

# **ROADWAY DESIGN MANUAL**



**Mississippi Department Of Transportation**

**2001**

## PREFACE

Each year Mississippi invests heavily in highway construction. How Mississippi plans and designs its highway projects is critical to the return received on this investment. This Design Manual provides uniform design criteria and procedures for the Roadway Design Division of the Mississippi Department of Transportation and for other Department personnel to use when approaching highway design projects and preparing contract plans. The information contained in this Design Manual reflects years of experience as well as the most recent national guidelines which have evolved along with the automobile and various types and classifications of roads. In earlier days, while automobiles had more power, they were heavier and traveled at lower speeds on roads that were built along the contour of the terrain. Today vehicles are lighter and faster. Also, earth moving equipment that is larger and more reliable is readily available to build higher classification roads.

With a modern transportation system in place, the on-going challenge for the Mississippi Department of Transportation is to identify ways to improve that system. Of course one way to make the system better is to make it safer. Safety

is a primary objective on many of the Department's highway projects and, in all instances, is a concern. The Department seeks to improve safety by a variety of measures including, but not limited to, providing greater sight distances, greater clear zones, improved horizontal alignment, improved vertical alignment, and better anticipation of driver expectations.

However, there are other important goals as well. Due to changes in Federal Regulations, the Department of Transportation is increasing the weight it gives to avoiding environmentally sensitive areas (e.g., wetlands, historic districts, archaeological sites, etc.). In some cases, concerns of reducing potential relocatees, minimizing right-of-way acreage acquired, and limited funding are factors influencing the design of projects. Consequently, although the Design Manual is an important guide, its application must be flexible. The Design Manual's design criteria cannot envision every project's unique concerns. Above all, designers using the Manual must apply good judgment and innovation in their approach to highway design.

EXCERPT FROM THE MINUTES OF THE MEETING OF THE  
MISSISSIPPI TRANSPORTATION COMMISSION, SEPTEMBER 11, 2001

WHEREAS, the Commission proposed to revise and update the Roadway Design Manual adopted on April 15, 1988, and recorded in Book 106, Page 94, of the Commission Minutes. This manual incorporates in one document safety criteria and design standards or reference to such standards recommended for use in highway design; and

WHEREAS, the revised Roadway Design Manual has been reviewed and recommended for approval by the Chief Engineer and approved by the Director; and

WHEREAS, the Commission has considered and determined and now confirms that the publication and adoption of the revised Roadway Design Manual is proper and necessary.

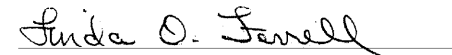
NOW, THEREFORE, upon motion duly made and seconded, and Commissioners Wayne H. Brown, Zack Stewart and Dick Hall, each voting yes, under the authority of the Commission, in conformity with and as spread on its minutes, the revised Roadway Design Manual is hereby adopted as an official document of the commission and further that the design of highways shall conform to policies, procedures, and standards promulgated by said Roadway Design Manual.

STATE OF MISSISSIPPI

COUNTY OF HINDS

I, Linda O. Ferrell, Secretary, Mississippi Transportation Commission, do hereby certify that the above and foregoing is a true and correct copy of an Order of the Mississippi Transportation Commission of record in Minute Book 8, Page 784, of the Official Minutes of said Commission on file in its offices in the City of Jackson, Mississippi, duly adopted on the 11<sup>th</sup> day of September, A.D., 2001.

Witness my hand and official seal this the 13<sup>th</sup> day of September A.D., 2001.



LINDA O. FERRELL, SECRETARY  
TRANSPORTATION COMMISSION  
STATE OF MISSISSIPPI