

**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

307



FROM: TLMA - Transportation Department

SUBMITTAL DATE:

July 3, 2013

SUBJECT: Analysis of Transportation Department Contract Change Orders – July 2011 through June 2012

RECOMMENDED MOTION: That the Board of Supervisors (Board) receive and file this analysis of the Contract Change Orders completed by the Department in this time period.

BACKGROUND: On May 16, 1995 (Agenda Item 3.25), the Board requested periodic reports regarding the Change Order rates from the Department. At that time, the Department set a goal to obtain an average annual Change Order rate not to exceed 4%. Attachment 1 illustrates the trend of contract statistics over the past 21 fiscal years, indicating the Change Order rates for that time period. From the beginning of the 1995/1996 fiscal year (when the Department had fully established the project manager form of project delivery and began implementing

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Director of Transportation and Land Management

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FINANCIAL DATA	Current FY Total Cost:	N/A	In Current Year Budget:	Yes
	Current FY Net County Cost:	\$ 0	Budget Adjustment:	No
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2012/2013
SOURCE OF FUNDS: N/A				Positions To Be Deleted Per A-30 <input type="checkbox"/>
				Requires 4/5 Vote <input type="checkbox"/>

C.E.O. RECOMMENDATION:

APPROVE
BY
Tina Grande

County Executive Office Signature

Dep't Recomm.: ☒ Consent ☐ Policy
Per Exec. Ofc.: ☒ Consent ☐ Policy

Prev. Agn. Ref. 05/25/10, Item 9.15 | **District:** ALL | **Agenda Number:**

2-21

procedures to control the Contract Change Order rate) through the end of the 2011/2012 fiscal year, the overall average rate to date was 4.5%. The Department has generally met or beat our target rate of 4% on most years.

This report presents the construction contract cost data and Change Order rates for fiscal year 2011/2012. There are currently several ongoing multi-year construction projects on the I-10 corridor in the desert area, the I-215 corridor, the I-15 corridor, the SR-79 corridor and two bridge replacement projects over the Santa Ana River, for which Notices of Completion have not yet been filed since they are in the documentation and claims close-out phase, that are not reflected contract amounts shown in this report. In fiscal year 2011/2012, the Department filed Notices of Completion on 23 road construction contracts totaling \$27,338,013.16. The Change Orders for these projects issued as part of the normal course of construction totaled \$1,284,987.95, a rate of 4.7%. This Change Order rate is just slightly above at our 4% target. About one third of the projects (six) had no Change Orders, and there were three projects with Change Orders that exceeded 10% of the original contract bid amount. The three projects with a Change Order rate that exceeded 10% were: the Etiwanda Rehabilitation, the San Timoteo Canyon and Live Oak Canyon Roads, and Old Elsinore Road/Clark Street/Rider Street Traffic Signal.

Regarding the Etiwanda Rehabilitation Project, the bulk of the Change Order dollars (\$436,358) was due to the change in the condition of the pavement from the time the materials report was put together to the time the design was completed, which was also hastened by a very wet winter. The project also had another \$48,000 in Change Orders to address various minor items to account for repairing some existing facilities (curb and gutter, drainage inlets, etc.) that were initially anticipated to remain in place and to accommodate the tie-in. The Change Orders on this project represented over one third of the overall Change Order dollars for this study period.

The San Timoteo Canyon and Live Oak Canyon Roads Project had anticipated that certain improvements would be completed by the water company installing a line in the road. However, the plans for the road improvements to be completed by the water company provided only for an overlay of the existing pavement, and the road needed to be reconstructed. The costs associated with that change amounted to almost \$100,000. Additionally, in accordance with the contract provisions, the County incurred additional asphalt costs in the amount of \$59,000 due to the volatility of the cost of asphalt oil.

The Old Elsinore Road/Clark Street/Rider Street Traffic Signal Project illustrates the difficulty in retrofitting an old and oddly shaped intersection to provide signalization for vehicular, pedestrian, and equestrian traffic. The drainage also proved difficult to address. The Change Orders for this project to address these challenges added a little over \$47,000 to the overall project cost, a 12.22% increase.

The Department will continue to strive at keeping contract costs from escalating by improving project coordination and design to minimize Change Orders. The Department is performing more constructability reviews, performing final reviews by the materials engineer prior to bidding, and is implementing a separate independent quantity review to help address some of the major avoidable type changes. A full copy of the Change Order detail listing each project with the descriptions and reasons for the Contract Change Orders for fiscal year 2011/2012 is available at the Transportation Department offices.

Riverside County Transportation Construction Contracts Change Order Rates



Summary of Yearly Results for Projects that a Notice of Completion has been Issued:

	Total Contracts	Total #CCO's	CCO's = 0	CCO's >10%	Total Bid Amounts	Total C.C.O Amount	Change Order %	Total Project Const. Cost
July 1991 - June 1992:	32	N/A	5	14	\$32,461,870.43	\$4,993,214.43	15.38%	\$37,526,088.18
July 1992 - June 1993:	26	N/A	5	12	\$23,776,027.00	\$4,105,665.18	17.27%	\$27,921,984.28
July 1993 - June 1994:	34	N/A	10	11	\$17,604,995.10	\$1,444,416.66	8.20%	\$18,905,372.77
July 1994 - June 1995:	30	268	3	16	\$33,116,622.75	\$2,994,852.15	9.04%	\$36,491,784.99
July 1995 - June 1996:	28	187	8	3	\$33,111,606.93	\$1,449,114.20	4.38%	\$34,223,630.17
July 1996 - June 1997:	31	54	10	2	\$19,359,692.36	\$528,836.04	2.73%	\$19,600,956.62
July 1997 - June 1998:	24	71	8	1	\$26,312,159.82	\$638,383.47	2.43%	\$27,041,530.97
July 1998 - June 1999:	21	65	5	2	\$17,449,359.09	\$896,241.17	5.14%	\$18,015,711.01
July 1999 - June 2000:	23	56	7	1	\$18,973,174.39	\$170,823.28	0.90%	\$18,995,903.27
July 2000 - June 2001:	25	72	6	2	\$17,268,546.14	\$1,509,103.94	8.74%	\$18,728,304.78
July 2001 - June 2002:	31	34	9	2	\$19,242,582.16	\$254,025.33	1.32%	\$19,015,424.61
July 2002 - June 2003:	16	51	1	1	\$12,122,501.47	\$388,178.25	3.20%	\$12,412,498.37
July 2003 - June 2004:	22	54	5	3	\$13,730,394.75	\$123,424.42	0.90%	\$13,937,898.23
July 2004 - June 2005:	27	42	7	0	\$11,837,051.59	\$213,722.98	1.81%	\$11,679,025.31
July 2005 - June 2006:	18	26	6	1	\$8,990,544.99	\$166,078.31	1.85%	\$8,985,032.83
July 2006 - June 2007:	26	62	9	2	\$28,992,325.65	\$1,531,066.05	5.28%	\$29,932,364.92
July 2007 - June 2008: <small>Developer Requested and Funded Changes on the Newport Road Project 07/08:</small>	21 13	33 13	11 13	3 3	\$69,114,974.64	\$2,009,888.99	2.91%	\$75,466,950.32
July 2008 - June 2009:	23	54	9	2	\$48,004,799.60	\$1,672,540.29	3.48%	\$48,114,294.24
July 2009 - June 2010:	19	10	14	0	\$12,184,523.30	\$327,164.97	2.69%	\$12,915,067.24
July 2010 - June 2011:	14	25	9	0	\$19,499,204.76	\$782,122.09	4.01%	\$20,779,145.84
July 2011 - June 2012:	23	27	6	3	\$27,338,013.16	\$1,284,987.95	4.70%	\$28,200,512.14
Totals for July 1991 through June 2012:	514	1204	153	81	\$510,490,970.08	\$31,726,261.27	6.21%	\$538,889,481.09

*Rate Since Implementation of Project Manager Format of Project Delivery - July 1995 through June 2012

4.51%

* Rate Excluding the 13 Developer Requested Changes on the Newport Road Project of \$4,242,411.12 =

3.46%