# STATE OF COLORADO



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

April 23, 2008

## COLORADO CONSTRUCTION COST INDEX REPORT Calendar year 2008 First Quarter

# Prepared by Gus Bieber Engineering Estimates and Market Analysis Unit of Contracts and Market Analysis Branch

Prepared for Pamela Hutton, Chief Engineer

# STATE OF COLORADO



#### DEPARTMENT OF TRANSPORTATION Contracts and Market Analysis Branch 4201 East Arkansas Avenue. 4<sup>th</sup> Floor

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## SUMMARY

## CONSTRUCTION COST INDEX FOR SELECTED HIGHWAY CONSTRUCTION ITEMS

## 1st QUARTER ENDING March 31, 2008

Index for this quarter	
Index for last quarter	
Point change from last quarter	196.7
Percentage change from last quarter	
Index for same quarter of last year	
Point change from same quarter last year	16.9
Percentage change from this quarter last year	5.7 %
4-quarter moving average	335.3

Average number of bidders this quarter	4.65
Change in number of bidders from last quarter	

NOTE: All information shown in this publication was assembled using 1987 as the base year.

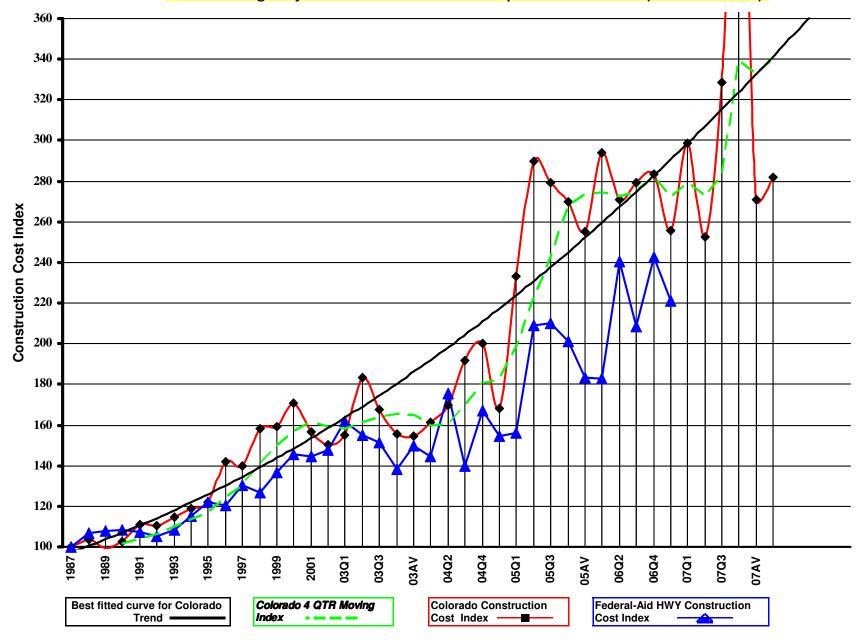
# Summary Report for all the projects awarded betwee 1/1/2008 And 3/31/2008

<b>Project</b> Amount	No. of Projects	No. of Bidders	Total Contract Amt. Avg. # of Bids			
\$0.00 to \$49,999.99	0					
\$50,000.00 to \$99,999.99	0					
\$100,000.00 to \$249,999.99	9	40	\$1,703,575.78	4.4		
\$250,000.00 to \$499,999.99	5	29	\$1,695,387.11	5.8		
\$500,000.00 to \$999,999.99	12	58	\$8,603,650.78	4.8		
1,000,000.00 to \$2,499,999.99	9	45	\$15,761,572.67	5.0		
2,500,000.00 to \$4,999,999.99	13	59	\$49,568,549.79	4.5		
5,000,000.00 to \$9,999,999.99	9	36	\$55,091,480.36	4.0		
10,000,000.00 to \$19,999,999.99	2	8	\$30,503,457.81	4.0		
20,000,000.00 to \$49,499,999.99	1	4	\$22,577,777.77	4.0		
50,000,000.00 or Greater	0					
Total	60	279	\$185,505,452.07	7		

The number of bidders on all projects awards during this period averaged 4.65 bidders per contract. Average cost per project is \$2,323,218.19 (avg. cci 1994=118.8 / avg. cci 1998 =158.1) in 1994 dollars.

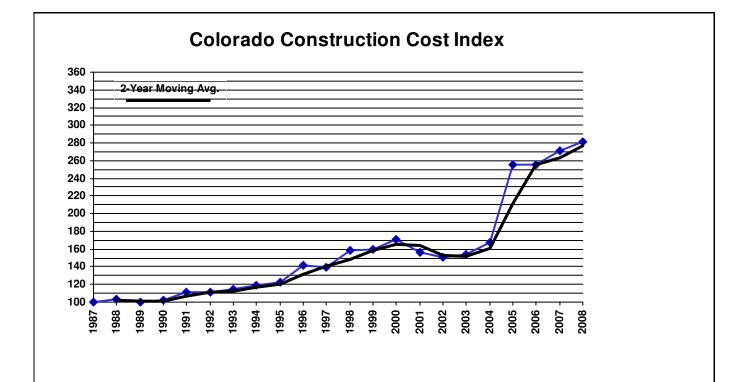
<b>OF ITEM</b> 29	QUANTITY English (CY) 586,271.02	PRICE \$6,168,951.08	UNIT PRICE \$10.52	INDEX		
29		\$6,168,951.08	\$10.52			
0	Metric (CM) <b>0.00</b>	\$0.00	\$0.00 \$0.00			
29	586,271.02 <sup>CY</sup>	\$6,168,951.08	\$10.52	425.9		
150	English (TON) 1,229,917.60	\$79,688,118.34	\$64.79			
0	Metric (MT) <b>0.00</b>	\$0.00	\$0.00			
150	1,229,917.60 <sup>T</sup>	\$79,688,118.34	\$64.79	280.6		
4	English (SY) <b>55,461.67</b>	\$2,666,674.00	\$48.08			
0	Metric (SM) 0.00	\$0.00	\$0.00			
4	55,461.67 <sup>SY</sup>	\$2,666,674.00	\$48.08	359.9		
		SURFACING TO	OTAL INDEX	287.9		
0	English (LB) <b>0.00</b>	\$0.00	\$0.00			
0	Metric (KG) <b>0.00</b>	\$0.00	\$0.00			
0	0.00 <sup>LB</sup>	\$0.00	\$0.00	0.0		
9	English (CY) <b>5,838.00</b>	\$1,954,006.48	\$334.70			
0	Metric (CM) <b>0.00</b>	\$0.00	\$0.00			
9	5,838.00 <sup>CY</sup>	\$1,954,006.48	\$334.70	154.0		
11	English (LB) 1,426,102.00	\$1,181,524.45	\$0.83			
0	Metric (KG) <b>0.00</b>	\$0.00	\$0.00			
11	1,426,102.00 <sup>LB</sup>	\$1,181,524.45	\$0.83	202.1		
				165.		
		COMPOSIT	E INDEX = 2	81.7		
	29 150 0 150 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 4 0 1 0 0 0 1 1 0 1 0 1 1 0 1 0 1 0 1 1 0 1 0 1 0 1 0 1 1 0 1 0 1 0 1 0 1 1 0 1 1 0 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1	29         586,271.02         CY           150         1,229,917.60         Metric (MT)           0         0.00         0.00           150         1,229,917.60         T           4         55,461.67         Metric (SM)           0         0.00         0.00           4         55,461.67         SY           0         English (LB)         0.00           0         0.00         Metric (SM)           0         0.00         Metric (KG)           0         0.00         Metric (KG)           0         0.00         Metric (CM)           0         0.00         Metric (CM)           0         0.00         Metric (CM)           0         0.00         Metric (CM)           0         0.00         Metric (KG)           0         5,838.00         S           11         1,426,102.00         Metric (KG)           0         0.00         Metric (KG) <td>29         586,271.02         \$6,168,951.08           150         1,229,917.60         \$79,688,118.34           0         0.00         \$0.00           150         1,229,917.60         \$79,688,118.34           0         0.00         \$0.00           150         1,229,917.60         \$79,688,118.34           150         1,229,917.60         \$79,688,118.34           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           0         0.00         \$0.00           9         5,838.00         \$1,954,006.48           11         1,426,102.00         \$1,181,524.45           0         0.00         \$0.00           9         5,838.00         \$1,181,524.45</td> <td>29         586,271.02         \$6,168,951.08         \$10.52           150         English (TON) 1,229,917.60         \$79,688,118.34         \$64.79           0         Metric (MT) 0.000         \$0.00         \$0.00         \$0.00           150         1,229,917.60         \$79,688,118.34         \$64.79           150         1,229,917.60         \$79,688,118.34         \$64.79           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00         \$0.00           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00         \$0.00           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00         \$0.00           0         0.00         \$0.00         \$0.00         \$0.00           9         5,838.00</td>	29         586,271.02         \$6,168,951.08           150         1,229,917.60         \$79,688,118.34           0         0.00         \$0.00           150         1,229,917.60         \$79,688,118.34           0         0.00         \$0.00           150         1,229,917.60         \$79,688,118.34           150         1,229,917.60         \$79,688,118.34           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           4         55,461.67         \$2,666,674.00           0         0.00         \$0.00           0         0.00         \$0.00           9         5,838.00         \$1,954,006.48           11         1,426,102.00         \$1,181,524.45           0         0.00         \$0.00           9         5,838.00         \$1,181,524.45	29         586,271.02         \$6,168,951.08         \$10.52           150         English (TON) 1,229,917.60         \$79,688,118.34         \$64.79           0         Metric (MT) 0.000         \$0.00         \$0.00         \$0.00           150         1,229,917.60         \$79,688,118.34         \$64.79           150         1,229,917.60         \$79,688,118.34         \$64.79           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00         \$0.00           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00         \$0.00           4         55,461.67         \$2,666,674.00         \$48.08           0         0.00         \$0.00         \$0.00         \$0.00           0         0.00         \$0.00         \$0.00         \$0.00           9         5,838.00		

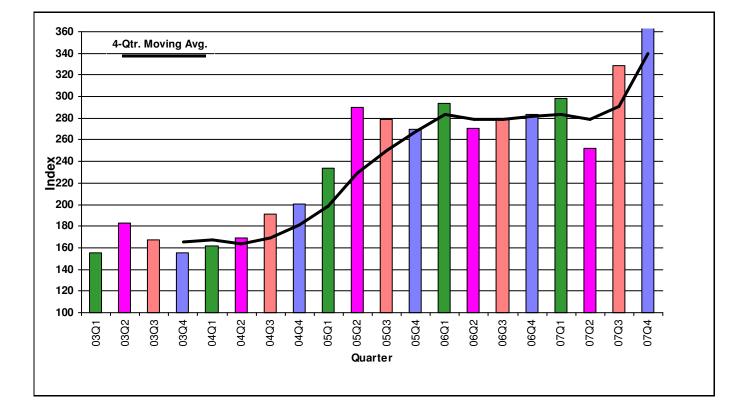
## CCL ITEMS USED FROM 1/1/2008 TO 3/31/2008



## Colorado Highway Construction Cost Index Graph and Tabulations (1987 Base Year)

		Colorado Highway Construction Cost Index Graph and Tabulations (1987 Base Year)														
YEAR	QTR.	Earthwork		Earthwork Asph. Pavement Cond			crete Pavement	Surfacing	Structural Concrete		Reinforcing Steel		Structural S	al Steel		Composite
1987	1987	<i>Bid Price</i> \$2.47	Index 100.0	\$23.17	Index 100.0	<i>Bid Price</i> \$13.36	Index 100.0	Index 100.0	Bid Price \$217.32	Index 100.0	<i>Bid Price</i> \$0.41	Index 100.0	Bid Price \$0.85	Index 100.0	100.0	100.0
1988	1988	\$2.92	118.1	\$23.88	103.0	\$13.84	103.6	103.1	\$195.02	89.7	\$0.45	110.7	\$0.89	104.1	96.7	103.7
1989	1989	\$2.57	103.9	\$23.67	102.2	\$11.65	87.2	100.6	\$199.41	91.8	\$0.40	97.8	\$0.88	103.5	95.3	99.6
1990	1990	\$2.78	112.5	\$23.98	103.5	\$15.09	113.0	104.5	\$190.86	87.8	\$0.37	90.8	\$0.99	116.0	94.1	102.7
1991	1991	\$3.31	133.8	\$26.25	113.3	\$16.03	120.0	114.0	\$195.43	89.9	\$0.38	93.1	\$0.89	104.4	93.5	111.2
1992	1992	\$2.77	112.3	\$26.20	113.1	\$23.82	178.3	119.8	\$216.87	99.8	\$0.36	87.9	\$0.71	82.8	94.0	110.7
1993	1993	\$3.25	131.4	\$27.74	119.7	\$16.75	125.4	121.3	\$212.43	97.7	\$0.37	90.1	\$0.79	93.0	95.3	114.7
1994	1994	\$3.56	144.2	\$28.40	122.6	\$18.78	140.6	124.4	\$219.94	101.2	\$0.37	89.7	\$0.67	78.8	94.4	118.8
1995	1995	\$3.41	138.1	\$30.25	130.5	\$17.82	133.4	130.8	\$211.29	97.2	\$0.39	94.0	\$0.90	105.5	98.3	122.3
1996	1996	\$4.46	180.5	\$32.73	141.3	\$19.22	143.9	141.5	\$265.98	122.4	\$0.43	105.1	\$1.09	128.5	120.2	141.7
1997	1997	\$4.24	171.7	\$32.92	142.1	\$21.39	160.1	143.9	\$246.29	113.3	\$0.45	110.8	\$1.01	117.9	113.8	139.6
1998	1998	\$4.89	198.0	\$35.72	154.2	\$26.54	198.7	158.7	\$283.01	130.2	\$0.50	122.0	(\$1.00)	-1.0	128.2	158.1
1999	1999	\$4.94	199.8	\$35.23	152.0	\$22.78	170.5	153.9	\$310.56	142.9	\$0.54	132.0	\$1.41	165.3	145.3	159.2
2000	2000	\$5.25	212.6	\$40.02	173.0	\$20.56	153.9	170.8	\$346.82	159.6	\$0.47	115.2	\$1.18	138.8	146.8	170.7
2001	2001	\$4.19	169.5	\$38.67	167.4	\$17.45	130.6	163.2	\$303.22	139.5	\$0.50	120.9	\$1.29	151.5	138.4	156.8
2002	2002	\$3.74	151.2	\$37.99	164.7	\$24.81	185.7	166.2	\$285.35	131.3	\$0.50	121.3	\$0.78	91.9	121.4	150.1
2003	03Q1	\$4.23	171.2	\$36.48	158.2	\$24.92	186.6	160.4	\$283.25	130.4	\$0.57	137.9	\$0.00	0.0	132.2	155.2
2003	03Q2	\$10.00	404.8	\$40.35	174.9	\$43.68	327.0	189.9	\$327.84	150.9	\$0.62	151.9	\$0.31	36.3	127.8	183.2
2003	03Q3	\$4.64	187.9	\$41.05	177.5	\$18.89	141.4	173.5	\$336.84	155.0	\$0.58	140.5	\$1.05	123.1	145.7	167.6
2003	03Q4	\$3.85	155.7	\$40.10	173.5	\$19.51	146.1	170.3	\$267.39	123.1	\$0.51	125.0	\$0.00	0.0	123.5	155.7
2003	03AV	\$4.42	178.9	\$38.23	165.7	\$20.91	156.6	164.1	\$289.44	133.2	\$0.55	133.4	\$0.72	84.7	123.4	154.4
2004	04Q1	\$3.94	159.7	\$36.03	156.1	\$31.13	233.0	163.5	\$297.69	137.0	\$0.71	172.4	\$1.78	208.9	158.4	161.3
2004	04Q2	\$5.84	236.6	\$35.97	155.9	\$28.42	212.8	161.2	\$297.92	137.1	\$0.78	190.1	\$1.13	132.9	146.5	169.6
2004	04Q3	\$4.38	177.1	\$43.33	188.0	\$27.59	206.5	189.0	\$350.71	161.4	\$0.91	221.3	\$2.70	316.3	204.4	191.6
2004	04Q4	\$7.39	298.9	\$41.45	179.2	\$40.01	299.5	191.3	\$305.55	140.6	\$0.74	179.9	\$0.00	0.0	150.1	200.3
2004	04AV	\$4.60	186.1	\$37.43	162.1	\$28.96	216.8	167.2	\$323.50	148.9	\$0.83	202.7	\$1.26	147.6	159.0	168.0
2005	05Q1	\$9.43	381.7	\$41.99	182.3	\$60.10	449.9	208.8	\$443.32	204.0	\$0.91	222.2	\$1.10	128.9	192.2	233.3
2005	05Q2	\$16.07	650.5	\$44.19	192.4	\$28.54	213.6	193.1	\$540.39	248.7	\$0.98	240.0	\$0.00	0.0	246.6	289.8
2005	05Q3	\$9.74	394.2	\$57.71	249.5	\$34.29	256.7	249.9	\$491.90	226.4	\$0.97	237.3	\$3.50	410.2	265.9	279.3
2005	05Q4	\$12.52	506.9	\$52.73	228.4	\$56.18	420.5	247.4	\$407.63	187.6	\$0.81	198.2	\$0.97	113.7	174.6	269.7
2005	05AV	\$12.90	522.0	\$44.17	191.8	\$30.69	229.8	194.7	\$508.77	234.1	\$0.96	232.9	\$1.01	118.4	210.4	255.2
2006	06Q1	\$11.48	464.6	\$54.99	238.8	\$47.80	357.8	249.7	\$566.84	260.9	\$1.22	296.5	\$0.00	0.0	269.5	293.8
2006	06Q2	\$10.68	432.4	\$58.85	255.1	\$28.40	212.6	249.7	\$426.20	196.1	\$1.11	271.4	\$1.93	226.1	216.8	270.9
2006	06Q3	\$7.03	284.7	\$74.90	323.5	\$26.79	200.6	310.6	\$439.17	202.1	\$0.91	222.3	\$0.00	0.0	207.0	279.4
2006		\$6.20	251.1	\$67.40	291.4	\$45.03	337.1	295.6	\$387.04	178.1	\$0.79	191.9	\$5.70	667.6	280.3	283.4
2006	06AV	\$7.54	305.1	\$59.61	258.4	\$33.79	253.0	256.8	\$430.27	198.0	\$0.92	223.5	\$2.62	306.9	225.1	255.5
2007	07Q1	\$9.68	391.6	\$63.57	274.9	\$54.18	405.6	287.8	\$564.69	259.9	\$1.41	343.2	\$1.75	205.1	264.8	298.6
2007	07Q2	\$5.99	242.5	\$67.30	290.9	\$38.03	284.7	289.9	\$468.58	215.6	\$0.89	217.7	\$0.85	99.8	192.5	252.5
2007	07Q3	\$10.32	417.6	\$81.60	352.9	\$28.59	214.0	338.0	\$588.03	270.6	\$1.06	258.9	\$2.00	234.4	261.0	328.3
2007	07Q4	\$17.76	719.0	\$103.64	448.2	\$98.13	734.6	476.8	\$563.39	259.3	\$1.02	249.2	\$5.90	691.1	345.1	478.4
2007	07AV	\$7.18	290.5	\$66.58	287.9	\$37.76	282.7	286.9	\$546.29	251.4	\$1.01	245.7	\$1.40	163.6	232.4	271.1
2008	Q1	\$10.52	425.9	\$64.79	280.6	\$48.08	359.9	287.9	\$334.70	154.0	\$0.83	202.1	\$0.00	0.0	165.7	281.7
_000	<u>.</u>	ψ10.0Z	420.0	φ04.70	200.0	φ0.00	000.0	207.0	φ00-1.70	104.0	ψ0.00		φ0.00	0.0	100.7	20117





## Comments:

This Colorado Construction Cost Index is composed of six indicator items and based on bid prices relative to the unit prices of 1987 (unit index=100). The Index varies due to type and location of projects in addition overall economic conditions.

## Earthwork (Excavation and Embankment):

The average price was \$10.52 a cu. yd. which is down \$7.24 from the previous quarter. A lot more projects with seven times as large total earthwork quantities were awarded this quarter than the last.

## Hot Mix Asphalt:

The average price was \$64.79 a ton which is down \$38.85 from the previous quarter. More projects with large HMA quantities were awarded this quarter than the last.

## Concrete Pavement:

The average price was \$48.08 a sq. yd. which is down \$50.05 from the previous quarter. Concrete pavement quantities were twenty-two times as large as the fourth quarter last year.

## Structural Steel:

No project with structural steel item was awarded in the first quarter.

## Structural Concrete:

The average price was \$334.70 a cu. yd. which is down \$228.69 from the previous quarter. Twice as large total quantity of structural concrete was awarded in this quarter.

## Reinforcing Steel:

The average price was \$0.83 a lb which is down \$0.19 from the previous quarter. The total quantity of reinforcing steel in the  $1^{st}$  quarter trippled from the previous one.

## ADDITIONAL INFORMATION:

For the 1st quarter, the category indices showing a decrease was Earthwork, Hot Mix Asphalt, Concrete Pavement, Structural Concrete and Reinforcing Steel. No bid for Structural Steel.

Engineering Estimate and Market Analysis (EEMA) believes because of the exaggeration in the third and fourth quarter CCI data for 2007, due to the relatively small number of total projects awarded and the relatively small size of the average projects, the 1<sup>st</sup> quarter data brings the index down to more normal levels. The 4-quarter moving average, which smoothes out the short term swings, is at around 335.3, which is more in line with actual market conditions.

60 projects were bid and awarded this quarter for a total of \$185,505,452.07. By comparison, 23 projects were bid last quarter. The six categories for CCI items totaled \$91,659,274.35, which is 49.4% of total awarded amount. 11 maintenance contract projects were bid this quarter. No metric, Design/Build, or Lump Sum projects were bid this quarter.

The competition for projects decreased to 4.65 bidders from 5.22 bidders for each project on average.