

TRANSPORTATION

Chairman: Kevin Coggin

Purpose

The purpose of this committee is to identify transportation related issues for the City and provide recommendations for support of significant projects that provide a benefit to the City. These projects are to be accompanied with realistic time schedules and identified funding sources so that the feasibility of implementation can be measured against each recommendation.

Recommendations

The Governor's Commission on Recovery Rebuilding & Renewal identified several transportation related projects that were recommended for implementation in Biloxi. The transportation committee reviewed these recommendations and endorsed the following:

10. *Relocate the rail traffic from the CSX Corridor.* The rail relocation has been the topic of newspaper articles and Congressional debate. The rail divides the community, the crossings are traffic hazards, and rail does not support the City in its commerce and industry.

11. *Establish a new boulevard system throughout the peninsula of Biloxi and complete the Back Bay Boulevard extension to Highway 90.*

This project supports the redevelopment of the coastal areas



of east Biloxi in the waterfront gaming and multi-family areas by adding a pedestrian friendly, boulevard loop east of I-110. One additional benefit to the project would be the support of the public transportation on this new loop.

12. *Enhance Beach Boulevard as a world-class scenic thoroughfare from Gulfport to the end of the eastern point of Biloxi. The MDOT has a reconstruction plan for Highway 90 that includes construction of auxiliary lanes, resurfacing the roadway, reconstructing the curb and gutter and constructing five foot sidewalks on the roadway and at-grade pedestrian crossings at some intersections. Additional pedestrian features could include grade-separated pedestrian crossings at some of the planned condominium towers.*
13. *Establish a tram along the beach connecting all the commercial centers along Beach Boulevard, the downtown, and the casinos. Public transportation is recommended as an alternative to automobile travel as density and development increase. Staged implementation of multi-modal public transportation would likely move from basic bus service and “rubber tire” trolleys to ultimately establishing a light-rail public transportation system.*

After reviewing the Governor’s Commission recommendations, the committee made the following additional recommendations following its own research and discussion:

Rail

The rail impacts to the City are substantial, as CSX averaged approximately 28 trains daily through the City of Biloxi prior to the storm. The City supports the relocation of the rail traffic from the existing CSX corridor, and there is a substantial move underway to relocate the rail. Until relocation can be accomplished, the committee recommends:

14. *Reduce the number of at-grade crossing. Identify crossings for closure or for grade separation to reduce the conflicts between rail and vehicular traffic.*
15. *Maintain the elevated height of the rail corridor. The existing topography of the railroad bed is elevated above the ground on each side of the rail. This berm served as a barrier to the storm surge and must be maintained in the event that the rail is relocated and the corridor serves another transportation use.*
16. *Improve all the existing at-grade rail crossings to have active warning devices. The existing rail crossings should be upgraded to active devices, including, bells, flashing lights, and cantilever-actuated crossing arms.*

Highways

The primary focus of the Highway discussion was focused on 1) a East Harrison County Connector, 2) the Interstate 110 ramps, and 3) Highway 90.

17. *Establish an additional East Harrison County connector to I-10.*

The transportation models developed by MDOT and GRPC demonstrate the long range need for a new interstate connection from I-10 to Highway 90. The location of Alternate H in the Environmental Document was the selected alternate that extends



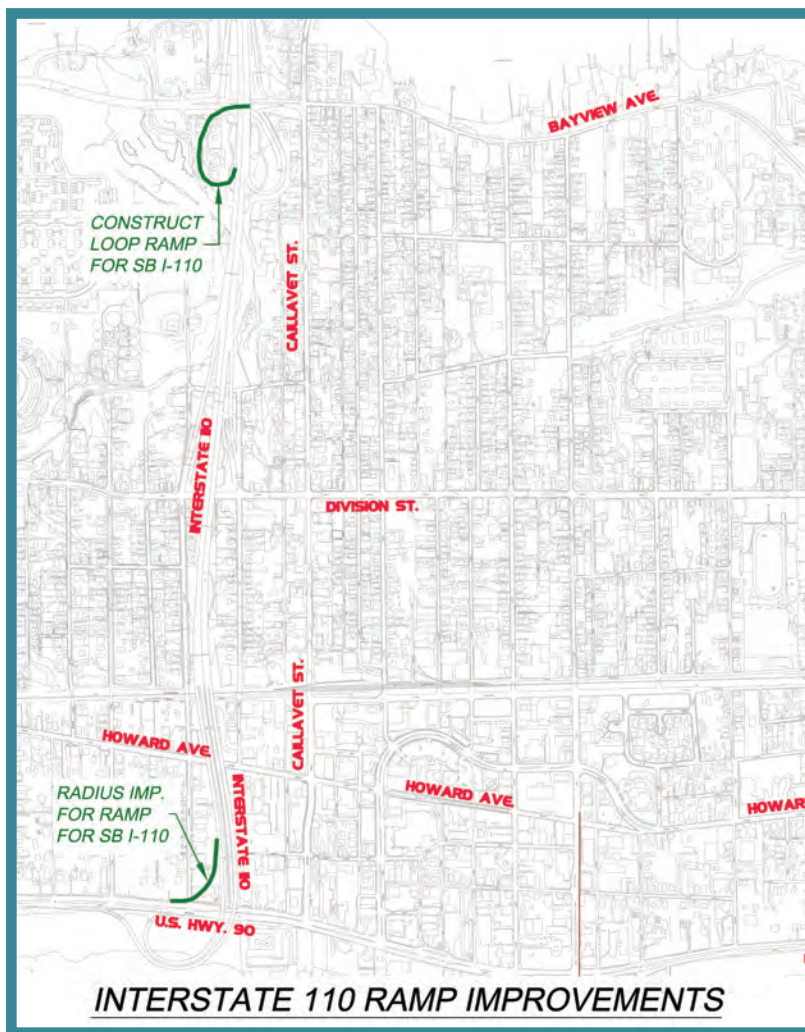
Figure 1

Figure 1

from the existing Highway 67 interchange at I-10 south to Popps Ferry Road, across the Back Bay of Biloxi, through west Falcon Park of Keesler Air Force base, and connects east of Camellia St. at Highway 90. The proposed alignment is shown in Figure 1.

18. *Improve the D'Iberville interchange to include a "Texas U-Turn." Future improvements to the D'Iberville interchange should include a "Texas U-Turn" to facilitate the return movement to Biloxi, rather than construct northbound exit ramps at Bayview and/or Division Street on I-110.*
19. *Construct a loop ramp for southbound traffic off I-110. The construction of a southbound I-110 to eastbound Bayview Avenue loop ramp in the southwest quadrant of the interchange would reduce the congestion that occurs in this area.*

Currently, Keesler traffic leaving the base and entering I-110 northbound must stop at the traffic signal on Bayview Avenue at the I-110 southbound ramp. The construction of a loop ramp for south-bound traffic would eliminate the traffic signal and provide for a free-flow traffic movement from I-110 southbound to eastbound Bayview Avenue.



20. *Reconfigure the Southbound I-110 to Westbound Hwy 90 ramp for better safety.*

Figure 2

The southbound I-110 to westbound Highway 90 ramp poses a significant safety hazard, especially to visitors of the City who are unaware of the sharp turn. Vehicles in route to westbound Highway 90 are often traveling at an increased rate of speed, and either sideswipe the barrier at the end of the ramp or merge too quickly into westbound traffic, potentially causing other types of accidents. Reconfiguring the ramp geometry to provide a larger curve radius will allow vehicles to safely maneuver onto Highway 90. *(The location of the ramp improvements is shown in Figure 2.)* If adjacent corridors can be developed to relieve Highway 90, the Committee supports the development of parallel corridors.

21. *Pedestrian and bicycle paths should be part of any Highway 90 improvements.* Currently, the MDOT has a plan in place to resurface Highway 90 and reconstruct the curb throughout Harrison County. The City, MDOT and GRPC are engaged in a study to provide access management along this roadway to help control access and meet the access needs of pedestrians, adjacent developments, commuting public, and the regional needs of the vehicular traffic. If adjacent corridors can be developed to relieve Highway 90, the Committee supports the development of parallel corridors.

The pedestrian components planned in the MDOT project include sidewalk construction and ADA compliant crosswalks. The plan should include bicycle paths and grade-separated pedestrian walkways.

22. *Move the main gate to Keesler Air Force Base to Division Street; Keesler Air Force Base is planning to utilize a new Main Gate on Division Street.* The base currently operates with gates on White Avenue (south gate), Pass Road (west gate) and Bayview Avenue (east gate). The opening and use of Division Street as a main gate will divert some traffic to the I-110 interchange on Division Street.

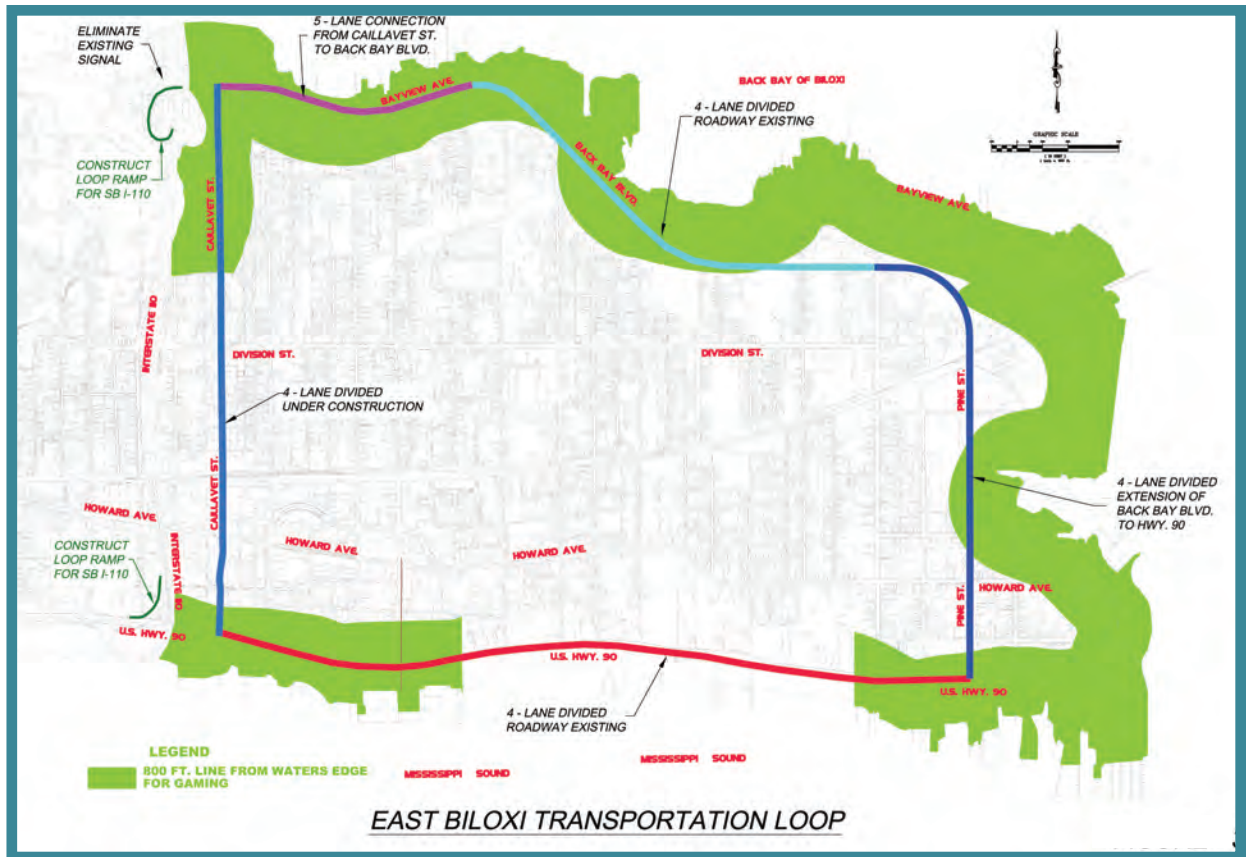


Figure 3

This project is recommended with special consideration needed for the Division Street/I-110 interchange to improve the operation and capacity of this half diamond interchange.

23. Complete the East Biloxi Transportation Loop (see figure 3). The circulation of traffic in east Biloxi, east of I-110 is supported by Bayview Avenue, Caillavet Street, Highway 90, Oak Street and Back Bay Boulevard. The property around this east loop is planned to have high-density redevelopment with waterfront gaming and multi-family dwellings. The majority of this loop is four lane divided roadways. The completion of this East Biloxi Transportation Loop should include extension of Back Bay Boulevard east and south to Highway 90 along the Pine Street alignment and the widening of Bayview Avenue to five lanes between I-110 ramps and the connection with Back Bay Boulevard. This roadway construction concurrent with the

Caillavet boulevard construction will provide a high capacity scenic route around the peninsula of east Biloxi.

24. *Provide aesthetic and pedestrian features on all new roadways*
Construction of other roadways within the City should include aesthetic components and pedestrian features. The boulevard cross section provides more green space and width for median islands to separate the opposing directions of traffic. The integration of sidewalks and street lights provide necessary components to help roadways fit into the communities they serve.
25. *Re-establish Howard Avenue as Two-Way Traffic. Howard Avenue serves the Vieux Marche between Reynoir Street and Lameuse Street as a one-way eastbound street with wide sidewalks, on-street parking, lighting and landscaping. The re-establishment of Howard Avenue to two traffic will eliminate the discontinuous nature of the street and improve the access to the businesses within this area. The circuitous, disjointed connection with the prohibition of westbound traffic through the area has proven to be confusing to visitors and tourists.*

Public Transit

26. *Establish an effective Inter-Modal Public Transportation System. An effective Intermodal Transportation System will minimize sprawl and sustain growth and quality of life. To prevent serious traffic congestion, it is essential that the community be offered viable options to the automobile. A walkable community is a goal and can be a key component of an effective transportation system. To be effective, public transportation services need to be within reasonable walking distance of potential users. Passenger waiting facilities should be architecturally sensitive to the areas they are placed in.*

The loss of affordable housing as a result of Hurricane Katrina has created a shortage of housing for local employees. Employees are faced with traveling farther distances and incurring greater

commuting costs. A comprehensive work transportation program can be offered to support the needs of the working public and the redeveloping business community. Vehicle gridlock as existing businesses reopen and new businesses are established in the heavily



developed waterfront areas of the city could stifle future development interest in those areas. Transportation alternatives need to be developed that will give commuters and tourists alternate modes of travel, rather than solely relying on passenger cars. A true Intermodal Transportation System is needed to support short term rebuilding efforts and sustain the long term development of the City.

Connecting adjacent communities is essential for an effective system. It should be noted that in accordance with the recommendations of the Governor's Commission on Recovery, Rebuilding and Renewal, a comprehensive Regional Intermodal Transportation Study is scheduled to begin in June, 2006. This new study is a collaborative effort by the

Gulf Regional Planning Commission, Coast
Transit Authority, MDOT and the Governor's Office of
Recovery and Renewal. This study will consider the
transportation needs of the communities in the three coastal
counties (including the City of Biloxi) and devise a plan that will
meet the needs of each community and create connectivity
among the three counties.

Two distinct markets have been identified as users of the proposed new Public Transportation System: 1) the local population and 2) tourists. Each segment has different public transportation needs. The local population requires an extensive, relatively quick moving system that connects the densely populated residential areas in the coastal and outlying areas

with the work, shopping and recreational areas. Tourists require a more aesthetically pleasing, but slower paced system with much more frequent stops that connects the condominium and hotel areas with the entertainment districts.

For the new Public Transportation System to be effective, it must be convenient (frequent), comfortable, safe and reliable. The committee has identified the following public transit projects, which meet those goals, as necessary components of a new Public Transportation System.

27. *Develop a "Park Once" System of Public Transportation.* This component is designed to create a system that will allow tourists (and residents) to arrive at their primary destination by personal automobile and keep their car parked at that location during most of their stay in the area. People would move about the entertainment districts by walking or using the public transit system. This would have a positive impact in reducing traffic congestion on Highway 90, the Point Cadet area and the proposed east Biloxi boulevard loop. Initially the transit system serving these areas could consist of rubber tire hybrid electric trolleys but could add a streetcar trolley system when the community density increases to warrant it. This program relies on the use of existing and new privately built parking facilities located at the major entertainment destinations and the publicly operated CTA transit system. For this program to be effective it will require a bus system frequency of at least 15 minutes. The system could be implemented in the current calendar year when the majority of the storm-damaged casinos have reopened.

Projects Costs. The estimated initial capital project costs consist of purchasing two new hybrid electric trolleys at a cost of \$300,000.00 each. The annual operating and maintenance costs for the two vehicles would be approximately \$250,000.00 per year.

Funding Sources. The capital costs could be funded 100% with public transit emergency assistance funds that are currently

being considered by Congress. If Congress fails to approve the funding, the vehicles could be purchased with Federal Transit Administration (FTA) Section 5309 funds. This federal program provides 80% funding. The \$120,000.00 (20%) local match would have to be provided by the State, City or County governments. The annual operating costs would be paid for using a combination of FTA Section 5307 funding, CTA self-generated revenues, and State and City subsidies. The City subsidy amount would be approximately \$50,000.00 annually.

28. *Launch a Streetcar Trolley System, primarily along the waterfront.*

A streetcar trolley system can help meet the transportation needs of both the tourism industry and residents when the community experiences significant redevelopment. The system could be designed to provide an attractive transportation alternative to the personal automobile that would connect the casinos, condos, hotels, entertainment venues and the Coliseum and Convention Center. It could consist of an electric streetcar system similar to that currently operated in New Orleans. It could operate primarily along the waterfront areas immediately south of Highway 90 and potentially be expanded into other heavily developed tourist areas. Acquisition of a new rail right-of-way can be a true pedestrian travel way incorporating a street car line, sidewalks and bikeways. The system would operate at a relatively slow speed with frequent stops that service major businesses, condominiums and residential areas along the route and provide improved access to our beautiful beaches. The system could be implemented in stages with the first stage (2.5 miles) operating between the Lighthouse and Point Cadet. As condos, hotels, casinos and other businesses develop west of that area the system could be expanded in appropriate stages to the Coliseum and Convention Center. The first stage of the system could be built within five years depending on the pace of development and acquisition of right-of-way.



Project Costs. The estimated capital costs to build the track system, passenger boarding stations, streetcars and maintenance facilities is \$35 million per mile. The estimated total capital cost for the first phase would be \$87.5 million. Annual operating and maintenance costs for the system are estimated to be \$2.4 million.

Funding Sources. Capital project costs could be funded with \$70 million (80%) of FTA Section 5309 funds and \$17.5 million (20%) local match provided by a combination of State, City, and County governments and the private sector. All other alternative sources of funding available at the time of implementation would also be considered. Annual operating and maintenance costs would be funded by a combination of system-generated revenues and subsidies provided by State, County and City governments and the private sector.

29. *Make Highway 90 an Intermodal Thoroughfare and Gulf Coast Walkway/Bikeway.* The Governor's commission recommended that Highway 90 be upgraded into a world class scenic boulevard. This upgraded boulevard could include an intermodal thoroughfare where personal vehicles, pedestrian walkways, bikeways, and public transportation effectively share the same right of way. The pre-Katrina boardwalk should not be rebuilt as it was with wood material, but rather it should be designed and constructed with materials that are more durable in a storm surge. A new continuous walkway and bikeway can be incorporated in a multi-modal beach side streetcar project and funded as part of the multi-modal project when it is implemented.
30. *Launch a Public Airport Bus Service.* There is a need for public bus service at the airport connecting the coastal communities to provide a competitive (low) cost alternative to the existing transportation options. Public bus service to the Biloxi community would be enhanced through the interconnection of

this service with shuttles or buses connecting the Gulfport/Biloxi Airport with casinos, Keesler Air Force Base and residential areas. The multi-modal connection between air, ground and potentially rail modes of transportation would allow locals, tourists and visitors to come to Biloxi from the airport and not be limited to the currently available ground transportation options. This new service could be implemented within 24 months.

Projects Costs. The estimated capital costs consist of the purchase of one public transportation vehicle at a cost of \$400,000.00. The estimated annual operating and maintenance costs are \$100,000.00 per year.

Funding Sources. The capital costs could be funded 100% with public transit emergency assistance funds that were previously mentioned. If that funding is not available the vehicle could be purchased with FTA Section 5309 funds. The \$80,000.00 local match would have to be provided by a combination of the State, City or County governments. The annual operating costs would be paid for using a combination of FTA Section 5307 funding, CTA self-generated revenues, and State and City subsidies. The City subsidy amount would be approximately \$20,000.00 annually.

31. *Launch a Work Transportation System.* A workers transportation program needs to be established to support the recovery and expansion of the local business community. The City of D'Iberville was specifically identified as an area where many employees that work in the Biloxi casino industry reside. Re-establishing the bus service with D'Iberville will also reduce the travel demand on I-110. A comprehensive transportation program should be developed that contains effective options such as a car pool ride match service and organized vanpools. Coast Transit Authority is currently developing such a program that is scheduled to be implemented in 2006.

Projects Costs. Estimated capital costs of the program are \$50,000. Estimated annual operating and maintenance costs are \$375,000.

Funding Sources. All capital, operating, and maintenance costs could be funded with public transit emergency assistance funds that were previously mentioned and/or a combination of system generated revenues, FTA Section 5307 funds, Department of Labor funds, and charitable organizations.

32. *Biloxi should be a part of a Gulf Coast Regional Commuter Rail.* The committee endorsed the concept of a Gulf Coast Regional Commuter Rail (heavy rail) system that would connect the Gulf Coast states. Potentially, a new rapid rail corridor could be established along or north of the I-10 corridor. The Southern Rapid Rail Commission is studying the potential for a new corridor to serve the Gulf Coast.
33. *Begin with a tri-county light rail commuter system on the CSX rail bed.* The committee strongly endorses the concept of building a tri-county light rail commuter system on the existing CSX rail bed as part of the redevelopment of that right of way as a new Intermodal corridor. The cost, implementation schedule, and funding mechanism would be determined by the Regional Intermodal Transportation Study.





Figure 1

After study, the top priority projects should be:

- 1) *The East Harrison County Connector.*
- 2) *Closing the CSX corridor for use by freight trains.*
- 3) *Back Bay Boulevard – Completion of the East Biloxi Transportation Loop.*

The funding source is anticipated to be 100% MDA Economic Development funding with a project cost of \$21 million. The project could be designed with right of way acquisition within two years and constructed by 2010.

- 4) *I-110 Interchanges - Ramp Construction at Bayview Avenue and realignment at Highway 90.*

The funding source is anticipated to be 80% FHWA funding or 100% MDA Economic Development funding with a project cost of \$15 million. The project could be designed with right of way acquisition within two years and constructed by 2010.

- 5) *Public Transit*

Bus service (and ultimately trolley service) connecting casinos, condos and Keesler Air Force Base and including a bus/shuttle connection to the Gulfport Airport and aesthetic consideration for passenger waiting facility.