



Sunnyvale



Water & Sewer Demand Per Hotel/Motel Room

09/13/18



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Table 1
City of Sunnyvale
Hotel/Motel Water Use per Room 2017/18

Hotel/Motel	Account (LID)	Rooms	Annual Use (ccf)	Use per Hotel/Motel Room	
				Peak Months*	Avg Month
Motel 6 # 20 G6 Hospitality Property	52840	61	3,294	5.7	4.5
The Grand Hotel	43492/73430	104	5,452	4.9	4.4
The Domain Hotel	37328	135	6,932	4.5	4.3
Residence Inn Sunnyvale II	49216	248	11,346	6.4	3.8
Staybridge Suites	58412	138	5,942	4.4	3.6
Cherry Orchard Inn	37334	62	2,640	4.1	3.5
Motel 6 # 1054 G6 Hospitality Property	49560/49562/58366	147	6,045	4.1	3.4
Days Inn & Suites - Sundowner	930	105	4,182	4.5	3.3
Ramada Inn Silicon Valley	5654	175	6,968	3.6	3.3
Wild Palms Hotel	14884	205	7,721	3.7	3.1
Comfort Inn Sunnyvale - Silicon Valley	1746	92	3,284	3.6	3.0
Towneplace Suites Sunnyvale	24208	94	3,287	2.9	2.9
Residence Inn Sunnyvale I	5784/5766	231	7,877	3.7	2.8
Larkspur Landing Sunnyvale	72346	126	4,175	3.0	2.8
Vagabond Inn Sunnyvale	52860	60	1,922	2.8	2.7
Silicon Way Inn - Americas Best Value Inn	72474/72630/72638	14	432	3.0	2.6
Courtyard By Marriott Sunnyvale	31560	145	4,325	2.9	2.5
Extended Stay America Hotel	71846	145	4,374	2.9	2.5
Quality Inn	1766/1768	70	2,006	2.3	2.4
Holiday Inn Express	57640/58122	58	1,607	0.4	2.3
Fair Oaks Inn - Americas Best Value Inn	57270/57272	35	965	2.5	2.3
Friendship Inn	58974/58976	40	1,097	1.5	2.3
Country Inn & Suites By Carlson	57602/57604	180	4,933	2.1	2.3
Corporate Inn Sunnyvale	72626	73	1,927	2.4	2.2
Sheraton Hotel Sunnyvale	148	173	4,485	2.4	2.2
Maple Tree Inn	34650/34652	178	4,327	2.2	2.0
Best Western Silicon Valley Inn & Suites	52790/52792	100	2,400	2.6	2.0
Wittle Motel (Wittle Inn)	43888	10	222	3.0	1.9
Travel Inn	52788	35	746	2.4	1.8
Aloft Sunnyvale	44316	85	1,203	1.5	1.2
Totals		3,324	116,116	3.4 ccf 85 gpd	2.9 ccf 72 gpd

* Peak monthly use per room based on water use from July and August.

Note: Excludes data from the Der Ghan Motel, which is served by California Water Service and has 10 rooms.

Table 2

City of Sunnyvale

Hotel/Motel Water Use by Month 2017/18

Hotel/Motel	Account (LID)	Rooms	METERED WATER USE (CCF)												Annual Use (ccf)	Use per Hotel/Motel Room	
			JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN		Peak Months*	Avg Month
Motel 6 # 20 G6 Hospitality Property	52840	61	0	692	0	542	0	537	0	555	0	531	0	437	3,294	5.7	4.5
The Grand Hotel	43492/73430	104	0	1,025	0	797	0	1,002	0	859	0	976	0	793	5,452	4.9	4.4
The Domain Hotel	37328	135	1,214	0	1,271	0	1,257	0	775	0	1,195	0	1,220	0	6,932	4.5	4.3
Residence Inn Sunnyvale II	49216	248	1,301	1,855	1,130	908	1,089	877	477	481	668	696	844	1,020	11,346	6.4	3.8
Staybridge Suites	58412	138	558	646	557	460	582	341	411	342	428	532	611	474	5,942	4.4	3.6
Cherry Orchard Inn	37334	62	505	0	534	0	452	0	457	0	403	0	289	0	2,640	4.1	3.5
Motel 6 # 1054 G6 Hospitality Property	49560/49562/58366	147	509	691	552	476	571	427	437	472	447	544	479	440	6,045	4.1	3.4
Days Inn & Suites - Sundowner	930	105	438	513	419	321	429	269	287	242	276	347	260	381	4,182	4.5	3.3
Ramada Inn Silicon Valley	5654	175	1,263	0	1,463	0	1,387	0	1,895	0	-67	0	1,027	0	6,968	3.6	3.3
Wild Palms Hotel	14884	205	1,529	0	1,649	0	1,341	0	1,005	0	984	0	1,213	0	7,721	3.7	3.1
Comfort Inn Sunnyvale - Silicon Valley	1746	92	0	654	0	629	0	565	0	441	0	505	0	490	3,284	3.6	3.0
Towneplace Suites Sunnyvale	24208	94	0	547	0	519	0	418	0	463	0	648	0	692	3,287	2.9	2.9
Residence Inn Sunnyvale I	5784/5766	231	689	1,040	849	672	784	501	501	452	514	584	680	611	7,877	3.7	2.8
Larkspur Landing Sunnyvale	72346	126	0	764	0	627	0	746	0	698	0	707	0	633	4,175	3.0	2.8
Vagabond Inn Sunnyvale	52860	60	0	341	0	305	0	246	0	249	0	374	0	407	1,922	2.8	2.7
Silicon Way Inn - Americas Best Value Inn	72474/72630/72638	14	36	48	52	40	47	27	18	29	29	34	42	30	432	3.0	2.6
Courtyard By Marriott Sunnyvale	31560	145	0	834	0	749	0	654	0	626	0	741	0	721	4,325	2.9	2.5
Extended Stay America Hotel	71846	145	381	474	471	305	469	295	234	334	335	381	382	313	4,374	2.9	2.5
Quality Inn	1766/1768	70	129	190	248	200	145	192	152	122	137	190	151	150	2,006	2.3	2.4
Holiday Inn Express	57640/58122	58	0	45	0	135	0	418	0	399	0	337	0	273	1,607	0.4	2.3
Fair Oaks Inn - Americas Best Value Inn	57270/57272	35	76	96	86	73	96	65	62	77	72	87	109	66	965	2.5	2.3
Friendship Inn	58974/58976	40	121	0	163	0	186	0	158	0	157	0	312	0	1,097	1.5	2.3
Country Inn & Suites By Carlson	57602/57604	180	322	438	431	294	444	385	519	378	427	458	451	386	4,933	2.1	2.3
Corporate Inn Sunnyvale	72626	73	355	0	324	0	287	0	305	0	310	0	346	0	1,927	2.4	2.2
Sheraton Hotel Sunnyvale	148	173	359	466	486	306	446	295	226	289	333	445	457	377	4,485	2.4	2.2
Maple Tree Inn	34650/34652	178	777	0	903	0	691	0	566	0	708	0	682	0	4,327	2.2	2.0
Best Western Silicon Valley Inn & Suites	52790/52792	100	0	520	0	465	0	348	0	246	0	400	0	421	2,400	2.6	2.0
Wittle Motel (Wittle Inn)	43888	10	0	59	0	45	0	30	0	29	0	26	0	33	222	3.0	1.9
Travel Inn	52788	35	0	168	0	117	0	103	0	65	0	140	0	153	746	2.4	1.8
Aloft Sunnyvale	44316	85	0	248	0	221	0	163	0	157	0	202	0	212	1,203	1.5	1.2
Totals		3,324	10,562	12,354	11,588	9,206	10,703	8,904	8,485	8,005	7,356	9,885	9,555	9,513	116,116	3.4	2.9

* Peak monthly use per room based on water use from July and August.

Note: Excludes data from the Der Ghan Motel, which is served by California Water Service and has 10 rooms.

Table 3
City of Sunnyvale
Estimated Demand per Hotel/Motel Room

	Water Demand per Room		Sewer Demand per Room	
	Demand Per Unit (gpd)	% of Standard Occupancy	Demand Per Unit (gpd)	% of Standard Occupancy
Residential Capacity Charge Demands <i>Usage per Residential Dwelling Unit</i>				
Standard Occupancy	300 gpd	100%	190 gpd	100%
Low Occupancy	170 gpd	57%	123.5 gpd	65%
Hotel/Motel Monthly Use per Room				
Based on Peak Month Water Use	85 gpd	28%	85 gpd	45%
Based on Average Month Water Use	75 gpd	25%	75 gpd	39%

Table A-1
City of Sunnyvale
Water Use per Apartment 2017/18

FYI

	Annual Use (ccf)	Winter Use (ccf)*
Water Use 2017/18		
A1 Apartment Monthly	266,030	79,393
A2 Apartment Bi-Monthly	<u>1,745,832</u>	<u>545,181</u>
Total	2,011,862	624,575
Residential Dwelling Units		
A1 Apartment Monthly	5,088	5,088
A2 Apartment Bi-Monthly	<u>29,337</u>	<u>29,337</u>
Total	34,426	34,426
Monthly Use per Dwelling Unit	4.9 ccf 120 gpd	4.5 ccf 112 gpd
* Based on water use during the 4 months of November through March)		

Table A-2
City of Sunnyvale
Hotel/Motel Water Use by Month 2010/11

Hotel/Motel	Account (LID)	Rooms	Annual Use (ccf)	Use per Hotel/Motel Room	
				Peak Months*	Avg Month
Motel 6 # 20 G6 Hospitality Property	52840	61	2,860	4.6	3.9
The Grand Hotel	43492/73430	104	3,813	3.2	3.1
The Domain Hotel	37328	135	5,253	3.7	3.2
Residence Inn Sunnyvale li	49216	248	153	0.1	0.1
Staybridge Suites	58412	138	6,008	4.9	3.6
Cherry Orchard Inn	37334	62	1,322	2.5	1.8
Motel 6 # 1054 G6 Hospitality Property	49560/49562/58366	147	5,900	3.6	3.3
Days Inn & Suites - Sundowner	930	105	2,414	1.9	1.9
Ramada Inn Silicon Valley	5654	175	394	0.3	0.2
Wild Palms Hotel	14884	205	6,823	4.5	2.8
Comfort Inn Sunnyvale - Silicon Valley	1746	92	3,622	3.5	3.3
Towneplace Suites Sunnyvale	24208	94	3,403	3.7	3.0
Residence Inn Sunnyvale I	5784/5766	231	8,907	5.5	3.2
Larkspur Landing Sunnyvale	72346	126	4,800	2.2	3.2
Vagabond Inn Sunnyvale	52860	60	1,735	2.7	2.4
Silicon Way Inn - Americas Best Value Inn	72474/72630/72638	14	654	4.0	3.9
Extended Stay America Hotel	71846	145	5,096	2.8	2.9
Quality Inn	1766/1768	70	1,733	2.7	2.1
Holiday Inn Express	57640/58122	58	2,302	3.1	3.3
Fair Oaks Inn - Americas Best Value Inn	57270/57272	35	1,131	2.2	2.7
Friendship Inn	58974/58976	40	1,471	3.3	3.1
Country Inn & Suites By Carlson	57602/57604	180	4,537	2.4	2.1
Corporate Inn Sunnyvale	72626	73	2,361	3.0	2.7
Sheraton Hotel Sunnyvale	148	173	4,635	2.4	2.2
Maple Tree Inn	34650/34652	178	4,833	2.8	2.3
Best Western Silicon Valley Inn & Suites	52790/52792	100	3,520	2.7	2.9
Wittle Motel (Wittle Inn)	43888	10	406	3.6	3.4
Travel Inn	52788	35	939	3.5	2.2
Aloft Sunnyvale	44316	85	3,495	2.8	3.4
Totals		3,179	94,520	2.9 ccf 72 gpd	2.5 ccf 61 gpd

* Peak monthly use per room based on water use from July and August.

Note: Excludes data from the Der Ghan Motel, Courtyard by Marriott Sunnyvale, and Residence Inn Sunnyvale.

Table A-3

City of Sunnyvale

Hotel/Motel Water Use by Month 2010/11

Hotel/Motel	Account (LID)	Rooms	METERED WATER USE (CCF)												Annual		Use per Hotel/Motel Room	
			JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Use (ccf)	Peak Months*	Avg Month	
Motel 6 # 20 G6 Hospitality Property	52840	61	0	566	0	552	0	491	0	372	0	386	0	493	2,860	4.6	3.9	
The Grand Hotel	43492/73430	104	0	675	0	585	0	709	0	524	0	643	0	677	3,813	3.2	3.1	
The Domain Hotel	37328	135	1,005	0	824	0	1,165	0	797	0	638	0	824	0	5,253	3.7	3.2	
Staybridge Suites	58412	138	706	647	741	571	373	464	278	341	281	400	502	704	6,008	4.9	3.6	
Cherry Orchard Inn	37334	62	315	0	234	0	214	0	198	0	160	0	201	0	1,322	2.5	1.8	
Motel 6 # 1054 G6 Hospitality Property	49560/49562/58366	147	592	454	582	500	439	479	464	403	327	482	461	717	5,900	3.6	3.3	
Days Inn & Suites - Sundowner	930	105	257	145	240	175	107	168	89	69	102	297	295	470	2,414	1.9	1.9	
Ramada Inn Silicon Valley	5654	175	102	0	153	0	85	0	10	0	19	0	25	0	394	0.3	0.2	
Wild Palms Hotel	14884	205	1,829	0	1,314	0	1,199	0	1,213	0	367	0	901	0	6,823	4.5	2.8	
Comfort Inn Sunnyvale - Silicon Valley	1746	92	0	635	0	551	0	703	0	591	0	496	0	646	3,622	3.5	3.3	
Towneplace Suites Sunnyvale	24208	94	0	687	0	471	0	479	0	569	0	585	0	612	3,403	3.7	3.0	
Residence Inn Sunnyvale I	5784/5766	231	970	1,548	895	669	528	541	508	517	389	669	694	979	8,907	5.5	3.2	
Larkspur Landing Sunnyvale	72346	126	0	550	0	745	0	1,061	0	849	0	830	0	765	4,800	2.2	3.2	
Vagabond Inn Sunnyvale	52860	60	0	329	0	545	0	274	0	209	0	155	0	223	1,735	2.7	2.4	
Silicon Way Inn - Americas Best Value Inn	72474/72630/72638	14	64	48	64	45	42	35	50	51	49	81	52	73	654	4.0	3.9	
Extended Stay America Hotel	71846	145	453	364	466	388	395	422	445	375	426	478	396	488	5,096	2.8	2.9	
Quality Inn	1766/1768	70	247	128	152	129	92	124	107	118	130	144	160	202	1,733	2.7	2.1	
Holiday Inn Express	57640/58122	58	0	357	0	380	0	311	0	656	0	310	0	288	2,302	3.1	3.3	
Fair Oaks Inn - Americas Best Value Inn	57270/57272	35	71	82	119	86	77	94	104	84	83	123	80	128	1,131	2.2	2.7	
Friendship Inn	58974/58976	40	260	0	211	0	311	0	296	0	182	0	211	0	1,471	3.3	3.1	
Country Inn & Suites By Carlson	57602/57604	180	454	404	411	347	322	326	360	326	340	424	359	464	4,537	2.4	2.1	
Corporate Inn Sunnyvale	72626	73	431	0	382	0	373	0	406	0	373	0	396	0	2,361	3.0	2.7	
Sheraton Hotel Sunnyvale	148	173	446	374	431	368	287	343	425	341	334	434	362	490	4,635	2.4	2.2	
Maple Tree Inn	34650/34652	178	999	0	797	0	728	0	803	0	763	0	743	0	4,833	2.8	2.3	
Best Western Silicon Valley Inn & Suites	52790/52792	100	0	543	0	981	0	437	0	436	0	582	0	539	3,520	2.7	2.9	
Wittle Motel (Wittle Inn)	43888	10	0	72	0	73	0	63	0	52	0	57	0	89	406	3.6	3.4	
Travel Inn	52788	35	0	244	0	183	0	163	0	100	0	108	0	141	939	3.5	2.2	
Aloft Sunnyvale	44316	85	0	484	0	649	0	572	0	382	0	422	0	986	3,495	2.8	3.4	
Totals		2,931	9,201	9,337	8,016	8,993	6,737	8,259	6,553	7,365	4,963	8,107	6,662	10,174	94,367	3.2	2.7	

* Peak monthly use per room based on water use from July and August.

Note: Excludes data from the Der Ghan Motel, Courtyard by Marriott Sunnyvale, and Residence Inn Sunnyvale.

Table B-1
City of Sunnyvale
Water Capacity Charges

CHARGE PER GPD		\$19.2860
RESIDENTIAL	<u>Water Demand¹</u>	<u>Capacity Charge</u>
<i>Charge per Residential Dwelling Unit</i>		
Standard Occupancy <i>With 3 or more bedrooms</i>	300 gpd	\$5,786
Low Occupancy <i>With 1 or 2 bedrooms, 2 bedrooms and den</i>	170 gpd	\$3,279
OTHER CONNECTIONS		<u>Capacity Charge</u>
<i>Charge per 100 gallons per day of estimated water consumption</i>		\$1,929
1 Based on Water Utility Master Plan, November 2010 by Infrastructure Engineering Corporation; Table 4-5 Recommended Duty Factors		

Table B-2
City of Sunnyvale
Sewer Capacity Charges

RESIDENTIAL					Capacity
<i>Charge per Residential Dwelling Unit</i>	<u>Flow (gpd)</u>	<u>Wastewater Strength (mg/l)</u>			<u>Charge</u>
Standard Occupancy <i>With 3 or more bedrooms</i>	190	200	100	34	\$7,606
Low Occupancy <i>With 1 or 2 bedrooms, 2 bedrooms and den</i>	123.5	200	100	34	4,944
NON-RESIDENTIAL					Capacity
<i>Charge per 100 gallons per day of estimated wastewater discharge</i>					<u>Charge</u>
	<u>Flow (gpd)</u>	<u>Wastewater Strength (mg/l)</u>			
<u>Commercial</u>		<u>SS</u>	<u>TOC</u>	<u>NH3</u>	
Low Strength	100	110	75	25	\$3,494
Standard Strength	100	160	90	30	3,778
High Strength	100	500	300	30	5,501
Institutional	100	160	90	30	3,778
SIGNIFICANT INDUSTRIAL USERS					
<i>Charge based on estimated wastewater flow and strength</i>					
Wastewater Flow (\$/gpd)					\$26.76
TOC (\$/1000 lbs/yr)					14,162.00
SS (\$/1000 lbs/yr)					4,023.78
NH3 (\$/1000 lbs/yr)					33,128.26