MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Interim Report Task 08

Economic Impacts

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MULTIPLAN 2050

This Plan was prepared as a cooperative effort of the U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Mississippi Department of Transportation (MDOT), and local governments in partial fulfillment of requirements in Title 23 USC 134 and 135, amended by the IIJA, Sections 11201 and 11525, October 1, 2021. The contents of this document do not necessarily reflect the official views or policies of the USDOT.

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1.0 Introduction

The purpose of this interim report is twofold:

- To assess the long-term economic impacts of the three funding scenarios analyzed in Task 7 – Scenario Analysis, which project the condition and performance of Mississippi's state highway system relative to the baseline through the horizon year 2050.
- To summarize the economic impacts of non-highway modes in Misssissippi based on previous relevant studies and projected economic trends in the state.

This report is organized as follows:

- **Section 2** describes the methodology used to estimate the economic impacts of the three funding scenarios, relative to the baseline, based on projected conditions and performance of Mississippi's state highway system through the horizon year 2050 under each scenario.
- **Section 3** presents the direct and total (combined direct, indirect, and induced) economic impacts resulting from the three funding scenarios, estimated using an economic model for the state of Mississippi.
- **Section 4** documents the economic impacts of non-highway modes, including rail, ports and waterways, air, transit, and pedestrian and cyclist facilities, based on findings from previous relevant studies and projected economic trends in Mississippi over the next 25 years.
- **Section 5** documents the main findings of this economic impact analysis.

All monetary values in this interim report are expressed in constant 2023 dollars.

This economic analysis focuses on the long-term economic contributions of investments in pavement, bridges, highway capacity, safety, and Intelligent Transportation Systems (ITS) through the horizon year 2050. These contributions are evaluated based on how such investments enhance transportation efficiency, reliability, cost-effectiveness, and support sustained economic growth.

It's important to note that this report does not emphasize short-term economic impacts associated with capital expenditures such as construction-related job creation.

2.0 Methodology to Assess the Economic Impacts of the Higwhway System in Mississippi

To assess the economic impacts of the three funding scenarios, which project the condition and performance of the Mississippi's state highway system through the horizon year 2050, this analysis uses a multi-step approach. The core steps of the proposed approach are:

- Define the anticipated direct economic impacts of each funding scenario by evaluating system performance over the 2025–2050 period, based on how the investments in pavement, bridges, highway capacity, safety, and Intelligent Transportation Systems (ITS) influence overall transportation efficiency, reliability, and cost-effectiveness.
- Measure the direct economic impacts for each funding scenario.
- Measure the total (direct, indirect, and induced) economic impacts for each funding scenario.

These core steps are discussed in more detail in the sub-sections that follow.

Funding Scenarios

This section presents the funding scenarios evaluated in the analysis, each representing a different level of investment in Mississippi's transportation infrastructure. These scenarios are designed to reflect a range of strategic approaches to improving pavement conditions, bridge performance, highway capacity, safety, and ITS. By comparing these scenarios, the analysis aims to assess how varying investment levels influence transportation outcomes and broader economic impacts across the state. **Table 1** outlines the three funding scenarios considered in this study.

The **Accelerating Budget Scenario** assumes no funding limitations, resulting in approximately $960 million annually available for transportation investments and enabling full compliance with federal and MDOT performance targets. This scenario adequately addresses Mississippi's transportation needs, ensuring well-maintained infrastructure, enhancing system performance, and expanding opportunities for economic growth across the state. Under this scenario, pavement and bridge conditions improve significantly, with poor conditions nearly eliminated and good/fair conditions maximized. Highway capacity is enhanced through the greatest reduction in delay hours, and transit assets are fully in a state of good repair. Safety, ITS, and non-highway programs are maintained at current funding levels, supporting a

balanced and resilient multimodal network. The Accelerating scenario allows MDOT to meet or exceed all performance targets, positioning Mississippi for long-term infrastructure sustainability and economic vitality.

The **Improving Budget Scenario** assumes an extension of Mississippi Lottery funding for transportation through 2050, beyond the original sunset date of 2028, and incorporates additional revenue from the motor fuel tax established by HB 1, resulting in approximately $845 million annually available for transportation investments. This scenario prioritizes meeting federal pavement and MDOT bridge performance targets. If these targets are met and funding remains, the surplus is to be allocated to improving highway capacity to meet MDOT's LOS goals, while funding for safety, ITS, and non-highway programs remains at current levels. Under this scenario, pavement and bridge conditions improve significantly, especially on 2-lane and 4-lane state-maintained roads. NHS bridges show increased deck area in good condition, and transit assets reach full good-repair status.

The **Maintaining Budget Scenario** includes new revenues as an outcome of HB 1. New revenue is generated, supported by a 5% retail fuel sales tax and phased increases in gasoline and special fuel excise taxes, resulting in approximately $725 million annually available for transportation investments. It prioritizes meeting federal pavement and MDOT bridge performance targets. If those targets are met and funding remains, the surplus is allocated to improving highway capacity to meet MDOT's urban and rural Level-of-Service (LOS) goals, while funding for safety, ITS, and non-highway programs remains at current levels. Based on the MDOT Planning for Performance Tool, this scenario maintains core infrastructure and achieves moderate gains in system performance. Pavement and bridge conditions remain stable, with limited improvements in delay reduction and transit asset condition. Overall, this scenario partially meets Mississippi's transportation needs, preserving existing infrastructure and capturing some opportunities for economic growth.

Table 1. Funding Scenarios

Funding Scenario	Average Annual Spending (Millions of 2023$)	Description
Accelerating	$960	Meets federal and state targets
Improving	$845	HB1 plus lottery funding that continues beyond 2028 (+$80M annually) Federal matching funds commitments continues at recent levels (+$40M annually)
Maintaining	$725	Forecast revenues with HB1 increase (+$85M annually)

Source: Mississippi Department of Transportation

To estimate the economic benefits generated by Mississippi's state highway system under each funding scenario through the horizon year 2050, each scenario is compared against the baseline condition. For the baseline condition, this analysis assumes no new revenue sources and maintains pre-HB 1 funding levels, resulting in approximately $640 million annually available for transportation investments. It prioritizes meeting federal performance targets for pavement and bridges, while maintaining existing funding levels for highway capacity, safety, intelligent transportation systems (ITS), and non-highway programs including transit, aviation, rail and ports, and bicycle and pedestrian infrastructure. As a result, this scenario cannot fully fund Mississippi's transportation needs, leading to deteriorating infrastructure, declining system performance, and missed opportunities for economic growth. Except for Non-Interstate NHS highways, pavement conditions worsen under this scenario, with more lane miles in poor condition and fewer in good condition. Similarly, NHS Bridge conditions improve marginally, but Non-NHS Bridge conditions worsen.

Expected Direct Economic Impacts

This section outlines the anticipated direct economic impacts of each funding scenario, based on the level of investment in key program areas including pavement, bridges, highway capacity, safety, and Intelligent Transportation Systems (ITS). It highlights how variations in funding across these components influence the outcomes

under each scenario, providing a foundation for understanding the broader economic implications of transportation investment decisions in Mississippi.

Pavement and Bridge Programs

The International Roughness Index (IRI) is the primary performance metric used to assess pavement condition and quantify the direct costs (or savings) incurred by highway users (including passenger vehicles and trucks) due to changes in pavement performance in Mississippi over the 2025-2050 period. Higher IRI values indicate deteriorated pavement, which typically requires reduced driving speeds for safe travel. The criteria for identifying the lane-miles in Mississippi in poor condition are based on the pavement condition thresholds from the Federal Highway Administration,[1] which rated pavements with IRI < 95 inches/mile in 'good' condition, pavements with IRI between 95 inches/mile and 170 inches/mile in 'fair' condition, and pavements with IRI > 170 inches/mile in 'poor' condition.

The direct impacts arising from deteriorated (or improved) pavement conditions in Mississippi are estimated based on the number of lane-miles rated in 'poor,' 'fair' and 'good' condition under the three scenarios of funding allocation, estimated using the MDOT Planning for Performance Tool.

Accelerating Funding Scenario

Table 2 outlines projected outcomes for various roadway types under the Accelerating Funding Scenario. NHS Interstates are expected to maintain a stable condition, with 70% of pavement rated good and 0% in poor condition, indicating consistent performance after 25 years. Non-NHS State Owned 2-Lane roads show a notable increase in good/fair condition, improving from 74.6% to 95%, suggesting that funding is effectively addressing maintenance needs. Non-NHS State Owned 4-Lane roads also improve, with poor condition reduced from 36.2% to 21%, slightly exceeding the target. Overall, the results suggest that funding under the Accelerating Scenario supports steady improvements in pavement condition across most categories, contributing to a more reliable and well-maintained network over the long term.

Under the Accelerating Funding Scenario, there is a **net increase of approximately 5,190 lane-miles** in good/fair condition across all roadway categories compared to the baseline.

[1] Code of Federal Regulations. eCFR :: 23 CFR 490.313 -- Calculation of performance management measures.

Table 2. Accelerating Funding Scenario - Pavement Condition Performance After 25-Year

Pavement Program	Performance Measure	Current Condition	Target	Average Annual Spending (2023$)	Condition After 25 Years
NHS Interstate	% Good	70.9%	≥ 55%	$110M	70%
	% Poor	0.4%	≤ 5%		0%
NHS -Non-Interstate	% Good	24.9%	≥ 20%	$91M	52%
	% Poor	6.6%	≤ 10%		2%
Non-NHS State Owned 4-Lane	% Good/Fair	63.8%	≥ 75%	$11M	79%
	% Poor	36.2%	≤ 25%		21%
Non-NHS State Owned 2-Lane	% Good/Fair	74.6%	≥ 75%	$288M	95%
	% Poor	25.4%	≤ 25%		5%

Source: MDOT Planning for Performance Tool.

Table 3 summarizes projected bridge conditions for NHS and Non-NHS state-owned structures based on deck area. For NHS bridges, the percentage rated in good condition is expected to increase from 53.5% to 66% under the Accelerating Funding Scenario, while poor condition is projected to drop from 1.7% to 0%, both meeting performance targets. Non-NHS bridges also show improvement, with good condition rising from 63.5% to 66% and poor condition decreasing from 2.7% to 2% over 25 years. These results indicate that with consistent funding, bridge conditions can be maintained or gradually improved, supporting system reliability and long-term asset performance.

Table 3. Accelerating Funding Scenario - Bridge Condition Performance After 25-Year

Bridge Program	Performance Measure	Current Condition	Target	Average Annual Spending (2023$)	Condition After 25 Years
NHS State Owned Bridge by Deck Area (from NBIAS)	% Good	53.5%	≥ 45%	$102M	66%
	% Poor	1.7%	≤ 5%		0%
Non-NHS State Owned Bridge by Deck Area (from NBIAS)	% Good	63.5%	≥ 60%	$76M	66%
	% Poor	2.7%	≤ 3%		2%

Source: MDOT Planning for Performance Tool.

Improving Funding Scenario

Table 4 presents pavement condition projections over 25 years under the Improving Funding Scenario. NHS Interstate pavements are expected to remain stable, with 70% in good condition and 0% in poor condition. NHS Non-Interstate roads show strong improvement, with good condition increasing from 24.9% to 52% and poor condition decreasing from 6.6% to 2%, both exceeding their respective targets. Non-NHS State Owned 4-Lane roads also perform well, with good/fair condition rising from 63.8% to 79%, surpassing the 75% target, and poor condition dropping from 36.2% to 21%, meeting the goal of 25% or less. These results indicate that funding under the Improving Funding Scenario supports consistent improvements across all roadway categories.

Under the Improving Funding Scenario, there is a **net increase of approximately 4,160 lane-miles** in good/fair condition across all roadway categories compared to the baseline.

Table 4. Improving Funding Scenario - Pavement Condition Performance After 25-Year

Pavement Program	Performance Measure	Current Condition	Target	Average Annual Spending (2023$)	Condition After 25 Years
NHS Interstate	% Good	70.9%	≥ 55%	$110M	70%
	% Poor	0.4%	≤ 5%		0%
NHS -Non-Interstate	% Good	24.9%	≥ 20%	$91M	52%
	% Poor	6.6%	≤ 10%		2%
Non-NHS State Owned 4-Lane	% Good/Fair	63.8%	≥ 75%	$11M	79%
	% Poor	36.2%	≤ 25%		21%
Non-NHS State Owned 2-Lane	% Good/Fair	74.6%	≥ 75%	$236M	88%
	% Poor	25.4%	≤ 25%		12%

Source: MDOT Planning for Performance Tool.

Table 5 presents bridge condition projections over 25 years under the Improving Funding Scenario. For NHS state-owned bridges, the percentage in good condition increases from 53.5% to 59%, exceeding the target of 45%, while poor condition decreases slightly from 1.7% to 1%, remaining well below the 5% threshold. Non-NHS state-owned bridges also show improvement, with good condition rising from 63.5% to 66% and poor condition decreasing from 2.7% to 2%, both meeting or surpassing performance targets. These results suggest that funding under the Improving Funding Scenario supports steady gains in bridge condition across both NHS and Non-NHS networks.

Table 5. Improving Funding Scenario - Bridge Condition Performance After 25 Years

Bridge Program	Performance Measure	Current Condition	Target	Average Annual Spending (2023$)	Condition After 25 Years
NHS State Owned Bridge by Deck Area (from NBIAS)	% Good	53.5%	≥ 45%	$84M	59%
	% Poor	1.7%	≤ 5%		1%
Non-NHS State Owned Bridge by Deck Area (from NBIAS)	% Good	63.5%	≥ 60%	$76M	66%
	% Poor	2.7%	≤ 3%		2%

Source: MDOT Planning for Performance Tool.

Maintaining Funding Scenario

Table 6 presents pavement condition projections over 25 years under the Maintaining Funding Scenario. NHS Interstate pavements are projected to remain stable, with 70% in good condition and 0% in poor condition, both meeting performance targets. NHS Non-Interstate roads show improvement, with good condition increasing from 24.9% to 52% and poor condition decreasing from 6.6% to 2%. Non-NHS State Owned 4-Lane roads also meet expectations, with good/fair condition rising from 63.8% to 76% and poor condition dropping from 36.2% to 24%. Non-NHS State Owned 2-Lane roads reach the target exactly, with good/fair condition increasing slightly from 74.6% to 75% and poor condition decreasing from 25.4% to 25%. Overall, the Maintaining Funding Scenario supports steady progress across all roadway categories, with most segments meeting or slightly exceeding their targets.

Under the Maintaining Funding Scenario, there is a **net increase of approximately 2,230 lane-miles** in good/fair condition across all roadway categories compared to the baseline.

Table 6. Maintaining Scenario - Pavement Condition Performance After 25-Years

Pavement Program	Performance Measure	Current Condition	Target	Average Annual Spending (2023$)	Condition After 25 Years
NHS Interstate	% Good	70.9%	≥ 55%	$110M	70%
	% Poor	0.4%	≤ 5%		0%
NHS -Non-Interstate	% Good	24.9%	≥ 20%	$91M	52%
	% Poor	6.6%	≤ 10%		2%
Non-NHS State Owned 4-Lane	% Good/Fair	63.8%	≥ 75%	$10M	76%
	% Poor	36.2%	≤ 25%		24%
Non-NHS State Owned 2-Lane	% Good/Fair	74.6%	≥ 75%	$171M	75%
	% Poor	25.4%	≤ 25%		25%

Source: MDOT Planning for Performance Tool.

Table 7 presents bridge condition projections over 25 years under the Maintaining Funding Scenario. For NHS state-owned bridges, the percentage in good condition is expected to decrease slightly from 70.9% to 57%, though it remains above the target of 55%. Poor condition increases modestly from 0.4% to 2%, still well within the acceptable threshold of 5%. Non-NHS state-owned bridges show improvement, with good condition rising from 24.9% to 64%, exceeding the 20% target, and poor condition decreasing from 6.6% to 2%, meeting the goal of less than 10%. These results suggest that expected funding levels are sufficient to maintain or improve bridge conditions across both NHS and Non-NHS networks.

Table 7. Maintaining Funding Scenario - Bridge Condition Performance After 25 Years

Bridge Program	Performance Measure	Current Condition	Target	Average Annual Spending (2023$)	Condition After 25 Years
NHS State Owned Bridge by Deck Area (from NBIAS)	% Good	53.5%	≥ 45%	$82M	57%
	% Poor	1.7%	≤ 5%		2%
Non-NHS State Owned Bridge by Deck Area (from NBIAS)	% Good	63.5%	≥ 60%	$74M	64%
	% Poor	2.7%	≤ 3%		2%

Source: MDOT Planning for Performance Tool.

Baseline Condition

Table 8 presents pavement condition projections over 25 years under the baseline condition. NHS Interstate pavements are expected to remain stable, with 70% in good condition and 0% in poor condition, both meeting performance targets. NHS Non-Interstate roads show improvement, with good condition increasing from 24.9% to 52% and poor condition decreasing from 6.6% to 2%. However, Non-NHS State Owned 4-Lane roads fall short of targets, with good/fair condition decreasing from 63.8% to 43% and poor condition increasing from 36.2% to 57%. Non-NHS State Owned 2-Lane roads also underperform, with good/fair condition dropping from 74.6% to 61% and poor condition rising from 25.4% to 39%. These results suggest that under baseline condition funding levels, pavement conditions deteriorate for Non-NHS routes, particularly 2-lane and 4-lane roads, while NHS routes are maintained.

Table 8. Baseline Condition – Pavement Condition and Performance After 25 Years

Pavement Program	Performance Measure	Current Condition	Target	Average Annual Spending (2023$)	Condition After 25 Years
NHS Interstate	% Good	70.9%	≥ 55%	$110	70%
	% Poor	0.4%	≤ 5%		0%
NHS -Non-Interstate	% Good	24.9%	≥ 20%	$91	52%
	% Poor	6.6%	≤ 10%		2%
Non-NHS State Owned 4-Lane	% Good/Fair	63.8%	≥ 75%	$5	43%
	% Poor	36.2%	≤ 25%		57%
Non-NHS State Owned 2-Lane	% Good/Fair	74.6%	≥ 75%	$130	61%
	% Poor	25.4%	≤ 25%		39%

Source: MDOT Planning for Performance Tool.

Table 9 presents bridge condition projections over 25 years under the baseline condition. For NHS state-owned bridges, the percentage in good condition improves slightly from 53.5% to 58%, remaining above the target of 45%, while poor condition increases modestly from 1.7% to 2%, still within the acceptable threshold. Non-NHS state-owned bridges show a decline in performance, with good condition dropping from 63.5% to 49% and poor condition rising to 7%, exceeding the target of 3%. These results suggest that while NHS bridges can be maintained under baseline condition funding levels, Non-NHS bridges may experience deterioration without increased investment.

Table 9. Baseline Condition - Bridge Condition and Performance After 25 Years

Bridge Program	Performance Measure	Current Condition	Target	Average Annual Spending (Millions of 2023$)	Condition After 25 Years
NHS State Owned Bridge by Deck Area (from NBIAS)	% Good	53.5%	≥ 45%	$82	58%
	% Poor	1.7%	≤ 5%		2%
Non-NHS State Owned Bridge by Deck Area (from NBIAS)	% Good	63.5%	≥ 60%	$65	49%
	% Poor	2.7%	≤ 3%		7%

Source: MDOT Planning for Performance Tool.

Changes in Travel Delay Costs Due to Poor Pavement Condition

This analysis estimates the impact of pavement roughness on travel delay due to poor pavement conditions based on the findings from a study conducted by the Research Center of the University of California (UC) for the California Department of Transportation (Caltrans). The research study found that pavement roughness accounts for a small portion of the total speed variance.[2] When holding all other variables of the roadway constant, the study found that one unit of IRI change (63.4 in/mi) leads to about a 0.30 mph decrease in free-flow speed.

Highway Capacity Program

Table 10 outlines the three funding scenarios and their projected impact on highway capacity conditions from 2025-2050. Each scenario is evaluated based on performance measures like Level of Service (LOS), current and target conditions, and average annual spending (in 2023 dollars). The Accelerating Funding Scenario has

[2] Wang, T., Harvey, J., Lea, J., & Kim, C. (2013). Impact of Pavement Roughness on Vehicle Free-Flow Speed. Research Center of the University of California, UC Davis and UC Berkeley. California Department of Transportation. Impact of Pavement Roughness on Vehicle Free-Flow Speed

the highest annual investment at $188 million, followed by the Improving scenario at $144 million annually and Maintaining scenario at $100 million. By comparison, the baseline condition investment is $69 million.

Table 10. Funding Scenarios - Highway Capacity Condition and Performance After 25 Years

Funding Scenario	Performance Measure	Current Condition	Target	Average Annual Spending (Millions of 2023$)
Accelerating	LOS C – Rural LOS D - Urban	LOS C – Rural LOS D - Urban	LOS C – Rural LOS D - Urban	$188
Improving				$144
Maintaining				$100

Source: Mississippi Travel Demand Model.

Safety Program

Each funding scenario includes an annual investment of $45 million dedicated to improving highway safety. While this investment level remains consistent across all scenarios, it is expected to generate meaningful economic benefits by reducing crash rates and improving overall system safety. According to the performance targets outlined previously, this investment supports progress toward statewide safety goals, contributing to fewer fatalities and serious injuries on Mississippi's roadways. These safety improvements not only enhance quality of life but also yield long-term economic gains through reduced crash-related costs and improved travel reliability.

This investment is expected to reduce crash frequency, save lives, prevent injuries, lower vehicle repair costs, and enhance travel time reliability. These outcomes contribute to reduced insurance premiums, minimized property damage and cargo loss, and an overall improved quality of life for Mississippi residents. Enhanced highway safety also supports environmental goals through lower emissions and facilitates better emergency response access. Moreover, these improvements promote safer conditions for nonmotorized travel, such as biking and walking, contributing to a more inclusive and efficient transportation system.

Intelligent Transportation Systems (ITS) Program

Table 11 presents average annual spending on ITS under each of the funding scenarios. Both Accelerating and Improving scenarios allocate $5 million annually, while the Maintaining scenario allocates $1 million (in 2023 dollars).

Table 11. Funding Scenarios – Average Annual Investments in ITS

Funding Scenario	Average Annual Spending (Millions of 2023$)
Accelerating	$5
Improving	$5
Maintaining	$1

Source: MDOT Planning for Performance Tool.

Investing in Intelligent Transportation Systems (ITS) delivers significant economic benefits by enhancing the efficiency, safety, and sustainability of transportation networks. By 2050, ITS is expected to improve safety, reduce emissions, increase roadway capacity, and generate daily travel time cost savings of $5.6 million.[3] ITS will further optimize traffic flow, reduce congestion, and lower vehicle operating costs through better fuel efficiency and less wear and tear. These systems also support more reliable freight movement, strengthen supply chain performance, and improve emergency response capabilities. The full economic impact will vary based on the specific ITS technologies deployed under MULTIPLAN 2050.

Measuring the Direct Economic Impacts of the Pavement Program

This section describes the process, data sources, and methodologies used to evaluate and monetize the direct economic impacts of the pavement program under each funding scenario.

Measures, Data, and Sources

Table 12 presents the measures used in this analysis to quantify the direct costs (or savings) borne by highway users because of poor (or improved) pavement condition

[3] MDOT Planning for Performance Tool.

and performance in Mississippi. **Table 13** lists the data obtained from relevant data sources to estimate the measures presented in **Table 12**.

Table 12. Measures of Direct Economic Impacts Arising from Changes in Pavement Condition and Performance

Direct Impact	Measures
Vehicle Operating and Maintenance Cost	Increase (or decrease) in fuel and non-fuel vehicle operating costs by vehicle type (passenger cars and trucks)
Travel Delay	Additional (or saved) travel delay costs by vehicle type (passenger cars and trucks)
Motor Vehicle Crash Risk	Increase (or decrease) in motor vehicle crashes involving passenger cars and trucks

Table 13. Data and Sources for Estimating the Direct Impacts from Changes in Pavement Condition and Performance

Data	Description	Data Source
Highway Pavement Condition (for baseline condition and scenarios)	Lane miles in Good, Good/Fair, and Poor pavement condition for Interstate; Non-Interstate NHS; and 4- and 2-Lane, Non-NHS, State Maintained highways in Mississippi	MDOT Planning for Performance Tool
Bridge Condition (for baseline condition and scenarios)	Square feet of bridge deck area in Good and Poor condition for NHS and Non-NHS bridges in Mississippi	MDOT Planning for Performance Tool & NBIAS
AADT associated with each of the funding scenarios in the base year 2025 and the horizon year 2050	AADT (Average Annual Daily Traffic) by vehicle type (passenger cars and trucks) in Mississippi	Mississippi Statewide Travel Demand Model (TDM)
Daily VMT, VHT, and VHD associated with each of the funding scenarios in the base year 2025 and the horizon year 2050	Daily VMT (Vehicle Miles Traveled), VHT (Vehicle Hours Traveled), and VHD (Vehicle Hours of Delay) by vehicle type (passenger cars and trucks) in Mississippi	Mississippi Statewide TDM
Average Travel Speed	Estimated average travel speed ranges for NHS Interstate Highways, NHS Non-Interstate Highways, 4-Lane Highways (Non-NHS), and 2-Lane Highways (Non-NHS)	U.S. Department of Transportation, Federal Highway Administration. Highway Performance Monitoring System (HPMS). https://highways.dot.gov/safety/data-analysis-tools/rsdp/rsdp-tools/highway-performance-monitoring-system-hpms

Data	Description	Data Source
Annualization factors for passenger cars and trucks	Factors to annualize the daily TDM outputs by vehicle type (passenger cars and trucks)	HNTB Analysis, informed by prior experience and available data.
Average Marginal Vehicle Operating Costs for Passenger Cars	Average vehicle operating costs for an average light duty vehicle (in 2023$ per VMT) includes fuel, maintenance, tires, and depreciation costs, assuming an average of 15,000 miles driven per year. The value omits other ownership costs that are mostly fixed, or transfers such as insurance, license, registration, taxes, and financing charges. Forecast using 2013-2023 growth rate.	American Automobile Association (AAA), *Your Driving Costs,* 2013 and 2023 editions. https://exchange.aaa.com/wp-content/uploads/2013/04/Your-Driving-Costs-2013.pdf; YDC-Brochure_2023-FINAL-8.30.23-.pdf
Average Marginal Vehicle Operating Costs for Trucks	Average vehicle operating costs for an average commercial truck (in 2023$ per VMT) includes fuel costs, truck/trailer lease or purchase payments, repair and maintenance, truck insurance premiums, permits and licenses, and tires. The value omits tolls (which are transfers), and driver wages and benefits (which are already included in the value of travel time of truck drivers).	American Transportation Research Institute, *An Analysis of the Operational Costs of Trucking: 2024 Update* (June 2024) ATRI-Operational-Cost-of-Trucking-06-2024.pdf

Data	Description	Data Source
Distribution of Passenger Car Trips by Trip Purpose	Distribution of commute (work), work-related business, and 'all other purposes' trips made by Mississippi residents	Bureau of Transportation Statistics (BTS), State Transportation by the Numbers. BTS statistics for Mississippi. State Transportation by the Numbers | Bureau of Transportation Statistics
Average Value of Travel Time for Passenger Cars	Hourly value of travel time (2023$ per person-hour) by trip purpose for passenger car users	U.S. Department of Transportation, *Benefit-Cost Analysis Guidance for Discretionary Grant Programs* (May 2025) Benefit Cost Analysis Guidance 2025 Update II (Final).pdf
Average Value of Travel Time for Trucks	Hourly value of travel time (2023$ per person-hour) for truck drivers	U.S. Department of Transportation, Benefit-Cost Analysis Guidance for Discretionary Grant Programs (May 2025) Benefit Cost Analysis Guidance 2025 Update II (Final).pdf
Average Vehicle Occupancy Rates for Passenger Vehicles by Trip Purpose	Average number of occupants per passenger vehicle by trip purpose	2022 National Household Travel Survey (NHTS) National Household Travel Survey
Average Vehicle Occupancy Rate for Trucks	Average number of occupants per truck	FHWA (2017). National Performance Management Measures: Assessing Performance of the National Highway System, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement Program. Federal Register, Vol. 82, No. 11, p. 5970. Docket No. FHWA–2013–0054.
Economic Value of Property Damage Only (PDO) Crashes	Monetized value of PDO crashes (in 2023$ per PDO crash)	U.S. DOT Benefit-Cost Analysis Guidance for Discretionary Grant Programs, May 2025

Data	Description	Data Source
Number of Fatal Crashes	Historical fatal crashes in Mississippi	U.S. Department of Transportation, National Highway Traffic Safety Administration (NHTSA). Fatality and Injury Reporting System Tool (FIRST). https://cdan.dot.gov/query
Number of Injury Crashes	Historical injury crashes in Mississippi	Injuries in 2016-2020 from the State of Mississippi-Highway Safety Plan Federal Fiscal Year 2023. Injuries in 2021 from State of Mississippi Triennial Highway Safety Plan, Federal Fiscal years 2024-2026.
Number of Property Damage Only (PDO) Crashes	Historical PDO crashes in Mississippi estimated using ratio of PDO crashes to fatal crashers	PDO crashes from U.S. Department of Transportation, Federal Motor Carrier Safety Administration (FMCSA). Trends Table 12, All Motor Vehicle Property Damage Only (PDO) Crash Statistics, 2000-2020. https://www.fmcsa.dot.gov/safety/data-and-statistics/trends-table-12-all-motor-vehicle-property-damage-only-pdo-crash-7 Fatal crashes from U.S. Department of Transportation, NHTSA. 2019 Crash Fatality Data. https://www.nhtsa.gov/press-releases/nhtsa-releases-2019-crash-fatality-data
Crash Modification Factors (CMFs)	Relevant CMFs used to estimate changes in fatal, injury, and PDO crashes resulting from improved pavement conditions	U.S. Department of Transportation, Federal Highway Administration. Crash Modification Factors Clearinghouse. https://cmfclearinghouse.fhwa.dot.gov/

Changes in Vehicle Operating and Maintenance Costs Due to Poor Pavement Condition

This analysis estimates the impact of IRI on vehicle operating costs based on the findings from the National Cooperative Highway Research Program (NCHRP) Report

720.[4] This comprehensive study on the effects of the pavement condition on vehicle operating costs indicates that rough roads can lead to increased fuel consumption, accelerated wear and tear, and higher repair and maintenance costs for both passenger car and truck owners, including:

- An increase in IRI of 63.4 in/mi will increase fuel consumption of passenger cars by nearly 2 percent regardless of vehicle speed. For trucks, the increase is estimated to be about 1 percent at normal travel speeds (i.e., 60 mph) and 2 percent at low travel speeds (i.e., 35 mph).

- An increase in IRI of 63.4 in/mi will increase the tire wear of passenger cars and trucks by 1 percent at 55 mph or higher.

- Pavement roughness of up to IRI of 190.2 in/mi has no impact on vehicle repair and maintenance cost. Beyond this value, an increase in IRI up to 253.6 in/mi will increase vehicle repair and maintenance costs by 10 percent for both passenger cars and trucks. Worse pavement conditions will lead to more significant increases. An increase in IRI up to 317.0 in/mi will add repair and maintenance costs up to 40 percent for passenger cars and 50 percent for trucks. An increase in IRI up to 380.0 in/mi will escalate repair and maintenance cost up to 70 percent for passenger cars and 80 for heavy trucks.

Changes in Motor Vehicle Crash Costs Due to Poor Pavement Condition

A broad approach was used to evaluate the relationship between pavement roughness and road safety. Rather than relying on a single study, relevant Crash Modification Factors (CMFs) and Crash Reduction Factors (CRFs) were identified through a scan of the CMF Clearinghouse.[5] This method allowed for the inclusion of multiple studies, roadway types, and crash conditions, providing a more comprehensive and representative foundation for analysis. CMFs were selected based on their applicability to principal arterial interstates and rural arterials, with consideration given to Mississippi-specific roadway classifications where available.

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[4] Chatti, K., & Zaabar, I. (2012). NCHRP Report 720: Estimating the Effects of Pavement Condition on Vehicle Operating Costs. Washington, D.C.: Transportation Research Board (TRB).

[5] Federal Highway Administration, Crash Modification Factors Clearinghouse. https://cmfclearinghouse.fhwa.dot.gov/.

Measuring the Direct Economic Impacts of the Highway Capacity Program

This section describes the process, data sources, and methodologies used to evaluate and monetize the direct economic impacts of the highway capacity program under each funding scenario.

Measures, Data and Sources

The methodology used to estimate the economic impacts of Mississippi's Highway Capacity Program involves a structured approach to modeling and valuation. It began with projecting daily Vehicle Hours of Delay (VHD) by vehicle type (passenger cars and trucks) for the three funding scenarios and the baseline condition over the 2025–2050 period. The daily outputs were annualized by applying a factor of 365 to estimate yearly values. The annual VHD values for each funding scenario were compared to those of the baseline condition to assess annual reductions in travel delays resulting from increased capacity over the 25-year analysis period.

Changes in Travel Delay Costs Due to Increased Highway Capacity

To monetize the annual savings in travel delay for each scenario, the analysis applied value of travel time (VOTT) per person and average vehicle occupancy (AVO) rates, based on sources listed in **Table 13**. These values vary by trip purpose (commute, business, and other) and by vehicle type (passenger cars and trucks). The reduction in delay hours, segmented by trip purpose and vehicle type, was multiplied by the corresponding VOTT and AVO rates to estimate travel delay cost savings. The annual economic value of these savings was then aggregated over the 2025–2050 period to calculate both cumulative and average annual travel delay savings. All monetary values are expressed in constant 2023 dollars.

Estimate the Total (Combined Direct, Indirect, and Induced) Economic Impacts

This step converts direct economic impacts generated by the pavement and capacity programs into inputs for a REMI TranSight model for Mississippi to estimate the total economic effects (direct, indirect, and induced) under each of the three funding scenarios over the 2025–2050 period.

Economic modeling is conducted using the REMI TranSight model for Mississippi, developed by Regional Economic Models, Inc. (REMI).[6] REMI's economic models are dynamic forecasting and policy analysis tools that integrate input-output, computable general equilibrium, econometric, and economic geography methodologies.

These models incorporate input-output relationships and dynamic simulation to capture how economic activity flows across industries, time, and regions. [7] The REMI framework uses a transparent structure grounded in economic theory to trace how policy changes, investments, or external factors influence employment, income, productivity, and demographic trends throughout a regional economy.

REMI models can be used to assess the economic impacts of proposed policies (e.g., business tax incentives) and to demonstrate the effects of transportation projects (e.g., congestion mitigation and technology-driven infrastructure optimization). They also support analysis of demographic shifts due to energy or environmental initiatives and evaluate the economic implications of programs on rural communities).

REMI TranSight, specifically designed for transportation analysis, enables the evaluation of the economic impacts of transportation policies and infrastructure projects, and helps prioritize investments. For example, it can be used to estimate the economic benefits of rehabilitating deteriorated pavement and aging bridges across Mississippi's highway network, improvements that reduce vehicle operating costs, enhance travel time reliability, and improve safety. These benefits, in turn, generate positive ripple effects across the state's economy by supporting job creation, increasing personal income, and boosting business productivity.

Using the REMI TranSight model for Mississippi, this analysis evaluates the economic impacts of each of the three funding scenarios. Each of these funding scenarios affects the condition and performance of the state's highway system in a distinct way. The outputs of the economic modeling reflect the total economic impacts, that is, the combined direct, indirect, and induced impacts resulting from the deteriorating or improving performance of Mississippi's highway infrastructure.

Impacts include the following:

- **Direct impacts** are industry-specific and illustrate how a particular sector responds to a given policy or investment. For example, improved highway conditions and reduced congestion can lead to lower fuel consumption and vehicle operating costs for both personal vehicles and freight carriers. Trucking

[6] https://www.remi.com/

[7] https://www.remi.com/models/

companies may benefit from shorter delivery times and reduced wear and tear on vehicles, which can translate into cost savings and increased efficiency. These direct impacts are incorporated into REMI TranSight through policy variables.

- **Indirect impacts** capture the economic activity generated within the supply chains of the affected industries. For instance, as freight carriers and logistics firms reduce transportation costs and expand operations, their suppliers (e.g., vehicle maintenance providers, fuel distributors, and equipment manufacturers) may also experience increased demand and business activity.
- **Induced impacts** refer to the subsequent in-state consumer spending by employees working directly in the affected industries or indirectly through related activities. For example, as transportation companies grow and hire more workers, those employees spend their earnings on housing, groceries, healthcare, and other goods and services, further stimulating the local economy. This ripple effect generates additional employment, income, and value-added across the state.

The REMI TranSight model used in this analysis covers 39 regions, including all counties in Mississippi as well as the remaining areas of the Memphis, New Orleans and Mobile Metropolitan Statistical Areas (MSAs), 70 industry sectors, historical demographic and economic data from 2001 to 2022, and forecast demographic and economic data from 2023 to 2060.

The deterioration of Mississippi's highway system increases transportation costs for both residents and businesses. Commuters face higher vehicle operating and maintenance costs, along with travel delays, which reduce disposable income and divert spending away from essentials such as food, rent, and entertainment. These increased costs limit disposable income and reduce consumer spending, thereby having a negative impact on the regional economy. Businesses also face higher freight and travel costs, which increases the cost of doing business in Mississippi. This discourages investment, reduces profitability, and limits expansion opportunities.

Higher transportation costs undermine the state's competitiveness, making it harder to attract and retain workers and businesses, slowing economic development. In contrast, improved highway conditions in the state lower travel costs, improve mobility, and support economic growth. Well-maintained roads reduce vehicle operating and maintenance costs, minimize travel delays, and improve overall efficiency. These improvements increase workforce productivity, encourage business activity, and attract investment. Ultimately, residents enjoy a higher quality of life, and

businesses benefit from lower operating costs, contributing to a stronger and more competitive state economy.

This analysis estimates the total economic (combined direct, indirect, and induced) impacts by using the direct impacts experienced by highway users over the 25-year analysis period, generated by the **Pavement and Highway Capacity Programs**, as inputs into the REMI TranSight model for Mississippi.[8] This involves converting monetized direct costs into inputs for the REMI TranSight model for Mississippi through a series of structured allocations:

- Increases (or decreases) in vehicle operating costs and travel time delays affecting trucks and business travelers, resulting from changes in the condition or performance of Mississippi's state highway system, translate into higher or lower costs of doing business within the state. The additional (or savings) in business costs for trucks (both for-hire and in-house) and business travelers, are allocated to individual industries based on two factors: (1) each industry's share of total output in Mississippi, and (2) the value of transportation services consumed by each industry to produce one dollar of output. The REMI TranSight model uses Mississippi's industrial composition and the Transportation Satellite Accounts (TSA) coefficients from 2025-2050 to distribute the estimated additional costs across industries within the state.
- Increases (or decreases) in vehicle operating costs for passenger cars commuting to work or making 'all other purposes' trips due to deteriorating (or improving) conditions and performance of Mississippi's state highway system are introduced into the REMI TranSight model as redcued (or increased) consumer spending on motor vehicle fuel, oil, maintenance, and repairs. In a constrained budget situation, any increase in spending on one item is offset by a decrease in spending on other goods and services. This consumption reallocation is addressed internally within the REMI TranSight model.
- Increases (or decreases) in travel time delay costs for private auto users communiting to work and making 'all other purposes' trips due to deteriorating (or improving) conditions and performance of Mississippi's state highway system are entered into the REMI TranSight model as changes in the quality of life or amenities.
- Increases (or decreases) in motor vehicle crash costs involving passenger cars and trucks due to deteriorating (or improving) conditions and performance of

[8] http://www.remi.com

Mississippi's state highway system are similarly treated as changes in the quality of life or amenities within the REMI TranSight model.

The REMI TranSight model for Mississippi is then run to calculate the total economic impacts to the state through the horizon year 2050. These results are used to communicate the total economic impact of the study's funding scenarios, based on three key measures of change in overall economic activity derived from the REMI TranSight modeling outputs. These three measures are:

- **Employment**, which comprises estimates of the number of full-time plus part-time jobs by place of work. Full-time and part-time jobs are counted at equal weight.
- **Personal Income**, which corresponds to income received by persons from all sources. Estimates of personal income are presented by the place of residence of the income recipients.
- **Value Added**, which corresponds to the contribution of an industry or sector to gross state product (GSP). In other words, it is that wealth created by industry activity.

3.0 Economic Impacts of Funding Scenarios

This section quantifies the direct costs and savings experienced by highway users, including passenger vehicles and freight trucks, under each funding scenario, based on changes in the condition and performance of Mississippi's highway infrastructure over the 2025–2050 analysis period. These impacts, generated through investments in the **Pavement and Highway Capacity Programs**, reflect improvements in travel time, reductions in vehicle operating costs and motor vehicle crashes, and enhanced overall system reliability. In addition to user-level impacts, the analysis captures the broader economic effects on the state, including direct, indirect, and induced impacts, as measured by job creation, personal income growth, and increases in Gross State Product (GSP).

Accelerating Funding Scenario

Table 16 summarizes the anticipated additional benefits to be experienced by highway users under the Accelerating Funding Scenario through the horizon year 2050. The additional savings in travel delay, vehicle operating costs, and motor vehicle crashes total $18.5 billion over the 2025-2050 analysis period (in 2023 dollars), with 89 percent accruing to passenger cars and 11 percent accruing to trucks.

Table 14. Direct Economic Impacts of the Accelerating Funding Scenario, 2025-2050

Direct Impact	Passenger Cars (Millions of 2023$)	Trucks (Millions of 2023$)	Total (Millions of 2023$)
Travel Delay Cost Savings	$8,561	$423	$8,984
Vehicle Operating and Maintenance Cost Savings	$6,095	$1,450	$7,544
Motor Vehicle Crash Cost Savings	$1,805	$136	$1,941
Total =	**$16,460**	**$2,009**	**$18,470**

Source: HNTB Analysis.

The Accelerating Funding Scenario is projected to generate an estimated $8.0 billion in gross state product and $5.7 billion in personal income from 2025-2050, along with average annual employment gains of approximately 1,600 jobs (**Table 15**).

Improved pavement conditions across the state result in significant savings in travel time, vehicle operating costs, and motor vehicle crashes. These savings fuel economic growth by encouraging residents to stay, supporting business expansion, and enhancing Mississippi's overall competitiveness. A more efficient and reliable transportation system strengthens the state's ability to attract and retain talent and investment, ultimately driving job creation, increased labor income, and long-term gains in GSP.

Table 15. Total Economic Impacts of the Accelerating Funding Scenario, 2025-2050

Economic Impact	Cumulative 2025-2050	Annual Average
Jobs created	41,800	1,600
Personal Income Created (Millions of 2023$)	$5,742	$221
GSP Created (Millions of 2023$)	$8,051	$310

Source: HNTB Analysis of REMI TranSight Model Outputs for Mississippi under the Accelerating Funding Scenario.

Improving Funding Scenario

Table 16 summarizes the anticipated additional benefits to be experienced by highway users under the Improving Funding Scenario through the horizon year 2050. The additional savings in travel delay, vehicle operating costs, and motor vehicle crashes total $15.9 billion over the 2025-2050 analysis period (in 2023 dollars), with 89 percent accruing to passenger cars and 11 percent accruing to trucks.

Table 16. Direct Economic Impacts of the Improving Funding Scenario, 2025-2050

Direct Impact	Passenger Cars (Millions of 2023$)	Trucks (Millions of 2023$)	Total (Millions of 2023$)
Travel Delay Cost Savings	$7,361	$367	$7,727
Vehicle Operating and Maintenance Cost Savings	$5,183	$1,208	$6,390
Motor Vehicle Crash Cost Savings	$1,624	$122	$1,746
Total =	**$14,167**	**$1,697**	**$15,864**

Source: HNTB Analysis.

The Improving Funding Scenario is projected to generate an estimated $6.9 billion in gross state product and $5.0 billion in personal income from 2025-2050, along with average annual employment gains of approximately 1,400 jobs (**Table 17**).

Table 17. Total Economic Impacts of the Improving Funding Scenario, 2025-2050

Economic Impact	Cumulative 2025-2050	Annual Average
Jobs Created	36,100	1,400
Personal Income Created (Millions of 2023$)	$4,981	$192
GSP Created (Millions of 2023$)	$6,923	$266

Source: HNTB Analysis of REMI TranSight Model Outputs for Mississippi under the Improving Funding Scenario.

Maintaining Funding Scenario

Table 18 summarizes the anticipated additional benefits to be experienced by highway users under the Improving Funding Scenario through the horizon year 2050. The additional savings in travel delay, vehicle operating costs, and motor vehicle crashes total $11.9 billion over the 2025-2050 analysis period (in 2023 dollars), with 90 percent accruing to passenger cars and 10 percent accruing to trucks.

Table 18. Direct Economic Impacts of the Maintaining Funding Scenario in Mississippi, 2025-2050

Direct Impact	Passenger Cars (Millions of 2023$)	Trucks (Millions of 2023$)	Total (Millions of 2023$)
Travel Delay Cost Savings	$6,129	$301	$6,430
Vehicle Operating and Maintenance Cost Savings	$3,370	$739	$4,109
Motor Vehicle Crash Cost Savings	$1,220	$92	$1,312
Total =	**$10,719**	**$1,131**	**$11,850**

Source: HNTB Analysis.

The Maintaining Funding Scenario is projected to generate an estimated $5.4 billion in gross state product and $3.9 billion in personal income from 2025-2050, along with average annual employment gains of approximately 1,100 jobs (**Table 19**).

Table 19. Total Economic Impacts of the Maintaining Funding Scenario, 2025-2050

Economic Impact	Cumulative 2025-2050	Annual Average
Jobs Created	28,300	1,100
Personal Income Created (Millions of 2023$)	$3,944	$152
GSP Created (Millions of 2023$)	$5,417	$208

Source: HNTB Analysis of REMI TranSight Model Outputs for Mississippi under the Maintaining Budget Scenario.

4.0 Economic Contribution of Non-Highway Modes

This section outlines the economic impacts of non-highway transportation modes, including rail, ports and waterways, air travel, transit, and pedestrian and bicycle infrastructure, based on findings from prior relevant studies and projected economic trends in Mississippi over the next 25 years.

Airports

Mississippi's network of 80 airports, including 74 public and six private airports, plays a crucial role in the state's transportation system and serves as a key driver of economic growth and development. These airports offer essential connections that help businesses operate effectively and enhance the quality of life for Mississippi residents and visitors. In addition to these functions, Mississippi's airports provide a range of valuable services, including air ambulance support, law enforcement assistance, aerial agricultural operations, aerospace education, and support for the oil and gas industries.[9]

Direct Economic Contribution of Mississippi Air Transportation Industry

Table 20 provides a snapshot of the direct economic contribution of Mississippi's air transportation industry in 2023, along with projected contributions for 2050. In 2023, the industry, which includes both scheduled and non-scheduled air carriers transporting passengers and freight, supported 480 direct jobs. These jobs generated $20.1 million in wages and benefits, contributed $136.9 million to Mississippi's GSP, and added $323.7 million to the state's total economic output. Over the next 27 years, the number of direct jobs in the air transportation industry is forecasted to grow by 0.4 percent. Despite the modest job growth, the industry is expected to maintain a significant economic impact, with average annual contributions of 1.9 percent to both statewide compensation and economic output.

[9] Mississippi Department of Transportation. Intermodal Planning. Intermodal Planning.

Table 20. Direct Economic Contribution of Air Transportation Industry in Mississippi, 2023 and 2050

Metric	2023	2050	CAGR (2023- 2050)
Employment (jobs)	480	530	0.4%
Compensation (Millions of 2023$)	$20.1	$33.1	1.9%
Average Annual Compensation Rate (2023$)	$41,520	$61,976	1.5%
Gross State Product (Millions of 2023$)	$136.9	$220.5	1.8%
Economic Output (Millions of 2023$)	$323.7	$538.7	1.9%

Source: REMI TranSight Model for Mississippi.

Total Economic Contribution of Mississippi General Aviation Industry

Table 21 presents a snapshot of the total economic contribution of the general aviation industry in Mississippi in 2023. The direct impact refers to economic activity generated within the general aviation industry itself. The indirect impact encompasses the economic activity that occurs throughout the industry's supply chain. The induced impact captures the economic activity driven by household spending of wages and proprietor income earned as a result of direct or indirect involvement in general aviation. Finally, the enabled impact reflects the economic activity stemming from visitor spending at destinations reached via general aviation flights.

General aviation encompasses all civil aviation operations that are not part of commercial airline service or military activity. This includes virtually all flights not operated by major commercial carriers or the armed forces.[10] General aviation includes a wide range of flight operations outside of commercial airline and military activity such as agricultural aviation (e.g., crop dusting, aerial seeding), corporate and business aviation (company jets and charters), unscheduled charter flights, flight training, medical transport (air ambulances), private flying, sightseeing tours, aerial firefighting, law enforcement, and search and rescue operations. In 2023, general aviation supported approximately 13,700 jobs in Mississippi, generating $770 million

10 Contribution of General Aviation to the US Economy in 2023. Contribution of General Aviation to the US Economy in 2023

in total payroll and contributing with $3 billion to the state's total economic output. The findings also indicate that each direct job in general aviation supported an additional 2.3 jobs in other industry sectors in Mississippi.

In 2023, general aviation supported 13,700 jobs with a total annual payroll of more than $770 million and contributed more than $3 billion to Mississippi's economic output in that year.[11] These results also indicate that each direct job in the general aviation industry supported an additional 2.3 jobs in other sectors of Mississippi's economy.

Table 21. Total Economic Contribution of Mississippi General Aviation Industry, 2023

Metric	Direct Impact	Indirect & Induced Impact	Enabled Impact	Total Impact	Percent of State
Employment (Jobs)	4,200	8,200	1,300	13,700	0.8%
Labor Income (Millions of 2023$)	$321	$399	$50	$770	0.9%
Gross State Product (Millions of 2023$)	$497	$774	$93	$1,364	0.9%

Source: Contribution of General Aviation to the US Economy in 2023. Contribution of General Aviation to the US Economy in 2023

Ports and Waterways

Mississippi is connected to national and global markets through 16 ports located along the navigable waters of the Mississippi River, its tributaries, the Tennessee-Tombigbee Waterway, and the northern Gulf of Mexico. Strategically positioned along key segments of the inland waterway system, including the Lower Mississippi River, the Yazoo River, and the Tennessee-Tombigbee Waterway, these ports provide Mississippi with direct access to both domestic and international trade routes.

Mississippi three largest seaports located on the northern Gulf of Mexico include the Port of Gulfport, the Port of Pascagoula, and Port Bienville. These ports provide bulk, break-bulk, and ship construction and repair services, with the Port of Gulfport being

[11] Contribution of General Aviation to the US Economy in 2023. Contribution of General Aviation to the US Economy in 2023

the only Mississippi container port. In 2024, the Port of Gulfport handled approximately $907.4 million in containerized cargo value, marking a 5.3 percent increase from the previous year.[12] Its status as the only container port in Mississippi underscores its unique position in facilitating international trade and supporting regional economic growth.

Direct Economic Contribution of Mississippi Water Transportation Industry

A snapshot of the direct economic contribution of Mississippi water transportation industry in 2023 and the expected contribution in 2050 is provided in **Table 22**. In 2023, the water transportation industry handling the movement of commodities and people through Mississippi's ports and waterways accounted for 1,040 direct jobs, generated $125.2 million in direct wages and benefits, and directly contributed $234.8 million to the state's GSP and $843.5 million to Mississippi's economic output.

The forecasted decline in employment reflects a rise in labor productivity driven by accelerated automation, technological innovations, and significant capital investments. These advancements enable the industry to achieve greater efficiency and output with fewer workers, fundamentally reshaping the labor landscape. Although the number of direct jobs in the water transportation industry is projected to decline slightly over the next 27 years, the industry is still expected to contribute an average of 1.6 percent annually to total compensation and 1.5 percent annually to GSP in the state.

[12] Breaking Down America's Biggest Container Ports: 2024 Trade Insights – Pacific Merchant Shipping Association

Table 22. Direct Economic Contribution of Mississippi Water Transportation Industry, 2023 and 2050

Metric	2023	2050	CAGR (2023-2050)
Employment (Jobs)	1,040	960	-0.3%
Compensation (Millions of 2023$)	$125.2	$189.9	1.6%
Average Annual Compensation Rate (2023$)	$120,800	$196,826	1.8%
Gross State Product (Millions of 2023$)	$234.8	$353.6	1.5%
Economic Output (Millions of 2023$)	$843.5	$1,316.2	1.7%

Source: REMI TranSight Model for Mississippi and Adjacent MSAs.

Total Economic Contribution of Mississippi Inland Waterways

Table 23 summarizes the total (combined direct, indirect and induced) economic contribution of Mississippi's inland waterways to the state's economy in 2021. These waterways are a vital component of Mississippi's transportation infrastructure, supporting both commercial navigation and broader economic activity. The inland waterways enable the efficient movement of bulk commodities such as food and food products, petroleum products, and construction materials. In 2021, 17.9 million tons of freight valued at $10 billion were transported via Mississippi's inland waterways, accounting for 45 percent of the state's total marine freight tonnage.[13] Beyond goods movement, these waterways support a wide range of industries, including water transportation, logistics, warehousing, and port operations, forming a cornerstone of Mississippi's freight network and economic development. In 2021, these industries supported a total of 114,000 jobs (including direct, indirect, and induced), generated $6.0 billion in personal income, contributed $9.2 billion to GSP, and added $23.8 billion to Mississippi's total economic output. Altogether, the economic activity generated by Mississippi's inland waterway ports in 2021 represented 7 percent of all jobs in the state and 5.6 percent of its GSP.

[13] National Waterways Foundation. Economic Impact of Mississippi's Inland Waterways in 2021. HO_Waterways_MS_231108.pdf.

Table 23. Total Economic Contribution of Mississippi's Inland Waterways, 2021

Metric	2021*	Percent of State**
Employment (Jobs)	114,000	7.0%
Personal Income (Billions of 2021$)	$6.0	4.4%
Gross State Product (Billions of 2021$)	$9.2	5.6%
Economic Output (Billions of 2021$)	$23.8	7.5%

Source: *National Waterways Foundation. Economic Impact of Mississippi's Inland Waterways in 2021. HO_Waterways_MS_231108.pdf. **REMI TranSight Model for Mississippi and Adjacent MSAs.

Total Economic Contribution of Mississippi Ports

In 2013 Mississippi's ports supported more than 125,000 jobs (combined direct, indirect, and induced jobs) in the state, generating $5.4 billion in income and $16.8 billion in gross state product. The ports supported as many as one out of every 10 jobs across the state and contributed 16 percent to Mississippi GSP.[14] More recent research indicates that in 2022, the Port of Gulfport alone provided $3.8 billion in economic value to the Mississippi Gulf Coast region, contributed $62.5 million in local and state taxes, and supported approximately 3,600 direct jobs and 5,300 indirect jobs.[15]

Rail

Rail plays a vital role in the movement of numerous commodities and is especially important for long-distance and interstate freight. It also serves as an efficient alternative to congested highway corridors for specific goods. In Mississippi, rail provides essential access to key gateways, such as maritime ports and intermodal terminals, as well as major freight generators across critical industries, including agriculture and food manufacturing, pulp and paper, petroleum and chemicals, steel and metal fabrication, and construction materials.

[14] MDOT. Statewide Port Study Economic Role of Ports. December 2014.

[15] Mississippi State Port Authority at Gulfport Five Year Strategic Plan, Fiscal Years 2027-2031. https://www.lbo.ms.gov/misc/strategic/FY27/936-00-plan.pdf.

Mississippi's rail network plays a vital role in enhancing the state's multimodal transportation system while supporting economic development and community vitality. By offering an efficient alternative to highway transportation, both freight and passenger rail services contribute to a more balanced, sustainable, and resilient transportation system. The economic and societal benefits of Mississippi's rail network include the following:

- **Highway Infrastructure Preservation -** Freight and passenger travel by rail reduces wear and tear on roads, particularly from heavy trucks, minimizing the need for costly road maintenance and future expansion in Mississippi. Nearly 70 semi-tractor/trailer trucks are needed to move 1,750 short tons of dry cargo, compared with 16 railcars to move the same amount of dray cargo.[16] In 2022, it would have taken 6.2. million trucks to move the freight that moved by rail in Mississipi.[17] Therefore, rail contributes to the state of good repair of the largely publicly-owned roadway infrastructure in Mississippi.
- **Reduced Demand for Additional Roadway Capacity** - Freight and passenger rail contributes to the efficient use of existing road capacity by reducing the demand for additional highway capacity or substantial upgrades to accommodate additional traffic.[18]
- **Highway User Benefits -** Freight rail reduces long-distance truck traffic and passenger rail reduces long-distance car travel. This leads to less congestion on highways, improving travel times and lowers vehicle operating costs for road users in Mississippi.
- **Environmental Sustainability -** Rail transportation is significantly more fuel-efficient than trucks and passenger cars. On average, freight rail is 3 to 4 times more fuel-efficient than trucks; freight rail can transport one ton of cargo over 470 miles on a single gallon of diesel fuel, while freight trucks can only move the same amount of cargo over 134 miles per gallon.[19] Freight rail is also more environmentally friendly than trucks. Trucks emit 6 to 7 times more CO_2 per ton-mile than rail; freight rail emits 21.57 grams of CO_2 per ton-mile while

[16] *A Modal Comparison of Domestic Freight Transportation Effects on the General Public: 2001–2019* (January 2022). Prepared for the U.S. National Waterways Foundation. Prepared by the Texas Transportation Institute's Center for Port and Waterways at Texas A&M University.

[17] Freight Rail in Mississippi Factsheet, Available at State Fact Sheets.

[18] Association of American Railroads (AAR). Policy & Economics. Rail Transportation and the U.S. Economy: Fueling Growth, Trade, and Opportunity. February 28, 2025.

[19] Is Rail Better for the Environment Than Trucks? - RSI Logistics

freight trucks emit 140.70 grams per ton-mile.[20] Overall, rail transportation provides significant environmental benefits in Mississippi, including reduced petroleum consumption, lower greenhouse gas emissions, and improved air quality.

- **Safety Benefits** - Rail transportation has lower accident, injury, and fatality rates per ton-mile and passenger-mile compared to trucks and passenger cars. This contributes to fewer vehicle crashes on highways, enhancing overall transportation safety in Mississippi.
- **Freight Shipping Cost Savings** - Rail offers lower shipping costs per ton-mile than trucking, making it a cost-effective option for businesses, especially for long-haul freight. Though transit times may be longer, shippers benefit from reduced costs and can plan accordingly.
- **Expanded Market Access and Productivity Gains** - In Mississippi, rail expands market access for local businesses by connecting them to regional, national, and international markets. This enables economies of scale in both production and distribution, supporting greater efficiency, lower costs, and enhanced competitiveness across key industries in the state.
- **Supply Chain Efficiency** - Investments in rail infrastructure in Mississippi enhance connectivity between freight origins and their destinations across the country. These improvements enhance supply chain reliability, improve network fluidity, and expand freight capacity, delivering long-term economic benefits for key industries that drive Mississippi's economy, including chemicals, steel, lumber and wood products, pulp and paper, petroleum and coal, crushed stone and sand, grain, and food products.
- **Tourism and Visitor Spending** - Amtrak passengers visiting Mississippi contribute significantly to local economies. These visitors, often traveling for major regional events such as Mardi Gras, the New Orleans Jazz & Heritage Festival, and the Essence Festival, spend on accommodations, food, entertainment, and retail. Their spending supports jobs, drives local business revenue, and bolsters tax bases in communities across the state.
- **Enterprise Effects** - The presence of freight rail operators and Amtrak services in Mississippi contributes directly to employment and generates demand for local goods and services, supporting broader community development.

[20] *A Modal Comparison of Domestic Freight Transportation Effects on the General Public: 2001–2019* (January 2022). Prepared for the U.S. National Waterways Foundation. Prepared by the Texas Transportation Institute's Center for Port and Waterways at Texas A&M University.

Enterprise Direct Impacts of Mississippi Freight Rail Industry

Table 24 provides a snapshot of the enterprise direct impacts of Mississippi freight rail industry, based on the most recent data from the Association of American Railroads (AAR). In 2021, the industry paid $230.8 million in wages and benefits to 1,733 employees, along with $137 million in retirement benefits to 5,200 retirees. By 2022, employment in the industry increased by 4.6 percent. These figures underscore the significant contribution of the freight rail industry to Mississippi's economy.

Table 24. Freight Rail Employees, Payroll Operating Expenses, Railroad Retirement Beneficiaries and Railroad Retirement Benefits Paid in Mississippi, 2021

Direct Benefits	2021*	2022**
Number of freight rail employees	1,733	1,812
Average wages & benefits per freight rail employee	$133,200	Not Available
Estimated freight rail payroll (wages and benefits) operating expenses (Millions)	$230.8	Not Available
Number of railroad retirement beneficiaries	5,200	5,900
Railroad retirement benefits paid (Millions)	$137.0	$139.0

Sources: *Association of American Railroads, Freight Railroads by State: 2021, Available at AAR-State-Rankings-2021.pdf. **Freight Rail in Mississippi Factsheet, Available at State Fact Sheets.

Mississippi railroads also make significant expenditures on labor, supplies, utilities, and other goods and services within the state. These investments generate direct, indirect, and induced economic impacts throughout Mississippi. For example, from 2018 to 2022, Canadian National (CN) invested over $300 million in capital improvements across the state, and in 2021 alone, CN paid $19 million in cash taxes.[21]

[21] CN to Invest $65 Million in Mississippi Enabling

Direct Economic Contribution of Mississippi Rail Transportation Industry

A snapshot of the direct economic contribution of Mississippi rail transportation industry serving passenger and freight movements in 2023 and the expected contribution of the industry in 2050 is provided in **Table 25**. In 2023, the rail transportation industry in Mississippi supported approximately 1,300 direct jobs, generated $184 million in wages and benefits, and contributed $496.8 million to the state's GSP and $978.8 million to overall economic output.

The forecasted decline in employment is indicative of rising labor productivity. Advances in automation, technology, and capital investment allow the rail industry to maintain high service standards while operating more efficiently with a smaller workforce. While the number of direct rail industry jobs is projected to decline slightly over the next 27 years, the industry is still expected to make a steady economic impact, contributing an average of 0.3 percent annually to both total compensation and the state's GSP.

Table 25. Direct Economic Contribution of Mississippi Rail Transportation Industry, 2023 and 2050

Metric	2023	2050	CAGR (2023 2050)
Employment (jobs)	1,300	1,210	-0.3%
Compensation (Millions in 2023 dollars)	$184.0	$200.2	0.3%
Average Annual Compensation Rate (2023 Dollars)	$141,980	$165,752	0.6%
Gross State Product (Millions in 2023 dollars)	$496.8	$541.6	0.3%
Economic Output (Millions in 2023 dollars)	$978.8	$1,101.8	0.4%

Source: REMI TranSight Model for Mississippi and Adjacent MSAs.

Transit

In 2023, Mississippi's public transit system served 3 million riders, a 9.8 percent increase from 2022[22], generating significant economic benefits, including:

- **Reduced Traffic Congestion and Lower Vehicle Operating Costs** - Efficient transit systems reduce the number of personal vehicles on the road, easing congestion and cutting costs associated with lost travel time and increased fuel consumption among remaining drivers.
- **Environmental and Public Health Benefits** - Reduced reliance on personal vehicles leads to fewer emissions, which can decrease healthcare costs related to pollution, while contributing to a healthier, more sustainable environment.
- **Improved Access to Employment, Healthcare, Education, Social Service, Shopping And Recreation Destinations** - Reliable transit systems connect residents, especially those in rural or underserved areas, to job opportunities. This expands labor market access and reduces employment barriers. Transit also opens pathways to a broad spectrum of essential destinations, including health services, educational institutions, retail centers, and recreational opportunities. [23] Collectively, these connections bridge geographic divides and empower communities by ensuring that every necessary service and amenity is within reach, thereby promoting a more inclusive and vibrant regional economy.
- **Boosting Local Business and Economic Development** - Transit hubs often become centers of economic activity that attract retail, restaurants, and services. This clustering effect can lead to revitalized communities and increased local tax revenues.
- **Household Cost Savings** - Public transit offers an affordable alternative to private vehicle use, cutting down on costs such as fuel, maintenance, and parking, which can free up household funds for other expenditures.
- **Increased Property Values** - Areas with improved transit access often see a rise in property values, attracting further investments and encouraging urban revitalization.
- **Enhanced Urban and Regional Connectivity** - A well-planned transit system links various parts of the state, creating a more interconnected region that can be more attractive to both residents and businesses.

[22] State Transportation by the Numbers | Bureau of Transportation Statistics.

[23] Section 5311 - Fact Sheet.pdf

- **Boosted Tourism** - Improved transit makes it easier for visitors to navigate cities and rural attractions alike, potentially increasing tourism revenue and promoting local culture and commerce.
- **Enterprise Effects** - The presence of transit operators in Mississippi contributes directly to employment and generates demand for local goods and services, fostering local economic growth. In 2023, Mississippi's transit and ground passenger transportation industry contributed $83.6 million in gross state product.[24]

Economic Development Partnerships

Strategic partnerships between transit agencies and organizations such as the Mississippi Economic Development Authority, Department of Human Services, and Department of Rehabilitation Services have helped align transit planning with broader economic goals.[25] These collaborations support job training programs, reduce barriers to employment, and enhance access to business districts, contributing to local economic vitality.

Additionally, services provided by agencies like Region 4 Mental Health Services help over 20,000 clients access jobs and community resources, reinforcing transit's role in workforce development and independent living.

Looking ahead, Mississippi is investing in mobility management networks and multimodal infrastructure to further integrate transit into economic planning. These efforts aim to improve coordination across sectors, address service gaps, and build resilience in the face of changing demographics and economic conditions.

Pedestrian and Cycling Facilities

Mississippi's pedestrian and cycling network has seen significant development in recent years, with a growing emphasis on safety, connectivity, and multimodal transportation. MDOT has prioritized creating a safe intermodal system that includes dedicated infrastructure for bicyclists and pedestrians.[26] The state features over 117 miles of bike routes, sidewalks, and shared pathways, integrated into both urban and

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[24] U.S. Bureau of Economic Analysis, Gross Domestic Product: Transit and Ground Passenger Transportation (485) in Mississippi, retrieved from FRED, Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org, accessed August 8, 2025.

[25] National Center for Mobility Management, *State of the State: Transportation Coordination Efforts in Mississippi,* February 2023, https://www.ccam-tac.org/wp-content/uploads/2023/03/NCMM_MS_State-of-the-State_-Final.pdf

[26] Bicycle & Pedestrian Program

rural areas.[27] Major trails such as the Natchez Trace Parkway[28], Longleaf Trace[29], and Tanglefoot Trail[30] offer scenic and functional routes for recreational and commuter use.

Economic benefits from bike and pedestrian infrastructure stem from the improved environmental, health, and business outcomes[31], including:

- **Reduced Traffic Congestion and Lower Vehicle Operating Costs** - By offering alternative transportation options, pedestrian and cycling infrastructures decrease dependency on cars, which in turn reduces traffic congestion, lowers fuel consumption, and minimizes overall vehicle operating expenses.
- **Environmental and Public Health Benefits** - Fewer cars on the road result in lower emissions and improved air quality. These environmental benefits translate into reduced public spending on pollution management and health-related issues.
- **Reduced Health Care Costs -** By promoting active living, these facilities help reduce obesity, cardiovascular issues, and other related health problems. Improved public health can lead to lower health care expenditures over time.
- **Boost to Local Retail and Commercial Activity** - Walkable and bike-friendly neighborhoods tend to attract more foot traffic. This increased presence of residents and visitors can lead to higher retail sales, reduced commercial vacancies, and overall economic revitalization of local businesses.
- **Enhanced Property Values** - Areas with high-quality pedestrian and cycling facilities often experience an uplift in property values, attracting further investment and development in both residential and commercial real estate.
- **Increased Tourism and Visitor Spending** - Attractive, accessible urban environments encourage tourism. Visitors are more likely to explore walkable

[27] State: Infrastructure for People Biking & Walking - Benchmarking Report By the League of American Bicyclists

[28] Visiting the Park | Natchez Trace Parkway Association

[29] Longleaf Trace | Mississippi's Premier Trail

[30] Mississippi's Tanglefoot Trail - Rails to Trails Conservancy | Rails to Trails Conservancy

[31] U.S. Department of Transportation, "Active Transportation," accessed September 18, 2025, https://www.transportation.gov/mission/office-secretary/office-policy/active-transportation/active-transportation.

areas, thereby boosting revenues for local shops, restaurants, and cultural attractions.

These benefits highlight how pedestrian and cycling infrastructure not only enhances quality of life, but can also drive sustainable long-term economic growth in Mississippi.

Visionary Bike-Ped Corridors

Active transportation corridors identified in the 2045 Gulf Regional Planning Commission (GRPC) and 2045 Central Mississippi Planning and Development District (CMPDD) metropolitan transportation plans outline a substantial pipeline of proposed biking and walking infrastructure across Mississippi. These plans identify 79 projects totaling nearly 230 miles of new facilities, with an estimated investment of more than $150 million in 2020 dollars.[32] While the plans do not include a specific investment timeframe, the GRPC anticipates that $30.7 million in federal Transportation Alternatives (TA) Set-Aside funding will be available for bike-ped projects in its region from 2020-2045. Similarly, the CMPDD anticipates that $19.73 million in TA funding will be available for bike-ped projects in its region from 2020-2045.

The proposed projects include a mix of shared use paths, buffered bike lanes, bike routes, and bicycle paths, reflecting a comprehensive approach to expanding safe, accessible active transportation options. Shared use paths alone account for more than half of the total mileage and funding, underscoring their importance in connecting communities and supporting multimodal travel.

These investments are expected to yield long-term economic benefits by improving access to jobs, schools, and services; enhancing public health; supporting tourism and local commerce; and increasing property values.

[32] Mississippi Gulf Coast Metropolitan Planning Organization, *2045 Metropolitan Transportation Plan,* December 2020, https://grpc.com/wp-content/uploads/2021/01/GRPC-MTP-2045-Main-Report-FINAL.pdf. Central Mississippi Planning & Development District. *2045 Metropolitan Transportation Plan,* November 2020, https://cmpdd.org/transportation/2045-metropolitan-transportation-plan/.

5.0 Key Findings

Documented in this technical memorandum is the approach to assessing the economic impacts in Mississippi associated with three scenarios of funding allocation that depict the condition and performance of the state highway system in the state through the horizon year 2050. It includes the measures of performance, data sources, and tools used to estimate direct impacts. It then describes the process used to translate the monetized direct impacts into the necessary model inputs for the economic impact model (REMI TranSight model for Mississippi). The REMI TranSight model uses the direct impacts to estimate the total (direct, indirect, and induced) changes in employment, personal income, and GSP in the state over the 2025-2050 period.

This economic impact analysis quantifies the long-term direct, indirect, and induced effects of the three funding scenarios based on changes in travel delay, vehicle operating and maintenance costs, and traffic crashes over the 25-year analysis period. Direct impacts represent the savings (or additional costs) attributable to travel efficiencies (or inefficiencies), arising from changes in conditions and performance of the highway network following MDOT funding scenarios (**Table 26** and **Table 27**).

Indirect and induced impacts, interchangeably referred to as the multiplier impacts, on the state economy are calculated from the direct impacts. Indirect impacts are associated with the changes in inter-industry purchases of intermediate goods and services, as economic drivers respond to the output changes in major industries resulting from the implementation of MDOT funding scenarios. Induced impacts result from the spending by employees working for the directly and indirectly impacted businesses within the state.

In this context, reductions in the costs of conducting business within the state, attributable to savings in travel delay and vehicle operating and maintenance costs, may have both direct impacts for those businesses realizing these savings, as well as indirect and induced effects on related businesses and activities. Total economic impacts are the aggregation of the direct and multiplier impacts (**Table 28**).

By understanding the current funding landscape and exploring future opportunities, this memo aims to equip policymakers with the necessary insights to make informed decisions. The goal is to develop a long-range transportation plan that not only addresses immediate needs, but also ensures the resilience and adaptability of Mississippi's transportation network.

Table 26. User Benefits for the Three Funding Scenarios, 2025-2050

User Benefits	Accelerating Funding Scenario	Improving Funding Scenario	Maintaining Funding Scenario
Hours of travel delay avoided	6.9 million	5.9 million	3.8 million
Hours of travel delay avoided per driver*	3.5 hours	3.0 hours	2.0 hours
Gallons of fuel saved	1.4 billion	1.2 billion	775 million
Gallons of fuel saved per driver*	660 gallons	560 gallons	360 gallons
Fatal crashes avoided	65	60	40
Injury crashes avoided	2,800	2,520	1,890
Property damage only (PDO) crashes only	7,680	6,900	5,190
Transportation cost savings** per driver* (2023$)	$8,700	$7,500	$5,600

*These savings are estimated on a per-driver basis using an average of 2.1 million licensed drivers annually in Mississippi over the 2025–2050 period. This estimate is based on historical population data from 2019–2023, where the number of licensed drivers was calculated as a share of the statewide population and applied to statewide future population projections provided by Woods & Poole Economics, Inc. **Transportation cost savings reflect the economic value of avoided travel delays, vehicle operating and maintenance costs, and traffic crashes.

Source: HNTB analysis.

Table 27. Direct Economic Impacts of the Three Funding Scenarios in Mississippi, 2025-2050

Direct Impact	Accelerating Funding (Millions of 2023$)	Improving Funding (Millions of 2023$)	Maintaining Funding (Millions of 2023$)
Travel Delay Cost Savings	$8,984	$7,727	$6,430
Vehicle Operating and Maintenance Cost Savings	$7,544	$6,390	$4,109
Motor Vehicle Crash Cost Savings	$1,941	$1,746	$1,312
Total Cost Savings =	**$18,470**	**$15,864**	**$11,850**

Source: HNTB Analysis.

Table 28. Total Economic Impacts of the Three Funding Scenarios in Mississippi, 2025-2050

Annual Average Total Economic Impact	Accelerating Funding	Improving Funding	Maintaining Funding
Jobs Created	41,800	36,100	28,300
Personal Income Created (Millions of 2023$)	$5,742	$4,981	$3,944
GSP Created (Millions of 2023$)	$8,051	$6,923	$5,417

Source: HNTB Analysis of REMI TranSight Model Outputs for Mississippi under the three funding scenarios.

Using job impact estimates from IHS Markit's analysis of transportation infrastructure spending under the Infrastructure Investment and Jobs Act (IIJA)[33], this analysis estimates that annual capital expenditures under the funding scenarios could generate between 1,800 and 6,800 additional jobs annually, relative to the baseline. These estimates are based on the rule of thumb that every $1 million in infrastructure investment (highways, bridges, and public transit) supports approximately 21 jobs across the economy.

Additional Annual Jobs Supported by Capital Expenditures:

- Accelerating Funding Scenario – **6,800** jobs
- Improving Funding Scenario – **4,300** jobs
- Maintaining Funding Scenario – **1,800** jobs

[33] HIS Markit. Economic Impacts of Transportation Infrastructure. Prepared for American Road and Transportation Builders ARTBA_EIA_IIJA_Report_Sept2021.pdf.