

**Engineering Factors
Overhead Costs per Total Construction Costs**

**7/1/2009 - 6/30/2012
Statewide Totals**

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
1- ITS	7.60%	0.00%	22.51%	30.11%	0.00%	6
A- ADD LANES	7.42%	1.35%	7.83%	16.61%	13.00%	37
B- BRIDGE REPLACEMENT	11.83%	0.39%	8.30%	20.52%	1.77%	47
D- DUAL DIVIDED	5.91%	0.76%	6.27%	12.94%	11.94%	35
E- ENHANCEMENTS	10.26%	0.06%	7.47%	17.79%	0.40%	14
F- FREEWAY	5.50%	0.56%	7.52%	13.58%	16.51%	13
G- PREV MAINT-BRIDGE	2.95%	0.02%	6.34%	9.31%	0.05%	44
H- HIGH TYPE RESURFACING	3.20%	0.17%	6.51%	9.88%	0.30%	72
I- INTERCHANGE	4.29%	0.19%	5.13%	9.62%	3.25%	29
J- PREV MAINT-PAVEMENT	1.09%	0.00%	5.80%	6.89%	0.00%	118
K- MED TYPE RESURFACING	1.27%	0.01%	6.20%	7.48%	0.02%	104
L- LOW TYPE RESURFACING	0.44%	0.00%	5.39%	5.83%	0.00%	198
M- MAJOR BRIDGE	8.31%	0.00%	5.77%	14.08%	0.00%	9
O- OTHER	11.30%	0.35%	11.53%	23.18%	1.86%	47
P- PAVEMENT REPLACEMENT	1.25%	0.00%	5.60%	6.85%	0.00%	18
Q- CMAQ	5.04%	0.84%	11.71%	17.59%	8.66%	79
R- BRIDGE REHABILITATION	5.40%	0.08%	10.10%	15.57%	0.13%	166
T- NEW OR IMPROVED 2 LANE	11.21%	1.87%	8.56%	21.64%	19.58%	8
W- SHOULDER WIDENING	3.55%	0.00%	3.27%	6.82%	0.00%	2
X- SAFETY	6.58%	0.81%	9.03%	16.42%	6.96%	102
Y- ROUTINE MAINTENANCE	3.25%	0.00%	9.72%	12.98%	0.00%	22
Unassigned Work Type	7.30%	0.00%	7.30%	14.60%	0.00%	1
	5.20%	0.44%	7.10%	12.73%	5.28%	1,171

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	5.91%	0.68%	6.32%	12.90%	9.55%	131
TCOS	4.49%	0.23%	7.79%	12.51%	1.57%	1,023
OTHER	9.32%	0.05%	6.90%	16.28%	0.34%	17
	5.20%	0.44%	7.10%	12.73%	5.28%	1,171

Added costs as percentages of corresponding construction costs.

**Engineering Factors
Overhead Costs per Total Construction Costs**

**7/1/2009 - 6/30/2012
By District**

Northwest

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
A- ADD LANES	0.00%	0.00%	0.00%	0.00%	0.00%	1
B- BRIDGE REPLACEMENT	4.91%	0.01%	5.15%	10.07%	0.01%	4
E- ENHANCEMENTS	60.29%	0.00%	0.00%	60.29%	0.00%	1
G- PREV MAINT-BRIDGE	2.44%	0.00%	3.58%	6.02%	0.00%	3
H- HIGH TYPE RESURFACING	2.26%	0.46%	5.03%	7.75%	0.03%	6
J- PREV MAINT-PAVEMENT	1.01%	0.00%	4.24%	5.25%	0.00%	17
K- MED TYPE RESURFACING	1.10%	0.00%	4.86%	5.96%	0.00%	16
L- LOW TYPE RESURFACING	0.37%	0.00%	4.23%	4.60%	0.00%	28
M- MAJOR BRIDGE	0.00%	0.00%	0.00%	0.00%	0.00%	1
O- OTHER	21.60%	3.00%	19.99%	44.58%	30.16%	3
P- PAVEMENT REPLACEMENT	0.09%	0.00%	2.54%	2.63%	0.00%	3
R- BRIDGE REHABILITATION	6.28%	0.04%	10.27%	16.59%	0.00%	28
T- NEW OR IMPROVED 2 LANE	12.77%	1.63%	8.59%	22.99%	8.26%	1
W- SHOULDER WIDENING	0.49%	0.00%	4.12%	4.61%	0.00%	1
X- SAFETY	4.25%	0.00%	13.32%	17.57%	0.00%	4
	2.94%	0.15%	5.62%	8.71%	0.71%	117

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	11.94%	1.52%	8.03%	21.49%	7.72%	3
TCOS	2.40%	0.07%	5.50%	7.97%	0.30%	112
OTHER	2.42%	0.00%	3.99%	6.41%	0.00%	2
	2.94%	0.15%	5.62%	8.71%	0.71%	117

Added costs as percentages of corresponding construction costs.

**Engineering Factors
Overhead Costs per Total Construction Costs**

**7/1/2009 - 6/30/2012
By District**

Northeast

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
A- ADD LANES	5.68%	0.64%	8.35%	14.67%	9.62%	6
D- DUAL DIVIDED	12.24%	1.03%	7.13%	20.39%	13.31%	3
G- PREV MAINT-BRIDGE	12.23%	0.00%	12.86%	25.09%	0.00%	9
H- HIGH TYPE RESURFACING	2.32%	0.00%	6.98%	9.30%	0.00%	8
I- INTERCHANGE	5.63%	0.05%	8.06%	13.74%	0.24%	2
J- PREV MAINT-PAVEMENT	5.94%	0.00%	6.50%	12.44%	0.00%	3
K- MED TYPE RESURFACING	1.80%	0.00%	9.55%	11.36%	0.00%	2
L- LOW TYPE RESURFACING	0.40%	0.00%	5.55%	5.95%	0.00%	32
O- OTHER	13.41%	0.33%	16.25%	29.99%	0.00%	3
P- PAVEMENT REPLACEMENT	9.57%	0.00%	9.22%	18.79%	0.00%	1
R- BRIDGE REHABILITATION	4.60%	0.00%	14.06%	18.66%	0.00%	13
X- SAFETY	10.09%	0.00%	20.81%	30.90%	0.00%	3
	7.76%	0.57%	7.84%	16.17%	7.62%	85

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	10.10%	0.86%	7.50%	18.46%	11.42%	11
TCOS	3.06%	0.01%	8.50%	11.57%	0.00%	74
	7.76%	0.57%	7.84%	16.17%	7.62%	85

Added costs as percentages of corresponding construction costs.

**Engineering Factors
Overhead Costs per Total Construction Costs**

**7/1/2009 - 6/30/2012
By District**

Kansas City

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
A- ADD LANES	6.28%	0.83%	8.55%	15.67%	1.77%	5
B- BRIDGE REPLACEMENT	15.03%	0.73%	8.72%	24.48%	2.72%	7
D- DUAL DIVIDED	5.72%	1.80%	7.91%	15.43%	19.41%	5
G- PREV MAINT-BRIDGE	2.54%	0.03%	5.72%	8.29%	0.08%	10
H- HIGH TYPE RESURFACING	2.46%	0.00%	5.78%	8.24%	0.00%	10
I- INTERCHANGE	3.27%	0.06%	3.71%	7.04%	1.96%	11
J- PREV MAINT-PAVEMENT	0.92%	0.00%	6.74%	7.67%	0.00%	31
K- MED TYPE RESURFACING	1.93%	0.00%	6.79%	8.73%	0.00%	7
L- LOW TYPE RESURFACING	1.45%	0.00%	7.33%	8.78%	0.00%	25
M- MAJOR BRIDGE	17.12%	0.00%	5.20%	22.32%	0.00%	3
O- OTHER	12.92%	0.00%	8.48%	21.40%	0.00%	12
Q- CMAQ	0.87%	0.00%	7.60%	8.46%	0.00%	9
R- BRIDGE REHABILITATION	7.55%	0.44%	9.63%	17.62%	0.55%	26
X- SAFETY	16.00%	2.56%	10.68%	29.25%	28.21%	14
Y- ROUTINE MAINTENANCE	2.11%	0.00%	8.69%	10.81%	0.00%	7
	5.09%	0.29%	5.86%	11.25%	2.95%	182

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	4.57%	0.29%	4.56%	9.42%	3.56%	24
TCOS	5.75%	0.30%	7.49%	13.55%	2.16%	158
	5.09%	0.29%	5.86%	11.25%	2.95%	182

Added costs as percentages of corresponding construction costs.

**Engineering Factors
Overhead Costs per Total Construction Costs**

**7/1/2009 - 6/30/2012
By District**

Central

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
A- ADD LANES	8.36%	1.78%	7.72%	17.86%	19.87%	7
B- BRIDGE REPLACEMENT	10.16%	0.47%	9.51%	20.14%	0.66%	5
D- DUAL DIVIDED	2.69%	0.73%	5.79%	9.22%	19.14%	11
E- ENHANCEMENTS	0.00%	0.00%	0.00%	0.00%	0.00%	1
G- PREV MAINT-BRIDGE	4.52%	0.00%	12.86%	17.38%	0.00%	3
H- HIGH TYPE RESURFACING	0.99%	0.00%	4.08%	5.07%	0.00%	10
I- INTERCHANGE	2.23%	0.13%	6.84%	9.20%	2.10%	5
J- PREV MAINT-PAVEMENT	0.05%	0.00%	3.57%	3.62%	0.00%	14
K- MED TYPE RESURFACING	1.00%	0.00%	5.86%	6.86%	0.00%	18
L- LOW TYPE RESURFACING	0.32%	0.00%	6.24%	6.57%	0.00%	28
O- OTHER	2.17%	0.00%	20.64%	22.81%	0.00%	3
P- PAVEMENT REPLACEMENT	2.62%	0.00%	8.92%	11.55%	0.00%	2
R- BRIDGE REHABILITATION	3.30%	0.00%	11.38%	14.69%	0.00%	18
X- SAFETY	6.73%	1.05%	10.08%	17.86%	1.83%	9
Y- ROUTINE MAINTENANCE	5.01%	0.00%	1.43%	6.44%	0.00%	3
	3.39%	0.57%	6.49%	10.45%	10.17%	137

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	3.82%	0.86%	6.36%	11.04%	16.72%	23
TCOS	2.73%	0.14%	6.70%	9.57%	0.22%	113
OTHER	0.00%	0.00%	0.00%	0.00%	0.00%	1
	3.39%	0.57%	6.49%	10.45%	10.17%	137

Added costs as percentages of corresponding construction costs.

**Engineering Factors
Overhead Costs per Total Construction Costs**

**7/1/2009 - 6/30/2012
By District**

St. Louis

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
1- ITS	0.00%	0.00%	18.44%	18.44%	0.00%	2
A- ADD LANES	10.21%	1.41%	6.34%	17.96%	16.08%	2
B- BRIDGE REPLACEMENT	11.77%	0.20%	10.47%	22.44%	2.07%	12
D- DUAL DIVIDED	10.59%	0.78%	6.20%	17.58%	11.62%	5
E- ENHANCEMENTS	18.45%	0.00%	9.72%	28.17%	0.00%	3
F- FREEWAY	4.61%	0.73%	7.23%	12.58%	22.66%	4
G- PREV MAINT-BRIDGE	1.96%	0.00%	5.57%	7.54%	0.00%	3
H- HIGH TYPE RESURFACING	4.33%	0.00%	7.68%	12.01%	0.00%	25
I- INTERCHANGE	7.89%	0.95%	7.26%	16.09%	12.85%	4
J- PREV MAINT-PAVEMENT	2.61%	0.00%	8.09%	10.69%	0.00%	10
K- MED TYPE RESURFACING	3.16%	0.00%	6.85%	10.01%	0.00%	8
M- MAJOR BRIDGE	2.60%	0.00%	4.91%	7.50%	0.00%	4
O- OTHER	16.40%	1.03%	15.61%	33.04%	1.19%	6
P- PAVEMENT REPLACEMENT	8.13%	0.00%	12.61%	20.74%	0.00%	3
Q- CMAQ	11.44%	0.90%	19.37%	31.71%	4.23%	60
R- BRIDGE REHABILITATION	4.72%	0.00%	12.33%	17.06%	0.00%	33
X- SAFETY	13.58%	1.57%	18.37%	33.52%	14.86%	23
Y- ROUTINE MAINTENANCE	2.66%	0.00%	13.62%	16.28%	0.00%	2
	7.56%	0.48%	9.66%	17.69%	6.97%	209

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	7.36%	0.72%	6.54%	14.61%	13.71%	19
TCOS	7.39%	0.31%	12.01%	19.71%	2.10%	187
OTHER	18.45%	0.00%	9.72%	28.17%	0.00%	3
	7.56%	0.48%	9.66%	17.69%	6.97%	209

Added costs as percentages of corresponding construction costs.

**Engineering Factors
Overhead Costs per Total Construction Costs**

**7/1/2009 - 6/30/2012
By District**

Southwest

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
1- ITS	13.57%	0.00%	17.97%	31.54%	0.00%	3
A- ADD LANES	8.65%	2.21%	9.57%	20.43%	21.09%	7
B- BRIDGE REPLACEMENT	10.91%	0.18%	5.46%	16.54%	1.45%	7
D- DUAL DIVIDED	4.52%	0.32%	5.71%	10.55%	3.13%	6
E- ENHANCEMENTS	5.90%	0.10%	6.30%	12.30%	0.64%	7
F- FREEWAY	6.81%	0.00%	7.18%	13.99%	0.00%	5
G- PREV MAINT-BRIDGE	10.78%	0.00%	9.15%	19.94%	0.00%	4
H- HIGH TYPE RESURFACING	3.29%	0.00%	7.44%	10.73%	0.00%	5
I- INTERCHANGE	8.86%	0.53%	10.43%	19.82%	5.81%	6
J- PREV MAINT-PAVEMENT	1.07%	0.00%	3.78%	4.85%	0.00%	14
K- MED TYPE RESURFACING	1.22%	0.00%	5.56%	6.78%	0.00%	29
L- LOW TYPE RESURFACING	0.18%	0.00%	4.75%	4.93%	0.00%	46
O- OTHER	8.73%	0.10%	13.51%	22.34%	2.21%	11
R- BRIDGE REHABILITATION	6.06%	0.02%	6.66%	12.74%	0.16%	31
T- NEW OR IMPROVED 2 LANE	11.40%	2.91%	6.78%	21.10%	33.96%	2
X- SAFETY	3.05%	0.21%	8.01%	11.26%	0.53%	26
Y- ROUTINE MAINTENANCE	18.58%	0.00%	6.14%	24.72%	0.00%	5
	6.18%	0.51%	6.92%	13.60%	5.10%	214

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	7.24%	1.06%	7.83%	16.14%	10.92%	26
TCOS	5.30%	0.07%	6.19%	11.55%	0.49%	181
OTHER	5.90%	0.10%	6.30%	12.30%	0.64%	7
	6.18%	0.51%	6.92%	13.60%	5.10%	214

Added costs as percentages of corresponding construction costs.

**Engineering Factors
Overhead Costs per Total Construction Costs**

**7/1/2009 - 6/30/2012
By District**

Southeast

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
A- ADD LANES	7.32%	0.73%	4.81%	12.86%	5.55%	8
B- BRIDGE REPLACEMENT	16.90%	1.07%	12.11%	30.08%	3.35%	11
D- DUAL DIVIDED	2.01%	0.46%	6.02%	8.49%	3.62%	5
E- ENHANCEMENTS	8.00%	0.00%	18.67%	26.67%	0.00%	2
F- FREEWAY	7.22%	0.38%	8.45%	16.04%	8.39%	4
G- PREV MAINT-BRIDGE	1.02%	0.00%	2.07%	3.09%	0.00%	6
H- HIGH TYPE RESURFACING	6.17%	1.15%	8.66%	15.98%	2.22%	8
I- INTERCHANGE	7.61%	0.05%	7.42%	15.08%	0.00%	1
J- PREV MAINT-PAVEMENT	0.32%	0.00%	4.38%	4.69%	0.00%	13
K- MED TYPE RESURFACING	0.42%	0.00%	6.96%	7.38%	0.00%	22
L- LOW TYPE RESURFACING	0.21%	0.01%	5.22%	5.43%	0.00%	35
O- OTHER	2.42%	0.64%	10.28%	13.33%	1.14%	8
P- PAVEMENT REPLACEMENT	0.69%	0.00%	5.32%	6.01%	0.00%	6
R- BRIDGE REHABILITATION	2.91%	0.00%	11.14%	14.06%	0.00%	13
T- NEW OR IMPROVED 2 LANE	10.13%	0.89%	10.45%	21.47%	10.49%	5
W- SHOULDER WIDENING	8.89%	0.00%	1.79%	10.68%	0.00%	1
X- SAFETY	1.90%	0.15%	6.49%	8.55%	0.10%	11
Unassigned Work Type	7.30%	0.00%	7.30%	14.60%	0.00%	1
	4.22%	0.43%	6.82%	11.47%	2.90%	160

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	5.02%	0.54%	6.40%	11.96%	5.08%	23
TCOS	3.36%	0.33%	7.25%	10.94%	0.73%	133
OTHER	8.48%	0.00%	5.03%	13.51%	0.00%	4
	4.22%	0.43%	6.82%	11.47%	2.90%	160

Added costs as percentages of corresponding construction costs.

**Engineering Factors
Overhead Costs per Total Construction Costs**

**7/1/2009 - 6/30/2012
By District**

Various Counties Statewide

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
1- ITS	10.20%	0.00%	32.88%	43.08%	0.00%	1
A- ADD LANES	3.90%	3.54%	19.90%	27.34%	30.21%	1
B- BRIDGE REPLACEMENT	11.12%	0.19%	9.49%	20.79%	0.43%	1
G- PREV MAINT-BRIDGE	1.97%	0.00%	8.66%	10.63%	0.00%	6
J- PREV MAINT-PAVEMENT	0.29%	0.00%	7.30%	7.59%	0.00%	16
K- MED TYPE RESURFACING	3.58%	0.23%	8.87%	12.69%	0.28%	2
L- LOW TYPE RESURFACING	0.70%	0.00%	5.98%	6.69%	0.00%	4
M- MAJOR BRIDGE	1.49%	0.00%	11.38%	12.87%	0.00%	1
O- OTHER	7.42%	0.00%	13.83%	21.25%	0.00%	1
P- PAVEMENT REPLACEMENT	0.49%	0.00%	6.64%	7.13%	0.00%	3
Q- CMAQ	1.00%	0.94%	6.74%	8.68%	13.40%	10
R- BRIDGE REHABILITATION	0.26%	0.00%	13.70%	13.95%	0.00%	4
X- SAFETY	1.53%	0.00%	2.55%	4.08%	0.00%	12
Y- ROUTINE MAINTENANCE	1.69%	0.00%	1.98%	3.67%	0.00%	5
	1.72%	0.52%	7.51%	9.74%	6.43%	67

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	2.60%	1.63%	15.31%	19.54%	13.94%	2
TCOS	1.64%	0.42%	6.85%	8.92%	5.80%	65
	1.72%	0.52%	7.51%	9.74%	6.43%	67

Added costs as percentages of corresponding construction costs.