewide Freight Counties Served		Warren, Washington			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011			Recovery time from flood or drought to 12' minimum depth	
	2040				
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)					
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)				
	Vertical clearance				
	Weight-restricted bridges				

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	Highways such as US 61, US 82, US 84 and local connectors provide critical last mile access to the Mississippi River inland ports. I-20 via US 61 provides critical access to the Port of Vicksburg. The recently implemented ITS bridge and detour monitoring across Mississippi River in Vicksburg, Greenville, Natchez, and Lula increase truck volumes/speeds on approaches.	Last mile rail access is an issue for multiple MS River ports served by short lines. Port of Rosedale has no rail access currently, and all other MS River ports are in need of rail access, maintenance, modernization, and capacity improvements.	Mississippi has five public ports immediately adjacent to the Mississippi River, and one accessed from the Mississippi River via the Yazoo River. All are important to the state's economy (although Port of Claiborne County currently does not process any cargo). Inland port alternatives help keep rates for other modes competitive. Beyond Mississippi, inland ports provide feeder service for international and domestic shipments.	
Potential Freight Improvement Projects	Consider and prioritize improvements to the identified corridor NHS connectors in highway project programming due to their role in providing roadway access to the Mississippi River ports. US 61 to Haining Rd./ Port of Vicksburg - new roadway to the port (MULTIPLAN 2035; FAC) US 61 Business / Haining Rd bridge access to Port of Vicksburg - bridge replacement with 4 lane bridge (MULTIPLAN 2035).	Reinstate rail access to the Port of Rosedale. Implement Port of Yazoo rail access improvements: resurfacing grade crossings and rehabilitation of trackage. (MS State Rail Plan).	Encourage continued use of the Port of Vicksburg, Port of Greenville, and Port of Rosedale through promoting highway and rail access to port facilities along the I-20, US 61, and US 82 through the Intermodal Connector Improvement Program.	

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

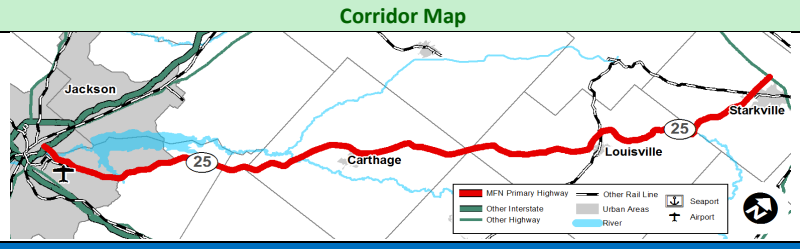
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier II: MS 25 (Jackson-Louisville-Starkville) Corridor

General Description

The MS 25 Tier II Corridor runs northeast from Jackson to Starkville. Truck freight was the dominant mode in 2011, accounting for 51% of the total corridor freight by tonnage. Truck is also the dominant mode in the corridor by the value of moved freight. Truck freight is expected to grow its modal share from 51% in 2011 to 57% in 2040. The corridor currently experiences no congestion and by 2040 less than 10% of its length will be congested. Key transportation infrastructure in this corridor includes MS 25, and Jackson International Airport. There are no mainline rail tracks parallel to MS 25, but KCS mainline from Starkville to Newton provides access to multiple towns along the MS 25 corridor. The primary commodities shipped through the corridor is petroleum chemicals, coal, and crude oil.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	MS 25 from Jackson / I-55 northeast to Starkville / US 82 via Carthage and Louisville (124 miles)			Jackson International Airport
Key Connectors	MS 35 from MS 25 in Carthage to MS 12 in Kosciusko, providing access to Tyson Foods Inc. MS 475 between I-20 and MS 25, providing access to Jackson and Jackson International Airport (NHS Intermodal Connector south of Jackson International Airport)	KCS mainline from West Point south to Newton, serving Starkville and Louisville		
Existing ITS Deployments	None			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	19.7 / $39.7	18.8 / $22.3		< 0.1 / $1.6
	2040	34.7 / $79.7	26.1 / $41.3		< 0.1 / $4.4
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	9.4 / 5.8 / 4.8			
	2040	12.6 / 9.3 / 9.3			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$9.1 / $9.3 / $3.7			
	2040	$18.2 / $19.3 / $6.0			
% Freight Flows by Mode	2011	51%	49%		< 0.1%
	2040	57%	43%		< 0.1%
Average % Truck Mix / Average Total Daily Volume	2011	7% / 8,900			
Major Bottlenecks as identified	ATRI (1)	None			
	FAC / Freight User Survey (2)	Jackson area	None identified		None identified
Top Commodities	Tonnage	Chemicals Petroleum, Coal Minerals, Crude petrol Gas, Food Tobacco, Agriculture, and Secondary Traffic Others			
	Value	Fabricated Metal Machinery Equipment, Concrete Glass Primary Metal, Misc Freight, Food Tobacco, and Chemicals Petroleum			
Major Freight Generators	Tonnage (3)	None			
Top 10 Statewide Freight Counties Served		Rankin			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	7 miles (5%) congested: - I-55 to Luckney Rd			21% in 2008 (MSGM&TS)
	2040	13 miles (10%) congested: - I-55 to MS 471			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 265 Corridor does not meet Tier II safety performance criteria. 22 miles (18%) across the corridor with high crash segments.			
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 89% 14 miles (11%) unacceptable. High IRI > 95 segments: - I-55 to Lakeland Dr - Flowood Dr to Holly Bush Rd - Pisgah Rd to MS 43 - Old Hwy 25 to MS 12			
	Vertical clearance	0 of 9 (0%) restricted			
	Weight-restricted bridges	0 of 73 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service**: MS 25 provides good LOS with only short congested segments in Jackson. Multiple segments of MS 25 in the urban Jackson area are programmed to be widened. **Safety**: MS 25 overall does not meet Tier II safety performance criteria. **Operations**: The corridor passes through a variety of settings, including urbanized Jackson and small towns, Jackson International Airport. Its major interchanges with key statewide facilities (e.g., I-55) allow for quick interstate access. It provides regional connection between Jackson and Starkville /Columbus area. Issues with operations along the corridor are attributed to urban congestion in Jackson, with no issues outside the capitol area. **Physical Condition**: Only 11% of MS 25 pavement miles is unacceptable and overall pavement condition is not an issue. This corridor is one of the few MFN corridors that has no issues with bridge vertical clearance or weight restrictions.			Last-mile roadway access improvements can improve freight flows in and out of Jackson International Airport. V/C need to be maintained below 100% to avoid capacity shortfall - currently Jackson airport comfortably meets the criteria.
Potential Freight Improvement Projects	Repaving and widening of MS 25 from Grants Ferry Rd to MS 471 (MDOT STIP/Preliminary Priority List). Safety improvements along MS 25.			None identified

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

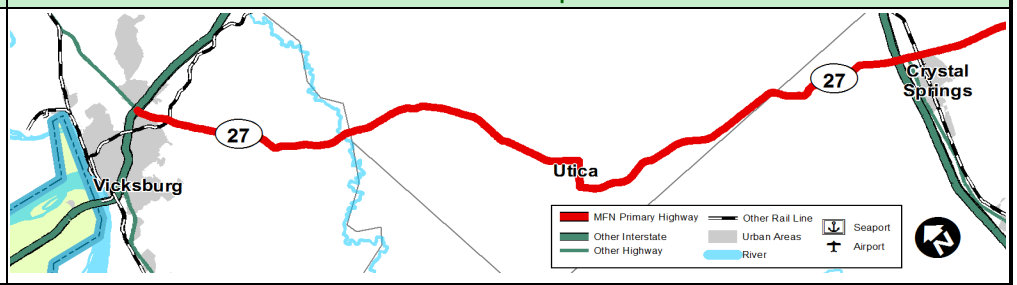
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger). Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier II: MS 27 (Vicksburg-Utica-Crystal Springs) Corridor

General Description

The MS 27 Tier II Corridor runs southeast from Vicksburg to Crystal Springs via Utica. Nearby rail freight was the dominant mode in 2011, accounting for 73% of the total corridor freight by tonnage. Rail is also the dominant mode in the corridor by the value of moved freight. Truck freight is expected to grow its modal share from 21% in 2011 to 26% in 2040. Trucks are able to use MS 27 to connect between I-20 and I-55 within having to drive through Jackson. This bypass of the Jackson area also provides access to some of the largest freight generators by tonnage in the state near the interchange of I-55 and MS 27 in Copiah County. The MS 27 Corridor currently experiences and is forecast to experience no roadway congestion. Key transportation infrastructure in this corridor includes MS 27. Although there are no mainline rail tracks parallel to MS 27, both the KCS mainline flows (running parallel to I-20) and CN mainline flows (parallel to I-55) are captured as part of this corridor's overall flows due to their proximity. The primary commodities shipped through the corridor is coal and other minerals, crude oil, and chemicals petroleum.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	MS 27 from I-20 in Vicksburg to I-55 in Crystal Springs via Utica (41 miles)	No primary rail		
Key Connectors	MS 18 from MS 27 in Utica to MS 467 in Raymond MS 18 from MS 27 in Utica to US 61 in Port Gibson			
Existing ITS Deployments	None			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	10.1 / $14.8	36.0 / $40.9	3.4 / $1.8	
	2040	18.8 / $35.4	51.0 / $47.1	3.2 / $1.2	
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	12.3 / 7.1 / 3.4			
	2040	15.4 / 11.9 / 5.2			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$9.7 / $10.9 / $1.8			
	2040	$16.4 / $27.6 / $2.6			
% Freight Flows by Mode	2011	21%	73%	7%	
	2040	26%	70%	4%	
Average % Truck Mix / Average Total Daily Volume	2011	6% / 3,400			
Major Bottlenecks as identified by	ATRI (1)	None			
	FAC / Freight User Survey (2)	MS 18 between Raymond and Port Gibson			
Top Commodities by	Tonnage	Coal Minerals, Crude petrol Gas, Chemicals Petroleum, Agriculture, Paper Printed Matter, and Food Tobacco			
	Value	Chemicals Petroleum, Misc Freight, Fabricated Metal Machinery Equipment, Secondary Traffic Others, and Concrete Glass Primary Metal			
Major Freight Generators served by	Tonnage (3)	Blain Sand & Gravel Inc, N Runyon WJ & Son Inc.			
Top 10 Statewide Freight Counties Served		Hinds, Warren, Copiah			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	0 miles (0%) congested			
	2040	0 miles (0%) congested			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 316 Corridor does not meet Tier II safety performance criteria. 12 miles (28%) across the corridor with high crash segments.			
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 56% 19 miles (43%) unacceptable. Corridor below Tier II performance target. High IRI > 95 segments: - I-20 to Raxton Rd - Pine St to I-55			
	Vertical clearance	0 of 2 bridges (0%) deficient			
	Weight-restricted bridges	2 of 9 (22%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service:** MS 27 provides good LOS with minimal existing and forecasted congestion. A few segments of MS 25 around MS 18 are programmed to be widened. **Safety:** MS 27 does not meet Tier II safety performance criteria. 28% of corridor miles do not meet the recommended safety standard. **Operations:** The corridor is a significant regional link for trucks bypassing Jackson and also accessing major freight activity centers in the area, particularly near the junction of MS 27 and I-55. It provides a quick short-cut between I-20 and I-55. Issues with operations along the corridor are attributed to congestion in suburban Jackson, with intersecting MS 18 reported to have more issues than MS 27. Increasing urbanization southwest of Jackson in the corridor area might adversely impact truck flows in the future due to potential truck / passenger auto conflicts and capacity constraints. **Physical Condition:** The corridor does not meet Tier II pavement condition criteria, with IRI rating better than 95 for less than 65% of primary route miles - 56%. 43% of MS 27 pavement miles is unacceptable and overall pavement condition is an issue, with pavement condition worst of all Tier II corridors. Weight restricted bridges impact freight flows, with 22% of MS 27 bridges deficient.			
Potential Freight Improvement Projects	Safety improvements along MS 27. MS 27 pavement management program. Reconstruct two MS 27 bridges to lift weight restrictions.			

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

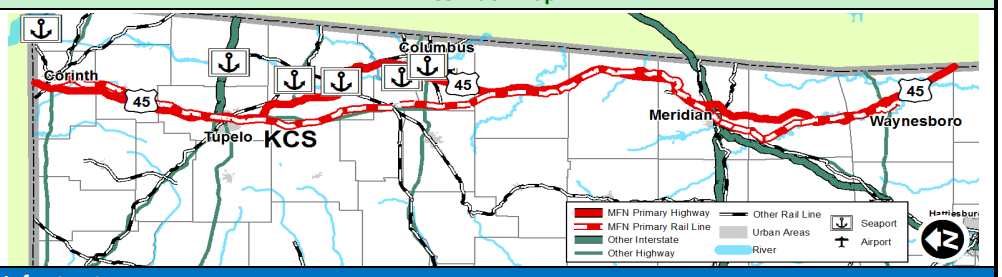
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier II: US 45 / KCS (Corinth-Meridian-Waynesboro) Corridor

General Description

The US 45 / KCS Tier II Corridor runs north-south through the eastern portion of the state along US 45 and the KCS rail line, and parallel to the Tennessee-Tombigbee Waterway, a designated national marine highway. Rail freight was the dominant mode in 2011, accounting for 77% of the total corridor freight by tonnage. Rail is also the dominant mode in the corridor by the value of moved freight. Truck freight is expected to grow its modal share from 23% in 2011 to 23% in 2040. The corridor currently experiences no congestion and by 2040 less than 10% of its length will be congested. Key transportation infrastructure in this corridor includes US 45, KCS mainline and six river ports on the Tennessee-Tombigbee Waterway. Although the four river ports closest to US 45 and KCS mainline do not move high amount of freight by tonnage or value, they are still critical elements of the regional and statewide MS economy. The primary commodities shipped through the corridor is coal, crude oil, and petroleum chemicals.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	US 45: north-south Tennessee border via Corinth-Meridian route, continuing south to Mobile, Alabama (266 miles)	KCS / Artesia subdivision mainline: north-south Corinth-Meridian route (212 miles)	Port of Aberdeen, Clay County Port, Lowndes County Port, Port of Amory	
Key Connectors	NHS Connectors to the corridor's ports (listed under 'Ports & Waterways')	Rail service access to Lowndes County Port provided by KCS and Columbus and Greenville Railway (CAGY)	To Port of Aberdeen: from US 45 via Port Access Rd to the port (NHS Intermodal Connector) To Port of Amory: from US 45 east on US 278, Waterway Dr, and Port Access Road to port (NHS Intermodal Connector) To Lowndes County Port: From US 45: on MS 182 to the port (NHS Intermodal Connector)	
Existing ITS Deployments	WIM (US 45 at the Tennessee border)			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	20.6 / $20.3	69.9 / $71.3	0.8 / $0.4	
	2040	41.1 / $44.8	80.9 / $125.3	1.4 / $1.0	
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	12.0 / 9.6 / 5.4			
	2040	23.0 / 16.8 / 9.8			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$9.4 / $10.6 / $3.9			
	2040	$16.0 / $25.6 / $5.7			
% Freight Flows by Mode	2011	23%	77%	1%	
	2040	33%	66%	1%	
Average % Truck Mix / Average Total Daily Volume	2011	11% / 9,000			
Major Bottlenecks as identified	ATRI (1)	None			
	FAC / Freight User Survey (2)	Columbus	None identified	None identified	
Top Commodities	Tonnage	Coal Minerals, Crude petrol Gas, Chemicals Petroleum, Concrete Glass Primary Metal, Food Tobacco, and Misc Freight			
	Value	Misc Freight, Chemicals Petroleum, Fabricated Metal Machinery Equipment, Concrete Glass Primary Metal, and Food Tobacco			
Major Freight Generators	Tonnage (3)	Axiall Corp, Mississippi Gravel Sales Inc, Holcim US Inc			
Top 10 Statewide Freight Counties Served		Lowndes, Monroe			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	0 miles (0%) congested	Only about half of the KCS trackage between Corinth and Meridian handles 286k weight limit.	Recovery time from flood or drought to 12' minimum depth	
	2040	23 miles (8%) congested: - US 278 to Euclautubba Rd in Tupelo - Golding Rd Warriner Rd south of Corinth			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 112 37 miles (14%) across the corridor with high crash segments.	12 crossings of 15 (80%) do not have Active 2 warning devices.		
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 88% 31 miles (11%) unacceptable. High IRI > 95 segments: - Tennessee State Line to US 72 - MS 178 to MS 6 - MS 76 to Brewer Rd - Noah Curtis Rd to Pine Grove Rd - Strong Rd to W Hazelwood Rd - Lone Oak Dr to Sumter Rd - Townsend Rd to Dan Whitsett Rd - I-20 to MS 145	KCS mainline does not meet speed track speed standards from Corinth to Tupelo.		
	Vertical clearance	0 of 35 bridges (0%) deficient			
	Weight-restricted bridges	0 of 217 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service:** US 45 provides acceptable LOS with minimal existing and forecasted congestion. FAC cited the Columbus area as experiencing congestion. No segments of US 45 are programmed to be widened. **Safety:** US 45 overall is a relatively safe highway corridor. US 45 corridor is the only Tier II corridor with a crash rate better than Tier II average. **Operations:** The corridor functions well and is a significant regional freight link providing access to area freight generators and emerging manufacturing activity centers. US 45 provides quick access to I-20, I-22/US 78, US 82, and US 72. The planned Columbus Bypass will improve freight flows along the corridor and provide quicker access to area ports. **Physical Condition:** 11% of US 45 pavement miles is unacceptable but overall condition is not an issue.	**Capacity**: Rail freight flows are more dominant on a percentage basis than truck freight flows within the corridor, but a significant portion of the KCS mainline is not able to handle 286k weight limit. Only some rail spurs to the river ports can handle 286k weight limits. **Safety**: 80% the railroad crossings do not have Active 2 warning devices. **Physical Condition**: FRA track speed standards are not met from Corinth to Tupelo.	Class I railroads (KCS and BNSF) directly serve several of the Tenn–Tom Waterway System ports in the corridor. Port of Aberdeen has no existing direct rail connection. The quality of last mile access rail service provided by other short line carriers depends on these Class I connections. Last mile roadway access is also critical since none of the river ports are served directly by US 45, but rather via collectors and local streets that connect to US 45.	
Potential Freight Improvement Projects	None identified	Upgrade the KCS mainline from Corinth to West Point to handle 286k weight limit. KCS mainline core track improvements from Corinth to Tupelo to to raise line speed. Upgrade all public corridor crossings along the KCS mainline with at least Active 2 warning devices.	Port of Amory - BNSF: upgrade 12 rail bridges between Amory and Columbus to permit 286k loads (MULTIPLAN 2035 and MS State Rail Plan). Port of Aberdeen: construct 3.2-mile connection track (MULTIPLAN 2035 and MS State Rail Plan).	

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

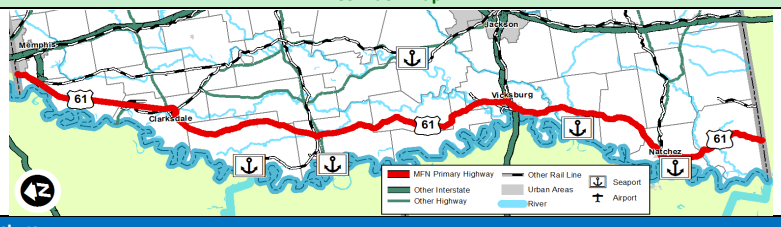
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier II: US 61 (Southaven-Vicksburg-Woodville) Corridor

General Description

The US 61 Tier II Corridor runs north-south through the western portion of the state along US 61, parallel to the Mississippi River, and near its multiple ports. At 317 miles, this is the longest of all MFN corridors. Although there are no key mainline routes along the corridor and major freight origins and destinations are served by multiple short lines, rail freight was the dominant mode in 2011, accounting for 49% of the total corridor freight by tonnage. Truck freight is expected to grow its modal share from 44% in 2011 to 50% in 2040 and overtake rail as number one mode. With multiple MS River ports, the US 61 Corridor has the largest percentage of waterborne freight flows of all Tier II Corridors (outside the water-only Tennessee-Tombigbee Waterway Corridor). US 61 currently experiences and is forecasted to experience no congestion. Key transportation infrastructure in this corridor includes US 61 and four Mississippi River ports. The primary commodities shipped through the corridor are chemicals / petroleum, crude oil, and coal.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	US 61 north-south from Memphis /Tennessee border to Louisiana border (317 miles)	No primary rail	Port of Natchez, Port of Rosedale, Port of Vicksburg, Port of Greenville, Port of Claiborne County	
Key Connectors	US 49 from US 61 to US 49 Mississippi River bridge in Lula	The Vicksburg Southern Railroad (VSOR) connects to the Port of Vicksburg and north to Redwood. VSOR interchanges with KCS in Vicksburg.	To Port of Vicksburg : from US 61/I-20 interchange, west on Clay St, Cherry St, 1st East St, north on Washington, and west on Haining Rd to port (NHS Intermodal Connector)	
	MS 8 from US 61 in Cleveland to Rosedale			
	US 61 Business from I-20 north and south on Washington St to Haining Rd and Port of Vicksburg	The Great River Railroad (GTR) between Greenville and Rosedale and serves the Port of Rosedale. Note: GTR has been out of service for 10 years.	To Port of Rosedale: Port Access Rd to Russell Crutcher to MS 8 to US 61 (NHS Intermodal Connector)	
	US 84 / MS 425 from US 61 to US 84 Mississippi River bridge in Natchez	Natchez Railway, LLC (NTZR) - former CN branch from Brookhaven to the Port of Natchez	To Port of Natchez: from U.S. 84 / MS 425: Government Fleet Rd to Magnolia Bluff Rd, L.E. Barry Rd to port (NHS Intermodal Connector)	
	US 84 from US 61 in Natchez east to I-55/ Brookhaven	The Columbus and Greenville Railway (CAGY) between Columbus and Greenville to the Port of Greenville	To Port of Greenville: from US 61 to US 82 and 2.8 mi on Harbor Front Road to port (NHS Intermodal Connector)	
	US 82 from US 61 in Leland west to Greenville			
	US 278/MS 6 from US 61 (Clarksville) to I-55 (Batesville)			
Existing ITS Deployments	WIM PrePass (US 84 Mississippi River crossing) Mississippi River bridges monitoring: - US 49 bridge in Lula, Mississippi / Helena, Arkansas; and US 84 bridge in Natchez, Mississippi / Ferriday, Louisiana: - Surveillance cameras - Traffic volumes/speeds on approaches - Real Time River Current data sensors - Dynamic Message signs - Detour monitoring			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	51.0 / $71.7	56.5 / $60.9	8.7 / $4.0	
	2040	80.4 / $119.7	67.7 / $112.9	11.4 / $4.9	
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	19.3 / 16.1 / 2.7			
	2040	26.5 / 27.3 / 4.3			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$15.3 / $18.0 / $1.2			
	2040	$25.6 / $36.1 / $1.6			
% Freight Flows by Mode	2011	44%	49%	8%	
	2040	50%	42%	7%	
Average % Truck Mix / Average Total Daily Volume	2011	8% / 6,800			
Major Bottlenecks as identified	ATRI (1)	None			
	FAC / Freight User Survey (2)	MS 6 (US 278) east of US 61 to I-55	None identified	From US 61 to Port of Vicksburg From US 61 to Port of Natchez	
Top Commodities	Tonnage	Chemicals Petroleum, Coal Minerals, Crude petrol Gas, Food Tobacco, Agriculture, and Secondary Traffic Others			
	Value	Chemicals Petroleum, Misc Freight, Fabricated Metal Machinery Equipment, Concrete Glass Primary Metal, and Food Tobacco			
Major Freight Generators	Tonnage (3)	N Runyon WJ & Son Inc			
Top 10 Statewide Freight Counties Served		Warren, Washington			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	0 miles (0%) congested		Recovery time from flood or drought to 12' minimum depth	
	2040	14 miles (4%) congested: - US 425 to US 61 BUS in Natchez - MS 547 to MS 18 in Port Gibson - Grange Hall Rd to US 61 BUS in Vicksburg - US 80 to Culkin Rd in Vicksburg - MS 8 to E Rosemary Rd in Cleveland - I-69 to MS 304 in Robinsonville - MS 302 to Tennessee Sate Line			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 225 Corridor does not meet Tier II safety performance criteria. 62 miles (19%) across the corridor with high crash segments.			
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 85% 41 miles (13%) unacceptable. High IRI > 95 segments: - Mcknight Rd to South St - US 82 to Kennedy Flat Rd - MS 12 to MS 436 - Southdale Rd to MS 16 - Fork Creek Rd to Magnolia Dr - Blanto Rd to MS 1 - Culkin Rd to I-20 - Allen Station Rd to Big Black Creek - MS 18 to MS 547 - Old US 84 to Lynda Lee Dr - John R Junkin Dr to Col John Pitchford Pkwy - Will Washington Rd to Hyde Park Rd - Buffalo Rd to MS 563 - Byrd Rd to MS 24			
	Vertical clearance	0 of 12 bridges (0%) deficient			
	Weight-restricted bridges	0 of 116 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service**: US 61 provides good LOS with minimal existing and forecasted congestion. No segments of US 61 are programmed to be widened outside of its future connection to I-69. **Safety**: US 61 overall does not meet Tier II safety performance criteria. **Operations**: The corridor due to its length and functional classification passes through a variety of settings, including small towns, major interchanges with key statewide facilities (e.g., I-20), and rural areas. It provides access to major freight generators along the corridor, and MS River ports. Issues with operations along the corridor are localized or regional, rather than corridor-wide. Once I-69 is completed, US 61 will gain in significance as a major access link to Memphis via I-69. The recently implemented ITS bridge and detour monitoring across Mississippi River in Natchez and Lula should benefit truck flows by increasing truck volumes/speeds on approaches. **Physical Condition**: 13% of US 61 pavement miles is unacceptable but overall condition is not an issue.		US 61 and local streets connecting to it provide critical last mile access to multiple ports in the area. Inadequate roadway access to Port of Vicksburg has been cited as an issue by the FAC.	
Potential Freight Improvement Projects	Safety improvements along US 61.		US 61 Business / Haining Rd bridge access to Port of Vicksburg - bridge replacement with 4 lane bridge (MULTIPLAN 2035). US 61 to Haining Rd / Port of Vicksburg - new roadway to the port (MULTIPLAN 2035; FAC).	

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

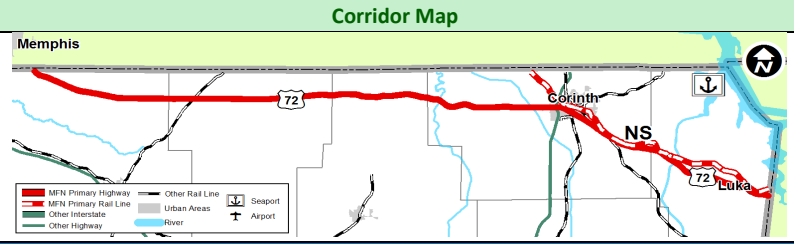
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier II: US 72 / NS (Mt. Pleasant-Corinth-Iuka) Corridor

General Description

The US 72 / NS Tier II Corridor runs west-east through the northern portion of the state along US 72, with NS Crescent Corridor mainline parallel to the highway facility in the northeastern section of the corridor. Rail freight was the dominant mode in 2011, accounting for 68% of the total corridor freight by tonnage. Truck freight is expected to grow its modal share from 30% in 2011 to 51% in 2040 and overtake rail as number one mode. The Yellow Creek Port located on Tenn-Tombigbee Waterway is served by a short line spur operated by KCS. US 72 currently experiences and is forecasted to experience no congestion. Key transportation infrastructure in this corridor includes US 72, NS mainline, and Yellow Creek Port. The primary commodities shipped through the corridor is coal, minerals, and crude oil.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	US 72 west-east from Tennessee border to Alabama border (90 miles)	NS Crescent Corridor mainline between Chattanooga and Memphis, with a short segment of 17 miles passing through northeastern Mississippi, parallel to US 72 (36 miles)	Yellow Creek Port	
Key Connectors	MS 25 from US 72 south to MS 30 / Tishomingo and access to DuraClass plant	Yellow Creek Port Railroad (YCRK) operated by KCS: 10 miles from Sharp, Mississippi, to Counce, Tennessee, to Yellow Creek Port where it terminates	To Yellow Creek Port: North Connector: from US 72, north on MS 25, east on Port Access Rd (CR 370), west along CR 351 to terminals South Connector: from US 72 south along MS 365 to the Port Access Rd, to port (NHS Intermodal Connectors)	
Existing ITS Deployments	WIM			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	21.3 / $33.9	48.0 / $35.0	0.9 / $0.4	
	2040	48.2 / $79.8	44.9 / $61.8	0.9 / $0.3	
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	5.5 / 4.6 / 0.3			
	2040	11.7 / 10.3 / 0.8			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$3.9 / $4.9 / $0.3			
	2040	$8.4 / $13.5 / $0.4			
% Freight Flows by Mode	2011	30%	68%	1%	
	2040	51%	48%	1%	
Average % Truck Mix / Average Total Daily Volume	2011	16% / 9,700			
Major Bottlenecks as identified	ATRI (1)	None			
	FAC / Freight User Survey (2)	US 72 in Corinth	None identified	None identified	
Top Commodities	Tonnage	Coal Minerals, Crude petrol Gas, Secondary Traffic Others, Chemicals Petroleum, Food Tobacco, and Concrete Glass Primary Metal			
	Value	Fabricated Metal Machinery Equipment, Misc Freight, Secondary Traffic Others, Chemicals Petroleum, and Food Tobacco			
Major Freight Generators	Tonnage (3)	None			
Top 10 Statewide Freight Counties Served		None			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	0 miles (0%) congested	The NS mainline handles 286k weight limit.	Recovery time from flood or drought to 12' minimum depth	
	2040	1 miles (1%) congested: - US 45 to MS 145 in Corinth			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 230 Corridor does not meet Tier II safety performance criteria. 16 miles (18%) across the corridor with high crash segments.	2 crossings of 2 (100%) do not have Active 2 warning devices.		
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 82% 16 miles (18%) unacceptable. High IRI > 95 segments: - US 45 to S Cass St - MS 304 to MS 300 - Front St to MS 365 - MS 172 to Alabama State Line	Not enough sufficient data points to draw conclusions.		
	Vertical clearance	0 of 3 bridges (0%) deficient			
	Weight-restricted bridges	0 of 60 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service**: US 72 provides good LOS with minimal existing and forecasted congestion. No segments of US 72 are programmed to be widened, but its short segment from MS 302 to TN border is on MDOT's Preliminary Priority List for widening. The FAC did report that congestion can be a localized issue along US 72 in Corinth. As trucks as percentage of freight flows by mode is projected to increase by 70% between now and 2040, the number of trucks along the corridor is bound to increase as well. **Safety**: US 72 Corridor does not meet Tier II safety performance criteria. **Operations**: The corridor functions well and is a significant regional freight link providing access to Memphis and relief to US 78/I-22 corridor. **Physical Condition**: 18% of US 72 pavement miles is unacceptable but overall condition is certainly not an issue today. With the projected increase in percentage of trucks using the corridor, pavement condition might deteriorate in the future.	**Capacity**: The NS mainline is part of the Crescent Corridor that extends from Louisiana to New Jersey and passes through Mississippi briefly on its section connecting Chattanooga and Memphis. The NS mainline is able to handle 286k weight limit. **Safety**: All public railroad crossings on the NS mainline within Mississippi borders do not have Active 2 warning devices.	US 72 via MS 25 and MS 365 provides critical roadway last mile access to the Yellow Creek Port. The Yellow Creek Port Railroad (YCRK) short line operated by KCS provides direct access to the port but is reportedly in need of rehabilitation (MS State Rail Plan & Multiplan 2035).	
Potential Freight Improvement Projects	Safety improvements along US 72.	Upgrade all public corridor crossings along the NS mainline with at least Active 2 warning devices.	Rehabilitate the 10-mile Yellow Creek Railroad connecting Yellow Creek State Inland Port to KCS (MS State Rail Plan & Multiplan 2035).	

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

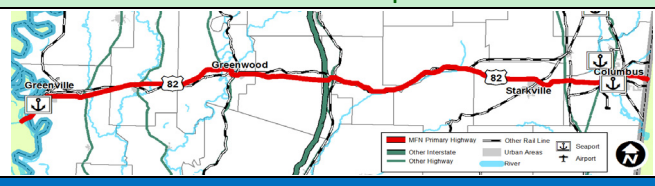
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier II: US 82 (Greenville-Winona-Columbus) Corridor

General Description

The US 82 Tier II Corridor runs west-east through the central part of the state along US 82. This Tier II Corridor is also the only MFN Corridor that provides a direct connection between Mississippi River and the Tennessee-Tombigbee Waterway. Rail freight was the dominant mode in 2011, accounting for 64% of the total corridor freight by tonnage. Truck freight is expected to grow its modal share from 31% in 2011 to 37%. US 82 currently experiences and is forecasted to experience no congestion. Key transportation infrastructure in this corridor includes US 82 and the Port of Greenville and Lowndes County Port. The primary commodities shipped through the corridor is coal and other minerals, crude oil, and petroleum.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	US 82 from Greenville / Arkansas state line east to Columbus / Alabama state line (179 miles)	None (short lines only)	Lowndes County Port, Port of Greenville	
Key Connectors	MS 1 from US 82 / Greenville to Rosedale	The Columbus and Greenville Railway (CAGY) between Columbus and Greenville, parallel to US 82. The Port of Greenville is served by CAGY, and CN - Greenwood interchange connection is CAGY's largest. Lowndes County Port in Columbus is also served by CAGY (and a KCS spur).	To Lowndes County Port: from US 82: 2.7 mi on Port Access Road to port (NHS Intermodal Connector)	
		The Great River Railroad (GTR) between Greenville and Rosedale serves the Port of Rosedale. Note: GTR has been out of service for 10 years (MS State Rail Plan).	To Port of Greenville: from US 82: 2.8 mi on Harbor Front Road to port (NHS Intermodal Connector)	
Existing ITS Deployments	WIM (Greenville) Mississippi River bridge monitoring: US 82 bridge in Greenville, Mississippi / Lake Village, Arkansas: - Surveillance cameras - Traffic volumes/speeds on approaches - Real Time River Current data sensors - Dynamic Message signs - Detour monitoring			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	15.0 / $13.4	31.2 / $25.6	2.9 / $1.3	
	2040	25.7 / $34.4	41.3 / $45.7	3.4 / $1.7	
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	14.8 / 10.0 / 4.8			
	2040	19.0 / 17.7 / 8.9			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$9.8 / $12.3 / $2.1			
	2040	$16.3 / $34.7 / $3.6			
% Freight Flows by Mode	2011	31%	64%	6%	
	2040	37%	59%	5%	
Average % Truck Mix / Average Total Daily Volume	2011	9% / 10,000			
Major Bottlenecks as identified	ATRI (1)	None			
	FAC / Freight User Survey (2)	US 82 in Columbus	None identified	None identified	
Top Commodities	Tonnage	Coal Minerals, Crude petrol Gas, Chemicals Petroleum, Agriculture, Food Tobacco, and Concrete Glass Primary Metal			
	Value	Chemicals Petroleum, Fabricated Metal Machinery Equipment, Concrete Glass Primary Metal, Food Tobacco, and Secondary Traffic Others			
Major Freight Generators	Tonnage (3)	Blubox, Mars Food US			
Top 10 Statewide Freight Counties Served		Lowndes, Choctaw, Washington			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	0 miles (0%) congested		Recovery time from flood or drought to 12' minimum depth	
	2040	8 miles (5%) congested: - US 49E to Main St in Greenwood - US 45 to Military Rd in Greenwood			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 211 Corridor does not meet Tier II safety performance criteria. 35 miles (20%) across the corridor with high crash segments.			
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 61% 69 miles (38%) unacceptable. High IRI > 95 segments: - MS 454 to S Raceway Rd - Airport Rd to US 49 W - Schiey St to Cow Rd - MS 35 to Middleton Rd - Bailey Rd to Grady Rd - County line Rd to MS 182 - Camps Airport Rd to MS 791 - Plymouth Bluff Access Rd to Military Rd			
	Vertical clearance	0 of 13 bridges (0%) deficient			
	Weight-restricted bridges	0 of 113 (0%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service:** US 82 provides good LOS with minimal existing and forecasted congestion. The FAC identified US 82 in Columbus as congested. No segments of US 82 are programmed to be widened. **Safety:** US 82 does not meet Tier II safety performance criteria. **Operations:** The corridor due to its length and functional classification passes through a variety of settings, including regional freight activity centers (manufacturing: Columbus; rail/highway intermodal terminal: Greenwood (CN/truck); major interchanges with key statewide facilities (e.g., I-55 in Winona), major inland ports (Port of Greenville, and Lowndes County Port) and rural coal mining areas. Issues with operations along the corridor are localized, rather than corridor-wide - e.g., congestion along US 82 in Columbus cited by the FAC. The recently implemented ITS bridge and detour monitoring across Mississippi River in Greenville should benefit truck flows by increasing truck volumes/speeds on approaches. **Physical Condition**: The corridor does not meet Tier II pavement condition criteria, with IRI rating better than 95 for less than 65% of primary route miles - 61%. 38% of US 82 pavement miles (69 miles) is unacceptable. US 82 is the second worst faring Tier II corridor by IRI rating, behind MS 27.	Although there are no key rail facilities within the corridor, the CAGY short line has potential to provide long distance east-west freight rail service along the corridor. Unfortunately, continuous east-west CAGY operations were suspended in 2002 due to line and bridge conditions, and 93 miles between West Point and Greenwood is out of service (MS State Rail Plan). Port of Rosedale has no existing rail service; Great River Railroad (GTR) runs 32 miles between Greenville and Rosedale and serves the Port of Rosedale but has not been in operation due to lack of funding since 2002.	US 82 and local streets connecting to it provide critical last mile access to multiple inland ports: Lowndes County Port, Port of Greenville, and Port of Rosedale.	
Potential Freight Improvement Projects	Safety improvements along US 82. US 82 pavement management program.	Reinstate rail access to the Port of Rosedale.	Consider and prioritize improvements to the NHS connectors in highway project programming due to their role in providing roadway access to the two corridor ports.	

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

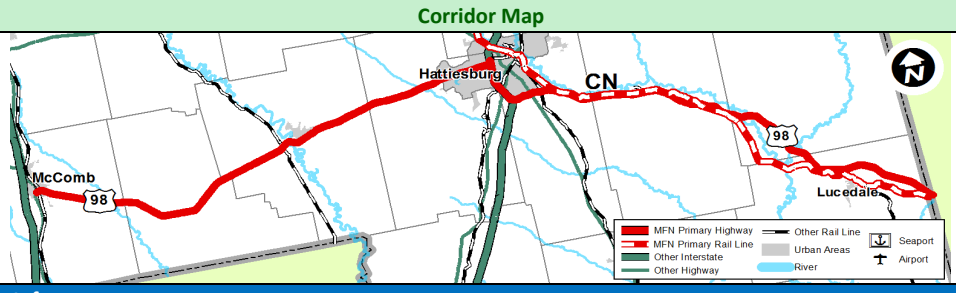
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger).
Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier II: US 98 / CN (McComb-Hattiesburg-Lucedale) Corridor

General Description

The US 98/CN Tier II Corridor runs west-east through the south-central part of the state along US 98 from I-55 east via Hattiesburg to Alabama state border (and further east to Mobile); the CN mainline runs parallel to US 98 on its Hattiesburg to Alabama state line segment (the same CN route extends northwest of Hattiesburg and is part of the US 49/CN Tier I corridor). This Tier II Corridor provides vital regional level west-east connectivity between freight activity centers in southern Mississippi. Rail freight was the dominant mode in 2011, accounting for 60% of the total corridor freight by tonnage. Truck freight is expected to grow its modal share from 41% in 2011 to 47%. US 98 currently experiences and is forecasted to experience little congestion. Key transportation infrastructure in this corridor includes US 98, and CN mainline from Hattiesburg along US 98 to Alabama border. The primary commodities shipped through the corridor are petroleum chemicals, coal, and crude oil.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	US 98 from I-55/McComb east to Lucedale and Alabama via Hattiesburg (141 miles)	CN mainline from Hattiesburg southeast to Lucedale and to Alabama (68 miles)		
Key Connectors	MS 13 between Columbia and Lumberton / I-59, serving Marion Clay & Gravel in Columbia MS 589 from US 98 to Purvis / I-59	Mississippi Export Railroad (MSE) - connecting CN and east-west CSXT M&M subdivision		
Existing ITS Deployments	WIM			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Commercial Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011	22.0 / $37.7	32.3 / $28.0		
	2040	36.1 / $71.6	41.1 / $45.1		
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	9.2 / 6.2 / 3.9			
	2040	12.6 / 9.5 / 8.0			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$6.5 / $8.0 / $3.2			
	2040	$12.1 / $12.9 / $4.9			
% Freight Flows by Mode	2011	41%	60%		
	2040	47%	53%		
Average % Truck Mix / Average Total Daily Volume	2011	11% / 1,400			
Major Bottlenecks as identified	ATRI (1)	None			
	FAC / Freight User Survey (2)	None identified			
Top Commodities	Tonnage	Chemicals Petroleum, Coal Minerals, Crude petrol Gas, Agriculture, Food Tobacco, and Secondary Traffic Others			
	Value	Chemicals Petroleum, Concrete Glass Primary Metal, Fabricated Metal Machinery Equipment, Food Tobacco, and Agriculture			
Major Freight Generators	Tonnage (3)	Singley Construction Co, John L Sanford Jr Inc., Riverside Gravel, Hover Gravel Co, American Sand & Gravel Co, Marion Clay & Gravel LLC.			
Top 10 Statewide Freight Counties Served		None			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Commercial Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011	8 miles (5%) congested: - MS 589 to I-59 in Hattiesburg	CN mainline from Hattiesburg southeast to Lucedale and to Alabama supports 286k limits.		
	2040	11 miles (8%) congested: - MS 589 to I-59 in Hattiesburg - I-59 to US 49 in Hattiesburg			
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)		Crash rate: 292 Corridor does not meet Tier II safety performance criteria. 26 miles (19%) across the corridor with high crash segments.	10 crossings of 10 (100%) do not have Active 2 warning devices.		
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)	IRI score: 70% 40 miles (28%) unacceptable. High IRI > 95 segments: - I-55 to Leatherwood Rd - Old New Hope Rd to Old Lakeview Dr - US 98 to Ralston Rd - MS 15 to W Main St - MS 198 to Agricola-Latonia Rd	CN mainline does not meet track speed standards in southeast Hattiesburg and McLain.		
	Vertical clearance	0 of 5 bridges (0%) deficient			
	Weight-restricted bridges	2 of 64 (3%) restricted			

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Commercial Airports
Performance Assessment	**Level of Service**: US 98 provides good LOS with minimal existing and forecasted congestion. No segments of US 98 are programmed to be widened. **Safety**: US 98 does not meet Tier II safety performance criteria. **Operations**: The corridor provides regional connections to freight activity centers between I-55, Hattiesburg, and points along US 98 southeast to Alabama border and further down to Mobile, Alabama. Major interchanges with I-55, I-59 and US 49 operate smoothly and issues with operations along the corridor are localized, rather than corridor-wide - e.g., congestion in Hattiesburg. Deployment of the Hattiesburg Region ITS should further improve operations along the corridor. **Physical Condition**: 28% of US 98 pavement miles (or 40 miles) is unacceptable, but overall condition is not an issue. This corridor is one of the few MFN corridors that has no issues with bridge vertical clearance and very few bridge weight restrictions.	**Capacity**: Even though there are more corridor highway miles than rail trackage, rail freight flows are more dominant on a percentage basis than truck freight flows within the corridor. 100% of the CN mainline can handle 286k weight limit. **Safety**: All railroad crossings in this corridor do not have Active 2 warning devices. **Physical Condition**: CN mainline in Hattiesburg and in McLain area suffers from low track speed.		
Potential Freight Improvement Projects	Safety improvements along US 98. Leverage deployment of Hattiesburg region Incident Management System & TMC Operations to include expanded commercial vehicle elements. Reconstruct two US 98 bridges to lift weight restrictions.	CN mainline core track improvements in Hattiesburg and McLainto raise line speed. Upgrade all public corridor crossings along the CN mainline with at least Active 2 warning devices.		

Notes:

(1) FHWA/ATRI Nationwide Bottleneck Analysis

(2) MS Freight Advisory Committee input and Freight User Survey Bottleneck Identification

(3) Major freight generators move over 1 million tons or $200 million in value

(4) Undesired Level of Service defined as below LOS C in rural areas and below LOS D for urban areas.

(5) Capacity includes the total storage space for air cargo, ramp space and capacity in tonnage. Volume refers to cargo volumes in tonnage.

**** Excludes through freight***

(6) Crash rate greater than 80% of state average for Tier I and 100% for Tier II

(7) Criteria applies to all public road crossings with active crossing warning devices (gates and warning signals for Tier I and Tier II crossings).

(8) Pavement condition is satisfactory if IRI rating on 65% of primary route miles < 95 for Tier I and 60% < 95 for Tier II.

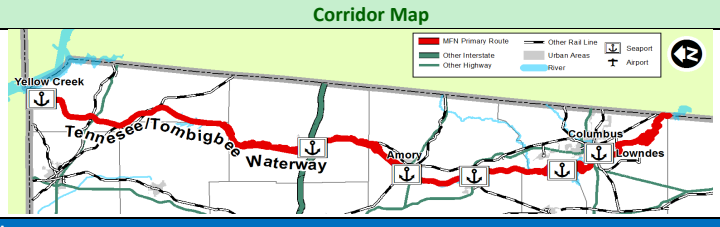
(9) Tier I: all core track meets or exceeds FRA Class 4 standards (> 40 mph for freight, > 60 mph for passenger). Tier II: 80% of core track meets or exceeds FRA Class 3 standards (> 25 mph for freight, > 30 mph for passenger; no signals).

Tier II: Tennessee-Tombigbee Waterway (Yellow Creek Port-Lowndes County Port) Corridor

General Description

The Tennessee-Tombigbee Waterway, a designated national marine highway, runs north-south through the eastern portion of Mississippi. The Waterway connects the Tombigbee River with the Tennessee River, creating a water transportation route that serves 23 southern and mid-western states from the Gulf of Mexico (Port of Mobile) northward. Six public ports are located in the Mississippi state: Port of Aberdeen, Port of Itawamba, Lowndes County Port, Port of Amory, Yellow Creek Port, and Clay County Port. In 2011, the Tenn-Tom carried nearly 2 million tons of goods with the primary commodity carried on the Mississippi portion of the Tenn-Tom being lumber, followed by coal, crude oil, concrete glass / metals, and petroleum products.

Corridor Map



Corridor Freight Infrastructure

	Highway	Rail	Ports & Waterways	Commercial Airports
Primary Facilities / Operators	US 45 (also Tier II corridor) from Corinth to Columbus		Tennessee-Tombigbee Waterway; Port of Aberdeen, Port of Itawamba, Lowndes County Port, Port of Amory, Yellow Creek Port, and Clay County Port	
Key Connectors	To Port of Itawamba: from U.S. 78: north on MS 25, west on South Access Route to port (NHS Intermodal Connector)	The Mississippian Railway Cooperative (MMSW) - rail connection to Port of Itawamba.		
	To Lowndes County Port: From U.S. 45: on MS 182 to the port (NHS Intermodal Connector)	KCS and Columbus and Greenville Railway (CAGY) - rail connection to Lowndes County Port		
	To Yellow Creek Port: North Connector: from US 72, north on MS 25, east on Port Access Rd (CR 370), west along CR 351 to terminals South Connector: from US 72 south along MS 365 to the Port Access Rd, to port (NHS Intermodal Connectors)	Yellow Creek Port Railroad (YCRK) - operated by KCS, rail connection to the Yellow Creek Port		
	To Port of Amory: I-22 to US 45: east on U.S. 278, north on Waterway Dr, west on Port Access Road to port (NHS Intermodal Connector)	BNSF - provides connection to vicinity of the Port of Amory		
	To Port of Aberdeen: from US 45 via Port Access Rd to the port (NHS Intermodal Connector)			
Existing ITS Deployments	None			

Freight Flow Characteristics

		Highway	Rail	Ports & Waterways	Airports
Annual Freight: Tonnage (millions) / Value ($ billions)	2011			1.9 / $0.8	
	2040			2.4 / $1.3	
Annual Inbound/ Outbound/ Intrastate: Tonnage (millions)*	2011	0.7 / 1.1 / < 0.1			
	2040	0.8 / 1.6 / < 0.1			
Annual Inbound/ Outbound/ Intrastate: Value ($ billions)*	2011	$0.4 / $0.4 / < $0.1			
	2040	$0.4 / $0.9 / < $0.1			
% Freight Flows by Mode	2011			100%	
	2040			100%	
Average % Truck Mix / Average Total Daily Volume	2011				
Major Bottlenecks as identified	ATRI (1)				
	FAC / Freight User Survey (2)	None identified	None identified	None identified	
Top Commodities	Tonnage	Lumber Furniture, Coal Minerals, Crude petrol Gas, Concrete Glass Primary Metal, Chemicals Petroleum, and Waste Hazardous Matter			
	Value	Concrete Glass Primary Metal, Chemicals Petroleum, Fabricated Metal Machinery Equipment, Lumber Furniture, and Waste Hazardous Matter			
Major Freight Generators	Tonnage (3)	Bluebox, Axiall Corp, Mississippi Gravel Sales Inc.			
Top 10 Statewide Freight Counties Served		Lowndes, Monroe			

Corridor Infrastructure Performance

		Highway	Rail	Ports & Waterways	Airports
Capacity: Highways: Level of Service (4) Rail: % supporting 286k weight limits Ports: channel depth Commercial airports: storage volume to capacity (5)	2011			Recovery time from flood or drought to 12' minimum depth	
	2040				
Safety: Highways: Annual Crash Rate (174/100M vmt) (6) Rail: RR crossings w/o active warning devices (7)					
Infrastructure Condition: Highways: Pavement & Structures Rail: Speed/Track (9)	IRI rating (8)				
	Vertical clearance				
	Weight-restricted bridges				

Corridor Needs Assessment and Infrastructure Need

	Highway	Rail	Ports & Waterways	Airports
Performance Assessment	Highways such as I-22/US 78, US 45, US 72, and US 82 and local connectors provide critical last mile access to the Tennessee-Tombigbee Waterway ports.	Last mile rail access is an issue for multiple TN-Tombigbee ports served by short lines. Port of Aberdeen currently has no direct rail access, and all other TN-Tombigbee ports are in need of rail access, maintenance, modernization, and capacity improvements. Only some rail spurs to the river ports can handle 286k weight limits.	The national and statewide significance of the Tn-Tombigbee ports is signified by the fact that all but one of them are served by the NHS Intermodal Connectors. (Port of Aberdeen and Clay County Port currently process very minimum cargo volumes.). Inland port alternatives along the TN-Tombigbee help keep rates for other modes competitive. Beyond Mississippi, inland ports provide feeder service for international and domestic shipments downstream through Mobile, Alabama. Last mile rail and roadway access is critical for the six river ports located within the corridor. Class I railroads (KCS and BNSF) directly serve several of the Tenn–Tom Waterway System ports in the corridor, with short lines providing connecting services. The quality of last mile access rail service provided by other short line carriers depends on these Class I connections. (Port of Aberdeen has no existing direct rail connection.)	
Potential Freight Improvement Projects	Consider and prioritize improvements to the NHS connectors in highway project programming due to their role in providing roadway access to the Tennessee-Tombigbee Waterway ports. US 278 - US 45 to Amory: widen to 4 lanes (to Port of Amory).	Port of Itawamba (MMSW): Rehabilitate 23 miles of rail line from Fulton to Amory to handle 286k carload weights (MS State Rail Plan). Port of Amory (near the facility) - BNSF: upgrade 12 rail bridges between Amory and Columbus to permit 286K loads (MULTIPLAN 2035 and MS State Rail Plan). Port of Amory - BNSF: extend rail spur to US 278 bridge (MULTIPLAN 2035 and MS State Rail Plan). Port of Aberdeen: construction of a 3.2-mile-long connection track to the Kansas City Southern Railway (MULTIPLAN 2035 and MS State Rail Plan). Rehabilitate the 10-mile Yellow Creek Railroad that connects Yellow Creek State Inland Port to the KCS system (MS State Rail Plan & Multiplan 2035).	Encourage continued use of the Port of Itawamba, Port of Amory, Lowndes County Port, and Yellow Creek Port through promoting highway and rail access to port facilities along the I-22/US 78, US 45, US 72, and US 82 through the Intermodal Connector Improvement Program.	

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