

On behalf of the Mobile Metropolitan Planning Organization,  
and the Alabama Department of Transportation,

The South Alabama Regional Planning Commission

Presents the

## EXECUTIVE SUMMARY

of the

## DRAFT

Mobile Area Transportation Study

# Long Range Transportation Plan

For further information or comment regarding this Executive Summary  
Please contact:

South Alabama Regional Planning Commission  
Transportation Planning Department  
100 Beauregard St. Suite 207  
Mobile, AL 36602  
(251)433-6541  
[mats@sarpc.org](mailto:mats@sarpc.org)

February 3, 2010

## 2035 MATS PLAN EXECUTIVE SUMMARY

The Mobile Area Transportation Study (MATS) covers an area substantially larger than the City of Mobile, but smaller than Mobile County. The study area measures approximately 44 miles north to south and 26 miles east to west; the boundaries are shown on Figure 1 (preceding page) and can be generally described as Salco Road and Walter Moore Road to the north, Mobile River (and Spanish River) to the east, Bayou La Batre to the south, and Big Creek Lake and Grand Bay to the west. This area includes all of the Mobile urban area as defined by the U. S. Department of Commerce and also includes all contiguous portions of Mobile County which are expected to be urbanized by the year 2035, the time frame of this study.

The 2035 Long Range Transportation Plan (LRTP) describes an integrated, intermodal transportation system for the MATS planning area. The highway element is detailed, cost-sensitive, and includes specific facility recommendations. The public transportation plan includes policy recommendations as well as some facility and service recommendations. The bicycle and pedestrian element is primarily policy oriented, but also includes cost estimates for recommended projects. The Congestion Management Process (CMP) includes intersection type improvements to increase travel time, decrease delay and improve capacity.

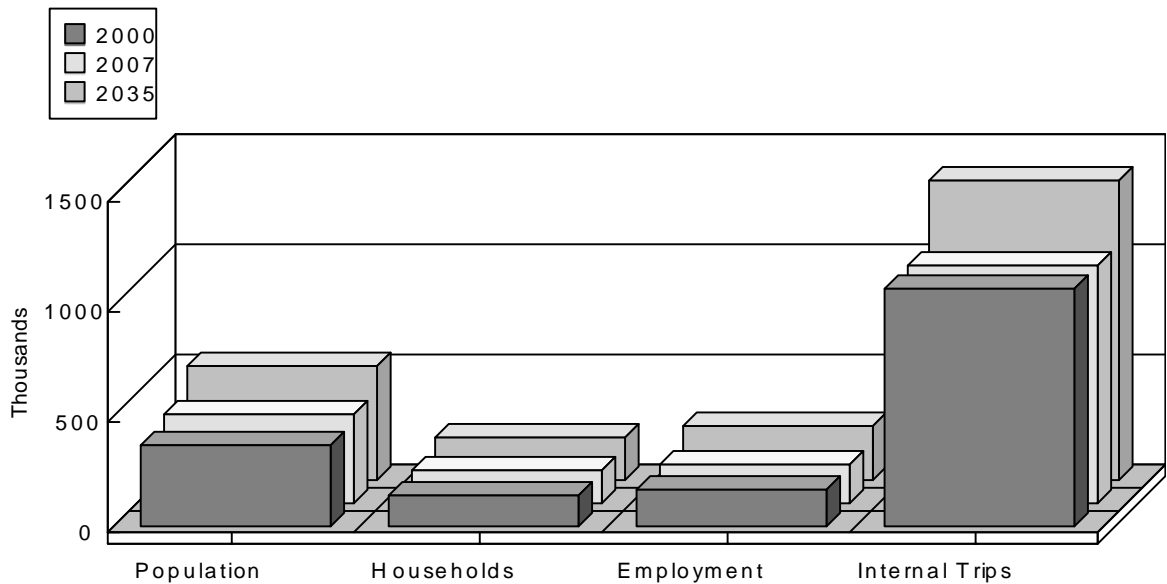
### Anticipated Growth

The future infrastructure needs of an area are largely determined by its growth and the subsequent demand placed on a limited supply of any given commodity - in this case transportation system capacity. The extent of future transportation needs depends on the number and length of trips made on an average day. Trip characteristics are primarily determined by an area's population, housing, and employment densities and the spatial orientation of its residential and commercial or industrial areas.

By year 2035, it is estimated that the MATS area will have almost 200,000 households and over 250,000 employees. This is a significant increase compared to over 155,000 households and almost 184,000 employees in year 2007. Figure 1 graphically illustrates the anticipated growth in the MATS area between 2007 and 2035 including the significant growth in internal automobile and truck trips. While population is expected to increase about 26% and housing and employment by 29% to 36%, daily vehicle-trips will likely increase by 28% during the period.

Table 1 quantifies the projected growth in area-wide vehicle-trips per day between 2007 and 2035 and illustrates the impact on the area's street and highway system. When the projected growth of internal trips is combined with external trips, the total increase is forecast at 40% over the 30 year period. As shown in Table 1, the impact of this growth on the Existing and Committed system (E+C, or the roads now open to traffic plus those currently under construction or contract) would be intolerable by today's traffic service standards. While the number of vehicle-miles driven in the study area each day would increase by over 75%, or almost 7.1 million miles daily, the available lane-miles to accommodate this increase would be only about 71 miles greater than today, representing a capacity increase of about 4%. The street miles

Figure 1  
 Projected Study Area Growth: 2007-2035



operating at unacceptable, over-crowded conditions (level-of-service E or F) would increase from 2007's 31 miles to over 230 miles in 2035; further, operating conditions throughout the network would badly deteriorate with system-wide capacity utilization of 96% in 2035 as compared to the 56% utilized today. The ultimate result of this growth and accompanying congestion will be a need for additional highway capacity throughout the MATS planning area, with the need being most acute west of I-65. After evaluating numerous alternative systems and individual projects, SARPC will recommended a 2035 Highway Plan to the MPO members for their concurrence; the plan will be adopted on February 24, 2010. The data in Table 1 below include the 2035 operating conditions after implementation of this recommended plan. Capacity utilization is higher in the future year than the 2007 base year (56%) because of the strain on the system produced by the new demand. The capacity utilization in 2035 is expected to be at 83% and road miles at LOS E or F are expected to be significantly higher in 2035 than 2007; about 115 miles in 2035 versus 31 miles in 2007. The main reason for this is the anticipated interstate growth.

Figure 2 illustrates the projects included in the 2035 Highway Plan as proposed and Table 2 describes the projects. The plan is based on both new construction and improvements to existing roads. Slightly more than 55 lane-miles of additional limited access roadway would be constructed, with about 3 miles of new roadway (I-10 Mobile River Bridge). About 27 miles of new arterial roads would be constructed with a total of over 158 additional arterial lane-miles system-wide. An improvement to an existing interchange is included on the Interstate system at Celeste Road on I-65. Other than projects recommended under the congestion management Element of this Long Range Transportation Plan (LRTP) or projects being planned with local funds, there are no significant improvements to the collector system. The highway element of

Table 1  
Mobile Area Transportation Study System Comparisons, 2007 and 2035 (Local streets are not included)

Vehicle-Trips/Day	2007		2035		%Increase	
Home-Based Work	279 300		355 400			
Home-Based Other	563 900		717 600			
Non-Home Based	225 600		287 000			
Trucks	15 200		45 600			
Total Internal	1 084 000		1 405 600		30%	
Internal-External	159 400		314 600			
Through	18 200		36 400			
Through Trucks	5 800		15 500			
Total	1 267 400		1 772 100		40%	

System Data	2007		2035 E+C		2035 Plan	
Miles	Lane-Mi	Mi	Lane-Mi	Mi	Lane-Mi	Mi
Freeway	306.7	59.2	306.7	59.2	370.5	62.0
Principal Arterial	542.8	159.5	591.9	157.4	660.4	174.9
Minor Arterial	617.3	250.4	639.6	255.1	729.0	261.8
Collector	379.9	179.9	379.5	177.3	382.3	179.7
Total	1 846.7	649.0	1 917.7	649.0	2 133.7	678.0
VMT/Day	Miles/Day	%Tot	Miles/Day	%Tot	Miles/Day	%Tot
Freeway	3 320 200	35%	5 836 700	35%	5 963 800	36%
Principal Arterial	2 984 900	31%	5 083 100	30%	4 823 700	29%
Minor Arterial	2 420 000	25%	4 159 000	25%	4 222 200	26%
Collector	822 200	9%	1 651 200	10%	1 416 700	9%
Total	9 547 300		16 730 000		16 426 400	
Level-of-Service	Mi over LOS D	Capac. <sup>1</sup> Used	Mi over LOS D	Capac. <sup>1</sup> Used	Mi over LOS D	Capac. <sup>1</sup> Used
Freeway	6.1	72%	43.0	126%	39.8	108%
Principal Arterial	12.6	60%	76.8	95%	32.3	80%
Minor Arterial	10.0	50%	86.2	84%	33.5	74%
Collector	2.5	33%	30.2	67%	9.6	57%
Total	31.2	56%	236.2	96%	115.1	83%

<sup>1</sup>Capacity based on LOS D.

the 2035 Plan is estimated to cost approximately \$741 million to construct over the next twenty-five year period. Two of the most noticeable projects in the 2035 Plan are the arterial Snow Road extension/arterial loop project, and a new I-10 bridge over the Mobile River. The arterial Snow Road extension project would be a 4-lane divided arterial facility connecting the new US 98 in Semmes to I-10 at McDonald Road and would allow a percentage of trips to bypass the congested I-65 corridor completely, using the new US 98 connection / Industrial Parkway to Interstate 65. It would also improve access to west Mobile from the suburban areas along I-65 to the north and I-10 to the south.

Along with this general access improvement would be a substantial reduction in travel time to the Regional Airport from most origin points in the county. The second vital freeway project included in the 2035 Plan is a new I-10 river crossing the Mobile River. This project is envisioned as a 6-lane structure connecting I-10 in the area of Virginia Street directly to the Bayway near Battleship Park. Its construction would allow I-10 traffic to bypass the Wallace Tunnel, except for those trips originating from or destined to downtown Mobile. The bridge would require a minimum vertical clearance of 190 feet above mean high tide to minimize limitations to vessels using the Port of Mobile

Figure 2  
 MATS 2035 Highway Plan

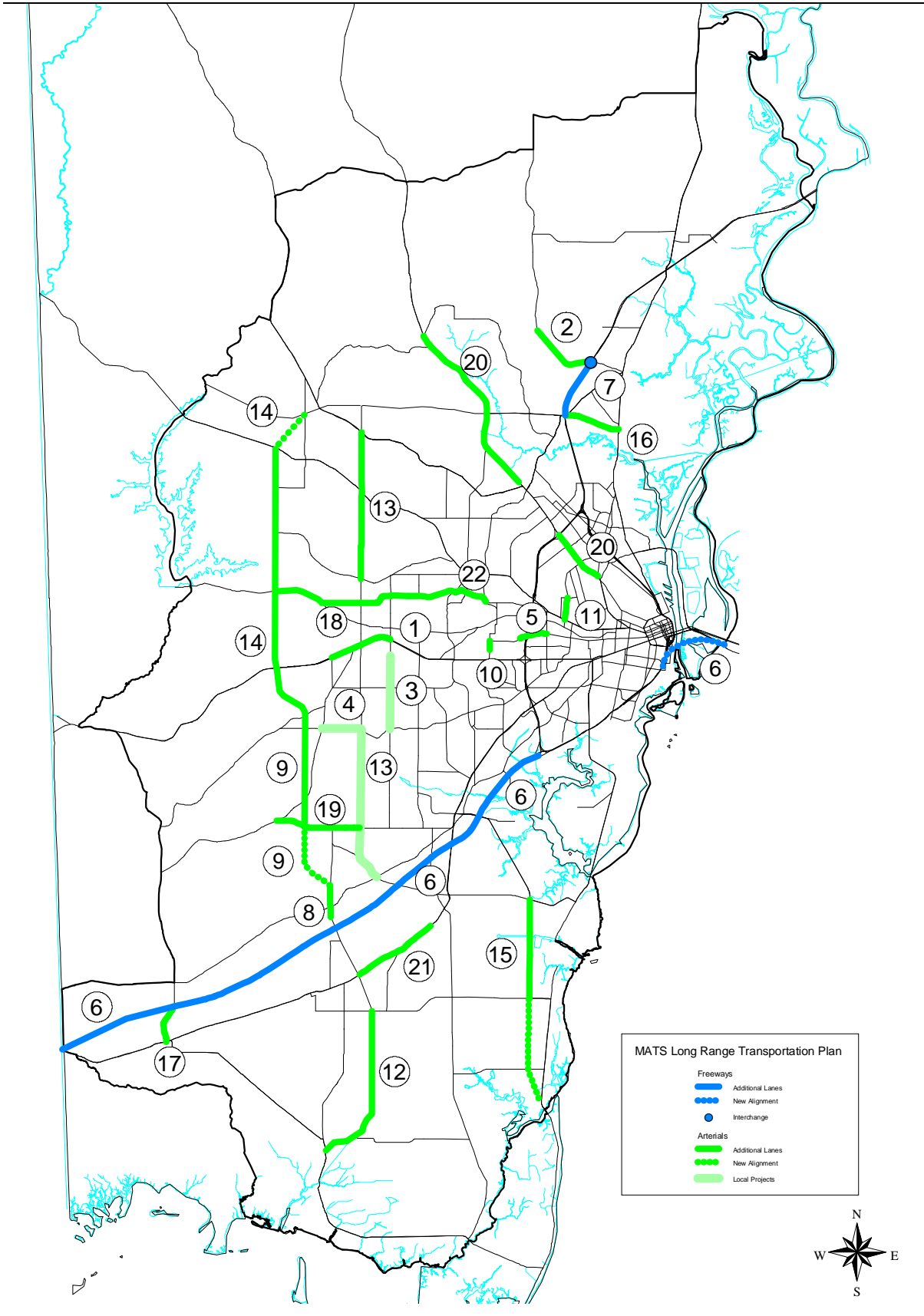


Table 2  
Recommended Highway Projects, 2007 – 2035

Map No.	Project	Est. Cost*** (millions)	From:	To:	Dist. (mi.)	Lanes 2007	Lanes 2035	AADT** 2007	AADT** 2035	P*
1	Airport Blvd	\$4.6	Cody Rd	Regional Airport	2.3	4	6	32,300	46,600	2
2	Celeste Rd	\$12.0	I-65	Oak Ridge Lane	2.5	2	4	12,500	27,100	2
3	Cody Rd	\$0.0	Pine Run Rd	Cottage Hill Rd	2.6	2	3	23,000	29,500	1
4	Cottage Hill Rd	\$0.0	Schillinger Rd	Dawes Rd	1.4	2	4	19,100	25,300	1
5	Dauphin Street	\$3.3	Sage Ave	Springhill Hospital	1.1	4	6	37,200	46,700	1
6	I-10	\$6.6	Over Mobile River	ROW	2.9	New	6	New	74,100	1
		\$281.9	Over Mobile River		2.9	New	6	New	74,100	2
		\$26.8	Carol Plantation Rd	Halls Mill Creek	3.0	4	6	86,400	156,500	2
		\$17.4	McDonald Rd	Carol Plantation	4.2	4	6	60,300	109,900	2
		\$26.4	McDonald Rd	SR-188	6.5	4	6	48,300	120,500	2
		\$22.7	SR-188	State Line	4.2	4	6	43,200	109,300	3
7	I-65	\$10.6	SR 158	Celeste Rd	2.1	4	6	44,600	105,100	2
		\$5.1	Celeste Rd Interchange	Interchange Improvement						2
8	McDonald Rd	\$1.2	North of I-10	Old Pascagoula Rd	0.5	2	4	6,500	35,900	1
9	McFarland Rd	\$31.9	Old Pascagoula Rd	Dawes Lane	2.5	New	4	New	19,300	3
		\$18.8	Dawes Lane	Jeff Hamilton Rd	3.0	2	4	New	26,500	3
10	McGregor Ave	\$3.9	Dauphin St	Eslava Creek	0.5	2	4	19,100	32,900	1
11	Mobile St	\$5.9	Springhill Ave	Stanton Rd	1.0	2	3	13,800	14,100	1
12	Padgett Switch Rd	\$34.2	SR-188	Half Mile Rd	5.8	2	4	5,700	21,200	3
13	Schillinger Rd	\$9.0	Howells Ferry Rd	US 98	3.1	2	4	18,400	28,200	1
		\$4.9	US 98	Lott Rd	2.1	2	4	11,900	24,000	1
		\$0.0	Cottage Hill Rd	S. of Halls Mill Crk	1.5	2	4	15,600	27,800	1
		\$0.0	S. of Halls Mill Crk	Three Notch Rd	2.0	2	4	16,900	26,800	1
		\$0.0	Three Notch Rd	Old Pascagoula Rd	2.0	2	4	16,700	21,600	1
14	Snow Rd	\$31.2	Jeff Hamilton Rd	Tanner Williams Rd	4.9	2	4	11,400	28,400	3
		\$32.5	Tanner William Rd	Moffet Rd	5.1	2	4	9,000	23,600	3
		\$7.9	Moffet Rd	US-98	1.0	New	4	New	23,900	3
15	SR 193	\$13.2	Hamilton Blvd	Laurendine Rd	3.5	2	4	13,900	32,100	2
		\$22.3	Laurendine Rd	N. of Fowl River	3.9	2	4	New	27,200	2
16	SR 158	\$8.5	I-65	US 43	2.0	2	4	19,200	24,500	2
17	SR 188	\$5.5	I-10	US 90	1.4	2	4	10,200	25,200	2
18	Tanner Will. Rd	\$11.7	Zeigler Blvd	Snow Rd	1.9	2	4	11,800	29,300	1
19	Three Notch Rd	\$4.9	Schillinger Rd	McDonald Rd	1.0	2	4	11,600	28,300	1
		\$4.6	McDonald Rd	McFarland Rd	1.0	2	4	5,600	24,500	2
		\$4.6	McFarland Rd	Dawes Rd	1.0	2	4	3,900	10,600	2
20	US 45	\$6.8	Wilson Ave	I-65	2.0	2	4	20,300	25,800	2
		\$25.4	End of 4 lane	Kali Oka Rd	5.6	2	4	20,100	41,600	3
21	US 90	\$10.3	McDonald Rd	S. of Swede. Rd	3.0	2	4	15,600	35,300	2
22	Zeigler Blvd	\$10.9	Forrest Hill Rd	Cody Rd	3.4	2	4	19,700	34,300	1
		\$4.9	Cody Rd	Schillinger Rd	1.8	2	4	13,300	26,500	1
		\$9.1	Schillinger Rd	Tanner Williams Rd	1.4	2	4	8,000	19,100	1

TOTAL (millions)	\$741.4
Priority 1 (2010 - 2015)	\$ 76,185,000
Priority 2 (2015 - 2025)	\$ 460,791,000
Priority 3 (2025 - 2035)	\$ 204,396,000

\* These priorities were determined by the Mobile MPO and are subject to change.

\*\* AADT refers to Average Annual Daily Traffic

\*\*\* Projects that have a \$0 cost are regionally significant projects being funded with local dollars

Together, the Snow Road Extension and I-10 Bridge projects are estimated to cost approximately \$412 million, or over half of the projected construction costs of the entire 2035 Plan.

Other freeway projects included in the 2035 Plan are additional lanes on I-65 from Industrial Parkway to Celeste Road with a new improved interchange at Celeste Road, and on I-10 from I-65 west to the Alabama / Mississippi state line. It is worthy to note that the projected traffic growth on I-10 dictates that additional lanes will be required on all of I10 within the study area by year 2035. The current I-10 projects listed above are for 2 additional lanes. In order to accomplish meeting the demands of the future year, 4 more additional lanes will be required. This would require additional right of way for 4 more additional lanes as the current I-10 projects listed are planned to occur within the existing right of way. This is detailed in the visionary element of this plan.

The proposed new arterial roads include the extension of Snow Road north to what will be the new US 98, and the extension south along McFarland to new alignment that will take Snow Road/ McFarland to Interstate 10. Also planned is the extension of Rangeline Road, south from Laurendine Road to Fowl River. Portions of numerous existing arterials will be widened under this plan, including Airport Boulevard, Celeste Road, Cottage Hill Road, Dauphin Street, Industrial Parkway, McDonald Road, McGregor Avenue, Mobile Street, Padgett Switch Road, Rangeline Road, Schillinger Road, Tanner Williams Road, Theodore-Dawes Road, Three Notch Road, US 45, US 90, Zeigler Boulevard, and several others (see Figure 2 and Table 2). Through the County's Pay-As-You-Go Program, there are several projects that are being locally funded that are considered to be regionally significant projects based on volume and dollar amount. These projects are included in the MATS 2035 Long Range Transportation Plan.

The projects laid out in this document represent the best use of projected federal funding over the next 25 years. However, the anticipated increase in volume on our interstates creates a capacity demand that is far beyond the reach of federal funding that is expected to be annually received . For this reason, the LRTP also includes Visionary Projects. These are projects that are needed to fulfill the capacity demands on the Mobile transportation network that cannot be remedied by limited funding that the MATS area expects to receive. Those projects are the additional widening of Interstate 10 from the State Line to Interstate 65, the additional widening of Interstate 65 from Interstate 165 to US 43 and the widening US 45 from Kali-Oka Road to Citronelle.

## Transit

The 2035 Plan proposes transit system improvements which encompass service development, capital improvements, and funding. A hub system is recommended to improve efficiency and accessibility throughout the system, and the proposed service improvements are built on that concept. The proposed emphasis areas for additional Mobile County transit services are Bus Rapid Transit, Trunk Routes, High-Density Circulators, Lifeline Routes, Neighborhood Services, an Intermodal Passenger Terminal Complex and a rural connection for Mobile County outside of the urban area. The Bus Rapid Transit would operate along an exclusive or semi-exclusive right of way on Airport Boulevard to offer competitive travel times to driving in traffic. The Rideshare Program with both carpool and vanpool services further expands available travel options. Finally, implementation of a dedicated funding source is recommended to ensure the future vitality of transit in Mobile.

## Bicycle / Pedestrian

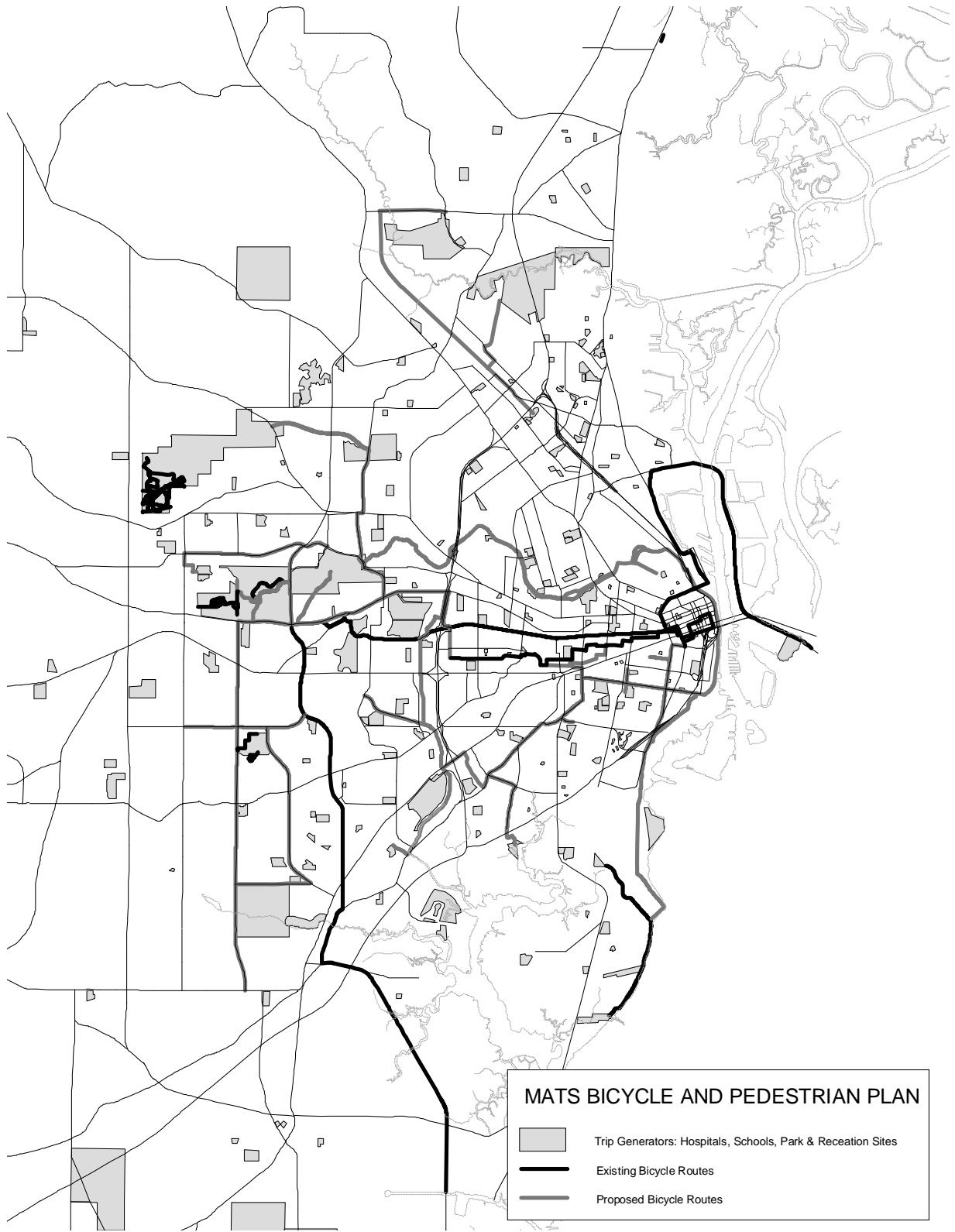
The bicycle/pedestrian portion of the 2035 MATS Plan combines the elements of engineering and planning, education, enforcement, and encouragement. Recommendations for the bicycle/pedestrian network apply not only to physical improvements, but also to basic planning techniques and education programs. To insure that the diverse needs of the various user groups will be met or addressed, input from organized bicycle clubs and other groups was solicited prior to and during the plan's development. The proposed bicycle and pedestrian plan, linking major trip origins and destinations, is shown on Figure 3. Facilities are sited on existing roads — as bike lanes or widened shoulders — as well as on separate paths, creating a transportation network with expanded travel options. All arterial improvements of the Highway Element of the MATS Long Range Transportation Plan must have a bicycle or pedestrian facility given consideration as a viable part of the project. Consideration will be determined as part of the engineering phase of the project.

## The Congestion Management Process (CMP)

This element of the LRTP addresses congestion on all roadways inside of the Mobile urban area boundary which are functionally classified as an arterial or higher that are not addressed by any of the elements noted above. Intersections are screened for being potential problem intersections, and an appointed CMP Committee surveys each intersection in the field during a peak hour to develop projects to alleviate congestion.

The screening process determines which intersections (only principal or minor arterials) have a total approach volume of over 45,000 ADT, or have at least two approaches with a volume exceeding 7,000 vehicles/lane/day. For nonrecurring congestion, intersections are screened for any at or above 1.5 vehicle collisions per MEV (million entering vehicles). Another measurement for congestion other than vehicles over capacity (V/C) is travel time. As part of the CMP, global positioning satellites (GPS) are used to determine actual travel time based on an average of a minimum of 6 runs in each direction. This other means of measuring congestion is also a method for screening intersections used by CMP.

Figure 3  
Proposed Bicycle Routes



The following intersection improvements are recommended by the CMP Committee as a result of the process. The recommended improvements were developed from the onsite peak hour examination by the CMP committee and has a benefit cost ratio detailed in the LRTP.

1. Azalea Road and Burma Road; install protected left turns on Azalea northbound and Burma, install exclusive right turn lane southbound Azalea Road.
2. Old Shell Road and Service Road West; protected left turns on all approaches
3. Stanton Road and Fillingim Street; improve exclusive right turn radius from Fillingim to Stanton Road
4. Cottage Hill Road and Hillcrest Road; Install dual left turn lanes on Hillcrest Road southbound, Add median past the driveways of all approaches and close the driveways adjacent to the intersections.
5. Grelot Road and Hillcrest Road; Extend the left turn lanes at all approaches and install right turn lane on all approaches.
6. St. Stephens Road and Wolf Ridge Road; St. Stephens Road dedicated left turn north bound, and exclusive right turn lane on Wolf Ridge Road.
7. Springhill Avenue and Stanton Street; increase storage of left turn lanes on Springhill Avenue eastbound, improve radius on Stanton with wider left and right turn lanes.
8. Airport Boulevard and I-65 Service road East; one way service roads
9. St. Stephens Road and Berkley Ave; Improve radius of St. Stephens southbound exclusive right turn lane onto service road by moving service road entrance on Berkley further south from St. Stephens Road / Berkley intersection.
10. Azalea Road and Cottage Hill Road; install exclusive right turn lanes on all approaches.
11. St. Stephens Road and Lott Road; exclusive right turn with improved radius, through and protected left turn on Lott Road northbound.
12. Zeigler Boulevard and University Boulevard; add through lanes on University Boulevard in both directions.
13. Broad Street and Dauphin Street; 5 lanes Broad Street, reversible left turn (both lefts)
14. Florida Street and Dauphin Street; extend right turn lane on Florida southbound.

### Air Quality Conformity Determination

Air Quality Conformity Determination refers to the requirement of non-attainment areas (as defined by Environmental Protection Agency (EPA) tolerance limits on ground-level and atmospheric pollutant concentrations) and those re-designated to attainment after 1990 to show that federally supported highway and transit projects will not cause new air quality violations, worsen existing violations or delay the timely attainment of the relevant National Ambient Air Quality Standards (NAAQS). The Mobile Area MPO area is currently in attainment status. However, the Mobile MPO is anticipating becoming non-attainment status in the near future. On January 6<sup>th</sup>, 2010, the EPA announced the recommended new standard for ozone. The new standard is under public review until, tentatively, August of 2010. Currently, neither Mobile nor Baldwin County meets the new recommended standard. When Mobile is designated non-attainment status for ozone, the proposed projects of this plan will be subject to an air quality model and emissions budget which may result in VMT restrictions.

Additional information regarding the proposed highway, transit system bicycle/pedestrian and congestion management process projects can be found in the respective chapters of the Plan. The Plan also contains information on the Environmental Justice Element of the Plan which details efforts to assure that the projects of the LRTP have no detrimental effects in terms of travel time to area determined to be low income or minority by the US Census. It quantifies that low-income and minority communities are being equally served by federal road improvements, transit services, and bicycle and pedestrian improvements. A separately bound report (*MATS 2035 Transportation Plan Model Documentation and Appendices*) provides information regarding the technical aspects of the plan update process.