Appendix F

Bureau of Multi-Modal Planning

Generalized Daily Level Of Service Maximum Volumes for Florida's Urbanized Areas*

(Issue Date: October 27, 1987; Valid for Use Through December 1988)

FREEWAYS (Suburban)

LANES	LEVEL OF SERVICE C	D	E
4	49,800	59,700	63,000
6	74,600	89,600	94,600
8	99,500	119,400	126,100
10	124,400	149,300	157,600

FREEWAYS (CBD)

LANES	LEVEL OF SERVICE C	D	E
4	54,800	64,200	69,900
6	82,100	96,300	104,800
8	109,500	128,400	139,700
10	136,900	160,500	174,700

MULTI-LANE HIGHWAYS (less than 1 signalized intersection every 2 miles)

LANES	LEVEL OF SERVICE C	D	E
4	42,000	53,300	59,700
6	62,900	79,900	89,600

PRINCIPAL ARTERIALS

GROUP 1 (0.5 to 2.5 signalized intersections per mile)

LANES	LEVEL OF SERVICE C	D	E
2	15,800	17,100	18,400
4	32,500	34,900	37,100
6	49,300	52,600	55,800

GROUP 2 (2.6 to 5.0 signalized intersections per mile)

LANES	LEVEL OF SERVICE C	D	E
2	8,400	12,900	15,300
4	17,300	27,300	31,700
6	26,300	42,100	48,200

GROUP 3 (more than 5 signalized intersections per mile)

LANES	LEVEL OF SERVICE C**	D	E
2	---	9,900	14,300
4	---	20,000	30,200
6	---	30,100	46,400

MINOR ARTERIALS

GROUP 1 (0.5 to 2.5 signalized intersections per mile)

LANES	LEVEL OF SERVICE C	D	E
2	13,600	15,000	16,200
4	28,200	30,600	32,800
6	42,900	46,300	49,300

GROUP 2 (2.6 to 5.0 signalized intersections per mile)

LANES	LEVEL OF SERVICE C**	D	E
2	---	10,700	13,100
4	---	22,800	27,400
6	---	34,200	41,900

GROUP 3 (more than 5 signalized intersections per mile)

LANES	LEVEL OF SERVICE C**	D	E
2	---	6,200	12,300
4	---	12,700	26,300
6	---	19,200	40,600

ONE-WAY FACILITIES

GROUP 2 (2.6to 5.0 signalized intersections per mile)

LANES	LEVEL OF SERVICE C	D	E
2	12,600	15,500	17,000
3	19,400	23,800	25,700
4	26,300	32,100	34,500

GROUP 3 (more than 5 signalized intersections per mile)

LANES	LEVEL OF SERVICE C	D	E
2	5,400	13,000	15,500
3	8,200	19,500	23,700
4	11,100	26,000	31,900

TWO-WAY COLLECTORS (intersection analysis)

LANES	LEVEL OF SERVICE C	D	E
2	6,200	9,900	11,100
4	13,100	20,700	22,800
6	20,200	32,000	34,600

ASSUMPTIONS

	FREEWAY Suburb	FREEWAY CBD	MULTI LANE	PRINCIPAL ARTERIALS G-1	G-2	G-3	MINOR ARTERIALS G-1	G-2	G-3	ONE-WAY G-2	G-3	COLLECTOR
K	.094	.087	.09	.09	.09	.09	.09	.09	.09	.11	.11	.09
D	.59	.56	.57	.58	.58	.54	.58	.58	.54	1.00	1.00	.58
PHF	.92	.92	.92	.92	.92	.92	.92	.92	.92	.92	.92	.92
Lefts	NA	NA	NA	.07	.07	.07	.09	.09	.09	.07	.07	.12
Class	NA	NA	NA	I	I	II	I	I	II	I	II	NA
Ln Cap	1900	1850	1850	1700	1700	1650	1650	1650	1650	1700	1650	1600
L Bays	NA	NA	NA	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Level	Yes	Yes	Yes	NA	NA	NA	NA	NA	NA	NA	NA	NA
Speed	NA	NA	50	45	45	35	40	40	35	45	35	NA
Arrival	NA	NA	NA	4	4	4	4	4	4	5	5	3
SI***	NA	NA	<5	1.5	4	7	1.5	4	7	4	7	NA
C	NA	NA	NA	120	120	120	120	120	120	120	120	120
g/C	NA	NA	NA	.50	.50	.50	.45	.45	.45	.55	.55	.35

* Values shown are average daily traffic maximum volumes (based on peak hour volumes) for levels of service and are based on the 1985 Highway Capacity Manual and Florida traffic data. The table does not constitute a standard, but can be used for general planning applications.

** Cannot be achieved.

*** Signalized intersections per mile.

Source: Bureau of Multi-Modal System Planning, Florida Department of Transportation, 1987.

Appendix G

Intercity HST Ridership by Source

Appendix G
Intercity HST Ridership By Source

Origin	Destination	Total	Local Air	Connect Air	Auto	Rail	Induced
Palmdale	SF	169,668	151,608	0	17,637	360	63
	SF Airport	55,827	49,038	0	6,644	116	29
	Redwood City	45,014	40,156	0	4,747	87	24
	Oakland	162,424	149,399	0	12,632	373	20
	Fremont	61,805	56,670	0	4,981	141	13
	San Jose	138,232	123,144	0	14,697	293	98
	Gilroy	18,712	15,104	0	3,500	17	91
	Oceanside	13,081	2,448	0	8,423	903	1,307
	University Town C	10,477	1,985	0	6,919	546	1,027
	Mira Mesa	32,430	4,622	0	22,383	2,040	3,385
	San Diego	72,151	11,456	0	50,375	2,975	7,345
	Escondido	16,936	2,848	0	10,298	2,172	1,618
	Bakersfield	12,887	2,371	0	8,143	277	2,096
	Fresno	25,142	14,527	0	8,653	1,238	724
	Merced	1,845	26	0	1,339	335	145
	Modesto	4,304	499	0	3,023	510	272
	Sacramento	155,963	134,777	0	20,753	348	85
	Stockton	3,890	0	0	3,140	443	307
	Visalia	959	256	0	310	362	31
	TOTAL ANNUAL TRIPS:	**1,001,747**	**760,934**	**0**	**208,597**	**13,536**	**18,680**
	TOTAL DAILY TRIPS:	2,745	2,085	0	571	37	51

Origin	Destination	Total	Local Air	Connect Air	Auto	Rail	Induced
LAUS	SF	1,025,678	811,496	0	208,375	2,057	3,750
	SF Airport	334,331	261,224	0	71,310	654	1,143
	Redwood City	268,335	213,902	0	52,828	491	1,114
	Oakland	953,423	786,729	0	163,266	2,120	1,308
	Fremont	361,045	298,187	0	61,508	781	569
	San Jose	831,321	654,290	0	170,380	1,630	5,021
	Gilroy	130,193	80,185	0	47,555	98	2,355
	Oceanside	151,163	14,254	0	93,227	20,721	22,961
	University Town C	112,824	11,692	0	72,464	13,681	14,987
	Mira Mesa	356,214	26,903	0	240,516	39,189	49,606
	San Diego	807,343	66,945	0	545,513	84,986	109,899
	Escondido	213,012	16,454	0	139,027	26,257	31,274
	Bakersfield	297,324	12,762	0	224,841	2,566	57,155
	Fresno	238,769	78,066	0	136,573	8,325	15,805
	Merced	22,890	124	0	18,400	2,130	2,236
	Modesto	56,345	2,634	0	45,374	3,133	5,204
	Sacramento	977,570	711,150	0	258,924	1,999	5,497
	Stockton	48,434	0	0	41,094	2,504	4,836
	Visalia	11,322	1,359	0	5,471	3,922	570
	TOTAL ANNUAL TRIPS:	**7,197,536**	**4,048,356**	**0**	**2,596,646**	**217,244**	**335,290**
	TOTAL DAILY TRIPS:	19,719	11,091	0	7,114	595	919

Appendix G
Intercity HST Ridership By Source

Origin	Destination	Total	Local Air	Connect Air	Auto	Rail	Induced
Burbank	SF	535,776	446,818	0	86,921	1,030	1,007
	SF Airport	176,920	144,291	0	31,835	324	470
	Redwood City	141,700	118,084	0	22,970	245	401
	Oakland	500,934	432,724	0	66,820	1,053	337
	Fremont	191,467	164,262	0	26,598	389	218
	San Jose	436,124	361,356	0	72,378	812	1,578
	Gilroy	64,663	44,346	0	19,406	49	862
	Oceanside	73,627	7,627	0	46,493	9,803	9,704
	University Town C	51,837	6,232	0	33,361	6,336	5,908
	Mira Mesa	165,133	14,396	0	111,079	19,008	20,650
	San Diego	374,827	35,755	0	254,755	38,040	46,277
	Escondido	100,409	8,822	0	65,428	13,218	12,941
	Bakersfield	111,350	7,024	0	80,051	1,284	22,991
	Fresno	105,794	42,988	0	52,840	4,130	5,836
	Merced	9,814	71	0	7,722	1,060	961
	Modesto	21,346	1,451	0	16,549	1,559	1,787
	Sacramento	500,297	391,331	0	106,672	996	1,298
	Stockton	20,027	0	0	16,820	1,249	1,958
	Visalia	5,066	750	0	2,181	1,893	242
	TOTAL ANNUAL TRIPS:	**3,587,111**	**2,228,328**	**0**	**1,120,879**	**102,478**	**135,426**
	TOTAL DAILY TRIPS:	9,828	6,105	0	3,071	281	371

Origin	Destination	Total	Local Air	Connect Air	Auto	Rail	Induced
Sylmar	SF	464,135	404,938	0	57,728	873	596
	SF Airport	152,091	130,744	0	20,767	284	296
	Redwood City	122,268	107,056	0	14,743	211	258
	Oakland	440,604	395,929	0	43,576	905	194
	Fremont	167,773	150,303	0	17,004	336	130
	San Jose	375,693	327,950	0	46,042	707	994
	Gilroy	52,139	40,213	0	11,420	42	464
	Oceanside	48,056	6,782	0	31,495	4,033	5,746
	University Town C	34,849	5,533	0	23,036	2,535	3,745
	Mira Mesa	113,471	12,804	0	79,011	8,170	13,486
	San Diego	246,813	31,784	0	171,243	14,911	28,875
	Escondido	67,712	7,864	0	45,132	6,805	7,911
	Bakersfield	65,088	6,355	0	44,683	762	13,288
	Fresno	78,764	38,872	0	33,438	3,060	3,394
	Merced	6,438	73	0	4,952	822	591
	Modesto	14,410	1,315	0	10,756	1,245	1,094
	Sacramento	429,436	357,432	0	70,425	849	730
	Stockton	13,220	0	0	10,944	1,066	1,210
	Visalia	3,169	673	0	1,288	1,067	141
	TOTAL ANNUAL TRIPS:	**2,896,129**	**2,026,620**	**0**	**737,683**	**48,683**	**83,143**
	TOTAL DAILY TRIPS:	7,935	5,552	0	2,021	133	228

Appendix H

Total Intercity Trips by Mode Without HST

Appendix H
Total Intercity Trips by Mode Without HST

Origin	Destination	Total	Local Air	Connect Air	Auto	Rail
Palmdale	SF	193,751	111,507	0	81,875	369
	SF Airport	61,742	36,055	0	25,570	117
	Redwood City	48,571	29,527	0	18,956	88
	Oakland	191,142	110,071	0	80,692	379
	Fremont	71,877	41,757	0	29,980	140
	San Jose	154,178	90,568	0	63,318	292
	Gilroy	44,223	11,069	0	33,136	18
	Oceanside	146,196	1,808	0	140,300	4,088
	University Town C	101,263	1,467	0	97,102	2,694
	Mira Mesa	264,054	3,412	0	253,188	7,454
	San Diego	633,146	8,453	0	607,342	17,351
	Escondido	169,482	2,101	0	162,530	4,851
	Bakersfield	266,743	1,739	0	264,458	546
	Fresno	98,939	10,620	0	86,820	1,499
	Merced	11,431	18	0	11,029	384
	Modesto	25,808	362	0	24,883	563
	Sacramento	201,384	99,137	0	101,889	358
	Stockton	20,057	0	0	19,608	449
	Visalia	7,584	186	0	6,595	803
	TOTAL ANNUAL TRIPS:	**2,711,571**	**559,857**	**0**	**2,109,271**	**42,443**
	TOTAL DAILY TRIPS:	7,429	1,534	0	5,779	116

Origin	Destination	Total	Local Air	Connect Air	Auto	Rail
LAUS	SF	1,087,847	597,184	0	488,604	2,059
	SF Airport	345,098	192,095	0	152,350	653
	Redwood City	271,359	157,355	0	113,515	489
	Oakland	1,063,628	581,373	0	480,141	2,114
	Fremont	400,703	221,101	0	178,820	782
	San Jose	861,098	481,578	0	377,888	1,632
	Gilroy	257,316	58,763	0	198,454	99
	Oceanside	860,191	10,519	0	826,963	22,709
	University Town C	597,214	8,628	0	573,621	14,965
	Mira Mesa	1,554,168	19,857	0	1,492,918	41,393
	San Diego	3,728,107	49,408	0	3,582,325	96,374
	Escondido	994,209	12,144	0	955,118	26,947
	Bakersfield	1,565,245	9,345	0	1,552,861	3,039
	Fresno	584,210	57,076	0	518,761	8,373
	Merced	68,340	96	0	66,098	2,146
	Modesto	154,194	1,926	0	149,126	3,142
	Sacramento	1,134,500	523,744	0	608,757	1,999
	Stockton	120,014	0	0	117,508	2,506
	Visalia	44,880	991	0	39,405	4,484
	TOTAL ANNUAL TRIPS:	**15,692,321**	**2,983,183**	**0**	**12,473,233**	**235,905**
	TOTAL DAILY TRIPS:	42,993	8,173	0	34,173	646

Appendix H
Total Intercity Trips by Mode Without HST

Origin	Destination	Total	Local Air	Connect Air	Auto	Rail
Burbank	SF	567,074	329,248	0	236,801	1,025
	SF Airport	180,249	106,114	0	73,810	325
	Redwood City	142,217	86,915	0	55,057	245
	Oakland	555,793	322,194	0	232,547	1,052
	Fremont	209,464	122,419	0	86,655	390
	San Jose	450,181	266,221	0	183,146	814
	Gilroy	128,810	32,504	0	96,257	49
	Oceanside	416,989	5,628	0	399,666	11,695
	University Town C	289,676	4,599	0	277,368	7,709
	Mira Mesa	753,553	10,624	0	721,581	21,348
	San Diego	1,807,620	26,392	0	1,731,592	49,636
	Escondido	481,676	6,513	0	461,287	13,876
	Bakersfield	756,523	5,146	0	749,838	1,539
	Fresno	287,084	31,427	0	251,486	4,171
	Merced	33,187	53	0	32,065	1,069
	Modesto	74,972	1,065	0	72,342	1,565
	Sacramento	586,343	290,231	0	295,111	1,001
	Stockton	58,252	0	0	57,004	1,248
	Visalia	21,884	548	0	19,103	2,233
	TOTAL ANNUAL TRIPS:	**7,801,547**	**1,647,841**	**0**	**6,032,716**	**120,990**
	TOTAL DAILY TRIPS:	21,374	4,515	0	16,528	331

Origin	Destination	Total	Local Air	Connect Air	Auto	Rail
Sylmar	SF	500,339	297,979	0	201,470	890
	SF Airport	132,278	69,141	0	62,855	282
	Redwood City	125,705	78,743	0	46,750	212
	Oakland	491,546	292,450	0	198,183	913
	Fremont	185,145	111,060	0	73,747	338
	San Jose	397,822	241,303	0	155,813	706
	Gilroy	111,243	29,472	0	81,728	43
	Oceanside	357,600	5,005	0	342,479	10,116
	University Town C	248,122	4,081	0	237,372	6,669
	Mira Mesa	646,107	9,448	0	618,194	18,465
	San Diego	1,549,604	23,450	0	1,483,217	42,937
	Escondido	413,777	5,800	0	395,973	12,004
	Bakersfield	649,955	4,653	0	643,968	1,334
	Fresno	245,853	28,421	0	213,812	3,620
	Merced	28,190	48	0	27,214	928
	Modesto	63,722	965	0	61,399	1,358
	Sacramento	515,205	263,426	0	250,910	869
	Stockton	49,465	0	0	48,381	1,084
	Visalia	18,676	497	0	16,241	1,938
	TOTAL ANNUAL TRIPS:	**6,730,354**	**1,465,942**	**0**	**5,159,706**	**104,706**
	TOTAL DAILY TRIPS:	18,439	4,016	0	14,136	287