

Building a 21st Century Transportation System for the Gulf Coast

Hurricane Katrina destroyed thousands of homes and businesses along the Gulf Coast. The storm also ripped up freight lines, brought down bridges and wrought havoc with the transportation system. Yet local residents and state leaders showed optimism and resilience throughout the Mississippi Renewal Forum, a one-week effort to help define a rebuilding strategy for the Gulf Coast. Though the primary emphasis of the Forum was to provide plans and tools for the 11 towns to reemerge stronger than ever, a key set of recommendations focused on regional transportation infrastructure. Forum participants found that the economic, environmental and social vitality of the region depends, in part, on a renewed transportation network – a network that both nurtures reinvestment in the historic Gulf Coast towns and provides forward-thinking linkages to economic centers throughout the South.

Clearly, one of the first rebuilding tasks is to reestablish the linkages between communities and across waterways that were destroyed. There is a sense of urgency to restarting the local economy that can be assisted through strategic road and bridge projects. Indeed, many of the existing streets need repair and reconstruction, and several key bridges need to be replaced.

Importantly, however, this urgency must be somewhat tempered as the opportunity now exists to reconsider how all of the reconstruction efforts fit with the long-term goals of the region and local communities. If the Mississippi Gulf Coast is to reemerge as a model of economic strength, based on a diversified economy of homes, businesses, tourism, gaming, retirement living and water-related industry, the character and design of new transportation infrastructure should be sensitive to these goals and enhance them whenever possible. The priority should be placed on rebuilding well-loved and economically vital places, rather than simply moving cars or freight through the region.

1. Goals and Priorities

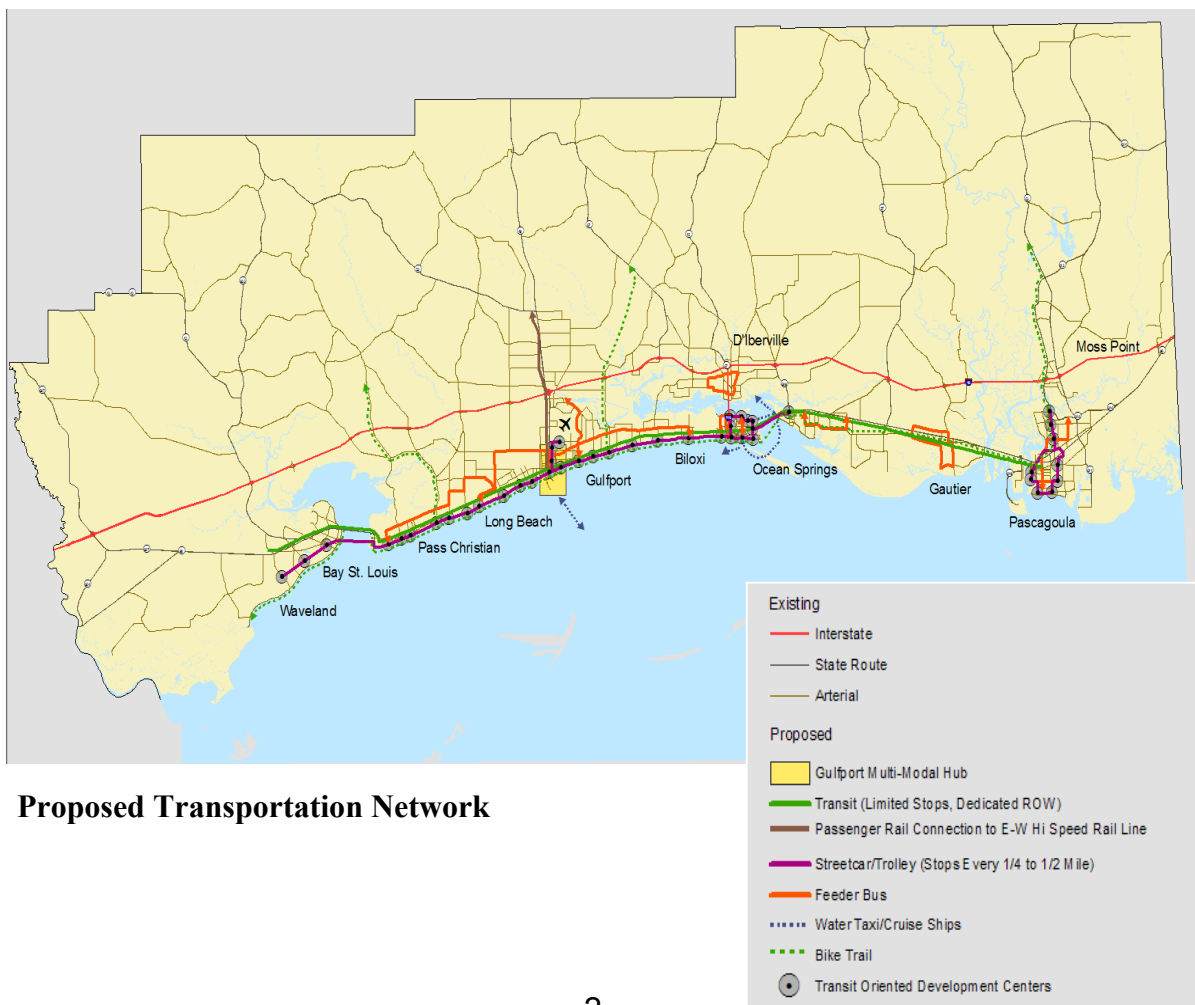
The Renewal Forum's Transportation Team endorsed the goals suggested by the Governor's Commission's Infrastructure Committee:

- Plan and rebuild to new higher standards
- Improve transportation systems
- Move east-west railroad to the north
- Provide better access to and from the region

To achieve these goals, the Transportation Team recommends the following priorities:

- Reduce congestion and improve the vitality of towns by prioritizing walkability. Each town should have a network of walkable neighborhoods and districts.
- Work with the legislature to revise the structure of MDOT to create a department with a single Commissioner who is appointed by and responsible to the Governor on behalf of the people.

- Work with MDOT to plan the movement of people – not just cars – to and around the Gulf Coast.
- Build a transportation network that is “multi-modal” – cars, bikes, pedestrians and transit.
- Design matters. Every road, transit and bridge project should pay attention to the details of place-making.
- Revisit and recalculate ALL future traffic projections based on the new visions.
- Improve east-west connectivity between Gulf Coast towns with a new multi-modal (transit, pedestrians and cars) boulevard along the railroad right-of-way.
- Realign and revise U.S. 90 to become a pedestrian-friendly “Beach Boulevard,” linking communities with the Gulf’s beaches and waterways.
- Create a Gulf Coast bikeway that stretches the entire length of the region and provides linkages to the beautiful inland bayous and greenways.
- Balance freight and industry needs with local development objectives.
- Connect the economy of the Gulf communities with the greater South through a high-speed inter-city rail connection.
- Move the existing freight train route out of the coastal area.

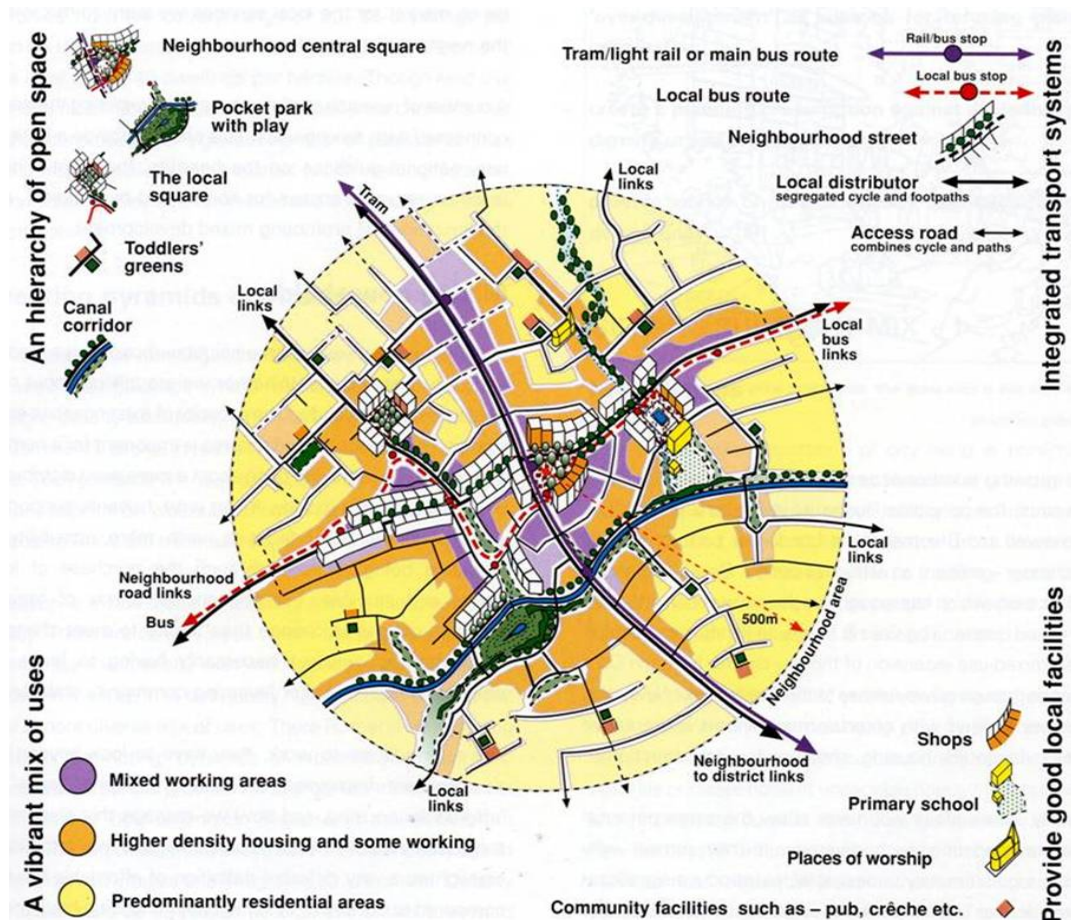


2. Recommendations

A. Build Walkable Neighborhoods and Multi-Modal Streets

In recent years, “Context Sensitive Design,” “Context Sensitive Solutions,” “Smart Growth,” “Traditional Neighborhood Development,” “New Urbanism” and “Transit-Oriented Development” have arisen as similar development concepts in planning and engineering circles. These related concepts have begun to be endorsed by leading professional organizations and public agencies, including the Institute for Transportation Engineers (ITE), the American Association of State Highway Transportation Officials (AASHTO), the Urban Land Institute (ULI) and the Federal Highway and Transit Administrations (FHWA and FTA). Standards for their adoption are now under consideration.

The design concepts embodied within these ideas include, among other similarities, mixed land uses, interconnected street networks and more walkable streets.



The Walkable Neighborhood Concept

Walkable neighborhoods provide interconnected street networks that link directly to local services and a wide range of uses that are within a short walk. Many of the streets in the historic Gulf Coast towns were built along this model and should be rebuilt with sidewalks and design features that make walking pleasurable. As new streets and road projects are considered, their design should specifically consider how pedestrians will be accommodated and whether the project indeed adds to the development vitality of the place.

This approach is somewhat different than the way most new subdivisions, including those recently built in the Gulf Coast region, have been designed. As we looked throughout the region, we saw a number of places where big, fast-moving streets cut between neighborhoods or divided two sides of a downtown district. The result is that any trip to the store, to school or to work, no matter how long or short, must be made by car.

Indeed in the recent Governor's Commission Renewal Forum, all 11 communities agreed that they should rebuild "better" than before, and desire for walkable neighborhoods was a common denominator among the communities.

Unfortunately, many streets in the region have been designed with the equivalent of a "one size fits all" mentality. In this case, the "one size" has been that which fits the motor vehicle. Proper thoroughfare design, particularly in the denser parts of the Gulf coast, should accommodate multiple modes of travel – walking, biking, driving and transit. This "multi-modal approach" should all be considered in the course of the design or redesign process.

B. Design Streets as Public Spaces

Streets are perhaps the most prevalent of public spaces; essentially every parcel of land abuts one or more "streets."¹ Clearly, the appropriate design and redesign of the surface streets is an important component of the redevelopment of the Gulf Coast.

The Mississippi Department of Transportation (MDOT) acknowledges the need to plan for more than just the automobile. In its list of 10 goals, Goal #1 includes the following language:

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.**

The appropriate design of streets supports the creation of an environment where drivers will realize that to drive too fast or too aggressively is inappropriate, anti-social and,

¹ For the sake of clarity in this document, all those linear corridors that mix motor vehicles, pedestrians, bicyclists and/or transit facilities over quite wide volumetric ranges will be referred to with the inclusive term "route."

perhaps most effectively, uncomfortable. With the appropriate street design techniques, drivers will more automatically choose lower driving speeds and less aggressive behaviors. In this “self-enforcing” environment, both motorists and non-motorists feel more equivalent occupants of the street; this sense of “equivalency” should be a design goal as it will enhance the livability of the street and neighborhood.

Any environment that is motorist-dominated needlessly impacts children and other non-drivers. When a non-motorist cannot safely or conveniently travel to a day’s events without a vehicle, even simple matters such as a trip to the doctor’s office or children’s recreation must depend on the availability of a driver.

The societal impacts of this approach to street design are difficult to measure, but they are doubtless significant; the net effect of a motorist-dependent environment is that each home, on average, generates 12 auto trips per day, clogging up major thoroughfares and forcing parents and caretakers into the role of chauffeur. A multi-modal and walkable environment allows the possibility that some vehicular trips will be replaced with non-vehicular trips, such as walking, biking and transit.

C. Rethink Street Standards and Major Roadway Projects to Better Fit with Local Development Goals

Because of the destruction of Katrina, the 11 Gulf Coast communities have an unprecedented opportunity to rethink many development, transportation and design decisions that took place over the past several decades. Quality design, involves qualitative judgments as a part of the process of creating either a new part of an area or in changing an existing part. Since a region of so many cannot have a single voice making these qualitative (and therefore somewhat discretionary) decisions, it is therefore critical that the region, MDOT and each community work in partnership to ensure fully informed decisions that result in quality designs comporting with the visions from the charrette.

The best solutions will usually result from decisions made in consideration of the most information that can be brought to bear on the matter at hand. Single purpose solutions, such as the elevated 110 highway placed through Biloxi years ago, served the function of moving vehicles to and from the city quickly, but served the areas beneath and adjacent with that highway far less well at the level of the street.

If planners begin to design for only one user of a street, the design focus has likely become too narrow. Planners need to be cautious not to tread on this “slippery slope” of narrow focus, because it can easily result in a substantial degradation of the quality or safety of the street environment for other users of the street. This problem is presented if the single-minded focus is either the motorists or the non-motorists (exceptions include, for example, single-focus needs such as wheelchair ramps, truck loading docks and high speed/volume streets).

D. The coastal communities should rebuild as "park-once" neighborhoods where parking facilities are shared among many users and not dedicated to single uses.

The supply and location of parking is an important design element and the coastal communities should carefully consider the location, the quantity and the access to parking both on-street and off-street. The overall goal to promote walkability and multi-modalism is to create what are termed "park-once" areas.

The prior example of the casinos, for example, of having stand-alone parking structures directly linked with only the sponsoring casino having access to that parking is not a good example of a park-once design.

The construction of parking structures represents an opportunity for the cities to partner with the private sector to create shared parking structures that may be utilized by the public.

The overall parking goal is to design and locate parking so that visitors and others arriving by vehicle will literally park one time and then walk and use transit facilities to circulate along the coast.

Sidebar: The Concept of Induced Traffic

Where a modal shift away from the car is sought, then all auto-oriented matters must be addressed with particular care. Indeed, for the best opportunities for non-auto transport solutions to succeed, drivers must begin to associate greater cost, whether in terms of time, actual monetary cost or convenience with auto trips. It can be fairly noted that additional infrastructure for autos will be used and will be necessary, but greater convenience must first become associated with alternative modes of travel.

In addition to the concerns noted previously, such solutions are unlikely to solve congestion problems due to a theory known as "triple convergence." This transport theory affects both new facilities and existing systems as follows.

When a travel street, such as an highway or expressway, becomes congested and slow moving, people seek alternate streets, times, and modes of transportation, which offer less resistance. Over time, this brings an area's transport system into equilibrium of sorts. Those people accustomed to using the secondary streets stick with their pattern; those people who adjust their schedule to miss peak traffic stick with their schedule and street; and the people using mass transit continue their mode of transportation.

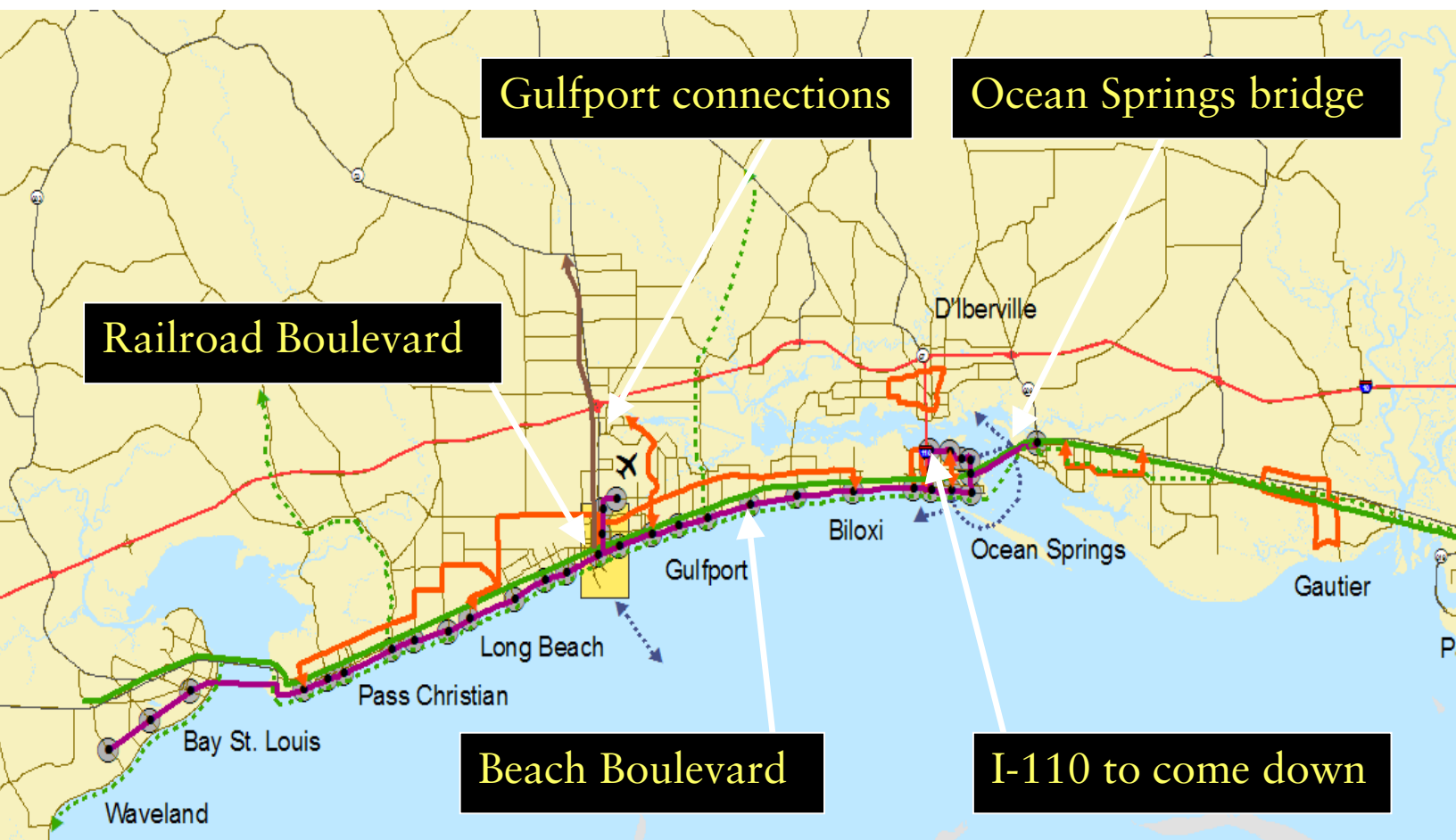
When a change occurs, such as adding several lanes to a multi-lane highway, this immediately upsets the equilibrium. Drivers soon learn that the peak traffic congestion on the highway has been eliminated or reduced. In response to this new information, drivers formerly choosing other streets select the improved highway (spatial convergence). People who were commuting during non-peak times switched to peak times (time convergence). Finally, people who were using alternative modes of transportation switch

to driving because it has become more convenient with the improvement (modal convergence).

These three convergences cause the peak traffic to increase when the original problem situation is again reached. It is this phenomenon that causes new thoroughfares to “fill up” with traffic long before their designers anticipated

The opposite of triple convergence, triple divergence causes people to seek alternative times, streets and modes of transportation in order to avoid peak traffic or other congestion in transport systems. For example, residents who can walk to transit, tend to use it more than those who need to drive to it. This is especially true of fast growing metropolitan areas. Those who do know alternative streets seek them. Those who do not know alternative streets alter their travel times to avoid the peak travel times.

Transportation systems that offer people choices in travel modes tend to be the least impacted by disruption in their transportation networks, and these communities often exhibit less of the triple convergence phenomenon.



Road and bridge projects recommended for the Gulf Coast Communities.

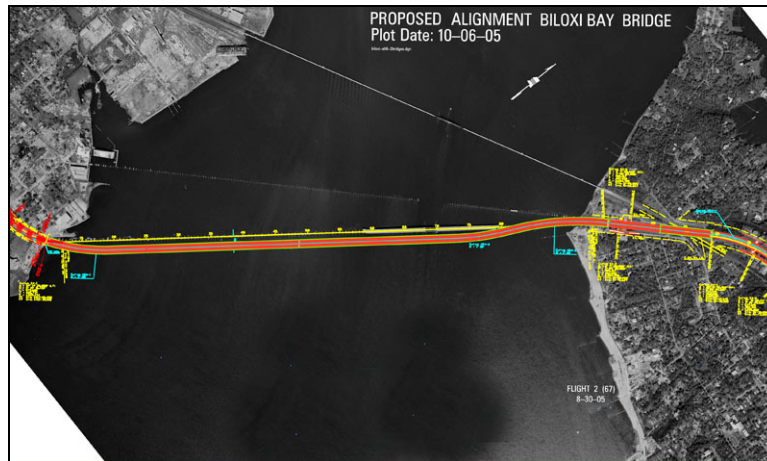
D. Reconsider Specific Transportation Proposals

MDOT has at least two very large (physically and financially) projects actively proposed for construction or reconstruction that do not fit well with the community visions that came from the Renewal Forum. These are:

- The Biloxi Bay U.S. 90 bridge reconstruction, Project No. ER/BR-0003-01(099) 104556/101000; and
- The Gulfport Canal Road Connector to I-10 (Project number unknown)

Biloxi Bay Bridge

The new Biloxi Bay bridge is proposed as a high-rise six-lane bridge on parallel alignment that will extend over the CSX Transportation Railroad in Ocean Springs.² This bridge is proposed to replace the four-lane bridge the travel surface of which was destroyed by Katrina (in color below). The cross section of the proposed bridge is up to 120 feet wide; actually wide enough for at least eight lanes of traffic.



Proposed alignment of a six- to eight-lane bridge from Biloxi to Ocean Springs.

The destruction of the old bridge is an important example of a new opportunity for a revised alignment because other than the right-of-way, there is nothing requiring its reconstruction in the same location as before.

In the prior auto-dominant scenario of the Gulf Coast, planning highways always bigger and faster made more sense than it does today. If the Gulf communities are allowed or even required to be rebuilt as mixed-use, walkable neighborhoods then they will generate less traffic. Further, if transportation options are provided, such as transit, then need for additional lanes of traffic is lessened.

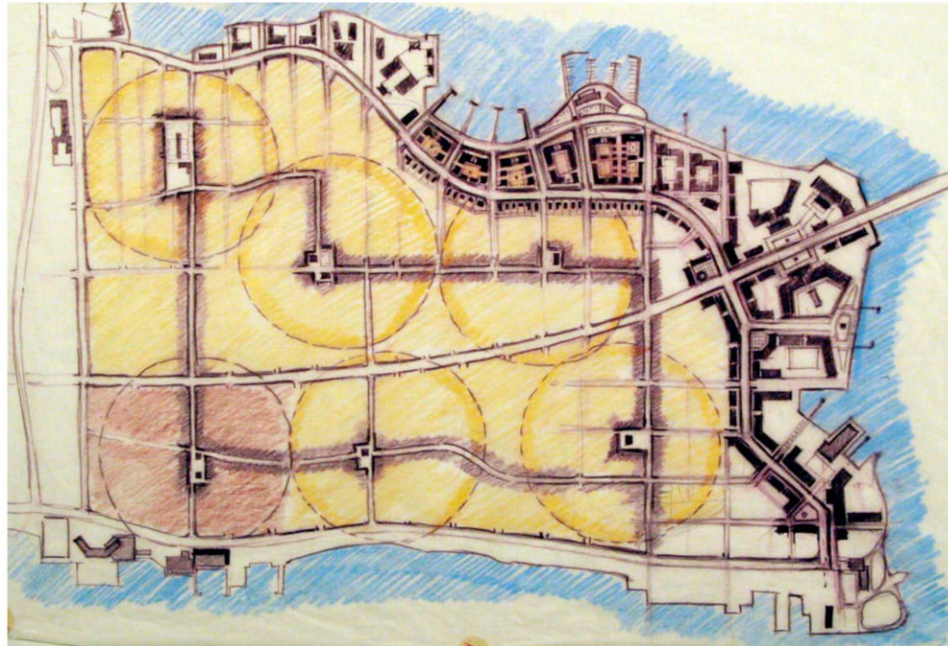
² In practical terms, the proposed bridge is an eight-lane bridge with a right-of-way of 120 inches across the water, transitioning to six lanes at Biloxi and Ocean Springs.

Building in “extra” capacity can also have unintended consequences as overbuilding a highway facility can induce more vehicular travel (see the induced traffic sidebar, above for additional explanation of this point).

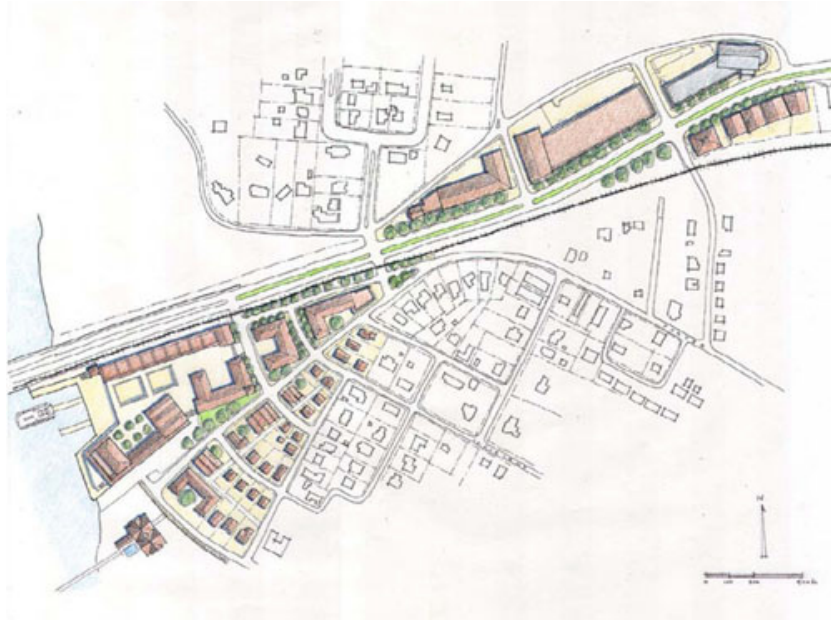
In addition, the Biloxi side of the bridge is fixed in most folks’ minds at no more than four lanes. On the Ocean Springs side, the city has seen how it may redevelop, and the recent widening of its section of U.S. 90 to six lanes may need to be undone.

A four-lane bridge makes sense and would save a lot of taxpayer money (64 feet wide as opposed to 120 feet). In the alternative, a six-lane bridge that is truly a six-lane bridge (about 88 feet wide) would also save a significant sum. Furthermore, a six-lane bridge connecting with four-lane streets does not make sense.

The transportation team proposes a realignment of the bridge to the north into the CSX rail corridor. This realignment would be in conjunction with a new east-west thoroughfare in Biloxi on Division Street and providing connection with Beach Boulevard (former US 90 in Biloxi), as depicted in the first diagram below.



Suggested realignment of Highway 90 through Biloxi and the Biloxi-Ocean Springs Bridge.



Simplified alignment of railroad and Highway 90 in Ocean Springs.

This realignment would also allow significant redevelopment and additions to the tax bases of both Biloxi and Ocean Springs. The sale of the land in unused right-of-way would generate significant revenue as well (one real estate broker's estimate in Biloxi was "at least \$7 million" for the Biloxi side).

Though all local and state leaders have agreed that this approach is superior to rebuilding the bridge in its current alignment, MDOT has decided to move forward with its original plans due to potential funding constraints from the Federal Highway Administration. Another concern is that the use of the CSX right of way would take too long to negotiate.

The primary final MDOT complaint was that any change would delay reopening traffic flows across the Bay.

Subsequent to the charrette, it was determined that at least one contractor who proposes to build the new bridge will be doing so in reliance on the abutments that remain where Katrina lifted the concrete deck panels from them in the bay.

Learning this, the charrette team members proposed that the abutments be used to reopen an automobile-only bridge that could remain as a two-lane auto plus pedestrian plus bicycle plus transit bridge. This rebuilt two-lane bridge would be combined with a four-lane bridge on the CSX alignment.

This "four plus two" concept would have reopened traffic across the Bay much sooner than any other plan and would provide the larger bridge along the better alignment. Reopening the smaller bridge soon would also have taken a little pressure off MDOT and allow it time to negotiate the CSX alignment.

Once again, however, MDOT has rejected this concept out of hand. The transportation team urges locals to insist on a reconsideration of this matter.

Gulfport (Canal Road) Connector

The Gulfport connector is proposed as a new four and six-lane grade-separated highway link from the area of the port and the interstate. The connection at the interstate is proposed as a new “super-interchange” of multiple levels, combining the existing Canal Road interchange with the new link’s alignment to the north.

A new or improved link to aid truck traffic into and out of the Port seems like a reasonable notion, but its design conception seems flawed.

A revised alignment, aligning with the existing Canal Road interchange, would save a lot of money and greatly simplify the interchange for drivers. Alternatively, the Canal Road interchange could be abandoned and a much simpler interchange built on the proposed alignment – again saving funds that could potentially be used on other projects.

In addition, MDOT is building this interchange with the belief that it needs to accommodate as many as 60,000 vehicles per day in and out of Gulfport. These projections should be recalculated based on the revised vision for the city and the region.

In addition, the current MDOT plans propose a connection of this road with Beach Boulevard. This would be a mistake as it would continue to create and foster auto-dependence.

The transportation team recommends that this proposal be revisited fundamentally. The specific charrette recommendation is for a two-lane truck connection with the port that would come back to grade as soon as practical and then align with Canal Road.

Re-Build I-110 as an At-Grade Boulevard

I-110 provides a grade-separated connection between I-10 and Highway 90 through D’Iberville and Biloxi. The Biloxi team recommended tearing down the elevated section of this road as it passes through Biloxi and building a boulevard with similar capacity in its place. This strategy would not only open up tremendous land for development in Downtown Biloxi, but would also improve the quality of the environment at grade, improve east-west connections to downtown and maintain easy access to the beach casinos.

At the time of this writing, MDOT and the city have declined to accept this recommendation, but it should remain a part of the long term plans.

E. Create a Gulf Coast Bikeway

Bicycles are perhaps the most energy efficient means of travel, on average five times more efficient than walking and, of course, bicycles do not consume fossil fuels. Bicycle travel should be encouraged, and the opportunity for and the benefits of a regional coastal bike route are tremendous. The transportation team recommends creating a Coastal Bikeway along the waterfront and linking all the towns in the Gulf. This could be a tremendous asset to the regional eco-tourism program and could be of value to local residents.

F. Build Transit as a Development Strategy

Forum participants from all 11 towns were enthusiastic about becoming a region where a walk to the local store is easy and convenient, and where transit is a pleasurable and cost-effective means of getting to work or seeing the sights. This notion of providing a transit stop in each neighborhood and clustering new housing, shops and businesses nearby is called: transit-oriented development.

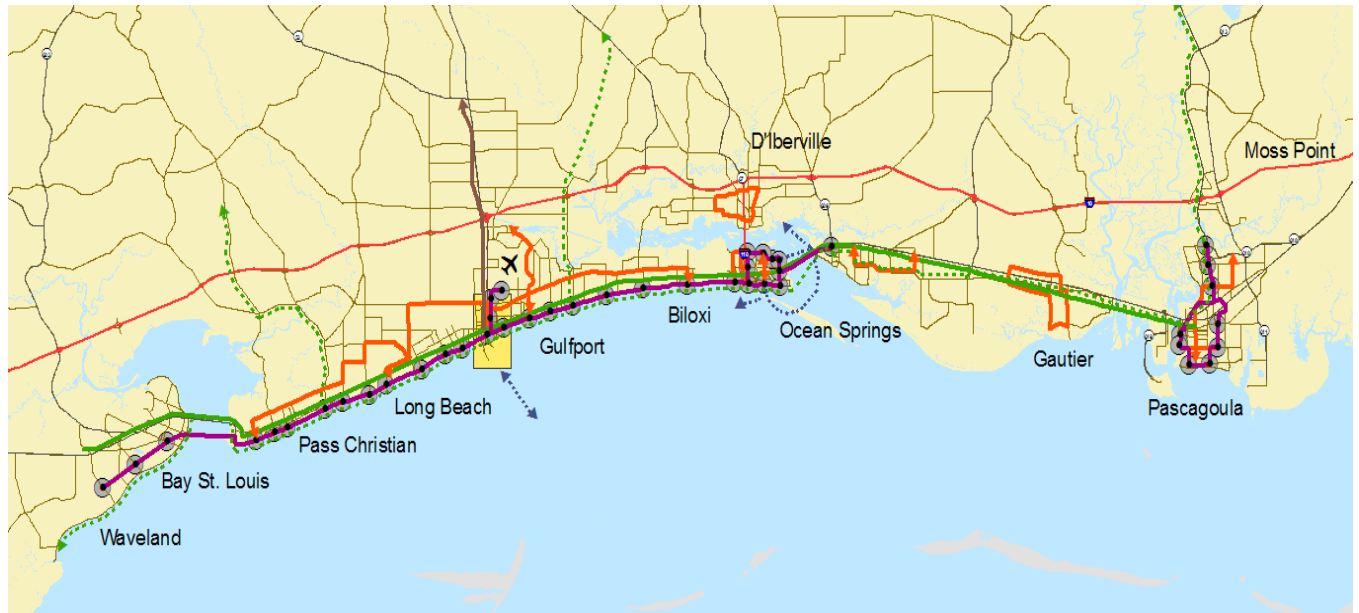
Gulf Coast towns used to be served by an interurban streetcar, carrying visitors from New Orleans to the Gulf Coast and neighbors from town to town. That streetcar, and others that provided local service in towns like Gulfport and Biloxi, are still remembered fondly by local residents. In 1925, the Mississippi Power Company changed the vision to a more modern reality. The trolleys were abandoned for a more efficient and flexible way to travel: the bus. And from 1969 to 1974, no public transit was provided along the Gulf. Since 1974, the region has operated limited bus service.



Streetcars, or Trolleys, used to be a common form of transportation on the Gulf Coast.

In a region where most see the car as the most convenient and practical form of transit, why would new transit be considered? Prior to Katrina, Gulfport and Biloxi were among the top 10 most walkable communities in Mississippi. Car use on the Mississippi Gulf Coast was *less* than U.S. averages (75 percent drive alone to work vs. 90 percent nationally), and carpooling was *higher* than U.S. averages 15 percent vs. 4 percent). Though less than 1 percent of Gulf residents used transit to get to work, that number may be due more to a matter of service frequencies or route choices than unwillingness. We believe that the transit market is underserved and there is an untapped market from visitors who might seek out the nostalgia of hopping from town to town via streetcar and

from workers trying to get to their jobs at casinos, the Port of Gulfport, the shipyard, the University of Mississippi, and other places of work.



The Transit Strategy suggests a variety of types of transit to service different types of trips.

The Transit Strategy first calls for encouraging neighborhoods and districts to be built with pedestrians in mind. Streets should provide easy and convenient links to local destinations and should be designed specifically so that pedestrians feel comfortable. Cars will remain an important way to get around, but in no case should they be moving so fast that a person walking or biking feels out of place.

If a transit stop is placed either in the center of a neighborhood or along a commercial way within a five- or 10-minute walk of most homes and businesses, studies show that people are five times more likely to use transit than if they have to drive to get on a train. A necklace of walkable neighborhoods is envisioned along the length of the Gulf Coast.

Throughout America, the demand for neighborhoods that are both walkable and transit-connected is rising. That's in part because we're an aging society; retiring baby boomers are going to be the largest part of the home buying market in the future, and they are increasingly recognizing that there's a value to having the option of walking to a neighborhood coffee shop or hopping transit to take a class or visit the library. It's also because gas prices are on the rise and the cost of owning a car is now over \$10,000 per year per vehicle. Nationally, the demand for housing near transit is pegged at over 8 million new units in the next 25 years. If the Gulf Coast could capture only a fraction of that market, there would be more than enough development to realize the Renewal Vision.

Forum participants suggested that a 21st Century transit system would be an important new amenity for the Gulf Coast. The plan, as envisioned, calls for five types of transit:

- Streetcars or historic trolleys along a revived and beautiful Beach Boulevard and as local circulators in Ocean Springs and Pascagoula. A necklace of transit-oriented neighborhoods and districts would emerge around each stop.
- Inter-city rapid transit that provides quick and convenient service along the 50-mile stretch of the coast, stopping in each town and at major employment hubs.
- Local feeder bus routes that link outlying neighborhoods into the streetcar and inter-city transit lines.
- Water taxis or small ferry service to provide visitors with access to the water and a delightful way of visiting Gulf towns.
- Regional high-speed rail service to replace the current Amtrak Sunset service, providing faster-than-driving connections to Baton Rouge, Mobile and Pensacola.

A Note about Transit

There are many different types of transit, and there is much confusion about how different technologies operate and how much they cost. The highest performing transit networks provide a variety of types of transit technologies, each calibrated to serve a particular market. Additional studies will be needed to determine the most appropriate type of transit services for the Gulf Coast, but the most important considerations are to ensure that costs are kept under control, that the type of technology that is chosen for a particular route can actually provide service in a timely manner and the degree to which new development is spurred by an interest in locating near the transit line. (For example, no one wants to ride the train if it takes too long to get to work.)



Light Rail in Bilbao, Spain

Streetcar in
Portland, Oregon



Bus Rapid
Transit in
Boston

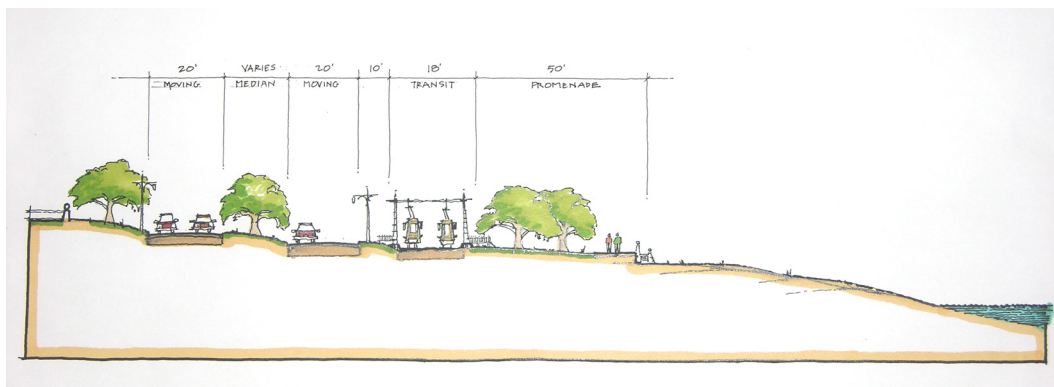
Transit Costs

<i>Bus Rapid Transit Regional Connector</i>	<i>\$5-15 million/mile Stations every 1/2-2 miles</i>
<i>Streetcar/Trolley District Circulator</i>	<i>\$10-15 million/mile Stations every 1/4-1/2 mile</i>
<i>Light Rail Regional Connector</i>	<i>\$45-50 million/mile Stations every 1-2 miles</i>
<i>Heavy Rail Regional Connector</i>	<i>\$100 million/mile Stations every 1-2 miles</i>
<i>Commuter Rail (Heavy rail cars) Am/Pm Long Distance Connector</i>	<i>\$20-30 million/mile Stations every 2-5 miles</i>
<i>Commuter Rail (DMU) Regional Connector</i>	<i>\$5-10 million/mile Stations every 1-3 miles</i>

G. Start With The Beach Boulevard Streetcar



The most cost-effective and easy to implement segment of new transit service is a streetcar that links Gulfport to Biloxi along the waterfront. This segment would begin in Downtown Gulfport, continue along the waterfront, and loop through the casino district of Downtown Biloxi. Stops every $\frac{1}{4}$ -mile at every neighborhood center would allow visitors to see the sites, hop off for a short walk and hop on again to continue their journey. A second phase of the streetcar project would link Biloxi with Ocean Springs and a separate local circulator route in Pascagoula. Ultimately, a connection to the Gulfport Airport would help make this region even more attractive to visitors.



Beach Boulevard provides safe pedestrian and bicycle access to and along the water, as well as space for a waterfront streetcar.

The beauty of the streetcar is that it is a very low-cost, easy to build, and attractive type of transit. Over 70 cities around the country are planning or building streetcars, and

many are experiencing a tremendous boom in housing development and tourist-related enterprises within one or two blocks of their streetcars.

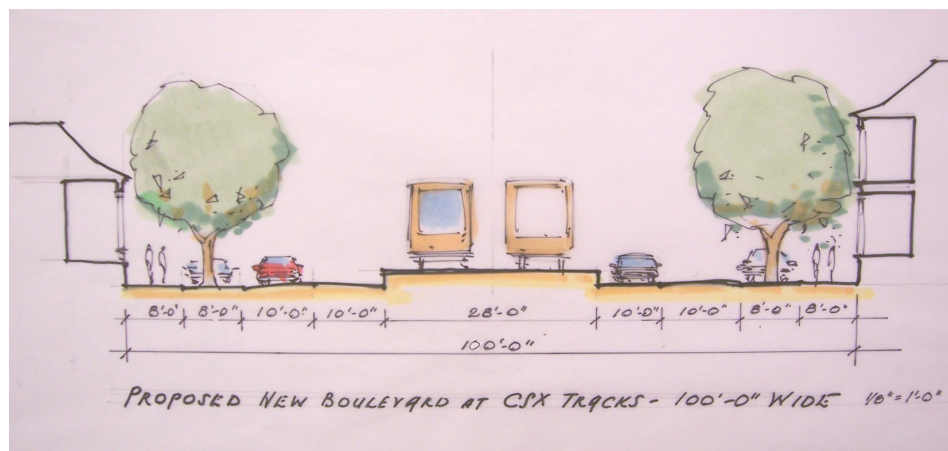


Tampa's TECO streetcar was built with sponsorships by the local utility and provides transportation options for both visitors and local residents. Since the system was opened in 2004, over 2,000 housing units have been built within walking distance.

H. Provide Inter-Urban Rapid Transit Service on the CSX Right-of-Way

For many years, planners and local leaders have called for the removal of freight traffic on the CSX rail line, which runs east-west through the region roughly 800 feet from the coast. Accidents and noise from the 25 to 30 trains a day place a burden on neighbors and make the line difficult to cross.

Forum participants recommended embracing a plan to move the freight line north of I-10 (combined with high-speed rail, see below) and thus open up the current CSX right-of-way for a combined street/transit way.



The CSX right-of-way is between 100 feet and 120 feet wide, providing sufficient room for cars, pedestrians and transit.

A new Railroad Boulevard would provide two to four lanes for cars and a center median for two-way transit. The precise type of transit is yet to be determined but could range from new high-tech bus rapid transit to self-propelled rail cars. In any case, a relatively low-cost technology is possible and would allow a resident of Waveland to get to their job at the Port of Gulfport in less than 15 minutes and a casino worker living in Pascagoula to get to work in Biloxi in less than 20 minutes. The new street design would provide additional capacity for east-west travel now that Highway 90 is suggested as a boulevard. Keeping travel times down is a particularly important goal, as the length of this transit line is over 50 miles. Thus, stops are suggested in every 1 to 2 miles in town centers and at major employment hubs. Multi-modal stations are suggested in Gulfport and Biloxi.

Further study is needed to define the precise alignment of the connections to Waveland and to Ocean Springs. Forum participants recommended using the railroad bridges for this service; electronic switching could be used to direct traffic over these single-track bridges.

I. Enhance Local Feeder Bus Service

Current bus routes, over time, should be realigned to provide feeder connections to and from the streetcar and major transit stations.

J. Promote Water Taxis

The region is blessed with tremendous heritage and access to the water. It is part of what defines the Mississippi coast and makes it unique. Visitors, in particular, should have greater opportunities to visit the water experience the water as a means of travel.

Initially, a ferry connection between Ocean Springs and Biloxi will be provided while the Highway 90 bridge is being reconstructed. Over time, additional routes could be added that link with Moss Point and the islands.

K. Connect the Economy of the Gulf Communities with the Greater South Through a High-Speed Inter-City Rail Connection.

CSX has an interest in building its capacity to support east-west freight traffic and provide more efficient linkages to New Orleans and Baton Rouge to the west, Meridian and Jackson to the north, and Mobile and Pensacola to the east. The strategy calls for acquiring new right-of-way north of I-10. A doubling of return on this substantial investment could be achieved if the right-of-way also includes high-speed passenger rail service that links to airports and major cities throughout the South. Improved freight and passenger rail service has the potential to substantially bolster the economy and vitality of the Southern states, as well as provide a secure evacuation route that gets residents quickly and efficiently out of harms way.

To accomplish this goal, the CSX service would need to be realigned to this route, with a rail spur for north-south freight and passenger service along the existing right of way next to Highway 49 to Gulfport. Connections through Louisiana and Alabama would need to be negotiated. Costs for high-speed passenger rail tracks and cars would need to be identified and funds secured. Unless access is limited, the service may not function as envisioned.



High-speed inter-city passenger rail would connect the Gulf Coast to the airports and economies of the greater South.

3. Implementation Actions

1. **Develop a Refined Transportation Master Plan for the Gulf** – The plans prepared during the Renewal Forum were embraced by all 11 mayors and have been enthusiastically received by members of the public. These “visions for a renewed Gulf Coast” suggest a new future for the region, one based on walkable neighborhoods and greater transportation choices. Current plans for highways, streets, bridges and transit were based on out-dated assumptions regarding traffic volumes and travel patterns, and it would be incorrect to invest in major new capital improvements based on these assumptions. A Refined Transportation Master Plan for the Gulf should be prepared that revisits and recalculates projected traffic volumes and travel patterns based on the Renewal Forum recommendations; defines a revised set of street, highway, bridge and transit improvements; determines an appropriate phasing strategy; and identifies appropriate implementation mechanisms and funding sources.
2. **Seek New Transportation Funds, but Seek Maximum Flexibility** – As mentioned above, several of the road and bridge projects planned by MDOT in advance of Hurricane Katrina do not complement the local community development objectives. We would strongly suggest that the funds sought for transportation infrastructure be made as flexible as possible so that following negotiations with MDOT and local communities the most appropriate projects, whether they be highways, bridges, streets or transit, can be implemented. This change would allow (or even require) MDOT to consider some of the proposed project changes discussed above and not be in a scenario of “losing” the money to another State if changes were made. There could even be an incentive program built in to reward DOT engineers, local planners and others who develop better ideas to receive a “bounty” from the savings realized.
3. **Revise the Governing Structure of MDOT** – At the State level, the existing MDOT structure of three elected Commissioners who in turn appoint an Executive Director is, to the team’s knowledge, unlike any other State DOT, and has lead to an agency that is too autonomous. We recommend that the Mississippi legislature study this issue and consider changing the existing structure to one where a Commissioner of Transportation (one person) would be appointed by the Governor for four-year terms.
4. **Negotiate moving the CSX service out of the urbanized area of the Gulf.** Moving freight service out of the Gulf Communities will open up opportunities for more rational road and bridge configurations, new transit service and expanded development sites. The right-of-way should be deeded to a Rail Authority with the ability to operate transit service between Gulf communities and work with MDOT to build a multi-modal boulevard in its place.
5. **Amend State constitution to permit flexible use of state gas tax funds for transit and ferry improvements, as well as bike/pedestrian trails, air-rail connections, roads and highways.** Current methods of funding transportation in Mississippi strongly emphasize road and highway projects. Changing this

approach and enhancing funding for all modes of travel will also require building political support at federal, state and local levels.

- 6. Establish a Rail Authority for Inter-City and Inter-Urban Transportation and Seek Seed Funding** – One of the first steps toward achieving a 21st Century transportation network for Mississippi and its neighbors will be to establish a body that has the ability to develop an implementable plan for high speed freight/passenger rail service, as well as take on the task of planning for inter-urban transit service in the existing railroad right-of-way. We would recommend that the Governors of each state appoint a representative to undertake this effort and that seed funds of approximately \$1,000,000 be allocated for a one-year process. (Or charge existing bodies, such as the Southern Regional Rail Commission, with the task of addressing both freight and passenger rail.). A first task of this effort should be to finalize the appropriate freight and passenger rail alignments. A second task should be to develop a funding strategy and incentive program to encourage CSX to relocate out of the urbanized area.
- 7. Create centralized tracking system for MDOT projects** conceived, planned, designed, contracted for and under construction to ensure that mutual goals are met. Billions of dollars are in the transportation pipeline in projects that could either support or undermine the plans for the region and the individual towns. MDOT is an independent entity with separately elected commissioners – local access to state transportation plans is very limited. Unclear that alignment of goals is a mutually desirable objective.
- 8. Encourage MDOT and Gulf Coast Cities to adopt new street standards.** The rebuilding process presents an opportunity to consider amendments to existing street standards or adoption of new street design standards that better accommodate a wider range of transportation modes and fit better with the community-building objectives of each town. While street design and construction is under the purview of local communities, the templates and model street design standards provided by the charrette team could be adopted by each community individually.
- 9. Seek Rapid Approval of Amtrak Reauthorization** – Senator Lott has introduced S. 1516, the Passenger Rail Investment and Improvement Act of 2005 which provides tax-credit bonding authority for intercity passenger rail service, as well as a new State Capital Grant program for intercity passenger rail capital projects. This bill, if approved, would substantially smooth the way for implementation of the recommended High Speed Rail connector.
- 10. Develop a diversified funding strategy for building and operating a network of interurban and local streetcar lines.** Virtually every streetcar system in the U.S. built in the last decade has been the result of public/private partnerships. These partnerships help build community support for public investments, accrue value to nearby property owners, and ensure that major employers, such as the casinos, actively engage in the design, funding and management of the facility. There are limited federal funds available for low-cost transit improvements, such as streetcars, through the Small Starts program. Thus, communities have had to

develop diversified funding strategies that draw funds from a wide variety of sources, including assessment districts, bulk transit pass purchasing programs, parking revenues, advertising and naming rights, and endowments.

- 11. Seek Funds for Phase 1 Streetcar from Gulfport to Biloxi** – A new streetcar/trolley service has been suggested to link Downtown Gulfport to Downtown Biloxi and possibly onto Ocean Springs. This project can be funded through a mix of public and private funds. We would recommend requesting \$25 million for phase 1 public costs.
- 12. Seek Funds for Inter-City Rail Right-of-Way Acquisition** – A \$75 million fund should be established to facilitate land acquisition for a combined freight/high speed passenger right-of-way, with limited auto/truck access, to link Mobile, Gulfport, Baton Rouge and possibly New Orleans.