

TABLE 1

Generalized Annual Average Daily Volumes for Florida's Urbanized Areas¹

10/4/10

STATE SIGNALIZED ARTERIALS						FREEWAYS						
Class I (>0.00 to 1.99 signalized intersections per mile)						Lanes	B	C	D	E		
Lanes	Median	B	C	D	E	4	43,500	59,800	73,600	79,400		
2	Undivided	9,600	15,400	16,500	***	6	65,300	90,500	110,300	122,700		
4	Divided	29,300	35,500	36,700	***	8	87,000	120,100	146,500	166,000		
6	Divided	45,000	53,700	55,300	***	10	108,700	151,700	184,000	209,200		
8	Divided	60,800	71,800	73,800	***	12	149,300	202,100	238,600	252,500		
Class II (2.00 to 4.50 signalized intersections per mile)						Freeway Adjustments						
Lanes	Median	B	C	D	E	Auxiliary Lanes	Ramp Metering					
2	Undivided	**	10,500	15,200	16,200	+ 20,000	+ 5%					
4	Divided	**	25,000	33,200	35,100							
6	Divided	**	39,000	50,300	53,100							
8	Divided	**	53,100	67,300	70,900							
Class III/IV (more than 4.5 signalized intersections per mile)						UNINTERRUPTED FLOW HIGHWAYS						
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E	
2	Undivided	**	5,100	11,900	14,900	2	Undivided	7,800	15,600	22,200	27,900	
4	Divided	**	12,600	28,200	31,900	4	Divided	34,300	49,600	64,300	72,800	
6	Divided	**	19,700	43,700	48,200	6	Divided	51,500	74,400	96,400	109,400	
8	Divided	**	27,000	59,500	64,700	Uninterrupted Flow Highway Adjustments						
						Lanes	Median	Exclusive left lanes	Adjustment factors			
						2	Divided	Yes	+5%			
						Multi	Undivided	Yes	-5%			
						Multi	Undivided	No	-25%			
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						BICYCLE MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						
Major City/County Roadways - 10%						Paved Shoulder/ Bicycle Lane						
Other Signalized Roadways - 35%						Coverage	B	C	D	E		
						0-49%	**	3,200	12,100	>12,100		
						50-84%	2,400	3,700	>3,700	***		
						85-100%	6,300	>6,300	***	***		
State & Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						PEDESTRIAN MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						
Divided/Undivided & Turn Lane Adjustments						Sidewalk Coverage	B	C	D	E		
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors			0-49%	**	**	5,000	14,400	
2	Divided	Yes	No	+5%			50-84%	**	**	11,300	18,800	
2	Undivided	No	No	-20%			85-100%	**	11,400	18,800	>18,800	
Multi	Undivided	Yes	No	-5%			BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)					
Multi	Undivided	No	No	-25%			Sidewalk Coverage	B	C	D	E	
-	-	-	Yes	+ 5%			0-84%	>5	≥4	≥3	≥2	
						85-100%	>4	≥3	≥2	≥1		
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6.												

¹ Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. Although presented as daily volumes, they actually represent peak hour direction conditions with applicable K and D factors applied. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

** Cannot be achieved using table input value defaults.

*** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
605 Suwannee Street, MS 19
Tallahassee, FL 32399-0450

TABLE 1
(continued)

Generalized **Annual Average Daily** Volumes for Florida's
Urbanized Areas

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities		Interrupted Flow Facilities									
	Freeways	Highways	State Arterials						Class II			
			Class I	Class II	Class III	Bicycle	Pedestrian	Bus				
ROADWAY CHARACTERISTICS												
Area type (l,o)	1	1	1	1	1	1	1	1	1	1	1	1
Number of through lanes	4-12	2	4-6	2	4-8	2	4-8	2	4-8	4	4	
Posted speed (mph)	65	50	50	45	50	45	45	35	35	45	45	
Free flow speed (mph)	70	55	55	50	55	50	50	40	40	50	50	
Aux, meter, or accel/decel ≥ 1500 (n,y)	n											
Median (n, nr, r)		n	r	n	r	n	r	n	r	r	r	
Terrain (l,r)	1	1	1									
% no passing zone		80										
Exclusive left turn lanes / [impact](n, y)		[n]	y	y	y	y	y	y	y	y	y	
Exclusive right turn lanes (n, y)				n	n	n	n	n	n	n	n	
Paved shoulder/bicycle lane (n, y)										n, 50%,y	n	
Outside lane width										t	t	
Pavement condition										t		
Sidewalk (n, y)											n, 50%,y	n,y
Sidewalk/roadway separation (a, t, w)											t	
Sidewalk protective barrier (n, y)											n	
Obstacle to bus stop (n, y)												n
Facility length (mi)	4	5	5	2	2	2	2	2	2	2	2	2
Number of segments	4											
TRAFFIC CHARACTERISTICS												
Planning analysis hour factor (K)	0.092	0.094	0.094	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
Peak hour factor (PHF)	0.95	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	
Base saturation flow rate (pcphpl)		1700	2100	1950	1950	1950	1950	1950	1950	1950	1950	
Heavy vehicle percent	4.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.5	2.0	2.0	
Local adjustment factor	0.98	1.0	0.98									
% left turns				12	12	12	12	12	12	12	12	
% right turns				12	12	12	12	12	12	12	12	
Bus span of service												15
CONTROL CHARACTERISTICS												
Number of signals				2	2	6	6	10	10	6	6	
Arrival type (1-6)				3	3	4	4	4	4	4	4	
Signal type (a, s, p)				a	a	s	s	s	s	s	s	
Cycle length (C)				120	120	120	120	120	120	120	120	
Effective green ratio (g/C)				0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	
LEVEL OF SERVICE THRESHOLDS												
Level of Service	Freeways	Highway Segments		State & Non-State Signalized Arterials			Bicycle	Pedestrian	Bus			
	Density	Two-Lane	Multilane	Class I	Class II	Class III	Score	Score	Buses per hr.			
B	≤ 17	≥ 0.833	≤ 18	> 34 mph	> 28 mph	> 24 mph	≤ 2.5	≤ 2.5	≥ 4			
C	≤ 24	> 0.750	≤ 26	> 27 mph	> 22 mph	> 18 mph	≤ 3.5	≤ 3.5	≥ 3			
D	≤ 31	> 0.667	≤ 35	> 21 mph	> 17 mph	> 14 mph	≤ 4.5	≤ 4.5	≥ 2			
E	≤ 39	> 0.583	≤ 41	> 16 mph	> 13 mph	> 10 mph	≤ 5.5	≤ 5.5	≥ 1			

% ffs = Percent free flow speed ats = Average travel speed

TABLE 2

**Generalized Annual Average Daily Volumes for Florida's
Areas Transitioning into Urbanized Areas OR
Areas Over 5,000 Not In Urbanized Areas¹**

10/4/10

STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (>0.00 to 1.99 signalized intersections per mile)						Lanes	B	C	D	E	
Lanes	Median	B	C	D	E	4	42,600	57,600	68,700	73,600	
2	Undivided	8,900	14,100	15,200	***	6	63,900	86,600	103,300	113,700	
4	Divided	26,900	32,100	33,800	***	8	85,200	115,600	137,600	153,700	
6	Divided	41,500	48,600	51,000	***	10	106,400	145,600	172,400	192,800	
 Class II (2.00 to 4.50 signalized intersections per mile)						Freeway Adjustments					
Lanes	Median	B	C	D	E	Auxiliary Lanes	Ramp Metering				
2	Undivided	**	9,400	13,700	14,700	+ 20,000	+5%				
4	Divided	**	22,700	30,000	31,700						
6	Divided	**	35,700	45,400	47,800						
 Class III (more than 4.5 signalized intersections per mile)						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
2	Undivided	**	4,700	10,700	13,400	2	Undivided	8,000	15,100	21,100	26,800
4	Divided	**	11,500	25,500	28,900	4	Divided	31,400	45,400	58,800	66,600
6	Divided	**	18,000	39,800	43,900	6	Divided	47,200	68,100	88,200	100,000
 Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						Uninterrupted Flow Highway Adjustments					
Major City/County Roadways - 10%						Lanes	Median	Exclusive left lanes	Adjustment factors		
Other Signalized Roadways - 35%						2	Divided	Yes	+5%		
State & Non-State Signalized Roadway Adjustments (Alter corresponding volume by the indicated percent.)						Multi	Undivided	Yes	-5%		
Divided/Undivided & Turn Lane Adjustments						Multi	Undivided	No	-25%		
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		BICYCLE MODE²					
2	Divided	Yes	No	+5%		(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
2	Undivided	No	No	-20%		Paved Shoulder/ Bicycle Lane Coverage	B	C	D	E	
Multi	Undivided	Yes	No	-5%		0-49%	**	2,800	7,300	>7,300	
Multi	Undivided	No	No	-25%		50-84%	2,200	3,400	13,100	>13,100	
-	-	-	Yes	+ 5%		85-100%	4,100	>4,100	***	***	
One-Way Facility Adjustment						PEDESTRIAN MODE²					
Multiply the corresponding two-directional volumes in this table by 0.6.						(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
						Sidewalk Coverage	B	C	D	E	
						0-49%	**	**	5,000	14,400	
						50-84%	**	**	11,300	18,800	
						85-100%	**	11,400	18,800	>18,800	

¹ Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. Although presented as daily volumes, they actually represent peak hour direction conditions with applicable K and D factors applied. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

** Cannot be achieved using table input value defaults.

*** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:

Florida Department of Transportation
Systems Planning Office
605 Suwannee Street, MS 19
Tallahassee, FL 32399-0450

TABLE 2
(continued)

Generalized **Annual Average Daily** Volumes for Florida's
Areas Transitioning Into Urbanized Areas OR
Areas over 5,000 Not in Urbanized Areas

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities		Interrupted Flow Facilities								
	Freeways	Highways	State Arterials						Class II		
			Class I	Class II	Class III	Bicycle	Pedestrian				
ROADWAY CHARACTERISTICS											
Number of through lanes	4-10	2	4-6	2	4-6	2	4-6	2	4-6	4	4
Posted speed (mph)	70	50	50	45	50	45	45	35	35	45	45
Free flow speed (mph)	75	55	55	50	55	50	50	40	40	50	50
Aux, meter, or accel/decel ≥ 1500 (n,y)	n	n	n								
Median (n, nr, r)		n	r	n	r	n	r	n	r	r	r
Terrain (l, r)	1	1	1								
% no passing zone		60									
Exclusive left turn lanes/[impact] (n, y)		[n]	y	y	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n	n	n
Paved shoulder/bicycle lane (n, y)										n,50%,y	n
Outside lane width										t	t
Pavement condition										t	
Sidewalk (n, y)											n,50%,y
Sidewalk/roadway separation (a, t, w)											t
Sidewalk protective barrier (n, y)											n
Facility length (m)	8	5	5	2	2	2	2	2	2	2	2
Number of segments	4										
TRAFFIC CHARACTERISTICS											
Planning analysis hour factor (K)	0.094	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Peak hour factor (PHF)	0.950	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910
Base capacity (pcphpl)		1700	2100	1950	1950	1950	1950	1950	1950	1950	1950
Heavy vehicle percent	9.0	4.0	4.0	3.0	3.0	3.0	3.0	2.0	2.0	3.0	3.0
Local adjustment factor	0.95	1.00	0.95								
% left turns				12	12	12	12	12	12	12	12
% right turns				12	12	12	12	12	12	12	12
CONTROL CHARACTERISTICS											
Number of Signals				2	2	6	6	10	10	6	6
Arrival type (1-6)				3	3	4	4	4	4	4	4
Signal type (a, s, p)				a	a	s	s	s	s	s	s
Cycle length (C)				120	120	120	120	120	120	120	120
Effective green ratio (g/C)				0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
LEVEL OF SERVICE THRESHOLDS											
Level of Service	Freeways	Highway Segments		State & Non-State Two-Way Arterials			Bicycle	Pedestrian			
	Density	Two-Lane	Multilane	Class I	Class II	Class III	Score	Score			
		%ffs	Density	ats	ats	ats					
B	≤ 17	≥ 0.833	≤ 18	> 34 mph	> 28 mph	> 24 mph	≤ 2.5	≤ 2.5			
C	≤ 24	> 0.750	≤ 26	> 27 mph	> 22 mph	> 18 mph	≤ 3.5	≤ 3.5			
D	≤ 31	> 0.667	≤ 35	> 21 mph	> 17 mph	> 14 mph	≤ 4.5	≤ 4.5			
E	≤ 39	> 0.583	≤ 41	> 16 mph	> 13 mph	> 10 mph	≤ 5.5	≤ 5.5			

% ffs = Percent free flow speed ats = Average travel speed

**Generalized Annual Average Daily Volumes for Florida's
Rural Undeveloped Areas and Cities OR
Developed Areas Less than 5,000 Population¹**

TABLE 3

10/4/10

Rural Undeveloped Areas						Cities or Rural Developed Areas Less Than 5000					
FREEWAYS						FREEWAYS					
Lanes	B	C	D	E		Lanes	B	C	D	E	
4	37,100	50,800	59,900	63,700		4	37,100	49,900	59,400	63,700	
6	56,500	76,400	89,900	98,300		6	54,800	74,600	89,000	98,300	
8	75,100	101,100	119,900	132,900		8	73,300	100,200	118,700	132,700	
Freeway Adjustments						Freeway Adjustments					
Auxiliary Lanes						Auxiliary Lanes					
+18,000						+18,000					
UNINTERRUPTED FLOW TWO-LANE HIGHWAYS						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
2	Undivided	4,500	8,100	13,800	27,600	2	Undivided	7,800	14,200	20,000	25,600
Passing Lane Adjustment						Uninterrupted Flow Highway Adjustments					
Alter LOS B-D volumes in proportion to passing lane length to the highway segment length.						Lanes Median Exclusive left lanes Adjustment factors					
UNINTERRUPTED FLOW MULTILANE HIGHWAYS						STATE SIGNALIZED ARTERIALS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
4	Divided	26,300	41,100	52,100	59,100	2	Undivided	**	9,800	13,000	13,900
6	Divided	39,400	61,700	78,000	88,600	4	Divided	**	23,300	28,000	29,900
ISOLATED STATE SIGNALIZED INTERSECTIONS						Non-State Signalized Roadway Adjustments					
Lanes	B	C	D	E		(Alter corresponding state volumes by the indicated percent.)					
2	**	4,700	10,400	12,300		Major City/County Roadways - 10%					
4	**	10,300	23,200	25,500		Other Signalized Roadways - 35%					
6	**	15,800	36,000	38,500		State & Non-State Signalized Roadway Adjustments					
BICYCLE MODE²						Divided/Undivided & Turn Lane Adjustments					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						(Alter corresponding volume by the indicated percent.)					
Paved Shoulder/ Bicycle Lane						Exclusive Exclusive					
Coverage	B	C	D	E		Lanes	Median	Lanes	Lanes	Adjustment	
0-49%	**	**	**	7,800		2	Divided	Yes	No	+5%	
50-84%	**	**	**	14,000		2	Undivided	No	No	-20%	
85-100%	**	4,200	>4,200	***		Multi	Undivided	Yes	No	-5%	
BICYCLE MODE²						BICYCLE MODE²					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Paved Shoulder/ Bicycle Lane						Paved Shoulder/ Bicycle Lane					
Coverage	B	C	D	E		Coverage	B	C	D	E	
0-49%	**	2,800	7,300	>7,300		0-49%	**	2,800	7,300	>7,300	
50-84%	2,200	3,400	13,100	>13,100		50-84%	2,200	3,400	13,100	>13,100	
85-100%	4,100	>4,100	***	***		85-100%	4,100	>4,100	***	***	
PEDESTRIAN MODE²						PEDESTRIAN MODE²					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Sidewalk						Sidewalk					
Coverage	B	C	D	E		Coverage	B	C	D	E	
0-49%	**	**	5,000	14,400		0-49%	**	**	5,000	14,400	
50-84%	**	**	11,300	18,800		50-84%	**	**	11,300	18,800	
85-100%	**	11,400	18,800	>18,800		85-100%	**	11,400	18,800	>18,800	

¹ Values shown are presented as two-way annual average daily volumes for levels of service and are for the automobile/truck modes unless specifically stated. Although presented as daily volumes, they actually represent peak hour direction conditions with applicable K and D factors applied. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model and Pedestrian LOS Model, respectively for the automobile/truck, bicycle, and pedestrian modes.

² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

** Cannot be achieved using table input value defaults.

*** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:

Florida Department of Transportation
Systems Planning Office
605 Suwannee Street, MS 19
Tallahassee, FL 32399-0450

TABLE 3
(continued)

Generalized **Annual Average Daily** Volumes for Florida's
Rural Undeveloped Areas and Cities OR
Developed Areas Less than 5,000 Population

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities					Interrupted Flow Facilities					
	Freeways	Highways				Isolated Signalized Intersections	Arterials Class I	Bicycle Class I		Pedestrian Class I	
ROADWAY CHARACTERISTICS											
Area type (ru, rd)	ru/rd	ru	ru	rd	rd	ru	rd	rd	ru	rd	rd
Number of through lanes	4-8	2	4-6	2	4-6	2-6	2	4-6	2	2	2
Posted speed (mph)	70	55	65	50	55		45	45	55	45	45
Free flow speed (mph)	75	60	70	55	60		50	50	60	50	50
Aux, meter, or accel/decel ≥ 1500 (n,y)	n										
Median (n, nr, r)		n	r	n	r	n	n	r	n	n	n
Terrain (l,r)	l	l	l	l	l						
% no passing zone		20		60							
Exclusive left turn lanes/[impact] (n, y)		[n]	y	[n]	y	y	y	y	[n]	y	y
Exclusive right turn lanes (n, y)											
Paved shoulder/bicycle lane (n, y)									n,50%,y	n,50%,y	n,50%,y
Outside lane width											
Pavement condition											
Sidewalk (n, y)											
Sidewalk/roadway separation (a, t, w)											
Sidewalk protective barrier (n, y)											
Obstacle to bus stop (n, y)											
Facility length (mi)	14	10	10	5	5		2	2	4	2	2
Number of segments	4										
TRAFFIC CHARACTERISTICS											
Planning analysis hour factor (K)	0.103	0.098	0.098	0.100	0.100	0.098	0.097	0.097	0.098	0.097	0.097
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Peak hour factor (PHF)	0.95	0.88	0.88	0.895	0.895	0.88	0.895	0.895	0.88	0.895	0.895
Base saturation flow rate (pcphpl)		1700	2300	1700	2200	1950	1950	1950	1950	1950	1950
Heavy vehicle percent	9.0	5.0	9.0	4.0	4.0	5.0	3.0	3.0	6.0	3.0	3.0
Local adjustment factor	0.90	1.00	0.86	1.00	0.93						
% left turns						12	12	12		12	12
% right turns						12	12	12	12	12	12
CONTROL CHARACTERISTICS											
Number of signals							4	4	2	4	4
Arrival type (1-6)						3	3	3	3	3	3
Signal type (a, s, p)						a	s	s	a	s	s
Cycle length (C)						60	90	90	60	90	90
Effective green ratio (g/C)						0.44	0.44	0.44	0.44	0.44	0.44
LEVEL OF SERVICE THRESHOLDS											
Level of Service	Freeways	Highway Segments				Isolated Intersections	Arterials	Bicycle	Pedestrian		
	Density	Two-Lane ru %tsf	Two-Lane rd %ffs	Multilane ru ats	Multilane rd ats	Other (Control delay) ats	Major City/Co. ats	Score	Score		
B	≤ 17	≤ 50	≥ 0.833	≤ 14	≤ 14	≤ 10 sec	> 34 mph	≤ 2.5	≤ 2.5		
C	≤ 24	≤ 65	> 0.750	≤ 22	≤ 22	≤ 15 sec	> 27 mph	≤ 3.5	≤ 3.5		
D	≤ 31	≤ 80	> 0.667	≤ 29	≤ 29	≤ 20 sec	> 21 mph	≤ 4.5	≤ 4.5		
E	≤ 39	> 80	> 0.583	≤ 34	≤ 34	≤ 40 sec	> 16 mph	≤ 5.5	≤ 5.5		

% tsf = Percent time spent following % ffs = Percent free flow speed ats = Average travel speed ru = Rural undeveloped rd = Rural developed

TABLE 4

Generalized Peak Hour Two-Way Volumes for Florida's Urbanized Areas¹

10/4/10

STATE SIGNALIZED ARTERIALS						FREEWAYS						
Class I (>0.00 to 1.99 signalized intersections per mile)						Lanes	B	C	D	E		
Lanes	Median	B	C	D	E	4	4,000	5,500	6,770	7,300		
2	Undivided	930	1,500	1,600	***	6	6,000	8,320	10,150	11,290		
4	Divided	2,840	3,440	3,560	***	8	8,000	11,050	13,480	15,270		
6	Divided	4,370	5,200	5,360	***	10	10,000	13,960	16,930	19,250		
8	Divided	5,900	6,970	7,160	***	12	13,730	18,600	21,950	23,230		
Class II (2.00 to 4.50 signalized intersections per mile)						Freeway Adjustments						
Lanes	Median	B	C	D	E	Auxiliary Lanes	Ramp Metering					
2	Undivided	**	1,020	1,480	1,570	+ 1,800	+ 5%					
4	Divided	**	2,420	3,220	3,400							
6	Divided	**	3,790	4,880	5,150							
8	Divided	**	5,150	6,530	6,880							
Class III/IV (more than 4.50 signalized intersections per mile)						UNINTERRUPTED FLOW HIGHWAYS						
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E	
2	Undivided	**	500	1,150	1,440	2	Undivided	730	1,460	2,080	2,620	
4	Divided	**	1,220	2,730	3,100	4	Divided	3,220	4,660	6,040	6,840	
6	Divided	**	1,910	4,240	4,680	6	Divided	4,840	6,990	9,060	10,280	
8	Divided	**	2,620	5,770	6,280	Uninterrupted Flow Highway Adjustments						
						Lanes	Median	Exclusive left lanes	Adjustment factors			
						2	Divided	Yes	+5%			
						Multi	Undivided	Yes	-5%			
						Multi	Undivided	No	-25%			
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						BICYCLE MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						
Major City/County Roadways - 10%						Paved Shoulder/ Bicycle Lane						
Other Signalized Roadways - 35%						Coverage	B	C	D	E		
						0-49%	**	310	1,180	>1,180		
						50-84%	240	360	>360	***		
						85-100%	620	>620	***	***		
State & Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						PEDESTRIAN MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						
Divided/Undivided & Turn Lane Adjustments						Sidewalk Coverage	B	C	D	E		
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors			0-49%	**	**	480	1,390	
2	Divided	Yes	No	+5%			50-84%	**	**	1,100	1,820	
2	Undivided	No	No	-20%			85-100%	**	1,100	1,820	>1,820	
Multi	Undivided	Yes	No	-5%			BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)					
Multi	Undivided	No	No	-25%			Sidewalk Coverage	B	C	D	E	
-	-	-	Yes	+ 5%			0-84%	>5	≥4	≥3	≥2	
						85-100%	>4	≥3	≥2	≥1		
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6.												

¹ Values shown are presented as hourly two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. Although presented as peak hour two-way volumes, they actually represent peak hour peak direction conditions with an applicable D factor applied. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

** Cannot be achieved using table input value defaults.

*** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:

Florida Department of Transportation
Systems Planning Office
605 Suwannee Street, MS 19
Tallahassee, FL 32399-0450

TABLE 4
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's
Urbanized Areas

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities		Interrupted Flow Facilities									
	Freeways	Highways	State Arterials						Class II			
			Class I	Class II	Class III	Bicycle	Pedestrian	Bus				
ROADWAY CHARACTERISTICS												
Area type (l,o)	1	1	1	1	1	1	1	1	1	1	1	1
Number of through lanes	4-12	2	4-6	2	4-8	2	4-8	2	4-8	4	4	
Posted speed (mph)	65	50	50	45	50	45	45	35	35	45	45	
Free flow speed (mph)	70	55	55	50	55	50	50	40	40	50	50	
Aux, meter, or accel/decel ≥ 1500 (n,y)	n											
Median (n, nr, r)		n	r	n	r	n	r	n	r	r	r	
Terrain (l,r)	1	1	1									
% no passing zone		80										
Exclusive left turn lanes / [impact](n, y)		[n]	y	y	y	y	y	y	y	y	y	
Exclusive right turn lanes (n, y)				n	n	n	n	n	n	n	n	
Paved shoulder/bicycle lane (n, y)										n, 50%,y	n	
Outside lane width										t	t	
Pavement condition										t		
Sidewalk (n, y)											n, 50%,y	n,y
Sidewalk/roadway separation (a, t, w)											t	
Sidewalk protective barrier (n, y)											n	
Obstacle to bus stop (n, y)												n
Facility length (mi)	4	5	5	2	2	2	2	2	2	2	2	2
Number of segments	4											
TRAFFIC CHARACTERISTICS												
Planning analysis hour factor (K)	0.092	0.094	0.094	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
Peak hour factor (PHF)	0.95	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	
Base saturation flow rate (pcphpl)		1700	2100	1950	1950	1950	1950	1950	1950	1950	1950	
Heavy vehicle percent	4.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.5	2.0	2.0	
Local adjustment factor	0.98	1.0	0.98									
% left turns				12	12	12	12	12	12	12	12	
% right turns				12	12	12	12	12	12	12	12	
Bus span of service												15
CONTROL CHARACTERISTICS												
Number of signals				2	2	6	6	10	10	6	6	
Arrival type (1-6)				3	3	4	4	4	4	4	4	
Signal type (a, s, p)				a	a	s	s	s	s	s	s	
Cycle length (C)				120	120	120	120	120	120	120	120	
Effective green ratio (g/C)				0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	
LEVEL OF SERVICE THRESHOLDS												
Level of Service	Freeways	Highway Segments		State & Non-State Signalized Arterials			Bicycle	Pedestrian	Bus			
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Class III ats	Score	Score	Buses per hr.			
B	≤ 17	≥ 0.833	≤ 18	> 34 mph	> 28 mph	> 24 mph	≤ 2.5	≤ 2.5	≥ 4			
C	≤ 24	> 0.750	≤ 26	> 27 mph	> 22 mph	> 18 mph	≤ 3.5	≤ 3.5	≥ 3			
D	≤ 31	> 0.667	≤ 35	> 21 mph	> 17 mph	> 14 mph	≤ 4.5	≤ 4.5	≥ 2			
E	≤ 39	> 0.583	≤ 41	> 16 mph	> 13 mph	> 10 mph	≤ 5.5	≤ 5.5	≥ 1			

% ffs = Percent free flow speed ats = Average travel speed

**Generalized Peak Hour Two-Way Volumes for Florida's
Areas Transitioning into Urbanized Areas OR
Areas Over 5,000 Not In Urbanized Areas¹**

TABLE 5

10/4/10

STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (>0.00 to 1.99 signalized intersections per mile)						Lanes	B	C	D	E	
Lanes	Median	B	C	D	E	4	4,000	5,410	6,460	6,920	
2	Undivided	860	1,370	1,480	***	6	6,000	8,140	9,710	10,690	
4	Divided	2,600	3,110	3,280	***	8	8,000	10,870	12,930	14,450	
6	Divided	4,020	4,710	4,950	***	10	10,000	13,690	16,200	18,120	
Class II (2.00 to 4.50 signalized intersections per mile)						Freeway Adjustments					
Lanes	Median	B	C	D	E	Auxiliary Lanes	Ramp Metering				
2	Undivided	**	910	1,330	1,420	+ 1,800	+ 5%				
4	Divided	**	2,200	2,910	3,080						
6	Divided	**	3,460	4,400	4,640						
Class III/IV (more than 4.50 signalized intersections per mile)						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
2	Undivided	**	460	1,040	1,300	2	Undivided	770	1,460	2,040	2,590
4	Divided	**	1,110	2,480	2,800	4	Divided	3,040	4,400	5,700	6,460
6	Divided	**	1,750	3,860	4,260	6	Divided	4,570	6,600	8,550	9,700
						Uninterrupted Flow Highway Adjustments					
						Lanes	Median	Exclusive left lanes	Adjustment factors		
						2	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
Non-State Signalized Roadway Adjustments (Alter corresponding volume by the indicated percent.)						BICYCLE MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Major City/County Roadways - 10%						Paved Shoulder/ Bicycle Lane					
Other Signalized Roadways - 35%						Coverage	B	C	D	E	
						0-49%	**	270	710	>710	
						50-84%	220	330	1,270	>1,270	
						85-100%	400	>400	***	***	
State & Non-State Signalized Roadway Adjustments (Alter corresponding volume by the indicated percent.)						PEDESTRIAN MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Divided/Undivided & Turn Lane Adjustments						Sidewalk Coverage	B	C	D	E	
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		0-49%	**	**	480	1,390	
2	Divided	Yes	No	+5%		50-84%	**	**	1,100	1,820	
2	Undivided	No	No	-20%		85-100%	**	1,100	1,820	>1,820	
Multi	Undivided	Yes	No	-5%							
Multi	Undivided	No	No	-25%							
-	-	-	Yes	+ 5%							
One-Way Facility Adjustment Multiply the corresponding two-directional volumes in this table by 0.6.											
<p>¹ Values shown are presented as hourly two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. Although presented as peak hour two-way volumes, they actually represent peak hour direction conditions with an applicable D factor applied. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.</p> <p>² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.</p> <p>³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.</p> <p>** Cannot be achieved using table input value defaults.</p> <p>*** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.</p>											
						<p align="right"><i>Source:</i> Florida Department of Transportation Systems Planning Office 605 Suwannee Street, MS 19 Tallahassee, FL 32399-0450</p>					

TABLE 5
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's
Areas Transitioning Into Urbanized Areas OR
Areas over 5,000 Not in Urbanized Areas

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities		Interrupted Flow Facilities								
	Freeways	Highways	State Arterials						Class II		
			Class I	Class II	Class III	Bicycle	Pedestrian				
ROADWAY CHARACTERISTICS											
Number of through lanes	4-10	2	4-6	2	4-6	2	4-6	2	4-6	4	4
Posted speed (mph)	70	50	50	45	50	45	45	35	35	45	45
Free flow speed (mph)	75	55	55	50	55	50	50	40	40	50	50
Aux, meter, or accel/decel ≥ 1500 (n,y)	n	n	n								
Median (n, nr, r)		n	r	n	r	n	r	n	r	r	r
Terrain (l, r)	1	1	1								
% no passing zone		60									
Exclusive left turn lanes/[impact] (n, y)		[n]	y	y	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n	n	n
Paved shoulder/bicycle lane (n, y)										n,50%,y	n
Outside lane width										t	t
Pavement condition										t	
Sidewalk (n, y)											n,50%,y
Sidewalk/roadway separation (a, t, w)											t
Sidewalk protective barrier (n, y)											n
Facility length (m)	8	5	5	2	2	2	2	2	2	2	2
Number of segments	4										
TRAFFIC CHARACTERISTICS											
Planning analysis hour factor (K)	0.094	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Peak hour factor (PHF)	0.950	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910
Base capacity (pcphpl)		1700	2100	1950	1950	1950	1950	1950	1950	1950	1950
Heavy vehicle percent	9.0	4.0	4.0	3.0	3.0	3.0	3.0	2.0	2.0	3.0	3.0
Local adjustment factor	0.950	1.00	0.950								
% left turns				12	12	12	12	12	12	12	12
% right turns				12	12	12	12	12	12	12	12
CONTROL CHARACTERISTICS											
Number of Signals				2	2	6	6	10	10	6	6
Arrival type (1-6)				3	3	4	4	4	4	4	4
Signal type (a, s, p)				a	a	s	s	s	s	s	s
Cycle length (C)				120	120	120	120	120	120	120	120
Effective green ratio (g/C)				0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
LEVEL OF SERVICE THRESHOLDS											
Level of Service	Freeways	Highway Segments		State & Non-State Two-Way Arterials			Bicycle	Pedestrian			
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Class III ats	Score	Score			
B	≤ 17	≥ 0.833	≤ 18	> 34 mph	> 28 mph	> 24 mph	< 2.5	< 2.5			
C	≤ 24	> 0.750	≤ 26	> 27 mph	> 22 mph	> 18 mph	≤ 3.5	≤ 3.5			
D	≤ 31	> 0.667	≤ 35	> 21 mph	> 17 mph	> 14 mph	≤ 4.5	≤ 4.5			
E	≤ 39	> 0.583	≤ 41	> 16 mph	> 13 mph	> 10 mph	≤ 5.5	≤ 5.5			

% ffs = Percent free flow speed ats = Average travel speed

**Generalized Peak Hour Two-Way Volumes for Florida's
Rural Undeveloped Areas and Cities OR
Developed Areas Less Than 5,000 Population¹**

TABLE 6

10/4/10

Rural Undeveloped Areas						Cities or Rural Developed Areas Less Than 5000					
FREEWAYS						FREEWAYS					
Lanes	B	C	D	E		Lanes	B	C	D	E	
4	3,820	5,230	6,170	6,560		4	3,820	5,140	6,110	6,560	
6	5,820	7,870	9,260	10,120		6	5,640	7,690	9,170	10,120	
8	7,730	10,410	12,350	13,690		8	7,550	10,320	12,220	13,670	
Freeway Adjustments						Freeway Adjustments					
Auxiliary Lanes +1,800						Auxiliary lanes +1,800					
UNINTERRUPTED FLOW TWO-LANE HIGHWAYS						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
2	Undivided	440	790	1,350	2,700	2	Undivided	770	1,420	2,000	2,550
Passing Lane Adjustment						Uninterrupted Flow Highway Adjustments					
Alter LOS B-D volumes in proportion to passing lane length to the highway segment length.						Lanes Median Exclusive left lanes Adjustment factors					
UNINTERRUPTED FLOW MULTILANE HIGHWAYS						UNINTERRUPTED FLOW MULTILANE HIGHWAYS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
4	Divided	2,570	4,020	5,100	5,790	2	Divided	Yes			+5%
6	Divided	3,860	6,040	7,640	8,680	Multi	Undivided	Yes			-5%
ISOLATED STATE SIGNALIZED INTERSECTIONS						ISOLATED STATE SIGNALIZED INTERSECTIONS					
Lanes	B	C	D	E		Lanes	Median	B	C	D	E
2	**	460	1,020	1,200		2	Undivided	**	950	1,260	1,350
4	**	1,000	2,280	2,500		4	Divided	**	2,260	2,710	2,900
6	**	1,550	3,530	3,770		6	Divided	**	3,530	4,110	4,370
BICYCLE MODE²						STATE SIGNALIZED ARTERIALS					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						Non-State Signalized Roadway Adjustments (Alter corresponding volume by the indicated percent.) Major City/County Roadways - 10% Other Signalized Roadways - 35%					
Paved Shoulder/ Bicycle Lane						State & Non-State Signalized Roadway Adjustments (Alter corresponding volume by the indicated percent.) Divided/Undivided & Turn Lane Adjustments					
Coverage	B	C	D	E		Exclusive Exclusive Left Turn Right Turn Adjustment Lanes Median Lanes Lanes Factors					
0-49%	**	**	**	770		2	Divided	Yes	No		+5%
50-84%	**	**	**	1,370		2	Undivided	No	No		-20%
85-100%	**	410	>410	***		Multi	Undivided	Yes	No		-5%
¹ Values shown are presented as hourly two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. Although presented as peak hour two-way volume, they actually represent peak hour direction conditions with an applicable D factor applied. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model and Pedestrian LOS Model, respectively for the automobile/truck, bicycle, and pedestrian modes. ² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility. ** Cannot be achieved using table input value defaults. *** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.						BICYCLE MODE²					
						(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Paved Shoulder/ Bicycle Lane						PEDESTRIAN MODE²					
Coverage	B	C	D	E		(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
0-49%	**	270	710	>710		Sidewalk Coverage B C D E					
50-84%	220	330	1,270	>1,270		0-49%	**	**	480	1,390	
85-100%	400	>400	***	***		50-84%	**	**	1,100	1,820	
						85-100%	**	1,100	1,820	>1,820	

TABLE 6
(continued)

Generalized **Peak Hour Two-Way** Volumes for Florida's
Rural Undeveloped Areas and Cities OR
Developed Areas Less than 5,000 Population

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities					Interrupted Flow Facilities					
	Freeways	Highways				Isolated Signalized Intersections	Arterials Class I	Bicycle Class I		Pedestrian Class I	
ROADWAY CHARACTERISTICS											
Area type (ru, rd)	ru/rd	ru	ru	rd	rd	ru	rd	rd	ru	rd	rd
Number of through lanes	4-8	2	4-6	2	4-6	2-6	2	4-6	2	2	2
Posted speed (mph)	70	55	65	50	55		45	45	55	45	45
Free flow speed (mph)	75	60	70	55	60		50	50	60	50	50
Aux, meter, or accel/decel ≥ 1500 (n,y)	n										
Median (n, nr, r)		n	r	n	r	n	n	r	n	n	n
Terrain (l,r)	l	l	l	l	l						
% no passing zone		20		60							
Exclusive left turn lanes/[impact] (n, y)		[n]	y	[n]	y	y	y	y	[n]	y	y
Exclusive right turn lanes (n, y)											
Paved shoulder/bicycle lane (n, y)									n,50%,y	n,50%,y	n,50%,y
Outside lane width											
Pavement condition											
Sidewalk (n, y)											
Sidewalk/roadway separation (a, t, w)											
Sidewalk protective barrier (n, y)											
Obstacle to bus stop (n, y)											
Facility length (mi)	14	10	10	5	5		2	2	4	2	2
Number of segments	4										
TRAFFIC CHARACTERISTICS											
Planning analysis hour factor (K)	0.103	0.098	0.098	0.100	0.100	0.098	0.097	0.097	0.098	0.097	0.097
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Peak hour factor (PHF)	0.950	0.880	0.880	0.895	0.895	0.88	0.895	0.895	0.88	0.895	0.895
Base saturation flow rate (pcphpl)		1700	2300	1700	2200	1950	1950	1950	1950	1950	1950
Heavy vehicle percent	9.0	5.0	9.0	4.0	4.0	5.0	3.0	3.0	6.0	3.0	3.0
Local adjustment factor	0.90	1.00	0.86	1.00	0.93						
% left turns						12	12	12		12	12
% right turns						12	12	12	12	12	12
CONTROL CHARACTERISTICS											
Number of signals							4	4	2	4	4
Arrival type (1-6)						3	3	3	3	3	3
Signal type (a, s, p)						a	s	s	a	s	s
Cycle length (C)						60	90	90	60	90	90
Effective green ratio (g/C)						0.44	0.44	0.44	0.44	0.44	0.44
LEVEL OF SERVICE THRESHOLDS											
Level of Service	Freeways	Highway Segments				Isolated Intersections	Arterials	Bicycle	Pedestrian		
	Density	Two-Lane ru %tsf	Two-Lane rd %ffs	Multilane ru ats	Multilane rd ats	Other (Control delay) ats	Major City/Co. ats	Score	Score		
B	≤ 17	≤ 50	≥ 0.833	≤ 14	≤ 14	≤ 10 sec	> 34 mph	≤ 2.5	≤ 2.5		
C	≤ 24	≤ 65	> 0.750	≤ 22	≤ 22	≤ 15 sec	> 27 mph	≤ 3.5	≤ 3.5		
D	≤ 31	≤ 80	> 0.667	≤ 29	≤ 29	≤ 20 sec	> 21 mph	≤ 4.5	≤ 4.5		
E	≤ 39	> 80	> 0.583	≤ 34	≤ 34	≤ 40 sec	> 16 mph	≤ 5.5	≤ 5.5		

% tsf = Percent time spent following % ffs = Percent free flow speed ats = Average travel speed ru = Rural undeveloped rd = Rural developed

TABLE 7

Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas¹

10/4/10

STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (>0.00 to 1.99 signalized intersections per mile)						Lanes	B	C	D	E	
Lanes	Median	B	C	D	E	2	2,200	3,020	3,720	4,020	
1	Undivided	510	820	880	***	3	3,300	4,580	5,580	6,200	
2	Divided	1,560	1,890	1,960	***	4	4,400	6,080	7,420	8,400	
3	Divided	2,400	2,860	2,940	***	5	5,500	7,680	9,320	10,580	
4	Divided	3,240	3,830	3,940	***	6	7,560	10,220	12,080	12,780	
Class II (2.00 to 4.50 signalized intersections per mile)						Freeway Adjustments					
Lanes	Median	B	C	D	E	Auxiliary Lanes	Ramp Metering				
1	Undivided	**	560	810	860	+ 1,000	+ 5%				
2	Divided	**	1,330	1,770	1,870						
3	Divided	**	2,080	2,680	2,830						
4	Divided	**	2,830	3,590	3,780						
Class III/IV (more than 4.50 signalized intersections per mile)						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
1	Undivided	**	270	630	790	1	Undivided	400	800	1,140	1,440
2	Divided	**	670	1,500	1,700	2	Divided	1,770	2,560	3,320	3,760
3	Divided	**	1,050	2,330	2,570	3	Divided	2,660	3,840	4,980	5,650
4	Divided	**	1,440	3,170	3,450	Uninterrupted Flow Highway Adjustments					
						Lanes	Median	Exclusive left lanes	Adjustment factors		
						2	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						BICYCLE MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Major City/County Roadways - 10%						Paved Shoulder/ Bicycle Lane					
Other Signalized Roadways - 35%						Coverage	B	C	D	E	
						0-49%	**	170	650	>650	
						50-84%	130	200	>200	***	
						85-100%	340	>340	***	***	
State & Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						PEDESTRIAN MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Divided/Undivided & Turn Lane Adjustments						Sidewalk Coverage	B	C	D	E	
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		0-49%	**	**	270	770	
2	Divided	Yes	No	+5%		50-84%	**	100	600	1000	
2	Undivided	No	No	-20%		85-100%	**	610	1000	>1000	
Multi	Undivided	Yes	No	-5%		BUS MODE (Scheduled Fixed Route)³ (Buses in peak hour in peak direction)					
Multi	Undivided	No	No	-25%		Sidewalk Coverage	B	C	D	E	
-	-	-	Yes	+ 5%		0-84%	>5	≥4	≥3	≥2	
						85-100%	>4	≥3	≥2	≥1	
One-Way Facility Adjustment Multiply the corresponding volumes in this table by 1.20.											

¹ Values shown are presented as hourly directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. To convert to annual average daily traffic volumes, these volumes must be divided by appropriate D and K factors. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

** Cannot be achieved using table input value defaults.

*** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:

Florida Department of Transportation
Systems Planning Office
605 Suwannee Street, MS 19
Tallahassee, FL 32399-0450

TABLE 7
(continued)

Generalized **Peak Hour Directional** Volumes for Florida's
Urbanized Areas

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities		Interrupted Flow Facilities									
	Freeways	Highways	State Arterials						Class II			
			Class I	Class II	Class III	Bicycle	Pedestrian	Bus				
ROADWAY CHARACTERISTICS												
Area type (l,o)	1	1	1	1	1	1	1	1	1	1	1	1
Number of through lanes	2-6	1	2-3	1	2-4	1	2-4	1	2-4	2	2	
Posted speed (mph)	65	50	50	45	50	45	45	35	35	45	45	
Free flow speed (mph)	70	55	55	50	55	50	50	40	40	50	50	
Aux, meter, or accel/decel ≥ 1500 (n,y)	n											
Median (n, nr, r)		n	r	n	r	n	r	n	r	r	r	
Terrain (l,r)	1	1	1									
% no passing zone		80										
Exclusive left turn lanes / [impact](n, y)		[n]	y	y	y	y	y	y	y	y	y	
Exclusive right turn lanes (n, y)				n	n	n	n	n	n	n	n	
Paved shoulder/bicycle lane (n, y)										n, 50%,y	n	
Outside lane width										t	t	
Pavement condition										t		
Sidewalk (n, y)											n, 50%,y	n,y
Sidewalk/roadway separation (a, t, w)											t	
Sidewalk protective barrier (n, y)											n	
Obstacle to bus stop (n, y)												n
Facility length (mi)	4	5	5	2	2	2	2	2	2	2	2	2
Number of segments	4											
TRAFFIC CHARACTERISTICS												
Planning analysis hour factor (K)	0.092	0.094	0.094	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	
Peak hour factor (PHF)	0.95	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	0.925	
Base saturation flow rate (pcphpl)		1700	2100	1950	1950	1950	1950	1950	1950	1950	1950	
Heavy vehicle percent	4.0	2.0	2.0	2.0	2.0	2.0	2.0	1.5	1.5	2.0	2.0	
Local adjustment factor	0.98	1.0	0.98									
% left turns				12	12	12	12	12	12	12	12	
% right turns				12	12	12	12	12	12	12	12	
Bus span of service												15
CONTROL CHARACTERISTICS												
Number of signals				2	2	6	6	10	10	6	6	
Arrival type (1-6)				3	3	4	4	4	4	4	4	
Signal type (a, s, p)				a	a	s	s	s	s	s	s	
Cycle length (C)				120	120	120	120	120	120	120	120	
Effective green ratio (g/C)				0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	
LEVEL OF SERVICE THRESHOLDS												
Level of Service	Freeways	Highway Segments		State & Non-State Signalized Arterials			Bicycle	Pedestrian	Bus			
	Density	Two-Lane %ffs	Multilane Density	Class I ats	Class II ats	Class III ats	Score	Score	Buses per hr.			
B	≤ 17	≥ 0.833	≤ 18	> 34 mph	> 28 mph	> 24 mph	≤ 2.5	≤ 2.5	≥ 4			
C	≤ 24	> 0.750	≤ 26	> 27 mph	> 22 mph	> 18 mph	≤ 3.5	≤ 3.5	≥ 3			
D	≤ 31	> 0.667	≤ 35	> 21 mph	> 17 mph	> 14 mph	≤ 4.5	≤ 4.5	≥ 2			
E	≤ 39	> 0.583	≤ 41	> 16 mph	> 13 mph	> 10 mph	≤ 5.5	≤ 5.5	≥ 1			

% ffs = Percent free flow speed ats = Average travel speed

TABLE 8

**Generalized Peak Hour Directional Volumes for Florida's
Areas Transitioning into Urbanized Areas OR
Areas Over 5,000 Not In Urbanized Areas¹**

10/4/10

STATE SIGNALIZED ARTERIALS						FREEWAYS					
Class I (>0.00 to 1.99 signalized intersections per mile)						Lanes	B	C	D	E	
Lanes	Median	B	C	D	E	2	2,200	2,980	3,560	3,800	
1	Undivided	470	750	800	***	3	3,300	4,480	5,340	5,880	
2	Divided	1,430	1,710	1,800	***	4	4,400	5,980	7,120	7,940	
3	Divided	2,210	2,590	2,720	***	5	5,500	7,520	8,920	9,960	
Class II (2.00 to 4.50 signalized intersections per mile)						Freeway Adjustments					
Lanes	Median	B	C	D	E	Auxiliary Lanes	Ramp Metering				
1	Undivided	**	500	730	780	+ 1,000	+5%				
2	Divided	**	1,210	1,600	1,690						
3	Divided	**	1,900	2,420	2,550						
Class III (more than 4.50 signalized intersections per mile)						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
1	Undivided	**	250	570	710	1	Undivided	420	800	1,120	1,420
2	Divided	**	610	1,360	1,540	2	Divided	1,670	2,420	3,130	3,550
3	Divided	**	960	2,120	2,340	3	Divided	2,510	3,630	4,700	5,330
						Uninterrupted Flow Highway Adjustments					
						Lanes	Median	Exclusive left lanes	Adjustment factors		
						2	Divided	Yes	+5%		
						Multi	Undivided	Yes	-5%		
						Multi	Undivided	No	-25%		
Non-State Signalized Roadway Adjustments (Alter corresponding state volumes by the indicated percent.)						BICYCLE MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Major City/County Roadways - 10%						Paved Shoulder/ Bicycle Lane					
Other Signalized Roadways - 35%						Coverage	B	C	D	E	
						0-49%	**	150	390	>390	
						50-84%	120	180	700	>700	
						85-100%	220	>220	**	**	
State & Non-State Signalized Roadway Adjustments (Alter corresponding volume by the indicated percent.)						PEDESTRIAN MODE² (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Divided/Undivided & Turn Lane Adjustments						Sidewalk Coverage					
Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors		B	C	D	E		
2	Divided	Yes	No	+5%		0-49%	**	**	270	770	
2	Undivided	No	No	-20%		50-84%	**	**	600	1,000	
Multi	Undivided	Yes	No	-5%		85-100%	**	610	1,000	>1,000	
Multi	Undivided	No	No	-25%							
-	-	-	Yes	+ 5%							
One-Way Facility Adjustment Multiply the corresponding volumes in this table by 1.20.											

¹ Values shown are presented as hourly directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. To convert to annual average daily traffic volumes, these volumes must be divided by appropriate D and K factors. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

³ Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

** Cannot be achieved using table input value defaults.

*** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:

Florida Department of Transportation
Systems Planning Office
605 Suwannee Street, MS 19
Tallahassee, FL 32399-0450

TABLE 8
(continued)

Generalized **Peak Hour Directional** Volumes for Florida's
Areas Transitioning Into Urbanized Areas OR
Areas over 5,000 Not in Urbanized Areas

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities		Interrupted Flow Facilities								
	Freeways	Highways	State Arterials						Class II		
			Class I	Class II	Class III	Bicycle	Pedestrian				
ROADWAY CHARACTERISTICS											
Number of through lanes	2-5	1	2-3	1	2-3	1	2-3	1	2-3	2	2
Posted speed (mph)	70	50	50	45	50	45	45	35	35	45	45
Free flow speed (mph)	75	55	55	50	55	50	50	40	40	50	50
Aux, meter, or accel/decel ≥ 1500 (n,y)	n	n	n								
Median (n, nr, r)		n	r	n	r	n	r	n	r	r	r
Terrain (l, r)	1	1	1								
% no passing zone		60									
Exclusive left turn lanes/[impact] (n, y)		[n]	y	y	y	y	y	y	y	y	y
Exclusive right turn lanes (n, y)				n	n	n	n	n	n	n	n
Paved shoulder/bicycle lane (n, y)										n,50%,y	n
Outside lane width										t	t
Pavement condition										t	
Sidewalk (n, y)											n,50%,y
Sidewalk/roadway separation (a, t, w)											t
Sidewalk protective barrier (n, y)											n
Facility length (m)	8	5	5	2	2	2	2	2	2	2	2
Number of segments	4										
TRAFFIC CHARACTERISTICS											
Planning analysis hour factor (K)	0.094	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Peak hour factor (PHF)	0.950	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910
Base capacity (pcphpl)		1700	2100	1950	1950	1950	1950	1950	1950	1950	1950
Heavy vehicle percent	9.0	4.0	4.0	3.0	3.0	3.0	3.0	2.0	2.0	3.0	3.0
Local adjustment factor	0.950	1.00	.950								
% left turns				12	12	12	12	12	12	12	12
% right turns				12	12	12	12	12	12	12	12
CONTROL CHARACTERISTICS											
Number of Signals				2	2	6	6	10	10	6	6
Arrival type (1-6)				3	3	4	4	4	4	4	4
Signal type (a, s, p)				a	a	s	s	s	s	s	s
Cycle length (C)				120	120	120	120	120	120	120	120
Effective green ratio (g/C)				0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
LEVEL OF SERVICE THRESHOLDS											
Level of Service	Freeways	Highway Segments		State & Non-State Two-Way Arterials			Bicycle	Pedestrian			
	Density	Two-Lane	Multilane	Class I	Class II	Class III	Score	Score			
		%ffs	Density	ats	ats	ats					
B	≤ 17	≥ 0.833	≤ 18	> 34 mph	> 28 mph	> 24 mph	≤ 2.5	≤ 2.5			
C	≤ 24	> 0.750	≤ 26	> 27 mph	> 22 mph	> 18 mph	≤ 3.5	≤ 3.5			
D	≤ 31	> 0.667	≤ 35	> 21 mph	> 17 mph	> 14 mph	≤ 4.5	≤ 4.5			
E	≤ 39	> 0.583	≤ 41	> 16 mph	> 13 mph	> 10 mph	≤ 5.5	≤ 5.5			

% ffs = Percent free flow speed ats = Average travel speed

Generalized **Peak Hour Directional** Volumes for Florida's
Rural Undeveloped Areas and Cities OR
Developed Areas Less Than 5,000 Population¹

TABLE 9

10/4/10

Rural Undeveloped Areas						Cities or Rural Developed Areas Less Than 5000					
FREEWAYS						FREEWAYS					
Lanes	B	C	D	E		Lanes	B	C	D	E	
2	2,100	2,880	3,400	3,600		2	2,100	2,820	3,360	3,600	
3	3,200	4,320	5,100	5,560		3	3,100	4,220	5,040	5,560	
4	4,260	5,720	6,800	7,520		4	4,160	5,680	6,720	7,520	
Freeway Adjustments						Freeway Adjustments					
Auxiliary Lanes +1,000						Auxiliary Lanes +1,000					
UNINTERRUPTED FLOW TWO-LANE HIGHWAYS						UNINTERRUPTED FLOW HIGHWAYS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
1	Undivided	240	430	740	1,480	1	Undivided	420	780	1,100	1,400
Passing Lane Adjustment						Uninterrupted Flow Highway Adjustments					
Alter LOS B-D volumes in proportion to passing lane length to the highway segment length..						Lanes Median Exclusive left lanes Adjustment factors					
UNINTERRUPTED FLOW MULTILANE HIGHWAYS						STATE SIGNALIZED ARTERIALS					
Lanes	Median	B	C	D	E	Lanes	Median	B	C	D	E
2	Divided	1,410	2,210	2,800	3,180	1	Undivided	**	520	690	740
3	Divided	2,120	3,320	4,200	4,770	2	Divided	**	1,240	1,490	1,590
ISOLATED STATE SIGNALIZED INTERSECTIONS						Non-State Signalized Roadway Adjustments					
Lanes	B	C	D	E		(Alter corresponding volume by the indicated percent.)					
1	**	260	560	660		Major City/County Roadways - 10%					
2	**	560	1,260	1,380		Other Signalized Roadways - 35%					
3	**	860	1,940	2,080		State & Non-State Signalized Roadway Adjustments					
BICYCLE MODE²						Divided/Undivided & Turn Lane Adjustments					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						(Alter corresponding volume by the indicated percent.)					
Paved Shoulder/ Bicycle Lane						Lanes	Median	Exclusive Left Turn Lanes	Exclusive Right Turn Lanes	Adjustment Factors	
Coverage	B	C	D	E		2	Divided	Yes	No	+5%	
0-49%	**	**	**	420		2	Undivided	No	No	-20%	
50-84%	**	**	**	760		Multi	Undivided	Yes	No	-5%	
85-100%	**	230	>230	***		Multi	Undivided	No	No	-25%	
BICYCLE MODE²						BICYCLE MODE²					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Paved Shoulder/ Bicycle Lane						Paved Shoulder/ Bicycle Lane					
Coverage	B	C	D	E		Coverage	B	C	D	E	
0-49%	**	150	390	>390		0-49%	**	150	390	>390	
50-84%	120	180	700	>700		50-84%	120	180	700	>700	
85-100%	210	>210	***	***		85-100%	210	>210	***	***	
PEDESTRIAN MODE²						PEDESTRIAN MODE²					
(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)						(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Sidewalk						Sidewalk					
Coverage	B	C	D	E		Coverage	B	C	D	E	
0-49%	**	**	270	770		0-49%	**	**	270	770	
50-84%	**	**	600	1000		50-84%	**	**	600	1000	
85-100%	**	610	1000	>1000		85-100%	**	610	1000	>1000	

¹ Values shown are presented as hourly directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. To convert to annual average daily traffic volumes, these volumes must be divided by appropriate D and K factors. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model and Pedestrian LOS Model, respectively for the automobile/truck, bicycle, and pedestrian modes.

² Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

** Cannot be achieved using table input value defaults.

*** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:

Florida Department of Transportation
Systems Planning Office
605 Suwannee Street, MS 19
Tallahassee, FL 32399-0450

TABLE 9
(continued)

Generalized **Peak Hour Directional** Volumes for Florida's
Rural Undeveloped Areas and Cities OR
Developed Areas Less than 5,000 Population

9/4/09

INPUT VALUE ASSUMPTIONS	Uninterrupted Flow Facilities					Interrupted Flow Facilities					
	Freeways	Highways				Isolated Signalized Intersections	Arterials Class I	Bicycle Class I		Pedestrian Class I	
ROADWAY CHARACTERISTICS											
Area type (ru, rd)	ru/rd	ru	ru	rd	rd	ru	rd	rd	ru	rd	rd
Number of through lanes	2-4	1	2-3	1	2-3	1-3	1	2-3	1	1	1
Posted speed (mph)	70	55	65	50	55		45	45	55	45	45
Free flow speed (mph)	75	60	70	55	60		50	50	60	50	50
Aux, meter, or accel/decel ≥ 1500 (n,y)	n										
Median (n, nr, r)		n	r	n	r	n	n	r	n	n	n
Terrain (l,r)	1	1	1	1	1						
% no passing zone		20		60							
Exclusive left turn lanes/[impact] (n, y)		[n]	y	[n]	y	y	y	y	[n]	y	y
Exclusive right turn lanes (n, y)											
Paved shoulder/bicycle lane (n, y)									n,50%,y	n,50%,y	n,50%,y
Outside lane width											
Pavement condition											
Sidewalk (n, y)											
Sidewalk/roadway separation (a, t, w)											
Sidewalk protective barrier (n, y)											
Obstacle to bus stop (n, y)											
Facility length (mi)	14	10	10	5	5		2	2	4	2	2
Number of segments	4										
TRAFFIC CHARACTERISTICS											
Planning analysis hour factor (K)	0.103	0.098	0.098	0.100	0.100	0.098	0.097	0.097	0.098	0.097	0.097
Directional distribution factor (D)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Peak hour factor (PHF)	0.950	0.88	0.88	0.895	0.895	0.88	0.895	0.895	0.88	0.895	0.895
Base saturation flow rate (pcphpl)		1700	2300	1700	2200	1950	1950	1950	1950	1950	1950
Heavy vehicle percent	9.0	5.0	9.0	4.0	4.0	5.0	3.0	3.0	6.0	3.0	3.0
Local adjustment factor	0.90	1.00	0.86	1.00	0.93						
% left turns						12	12	12		12	12
% right turns						12	12	12	12	12	12
CONTROL CHARACTERISTICS											
Number of signals							4	4	2	4	4
Arrival type (1-6)						3	3	3	3	3	3
Signal type (a, s, p)						a	s	s	a	s	s
Cycle length (C)						60	90	90	60	90	90
Effective green ratio (g/C)						0.44	0.44	0.44	0.44	0.44	0.44
LEVEL OF SERVICE THRESHOLDS											
Level of Service	Freeways	Highway Segments				Isolated Intersections	Arterials	Bicycle	Pedestrian		
	Density	Two-Lane ru %tsf	Two-Lane rd %ffs	Multilane ru ats	Multilane rd ats	Other (Control delay) ats	Major City/Co. ats	Score	Score		
B	≤ 17	≤ 50	≥ 0.833	≤ 14	≤ 14	≤ 10 sec	> 34 mph	≤ 2.5	≤ 2.5		
C	≤ 24	≤ 65	> 0.750	≤ 22	≤ 22	≤ 15 sec	> 27 mph	≤ 3.5	≤ 3.5		
D	≤ 31	≤ 80	> 0.667	≤ 29	≤ 29	≤ 20 sec	> 21 mph	≤ 4.5	≤ 4.5		
E	≤ 39	> 80	> 0.583	≤ 34	≤ 34	≤ 40 sec	> 16 mph	≤ 5.5	≤ 5.5		

% tsf = Percent time spent following % ffs = Percent free flow speed ats = Average travel speed ru = Rural undeveloped rd = Rural developed