

SECTION 1.0 INTRODUCTION

This update of the Mobile Area Transportation Study (MATS) Long-Range Transportation Plan to the year 2035 was begun in 2007 under the guidance of the Mobile Urban Area Metropolitan Planning Organization (MPO). The study was conducted by the South Alabama Regional Planning Commission with the assistance of the Alabama Department of Transportation, the Mobile County Engineering Department, The WAVE Transit System, and the City of Mobile Transportation, Planning, and Engineering Departments. Funding has been provided by the U. S. Department of Transportation's Federal Highway Administration and Federal Transit Administration, by the Mobile County Commission, and by the cities of Mobile, Prichard, Chickasaw, Saraland, Satsuma, Creola, and Bayou La Batre.

The 2035 Transportation Plan is multi-modal in scope, encompassing long-range plans for highway, public transportation, and bicycle/pedestrian networks. Regional growth, economic development, and accessibility within the study area along with environmental concerns necessitate that the long-range plan addresses not only improved vehicular travel but also improvements to other modes of transportation such as bicycling and walking. Preservation of the existing transportation system coupled with enhancement of all modal choices will contribute to the improvement of the overall quality of life in the region.

The MPO's objective in initiating the plan update was to identify, to the maximum extent feasible, the multi-modal transportation improvements which will be needed in the Mobile urban area between now and the year 2035 in order to maintain an acceptable level of mobility. Where possible, these needs were quantified in terms of dollar costs and prioritized based on the availability of funding, the impact of the proposed improvement, and anticipated development patterns and timing. The Year 2035 Plan as detailed herein is not proposed as a rigid, inflexible blueprint, but rather is intended to guide decision-makers' actions within a regional context and thus maintain system coordination across the various political boundaries which divide the MATS area.

The recommendations contained in this report for highway and transit projects address only major needs of regional importance which will add significant capacity to the transportation system; the proposals should be regarded as general only and do not represent specific alignments or locations. Many projects not included in this plan will doubtless be constructed by developers or implemented by local governments between now and the year 2035; conversely, some of the projects described in this report may never be constructed. Prior to construction, specific studies will be conducted for each project to determine environmental, social, and economic impacts. For those determined to be in the best interest of the public, studies will be completed to finalize engineering details including specific location and any necessary rights-of-way. As required by federal mandate, bicycle and pedestrian facilities will be incorporated into all transportation projects funded with federal dollars unless exceptional circumstances for denying these facilities exist. Further,

the recommendations made in this report will be reviewed and updated periodically in future years as changing social, economic, physical or technological conditions warrant, and the appropriate changes as then determined will be incorporated in new, updated plans.

1.1 Climate Change

FHWA has determined that climate change should be integrated into transportation planning at the state, regional, and local levels and that consideration of potential long range effects by and to the transportation network be addressed. To that end, FHWA requires the following excerpt be present in the Long Range Transportation Plan, and other selected documents:

“According to the FHWA report *Integrating Climate Change into the Transportation Planning Process*, there is general scientific consensus that the earth is experiencing a long-term warming trend and that human-induced increases in atmospheric greenhouse gases (GHGs) may be the predominant cause. The combustion of fossil fuels is by far the biggest source of GHG emissions. In the United States, transportation is the largest source of GHG emissions, after electricity generation. Within the transportation sector, cars and trucks account for a majority of emissions. Opportunities to reduce GHG emissions from transportation include switching to alternative fuels, using more fuel efficient vehicles, and reducing the total number of miles driven. Each of these options requires a mixture of public and private sector involvement. Transportation planning activities, which influence how transportation systems are built and operated, can contribute to these strategies. In addition to contributing to climate change, transportation will likely also be affected by climate change. Transportation infrastructure is vulnerable to predicted changes in sea level and increases in severe weather and extreme high temperatures. Long-term transportation planning will need to respond to these threats.”

Introduction to Integrating Climate Change into the Transportation Planning Process - Federal Highway Administration, Final Report, July 2008

Some effects are currently being addressed through air quality conformity determination actions in areas that have been designated as NAAQS non-conforming. The MPO area is, as of the development of this plan, in attainment for air quality. Therefore, no climate change measures are present in the plan at this time. However, as time goes by this may change either by an increase in ground-level and atmospheric pollutant concentrations or by a tightening of EPA tolerance limits. Currently, the National Ambient Air Quality Standards (NAAQS) are being reviewed by the Environmental Protection Agency (EPA). The results of this review will be released in August 2010. The expectation is the Ozone standard will be lowered even further with the possibility that the Mobile Bay Area will be required to produce conformity documentation prior to March 2012.

The Mobile MPO has been selected by the Federal Highway Administration to be the pilot MPO for policy development as it pertains to Climate Change. In March 2008 the US Climate Change Science Program published the *“Impacts of Climate Change and Variability on Transportation Systems and Infrastructure: Gulf Coast Study, Phase 1”* The objective of Phase 1 was to conduct a preliminary assessment of the risks and vulnerabilities facing transportation in the Gulf Coast region. The objective of Phase 2 is to gather more definitive information about multimodal impacts at the local level and develop precise policies, tools and guidelines for State DOTs, MPOs, modal planners and municipalities to use to prepare for climate change. The Mobile MPO was selected because it includes a downtown, an airport, port, interstate and rail all on the coast and may be affected by an increase in sea level.

1.2 Air Quality

The Environmental Protection Agency (EPA) establishes tolerance limits on ground-level and atmospheric pollutant concentrations through enactment of the National Ambient Air Quality Standards (NAAQS). An MPO that has been determined to be in violation of NAAQS is said to be in ‘non-attainment’ status. The Mobile MPO area is currently in attainment therefore no air quality mitigation measures are present in the Plan at this time at the project level. However, it is anticipated that the Mobile Metropolitan Area may be classified as in nonattainment in the near future therefore tasks have been established in the Unified Planning Work Program for training in NAAQS monitoring and possible outreach activities. Anticipated additional climate change and green house gas requirements will have an effect outside the document production requirements that would include the Long Range Transportation Plan. MPO staff will continue to monitor FHWA and EPA bulletins and advisories on climate change, as well as the developing House and Senate legislation likely to become the next transportation bill.

1.3 Consistency with Other Plans

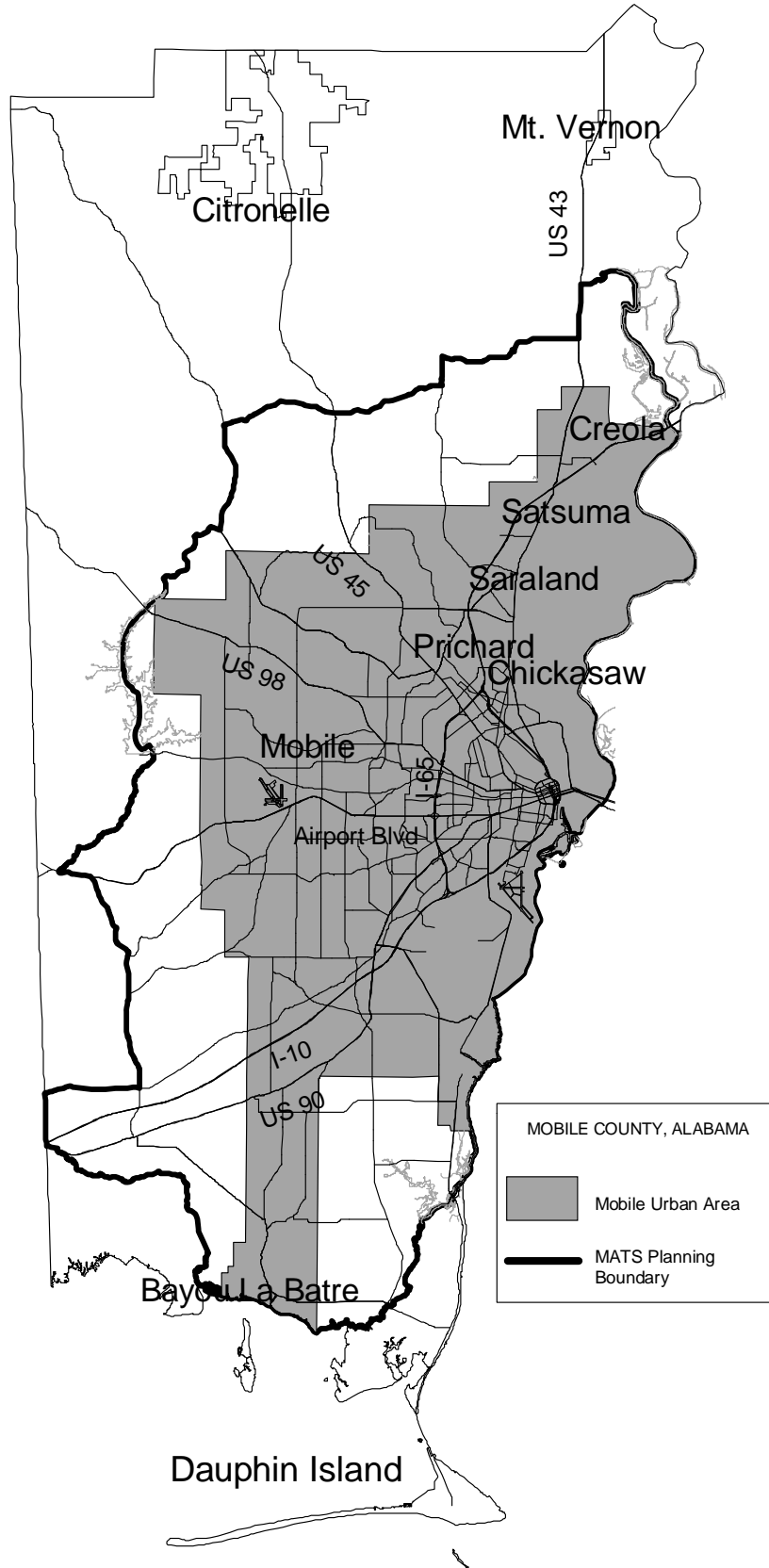
There are general and specific directions under SAFETEA-LU (Section 6001) for the consistency requirement. In revising 23 USC 134, Section 6001(a)(g)(3) states “The secretary shall encourage each metropolitan planning organization to consult with officials responsible for other types of planning activities.....economic development, environmental protection, airport operations, and freight movements....to coordinate its planning process....with such planning activities. Under the metropolitan planning process, transportation plans and TIPs shall be developed with due consideration of other related planning activities...” The MPO addresses this requirement by including planning and economic development personnel from the state and local level on the Technical Advisory / Citizens Advisory Committee (TAC/CAC). In addition, the MPO consults with agencies and officials responsible for other planning activities within the Study Area that are affected by transportation when developing the Long Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP). This includes Federal, State and Local agencies responsible for:

- Economic growth and development

- Environmental protection
- Airport operations
- Freight movement
- Land use management
- Natural resources
- Conservation
- Historic preservation
- Human service transportation providers

A contact list of these officials and agencies has been developed and is maintained. These agencies are invited to attend all MPO TCC/CAC and Policy Committee meetings so as to be involved in the transportation planning process continuously. In addition, a request to these agencies is made to compare the draft LRTP and TIP with their plans, maps, and inventories. Incorporating these key individuals in the transportation planning process allows for broad acknowledgement of transportation planning and land use development activities at the local and regional level which can afford opportunities for cooperation and coordination. The spirit and intent of SAFETEA-LU 6001 are clear. In accordance with Public Law 109-59 policy provisions and subsequent agency interpretation, the Long Range Transportation Plan should acknowledge consistency with other plans that include transportation and land use components: Regional, Long Range, municipal and county Comprehensive and Master Plans (Airport, Seaport, Multimodal, Transit, Utility, and independent bridge authorities), Congestion Management Plans, Air Quality Conformity Determination, Freight, Bicycle/Pedestrian, Public Participation Process, and Environmental Plans.

Figure 1
Mobile Area Transportation Study Area



SAFETEA-LU requires state transportation agencies to consult with other agencies in order to eliminate or minimize conflicts with activities that could impact or be impacted by transportation. Furthermore, transportation decision makers must take into account the potential environmental impacts associated with a transportation plan or plan update, in order to mitigate those impacts. Figure 2 illustrates the areas in the Mobile Area Transportation Study to be considered in minimizing the impact on the environment and sensitive resources.

Mitigation as defined by the National Environmental Policy Act (NEPA) is really a three-level concept. The first level is avoidance, and for transportation agencies, this could be as simple as choosing an alternative that avoids a sensitive resource, such as an historic site or a wetlands area.

The second level is minimization, which means that if avoidance is not possible, then the transportation agency takes action to minimize impact to the sensitive resource. For example, spanning a stream or wetlands area would have considerably less impact than re-channeling the stream or filling the wetlands.

The third level is mitigation, which means impact to a resource can't be avoided. Examples here include recordation of a historic structure that must be demolished and compensation for filled wetlands by debits from a wetlands "bank."

A few examples may illustrate how this hierarchy operates. Please note that for these resources there may be many more possible options to avoid, minimize or mitigate.

1.4 Wetlands

Wetland impacts require we avoid, minimize or mitigate by Executive Order 11990, to the extent practical.

For these resources we first try to avoid by shifting alignments. When the wetlands are narrow, for example, stream bank wetlands, we may avoid by spanning both the stream and the wet areas adjacent. That assumes a reasonable cost to avoid.

We may minimize by such actions as:

- narrowing medians,
- constructing fill slopes as steep as warranted by geotechnical investigation,
- alignment shift that may not entirely miss the wetland, but lessen the impact, or
- partial bridging

Mitigation for State projects in Alabama typically utilizes credits from the established wetland bank owned by the ALDOT. Other banks, including privately owned banks are available. However, on site mitigation may be possible by, for example, enhancing the remaining portion of the wetland to function at a higher level. *

* Restoration/enhancement efforts for isolated wetlands are usually successful only when involving simple actions like restoring water flow to a former wetland that has been drained.

1.5 Historic property

Historic properties are protected by both Section 4(f) of the DOT Act** (as amended) and Section 106 of the Historic Preservation Act. Section 4(f) in particular creates a high standard to pass before we can say we cannot avoid and must therefore use the resource.

Therefore we mandate fairly detailed consideration of shifts to either side of each individual resource as well as all protected resources. The costs and impacts associated with these avoidance alternatives must be substantial before FHWA can agree to use the resource.

Minimization for historic property can take the form of planting to screen the view of a modern facility (i.e., restoring a stone wall taken by the ROW), even moving a building that is historic for architectural reasons and restoring it in an appropriate location.

Mitigation of historic property taken can be in the form of archival quality (i.e. long-lasting) photographs or line drawings of the structure to be taken. A researched, written narrative of the historical importance of the resource may also be developed. In some cases parts of the structure (e.g. approach spans to a longer bridge) may be reused in another application.

** Other resources, notably publicly owner recreational lands are also protected by Section 4(f).

 Considerations of potential environmental impacts associated with transportation projects include but are not limited to the following resources/issues:

RESOURCE/ISSUE	WHY IMPORTANT	REGULATORY BASIS	CONTACT
HAZMAT Sites	Health hazards, costs, delays, liability for both State & federal projects on either existing or acquired right-of-way	State & federal law; Guidelines for Ops; ASTM E-1527	<u>Phase-I:</u> Design Bureau/ETS, phone 334-242-6154 <u>Phase-II & III:</u> Materials & Tests Bureau, phone 334-206-2284
Air Quality	Public health, welfare, productivity, and the environment are degraded by air pollution	Clean Air Act of 1970; 40 CFR Parts 51 & 93; State Implementation Plan	Design Bureau/ETS, phone 334-242-6147; <u>PM-2.5</u> – Design Bureau/ETS, phone 334-242-6315

Noise	Noise can irritate, interrupt, and disrupt, as well as generally diminish the quality of life	Noise Control Act of 1972; ALDOT's highway Traffic Noise Analysis Policy and Guidance	Design Bureau/ETS, phone 334-242-6147 or 6828 or 6710
Wetlands	Flood control, wildlife habitat, water purification; applies to both State and federally funded projects	Clean Water Act of 1977; Executive Order 11990; 23 CFR 777	Design Bureau/ETS, phone 334-242-6145; US Army Corps of Engineers, phone 251-690-2658
Threatened and Endangered Species	Loss of species can damage or destroy ecosystems, to include the human food chain	Endangered Species Act of 1973; 7 CFR 355	Design Bureau/ETS, phone 334-242-6132; US Fish & Wildlife Service, phone 251-441-5181
Floodplains	Encroaching on or changing the natural floodplain of a water course can result in catastrophic flooding of developed areas	Executive Order 11988; 23 CFR 650; 23 CFR 771	Design Bureau/ETS, phone 334-242-6145; Bridge Bureau, phone 334-242-6598
Farmlands	Insure conversion compatibility with State and local farmland programs and policies	Farmland Protection Policy Act of 1981; 7 CFR 658	Design Bureau/ETS, phone 334-242-6150; Natural Resources Conservation Service (NRCS), phone 334-887-4500
Recreation Areas	Quality of life; neighborhood cohesion	Section 6(f) of the Land and Water Conservation Fund Act; Section 4(f) of the DOT Act of 1966 (when applicable); 23 CFR 771	Design Bureau/ETS, phone 334-242-6143 or 6152; Alabama Department of Economic and Community Affairs, phone 334-242-5363
Historic Structures	Quality of life; preservation of the national heritage	National Historic Preservation Act of 1966 (Section 106); the DOT Act of 1966 [Section 4(f)]; 23 CFR 771; 36 CFR 800	Design Bureau/ETS, phone 334-242-6144 or 6225; Alabama Historical Commission, phone 334-230-2667
Archaeological Sites	Quality of life; preservation of national and Native American heritage	National Historic Preservation Act of 1966 (Section 106); the DOT Act of 1966 [Section 4(f)]; 23	Design Bureau/ETS, phone 334-242-6144 or 6225; Alabama Historical Commission, phone

		CFR 771; Executive Order 13175	334-230-2667
Environmental Justice	To avoid, minimize, or mitigate disproportionately high impacts on minorities and low-income populations; basic fairness	Title VI, Civil Rights Act of 1964; Executive Order 12898	Design Bureau/ETS, phone 334-242-6529 or 6576; right-of-way office in each respective ALDOT Division

In each of the examples given above, the first contact listed is the Design Bureau, Environmental Technical Section (ETS), ALDOT, not because it is a “resource agency” as defined by federal regulations, but because it has the multidisciplinary experts who can offer guidance through the early identification of impacts in the initial project planning and development stage. The sooner a potential environmental impact is identified, the more likely it can be avoided, minimized, or mitigated. Early contact with the ETS can insure timely consultation with all potentially affected stakeholders and compliance with provisions of the National Environmental Policy Act (NEPA) and its enforcing regulations.

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Figure 2 environmental and sensitive resources Map 11x17

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