



CHAPTER 2

GOALS, STRATEGIES AND ACTION STEPS

INTRODUCTION

The long-range transportation planning process provides a number of challenges in assuring successful implementation. A prime challenge is in addressing competing modal interests, and developing a proper fusion of these interests. While each mode of travel has its own value and significance, it is by recognizing the relationship among these modes that the greatest value to the state's transportation system can be recognized. Historically, the focus of the planning process has been upon multimodal systems independent of one another, and more specifically, highway facilities. Realizing the importance of intermodality among systems and facilities will enhance Mississippi's stature in terms of economic development, sustainable development, safety, and essential passenger and freight issues of accessibility and mobility.

Through development of Goals, Strategies, and Action Steps (GSAS) by which to ensure goal attainment, MULTIPLAN focus is placed upon critical aspects of the transportation planning process. Past goals and strategies of the state's transportation network have been reviewed with a look to the future in mind. Through such an analysis, revisions have been made to the GSAS that better address both the current and future transportation needs of the state.

The GSAS of the 1996 Mississippi Long Range Transportation Plan (LRTP) have been examined in detail for their relevance and appropriateness to the current and future transportation needs of the state. This examination takes into consideration actions that have occurred since they were originally developed, as well as changing priorities and focuses. The examination incorporates input gathered from MDOT staff, Commissioners, and appropriate stakeholders through a number of interviews, along with research into external factors affecting GSAS implementation.

Based on interviews, research, and an analysis of the existing transportation system, the LRTP goals and strategies have been revised and updated. In certain instances the changes are simply organizational in nature, while in others the GSAS are revised or reorganized to allow for more precise measurement and subsequently better monitoring and evaluation. From the nine goals and 63 strategies of the 1996 LRTP, revisions have been made that result in the seven goals and 54 strategies for the MULTIPLAN.

Strongly associated with identification of system strengths and weaknesses and recommendations for improvement is the development of Measures of Effectiveness (MOE) and a monitoring plan to help measure progress toward the plan's goals. In order to have a direct impact upon capital and operational investment decisions, the MOE must be linked to the MULTIPLAN's goals. Although not specifically referenced in the 1996 Long Range Transportation Plan (LRTP), MDOT has with Phase I of MULTIPLAN begun development of a three-tier approach to such measures, which will undergo further refinement and completion within Phase II.

REVIEW OF THE 1996 LRTP GOALS, STRATEGIES AND ACTION STEPS

In order to make a current determination of appropriateness for the GSAS as developed for the 1996 LRTP, a determination of the status of specific projects and programs put forth in the LRTP was undertaken. Where projects and programs were completed or significant progress made, the GSAS were adjusted accordingly. Where projects and programs were not undertaken or significant progress made, likewise the GSAS were adjusted accordingly.

In both cases, analysis into not only *what* has occurred since the 1996 LRTP but also *why* has been undertaken. The analysis incorporates input gathered from MDOT staff, Commissioners, and appropriate stakeholders through a number of interviews, along with research into external factors affecting GSAS implementation. Organizational issues that are deemed crucial to successful MULTIPLAN development and implementation are addressed as well. It is through this process that the GSAS have been reformulated to ensure successful implementation.

The MOE currently being developed and to be completed in Phase II, will serve as the basis for a monitoring plan that will gauge the impact of decisions defined in the MULTIPLAN. The clear intent is to focus upon *outcome* measures rather than *output*. In doing so, system performance can be more closely related to policy decisions and progress measured against established goals. The GSAS have therefore been analyzed for their ability to be measured for outcome-based success.

It is not the desire of MDOT to completely re-work the 1996 LRTP Goals, Strategies and Action Steps, but rather to ensure appropriateness and relevance so that successful MULTIPLAN implementation is attainable.

SUMMARY AND DOCUMENTATION OF INTERVIEWS

A number of specific programs and projects are identified in the 1996 LRTP that require a status update as to their progress. Each of these elements has been reviewed through a cooperative interview process involving the Working and Advisory Committees, MDOT staff and other stakeholders, including the Transportation Commission and Office Directors. Through these interviews, a better understanding of actions that have occurred since these goals and strategies were set has been achieved, and a determination made as to whether the recommended action steps have been implemented. Based on an understanding of the current status, as well as input from MDOT staff and stakeholders regarding changing focuses and priorities, revisions have been made which reflect the current status of selected aspects of the 1996 LRTP.

Stakeholders

The following paragraphs summarize interviews conducted with members of the Mississippi Transportation Commission, as well as other participants. These interviews were conducted during the course of the initial project kickoff meetings. The summaries provided are in answer to the interviews and not defined policy changes.

Strengths of the Existing Transportation System

- 1987 Four-Lane Highway Program
- 1994 Gaming Roads Program

The strength mentioned most often in the state's transportation system is the 1987 Four-Lane Highway Program. This program was put into place by state lawmakers with the intent to build a four-lane highway within 30 minutes or 30 miles of every Mississippian.

Weaknesses of the Existing Transportation System

- Need for improved cooperation between MDOT and the State Legislature
- Need more MDOT flexibility and decision-making in Four-Lane Highway Program implementation
- Inadequate passenger rail transportation
- Lack of intermodality

Suggestions were made to either eliminate or revise Phase IV of the Four-Lane Highway Program in light of statewide traffic needs. Suggestions were also made to allow MDOT rather than the state legislature to decide where new roads are built.

The recurrent weaknesses stated were a lack of sufficient system intermodality and the tendency to focus primarily on highways rather than other modes, lack of an adequate rail system, and a lack of MDOT flexibility and decision-making ability.

Barriers to Multimodal Implementation

- Lack of coordination and oversight due to inordinate amount of boards and commissions statewide
- Current focus on highway facilities at the expense of other modes
- Financial constraints to implementation and ongoing development
- Lack of understanding (both with public and decision-makers) as to benefits
- Lack of plan implementation

A primary barrier to multimodal implementation cited in the interviews was cost or financial constraints. Along this same line was a lack of understanding of the issues and benefits by both the state legislature and the general public. Past planning policies and practices by MDOT have led to the development of modes independent of one another, with highways as the primary mode at the expense of all others.

Freight and Trucking Industry Needs

The common theme is that freight is not appropriately considered in the development of the State Transportation Improvement Program. Rail transport is an issue as it pertains to loadings and general infrastructure improvements, and the trucking industry needs to make more of a contribution and become an integral part of an intermodal system. Intermodal access to and from ports is also cited as a problem. MDOT is viewed by some as being unresponsive to these issues.

Customer/Stakeholder Involvement

Though “real” people are accessible at MDOT and there are opportunities to voice comments, the agency can do a better job of reaching out. Public affairs is underfunded and understaffed. A conflict exists in that MDOT has not identified a feasible means to give the public a proper forum in which to voice their comments, while on the other hand the public tends to take transportation for granted and, therefore, does not adequately express their needs. The general feeling is that while there is opportunity for public comment and customer/stakeholder involvement, more needs to be done in terms of raising the mutual awareness levels of MDOT staff, stakeholders and the traveling public.

State Agency, MPO and Provider Involvement in Transportation Planning Process

While for the most part the feeling is that the various levels are sufficiently involved, there is a competing voice which feels that problems exist with MPOs. These organizations should be transportation driven, but in fact are not adequately staffed with intermodal transportation specialists, and are therefore not appropriately involved in the planning and decision-making process. Again, communication and coordination across the various levels are cited as issues.

Appropriateness of Higher User Taxes for Transportation Infrastructure Improvements, and Highway Revenues for Financing Non-Highway Capital Improvements

There are conflicting opinions as to whether higher user taxes should be introduced for transportation infrastructure improvements, as well as whether highway revenues should be used to finance nonhighway (rail, air, water, bicycle and transit) capital improvements. While one view exists that higher taxes, perhaps in the form of a variable fuel tax, could be introduced, a competing view is that MDOT simply needs greater flexibility in the use and potential shifting of funds for maintenance projects. With respect to the shifting of highway revenues to nonhighway capital improvement projects, again there are competing opinions. However, those in favor of such a policy believe that all other modes should benefit, and direct benefits should result.

The following questions were asked of the interviewees:

Of the following goals of MDOT, which do you think should receive highest priority?

- Maintain/preserve the existing system
- Build new roads
- Improve public transit
- Complete Four-Lane Program
- Promote safety
- Offer modal choices
- Improve customer service
- Promote sustainable development
- Preserve/protect the environment
- Other

System maintenance and preservation was the predominant choice for highest priority, with promoting sustainable development and offering modal choices viewed as important goals as well.

Which of the following issues will most significantly impact the public, and Mississippi, in the next 30 years?

- Congestion on major highways
- Mismanaged growth
- Poor air quality
- Poor maintenance of existing roads
- Other

Mismanaged growth was viewed as having the most significant impact over the next 30 years, while poor maintenance of existing roads was thought to have a significant impact as well.

In analyzing the results of the interviews, areas to concentrate on include intermodality, awareness and cooperation across multiple levels, and improvements in accessibility and mobility in both passenger and freight transport systems. Linkages between modes and facilities need to be improved. The 1987 Four-Lane Program is generally seen as a successful component of the state planning process, but care needs to be taken that its success is not at the expense of other modes.

Interview respondents also stated that MDOT should have greater flexibility and decision-making ability, and should provide greater leadership and more responsiveness with respect to transportation planning policy and implementation within the state. Further, respondents stated that steps need to be taken to ensure the state legislature's understanding of pertinent issues such that appropriate funding is allocated on an annual basis. Along with appropriate funding allocations is the need for the legislature to grant greater flexibility to MDOT for both financial and programmatic decisions.

MDOT needs to improve its public awareness activities such that the traveling public and integral stakeholders understand the benefits of an intermodal transportation system, and greater cooperation and collaboration can occur.

MDOT Staff

Based on discussions with MDOT staff, the following paragraphs detail the status of specific programs and projects identified in the 1996 LRTP. The numbers in parentheses are provided as a reference to the Goals, Strategies and Action Steps from the 1996 Plan.

Mobility

- Phase I of the Four-Lane Highway Program has been completed. Phases II-III are scheduled to be completed by 2008. Phase IV is scheduled for completion by 2020 (pending appropriation of necessary funding). (1.1(1-2))

- A program to widen and pave shoulders on selected arterial and collector routes has been implemented. MDOT is paving 14 feet lanes and then striping them as 12 feet. (1.4)
- A strategic marketing plan has not been developed for public transportation processes. (1.6(2))

Safety

- A Safety Management System (SMS) has been designed, but is currently being re-written. A Strategic Safety Plan is being written to replace the existing SMS. (2.1)
- Motorists' interactions with and behavior towards cyclists have been incorporated into the Mississippi Driver's Manual and Written Exam. (2.5(5-6))

Economic Development

- The Casino Roads Program has been implemented. However, it is not being adequately funded. House Bill 1269 implemented the Gaming Roads Program, and specified over \$1.2 billion in projects. The revenue stream to fund the projects received only two percent of the gaming funds, and was to be repealed in 2012. The revenue stream will fund no more than half of the mandated projects. (3.1)
- The Economic Development Highways Program has not been implemented. (3.2)
- Corridor X of the Appalachian Development Highways Program has been completed. Corridor V has approximately 27 miles remaining (pending appropriation of necessary funding). (3.1)
- A separate bike path has been constructed along segments of the Natchez Trace Parkway. The City of Ridgeland has constructed some segments and the City of Kosciusko has plans to construct paths as well. (3.7)

System Management

- A Safety Management System (SMS) has been designed, but a Strategic Safety Plan is currently being written to replace the existing SMS. Both a Congestion Management System (CMS) and a Traffic Monitoring System (TMS) have been developed, but are no longer required and therefore have not been implemented. (5.1(3-5))

Maintenance and Preservation

- A Bridge Management System has been developed through the purchase of Pontis, a comprehensive bridge management system licensed through AASHTO. (6.2(2))

Environment and Energy

- The state vehicle management programs have not been modified to achieve rapid introduction of reduced-emissions vehicles. (7.2(2))

- A public awareness program has not been initiated to educate the public on the value of public transportation. (7.4(1))

Finance

- The funding mechanism by which ports may have access to the state's bonding capacity was set up during the 2001 Regular Session with the Multimodal Transportation Improvement Fund, which was to provide state funds for modes other than highways; however, no funds were allocated during the 2001 Session. (9.1(1))
- The program by which port improvement loans costing less than \$500,000 may be converted to an interest-free basis has not been set up. However, the Mississippi Transportation Commission approved \$2.5 million per year (NHS Funds) through TEA-21 (6 years) for improving NHS connectors. (9.6(2))

REVISIONS TO THE 1996 LRTP GOALS, STRATEGIES AND ACTION STEPS

Customer Focus: The focus of the review of the 1996 LRTP Goals, Strategies and Action Steps (GSAS) is customer-driven, with emphasis on the traveling public. The customers may be passengers on the transportation network, or those entities with an interest in freight transport. In either case, it is the ultimate goal of the MULTIPLAN to focus on improving and enhancing the transportation network, and addressing any deficiencies and inefficiencies, so that any impact upon the traveling public is a positive one. This focus is addressed through the revision of the GSAS towards more external, outcome-oriented measures as opposed to internal, output-oriented measures. In certain instances, appropriate customer satisfaction and awareness are measured through survey methods. These are addressed in the development of Measures of Effectiveness in Phase II.

Safety: An additional focus, which directly relates to the traveling public, is the issue of safety. Mississippi continues to rate poor nationally in areas of highway safety, as evidenced by continually rating highest in the statewide fatality rate on the state highway system. The GSAS associated with safety were closely analyzed for appropriateness and relevance in order that the state's safety record could properly be addressed.

Flexibility: Certain strategies that are program and/or project focused are time limited in their implementation. Where possible, these strategies were revised so that they may be continued in perpetuity without being limited by the constraints of the specific program. In all cases, the key factor is the ability for proper planning policy to lead to successful MULTIPLAN implementation.

Selected revisions to be noted include the elimination of Intermodal Efficiency and Connectivity as a goal. An underlying goal throughout the MULTIPLAN is intermodalism. Due to its importance and value to the state's transportation system, intermodalism has been incorporated as the underlying theme of each of the remaining goals, such that the need to set it apart would be redundant.

Accessibility has been added to Mobility as the first goal. While both are somewhat similar, a facility must first be accessible before freight or passenger travel can take

place. Due to their similarities and equal importance, both are treated as a single goal for the MULTIPLAN.

Recognizing the importance of preserving and protecting both the human and natural environment in transportation planning decisions, the Environment and Energy goal has been revised. Incorporating both human and natural environment elements as a goal better represents the Plan's intent in addressing overall environmental stewardship responsibilities.

Similarly, the importance of public and stakeholder awareness has necessitated a revision to the goal of Partnerships and Cooperative Processes. The inclusion of awareness and education as a component of this goal will address concerns with stakeholder, decision-maker and public understanding and acceptance of the needs and issues facing Mississippi's transportation system.

Finally, System Management as presented in the 1996 LRTP is internal, MDOT-oriented as opposed to external-oriented and focused on the traveling public. Further, strategies and action steps that may be viewed as relevant to the traveling public have been addressed elsewhere -- examples of these would be implementation of a Strategic Safety Plan and Pavement and Bridge Management Systems, as well as references to airport development and waterborne commerce.

With the emphasis on developing a relationship between the MULTIPLAN's goals and strategies and the traveling public, and further developing quantifiable measurements for qualified impacts, System Management is not a separate goal within the development of the MULTIPLAN Goals, Strategies and Action Steps. This lack of inclusion by no means implies a lack of importance. In fact, sound system management is essential to the overall development of a successful intermodal transportation system, and should be an underlying theme throughout the MULTIPLAN. This revision simply reinforces the external-oriented, customer-based focus of the MULTIPLAN.

MULTIPLAN GOALS

The following MULTIPLAN Goals are revisions and additions to those formulated with the 1996 LRTP, which have been provided in Appendix A for reference. The full matrix of GSAS can be found in **Table 2-1**.

- *Accessibility and Mobility: Improve Accessibility and Mobility for Mississippi's People, Commerce and Industry*

A greater proportion of Mississippians are within access to the state's highway system through the Four-Lane Highway Program and other initiatives. The state also enjoys a relatively high level of travel mobility. Sufficient intermodal accessibility and mobility are essential not only for passenger travel, but freight movement as well in order to meet the needs of the state's industrial and commercial sectors. It is important to ensure access and mobility for all citizens, regardless of physical limitations, social status, economic level or geographic location.

- *Safety: Ensure High Standards of Safety in the Transportation System*

A core priority of MDOT is transportation safety across all modes. Safety-deficient facilities can lead not only to lost financial resources and time but, more importantly, loss of life. While Mississippi continues to rank high nationally in the statewide rate of traffic fatalities on the state's highway system, improvement has been made through concentrated and coordinated efforts. Mississippians should be able to look to MDOT as the driving force behind the development and implementation of multimodal transportation safety programs.

- *Maintenance and Preservation: Maintain and Preserve Mississippi's Transportation System*

Mississippi has an extensive multimodal transportation system, in which the state has made a substantial investment. If the system is to continue serving the state's citizens and the investment is to be recognized, placing a high priority on the maintenance and preservation of the existing infrastructure is fundamental. Funding for future rehabilitative costs will directly affect accessibility and mobility, not to mention safety, of the state's passenger and commercial transportation system. Further, the strain on resources brought about by an inadequate maintenance system will have a direct effect on the economic development efforts of the state as well.

- *Environmental Stewardship: Ensure that Transportation System Development is Sensitive to Human and Natural Environment Concerns*

A sound transportation plan must address the relationship between the movement of people and goods and the impact upon the environment. Such a relationship is recognized within TEA-21 through a number of programs, including Congestion Mitigation and Air Quality (CMAQ). Additional Federal Acts to take into account include the National Environmental Policy Act (NEPA), Clean Air Act Amendments of 1990, and the Energy Policy Act of 1992. Preservation and protection of Mississippi's human and natural environment and resources for the benefit of future generations must be a goal of the current MULTIPLAN.

- *Economic Development: Provide a Transportation System that Encourages and Supports Mississippi's Economic Development*

Transportation and the supporting infrastructure are essential to economic growth and development within Mississippi. Not only does a superior transportation system support and retain existing economic development interests within the state, but it will help to make Mississippi attractive in the recruitment of new economic development. It is important that the transportation system not only serves the state's citizens and businesses, but also places the citizens and businesses in a position that makes them competitive on a national and global scale.

- *Awareness, Education and Cooperative Processes: Create Effective Transportation Partnerships and Cooperative Processes that Enhance Awareness of the Needs and Benefits of an Intermodal System*

As every Mississippian either uses or is affected by the state's transportation system, it is important that all citizens have an awareness of both the benefits and needs of the system. A well-informed citizenry, public interest and stakeholder base, and state legislature will lead to well-informed decisions and long-term fiscal planning. One of the most difficult aspects of successful transportation planning efforts is balancing and coordinating the multitude of interests involved in the decision-making process. Through the development of education and cooperative processes with proper communication on all levels, sufficient balance can be attained.

- *Finance: Provide a Sound Financial Basis for the Transportation System*

With the focus on the traveling public, the citizens of Mississippi rightly expect the financing they provide for the state's transportation system be managed and invested responsibly. A challenge for MDOT is to ensure that adequate funding is available for the long-term health of the system. Multiple and varied funding sources must be identified and managed responsibly so that the transportation needs of Mississippi's citizens and economic interests are met.

**Table 2.1
Matrix of Goals, Strategies, Action Steps**

Goals		Strategies	Action Steps
ACCESSIBILITY AND MOBILITY	IMPROVE ACCESSIBILITY AND MOBILITY FOR MISSISSIPPI'S PEOPLE, COMMERCE AND INDUSTRY	1.1 Provide reasonable access to the state's highway system to all citizens	1) Complete construction and open to traffic Phases II-IV of the Four-Lane Highway Program by the adopted schedule dates
		1.2 Improve accessibility and mobility through roadway design of selected arterial and collector routes	1) Adhere to a prioritization and construction program for provision of widening and paving shoulders on rural and urban arterials and collector streets to improve mobility for vehicles, pedestrians and bicycles
		1.3 Maintain the state's participation in research and implementation of Intelligent Transportation Systems	1) Continue to participate in cooperative programs with other states to study and implement system improvements in mobility, operational efficiency and safety based on emerging new technologies and operational management systems known as Intelligent Transportation Systems -ITS
			2) Continue implementation of ITS technologies, including automated weigh stations, video surveillance devices and signal systems with two-way communications
		1.4 Establish coordinated regional public transportation processes that involve the needs of the communities	1) Promote and support the development of regional, full service transit systems that have the ability to meet a variety of customer needs within and across urban and rural areas
			2) Develop a strategic marketing plan and support public transportation development plans
3) Continue to work with service providers and others to ensure that Mississippi's people with disabilities have equal access to public transportation services			
1.5 Support airport improvements and development that address increasing air traffic	1) Monitor and inventory the air system to determine areas of increasing traffic		
	2) Support the ongoing development of capacity planning efforts for airports in areas of increasing traffic		
	3) Support highway planning for airport access as a workable intermodal system		
1.6 Promote increased use of the state's freight and passenger rail system	1) Continue to improve the MDOT program to fund acquisition and rehabilitation of branch lines as well as special rail-related construction projects		
	2) Eliminate railroad clearance restrictions (tri-level, double-stack and Amtrak Superliner), remove speed restrictions where it is feasible and cost beneficial, and increase capacity where constrained		
	3) Encourage more widespread use of intercity rail service		

Goals		Strategies	Action Steps
ACCESSIBILITY AND MOBILITY	(Continued)	1.7 Encourage continued use of the state's water ports	1) Promote the preservation and enhancement of port operational capacity
			2) Promote highway and rail access to port facilities and coordinate marine interests with other modes
		1.8 Address integration of bicycle and pedestrian concerns into the statewide transportation planning process	1) Integrate bicycle and pedestrian movement into the areas of design standards, facilities, policies, parking, transit access, safety, funding and implementation
			2) Increase awareness of state and local engineers and planners regarding bicycle and pedestrian needs
			3) Coordinate bikeway planning with the Department of the Interior and the National Park Service with respect to the Natchez Trace Parkway
			4) Investigate opportunities for making bridges accessible to bicycles
		5) Encourage use of the bicycle as an access and egress mode to and from public transit stations, rail stations and airports	

Goals	Strategies	Action Steps	
SAFETY	ENSURE HIGH STANDARDS OF SAFETY IN THE TRANSPORTATION SYSTEM	<p>2.1 Design and implement a Strategic Safety Plan (SSP) that will assist in reducing fatalities, injuries and property damage accidents on the highway system</p>	<p>1) Create a comprehensive SSP addressing the driver, roadway, vehicle and emergency medical response</p> <p>2) Establish mechanisms for the most cost-effective, cooperative efforts to identify safety deficiencies and develop effective countermeasures</p> <p>3) Identify causes of past accidents and implement countermeasures. Improve crash location in accident files.</p> <p>4) Continue to meet all design standards for safety, fully commit safety program funds, and pursue safety initiatives as authorized and funded annually</p>
		<p>2.2 Encourage a secure and safe environment for public transportation that includes operationally safe equipment, facilities and personal security</p>	<p>1) Sponsor safety training and awareness programs on passenger relations, personal security, emergency and accident handling procedures, safe driving, and special assistance for older adults and people with disabilities</p> <p>2) Require the development and implementation of public transportation safety program plans</p>
		<p>2.3 Support statewide improvements to rail crossings and corridors</p>	<p>1) Identify and systematically reduce the number of at-grade rail-highway grade crossings</p> <p>2) Develop safety corridor projects that will benefit rail and highway users, and evaluate private grade crossings as they relate</p> <p>3) Coordinate the establishment of engineering standards for railroad-highway grade crossings</p> <p>4) Upgrade existing rail-highway grade crossings through the systematic installation of electronically activated gates and flashing lights</p> <p>5) Improve crossings to insure safe pedestrian and nonmotorized vehicle movement</p> <p>6) Encourage local communities to improve sight distances at all crossings</p>
		<p>2.4 Participate in transportation planning to preserve existing and provide for future corridors for airport arrival and departure traffic</p>	<p>1) Monitor and work with airport authorities to protect airspace around airports</p>

Goals		Strategies	Action Steps
SAFETY	(Continued)	2.5 Support measures to ensure waterway safety and to reduce conflicts between recreational boating and commercial shipping	1) Support actions of the Department of Wildlife, Fisheries and Parks to improve and maintain recreational boater education programs
			2) Recommend establishment by appropriate officials of adequate capabilities for law enforcement and marine patrols in commercially navigable waters frequented by recreational boaters
			3) Evaluate critical commercial navigation areas and recommend to the proper officials recreational restrictions to promote safety
		2.6 Provide safe travel for pedestrians and bicyclists along corridors and within existing communities and new developments	1) When major streets and highways are renovated, consider inclusion of bike lanes, and design of intersections to reduce pedestrian-bicycle and pedestrian-vehicle accidents
			2) Where feasible, install sidewalks on Mississippi's urban arterials and collectors to reduce pedestrian-bicycle, and pedestrian-vehicle accidents
			3) Develop criteria for provision of and implement widening and paving of shoulders on rural and urban arterials and collector streets to improve safety for nonmotorized uses

Goals		Strategies	Action Steps
MAINTENANCE AND PRESERVATION	MAINTAIN AND PRESERVE MISSISSIPPI'S TRANSPORTATION SYSTEM	3.1 Complete reconstruction and relocation of deficient segments of state highways	1) Implement a comprehensive evaluation and implementation program for the segments of arterial highways that require reconstruction and/or relocation as identified
		3.2 Implement a program for widening and paving of shoulders on selected arterial and collector routes	1) Implement construction of widening and paving shoulders on rural and urban arterials and collector streets to provide protection for the structural integrity of roadbeds and to improve maintainability of roads and rights-of-way
		3.3 Implement capital preventive maintenance in a timely and systematic manner, and at an investment level that minimizes life-cycle costs	1) Utilize the Pavement Management System to identify the optimum pavement preservation strategy
			2) Utilize the Bridge Management System to identify the optimum bridge preservation strategy
			3) Develop an annual maintenance needs budget based on standards and workloads
			4) Develop and provide a maintenance training program to improve performance where needed
		3.4 Enforce pavement and bridge weight and size regulations to avoid loads which would result in premature deterioration and implement preventive measures	1) Expand the system of permanent scales and extend the hours of operation at those locations where there is the greatest likelihood of significant volumes of overweight and oversize vehicles
			2) Routinely evaluate the program for deploying portable scales to maximize its contribution to overall weight enforcement on the state highway system
			3) Cooperate with each county and city to identify and replace hazardous and deficient bridges
		3.5 Support improved maintenance and planned replacement of public transportation equipment and facilities	1) Support the construction of regional maintenance centers for nonurban public transportation systems
			2) Support the planned replacement of buses and vans based on life-cycle cost considerations
			3) Estimate assistance costs, identify funding sources, and establish budget line items
		3.6 Support development and maintenance of intermodal facilities and linkages	1) Support efforts for identifying locations for intermodal facility use and implement appropriate land preservation strategies
			2) Support the development of planned maintenance procedures
			3) Estimate assistance costs, identify funding sources, and establish budget line items

Goals		Strategies	Action Steps
MAINTENANCE AND PRESERVATION	(Continued)	3.7 Support rail corridor and infrastructure maintenance and preservation programs	1) Identify endangered railroad lines critical to the transportation interests of the state that could be preserved only by state participation in assistance funding
			2) Evaluate potential future use and expand criteria and funding for preserving ROW, trackage and facilities
			3) Implement the rails-to-trails program through identification and development of previously identified rail corridors
			4) Estimate assistance costs, identify funding sources, and establish budget line items
		3.8 Support airport development and maintenance programs	1) Assist in grant acquisition for airport improvement and maintenance programs
			2) Support the development of planned maintenance procedures and pavement management programs
		3.9 Support waterway port development, maintenance and preservation programs	1) Establish mechanisms for identifying waterfront land that may be needed for port or marine transport use and take appropriate steps to preserve the availability of land for such use
			2) Assist in grant acquisition for port improvement and maintenance programs
			3) Support the development of planned maintenance procedures

Goals		Strategies	Action Steps
ENVIRONMENTAL STEWARDSHIP	ENSURE THAT TRANSPORTATION SYSTEM DEVELOPMENT IS SENSITIVE TO HUMAN AND NATURAL ENVIRONMENT CONCERNS	4.1 Consider short and long term environmental and social impacts and follow appropriate MDOT procedures for all transportation projects	1) Apply systematic practices to ensure that the adopted procedures are followed, including adherence to MDOT's defined project development process 2) Determine a methodology for environmental justice testing of proposed projects and planning policies
		4.2 Implement state standards and initiatives which incorporate air quality and energy consumption regulations in transportation planning policy	1) Coordinate with and support MPO efforts to ensure that air quality requirements are met 2) Pursue modifications to state vehicle management programs to achieve cost-effective introduction of low-emission or alternatively-fueled vehicles 3) Support transit, ride share, van pooling, car pooling, bicycling and walking as travel modes that reduce congestion and maintain good air quality 4) Encourage the use of energy efficient modes including public transportation, rail and water transport 5) Support vehicle Inspection and Maintenance Program to reduce motor vehicle emissions 6) Consider the role of alternative fuels in public transit fleet operations
		4.3 Work with other agencies to encourage environmentally responsible and aesthetically pleasing transportation systems	1) Work with local governments and appropriate state and federal environmental agencies during route location planning to enhance environmental protection and to avoid conflicts and costly delays in transportation project construction 2) Work with appropriate agencies to explore and implement cost-effective and creative alternatives to replace or mitigate unavoidable impacts to sensitive environments 3) Continue the Adopt-A-Highway program to remove roadside debris and to maintain roadside aesthetics
		4.4 Link public transportation, energy conservation and environmental awareness to enhance and preserve the natural resources of Mississippi	1) Work with the Mississippi Dept. of Environmental Quality to initiate a public awareness program designed to educate the citizens of Mississippi of the importance of public transportation in energy conservation and the preservation of Mississippi's air and water resources 2) Encourage employer-sponsored activities and other travel demand management strategies designed to reduce single occupant vehicle travel

Goals		Strategies	Action Steps
ENVIRONMENTAL STEWARDSHIP	(Continued)	4.5 Work toward resolution of the complex problems surrounding dredging of channels and dredge spoil disposal	1) Support state and local efforts with respect to the national dredging policy
			2) Support clarification of the roles and policies of state and federal agencies involved in the process and the responsibilities of various permitting agencies
			3) Support "wetlands mitigation banking" which would consist of land acquired in advance of the need for wetlands mitigation, and held for use as needed
		4.6 Work toward reducing obstacles to needed development and excessive delays in acquiring necessary environmental approvals	1) Seek means to rationalize complex environmental regulations and policies that have evolved over time without adequate interagency coordination
			2) Work to improve access to financial assistance for elements of the transportation system which find it necessary to expend funds for mandated environmental actions and cleanups
		4.7 Encourage land use planning that will incorporate public transportation, walking and bicycles	1) Encourage "transit-friendly" land development
			2) Encourage mixed density and mixed use development, with ample curb space for safe bicycle travel in new developments

Goals		Strategies	Action Steps
<p>ECONOMIC DEVELOPMENT</p> <p>PROVIDE A TRANSPORTATION SYSTEM THAT ENCOURAGES AND SUPPORTS MISSISSIPPI'S ECONOMIC DEVELOPMENT</p>		5.1 Continue development and implementation of roads and highways construction programs geared towards economic development efforts	<p>1) Ensure sufficient funding for the Gaming Roads program in order that it can be properly implemented</p> <p>2) Integrate planning for Economic Development Highways into MDOT's program as appropriate</p> <p>3) Complete the Mississippi portion of the Appalachian Corridor V Development Highway and develop applicable access roads for both the V and X corridors</p>
		5.2 Assist in the promotion of airports for tourism use	<p>1) Participate with the Mississippi Development Authority (MDA) in promoting tourism utilization of general aviation airports through brochures, production of aviation charts, and assessment of economic benefits of tourism use of airports</p>
		5.3 Stimulate economic development in rural and urban areas by improving public transportation networks and broadening and encouraging the use of public transport	<p>1) Support the establishment of a state interagency working group for integrated development of public transit services with housing, employment, energy conservation and other community and economic development programs</p> <p>2) Advocate improved intercity and rural public transit programs to address job development needs in rural areas</p>
		5.4 Promote a balanced freight transportation system that takes advantage of the inherent efficiencies of each mode	<p>1) Identify present relative levels of state and federal support for each of the various modes of freight transportation, including taxation, regulation, capital investment, and operating subsidy</p> <p>2) Ensure staffing focus/expertise in the economics, management and viability of the state's major freight modes, including trucking, rail, air, and ports and waterways</p> <p>3) Work with the MDA to promote the state's freight transportation system and intermodal abilities in industrial recruitment activities</p>
		5.5 Assure effective transportation linkages for freight and passengers to attract a larger share of international trade and travel to the state	<p>1) Assist in the promotion of airports for both international passenger and cargo service, including opportunities for air cargo in Latin American trade</p> <p>2) Assist airports and ports in obtaining Free Trade Zone (FTZ) status, and development of same</p> <p>3) Review linkages of FTZ's to the highway network, the rail network, port facilities, and airports to ensure that FTZ's have appropriate, efficient linkages with the transportation system elements needed to promote effective utilization of the FTZ's</p>

Goals		Strategies	Action Steps
ECONOMIC DEVELOPMENT	(Continued)	5.6 Support continued development of the state's water ports	1) Document the impact ports play in economic development and coordinate with the Mississippi Development Authority regarding port and waterway development 2) Maintain an active role in relevant Mississippi port organizations and interest groups and promote port interests with other public agencies and organizations
		5.7 Prioritize transportation system improvements and investments considering intermodal connectivity	1) Consider access to ports, airports and industrial park facilities as a weighted evaluation factor in highway project programming 2) Support ports in negotiating with railroads for improvement of service, upgrading and rehabilitation of facilities 3) Identify opportunities for new and/or improved intermodal facilities as part of the planning process for transit, trucks, railroads, airports and ports
		5.8 Attract bicycle tourists by supporting the improvement of bicycle facilities at Mississippi's scenic and recreational areas	1) Adopt a policy to purchase and convert abandoned railroads to bike trails where feasible 2) Support the continued construction of bike/pedestrian facilities throughout the state

Goals		Strategies	Action Steps
<p style="text-align: center;"> AWARENESS, EDUCATION AND COOPERATIVE PROCESSES CREATE EFFECTIVE TRANSPORTATION PARTNERSHIPS AND COOPERATIVE PROCESSES THAT ENHANCE AWARENESS OF THE NEEDS AND BENEFITS OF AN INTERMODAL SYSTEM </p>	6.1 Address the transportation needs of local governments in state planning policies and procedures		1) Provide every urban place of more than 5,000 population with financial and administrative assistance for construction projects 2) Consider local plans when selecting alternative alignments for transportation improvements
	6.2 Maximize benefits from technical and research advancements that may be applied to continued development of high quality transportation systems		1) Support and participate in cooperative programs with the State's institutions of higher learning to carry out research that will benefit transportation efficiency and intermodalism 2) Utilize federal aid research funds and participate in federally sponsored research programs 3) Continue to support the Technology Transfer program for local agencies
	6.3 Encourage more public-private partnerships in the expansion of rural transit services and the connectivity between rural and intercity transportation services		1) Promote a collaborative process among federal, state, local and other organizations (public and private) to foster improved service planning, communications and coordination through the Mississippi Public Transit Association
	6.4 Promote effective public-private rail transportation partnerships, including Class I short line ventures		1) Provide seed funding and-or other activities for local involvement and use of local resources 2) Seek cooperation of carriers in joint funding of mutually beneficial projects 3) Enhance the rail program through the use of programs such as economic development and establish other revenue enhancement measures
	6.5 Continue the partnership between the Mississippi Development Authority, the Department of Transportation and providers of transportation for marketing of transport services		1) Improve the cooperative processes between MDOT and transport providers to gather information on transportation capabilities, facilities, intermodal connections, rates and services that can be used to mount effective marketing campaigns 2) Improve the cooperative processes with MDA and the transport providers to offer strong marketing and business development efforts on behalf of the service providers
	6.6 Continue the advisory group for transportation concerns at the state level		1) Support Advisory Committees, using existing groups to provide a conduit for transportation policy and programming between state and local government and the private sector

Goals		Strategies	Action Steps
AWARENESS, EDUCATION AND COOPERATIVE PROCESSES	(Continued)	6.7 Develop an intermodal-based awareness program that will encourage transfers between the transportation modes	1) Emphasize intermodal transportation alternatives in the transportation planning process 2) Develop a coordinated public information and education program about available intermodal services (and other energy - efficient alternatives) 3) As part of the metropolitan planning process, identify opportunities for new and/or improved passenger and freight intermodal facilities and services
		6.8 Develop and implement comprehensive safety awareness, education and training programs	1) Publish documents describing elements of Mississippi's safety awareness program 2) Support the "Safe and Sober" program of the Governor's Highway Safety Program, including supporting and strengthening existing DUI laws 3) Support legislation of a .08 Blood Alcohol Content level 4) Support the safety belt usage program of the Governor's Highway Safety Program 5) Continue support for "Operation Lifesaver," a national public education program dedicated to reducing crashes, injuries and fatalities at highway-rail grade crossings

Goals		Strategies	Action Steps
FINANCE	PROVIDE A SOUND FINANCIAL BASIS FOR THE TRANSPORTATION SYSTEM	7.1 Establish a balanced funding program to achieve MDOT's objective with the funds made available to the Department	1) Continue to match federal aid funds as the top priority 2) Explore alternative funding sources to supplement the traditional surface transportation funds, including various local option taxes, benefit districts, impact fees and the like 3) Utilize an expanded and enhanced array of management systems to identify investment programs that minimize life-cycle costs 4) Support the development of a transportation maintenance plan with projected costs and available funding, such that the ongoing development of the State's transportation network can be preserved
		7.2 Cooperate with the Governor and the Legislature in restructuring revenue laws as appropriate	1) Utilize the financial planning element of this Transportation Plan to identify a sound financial program that addresses: (a) the commitments to the Four-Lane Highway Program, (b) the existing backlog of highway and bridge needs, (c) the erosion of purchasing power associated with inflation
		7.3 Alleviate the shortfall of funds for planned public transportation improvements and maintenance programs	1) Allocate Surface Transportation Funds to enhancement programs 2) Maintain financial obligations at a level which will ensure that the ongoing development of the public transportation network can be accomplished
		7.4 Stimulate further development of the general aviation industry in small communities and the air carrier airports	1) Continue support of the Aeronautics State Aid program for improvements to general aviation and air carrier airports
		7.5 Support funding efforts of air carrier and high-activity general aviation airports experiencing increasing air traffic	1) Assist airport managers in obtaining grant funds when possible to address increasing air traffic

Goals		Strategies	Action Steps
FINANCE	(Continued)	7.6 Encourage better access for financing of major capital improvement projects for ports	1) Ensure the allocation of sufficient funding in order that the funding mechanism by which ports may have access to the state's bonding capacity can be utilized
			2) Support improved utilization of the Port Revitalization Loan Fund by converting the loans to an interest free basis for port improvements costing less than \$500,000
			3) Utilize the funding provided by the Transportation Commission through TEA - 21 for National Highway System connectors
		7.7 Ensure a sufficient funding capacity for the preservation, operation and maintenance of freight and passenger rail systems	1) Examine various methods of permanent funding for rail passenger service and other railroad main line public uses
			2) Identify state and federal programs which can be adopted or accessed
		7.8 Develop a financing program for intermodal-based transportation facilities that will encourage transfers between the transportation modes	1) Undertake Major Transportation Investment Studies where appropriate to ensure that major federally-aided projects incorporate the most beneficial mix of transportation alternatives, including intermodal facilities and services
	2) Direct specific attention to intermodal facilities as part of the budget development process		
	3) Define roles (including cost-sharing arrangements) of the state government, local governments and private sector regarding intermodal facilities, including the provision of access roads that connect such facilities to the National Highway System and other arterial routes		