

TABLES

**TABLE 1
PARKING SUPPLY AND DEMAND ESTIMATES**

<i>Potential Parking Supply</i>	Current Site Plan	With 800-Space Structure	With 1,000-Space Structure
Eastern End	15	15	15
Western End	212	212	212
Central Area	<u>385</u>	<u>800</u>	<u>1,000</u>
Total Spaces	612	1,027	1,227
<i>Estimated Parking Demand</i>		With 800-Space Structure	With 1,000-Space Structure
Maximum number of students in class on-site [1]		480	480
Maximum number of faculty on-site [1]		16	16
Staff [1]		15	15
Additional non-faculty staff in the two-story building [2]		<u>105</u>	<u>105</u>
Total Persons		616	616
Spaces per Person [3]		0.72	0.72
Total Estimated Parking Demand for On-Site Uses		443	443
Replace Existing Shuttle Lot		428	428
Replace Existing Spillover Parking [4]		80	80
Additional Remote Parking		<u>76</u>	<u>276</u>
Total Remote Parking		584	784
Total Spaces On-Site		1,027	1,227

[1] Per conceptual class schedule with up to 16 simultaneous classes with 30 students each.

[2] Assumed at 1 person per 300 gross square feet.

[3] Source: "Traffic and Parking Study for the Santa Monica College Parking Structure B and Liberal Arts Building Replacement Alternatives" (Kaku Associates, Inc. October 1998).

[4] This estimate of existing SMC-related use of parking lots along Airport Avenue not formally designated for SMC use is based on review of aerial photography taken on August 25, 2004 and September 22, 2004.

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTION:
CMA METHODOLOGY

Level of Service	Intersection Capacity Utilization	Definition
A	0.000-0.600	EXCELLENT. No Vehicle waits longer than one red light and no approach phase is fully used.
B	0.610-0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.710-0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.810-0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.910-1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths

Source: Transportation Research Board *Transportation Research Circular No. 212, Interim Materials on Highway Capacity*, 1980.

TABLE 3
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS
2000 HCM OPERATIONAL METHODOLOGY

Level of Service	Average Stopped Delay per Vehicle (seconds)	Definition
A	≤ 10	EXCELLENT. No Vehicle waits longer than one red light and no approach phase is fully used.
B	>10 and ≤ 20	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	>20 and ≤ 35	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>35 and ≤ 55	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>55 and ≤ 80	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>80	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths

Source: Transportation Research Board, *Highway Capacity Manual, Special Report 209, 2000.*

TABLE 4
LEVEL OF SERVICE DEFINITIONS
FOR SIGNALIZED INTERSECTIONS

Level of Service	Average Total Delay (seconds/vehicle)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Source: Transportation Research Board, *Highway Capacity Manual 2000*.

**TABLE 5
EXISTING (2004) INTERSECTION LEVELS OF SERVICE**

City of Santa Monica Methodology

Intersection	Peak Hour	Existing		
		Delay	V/C	LOS
1 23rd Street & Ocean Park Boulevard	AM	21	0.838	C
	PM	45	1.045	D
2 23rd Street & Airport Avenue [a]	AM	**	n/a	F
	PM	27	n/a	D
(overall intersection operation)	AM	3	n/a	A
	PM	1	n/a	A
9 Bundy Drive & Airport Avenue	AM	24	0.650	C
	PM	9	0.781	A
13 Donald Douglas Loop & Airport Avenue [b]	AM	9	0.269	A
	PM	9	0.285	A

City of Los Angeles Methodology

Intersection	Peak Hour	Existing		
		Delay or V/C	LOS	
2 23rd Street & Airport Avenue [a]	AM	**	n/a	F
	PM	27	n/a	D
(overall intersection operation)	AM	1	n/a	A
	PM	3	n/a	A
*3 Walgrove Avenue & Rose Avenue	AM	1.217		F
	PM	1.263		F
*4 Walgrove Avenue & Palms Boulevard	AM	0.750		C
	PM	0.892		D
*5 Bundy Drive & Pico Boulevard	AM	1.007		F
	PM	1.199		F
*6 Bundy Drive & I-10 Freeway EB on-ramp	AM	0.869		D
	PM	0.949		E
*7 Bundy Drive & Ocean Park Boulevard	AM	0.900		D
	PM	1.350		F
*8 Bundy Drive & National Boulevard	AM	0.978		E
	PM	0.868		D
*9 Bundy Drive & Airport Avenue	AM	0.734		C
	PM	0.890		D
*10 Centinela Avenue & Rose Avenue	AM	0.677		B
	PM	0.865		D
*11 Centinela Avenue & Palms Boulevard	AM	0.869		D
	PM	1.053		F
*12 Centinela Avenue & Venice Boulevard	AM	0.974		E
	PM	1.073		F

Notes:

- * Intersection is currently operating under ATSAC system.
- ** Indicates oversaturated conditions. Delay cannot be calculated.
- [a] Intersection is two-way stop controlled. Level of service is based on average vehicular delay in seconds per vehicle for the most constrained approach. Delay is also reported for the intersection overall.
- [b] Intersection is all-way stop controlled.

**TABLE 6
EXISTING (2004) DAILY TRAFFIC VOLUME SUMMARY**

City of Los Angeles

Location	City	Street Classification	Existing Daily Traffic Volumes	
			May 27, 2004	September 22, 2004
Centinela Avenue south of Airport Avenue	LA	Major	48,232	*
Walgrove Avenue south of Rose Avenue	LA	Collector	16,102	*
Rose Avenue east of Walgrove Avenue	LA	Collector	8,733	*
Beethoven Street south of Rose Avenue	LA	Collector	7,199	*
Rose Avenue east of Warren Avenue	LA	Local	3,413	*
Cabrillo Boulevard south of Rose Avenue	LA	Local	1,014	*
Rose Avenue west of Centinela Avenue	LA	Local	4,821	*

City of Santa Monica

Location	City	Street Classification	Existing Daily Traffic Volumes	
			May 27, 2004	September 22, 2004
23rd Street north of Airport Avenue	Santa Monica	Collector	23,958	*
Airport Avenue east of 23rd Street/Walgrove Avenue	Santa Monica	Collector	4,262	4,775
Airport Avenue west of Donald Douglas Loop South	Santa Monica	Collector	*	5,850
Airport Avenue west of Centinela Avenue	Santa Monica	Collector	7,424	8,985

* Daily (24-hour) traffic volumes were not collected on this date.

TABLE 8
TRIP GENERATION ESTIMATES - with 1,000 SPACE PARKING STRUCTURE
BUNDY CAMPUS

Land Use	Size	Trip Generation Rates							Estimated Trip Generation						
		Daily Rate	AM Peak Hour			PM Peak Hour			Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			Rate	% In	% Out	Rate	% In	% Out		Total	In	Out	Total	In	Out
<i>Building 4</i> Derived [a]	1,890 students 159 faculty 15 employees total								3,024 318 <u>30</u> 3,372	361 16 <u>15</u> 392	361 16 <u>15</u> 392	0 0 <u>0</u> 0	180 8 <u>15</u> 203	45 2 <u>0</u> 47	135 6 <u>15</u> 156
<i>Building 2</i> College Admin. Building [b]	31,370 KSF	11.01	1.55	88%	12%	1.49	17%	83%	345	49	43	6	47	8	39
<i>Remote Parking</i> Existing Shuttle Lot [c] Ex. Use of Non-SMC Spaces [c] Total New Spaces [c] Net New Spaces	-428 parking spaces -80 parking spaces <u>784</u> parking spaces 276	3.05 3.05 3.05	0.62 0.62 0.62	96% 96% 96%	40% 40% 40%	0.33 0.33 0.33	38% 38% 38%	62% 62% 62%	(1,305) (244) <u>2,391</u> 842	(265) (50) <u>486</u> 171	(254) (48) <u>467</u> 165	(11) (2) <u>19</u> 6	(141) (26) <u>259</u> 92	(54) (10) <u>98</u> 34	(87) (16) <u>161</u> 58
TOTAL TRIPS									6,108	927	902	25	509	153	356
NET INCREMENTAL TRIPS									4,559	612	600	12	342	89	253

Notes:

- a. Trip generation rates derived from the proposed SMC Sunset Vista Campus class schedule.
- b. Source: Institute of Transportation Engineers (ITE) Land Use 710, *Trip Generation, Seventh Edition*, 2003.
- c. Peak hour trip generation based on actual driveway counts taken May 27 and September 22 2004; daily rate based on relationship of peak-to-daily volumes at SMC Main Campus.

**TABLE 9
PROJECTED (2008) INTERSECTION LEVELS OF SERVICE**

<i>City of Santa Monica Methodology</i>		ALTERNATIVE 1						ALTERNATIVE 2						ALTERNATIVE 3					
Intersection	Peak Hour	With 800-Space Parking Structure			With 1,000-Space Parking Structure			With 800-Space Parking Structure			With 1,000-Space Parking Structure			With 800-Space Parking Structure			With 1,000-Space Parking Structure		
		Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS
2 23rd Street & Airport Avenue [a]	AM	**	n/a	F	**	n/a	F	**	n/a	F	**	n/a	F	**	n/a	F	**	n/a	F
	PM	19	n/a	C	19	n/a	C	19	n/a	C	19	n/a	C	19	n/a	C	19	n/a	C
(overall intersection operation)	AM	6	n/a	A	6	n/a	A	6	n/a	A	6	n/a	A	6	n/a	A	6	n/a	A
	PM	1	n/a	A	1	n/a	A	1	n/a	A	1	n/a	A	1	n/a	A	1	n/a	A
9 Bundy Drive & Airport Avenue	AM	48	0.722	D	50	0.722	D	49	0.719	D	51	0.721	D	49	0.718	D	51	0.719	D
	PM	25	0.997	C	28	1.015	C	18	0.956	B	20	0.969	C	12	0.900	B	12	0.905	B
13 Donald Douglas Loop South & Airport Avenue [b]	AM	22	0.861	C	33	0.956	D	15	0.714	B	17	0.784	C	12	0.592	B	13	0.642	B
	PM	11	0.385	B	11	0.428	B	10	0.371	A	10	0.384	B	9	0.338	A	9	0.346	A

<i>City of Los Angeles Methodology</i>		With 800-Space Parking Structure				With 1,000-Space Parking Structure				With 800-Space Parking Structure				With 1,000-Space Parking Structure			
Intersection	Peak Hour	Delay or V/C		LOS	Delay or V/C		LOS	Delay or V/C		LOS	Delay or V/C		LOS	Delay or V/C		LOS	
		2 23rd Street & Airport Avenue [a]	AM	**		F	**		F	**		F	**		F	**	
PM	19			C	19		C	19		C	19		C	19		C	
(overall intersection operation)	AM	6		A	6		A	6		A	6		A	6		A	
	PM	1		A	1		A	1		A	1		A	1		A	
*9 Bundy Drive & Airport Avenue	AM	0.818		D	0.820		D	0.818		D	0.818		D	0.818		D	
	PM	1.077		F	1.094		F	1.047		F	1.061		F	0.992		E	
14 Bundy Drive & SMC Driveway [c]	AM	15		B	15		C	15		B	16		C	0.712		C	
	PM	39		E	42		E	**		F	**		F	0.918		E	
(overall intersection operation)	AM	> 1		A	> 1		A	1		A	1		A				
	PM	1		A	1		A	1		A	2		A				

<i>City of Santa Monica Methodology</i>		ALTERNATIVE 4						ALTERNATIVE 5					
Intersection	Peak Hour	With 800-Space Parking Structure			With 1,000-Space Parking Structure			With 800-Space Parking Structure			With 1,000-Space Parking Structure		
		Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS
2 23rd Street & Airport Avenue [a]	AM	**	n/a	F	**	n/a	F	**	n/a	F	**	n/a	F
	PM	19	n/a	C	19	n/a	C	18	n/a	C	18	n/a	C
(overall intersection operation)	AM	6	n/a	A	6	n/a	A	6	n/a	A	6	n/a	A
	PM	1	n/a	A	1	n/a	A	1	n/a	A	1	n/a	A
9 Bundy Drive & Airport Avenue	AM	52	0.725	D	55	0.728	D	77	0.770	E	**	0.778	F
	PM	32	1.030	C	37	1.053	D	11	0.895	B	11	0.901	B
13 Donald Douglas Loop South & Airport Avenue [b]	AM	12	0.593	B	13	0.643	B	9	0.310	A	9	0.323	A
	PM	9	0.344	A	9	0.352	A	9	0.314	A	9	0.316	A

<i>City of Los Angeles Methodology</i>		With 800-Space Parking Structure				With 1,000-Space Parking Structure				With 800-Space Parking Structure				With 1,000-Space Parking Structure			
Intersection	Peak Hour	Delay or V/C		LOS	Delay or V/C		LOS	Delay or V/C		LOS	Delay or V/C		LOS	Delay or V/C		LOS	
		2 23rd Street & Airport Avenue [a]	AM	**		F	**		F	**		F	**		F	**	
PM	19			C	19		C	18		C	18		C	18		C	
(overall intersection operation)	AM	6		A	6		A	6		A	6		A	6		A	
	PM	1		A	1		A	1		A	1		A	1		A	
*9 Bundy Drive & Airport Avenue	AM	0.890		D	0.891		D	0.913		E	0.917		E	0.917		E	
	PM	1.160		F	1.180		F	1.061		F	1.067		F	1.067		F	
14 Bundy Drive & SMC Driveway	AM	0.449		A	0.457		A	0.714		C	0.716		C	0.716		C	
	PM	0.861		D	0.866		D	0.949		E	0.967		E	0.967		E	

Notes:

- * Intersection is currently operating under ATSC system.
- ** Indicates oversaturated conditions. Delay cannot be calculated.
- [a] Intersection is two-way stop controlled. Level of service is based on average vehicular delay in seconds per vehicle for the most constrained approach. Delay is also reported for the intersection overall.
- [b] Intersection is all-way stop controlled.
- [c] Intersection is two-way stop controlled under Alternatives 1 & 2. Under these alternatives, level of service is based on average vehicular delay in seconds per vehicle for the most constrained approach. Delay is also reported for the intersection overall.