

STATE OF COLORADO



DEPARTMENT OF TRANSPORTATION
Division of Project Support
Contracts and Market Analysis Branch

COLORADO CONSTRUCTION COST INDEX REPORT Calendar Year 2018 Third Quarter

Prepared for
Joshua Laipply, Chief Engineer

Prepared by
Stephen Bokros, Manager
Engineering Estimates and Market Analysis Unit
Contracts and Market Analysis Branch
Division of Project Support

CCI REPORT SUMMARY

3rd QUARTER ENDING September 30, 2018

Relative change from last quarter, quarterly data*	-10.05%
Cumulative change from same quarter last year, quarterly data*	-6.83%
Relative change from last year, annual data**	11.53%

* Calculations based on quarterly data may vary significantly due to strong seasonality in Colorado.

** Calculations derived from the most recent four consecutive quarters of data compared to the previous four consecutive quarters of data. For example, relative change for 2nd QUARTER ENDING June 30, 2017 is derived from July 1, 2016 to June 30, 2017 data compared to July 1, 2015 to June 30, 2016 data.

Summary for all Design-Bid-Build projects awarded between 7/1/2018 and 9/30/2018

Project Amount	Number of Projects	Number of Bidders	Biddable Items Total Amount	Average Number of Bidders
\$0.00 to \$999,999.99	12	34	\$7,208,696.60	2.83
\$1,000,000.00 to \$4,999,999.99	8	34	\$16,300,134.75	4.25
\$5,000,000.00 to \$19,999,999.99	5	39	\$32,276,672.57	7.80
\$20,000,000.00 or Greater	0	0	\$0.00	0.00
Total	25	107	\$55,785,503.92	4.28

Average number of bidders per project decreased to 4.28 this quarter from 4.30 the previous quarter.
 Average cost per Design-Bid-Build project was \$2,231,420.16.

Colorado Construction Cost Index Tabulations: Quarterly Data

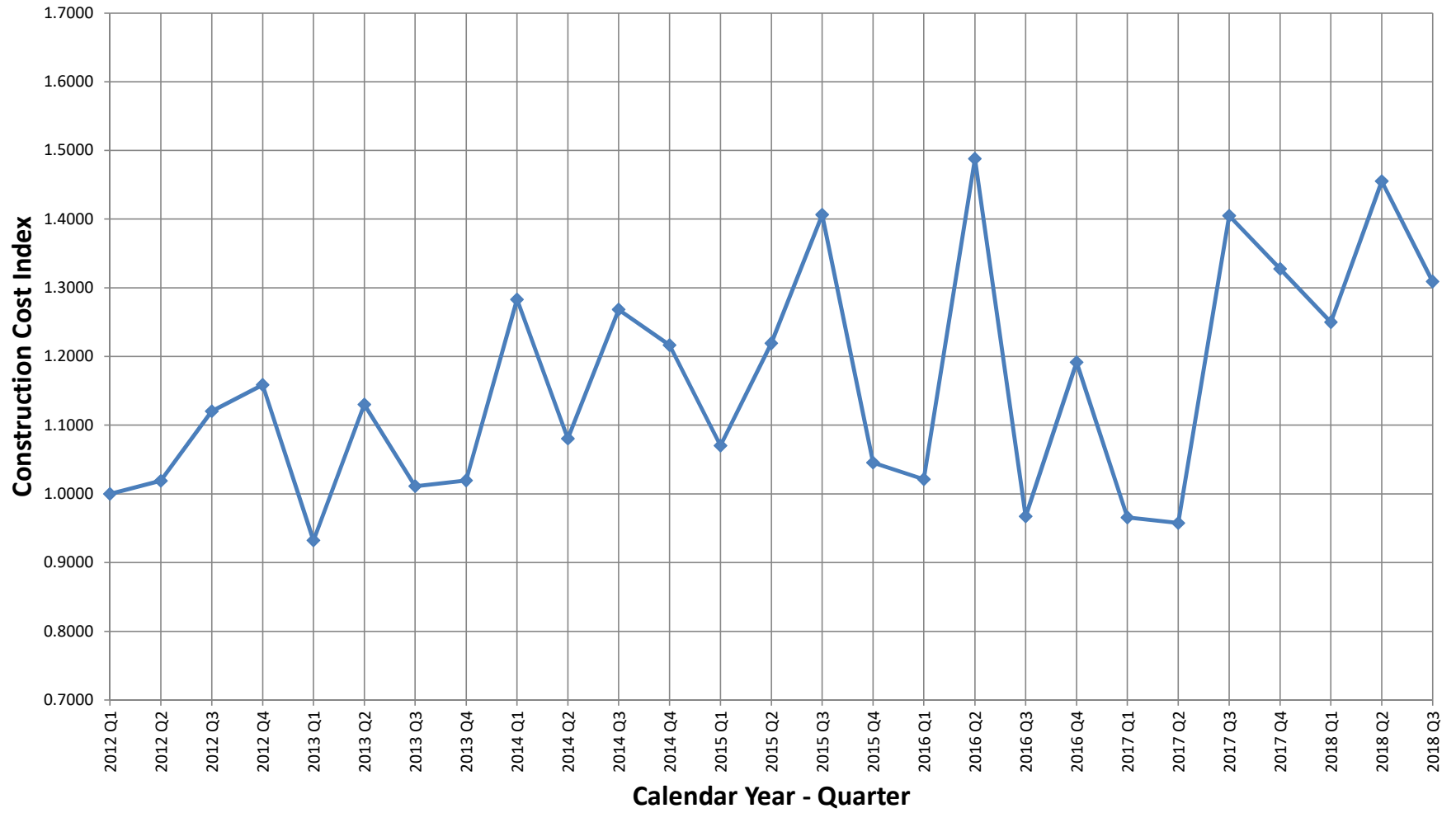
Year	Quarter	Earthwork		Hot Mix Asphalt		Concrete Pavement*		Structural Concrete		Reinforcing Steel		Fisher Ideal Index	
		Price (\$/CY)	Qty (CY)	Price (\$/TON)	Qty (TON)	Price (\$/SY)	Qty (SY)	Price (\$/CY)	Qty (CY)	Price (\$/LB)	Qty (LB)	Relative	Cumulative
2012	Q1	9.32	295,331.00	83.52	611,829.00	29.47	459,695.83	433.44	7,636.00	0.88	1,956,874.00		1.0000
2012	Q2	10.61	367,636.10	82.65	328,357.21	31.18	264,194.31	472.96	5,910.00	0.97	833,101.00	1.0190	1.0190
2012	Q3	11.92	212,117.00	90.76	59,799.23	34.76	107,643.81	487.93	2,388.20	1.04	485,586.00	1.0995	1.1204
2012	Q4	9.49	246,805.00	102.24	146,197.04	n/a**	n/a**	527.68	1,772.00	0.94	310,307.00	1.0344	1.1590
2013	Q1	8.08	659,125.00	76.07	393,759.56	31.81	549,580.81	487.00	9,019.00	0.87	1,929,721.00	0.8044	0.9323
2013	Q2	12.75	316,498.00	84.37	501,946.32	52.18	60,482.78	427.09	6,857.00	0.91	1,048,761.00	1.2121	1.1300
2013	Q3	8.72	419,967.00	85.00	147,064.84	35.57	170,833.67	372.83	9,917.00	0.77	2,350,291.00	0.8947	1.0111
2013	Q4	10.00	75,520.00	80.78	198,528.45	42.64	92,749.00	309.40	1,752.00	0.85	486,791.00	1.0086	1.0197
2014	Q1	20.16	99,605.00	92.28	433,692.17	76.84	57,552.78	476.21	3,265.00	0.98	629,246.00	1.2581	1.2830
2014	Q2	12.88	610,731.00	88.13	548,253.70	34.34	302,520.17	517.01	8,249.90	0.90	1,468,195.00	0.8421	1.0804
2014	Q3	13.30	708,794.00	100.07	102,680.99	52.39	147,911.17	592.26	16,294.30	1.01	2,949,114.00	1.1740	1.2684
2014	Q4	10.73	695,288.00	113.42	141,154.23	46.12	156,635.11	549.86	6,657.10	1.03	948,029.00	0.9591	1.2166
2015	Q1	16.60	301,494.80	83.80	736,968.84	34.36	311,378.67	744.81	1,994.30	1.66	368,665.00	0.8798	1.0703
2015	Q2	15.12	167,066.00	94.22	311,989.59	46.36	219,498.00	577.73	1,119.00	1.64	205,245.00	1.1391	1.2193
2015	Q3	20.32	40,649.00	98.61	89,024.05	75.70	12,880.78	739.20	706.90	1.33	86,854.00	1.1536	1.4065
2015	Q4	12.16	309,414.10	81.21	66,957.40	47.46	128,174.06	598.73	3,702.00	1.42	366,651.00	0.7434	1.0456
2016	Q1	12.27	939,477.00	84.03	1,078,315.35	39.18	243,518.78	617.10	6,507.71	1.02	1,627,487.00	0.9767	1.0213
2016	Q2	31.34	14,104.00	110.17	118,434.28	104.99	1,936.89	1,028.57	126.00	2.79	12,189.00	1.4571	1.4881
2016	Q3	10.66	503,305.00	83.55	286,987.61	52.59	275,462.06	606.80	1,952.80	0.94	331,788.70	0.6500	0.9672
2016	Q4	18.00	81,788.00	106.93	108,909.09	47.97	51,601.89	978.88	300.80	2.28	18,840.00	1.2318	1.1914
2017	Q1	24.99	110,497.40	82.20	480,758.14	36.08	60,069.44	1,138.99	67.00	2.17	26,054.00	0.8105	0.9657
2017	Q2	11.28	153,010.00	88.48	302,427.67	36.44	147,787.36	592.94	2,168.00	1.06	416,630.00	0.9916	0.9576
2017	Q3	27.34	51,552.00	115.01	19,675.64	97.88	2,088.89	629.83	2,292.00	1.15	346,069.00	1.4673	1.4051
2017	Q4	16.17	23,686.00	95.90	152,110.33	72.95	2,823.00	1,068.73	263.00	2.32	24,850.00	0.9449	1.3277
2018	Q1	13.97	163,772.00	90.91	302,427.23	92.58	7,834.00	862.30	1,167.00	1.39	206,568.00	0.9415	1.2500
2018	Q2	15.58	47,167.00	110.11	42,157.74	n/a**	n/a**	809.61	887.00	1.54	139,494.00	1.1643	1.4554
2018	Q3	15.69	77,482.00	107.51	38,587.91	60.91	11,825.11	711.51	5,097.00	1.07	1,480,110.00	0.8995	1.3091

Weighted average prices and quantities are calculated after outliers (< 5% and > 95%) are removed in the preceding 7 years for a given quarter.

* Concrete Pavement is normalized to 9 inches thick.

** Assuming same price and quantity as previous quarter for index calculations, due to insufficient data of this sub group.

Colorado CCI - Quarterly Data, Cumulative Assuming 2012 Q1 = 1.0000



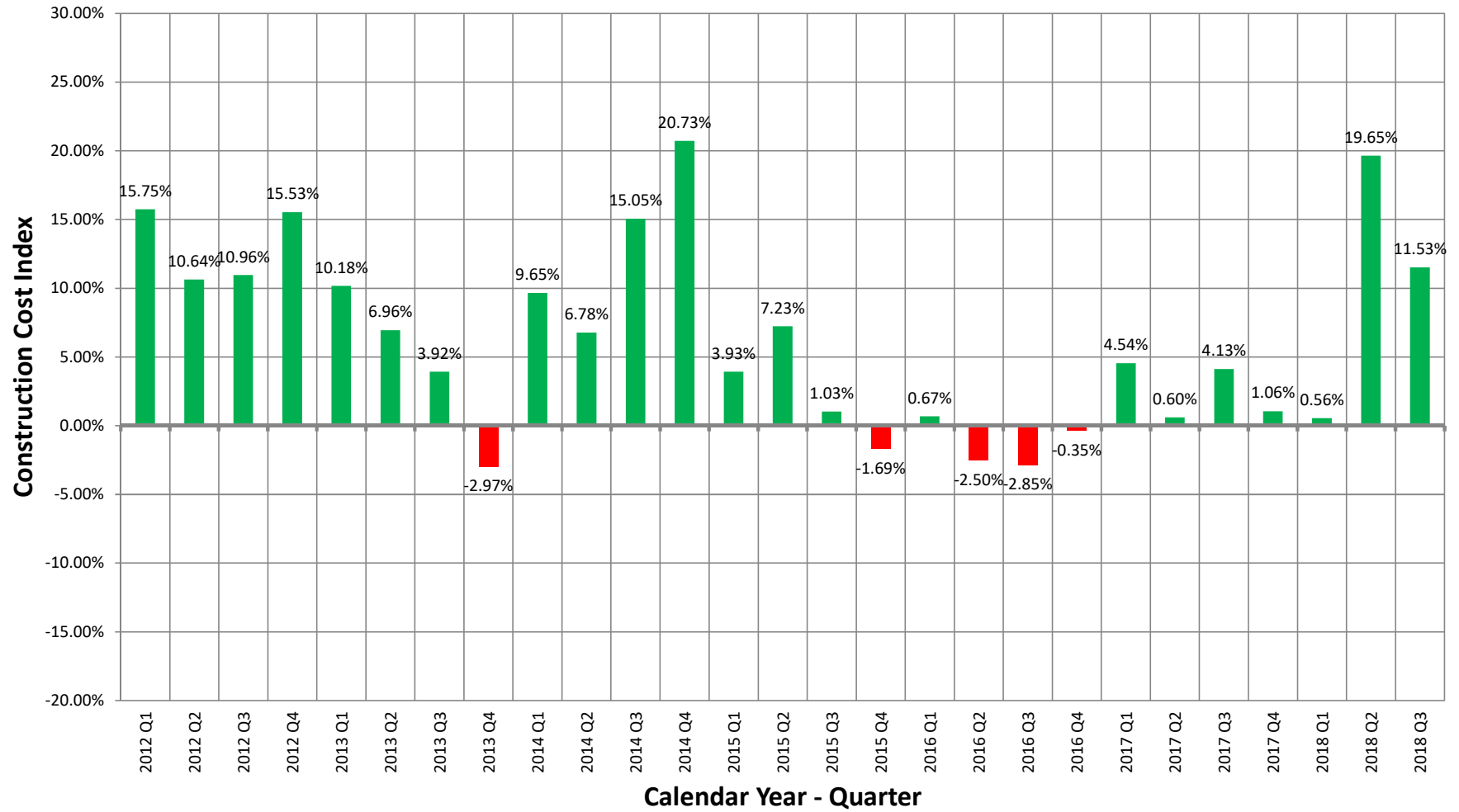
Colorado Construction Cost Index Tabulations: Annual Percentage Change

Year	Quarter	Earthwork		Hot Mix Asphalt		Concrete Pavement*		Structural Concrete		Reinforcing Steel		Fisher Ideal Index (Annual Change)			
		Price (\$/CY)	Qty (CY)	Price (\$/TON)	Qty (TON)	Price (\$/SY)	Qty (SY)	Price (\$/CY)	Qty (CY)	Price (\$/LB)	Qty (LB)	Q1	Q2	Q3	Q4
2012	Q1	7.48	3,751,697.00	74.46	2,382,261.64	34.23	900,143.46	422.36	73,783.53	0.85	13,569,678.00	15.75%	-	-	-
2012	Q2	8.23	1,880,505.10	80.96	1,363,144.44	30.16	816,743.88	443.62	23,011.23	0.90	4,772,701.00	-	10.64%	-	-
2012	Q3	8.48	1,846,077.10	81.66	1,287,260.97	31.05	843,073.00	452.94	22,476.20	0.91	4,787,809.00	-	-	10.96%	-
2012	Q4	10.27	1,121,889.10	86.04	1,146,182.48	31.16	939,177.75	463.41	17,706.20	0.93	3,585,868.00	-	-	-	15.53%
2013	Q1	9.49	1,485,683.10	83.47	928,113.04	32.27	1,029,062.73	486.55	19,089.20	0.92	3,558,715.00	10.18%	-	-	-
2013	Q2	9.92	1,434,545.00	84.12	1,101,702.15	34.07	825,351.20	470.21	20,036.20	0.91	3,774,375.00	-	6.96%	-	-
2013	Q3	9.36	1,642,395.00	83.90	1,188,967.76	34.28	888,541.07	433.64	27,565.00	0.84	5,639,080.00	-	-	3.92%	-
2013	Q4	9.37	1,471,110.00	81.24	1,241,299.17	35.11	873,646.26	419.69	27,545.00	0.84	5,815,564.00	-	-	-	-2.97%
2014	Q1	11.48	911,590.00	86.56	1,281,231.78	46.14	381,618.23	400.29	21,791.00	0.84	4,515,089.00	9.65%	-	-	-
2014	Q2	11.85	1,205,823.00	88.04	1,327,539.16	39.83	623,655.62	433.90	23,183.90	0.84	4,934,523.00	-	6.78%	-	-
2014	Q3	13.42	1,494,650.00	89.35	1,283,155.31	44.14	600,733.12	541.68	29,561.20	0.96	5,533,346.00	-	-	15.05%	-
2014	Q4	12.66	2,114,418.00	93.51	1,225,781.09	44.81	664,619.23	555.07	34,466.30	0.98	5,994,584.00	-	-	-	20.73%
2015	Q1	12.85	2,316,307.80	89.18	1,529,057.76	39.26	918,445.12	574.22	33,195.60	1.03	5,734,003.00	3.93%	-	-	-
2015	Q2	13.04	1,872,642.80	90.84	1,292,793.65	42.91	835,422.95	592.48	26,064.70	1.10	4,471,053.00	-	7.23%	-	-
2015	Q3	13.13	1,204,497.80	90.64	1,279,136.71	41.51	700,392.56	602.72	10,477.30	1.27	1,608,793.00	-	-	1.03%	-
2015	Q4	14.80	818,623.90	87.45	1,204,939.88	41.57	671,931.51	647.54	7,522.20	1.54	1,027,415.00	-	-	-	-1.69%
2016	Q1	12.80	1,456,606.10	86.80	1,546,286.39	44.32	604,071.62	614.96	12,035.61	1.15	2,286,237.00	0.67%	-	-	-
2016	Q2	12.70	1,303,644.10	87.14	1,352,731.08	43.47	386,510.51	623.45	11,042.61	1.11	2,093,181.00	-	-2.50%	-	-
2016	Q3	11.94	1,766,300.10	85.82	1,550,694.64	46.70	649,091.79	614.15	12,288.51	1.08	2,338,115.70	-	-	-2.85%	-
2016	Q4	12.22	1,538,674.00	87.45	1,592,646.33	46.65	572,519.62	632.92	8,887.31	1.03	1,990,304.70	-	-	-	-0.35%
2017	Q1	14.15	709,694.40	88.62	995,089.12	49.69	389,070.28	688.84	2,446.60	1.15	388,871.70	4.54%	-	-	-
2017	Q2	13.35	848,600.40	86.42	1,179,082.51	45.83	534,920.75	632.98	4,488.60	1.08	793,312.70	-	0.60%	-	-
2017	Q3	18.57	396,847.40	87.95	911,770.54	39.12	261,547.58	642.08	4,827.80	1.16	807,593.00	-	-	4.13%	-
2017	Q4	18.54	338,745.40	87.05	954,971.78	37.43	212,768.69	644.35	4,790.00	1.17	813,603.00	-	-	-	1.06%
2018	Q1	14.81	392,020.00	91.55	776,640.87	40.62	160,533.25	681.91	5,890.00	1.19	994,117.00	0.56%	-	-	-
2018	Q2	16.83	286,177.00	94.87	516,370.94	90.43	20,579.89	748.33	4,609.00	1.34	716,981.00	-	19.65%	-	-
2018	Q3	14.81	312,107.00	95.04	535,283.21	78.40	30,316.11	759.65	7,414.00	1.16	1,851,022.00	-	-	11.53%	-

Weighted average prices and quantities are calculated after outliers (< 5% and > 95%) are removed in the preceding 7 years for a given quarter.

* Concrete Pavement is normalized to 9 inches thick.

Colorado CCI - Annual Percentage Change



Calculations derived from the most recent four consecutive quarters of data compared to the previous four consecutive quarters of data.

Comments:

The methodology for preparing the CCI is documented in a brief report attached to the ‘2012 CCI Q2’ report at the following link <http://www.coloradodot.info/business/eema>, under the ‘Construction Cost Index’ heading and ‘2012 CCI Q2’ report.

Starting with 2016 Q3, this quarterly CCI report includes calculations based on annual data. The annual data calculations are less volatile than the quarterly data calculations, partially due to the strong seasonal nature of transportation construction in Colorado.

For the current quarter, price changes for the five sub groups, as shown in the ‘Colorado Construction Cost Index Tabulations: Quarterly Data’, are listed as follows:

Earthwork (Excavation and Embankment):

The average price was \$15.69/CY, which is up \$0.11/CY, with more than one and five-eighths times the quantity, from the previous quarter.

Hot Mix Asphalt:

The average price was \$107.51/TON, which is down \$2.60/TON, with more than seven-eighths times the quantity, from the previous quarter.

Concrete Pavement:

The average price was \$60.91/SY which is down \$31.67/SY, with more than one and one-half times the quantity, from the previous quarter.

Structural Concrete:

The average price was \$711.51/CY, which is down \$98.10/CY, with slightly less than five and three-fourths times the quantity, from the previous quarter.

Reinforcing Steel:

The average price was \$1.07/LB, which is down \$0.47/LB, with more than ten and one-half times the quantity, from the previous quarter.

ADDITIONAL INFORMATION:

This quarter, based on preceding quarter data, one sub group, Earthwork, showed an increase in price, while four sub groups, Hot Mix Asphalt, Concrete Pavement, Structural Concrete, and Reinforcing Steel showed a decrease in price. This quarter, 25 Design-Bid-Build projects for a total of \$55,785,503.92 were bid and awarded. The five categories for CCI items totaled \$11,294,830.40 which is 20.2% of total Design-Bid-Build awarded amount. By comparison, last quarter, 23 Design-Bid-Build projects were bid and awarded.

Projects Awarded this Quarter and Not Used in the CCI Calculations

Project Type	Number of Projects	Biddable Items Total Amount
Design-Build	0	\$0.00
Hybrid / Modified / Streamlined Design-Build	0	\$0.00
Construction Manager / General Contractor	1	\$57,727,234.71
Emergency	1	\$471,906.00
Sub Total	2	\$58,199,140.71