

# STATE OF COLORADO

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**DEPARTMENT OF TRANSPORTATION**  
**Division of Project Support**  
**Contracts and Market Analysis Branch**  
4201 East Arkansas Avenue, 4<sup>th</sup> Floor  
Denver, Colorado 80222  
(303) 757-9736

## COLORADO CONSTRUCTION COST INDEX REPORT Calendar Year 2016 First Quarter

Prepared for  
Joshua Laipply, Chief Engineer

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

## CCI REPORT SUMMARY

1<sup>st</sup> QUARTER ENDING March 31, 2016

|   |        |
|---|--------|
| Relative change from last quarter, quarterly data.....                        | -2.33% |
| Cumulative change from same quarter last year, quarterly data.....            | -4.58% |
| Relative change from last quarter, rolling four-quarter data.....             | -1.32% |
| Cumulative change from same quarter last year, rolling four-quarter data..... | 0.69%  |

**Summary for all Design-Bid-Build projects awarded between 1/1/2016 and 3/31/2016**

| Project Amount                    | Number of Projects | Number of Bidders | Biddable Items Total Amount | Average Number of Bidders |
|-----------------------------------|--------------------|-------------------|-----------------------------|---------------------------|
| \$0.00 to \$999,999.99            | 14                 | 48                | \$7,210,449.69              | 3.43                      |
| \$1,000,000.00 to \$4,999,999.99  | 26                 | 87                | \$61,742,504.44             | 3.35                      |
| \$5,000,000.00 to \$19,999,999.99 | 18                 | 65                | \$155,863,153.64            | 3.61                      |
| \$20,000,000.00 or Greater        | 1                  | 3                 | \$56,390,000.00             | 3.00                      |
| <b>Total</b>                      | <b>59</b>          | <b>203</b>        | <b>\$281,206,107.77</b>     | <b>3.44</b>               |

Average number of bidders per project decreased to 3.44 this quarter from 4.15 the previous quarter.  
 Average cost per Design-Bid-Build project was \$4,766,205.22.

## 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     |

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.

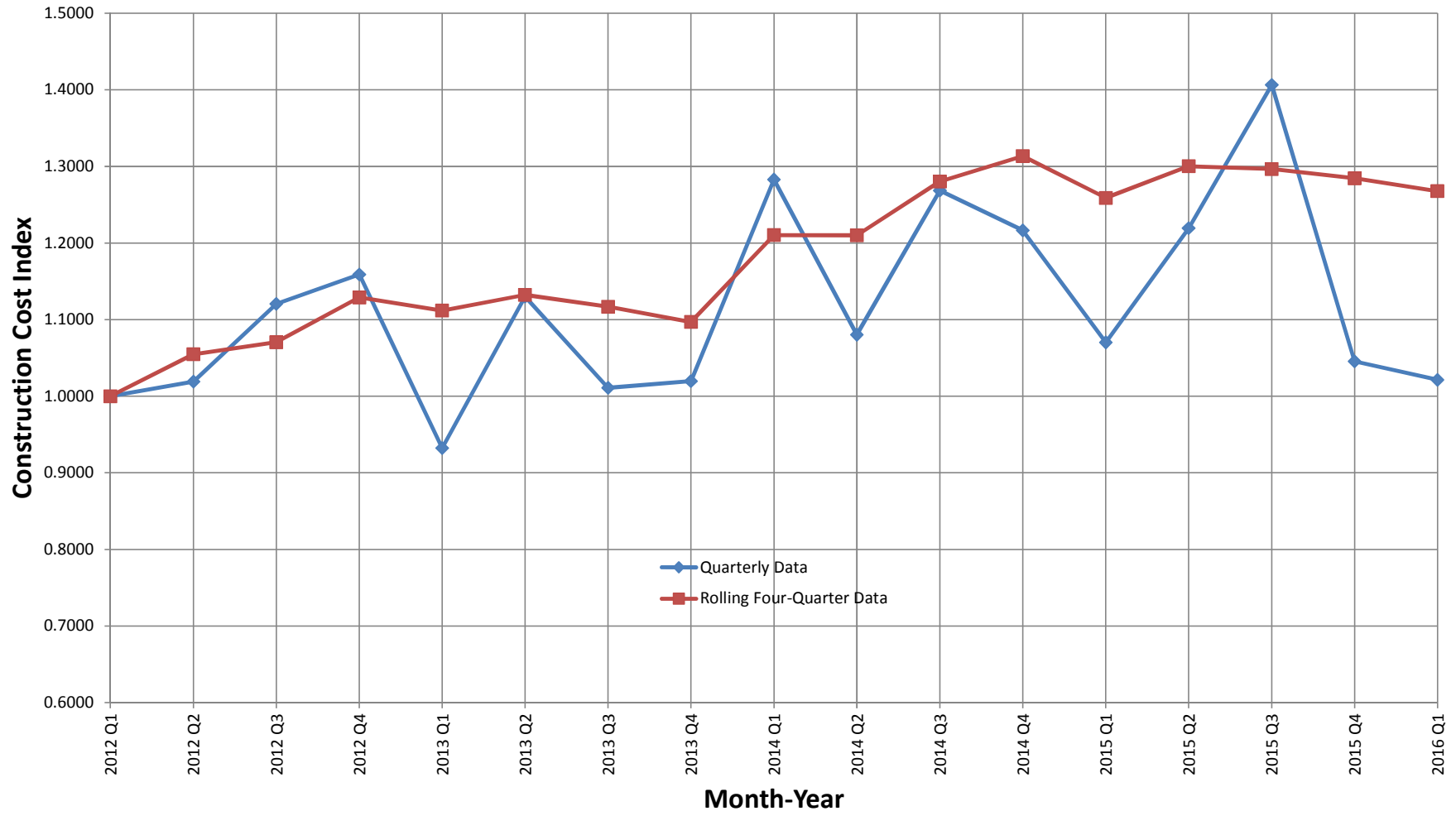
## Colorado Construction Cost Index Tabulations: Rolling Four-Quarter Data

| 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      | 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 |                    | 1.0000     |
| 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  | 1.0547             | 1.0547     |
| 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  | 1.0149             | 1.0704     |
| 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  | 1.0546             | 1.1289     |
| 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  | 0.9849             | 1.1118     |
| 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  | 1.0184             | 1.1323     |
| 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  | 0.9863             | 1.1168     |
| 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  | 0.9823             | 1.0970     |
| 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  | 1.1034             | 1.2105     |
| 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  | 0.9998             | 1.2102     |
| 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  | 1.0580             | 1.2804     |
| 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  | 1.0258             | 1.3134     |
| 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  | 0.9586             | 1.2590     |
| 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  | 1.0327             | 1.3002     |
| 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  | 0.9973             | 1.2966     |
| 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  | 0.9908             | 1.2847     |
| 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  | 0.9868             | 1.2677     |

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 - Fourth Quarter (Ending March 31, 2016)



NOTE: Data calculated using Fisher Ideal Index.

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 2015 Q3, this quarterly CCI report also includes calculations based on rolling four-quarter data. The rolling four-quarter 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 \$12.27/CY which is up \$0.11/CY, with more than 3 times the quantity, from the previous quarter.

Hot Mix Asphalt:

The average price was \$84.03/TON which is up \$2.82/TON, with more than 16 times the quantity, from the previous quarter.

Concrete Pavement:

The average price was \$39.18/SY which is down \$8.28/SY, with nearly 2 times the quantity, from the previous quarter.

Structural Concrete:

The average price was \$617.10/CY which is up \$18.37/CY, with nearly 2 times the quantity, from the previous quarter.

Reinforcing Steel:

The average price was \$1.02/LB which is down \$0.40/LB, with more than 4 times the quantity, from the previous quarter.

ADDITIONAL INFORMATION:

This quarter, based on preceding quarter data, three sub groups, Earthwork, Hot Mix Asphalt and Structural Concrete showed an increase in price while two sub groups, Concrete Pavement and Reinforcing Steel showed a decrease in price. This quarter, 59 Design-Bid-Build projects for a total of \$281,206,107.77 were bid and awarded. The five categories for CCI items totaled \$117,355,232.03 which is 41.7% of total Design-Bid-Build awarded amount. By comparison, last quarter, 20 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    | 0                  | \$0.00                      |
| Emergency                                    | 1                  | \$1,183,105.50              |
| Sub Total                                    | 1                  | \$1,183,105.50              |