

# STATE OF COLORADO

---



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

## COLORADO CONSTRUCTION COST INDEX REPORT Calendar Year 2020 Second Quarter

Prepared for  
Stephen Harelson, 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

2<sup>nd</sup> QUARTER ENDING June 30, 2020

Relative change from last quarter, quarterly data* .....	-8.44%
Cumulative change from same quarter last year, quarterly data* .....	-19.71%
Relative change from last year, annual data* .....	4.39%

\* 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 2<sup>nd</sup> 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 4/1/2020 and 6/30/2020**

Project Amount	Number of Projects	Number of Bidders	Biddable Items Total Amount	Average Number of Bidders
\$0.00 to \$999,999.99	5	12	\$3,910,901.44	2.40
\$1,000,000.00 to \$4,999,999.99	17	68	\$33,381,536.11	4.00
\$5,000,000.00 to \$19,999,999.99	6	21	\$48,873,298.28	3.50
\$20,000,000.00 or Greater	1	8	\$23,753,931.10	8.00
<b>Total</b>	<b>29</b>	<b>109</b>	<b>\$109,919,666.93</b>	<b>3.76</b>

Average number of bidders per project increased to 3.76 this quarter, from 3.23 the previous quarter.  
Average cost per Design-Bid-Build project was \$3,790,333.34.

## Colorado Construction Cost Index Tabulations: Quarterly Data

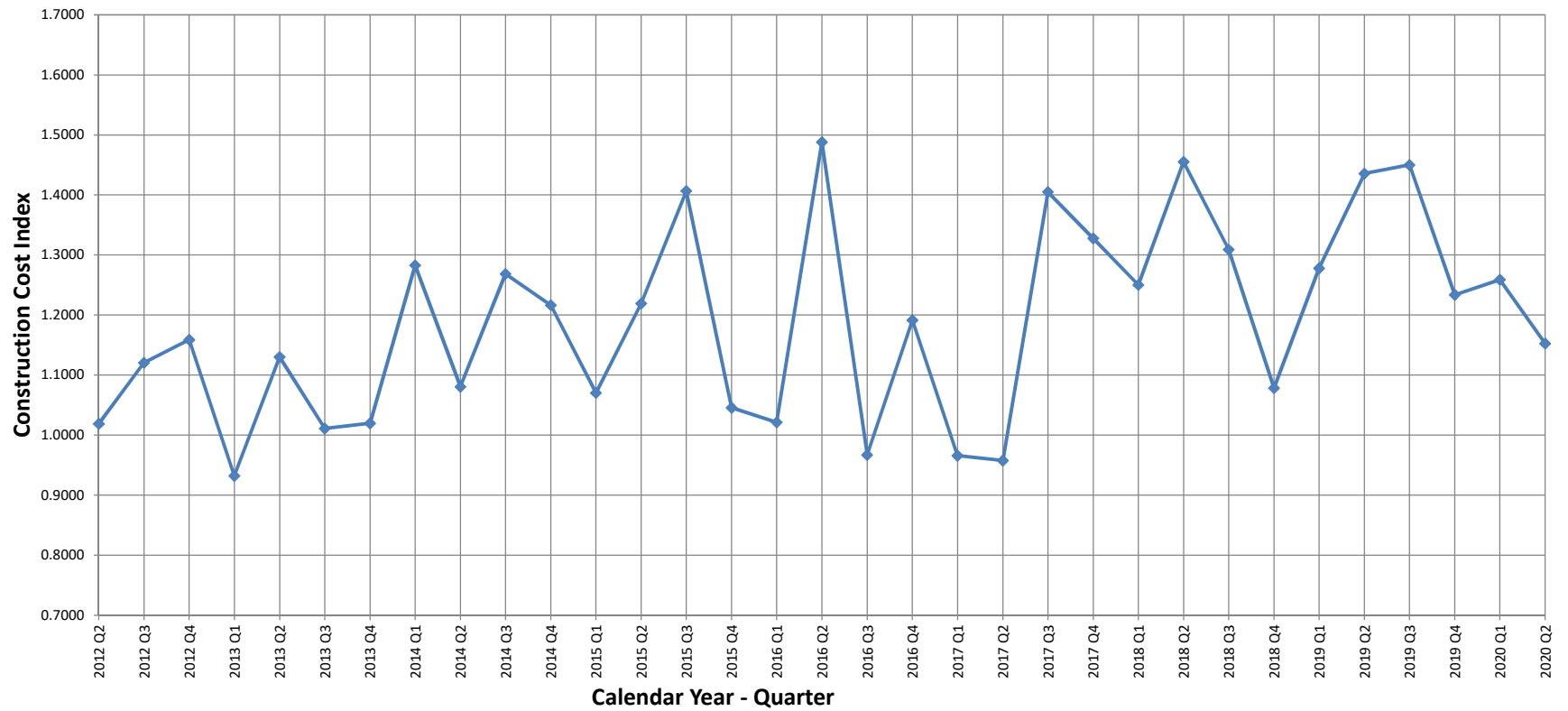
Year	Quarter	Earthwork		Hot Mix Asphalt		Concrete Pavement*		Structural Concrete		Reinforcing Steel		Fisher Ideal Index	
		Price (\$/CY)	Qty (CY)	Price (\$/TON)	Qty (TON)	Price (\$/SY)	Qty (SY)	Price (\$/CY)	Qty (CY)	Price (\$/LB)	Qty (LB)	Relative	Cumulative
2012	Q1	9.32	295,331.00	83.52	611,829.00	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	1.1589
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	0.9322
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	1.0110
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	1.2829
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	1.0803
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	1.2683
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	1.2164
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	1.0702
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	1.2190
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	1.4063
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	1.0454
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	1.0211
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	1.4878
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	0.9671
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	1.1913
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	0.9655
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	0.9574
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	1.4048
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	1.3274
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	1.2497
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	1.4551
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	1.3088
2018	Q4	16.51	174,175.00	89.89	594,326.44	35.97	974,214.00	674.59	2,017.00	1.29	213,561.00	0.8238	1.0785
2019	Q1	12.73	545,088.00	101.34	491,723.60	53.33	197,389.61	840.94	4,426.90	1.40	871,380.00	1.1848	1.2778
2019	Q2	26.64	55,197.00	119.73	116,528.65	79.43	13,611.17	479.34	8,463.00	1.05	1,230,972.00	1.1236	1.4357
2019	Q3	n/a**	n/a**	n/a**	n/a**	104.00	4,074.22	n/a**	n/a**	n/a**	n/a**	1.0100	1.4501
2019	Q4	16.30	207,333.00	95.42	275,273.38	43.76	41,068.89	798.39	468.00	1.39	149,577.00	0.8508	1.2337
2020	Q1	20.76	456,146.00	93.02	867,587.63	62.82	53,818.89	805.97	4,026.00	1.22	820,456.00	1.0204	1.2589
2020	Q2	9.86	764,455.00	104.16	156,927.56	51.27	177,038.39	809.92	1,804.90	1.43	363,737.00	0.9156	1.1527

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**



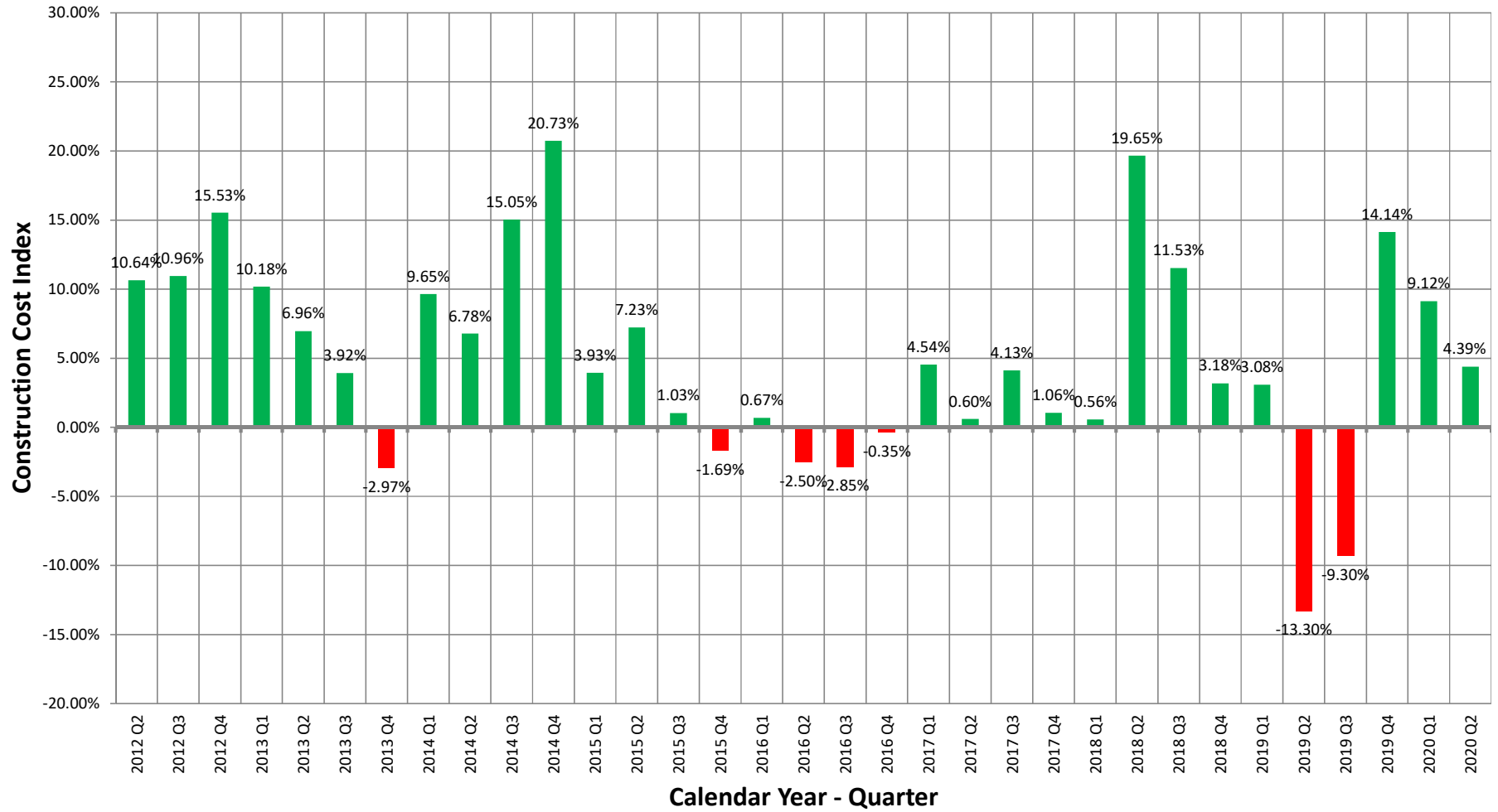
Colorado Construction Cost Index Tabulations: Annual Percentage Change

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%	-
2018	Q4	15.38	462,596.00	91.78	977,499.32	37.15	1,001,707.11	732.07	9,168.00	1.16	2,039,733.00	-	-	-	3.18%
2019	Q1	13.94	843,912.00	96.03	1,166,795.69	39.47	1,191,262.72	758.62	12,427.90	1.22	2,704,545.00	3.08%	-	-	-
2019	Q2	14.67	851,942.00	97.78	1,241,166.61	39.57	1,197,039.89	638.21	20,003.90	1.15	3,796,023.00	-	-13.30%	-	-
2019	Q3	15.37	829,657.00	99.43	1,319,107.35	39.58	1,189,289.00	564.69	23,369.90	1.15	3,546,885.00	-	-	-9.30%	-
2019	Q4	15.37	862,815.00	104.00	1,000,542.28	53.99	256,143.89	559.54	21,820.90	1.15	3,482,901.00	-	-	-	14.14%
2020	Q1	20.40	773,873.00	98.03	1,375,918.32	59.37	1,125,731.17	547.70	21,420.00	1.11	3,431,977.00	9.12%	-	-	-
2020	Q2	14.74	1,483,131.00	96.92	1,416,317.22	53.19	2,760,000.39	618.95	14,761.90	1.18	2,564,742.00	-	4.39%	-	-

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 \$9.86/CY, which is down \$10.90/CY, with 168% of the quantity, from the previous quarter.

Hot Mix Asphalt:

The average price was \$104.16/TON, which is up \$11.14/TON, with 18% of the quantity, from the previous quarter.

Concrete Pavement:

The average price was \$51.27/SY, which is down \$11.55/SY, with 329% of the quantity, from the previous quarter.

Structural Concrete:

The average price was \$809.92/CY, which is up \$3.95/CY, with 45% the quantity, from the previous quarter.

Reinforcing Steel:

The average price was \$1.43/LB, which is up \$0.21/LB, with 44% the quantity, from the previous quarter.

ADDITIONAL INFORMATION:

This quarter, based on preceding quarterly data, three subgroups, Hot Mix Asphalt, Structural Concrete, and Reinforcing Steel showed an increase in price, while the remaining two subgroups, Earthwork and Concrete Pavement and showed a decrease in price. 29 Design-Bid-Build projects for a total of \$109,919,666.93 were bid and awarded this quarter. The five categories for CCI items totaled \$34,939,130.94, which is 31.8% of the total Design-Bid-Build awarded amount. Last quarter, by comparison, had 39 Design-Bid-Build projects 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	1	\$77,748,000.00
Hybrid / Modified / Streamlined Design-Build	0	\$0.00
Construction Manager / General Contractor	1	\$8,274,649.78
Emergency	0	\$0.00
Sub Total	2	\$86,022,649.78