

Back by customer demand!

You asked and we listened. For customer convenience and estimating ease, we have made the 2019 Project Costs available for download at RSMMeans.com/2019books. You will also find sample estimates, an RSMMeans data overview video, and a book registration form to receive quarterly data updates throughout 2019.

Estimating Tips

- The cost figures available in the download were derived from hundreds of projects contained in the RSMMeans database of completed construction projects. They include the contractor's overhead and profit. The figures have been adjusted to January of the current year.
- These projects were located throughout the U.S. and reflect a tremendous variation in square foot (S.F.) costs. This is due to differences, not only in labor and material costs, but also in individual owners' requirements. For instance, a bank in a large city would have different features than one in a rural area. This is true of all the different types of buildings analyzed. Therefore, caution should be exercised when using these Project Costs. For example, for courthouses, costs in the database are local courthouse costs and will not apply to the larger, more elaborate federal courthouses.
- None of the figures "go with" any others. All individual cost items were computed and tabulated separately. Thus, the sum of the median figures for plumbing, HVAC, and electrical will not normally total up to the total mechanical and electrical costs arrived at by separate analysis and tabulation of the projects.
- Each building was analyzed as to total and component costs and percentages. The figures were arranged in ascending order with the results tabulated as shown. The 1/4 column shows that 25% of the projects had lower costs and 75% had higher. The 3/4 column shows that 75% of the projects had lower costs and 25% had higher. The median column shows that 50% of the projects had lower costs and 50% had higher.
- Project Costs are useful in the conceptual stage when no details are available. As soon as details become available in the project design, the square foot approach should be discontinued and the project should be priced as to its particular components. When more precision is required, or for estimating the replacement cost of specific buildings, the current edition of *Square Foot Costs with RSMMeans data* should be used.
- In using the figures in this section, it is recommended that the median column be used for preliminary figures if no

additional information is available. The median figures, when multiplied by the total city construction cost index figures (see City Cost Indexes) and then multiplied by the project size modifier at the end of this section, should present a fairly accurate base figure, which would then have to be adjusted in view of the estimator's experience, local economic conditions, code requirements, and the owner's particular requirements. There is no need to factor in the percentage figures, as these should remain constant from city to city.

- The editors of this data would greatly appreciate receiving cost figures on one or more of your recent projects, which would then be included in the averages for next year. All cost figures received will be kept confidential, except that they will be averaged with other similar projects to arrive at square foot cost figures for next year.

See the website above for details and the discount available for submitting one or more of your projects.

Did you know?

RSMMeans data is available through our online application:

- Search for costs by keyword
- Leverage the most up-to-date data
- Build and export estimates

Try it free
rsmeans.com/2019freetrial

50 17 | Project Costs

50 17 00 Project Costs			UNIT	UNIT COSTS			% OF TOTAL			
				1/4	MEDIAN	3/4	1/4	MEDIAN	3/4	
01	0000	Auto Sales with Repair	S.F.							01
	0100	Architectural	↓	104	116	126	59.8%	59.2%	63.7%	
	0200	Plumbing	↓	8.70	9.10	12.15	5%	5%	5%	
	0300	Mechanical	↓	11.65	15.60	17.20	6.7%	6.7%	8.6%	
	0400	Electrical	↓	17.90	22	27.50	10.3%	10.3%	12.1%	
0500	Total Project Costs	↓	174	182	187					
02	0000	Banking Institutions	S.F.							02
	0100	Architectural	↓	157	192	234	60.4%	60.4%	65.5%	
	0200	Plumbing	↓	6.30	8.80	12.25	2.4%	2.4%	3%	
	0300	Mechanical	↓	12.55	17.35	20.50	4.8%	4.8%	5.9%	
	0400	Electrical	↓	30.50	37	57	11.7%	11.7%	12.6%	
0500	Total Project Costs	↓	260	293	360					
03	0000	Court House	S.F.							03
	0100	Architectural	↓	82.50	162	162	54.6%	54.5%	58.3%	
	0200	Plumbing	↓	3.12	3.12	3.12	2.1%	2.1%	1.1%	
	0300	Mechanical	↓	19.50	19.50	19.50	12.9%	12.9%	7%	
	0400	Electrical	↓	25	25	25	16.6%	16.6%	9%	
0500	Total Project Costs	↓	151	278	278					
04	0000	Data Centers	S.F.							04
	0100	Architectural	↓	187	187	187	68%	67.9%	68%	
	0200	Plumbing	↓	10.20	10.20	10.20	3.7%	3.7%	3.7%	
	0300	Mechanical	↓	26	26	26	9.5%	9.4%	9.5%	
	0400	Electrical	↓	24.50	24.50	24.50	8.9%	9%	8.9%	
0500	Total Project Costs	↓	275	275	275					
05	0000	Detention Centers	S.F.							05
	0100	Architectural	↓	173	183	194	59.2%	59.2%	59%	
	0200	Plumbing	↓	18.25	22	27	6.3%	6.2%	7.1%	
	0300	Mechanical	↓	23	33	39.50	7.9%	7.9%	10.6%	
	0400	Electrical	↓	38	45	58.50	13%	13%	14.5%	
0500	Total Project Costs	↓	292	310	365					
06	0000	Fire Stations	S.F.							06
	0100	Architectural	↓	95	121	171	47%	50%	52.4%	
	0200	Plumbing	↓	9.95	13.50	15.65	4.9%	4.9%	5.8%	
	0300	Mechanical	↓	13.45	18.40	25.50	6.7%	6.6%	8%	
	0400	Electrical	↓	22.50	28.50	32.50	11.1%	11%	12.3%	
0500	Total Project Costs	↓	202	231	300					
07	0000	Gymnasium	S.F.							07
	0100	Architectural	↓	86.50	114	114	64.6%	64.4%	57.3%	
	0200	Plumbing	↓	2.12	6.95	6.95	1.6%	1.6%	3.5%	
	0300	Mechanical	↓	3.25	29	29	2.4%	2.4%	14.6%	
	0400	Electrical	↓	10.65	20.50	20.50	7.9%	7.9%	10.3%	
0500	Total Project Costs	↓	134	199	199					
08	0000	Hospitals	S.F.							08
	0100	Architectural	↓	105	172	187	42.9%	43%	47.1%	
	0200	Plumbing	↓	7.70	14.70	32	3.1%	3.1%	4%	
	0300	Mechanical	↓	51	57.50	74.50	20.8%	20.8%	15.8%	
	0400	Electrical	↓	23	46.50	60.50	9.4%	9.5%	12.7%	
0500	Total Project Costs	↓	245	365	395					
09	0000	Industrial Buildings	S.F.							09
	0100	Architectural	↓	44	70	227	56.4%	56.3%	68.6%	
	0200	Plumbing	↓	1.70	6.40	12.95	2.2%	2.2%	6.3%	
	0300	Mechanical	↓	4.71	8.95	42.50	6%	6%	8.8%	
	0400	Electrical	↓	7.20	8.20	68.50	9.2%	9.2%	8%	
0500	Total Project Costs	↓	78	102	425					
10	0000	Medical Clinics & Offices	S.F.							10
	0100	Architectural	↓	87.50	120	158	53.7%	51%	56.3%	
	0200	Plumbing	↓	8.50	12.85	20.50	5.2%	5.2%	6%	
	0300	Mechanical	↓	14.20	22	45	8.7%	8.8%	10.3%	
	0400	Electrical	↓	19.55	26	36.50	12%	11.9%	12.2%	
0500	Total Project Costs	↓	163	213	286					

50 17 | Project Costs

50 17 00 Project Costs			UNIT	UNIT COSTS			% OF TOTAL			
				1/4	MEDIAN	3/4	1/4	MEDIAN	3/4	
11	0000	Mixed Use	S.F.							11
	0100	Architectural		86.50	126	207	47%	47.5%	59.4%	
	0200	Plumbing		6	9.15	11.55	3.3%	3.2%	4.3%	
	0300	Mechanical		14.80	24	46.50	8%	7.8%	11.3%	
	0400	Electrical		15.25	24	40.50	8.3%	8.3%	11.3%	
	0500	Total Project Costs		184	212	335				
12	0000	Multi-Family Housing	S.F.							12
	0100	Architectural		75	125	167	60.5%	67.6%	56.6%	
	0200	Plumbing		6.40	12.75	15.10	5.2%	5.6%	5.8%	
	0300	Mechanical		6.95	11.70	37.50	5.6%	6.3%	5.3%	
	0400	Electrical		10.10	18	22.50	8.1%	8.8%	8.1%	
	0500	Total Project Costs		124	221	282				
13	0000	Nursing Home & Assisted Living	S.F.							13
	0100	Architectural		70	92	116	58.3%	58.4%	59%	
	0200	Plumbing		7.55	11.35	12.50	6.3%	5.9%	7.3%	
	0300	Mechanical		6.20	9.15	17.95	5.2%	5.2%	5.9%	
	0400	Electrical		10.25	16.20	22.50	8.5%	8.6%	10.4%	
	0500	Total Project Costs		120	156	188				
14	0000	Office Buildings	S.F.							14
	0100	Architectural		92.50	126	177	60.1%	60%	64.6%	
	0200	Plumbing		4.98	7.85	15.40	3.2%	3.1%	4%	
	0300	Mechanical		10.75	17.65	25.50	7%	6.8%	9.1%	
	0400	Electrical		12.35	21	34	8%	7.9%	10.8%	
	0500	Total Project Costs		154	195	285				
15	0000	Parking Garage	S.F.							15
	0100	Architectural		31	38	39.50	82.7%	82.1%	82.6%	
	0200	Plumbing		1.02	1.07	2	2.7%	2.7%	2.3%	
	0300	Mechanical		.79	1.22	4.62	2.1%	2.1%	2.7%	
	0400	Electrical		2.72	2.98	6.25	7.3%	7.1%	6.5%	
	0500	Total Project Costs		37.50	46	49.50				
16	0000	Parking Garage/Mixed Use	S.F.							16
	0100	Architectural		100	110	112	61%	61.2%	64.3%	
	0200	Plumbing		3.22	4.22	6.45	2%	2%	2.5%	
	0300	Mechanical		13.80	15.50	22.50	8.4%	8.4%	9.1%	
	0400	Electrical		14.45	21	21.50	8.8%	8.8%	12.3%	
	0500	Total Project Costs		164	171	177				
17	0000	Police Stations	S.F.							17
	0100	Architectural		113	127	160	53.3%	54%	48.5%	
	0200	Plumbing		15	18	18.10	7.1%	7%	6.9%	
	0300	Mechanical		34	47.50	49	16%	16.1%	18.1%	
	0400	Electrical		25.50	28	29.50	12%	12.1%	10.7%	
	0500	Total Project Costs		212	262	297				
18	0000	Police/Fire	S.F.							18
	0100	Architectural		110	110	340	67.9%	68.2%	65.9%	
	0200	Plumbing		8.65	9.15	34	5.3%	5.5%	5.5%	
	0300	Mechanical		13.55	21.50	77.50	8.4%	8.4%	12.9%	
	0400	Electrical		15.40	19.70	88.50	9.5%	9.6%	11.8%	
	0500	Total Project Costs		162	167	610				
19	0000	Public Assembly Buildings	S.F.							19
	0100	Architectural		115	156	218	62.5%	63%	61.7%	
	0200	Plumbing		5.95	8.75	12.90	3.2%	3%	3.5%	
	0300	Mechanical		13.60	22.50	34.50	7.4%	8%	8.9%	
	0400	Electrical		18.60	25.50	40.50	10.1%	10.5%	10.1%	
	0500	Total Project Costs		184	253	360				
20	0000	Recreational	S.F.							20
	0100	Architectural		108	170	231	56.3%	55.7%	59.2%	
	0200	Plumbing		8.35	15.35	24.50	4.3%	4.6%	5.3%	
	0300	Mechanical		12.90	19.60	31	6.7%	6.9%	6.8%	
	0400	Electrical		15.80	28	39	8.2%	7.7%	9.8%	
	0500	Total Project Costs		192	287	435				

50 17 | Project Costs

50 17 00 Project Costs			UNIT	UNIT COSTS			% OF TOTAL			
				1/4	MEDIAN	3/4	1/4	MEDIAN	3/4	
21	0000	Restaurants	S.F.						21	
	0100	Architectural		123	198	245	60.6%	77.9%		59.1%
	0200	Plumbing		9.95	31	39	4.9%	14.6%		9.3%
	0300	Mechanical		14.55	19.30	47	7.2%	11.2%		5.8%
	0400	Electrical		14.45	30.50	51	7.1%	17.9%		9.1%
	0500	Total Project Costs		203	335	420				
22	0000	Retail	S.F.						22	
	0100	Architectural		54	60.50	109	73%	59.9%		64.4%
	0200	Plumbing		5.65	7.85	9.95	7.6%	6.2%		8.4%
	0300	Mechanical		5.15	7.40	9.05	7%	5.6%		7.9%
	0400	Electrical		7.20	11.55	18.50	9.7%	7.9%		12.3%
	0500	Total Project Costs		74	94	148				
23	0000	Schools	S.F.						23	
	0100	Architectural		94	120	160	58%	58.8%		55.6%
	0200	Plumbing		7.50	10.40	15.15	4.6%	4.7%		4.8%
	0300	Mechanical		17.85	24.50	36.50	11%	11.1%		11.3%
	0400	Electrical		17.45	24	30.50	10.8%	11%		11.1%
	0500	Total Project Costs		162	216	286				
24	0000	University, College & Private School Classroom & Admin Buildings	S.F.						24	
	0100	Architectural		121	150	188	60.2%	61%		54%
	0200	Plumbing		6.90	10.70	15.10	3.4%	3.4%		3.8%
	0300	Mechanical		26	37.50	45	12.9%	12.9%		13.5%
	0400	Electrical		19.50	27.50	33.50	9.7%	9.8%		9.9%
	0500	Total Project Costs		201	278	370				
25	0000	University, College & Private School Dormitories	S.F.						25	
	0100	Architectural		79	139	147	67.5%	67.1%		62.6%
	0200	Plumbing		10.45	14.80	22	8.9%	8.9%		6.7%
	0300	Mechanical		4.69	19.95	31.50	4%	4%		9%
	0400	Electrical		5.55	19.35	29.50	4.7%	4.8%		8.7%
	0500	Total Project Costs		117	222	263				
26	0000	University, College & Private School Science, Eng. & Lab Buildings	S.F.						26	
	0100	Architectural		136	144	188	48.7%	49.1%		50.5%
	0200	Plumbing		9.35	14.20	26	3.4%	3.4%		5%
	0300	Mechanical		42.50	67	68.50	15.2%	15.3%		23.5%
	0400	Electrical		27.50	32	37.50	9.9%	9.8%		11.2%
	0500	Total Project Costs		279	285	320				
27	0000	University, College & Private School Student Union Buildings	S.F.						27	
	0100	Architectural		108	283	283	50.9%	60%		54.4%
	0200	Plumbing		16.25	16.25	24	7.7%	4.3%		3.1%
	0300	Mechanical		31	50	50	14.6%	9.7%		9.6%
	0400	Electrical		27	47	47	12.7%	13.3%		9%
	0500	Total Project Costs		212	520	520				
28	0000	Warehouses	S.F.						28	
	0100	Architectural		46	72	171	66.7%	67.4%		58.5%
	0200	Plumbing		2.40	5.15	9.90	3.5%	3.5%		4.2%
	0300	Mechanical		2.84	16.20	25.50	4.1%	4.1%		13.2%
	0400	Electrical	S.F.	5.15	19.40	32.50	7.5%	7.5%		15.8%
	0500	Total Project Costs	S.F.	69	123	238				