

Table 4.2
Average Percentage of Support Costs as a Proportion of Total Capital Costs
(Consultant Costs less than 30% of Support Costs)

Project Type	0 = Environmental (CE Only)				1 = Design				2 = Right-of-Way				3 = Construction			
	Avg %	95% CI		Sample Size	Avg %	95% CI		Sample Size	Avg %	95% CI		Sample Size	Avg %	95% CI		Sample Size
		Low	High			Low	High			Low	High			Low	High	
AA Haz waste removal				0				4				0	17.9%	1.1%	34.8%	5
AC Construct maint station				2	31.5%	22.6%	40.3%	12	0.7%	0.2%	1.1%	6	18.2%	13.1%	23.2%	13
AE Construct weigh station				4	15.0%	3.9%	26.0%	12				0	17.2%	11.5%	22.8%	9
AF Construct truck scale	11.2%	6.3%	16.4%	13	30.6%	13.9%	47.4%	26				4	18.8%	15.4%	22.3%	28
AG Construct ag inspect station				3	35.2%	13.6%	56.9%	6				1	15.6%	6.0%	25.2%	5
AI Modify roadside rest				3	53.2%	17.6%	88.7%	9				0	35.4%	7.9%	63.0%	7
AJ Install gas tanks				0	44.2%	15.1%	73.3%	8				0	35.6%	14.9%	56.4%	11
AK Install electrical	8.5%	0.0%	26.5%	5	54.6%	38.4%	70.8%	26				4	37.2%	19.7%	54.6%	23
AL Construct eq storage fac				3	39.3%	29.0%	49.6%	28				1	34.4%	25.5%	43.3%	31
AN Modify auto hoist lube	10.4%	1.8%	19.1%	12	47.5%	30.9%	64.1%	46	2.9%	58.0%	5.4%	5	24.1%	17.6%	30.5%	40
AO Modify weigh/main station	21.9%	0.0%	57.6%	10	50.6%	35.2%	66.1%	53				3	29.0%	23.7%	34.2%	48
AP Modfiy roofs				1	22.3%	9.4%	35.3%	22				0	14.8%	10.5%	19.1%	17
AR Construct restrooms				4	73.9%	53.2%	94.7%	32				0	40.8%	29.5%	52.1%	34
AV Ventilation systems				2	102.0%	58.9%	145.1%	13				0	27.5%	17.5%	37.5%	15
AW Install sewer or pumps	11.3%	3.8%	18.8%	9	50.2%	39.8%	60.6%	49				4	30.6%	25.5%	35.6%	54
BA Modify bridge railing	6.0%	0.0%	12.0%	6	28.8%	20.5%	37.0%	31				1	18.0%	15.6%	20.4%	29
BC Rehab bridge deck	9.3%	4.5%	14.2%	17	25.1%	20.8%	29.4%	60				1	20.1%	17.5%	22.7%	59
BE Seismic retrofit Phase II	10.3%	5.8%	14.9%	32	29.4%	22.7%	36.1%	110	1.2%	0.7%	1.5%	67	19.7%	17.9%	21.6%	116
BF Rehab structure	23.6%	10.3%	36.9%	9	34.4%	23.0%	45.7%	31	1.8%	0.0%	3.9%	5	18.8%	15.3%	22.3%	35

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		Low	High			Low	High			Low	High			Low	High	
BG Bridge replacement	31.2%	10.7%	51.8%	11	26.2%	20.5%	31.8%	49	4.8%	3.4%	6.1%	45	22.7%	20.0%	25.3%	51
BJ Widen bridge	11.2%	5.4%	16.9%	7	23.2%	16.4%	30.0%	21	2.4%	0.3%	4.5%	14	23.9%	20.1%	27.6%	20
BM Toll bridge improvements				1	42.7%	26.8%	58.6%	15				0	16.3%	9.7%	22.9%	15
BP Seismic retrofit Phase III	16.3%	3.8%	28.9%	18	44.0%	36.2%	51.7%	217	0.8%	0.6%	1.0%	156	20.0%	18.1%	21.9%	155
CA Resurface highway	29.3%	0.0%	99.2%	6	38.8%	0.0%	84.5%	23				2	20.3%	0.0%	43.1%	18
CB Resurface parking	23.6%	7.7%	39.5%	10	63.3%	44.9%	81.6%	68	9.4%	0.2%	18.6%	17	26.8%	21.2%	32.4%	57
CC Resurfacing w/structure \$	6.7%	1.3%	12.0%	6	22.3%	16.0%	28.5%	19	0.8%	0.0%	2.0%	7	19.6%	13.5%	25.8%	23
CD Seal coat				3	24.3%	10.2%	38.4%	9				0	19.5%	8.9%	30.1%	9
CE Resurface & drainage				3	23.5%	0.0%	51.9%	5				0	12.8%	0.0%	29.4%	5
CM Thick blanket	8.3%	2.9%	13.8%	28	13.9%	9.8%	17.9%	92	2.2%	0.8%	3.6%	23	12.4%	10.9%	14.0%	91
DA Realign highway				2	44.0%	36.4%	51.7%	8	28.1%	0.6%	55.5%	6	20.0%	10.8%	29.3%	7
DB Curve correction	28.1%	2.8%	53.4%	8	34.0%	20.6%	47.5%	26	18.0%	13.3%	22.7%	22	20.0%	16.4%	24.3%	32
DC Curve correction/widen shldr	17.7%	4.1%	31.3%	5	50.6%	11.7%	89.5%	12	12.4%	6.3%	18.5%	11	19.3%	13.6%	24.9%	11
DE Realignment w/structure \$				4	19.7%	12.0%	27.5%	11	8.2%	4.0%	12.5%	10	18.7%	15.5%	21.9%	13
DF Vertical alignment correction				5	17.7%	9.8%	25.6%	9				3	25.9%	14.2%	37.6%	7
EA Channelization	20.0%	13.6%	26.5%	26	44.5%	34.6%	54.4%	66	13.1%	7.8%	18.3%	20	23.8%	19.6%	28.1%	57
EC Channelize, signal & lighting	22.4%	13.0%	31.7%	11	50.8%	37.9%	63.6%	26	6.9%	2.5%	11.4%	11	30.0%	25.9%	34.0%	31
FB					11.4%	4.8%	18.0%	5	8.0%	5.8%	10.2%	10	13.4%	8.2%	18.5%	7
FC					6.3%	1.7%	10.8%	6	10.9%	4.0%	17.7%	5	11.9%	8.7%	15.1%	12

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		Low	High			Low	High			Low	High			Low	High	
FD Construct interchange				1	19.4%	2.9%	35.9%	9	3.2%	1.3%	5.1%	8	17.0%	14.1%	19.9%	17
GA Slide correction	20.3%	13.8%	26.8%	25	25.0%	21.1%	29.0%	186	5.5%	4.0%	7.1%	77	14.4%	10.6%	18.2%	164
GB Replace highway				1	25.6%	15.2%	36.1%	53	1.5%	0.0%	2.9%	13	21.5%	9.6%	33.5%	45
GD Storm/earthquake damage				2	17.1%	13.3%	21.0%	89	1.4%	0.7%	2.1%	33	13.7%	11.8%	15.6%	84
GE Drainage corrections	55.9%	0.0%	112.9%	8	53.8%	10.2%	97.3%	55	26.4%	0.0%	65.1%	22	24.1%	15.9%	32.2%	50
HA Ramp metering systems				2	58.3%	34.7%	81.8%	17				1	30.7%	22.7%	38.7%	21
HC Traffic surveillance	6.3%	3.0%	9.7%	8	23.7%	17.1%	30.4%	22				2	37.1%	22.6%	51.6%	18
JA Pavement markers	34.8%	0.0%	77.6%	5	45.9%	30.5%	61.2%	48				1	16.0%	12.0%	20.0%	43
JC Grind or groove pavement	7.6%	1.5%	13.6%	7	38.2%	24.4%	51.9%	36				3	15.2%	8.4%	22.0%	30
KA Construct concrete barrier	18.9%	7.9%	29.9%	31	35.4%	28.7%	42.1%	77				4	12.6%	10.4%	14.9%	72
KB Modify signs	16.5%	3.8%	29.2%	6	99.2%	20.6%	177.7%	33				2	19.9%	13.5%	26.3%	31
KC Modify lighting	32.3%	0.0%	85.5%	6	49.5%	36.8%	62.1%	51				4	26.9%	18.6%	35.1%	49
KE Modify signals	14.2%	9.7%	18.7%	27	53.7%	45.9%	61.6%	117	5.8%	2.8%	8.7%	16	30.7%	24.4%	36.9%	114
KF Modify signals & lighting	26.1%	17.6%	34.5%	21	49.0%	40.7%	57.2%	64	6.4%	1.2%	11.7%	8	27.7%	24.1%	31.3%	79
KH Modify guard railing	17.3%	13.0%	21.7%	53	44.5%	33.7%	55.3%	130	5.0%	0.0%	13.5%	5	17.9%	15.0%	20.8%	125
KL Modify fence	26.8%	13.0%	40.7%	7	56.0%	37.7%	74.3%	65				2	16.3%	12.6%	20.0%	62
KP Modify signs and lighting	28.2%	0.0%	61.9%	15	51.4%	35.1%	67.8%	68	8.0%	0.0%	20.2%	11	34.2%	22.4%	46.0%	68
LA Highway planting	9.7%	3.9%	15.5%	14	32.0%	23.6%	40.4%	62	7.3%	0.6%	14.0%	8	29.5%	23.8%	35.3%	47
LB Irrigation system	5.8%	1.2%	10.4%	11	32.6%	23.3%	42.0%	45				2	27.2%	22.8%	31.7%	43

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LC Restore highway planting	10.5%	7.3%	13.7%	33	34.8%	27.6%	42.0%	124				4	33.3%	29.0%	37.6%	106
MA Drainage w/strce \$	11.7%	3.5%	19.8%	10	37.0%	24.1%	49.9%	27	11.1%	0.0%	26.0%	9	20.8%	17.5%	24.0%	30
MB Slope protection	18.7%	12.2%	25.3%	27	33.2%	24.1%	42.3%	73	7.1%	4.3%	9.6%	29	22.7%	14.5%	30.9%	70
MD Install drainage facility	36.8%	20.9%	52.7%	49	60.6%	50.7%	70.6%	284	23.3%	16.2%	30.4%	70	23.7%	20.7%	26.7%	267
NA Soundwall	21.2%	12.5%	29.8%	16	32.5%	26.7%	38.3%	75	4.7%	2.0%	7.3%	35	24.5%	20.5%	28.5%	70
PA Rehab highway AC	10.5%	5.2%	15.7%	26	20.9%	15.5%	26.2%	95	6.7%	0.6%	12.8%	29	16.8%	13.8%	19.8%	84
PB Rehab freeway AC	9.3%	4.2%	14.4%	12	14.5%	10.3%	18.6%	54	7.3%	0.6%	14.0%	7	12.9%	11.0%	14.8%	38
PC Reconstruct interchange	32.9%	0.0%	76.9%	5	43.9%	23.7%	64.2%	16				1	20.9%	9.0%	32.7%	15
PD Rehab PCC pavement	14.9%	4.9%	24.8%	13	19.3%	13.7%	25.0%	49				3	19.1%	13.6%	24.5%	35
PE Rehab w/strce \$	4.2%	0.7%	7.7%	12	14.8%	11.5%	18.2%	48				4	14.3%	12.7%	15.8%	53
PG Recycle AC or PCC pavement				3	14.0%	4.8%	23.2%	9				0	17.8%	13.3%	22.2%	8
QA Widen highway w/o strce \$				0	31.6%	15.3%	47.9%	8	17.6%	535.0%	29.8%	8	20.7%	11.8%	29.7%	7
QB Widen highway w/strce \$				2	13.5%	6.3%	20.8%	12	10.2%	5.9%	14.6%	12	15.6%	10.9%	20.3%	9
QC Widen shoulder w/o strce \$	24.4%	15.3%	33.6%	29	41.9%	33.5%	50.4%	99	15.0%	9.2%	20.8%	39	21.5%	18.6%	24.3%	104
QD Widen freeway w/o strce \$				1	15.4%	1.4%	29.5%	7				3	16.6%	11.7%	21.5%	9
QE Widen freeway w/strce \$				4	14.2%	11.4%	16.9%	57	2.4%	1.4%	3.3%	51	17.5%	15.1%	19.9%	47
QF Modify ramps	33.7%	18.0%	49.5%	12	48.7%	35.8%	61.7%	37	8.2%	0.0%	24.5%	9	30.3%	25.3%	35.2%	36
QG Widen and channelization	27.1%	14.6%	39.6%	15	64.6%	38.7%	90.5%	25	18.6%	11.7%	25.6%	18	26.1%	18.3%	34.0%	25
QH Modify ramps w/strce\$				2	21.2%	14.1%	28.2%	18	2.0%	1.0%	3.0%	18	19.1%	15.7%	22.5%	15

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QI Widen shoulder w/strce \$				3	24.9%	2.1%	47.8%	13	6.2%	0.3%	12.1%	10	23.7%	13.4%	33.9%	10
QJ Passing lane w/o strce \$				3	25.1%	18.2%	32.0%	22	10.1%	3.2%	16.9%	9	19.9%	15.1%	24.7%	16
QL Widen signals & lighting	10.5%	0.0%	22.0%	5	37.5%	25.8%	49.2%	12	8.3%	1.7%	14.8%	9	23.3%	16.7%	30.0%	11
QQ Construct or modify curbs	33.5%	9.7%	57.3%	10	64.6%	48.7%	80.5%	71	32.5%	0.0%	80.4%	18	30.8%	22.6%	39.0%	62

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