

## SECTION 6.0 PROJECTED TRAFFIC CONDITIONS

Other portions of this report explain the estimation/forecasting procedure used to project future traffic levels and the data required as input to the computer models. The development scenario used in the *MATS 2035 Update* was explained in Section III and the impact on trip-end distribution was discussed in Section IV. A separate report entitled *MATS 2035 Model Documentation* details the procedure used to simulate trip-making in the community, under either present or future conditions.

Table 16  
Mobile Area Transportation Study Trip Data, 2007 and 2035

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%	

Trip-Ends/Day Planning Area	2007	2035	Increase	% Increase	% of New
1	54,909	74,676	19,767	36%	3.0%
2	100,979	104,549	3,570	4%	0.5%
3	70,926	87,991	17,065	24%	2.6%
4	105,431	107,756	2,325	2%	0.4%
5	223,457	234,396	10,939	5%	1.7%
6	108,436	115,427	6,991	6%	1.1%
7	9,611	19,631	10,020	104%	1.5%
8	13,178	14,129	951	7%	0.1%
9	14,328	22,788	8,460	59%	1.3%
10	15,438	17,885	2,447	16%	0.4%
11	84,639	118,624	33,985	40%	5.2%
12	53,046	80,763	27,717	52%	4.2%
13	96,823	109,445	12,622	13%	1.9%
14	197,910	224,281	26,371	13%	4.0%
15	260,381	283,813	23,432	9%	3.6%
16	138,812	152,549	13,737	10%	2.1%
17	47,610	49,795	2,185	5%	0.3%
18	33,740	44,856	11,116	33%	1.7%
19	19,539	64,772	45,233	232%	6.9%
20	31,303	78,556	47,253	151%	7.2%
21	64,791	91,215	26,424	41%	4.0%
22	154,926	178,590	23,664	15%	3.6%
23	38,070	78,669	40,599	107%	6.2%
24	131,032	155,527	24,495	19%	3.7%
25	104,383	127,323	22,940	22%	3.5%
26	34,535	69,547	35,012	101%	5.3%
27	44,080	127,530	83,450	189%	12.7%
28	25,417	61,588	36,171	142%	5.5%
29	24,024	39,581	15,557	65%	2.4%
30	22,914	48,086	25,172	110%	3.8%
Internal	2,324,668	2,984,338	659,670	28%	100%
External	220,900	463,300	242,400	110%	
Total	2,545,568	3,447,638	771,061	35%	

To briefly recap, Table 16 quantifies the projected growth in area wide vehicle-trips per day between 2007 and 2035 and illustrates the impact on various parts of the study area. When the projected growth of internal trips is combined with external trips, the total increase is forecast at 35% over the 27-year period. In general, the portion of the study area outlying western urban areas and the Airport Blvd corridor will experience the greatest increase in trip-ends; in fact, this area as shown by Figure 18 is projected to account for almost 49% of the new internal trips over the study period. The planning areas that are projected to increase more than thirty thousand trip ends per day are: 11, 19, 20, 23, 26, 27 and 28.

## 6.1 Existing and Committed Network

Future road needs are determined by assigning the forecast trips to future road networks and evaluating the resulting deficiencies. Generally, the first step is to assign the trips to the "Existing and Committed," or E+C system. The E+C system is the system of roads now open to traffic plus those recently opened, currently under construction, or under contract for construction. The MATS E+C system is the December, 2009 road network (not base year) plus what is currently under construction as of December 2009. The new US 98 from Schillinger Road to the Study Area Boundary, Rangeline Road Extension from Nevius Road to Hillcrest Road, Old Shell Road from Hillcrest Road to Schillinger Road and Airport Boulevard from Flave Peirce Road to Snow Road.

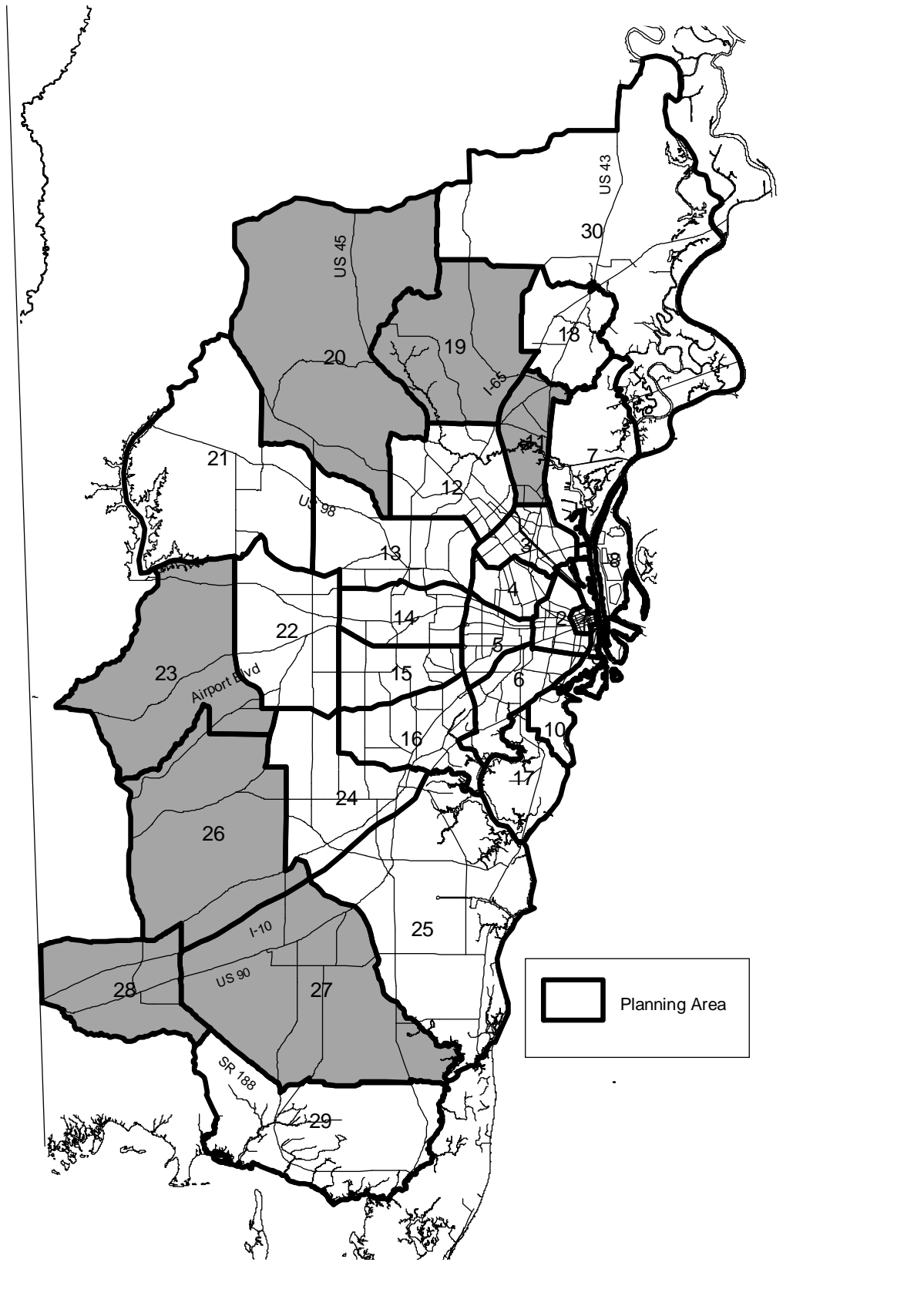
As shown in Table 17, the impact of the projected growth on the E+C system would be intolerable by today's traffic service standards. While the number of vehicle-miles driven in the study area each day would increase by almost 75%, or over 7.1 million miles daily, the available lane-miles to accommodate this increase would be only about 71 miles greater than today, representing increased capacity of about 4%.

Table 17  
MATS System Data, 2007 and 2035 (Local streets are not included)

	2007		2035 E+C	
	Lane-Mi	Mi	Lane-Mi	Mi
Miles				
Freeway	306.7	59.2	306.7	59.2
Principal Arterial	542.8	159.5	591.9	157.4
Minor Arterial	617.3	250.4	639.6	255.1
Collector	379.9	179.9	379.5	177.3
Total	1,846.7	649.0	1,917.7	649.0
VMT/Day	Miles/Day	%Tot	Miles/Day	%Tot
Freeway	3,320,200	35%	5,836,700	35%
Principal Arterial	2,984,900	31%	5,083,100	30%
Minor Arterial	2,420,000	25%	4,159,000	25%
Collector	822,200	9%	1,651,200	10%
Total	9,547,300		16,730,000	
Level-of-Service	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%
Principal Arterial	12.6	60%	76.8	95%
Minor Arterial	10.0	50%	86.2	84%
Collector	2.5	33%	30.2	67%
Total	31.2	56%	236.2	96%

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

Figure 18  
Planning Areas with Highest Projected Trip Increase, 2007 to 2035



## 6.2 Future Level of Service

The street miles 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; furthermore, operating conditions throughout the network would badly deteriorate with system-wide capacity utilization of just over 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 obvious west of I-65.

As explained in the *MATS 2035 Model Documentation* report, a threshold daily traffic level can be established which suggests the *likelihood* of capacity-related problems (LOS E or F) during some part of the day, but generally not all day. Many of the current capacity problems occur on the routes which are radial (east-west from downtown) to the Mobile CBD and many are in the vicinity of I-65. In 2007, these roads included I-10 east of the CBD (Wallace Tunnels and Bayway), The Bankhead Tunnel, Airport Boulevard from Interstate 65 to University, Cottage Hill Road from Azalea to University and from Cody to Schillinger Road, Dauphin Street from Sage Avenue to Springhill Memorial Hospital, Old Shell Road from Florida Street to Cody Road, Springhill Avenue from Catherine Street to Florida Street and east of Moffett Road, Moffett Road from Interstate 65 to Overlook Road, US 45 from Catherine Street to Craft Highway, from Prichard Avenue to Interstate 65 and north of SR 158, and Zeigler Boulevard from Springhill Avenue to Cody Road.

Non-radial roads exhibiting capacity problems in 2007 included Interstate 65 from Airport Boulevard to US 98, McGregor Avenue from Airport Boulevard to Dauphin Street, Mobile Street from Springhill Avenue to Fillingim, Stanton Road from Springhill Avenue to Summerville, all of Schillinger Rd, Theodore-Dawes Road from Old Pascagoula Road to Interstate 10, US 90 from west of Bellingrath Road to Padgett Switch Road.

Of the base year deficiencies noted above, the E+C projects directly address several, that have been improved since 2007 or are committed to be — The new US 98 from Schillinger Road to the Study Area Boundary, Rangeline Road Extension from Nevius Road to Hillcrest Road, McDonald Road extension to Padgett Switch Road, Old Shell Road from Hillcrest Road to Schillinger Road and Airport Boulevard from Flave Peirce Road to Snow Road.

Since the other deficiencies are not being addressed at this time, they would be expected to grow significantly worse between now and 2035. Most of the Interstate system is projected to carry over 40,000 vehicles more per day in 2035 than in 2007, and portions are projected to carry over 65,000 more per day. The I-10 sections east of the Mobile CBD — the Wallace Tunnels and the Bayway — will have a traffic demand over double their capacity, with around 123,500 vehicles per day on the Bayway and over 110,000 per day in the tunnels as compared to a capacity of just under 56,000. Without additional capacity, all of I-10 within the MATS area west of the I-65 interchange will be over capacity, although not to the extent of the Bayway

and tunnels. It is important to recognize national data that suggests truck traffic on I-10 in the next 25 years will almost triple, regardless of what happens to Mobile's economy.

Likewise, I-65 between Government Boulevard (US 90) and Moffett Road (US 98) will exceed capacity significantly by the end of the study period. Airport Boulevard and Schillinger Road will both have substantial capacity deficiencies west of I-65 by 2035 unless major improvements are undertaken. Virtually the entire major street network west of I-65 from US 45 south to Rangeline Road will be functioning at level-of-service D or worse by 2035, and a majority of these roads will be providing LOS E or F. In the absence of substantial road improvements, over seven times as many miles of area roads will exceed capacity in 2035 as in 2007 (31 miles versus 236 miles). Section VII of this report discusses the series of alternate road networks tested and the degree to which each would satisfy the projected 2035 traffic demand in the MATS area.

PAGE INTENTIONALLY LEFT BLANK