FACILITY TYPE	REGION	TERRAIN	AREA TYPE	TRUCKS	LOS E CAPACITY
Freeway	ALL	Level	Urban	Average	2045
Freeway	ALL	Level	Urban	High	2000
Freeway	ALL	Level	Suburban	Average	2055
Freeway	ALL	Level	Suburban	High	2005
Freeway	ALL	Level	Rural	Average	2060
Freeway	ALL	Level	Rural	High	2010
Freeway	PIED/MTNS	Rolling	Urban	Average	1950
Freeway	PIED/MTNS	Rolling	Urban	High	1825
Freeway	PIED/MTNS	Rolling	Suburban	Average	1960
Freeway	PIED/MTNS	Rolling	Suburban	High	1830
Freeway	PIED/MTNS	Rolling	Rural	Average	1965
Freeway	PIED/MTNS	Rolling	Rural	High	1835
Freeway	MTNS	Mountainous	Urban	Average	1785
Freeway	MTNS	Mountainous	Urban	High	1555
Freeway	MTNS	Mountainous	Suburban	Average	1795
Freeway	MTNS	Mountainous	Suburban	High	1560
Freeway	MTNS	Mountainous	Rural	Average	1800
Freeway	MTNS	Mountainous	Rural	High	1565
Expressway	ALL	Level	Urban	Average	1685
Expressway	ALL	Level	Urban	High	1645
Expressway	ALL	Level	Suburban	Average	1770
Expressway	ALL	Level	Suburban	High	1730
Expressway	ALL	Level	Rural	Average	1860
Expressway	ALL	Level	Rural	High	1815
Expressway	PIED/MTNS	Rolling	Urban	Average	1605
Expressway	PIED/MTNS	Rolling	Urban	High	1500
Expressway	PIED/MTNS	Rolling	Suburban	Average	1685
Expressway	PIED/MTNS	Rolling	Suburban	High	1575
Expressway	PIED/MTNS	Rolling	Rural	Average	1775
Expressway	PIED/MTNS	Rolling	Rural	High	1655
Expressway	MTNS	Mountainous	Urban	Average	1470
Expressway	MTNS	Mountainous	Urban	High	1280
Expressway	MTNS	Mountainous	Suburban	Average	1545
Expressway	MTNS	Mountainous	Suburban	High	1345
Expressway	MTNS	Mountainous	Rural	Average	1620
Expressway	MTNS	Mountainous	Rural	High	1410
FACILITY TYPE	**REGION**	**DIVIDED**	**AREA TYPE**	**SPEED LIMIT**	**LOS E CAPACITY**
Urban Arterial I	ALL	Yes	Urban	55	1140
Urban Arterial I	ALL	Yes	Suburban	55	1175
Urban Arterial I	ALL	Yes	Rural	55	1350
Urban Arterial I	ALL	Yes	Rural	45	1305
Urban Arterial II	ALL	Yes	Urban	45	1075
Urban Arterial II	ALL	Yes	Suburban	45	1080
Urban Arterial II	ALL	Yes	Suburban	35	1030
Urban Arterial III	ALL	Yes	Suburban	35	1005
Urban Arterial IV	ALL	Yes	Urban	35	770
Urban Arterial IV	ALL	Yes	Urban	25	720
Urban Arterial I	ALL	No	Urban	55	965
Urban Arterial I	ALL	No	Suburban	55	1025
Urban Arterial I	ALL	No	Rural	55	1140
Urban Arterial I	ALL	No	Rural	45	1105
Urban Arterial II	ALL	No	Urban	45	860
Urban Arterial II	ALL	No	Suburban	45	895
Urban Arterial II	ALL	No	Suburban	35	875
Urban Arterial III	ALL	No	Suburban	35	795
Urban Arterial IV	ALL	No	Urban	35	635
Urban Arterial IV	ALL	No	Urban	25	590
FACILITY TYPE	**REGION**	**TERRAIN**			**LOS E CAPACITY**
2-Lane Highway	ALL	Level			1235
2-Lane Highway	ALL	Rolling			1175

FREEWAYS - LEVEL OF SERVICE E HOURLY CAPACITIES* (CTP CLASSIFICATION = FREEWAYS)

COASTAL/PIEDMONT/MOUNTAINS (LEVEL)													
	PHF	Lanes	Terrain	Trucks	RV	Driver PF	BFFS	LW	LC	Interchange Density	Rural Freeway	PC/PH	PC/PH/PL	FINAL
Urban	0.92	2	Level	5	0	1	65	12	6	1	No	4093	2046.5	2045
Urban	0.92	2	Level	10	0	1	65	12	6	1	No	3996	1998	2000
Suburban	0.9	2	Level	5	0	1	70	12	6	0.75	No	4136	2068	2055
Suburban	0.9	2	Level	10	0	1	70	12	6	0.75	No	4014	2007	2005
Rural	0.88	2	Level	5	0	1	70	12	6	0.5	Yes	4121	2060.5	2060
Rural	0.88	2	Level	10	0	1	70	12	6	0.5	Yes	4023	2011.5	2010

PIEDMONT/MOUNTAINS (ROLLING)													
	PHF	Lanes	Terrain	Trucks	RV	Driver PF	BFFS	LW	LC	Interchange Density	Rural Freeway	PC/PH	PC/PH/PL	FINAL
Urban	0.92	2	Rolling	5	0	1	65	12	6	1	No	3903	1951.5	1950
Urban	0.92	2	Rolling	10	0	1	65	12	6	1	No	3648	1824	1825
Suburban	0.9	2	Rolling	5	0	1	70	12	6	0.75	No	3920	1960	1960
Suburban	0.9	2	Rolling	10	0	1	70	12	6	0.75	No	3664	1832	1830
Rural	0.88	2	Rolling	5	0	1	70	12	6	0.5	Yes	3930	1965	1965
Rural	0.88	2	Rolling	10	0	1	70	12	6	0.5	Yes	3673	1836.5	1835

MOUNTAINS (MOUNTAINOUS)													
	PHF	Lanes	Terrain	Trucks	RV	Driver PF	BFFS	LW	LC	Interchange Density	Rural Freeway	PC/PH	PC/PH/PL	FINAL
Urban	0.92	2	Mountainous	5	0	1	65	12	6	1	No	3571	1785.5	1785
Urban	0.92	2	Mountainous	10	0	1	65	12	6	1	No	3108	1554	1555
Suburban	0.9	2	Mountainous	5	0	1	70	12	6	0.75	No	3586	1793	1795
Suburban	0.9	2	Mountainous	10	0	1	70	12	6	0.75	No	3122	1561	1560
Rural	0.88	2	Mountainous	5	0	1	70	12	6	0.5	Yes	3595	1797.5	1800
Rural	0.88	2	Mountainous	10	0	1	70	12	6	0.5	Yes	3129	1564.5	1565

oftware - Freeways (Operations)

MULTI-LANE HIGHWAYS - LEVEL OF SERVICE E HOURLY CAPACITIES* (CTP CLASSIFICATION = EXPRESSWAYS)

COASTAL/PIEDMONT/MOUNTAINS (LEVEL)														
	BFFS	Lanes	Median	LW	LC (Right)	LC (Left)	Access/Mile	PHF	Terrian	Trucks	RV	Driver PF	PC/PH	PC/PH/PL	FINAL
Urban	50	2	Divided	12	6	6	15	0.92	Level	5	0	1	3369	1684.5	1685
Urban	50	2	Divided	12	6	6	15	0.92	Level	10	0	1	3289	1644.5	1645
Suburban	55	2	Divided	12	6	6	10	0.9	Level	5	0	1	3538	1769	1770
Suburban	55	2	Divided	12	6	6	10	0.9	Level	10	0	1	3454	1727	1730
Rural	60	2	Divided	12	6	6	5	0.88	Level	5	0	1	3719	1859.5	1860
Rural	60	2	Divided	12	6	6	5	0.88	Level	10	0	1	3630	1815	1815

PIEDMONT/MOUNTAINS (ROLLING)														
	BFFS	Lanes	Median	LW	LC (Right)	LC (Left)	Access/Mile	PHF	Terrian	Trucks	RV	Driver PF	PC/PH	PC/PH/PL	FINAL
Urban	50	2	Divided	12	6	6	15	0.92	Rolling	5	0	1	3212	1606	1605
Urban	50	2	Divided	12	6	6	15	0.92	Rolling	10	0	1	3003	1501.5	1500
Suburban	55	2	Divided	12	6	6	10	0.9	Rolling	5	0	1	3373	1686.5	1685
Suburban	55	2	Divided	12	6	6	10	0.9	Rolling	10	0	1	3153	1576.5	1575
Rural	60	2	Divided	12	6	6	5	0.88	Rolling	5	0	1	3546	1773	1775
Rural	60	2	Divided	12	6	6	5	0.88	Rolling	10	0	1	3314	1657	1655

MOUNTAINS (MOUNTAINOUS)														
	BFFS	Lanes	Median	LW	LC (Right)	LC (Left)	Access/Mile	PHF	Terrian	Trucks	RV	Driver PF	PC/PH	PC/PH/PL	FINAL
Urban	50	2	Divided	12	6	6	15	0.92	Mountainous	5	0	1	2939	1469.5	1470
Urban	50	2	Divided	12	6	6	15	0.92	Mountainous	10	0	1	2558	1279	1280
Suburban	55	2	Divided	12	6	6	10	0.9	Mountainous	5	0	1	3086	1543	1545
Suburban	55	2	Divided	12	6	6	10	0.9	Mountainous	10	0	1	2686	1343	1345
Rural	60	2	Divided	12	6	6	5	0.88	Mountainous	5	0	1	3244	1622	1620
Rural	60	2	Divided	12	6	6	5	0.88	Mountainous	10	0	1	2823	1411.5	1410

*** Uses HCS 2000 7+ Software Multi-lane Highways (Operations)**

DIVIDED URBAN ARTERIALS - LEVEL OF SERVICE E HOURLY CAPACITIES* (CTP CLASSIFICATION = BOULEVARDS)

55 MPH	Urban Arterial Class	DIR	Adjusted Saturation Flow Rate	Planning Analysis Hour Factor	PHF	Percent Turns from Exclusive Lanes	Number of Lanes	FFS	Section Length	Median	Left-Turn Bays	Signals	Arrival Type	Signal Type	Cycle Length	g/C Ratio	LOS E VPD	LOS E PC/ PH/PL	FINAL
Urban	I	60	1800	0.10	0.92	15	1	55	3	Yes	Yes	4	3	Pretimed	200	0.60	22799	1139.95	1140
Suburban	I	60	1800	0.10	0.90	10	1	55	3	Yes	Yes	3	4	Pretimed	200	0.60	23469	1173.45	1175
Rural	I	60	1800	0.10	0.88	10	1	55	3	Yes	Yes	2	5	Pretimed	200	0.60	26969	1348.45	1350

45 MPH	Urban Arterial Class	DIR	Adjusted Saturation Flow Rate	Planning Analysis Hour Factor	PHF	Percent Turns from Exclusive Lanes	Number of Lanes	FFS	Section Length	Median	Left-Turn Bays	Signals	Arrival Type	Signal Type	Cycle Length	g/C Ratio	LOS E VPD	LOS E PC/ PH/PL	FINAL
Urban	II	60	1800	0.10	0.92	20	1	45	2	Yes	Yes	4	3	Pretimed	150	0.55	21499	1074.95	1075
Suburban	II	60	1800	0.10	0.90	15	1	45	2	Yes	Yes	3	4	Pretimed	150	0.55	21519	1075.95	1080
Rural	I	60	1800	0.10	0.88	10	1	45	3	Yes	Yes	2	5	Pretimed	200	0.60	26099	1304.95	1305

35 MPH	Urban Arterial Class	DIR	Adjusted Saturation Flow Rate	Planning Analysis Hour Factor	PHF	Percent Turns from Exclusive Lanes	Number of Lanes	FFS	Section Length	Median	Left-Turn Bays	Signals	Arrival Type	Signal Type	Cycle Length	g/C Ratio	LOS E VPD	LOS E PC/ PH/PL	FINAL
Urban	IV	60	1800	0.10	0.92	20	1	35	1	Yes	Yes	6	4	Pretimed	120	0.42	15439	771.95	770
Suburban	III	60	1800	0.10	0.90	15	1	35	2	Yes	Yes	5	3	Pretimed	150	0.55	20139	1006.95	1005
Suburban	II	60	1800	0.10	0.90	15	1	35	2	Yes	Yes	3	3	Pretimed	150	0.55	20639	1031.95	1030

25 MPH	Urban Arterial Class	DIR	Adjusted Saturation Flow Rate	Planning Analysis Hour Factor	PHF	Percent Turns from Exclusive Lanes	Number of Lanes	FFS	Section Length	Median	Left-Turn Bays	Signals	Arrival Type	Signal Type	Cycle Length	g/C Ratio	LOS E VPD	LOS E PC/ PH/PL	FINAL
Urban	IV	60	1800	0.10	0.92	20	1	25	1	Yes	Yes	8	4	Pretimed	120	0.42	14369	718.45	720

*** Uses HCS 2000 7+ Software Urban Arterials (Planning)**

UNDIVIDED URBAN ARTERIALS - LEVEL OF SERVICE E HOURLY CAPACITIES* (CTP CLASSIFICATION = OTHER MAJOR/MINOR THOROUGHFARES)

55 MPH	Urban Arterial Class	DIR	Adjusted Saturation Flow Rate	Planning Analysis Hour Factor	PHF	Percent Turns from Exclusive Lanes	Number of Lanes	FFS	Section Length	Median	Left-Turn Bays	Signals	Arrival Type	Signal Type	Cycle Length	g/C Ratio	LOS E VPD	LOS E PC/ PH/PL	FINAL
Urban	I	60	1800	0.13	0.92	5	1	55	3	No	Yes	4	3	Actuated	200	0.60	14884	967.46	965
Suburban	I	60	1800	0.13	0.90	5	1	55	3	No	Yes	3	3	Actuated	200	0.60	15746	1023.49	1025
Rural	I	60	1800	0.13	0.88	5	1	55	3	No	Yes	2	3	Actuated	200	0.60	17569	1141.99	1140

45 MPH	Urban Arterial Class	DIR	Adjusted Saturation Flow Rate	Planning Analysis Hour Factor	PHF	Percent Turns from Exclusive Lanes	Number of Lanes	FFS	Section Length	Median	Left-Turn Bays	Signals	Arrival Type	Signal Type	Cycle Length	g/C Ratio	LOS E VPD	LOS E PC/ PH/PL	FINAL
Urban	II	60	1800	0.13	0.92	5	1	45	2	No	Yes	4	3	Actuated	150	0.55	13207	858.46	860
Suburban	II	60	1800	0.13	0.90	5	1	45	2	No	Yes	3	3	Actuated	150	0.55	13784	895.96	895
Rural	I	60	1800	0.13	0.88	5	1	45	3	No	Yes	2	3	Actuated	200	0.60	16976	1103.44	1105

35 MPH	Urban Arterial Class	DIR	Adjusted Saturation Flow Rate	Planning Analysis Hour Factor	PHF	Percent Turns from Exclusive Lanes	Number of Lanes	FFS	Section Length	Median	Left-Turn Bays	Signals	Arrival Type	Signal Type	Cycle Length	g/C Ratio	LOS E VPD	LOS E PC/ PH/PL	FINAL
Urban	IV	60	1800	0.13	0.92	8	1	35	1	No	Yes	6	4	Actuated	120	0.42	9807	637.46	635
Suburban	III	60	1800	0.13	0.92	5	1	35	2	No	Yes	5	3	Actuated	150	0.55	12246	795.99	795
Suburban	II	60	1800	0.13	0.90	5	1	35	2	No	Yes	3	3	Actuated	150	0.55	13476	875.94	875

25 MPH	Urban Arterial Class	DIR	Adjusted Saturation Flow Rate	Planning Analysis Hour Factor	PHF	Percent Turns from Exclusive Lanes	Number of Lanes	FFS	Section Length	Median	Left-Turn Bays	Signals	Arrival Type	Signal Type	Cycle Length	g/C Ratio	LOS E VPD	LOS E PC/ PH/PL	FINAL
Urban	IV	60	1800	0.13	0.92	20	1	25	1	No	Yes	8	4	Actuated	120	0.42	9107	591.96	590

*** Uses HCS 2000 7+ Software Urban Arterials (Planning)**

RURAL TWO-LANE HIGHWAYS - LEVEL OF SERVICE E HOURLY CAPACITIES

COASTAL/PIEDMONT/MOUNTAINS (LEVEL)														
Shoulder	Lane Width	Segment Length	Class Highway	Terrian	Directional	PHF	Trucks	RV	% No Passing	Access Points/Mile	BFFS	2 Way PCPH	PCPHPL	FINAL
4	12	1	I	LEVEL	60	0.88	10%	0	40	15	60	2467	1233.5	1235
PIEDMONT/MOUNTAINS (ROLLING)														
Shoulder	Lane Width	Segment Length	Class Highway	Terrian	Directional	PHF	Trucks	RV	% No Passing	Access Points/Mile	BFFS	2 Way PCPH	PCPHPL	FINAL
4	12	1	I	ROLLING	60	0.88	10%	0	40	15	60	2350	1175	1175

*** Uses HCS 2000 7+ Software Two-Lane Highways (Two-Way)**