

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

**7/1/2010 - 6/30/2013
Statewide Totals**

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
1- ITS	10.96%	0.00%	24.34%	35.30%	0.00%	5
A- ADD LANES	7.95%	1.27%	7.55%	16.77%	13.04%	27
B- BRIDGE REPLACEMENT	9.71%	0.39%	8.96%	19.06%	1.67%	51
D- DUAL DIVIDED	5.46%	0.95%	6.72%	13.12%	14.47%	34
E- ENHANCEMENTS	11.06%	0.09%	9.82%	20.97%	0.00%	21
F- FREEWAY	9.17%	0.45%	6.57%	16.19%	14.16%	12
G- PREV MAINT-BRIDGE	3.32%	0.01%	5.76%	9.09%	0.04%	50
H- HIGH TYPE RESURFACING	1.81%	0.01%	5.77%	7.59%	0.00%	75
I- INTERCHANGE	4.71%	0.17%	6.64%	11.53%	3.38%	26
J- PREV MAINT-PAVEMENT	1.47%	0.06%	6.30%	7.83%	0.09%	127
K- MED TYPE RESURFACING	0.94%	0.01%	5.16%	6.10%	0.01%	162
L- LOW TYPE RESURFACING	0.44%	0.00%	5.19%	5.63%	0.00%	200
M- MAJOR BRIDGE	3.04%	0.00%	5.09%	8.13%	0.00%	7
O- OTHER	8.65%	0.36%	8.59%	17.59%	3.32%	86
P- PAVEMENT REPLACEMENT	1.22%	0.03%	5.49%	6.74%	0.10%	21
Q- CMAQ	6.01%	0.26%	9.60%	15.87%	2.46%	73
R- BRIDGE REHABILITATION	4.98%	0.10%	8.88%	13.96%	0.15%	141
S- BRDG RETROFIT AND STR	1.27%	0.00%	7.93%	9.19%	0.00%	2
T- NEW OR IMPROVED 2 LANE	4.73%	0.22%	10.36%	15.31%	0.07%	5
W- SHOULDER WIDENING	8.89%	0.00%	1.79%	10.68%	0.00%	1
X- SAFETY	7.67%	0.71%	11.26%	19.64%	7.92%	91
Y- ROUTINE MAINTENANCE	2.69%	0.00%	8.09%	10.78%	0.00%	20
	4.59%	0.37%	7.00%	11.97%	4.83%	1,237

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	6.03%	0.76%	6.84%	13.63%	11.15%	111
TCOS	3.60%	0.13%	7.07%	10.79%	0.88%	1,104
OTHER	10.93%	0.09%	9.35%	20.36%	0.00%	22
	4.59%	0.37%	7.00%	11.97%	4.83%	1,237

Engineering costs as percentages of corresponding actual construction costs.
Based on projects completed within the indicated time frame.

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

**7/1/2010 - 6/30/2013
By District**

Northwest

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
B- BRIDGE REPLACEMENT	4.75%	0.01%	5.41%	10.17%	0.01%	5
G- PREV MAINT-BRIDGE	2.01%	0.00%	2.96%	4.97%	0.00%	4
H- HIGH TYPE RESURFACING	1.92%	0.17%	5.78%	7.86%	0.01%	6
J- PREV MAINT-PAVEMENT	1.16%	0.00%	4.46%	5.62%	0.00%	16
K- MED TYPE RESURFACING	1.19%	0.00%	5.05%	6.24%	0.00%	23
L- LOW TYPE RESURFACING	0.35%	0.00%	4.72%	5.07%	0.00%	27
M- MAJOR BRIDGE	0.00%	0.00%	0.00%	0.00%	0.00%	1
O- OTHER	18.28%	2.39%	17.30%	37.96%	22.61%	4
P- PAVEMENT REPLACEMENT	0.07%	0.02%	3.46%	3.55%	0.00%	5
R- BRIDGE REHABILITATION	6.69%	0.00%	9.24%	15.93%	0.00%	22
X- SAFETY	14.50%	0.00%	24.50%	39.00%	0.00%	5
	2.59%	0.06%	5.79%	8.44%	0.27%	118

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	0.00%	0.00%	0.00%	0.00%	0.00%	1
TCOS	2.59%	0.06%	5.79%	8.44%	0.27%	117
	2.59%	0.06%	5.79%	8.44%	0.27%	118

Engineering costs as percentages of corresponding actual construction costs.
Based on projects completed within the indicated time frame.

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

**7/1/2010 - 6/30/2013
By District**

Northeast

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
A- ADD LANES	8.36%	0.46%	12.97%	21.79%	9.72%	2
D- DUAL DIVIDED	8.16%	1.33%	7.41%	16.91%	16.20%	3
G- PREV MAINT-BRIDGE	7.03%	0.00%	9.79%	16.82%	0.00%	9
H- HIGH TYPE RESURFACING	1.77%	0.00%	6.67%	8.44%	0.00%	9
I- INTERCHANGE	5.63%	0.05%	8.06%	13.74%	0.24%	2
J- PREV MAINT-PAVEMENT	1.58%	0.00%	3.00%	4.58%	0.00%	10
K- MED TYPE RESURFACING	2.47%	0.00%	8.90%	11.36%	0.00%	3
L- LOW TYPE RESURFACING	0.34%	0.00%	5.14%	5.48%	0.00%	40
O- OTHER	22.43%	1.45%	15.80%	39.68%	10.28%	8
R- BRIDGE REHABILITATION	3.92%	0.00%	15.25%	19.17%	0.00%	8
X- SAFETY	0.00%	0.00%	4.96%	4.96%	0.00%	1
	5.68%	0.61%	7.99%	14.28%	7.47%	95

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	7.90%	1.08%	8.17%	17.15%	13.60%	7
TCOS	3.19%	0.08%	7.78%	11.05%	0.56%	88
	5.68%	0.61%	7.99%	14.28%	7.47%	95

Engineering costs as percentages of corresponding actual construction costs.
Based on projects completed within the indicated time frame.

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

**7/1/2010 - 6/30/2013
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	12.87%	1.25%	10.63%	24.75%	4.63%	6
D- DUAL DIVIDED	5.74%	1.83%	7.93%	15.50%	19.72%	4
E- ENHANCEMENTS	1.14%	0.00%	24.15%	25.28%	0.00%	2
G- PREV MAINT-BRIDGE	4.37%	0.03%	6.03%	10.43%	0.07%	10
H- HIGH TYPE RESURFACING	2.62%	0.00%	4.92%	7.55%	0.00%	9
I- INTERCHANGE	2.10%	0.12%	5.53%	7.75%	3.57%	9
J- PREV MAINT-PAVEMENT	2.29%	0.26%	8.24%	10.79%	0.40%	19
K- MED TYPE RESURFACING	0.59%	0.00%	4.40%	4.99%	0.00%	9
L- LOW TYPE RESURFACING	1.04%	0.00%	5.96%	7.00%	0.00%	25
M- MAJOR BRIDGE	9.37%	0.00%	4.47%	13.84%	0.00%	2
O- OTHER	11.34%	0.11%	7.93%	19.38%	0.31%	15
P- PAVEMENT REPLACEMENT	0.86%	0.00%	5.27%	6.13%	0.00%	1
Q- CMAQ	0.89%	0.00%	7.59%	8.49%	0.00%	7
R- BRIDGE REHABILITATION	5.98%	0.38%	8.32%	14.68%	0.46%	22
X- SAFETY	14.25%	1.34%	12.15%	27.73%	8.62%	11
Y- ROUTINE MAINTENANCE	0.60%	0.00%	8.13%	8.73%	0.00%	7
	4.15%	0.35%	6.75%	11.25%	3.03%	163

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	3.33%	0.49%	6.28%	10.10%	6.00%	20
TCOS	4.75%	0.25%	7.06%	12.05%	0.91%	141
OTHER	1.14%	0.00%	24.15%	25.28%	0.00%	2
	4.15%	0.35%	6.75%	11.25%	3.03%	163

Engineering costs as percentages of corresponding actual construction costs.
Based on projects completed within the indicated time frame.

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

**7/1/2010 - 6/30/2013
By District**

Central

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
A- ADD LANES	8.32%	1.66%	8.21%	18.18%	19.77%	6
B- BRIDGE REPLACEMENT	12.60%	0.52%	9.57%	22.68%	0.73%	6
D- DUAL DIVIDED	5.05%	0.96%	6.53%	12.54%	18.19%	15
E- ENHANCEMENTS	0.76%	0.00%	8.69%	9.45%	0.00%	5
G- PREV MAINT-BRIDGE	7.27%	0.00%	9.57%	16.84%	0.00%	3
H- HIGH TYPE RESURFACING	0.74%	0.00%	4.90%	5.64%	0.00%	13
I- INTERCHANGE	7.60%	0.00%	6.82%	14.42%	0.00%	4
J- PREV MAINT-PAVEMENT	0.03%	0.00%	3.78%	3.81%	0.00%	27
K- MED TYPE RESURFACING	1.00%	0.00%	5.41%	6.41%	0.00%	23
L- LOW TYPE RESURFACING	0.24%	0.00%	5.74%	5.98%	0.00%	37
O- OTHER	1.17%	0.00%	16.54%	17.71%	0.00%	4
P- PAVEMENT REPLACEMENT	12.67%	0.96%	11.31%	24.94%	3.59%	3
R- BRIDGE REHABILITATION	3.42%	0.00%	10.17%	13.59%	0.00%	16
T- NEW OR IMPROVED 2 LANE	6.25%	0.00%	8.91%	15.16%	0.00%	1
X- SAFETY	2.38%	0.31%	8.57%	11.26%	0.86%	7
Y- ROUTINE MAINTENANCE	13.25%	0.00%	1.32%	14.57%	0.00%	1
	4.30%	0.63%	6.74%	11.66%	10.25%	171

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	5.75%	1.01%	6.84%	13.60%	17.24%	26
TCOS	2.28%	0.08%	6.48%	8.83%	0.17%	140
OTHER	0.76%	0.00%	8.69%	9.45%	0.00%	5
	4.30%	0.63%	6.74%	11.66%	10.25%	171

Engineering costs as percentages of corresponding actual construction costs.
Based on projects completed within the indicated time frame.

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

**7/1/2010 - 6/30/2013
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%	18.69%	18.69%	0.00%	1
A- ADD LANES	9.00%	1.06%	7.36%	17.41%	15.86%	5
B- BRIDGE REPLACEMENT	8.97%	0.06%	9.61%	18.64%	0.22%	15
D- DUAL DIVIDED	18.25%	2.43%	9.23%	29.90%	35.76%	2
E- ENHANCEMENTS	16.64%	0.00%	9.50%	26.14%	0.00%	4
F- FREEWAY	9.76%	0.53%	6.50%	16.79%	16.66%	4
G- PREV MAINT-BRIDGE	0.20%	0.00%	2.07%	2.27%	0.00%	2
H- HIGH TYPE RESURFACING	4.17%	0.00%	7.45%	11.61%	0.00%	23
I- INTERCHANGE	10.20%	0.12%	7.56%	17.88%	1.85%	4
J- PREV MAINT-PAVEMENT	2.51%	0.00%	7.74%	10.25%	0.00%	18
K- MED TYPE RESURFACING	1.40%	0.00%	5.72%	7.12%	0.00%	6
L- LOW TYPE RESURFACING	5.29%	0.00%	5.48%	10.77%	0.00%	1
M- MAJOR BRIDGE	2.57%	0.00%	3.35%	5.92%	0.00%	3
O- OTHER	12.20%	0.59%	14.06%	26.85%	0.77%	12
P- PAVEMENT REPLACEMENT	16.26%	0.00%	11.12%	27.39%	0.00%	2
Q- CMAQ	9.77%	0.48%	14.43%	24.69%	4.54%	47
R- BRIDGE REHABILITATION	2.97%	0.11%	9.43%	12.51%	0.11%	32
S- BRDG RETROFIT AND STR	1.27%	0.00%	7.93%	9.19%	0.00%	2
X- SAFETY	9.74%	1.27%	15.74%	26.75%	15.78%	22
Y- ROUTINE MAINTENANCE	3.69%	0.00%	9.86%	13.55%	0.00%	2
	7.13%	0.40%	8.68%	16.21%	6.55%	207

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	9.99%	0.79%	6.78%	17.56%	15.68%	18
TCOS	5.33%	0.20%	9.68%	15.21%	1.77%	185
OTHER	16.64%	0.00%	9.50%	26.14%	0.00%	4
	7.13%	0.40%	8.68%	16.21%	6.55%	207

Engineering costs as percentages of corresponding actual construction costs.
Based on projects completed within the indicated time frame.

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

**7/1/2010 - 6/30/2013
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	9.45%	3.43%	6.99%	19.87%	23.14%	5
B- BRIDGE REPLACEMENT	10.19%	0.33%	7.67%	18.19%	2.83%	11
D- DUAL DIVIDED	4.00%	0.45%	5.97%	10.43%	4.32%	5
E- ENHANCEMENTS	51.08%	1.22%	13.98%	66.28%	0.00%	7
F- FREEWAY	5.83%	0.00%	6.95%	12.78%	0.00%	8
G- PREV MAINT-BRIDGE	3.85%	0.00%	7.27%	11.12%	0.00%	10
H- HIGH TYPE RESURFACING	1.54%	0.00%	5.22%	6.76%	0.00%	7
I- INTERCHANGE	10.54%	0.53%	10.03%	21.10%	5.78%	7
J- PREV MAINT-PAVEMENT	1.39%	0.00%	4.14%	5.53%	0.00%	14
K- MED TYPE RESURFACING	0.80%	0.00%	4.43%	5.23%	0.00%	63
L- LOW TYPE RESURFACING	0.07%	0.00%	4.17%	4.25%	0.00%	33
O- OTHER	10.42%	0.38%	8.37%	19.17%	8.06%	16
P- PAVEMENT REPLACEMENT	0.26%	0.00%	7.11%	7.36%	0.00%	4
Q- CMAQ	1.56%	0.00%	0.42%	1.98%	0.00%	3
R- BRIDGE REHABILITATION	6.84%	0.01%	6.78%	13.63%	0.14%	28
X- SAFETY	5.88%	0.21%	7.81%	13.89%	7.83%	25
Y- ROUTINE MAINTENANCE	17.75%	0.00%	5.92%	23.67%	0.00%	3
	5.40%	0.34%	6.47%	12.21%	3.30%	252

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	7.09%	0.90%	7.49%	15.47%	7.25%	25
TCOS	4.37%	0.08%	5.96%	10.41%	1.54%	220
OTHER	51.08%	1.22%	13.98%	66.28%	0.00%	7
	5.40%	0.34%	6.47%	12.21%	3.30%	252

Engineering costs as percentages of corresponding actual construction costs.
Based on projects completed within the indicated time frame.

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

**7/1/2010 - 6/30/2013
By District**

Southeast

Work Types	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
A- ADD LANES	7.17%	0.73%	5.96%	13.86%	8.09%	4
B- BRIDGE REPLACEMENT	8.70%	0.55%	10.92%	20.17%	3.12%	7
D- DUAL DIVIDED	1.62%	0.16%	5.21%	6.99%	1.31%	4
E- ENHANCEMENTS	8.00%	0.00%	18.67%	26.67%	0.00%	2
G- PREV MAINT-BRIDGE	1.10%	0.00%	2.44%	3.54%	0.00%	5
H- HIGH TYPE RESURFACING	0.38%	0.00%	5.30%	5.69%	0.00%	8
J- PREV MAINT-PAVEMENT	0.43%	0.00%	4.48%	4.91%	0.00%	8
K- MED TYPE RESURFACING	1.12%	0.05%	6.58%	7.75%	0.11%	30
L- LOW TYPE RESURFACING	0.18%	0.01%	5.71%	5.89%	0.00%	32
O- OTHER	1.89%	0.42%	8.61%	10.92%	0.75%	12
P- PAVEMENT REPLACEMENT	0.89%	0.00%	5.66%	6.54%	0.00%	4
R- BRIDGE REHABILITATION	3.56%	0.00%	11.90%	15.46%	0.00%	11
T- NEW OR IMPROVED 2 LANE	4.50%	0.25%	10.59%	15.34%	0.08%	4
W- SHOULDER WIDENING	8.89%	0.00%	1.79%	10.68%	0.00%	1
X- SAFETY	3.81%	0.56%	10.24%	14.61%	1.68%	6
	2.51%	0.21%	6.17%	8.89%	1.79%	138

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	4.11%	0.40%	5.95%	10.46%	3.97%	12
TCOS	1.34%	0.07%	6.34%	7.75%	0.28%	123
OTHER	8.75%	0.00%	4.52%	13.26%	0.00%	3
	2.51%	0.21%	6.17%	8.89%	1.79%	138

Engineering costs as percentages of corresponding actual construction costs.
Based on projects completed within the indicated time frame.

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

**7/1/2010 - 6/30/2013
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
B- BRIDGE REPLACEMENT	11.12%	0.19%	9.49%	20.79%	0.43%	1
D- DUAL DIVIDED	0.05%	0.00%	11.30%	11.35%	0.00%	1
E- ENHANCEMENTS	0.69%	0.00%	8.64%	9.32%	0.00%	1
G- PREV MAINT-BRIDGE	1.45%	0.00%	7.80%	9.25%	0.00%	7
J- PREV MAINT-PAVEMENT	0.16%	0.00%	7.90%	8.05%	0.00%	15
K- MED TYPE RESURFACING	0.27%	0.00%	6.21%	6.48%	0.00%	5
L- LOW TYPE RESURFACING	0.33%	0.00%	4.67%	5.00%	0.00%	5
M- MAJOR BRIDGE	1.49%	0.00%	11.38%	12.87%	0.00%	1
O- OTHER	0.41%	0.00%	1.75%	2.16%	0.00%	15
P- PAVEMENT REPLACEMENT	0.36%	0.00%	7.41%	7.77%	0.00%	2
Q- CMAQ	1.73%	0.00%	3.58%	5.31%	0.00%	16
R- BRIDGE REHABILITATION	0.00%	0.00%	13.97%	13.97%	0.00%	2
X- SAFETY	10.73%	0.00%	12.37%	23.10%	0.00%	14
Y- ROUTINE MAINTENANCE	1.47%	0.00%	3.44%	4.91%	0.00%	7
	1.62%	0.01%	6.60%	8.23%	0.02%	93

Work Type Categories	Preliminary Engineering	Right of Way Incidentals	Construction Inspection	Total Overhead	Right of Way Purchases	n=
MAJOR PROJECT	0.64%	0.00%	11.33%	11.97%	0.00%	2
TCOS	1.78%	0.01%	5.86%	7.65%	0.02%	90
OTHER	0.69%	0.00%	8.64%	9.32%	0.00%	1
	1.62%	0.01%	6.60%	8.23%	0.02%	93

Engineering costs as percentages of corresponding actual construction costs.
Based on projects completed within the indicated time frame.