Three Year Engineering Factors, SFY 2026 Report:

Engineering Costs per Total Construction Costs

Report Key:

Projects are grouped by the primary Detailed Work type, and then Detailed Work types are grouped into categories:

Note: Since SFY 2015's report, all projects are in the seven, reorganized districts. The group of "various" districts has been removed.

Category	Detailed Work
CAPITAL IMPROVEMENT	DRIVING/THRU LANES
CAPITAL IMPROVEMENT	CONSTRUCT NEW BRIDGE
CAPITAL IMPROVEMENT	INTERCHANGE
ASSET MANAGEMENT	BARRIERS
ASSET MANAGEMENT	BICYCLE/PEDESTRIAN FACILITIES
ASSET MANAGEMENT	BRIDGE MISC
ASSET MANAGEMENT	BRIDGE PREVENTIVE MAINT
ASSET MANAGEMENT	BRIDGE REDECK
ASSET MANAGEMENT	BRIDGE REHAB
ASSET MANAGEMENT	BRIDGE REPLACEMENT
ASSET MANAGEMENT	DRAINAGE
ASSET MANAGEMENT	DRIVING/THRU LANES
ASSET MANAGEMENT	FENCING
ASSET MANAGEMENT	INTERCHANGE
ASSET MANAGEMENT	INTERSECTION
ASSET MANAGEMENT	J-TURNS
ASSET MANAGEMENT	LIGHTING
ASSET MANAGEMENT	PAVEMENT FRICTION
ASSET MANAGEMENT	PAVEMENT MARKING
ASSET MANAGEMENT	PAVEMENT PRESERVATION
ASSET MANAGEMENT	PAVEMENT REBUILD
ASSET MANAGEMENT	PAVEMENT REPAIR ONLY
ASSET MANAGEMENT	PAVEMENT RESURFACING
ASSET MANAGEMENT	PAVEMENT RESURFACING WITH SHOULDERS
ASSET MANAGEMENT	ADA TRANSITION PLAN UPGRADES
ASSET MANAGEMENT	ROADWAY ALIGNMENT
ASSET MANAGEMENT	ROUNDABOUT
ASSET MANAGEMENT	RUMBLESTRIPES
ASSET MANAGEMENT	SAFETY OTHER
ASSET MANAGEMENT	SHOULDERS
ASSET MANAGEMENT	SIGNAGE
ASSET MANAGEMENT	SIGNALS
ASSET MANAGEMENT	SLIDES/EROSION
ASSET MANAGEMENT	TURN LANES
OTHER	EMERGENCY RESPONSE OPERATIONS
OTHER	ITS EQUIPMENT OR SOFTWARE
OTHER	ON-CALL WORKZONE ENFORCEMENT
OTHER	STAFFING AND MANAGEMENT OF THE TMC

Calculations:

Projects completed in the time frame are tabulated and categorized by primary Detailed Work type and district. Excludes payment and payback projects, right of way only projects, and other projects without actual construction costs.

Within each line item, all projects are totaled and then converted to percentages, based on the actual construction amount (actual CN). Not based on the actual total amount (actual Total). Thus, estimated construction costs for a project can be used with factors in this report to estimate overhead costs, which add up to total costs.

PE% = (actual PE) / (actual CN)
CE% = (actual CE) / (actual CN)

RW acquisition = (actual land)
RW incidentals = (total actual RW) - (actual land)

RWp% = (actual land) / (actual CN)
RWi% = (RW incidentals) / (actual CN)

$$\text{Total Engineering} = \frac{(\text{actual PE}) + (\text{actual CE}) + (\text{RW incidentals})}{(\text{actual CN})}$$

If a district has no completed projects of the work type, in the time frame, then the line item is removed from their table.

Note: Only the primary work type is used. For instance, many projects include shoulder widening, but few projects have shoulder widening as their primary work type.

Highlighted values:

n < 20	Each line item has an 'n' value indicating the number of projects included in the line. If the number of projects is low, then any unusual project can have a large effect on the results. Thus, lower 'n' values are highlighted and validity of the data should be confirmed.
0%	In some line items, none of the projects will include a type of engineering expense. For instance, Routine Maintenance normally does not include Right of Way Acquisition. The calculated rate will then be 0%, and these values have been highlighted.

Three Year Average Engineering Factors

Engineering Costs per Total Construction Costs

7/1/2024 - 6/30/2026
Statewide Totals

Statewide Summary

Detailed Work Type	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ADA TRANSITION PLAN UPGRADES	25.84%	10.52%	1.44%	**37.79%**	2.29%	31
BARRIERS	4.19%	6.77%	0.00%	**10.96%**	0.00%	10
BICYCLE/PEDESTRIAN FACILITIES	10.61%	13.50%	2.23%	**26.34%**	27.38%	14
BRIDGE MISC	4.75%	10.65%	0.14%	**15.54%**	0.25%	14
BRIDGE PREVENTIVE MAINT	3.80%	11.83%	0.00%	**15.63%**	0.00%	34
BRIDGE REDECK	8.00%	9.00%	0.01%	**17.01%**	0.00%	25
BRIDGE REHAB	5.83%	7.72%	0.03%	**13.58%**	0.86%	127
BRIDGE REPAINT	2.71%	8.29%	0.00%	**11.00%**	0.00%	8
BRIDGE REPLACEMENT	13.27%	8.64%	0.19%	**22.09%**	0.42%	115
DRAINAGE	10.10%	18.59%	0.61%	**29.31%**	1.75%	4
DRIVING/THRU LANES	13.58%	7.14%	0.64%	**21.35%**	2.97%	13
INTERCHANGE	8.42%	5.96%	0.70%	**15.09%**	6.86%	3
INTERSECTION	14.65%	10.83%	0.79%	**26.27%**	7.59%	7
ITS EQUIPMENT OR SOFTWARE	13.77%	11.66%	0.00%	**25.43%**	0.00%	3
J-TURNS	9.34%	10.61%	0.02%	**19.97%**	0.15%	5
LIGHTING	24.26%	18.46%	0.00%	**42.72%**	0.00%	3
PAVEMENT FRICTION	2.02%	3.75%	0.00%	**5.78%**	0.00%	9
PAVEMENT MARKING	1.16%	5.49%	0.02%	**6.67%**	0.00%	38
PAVEMENT PRESERVATION	0.77%	4.37%	0.00%	**5.14%**	0.00%	79
PAVEMENT PRESERVATION WITH SHOULDERS	2.50%	7.37%	0.00%	**9.87%**	0.00%	1
PAVEMENT REBUILD	9.76%	10.67%	1.14%	**21.57%**	4.52%	8
PAVEMENT REBUILD WITH SHOULDERS	6.41%	4.92%	0.06%	**11.39%**	0.04%	1
PAVEMENT REPAIR ONLY	1.59%	10.04%	0.06%	**11.69%**	4.51%	30
PAVEMENT RESURFACING	2.15%	5.02%	0.12%	**7.29%**	0.55%	406
PAVEMENT RESURFACING WITH SHOULDERS	1.71%	4.15%	0.00%	**5.87%**	0.00%	12
PAVING/REPAIRING SHOULDERS ONLY	0.87%	1.13%	0.00%	**2.01%**	0.00%	1
ROADWAY ALIGNMENT	9.13%	12.94%	0.19%	**22.26%**	0.87%	1
ROUNDABOUT	6.84%	13.02%	0.90%	**20.76%**	1.78%	9
RUMBLESTRIPES	3.47%	8.51%	0.00%	**11.98%**	0.00%	6
SAFETY OTHER	15.68%	25.04%	2.48%	**43.20%**	5.81%	5
SHOULDERS	2.76%	13.61%	0.00%	**16.37%**	0.00%	2
SIGNAGE	9.10%	9.25%	0.00%	**18.35%**	0.00%	12
SIGNALS	13.42%	11.35%	0.15%	**24.92%**	0.17%	11
SLIDES/EROSION	4.67%	7.10%	0.08%	**11.84%**	0.84%	14
TURN LANES	10.93%	11.28%	0.97%	**23.17%**	2.15%	21
	5.43%	6.76%	0.20%	**12.39%**	1.11%	1,082

Detailed Work Categories	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
CAPITAL IMPROVEMENT	12.29%	6.84%	0.65%	**19.78%**	3.95%	16
ASSET MANAGEMENT	5.16%	6.75%	0.18%	**12.09%**	0.99%	1,063
OTHER	13.77%	11.66%	0.00%	**25.43%**	0.00%	3
	5.43%	6.76%	0.20%	**12.39%**	1.11%	1,082

Engineering costs are represented as percentages of corresponding actual construction costs. Based on projects completed within the indicated time frame. Excludes payment and payback projects, right of way only projects and other projects without actual construction costs.

Three Year Average Engineering Factors

Engineering Costs per Total Construction Costs

7/1/2024 - 6/30/2026
by District

Northwest

Detailed Work Type	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ADA TRANSITION PLAN UPGRADES	104.38%	13.98%	2.21%	**120.57%**	2.19%	1
BICYCLE/PEDESTRIAN FACILITIES	7.22%	18.23%	6.07%	**31.52%**	2.16%	1
BRIDGE PREVENTIVE MAINT	13.60%	17.03%	0.00%	**30.63%**	0.00%	1
BRIDGE REDECK	12.10%	7.85%	0.00%	**19.94%**	0.00%	1
BRIDGE REHAB	6.66%	6.98%	0.01%	**13.65%**	0.00%	30
BRIDGE REPLACEMENT	18.49%	10.85%	0.21%	**29.55%**	0.30%	16
ITS EQUIPMENT OR SOFTWARE	0.00%	5.58%	0.00%	**5.58%**	0.00%	1
PAVEMENT FRICTION	96.94%	41.57%	0.00%	**138.51%**	0.00%	1
PAVEMENT MARKING	0.00%	5.03%	0.00%	**5.03%**	0.00%	1
PAVEMENT PRESERVATION	0.40%	4.92%	0.00%	**5.32%**	0.00%	9
PAVEMENT RESURFACING	0.32%	3.65%	0.00%	**3.97%**	0.00%	38
ROUNDABOUT	5.98%	15.84%	0.44%	**22.27%**	0.58%	1
SLIDES/EROSION	4.16%	5.86%	0.10%	**10.12%**	1.21%	6
TURN LANES	9.84%	7.72%	0.38%	**17.94%**	1.49%	3
	3.76%	5.29%	0.05%	**9.11%**	0.15%	110

Detailed Work Categories	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ASSET MANAGEMENT	3.76%	5.29%	0.05%	**9.11%**	0.15%	109
OTHER	0.00%	5.58%	0.00%	**5.58%**	0.00%	1
	3.76%	5.29%	0.05%	**9.11%**	0.15%	110

Engineering costs are represented as percentages of corresponding actual construction costs. Based on projects completed within the indicated time frame. Excludes payment and payback projects, right of way only projects and other projects without actual construction costs.

Three Year Average Engineering Factors

Engineering Costs per Total Construction Costs

7/1/2024 - 6/30/2026
by District

Northeast

Detailed Work Type	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ADA TRANSITION PLAN UPGRADES	30.91%	16.99%	2.89%	**50.78%**	1.72%	9
BARRIERS	0.15%	4.97%	0.00%	**5.12%**	0.00%	2
BRIDGE MISC	4.02%	7.66%	0.00%	**11.68%**	0.00%	2
BRIDGE PREVENTIVE MAINT	2.83%	17.47%	0.00%	**20.31%**	0.00%	11
BRIDGE REDECK	14.78%	9.60%	0.00%	**24.38%**	0.00%	4
BRIDGE REHAB	9.77%	8.87%	0.12%	**18.75%**	0.16%	3
BRIDGE REPAINT	3.78%	12.31%	0.00%	**16.09%**	0.00%	3
BRIDGE REPLACEMENT	14.43%	7.71%	0.10%	**22.24%**	0.46%	23
DRIVING/THRU LANES	2.17%	12.08%	0.00%	**14.26%**	0.00%	1
PAVEMENT MARKING	0.47%	4.24%	0.00%	**4.71%**	0.00%	2
PAVEMENT PRESERVATION	1.56%	4.44%	0.00%	**6.00%**	0.00%	15
PAVEMENT REBUILD	21.31%	9.31%	1.16%	**31.78%**	10.40%	1
PAVEMENT REBUILD WITH SHOULDERS	6.41%	4.92%	0.06%	**11.39%**	0.04%	1
PAVEMENT REPAIR ONLY	0.51%	14.06%	0.00%	**14.57%**	0.00%	2
PAVEMENT RESURFACING	0.90%	3.43%	0.01%	**4.34%**	0.00%	55
PAVEMENT RESURFACING WITH SHOULDERS	0.92%	3.52%	0.00%	**4.44%**	0.00%	5
ROUNDABOUT	7.03%	10.48%	0.23%	**17.75%**	1.10%	2
RUMBLESTRIPES	1.15%	4.03%	0.00%	**5.17%**	0.00%	1
SLIDES/EROSION	23.52%	2.73%	0.05%	**26.30%**	0.00%	1
TURN LANES	13.63%	16.66%	0.09%	**30.37%**	0.00%	2
	4.56%	5.84%	0.08%	**10.48%**	0.21%	145

Detailed Work Categories	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
CAPITAL IMPROVEMENT	2.17%	12.08%	0.00%	**14.26%**	0.00%	1
ASSET MANAGEMENT	4.57%	5.81%	0.08%	**10.46%**	0.21%	144
	4.56%	5.84%	0.08%	**10.48%**	0.21%	145

Engineering costs are represented as percentages of corresponding actual construction costs. Based on projects completed within the indicated time frame. Excludes payment and payback projects, right of way only projects and other projects without actual construction costs.

Three Year Average Engineering Factors

Engineering Costs per Total Construction Costs

7/1/2024 - 6/30/2026
by District

Kansas City

Detailed Work Type	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ADA TRANSITION PLAN UPGRADES	47.28%	3.53%	8.19%	**59.00%**	0.13%	1
BARRIERS	0.89%	5.67%	0.00%	**6.55%**	0.00%	4
BICYCLE/PEDESTRIAN FACILITIES	33.98%	24.59%	5.44%	**64.01%**	0.38%	2
BRIDGE MISC	2.31%	14.36%	0.29%	**16.95%**	0.21%	4
BRIDGE PREVENTIVE MAINT	3.86%	13.30%	0.00%	**17.16%**	0.00%	1
BRIDGE REDECK	10.47%	20.28%	0.00%	**30.75%**	0.00%	1
BRIDGE REHAB	9.38%	11.03%	0.01%	**20.42%**	0.00%	14
BRIDGE REPLACEMENT	15.06%	9.74%	0.10%	**24.90%**	0.04%	23
INTERCHANGE	8.05%	5.42%	0.76%	**14.23%**	7.43%	2
INTERSECTION	10.37%	6.00%	2.35%	**18.73%**	2.15%	1
J-TURNS	5.17%	12.71%	0.00%	**17.88%**	0.00%	1
LIGHTING	46.33%	24.19%	0.00%	**70.52%**	0.00%	1
PAVEMENT FRICTION	0.00%	8.34%	0.00%	**8.34%**	0.00%	1
PAVEMENT MARKING	0.35%	9.92%	0.00%	**10.27%**	0.00%	5
PAVEMENT REBUILD	26.88%	18.48%	0.00%	**45.36%**	0.00%	2
PAVEMENT REPAIR ONLY	0.39%	7.34%	0.00%	**7.73%**	0.00%	1
PAVEMENT RESURFACING	1.80%	6.04%	0.01%	**7.85%**	0.00%	60
PAVEMENT RESURFACING WITH SHOULDERS	3.88%	10.71%	0.00%	**14.59%**	0.00%	2
ROUNDABOUT	13.60%	12.54%	4.21%	**30.35%**	7.53%	2
SAFETY OTHER	15.85%	19.05%	3.80%	**38.70%**	4.70%	2
SHOULDERS	17.50%	21.26%	0.00%	**38.76%**	0.00%	1
SIGNALS	7.90%	14.54%	0.00%	**22.44%**	0.00%	2
SLIDES/EROSION	2.93%	11.71%	0.00%	**14.64%**	0.00%	3
TURN LANES	11.86%	14.27%	1.77%	**27.91%**	2.93%	6
	6.16%	7.93%	0.28%	**14.37%**	0.68%	142

Detailed Work Categories	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
CAPITAL IMPROVEMENT	8.05%	5.42%	0.76%	**14.23%**	7.43%	2
ASSET MANAGEMENT	6.04%	8.08%	0.25%	**14.38%**	0.27%	140
	6.16%	7.93%	0.28%	**14.37%**	0.68%	142

Engineering costs are represented as percentages of corresponding actual construction costs. Based on projects completed within the indicated time frame. Excludes payment and payback projects, right of way only projects and other projects without actual construction costs.

Three Year Average Engineering Factors

Engineering Costs per Total Construction Costs

7/1/2024 - 6/30/2026
by District

Central

Detailed Work Type	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ADA TRANSITION PLAN UPGRADES	160.52%	26.08%	1.51%	**188.11%**	0.00%	1
BARRIERS	2.06%	6.02%	0.00%	**8.08%**	0.00%	1
BICYCLE/PEDESTRIAN FACILITIES	41.15%	17.68%	2.36%	**61.19%**	0.04%	2
BRIDGE MISC	5.86%	7.35%	0.00%	**13.21%**	0.00%	2
BRIDGE PREVENTIVE MAINT	3.30%	11.28%	0.00%	**14.58%**	0.00%	3
BRIDGE REDECK	10.31%	13.38%	0.00%	**23.69%**	0.00%	11
BRIDGE REHAB	7.35%	10.30%	0.00%	**17.64%**	0.00%	29
BRIDGE REPAINT	2.19%	6.36%	0.00%	**8.55%**	0.00%	5
BRIDGE REPLACEMENT	17.25%	11.12%	0.51%	**28.89%**	0.18%	14
DRAINAGE	0.00%	13.36%	0.00%	**13.36%**	0.00%	1
INTERSECTION	9.90%	12.25%	0.00%	**22.15%**	0.00%	1
PAVEMENT FRICTION	1.49%	2.97%	0.00%	**4.45%**	0.00%	3
PAVEMENT MARKING	1.69%	3.89%	0.00%	**5.58%**	0.00%	8
PAVEMENT PRESERVATION	1.94%	5.94%	0.00%	**7.88%**	0.00%	16
PAVEMENT REPAIR ONLY	0.39%	12.57%	0.00%	**12.96%**	0.00%	6
PAVEMENT RESURFACING	0.96%	4.44%	0.00%	**5.41%**	0.00%	67
ROUNDABOUT	6.55%	12.46%	0.00%	**19.01%**	0.00%	1
RUMBLESTRIPES	1.48%	8.02%	0.00%	**9.50%**	0.00%	1
SIGNAGE	8.51%	7.05%	0.00%	**15.56%**	0.00%	5
SIGNALS	14.73%	28.82%	4.04%	**47.58%**	3.16%	1
TURN LANES	21.08%	8.41%	0.00%	**29.49%**	0.00%	3
	4.06%	6.18%	0.05%	**10.30%**	0.01%	181

Detailed Work Categories	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ASSET MANAGEMENT	4.06%	6.18%	0.05%	**10.30%**	0.01%	181
	4.06%	6.18%	0.05%	**10.30%**	0.01%	181

Engineering costs are represented as percentages of corresponding actual construction costs. Based on projects completed within the indicated time frame. Excludes payment and payback projects, right of way only projects and other projects without actual construction costs.

Three Year Average Engineering Factors

Engineering Costs per Total Construction Costs

7/1/2024 - 6/30/2026
by District

St. Louis

Detailed Work Type	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ADA TRANSITION PLAN UPGRADES	15.15%	7.45%	0.62%	**23.21%**	1.04%	1
BARRIERS	9.80%	7.33%	0.00%	**17.13%**	0.00%	2
BICYCLE/PEDESTRIAN FACILITIES	7.35%	9.36%	2.66%	**19.36%**	41.06%	4
BRIDGE MISC	4.39%	9.42%	0.00%	**13.80%**	0.00%	3
BRIDGE PREVENTIVE MAINT	5.74%	8.66%	0.00%	**14.39%**	0.00%	7
BRIDGE REDECK	22.52%	1.84%	0.00%	**24.36%**	0.00%	1
BRIDGE REHAB	4.52%	7.06%	0.03%	**11.61%**	1.57%	19
BRIDGE REPLACEMENT	7.71%	5.80%	0.17%	**13.68%**	1.07%	6
DRAINAGE	18.06%	17.20%	0.00%	**35.26%**	0.00%	2
DRIVING/THRU LANES	15.84%	1.76%	0.00%	**17.60%**	0.01%	1
INTERCHANGE	12.85%	12.44%	0.00%	**25.29%**	0.00%	1
J-TURNS	11.47%	9.81%	0.00%	**21.27%**	0.00%	2
LIGHTING	18.70%	17.01%	0.00%	**35.71%**	0.00%	2
PAVEMENT MARKING	3.41%	7.56%	0.10%	**11.07%**	0.01%	9
PAVEMENT PRESERVATION	0.67%	4.90%	0.00%	**5.58%**	0.00%	7
PAVEMENT PRESERVATION WITH SHOULDERS	2.50%	7.37%	0.00%	**9.87%**	0.00%	1
PAVEMENT REBUILD	7.37%	10.34%	0.00%	**17.71%**	0.00%	2
PAVEMENT REPAIR ONLY	2.41%	8.70%	0.12%	**11.23%**	9.40%	8
PAVEMENT RESURFACING	8.06%	7.82%	0.93%	**16.81%**	4.18%	33
PAVEMENT RESURFACING WITH SHOULDERS	9.57%	5.99%	0.00%	**15.56%**	0.00%	2
ROUNDABOUT	1.84%	21.34%	0.00%	**23.18%**	0.00%	1
SHOULDERS	0.05%	12.20%	0.00%	**12.26%**	0.00%	1
SIGNAGE	13.07%	6.29%	0.00%	**19.35%**	0.00%	2
SIGNALS	8.89%	10.21%	0.10%	**19.20%**	0.14%	6
SLIDES/EROSION	0.56%	9.27%	0.00%	**9.84%**	0.00%	1
TURN LANES	16.70%	8.31%	2.00%	**27.00%**	14.04%	1
	7.00%	7.40%	0.42%	**14.83%**	3.63%	125

Detailed Work Categories	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
CAPITAL IMPROVEMENT	15.51%	2.95%	0.00%	**18.46%**	0.01%	2
ASSET MANAGEMENT	6.72%	7.55%	0.44%	**14.71%**	3.75%	123
	7.00%	7.40%	0.42%	**14.83%**	3.63%	125

Engineering costs are represented as percentages of corresponding actual construction costs. Based on projects completed within the indicated time frame. Excludes payment and payback projects, right of way only projects and other projects without actual construction costs.

Three Year Average Engineering Factors

Engineering Costs per Total Construction Costs

7/1/2024 - 6/30/2026
by District

Southwest

Detailed Work Type	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ADA TRANSITION PLAN UPGRADES	20.31%	10.13%	0.96%	**31.39%**	3.01%	17
BICYCLE/PEDESTRIAN FACILITIES	0.19%	15.81%	0.47%	**16.47%**	0.49%	1
BRIDGE MISC	7.73%	14.23%	0.58%	**22.54%**	1.32%	3
BRIDGE PREVENTIVE MAINT	2.26%	5.96%	0.00%	**8.22%**	0.00%	9
BRIDGE REDECK	6.03%	8.09%	0.02%	**14.14%**	0.00%	7
BRIDGE REHAB	9.45%	8.48%	0.09%	**18.02%**	0.51%	15
BRIDGE REPLACEMENT	13.59%	8.83%	0.09%	**22.51%**	0.17%	13
DRIVING/THRU LANES	12.15%	7.55%	1.14%	**20.84%**	5.31%	8
INTERSECTION	17.53%	9.73%	0.59%	**27.85%**	12.99%	3
ITS EQUIPMENT OR SOFTWARE	15.58%	12.46%	0.00%	**28.04%**	0.00%	2
J-TURNS	7.57%	8.09%	0.16%	**15.82%**	1.23%	1
PAVEMENT FRICTION	1.11%	4.26%	0.00%	**5.37%**	0.00%	4
PAVEMENT MARKING	0.00%	3.97%	0.00%	**3.97%**	0.00%	10
PAVEMENT PRESERVATION	0.37%	3.56%	0.00%	**3.93%**	0.00%	10
PAVEMENT REBUILD	3.13%	6.39%	0.00%	**9.52%**	0.00%	1
PAVEMENT REPAIR ONLY	2.22%	15.04%	0.00%	**17.26%**	0.00%	9
PAVEMENT RESURFACING	2.12%	4.13%	0.00%	**6.25%**	0.00%	59
PAVEMENT RESURFACING WITH SHOULDERS	1.13%	3.10%	0.00%	**4.23%**	0.00%	2
ROUNDABOUT	4.66%	9.56%	0.00%	**14.22%**	0.00%	2
SAFETY OTHER	16.10%	31.52%	0.89%	**48.51%**	7.45%	2
SIGNAGE	9.60%	14.27%	0.00%	**23.87%**	0.00%	3
SIGNALS	104.45%	21.11%	0.00%	**125.57%**	0.00%	2
SLIDES/EROSION	3.23%	9.42%	0.04%	**12.69%**	0.09%	2
TURN LANES	7.14%	14.42%	1.00%	**22.56%**	3.03%	2
	7.09%	6.91%	0.25%	**14.25%**	1.24%	187

Detailed Work Categories	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
CAPITAL IMPROVEMENT	12.15%	7.55%	1.14%	**20.84%**	5.31%	8
ASSET MANAGEMENT	6.39%	6.81%	0.14%	**13.34%**	0.71%	177
OTHER	15.58%	12.46%	0.00%	**28.04%**	0.00%	2
	7.09%	6.91%	0.25%	**14.25%**	1.24%	187

Engineering costs are represented as percentages of corresponding actual construction costs. Based on projects completed within the indicated time frame. Excludes payment and payback projects, right of way only projects and other projects without actual construction costs.

Three Year Average Engineering Factors

Engineering Costs per Total Construction Costs

7/1/2024 - 6/30/2026
by District

Southeast

Detailed Work Type	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ADA TRANSITION PLAN UPGRADES	38.62%	16.21%	0.00%	**54.83%**	0.00%	1
BARRIERS	5.45%	12.50%	0.00%	**17.95%**	0.00%	1
BICYCLE/PEDESTRIAN FACILITIES	12.82%	23.62%	0.19%	**36.63%**	0.43%	4
BRIDGE PREVENTIVE MAINT	5.98%	16.78%	0.00%	**22.76%**	0.00%	2
BRIDGE REHAB	4.62%	6.59%	0.05%	**11.27%**	0.40%	17
BRIDGE REPLACEMENT	12.85%	9.89%	0.33%	**23.07%**	0.25%	20
DRAINAGE	8.14%	19.97%	0.96%	**29.07%**	2.77%	1
DRIVING/THRU LANES	16.37%	10.72%	0.00%	**27.09%**	0.00%	3
INTERSECTION	13.80%	21.91%	0.45%	**36.16%**	0.10%	2
J-TURNS	3.34%	17.38%	0.00%	**20.72%**	0.00%	1
PAVEMENT MARKING	0.00%	4.10%	0.00%	**4.10%**	0.00%	3
PAVEMENT PRESERVATION	0.67%	3.20%	0.00%	**3.88%**	0.00%	20
PAVEMENT REBUILD	6.14%	13.14%	2.29%	**21.57%**	5.73%	2
PAVEMENT REPAIR ONLY	0.46%	12.83%	0.00%	**13.29%**	0.00%	4
PAVEMENT RESURFACING	1.95%	5.99%	0.01%	**7.95%**	0.03%	73
PAVEMENT RESURFACING WITH SHOULDERS	0.54%	3.96%	0.00%	**4.50%**	0.00%	1
PAVING/REPAIRING SHOULDERS ONLY	0.87%	1.13%	0.00%	**2.01%**	0.00%	1
ROADWAY ALIGNMENT	9.13%	12.94%	0.19%	**22.26%**	0.87%	1
RUMBLESTRIPES	4.55%	8.79%	0.00%	**13.35%**	0.00%	4
SAFETY OTHER	0.00%	54.35%	0.00%	**54.35%**	0.00%	1
SIGNAGE	0.38%	15.55%	0.00%	**15.93%**	0.00%	2
SLIDES/EROSION	3.08%	16.70%	0.00%	**19.78%**	0.00%	1
TURN LANES	3.51%	7.74%	0.33%	**11.58%**	0.26%	4
	4.75%	7.45%	0.10%	**12.30%**	0.20%	169

Detailed Work Categories	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
CAPITAL IMPROVEMENT	16.37%	10.72%	0.00%	**27.09%**	0.00%	3
ASSET MANAGEMENT	4.22%	7.30%	0.10%	**11.62%**	0.21%	166
	4.75%	7.45%	0.10%	**12.30%**	0.20%	169

Engineering costs are represented as percentages of corresponding actual construction costs. Based on projects completed within the indicated time frame. Excludes payment and payback projects, right of way only projects and other projects without actual construction costs.

Three Year Average Engineering Factors

Engineering Costs per Total Construction Costs

7/1/2024 - 6/30/2026
by District

Statewide District

Detailed Work Type	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
PAVEMENT PRESERVATION	1.28%	7.31%	0.00%	**8.59%**	0.00%	2
PAVEMENT RESURFACING	0.03%	2.58%	0.00%	**2.61%**	0.00%	21
	0.04%	2.62%	0.00%	**2.67%**	0.00%	23

Detailed Work Categories	Preliminary Engineering	Construction Engineering	Right of Way Incidentals	**Total Engineering**	Right of Way Acquisition	n=
ASSET MANAGEMENT	0.04%	2.62%	0.00%	**2.67%**	0.00%	23
	0.04%	2.62%	0.00%	**2.67%**	0.00%	23

Engineering costs are represented as percentages of corresponding actual construction costs. Based on projects completed within the indicated time frame. Excludes payment and payback projects, right of way only projects and other projects without actual construction costs.

* ST projects