

# Traffic Operations & Access Management Analysis U.S. Highway 90—Beach Boulevard Harrison County, Mississippi



Submitted to  
**Gulf Regional Planning Commission**  
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Gulfport, MS 39501

Submitted by  
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*Solutions you can build upon*

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**FINAL REPORT**



Gulf Regional  
Planning Commission



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## 1.0 Introduction

This report summarizes the results of a traffic analysis performed by Neel-Schaffer as requested by the City of Biloxi, Gulf Regional Planning Commission (GRPC) and Mississippi Department of Transportation (MDOT) for the Highway 90 corridor in west Biloxi. The project includes an evaluation of Traffic Operations and Access Management strategies for the corridor. The goal of the study was to review the redevelopment of the corridor, to implement Access Management standards to improve the safety of the corridor, to reduce the frequency and severity of crashes and to improve traffic circulation, while preserving the character of the roadway and community that it serves.

The project was initiated in July 2005 as a response to intense development of coastal properties adjacent to Highway 90 with condominium units, casinos and supporting retail. The landfall of Hurricane Katrina on August 29, 2005, changed the project, the City, and the condominium industry. The City of Biloxi operated in a State of Emergency for over 2 years, following the landfall of the Hurricane. In December 2007, MDOT initiated a project to mill and overlay Highway 90 and reconstruct some of the curb and gutter that was overlaid with asphalt in prior years. A coordinated effort with MDOT resulted in the inclusion of some of the report recommendations into the mill/overlay plans of Highway 90 that are currently underway in Biloxi.

The project team included Neel-Schaffer, the City of Biloxi (Engineering and Planning), MDOT District Six, MDOT Planning Division, MDOT Traffic Division, Dane Ismart, Coast Transit Authority, and GRPC staff.

### 1.1 Significance of the Highway 90 Corridor

Highway 90 is a vital component of the City of Biloxi's transportation infrastructure. Highway 90 is the only Principal Arterial Roadway that extends east/west across the Biloxi Peninsula and extends from City limit to City limit. Keesler Air Force Base restricts the potential for additional east/west corridors on the Biloxi peninsula. During Hurricane Katrina, the Popp's Ferry Bridge was significantly damaged, the Highway 90 bridges were destroyed, and many portions of Highway 90 had significant damage throughout Harrison County. Significant portions of Highway 90 were closed within Harrison County while emergency repairs were made. The circulation of traffic was greatly impacted, as people were forced to use Irish Hill Drive as a backup to Highway 90.

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Highway 90 has historically been an economic engine for the City, with the majority of the major casino and condominium developments located along this corridor. Additionally, it provides regional connectivity to the adjacent communities and serves as the only major regional east/west route south of I-10 in Mississippi.

There are a limited number of north/south arterial roadways that connect Highway 90 and I-10 within the area. These connections include: Highway 49, Cowan Road, I-110 and Highway 609. An indirect route exists that includes: Beauvoir Road, Pass Road, Popp's Ferry Road, and Cedar Lake Road for access to I-10. Prior plans involving a new Interstate roadway, identified as the East Harrison County Connector, have been dismissed, and current long range plans do not include this route. The limited connectivity and arterial network within this area places more pressure on planning and operational improvements to the existing corridors.

The capacity of the Highway 90 corridor within this regional network of infrastructure is critically evident, while it also must serve the needs of access to the adjacent developments. The challenge is to identify a balance between serving access and mobility. Access Management is a tool that can be used to help achieve this balance.

## 1.2 Status of the Corridor

While there was a great need in 2005 to coordinate the traffic signals and plan the redevelopment of the corridor in the fast-paced redevelopment of coastal properties, Hurricane Katrina changed the immediate needs of the corridor. Prior to the Hurricane, there were many restaurants, locally owned hotels and motels, casinos and pawn shops in west Biloxi along the corridor. The impending construction of multi-story condominiums with hundreds of rooms on relatively small pieces of property had the potential to denigrate the regional movement of traffic by serving the multitude of driveways and nearly unlimited access points along Highway 90. The Hurricane destroyed the majority of the businesses along Highway 90 in west Biloxi. The destruction allowed for a unique opportunity to rebuild to current standards, with fewer driveway connections and improved mobility. Highway 90 is currently being resurfaced and repaired by MDOT. While economic changes may slow the redevelopment of adjacent property, the traffic is anticipated to exceed pre-storm levels in future years, yet operate with improved mobility through implementation of access management standards. Preserving the character and effectiveness of this vital transportation corridor is essential to the redevelopment of the area.