### **EXCERPTS**

#### Acronyms:

**CDOT-** Colorado Department of Transportation

PCL- Partial Cover Lowered (I-70 PCL, Lowered Portion of the Central 70 Project)

**ROD-** Record of Decision (given by the **FHWA-** Federal Highway Administration)

T-REX- Transportation Expansion Project, 2001-2006 (I-25, I-225 Highway Widening, and Light Rail)

#### Apr 2014- YouTube link to Cynthia Thorstad of the League of Women Voters

Presentation to explain the costs of the I-70 PCL vs. the I-270/I-76 (Reroute) alternative and other projects, including the numbers put forth by CDOT in 2012. CDOT estimated the cost of the I-270/I-76 alternative at \$21.2 million per lane mile (LM) vs. T-REX's numbers of \$3.8 million per LM, or over 5x as much! This made the alternative wildly expensive, even more so than a proposed 53 mile I-70 expansion into the mountains as is also shown in the presentation. (At the bottom of this report is CDOT's "Revised" cost estimate from 2017).

https://www.youtube.com/watch?v=Z6MCf aemr0

#### **Excerpts include:**

Using \$21.2M /LM inflates the I-270/76 alternative to \$4.35B, twice as much as the Trench (PCL):

### Repair of CDOT's Reroute Cost Estimate

		Trench Cost	Widen I-270			
			6 Thru Lanes Per CDOT Plan (10 built lanes)	Added Cost For 6 More Thru Lanes (16 built lanes)	Widen 1-76 To 12 Lames (16 built lames)	Net Cost Assigned to Alternative
Trench Alternative		\$2.2 Billion				\$2.2 Billion
CDOT I-27	0 Project					
Reroute Alternative	From CDOT's 2012 Draft Estimate (\$21.2M/LM)		\$950 Million	\$1.1 Billion	\$2.35 Billion	\$4.35 Billion

Source: Colorado DOT

We subtract the already planned \$950M **I-270 repair** project from the \$4.35B estimate to get **\$3.45B**:

## Repair of CDOT's Reroute Cost Estimate

Repair #1

			Widen 1-270			Net Cost
Trench Cost		6 Thru Lanes Per CDOT Plan (10 built lanes)	Added Cost For 6 More Thru Lanes (36 built lanes)	Widen 1-76 To 12 Lanes (16 bulk lanes)	Assigned to Alternative	
Trench Alternative		\$2.2 Billion				\$2.2 Billion
CDOT I-270 Project			\$950 Million			\$950 Million
Reroute Alternative	From CDOT's 2012 Draft Estimate (\$21.2M/LM)			\$1.1 Billion	\$2.35 Billion	\$3.45 Billion

We replace \$21.2M /LM with **T-REX's** \$3.8M/LM dropping the cost further to **\$775M**:

### Repair of CDOT's Reroute Cost Estimate

Repair #2

			Widen I-270		Widen 1-76 To 12 Lanes (16 built lanes)	Net Cost Assigned to Alternative
	Trench Cost		6 Thru Lanes Per CDOT Plan (10 built lanes)	Added Cost For 6 More Thru Lanes (16 built lanes)		
Trench Alternative		\$2.2 Billion				\$2.2 Billion
CDOT I-270 Project			\$950 Million			\$950 Million
Reroute Alternative	From CDOT's 2012 Draft Estimate (\$21.2M/LM)			\$1.1 Billion	\$2.35 Billion	\$3.45 Billion
	Using T-REX's Actual Costs (\$3.8M/LM)			\$350 Million	\$425 Million	\$775 Million

We reduce the I-270 repair costs as well, then add to the \$775M (+ \$170M = \$945M), but still ½ the Trench:

## Repair of CDOT's Reroute Cost Estimate

Repair #3

		$F^{-}$	Widen	Widen 1-270		No. Com
		Trench Cost	6 Yhru Lanes Per CDOT Plan (10 built lanes)	Added Cost for 6 More Thru Larses (16 built larses)	Widen 1-76 To 12 Lanes (36 built lanes)	Net Cost Assigned to Alternative
Trench Alternative		\$2.2 Billion				\$2.2 Billion
CDOT I-270 Project			\$170 Million			\$170 Million
Reroute Alternative	From CDOT's 2012 Draft Estimate (\$21.2M/LM)			\$1.1 Billion	\$2.35 Billion	\$3.45 Billion
	Using T-REX's Actual Costs (\$3.EM/LM)			\$350 Million	\$425 Million	\$775 Million

Finally, the ridiculous CDOT estimate of the Reroute compared to other projects with more LM's:

## Recap of Three Projects

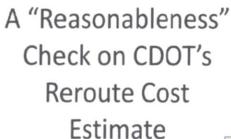
Project	Cost
T-REX Rebuild 17 miles with 209 new lane-miles	\$795 million
Parsons Corp. I-70 Mountain Proposal Rebuild 53 miles, approx 550 lane miles plus new tunnels	\$3.5 billion
CDOT Reroute Cost Estimate Rebuild 12.8 miles with 204.8 new lane-miles	\$4.35 billion ?

Below are some of the **Source Documents** that the League of Woman Voters used for this presentation, with some of their comments/corrections in red:

# Key Issues Regarding CDOT's Reroute Cost Estimate

	I-270/I-76 Reroute Cost Estimate		Issues		
	Amount	Cost			
1.Route length	12.8 miles				
2.Existing through lanes	4				
3.Existing shoulder lanes	4				
4.New through lanes	8		If only 50% of the traffic on I-70 is "through," why does more than the entire number of existing I-70 (i.e. 6) lanes need to move to the I-270/I76 Reroute option?		
5.New shoulder lanes	4				
6.Total new lanes added	16				
7.Total new lane-miles added	204.8				
8.Roadway cost per lane-mile	\$8.8 M		Should be around \$2M per lane mile, based on other recent CDOT Interstate widening projects, such as I-225, I-25 Colorado Springs to Monument, and I-25 North Forty.		
Subtotal roadway cost	Item 7 x Item 8	\$1,800,000,000	This line item alone is more than twice the cost of the entire T-REX highway project.		
Additional structure cost	\$800 M	\$800,000,000			
New interchanges	\$20M each x 4	\$80,000,000			
Total construction cost		\$2,700,000,000			
Other costs:					
30% contingency		\$680,000,000	This is a math error.		
15% design and 20% CO		\$800,000,000	This is a math error.		
I-70 removal		\$47,000,000			
Right-of-way	\$8.2M per mile	\$100,000,000			
Total Project Cost Estimate		\$4,350,000,000			

Source: CDOT I-270/I-76 Reroute/Bypass Alternative Draft Cost Estimate, July 9, 2012.



T-REX
17 miles long

I-25 from Logan St to I-225: 12 lanes x 6.5 miles = I-25 from I-225 to C-470: 14 lanes x 6.5 miles = I-225 from I-25 to Parker Rd: 10 lanes x 4.0 miles =

Total Lane-miles Constructed =

78 lane-miles +91 lane-miles +40 lane-miles

209 lane-miles

I-270/I76 Reroute Cost Estimate 12.8 miles long

<u>x 16 lanes =</u> **204.8 lane-miles** 

Total Highway Cost	\$795 million	\$4.35 billion
Total Highway Cost per Lane Mile	\$3.80 million/lm	\$21.2 million/lm

Source: Southeast Corridor Constructors and CDOT.

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**NOTE:** In January 2017 and as part of the **ROD** (Record of Decision) given to CDOT by the **FHWA**, **CDOT** revised its cost of doing the I-270/I-76 alternative to \$3.2B. (This was a drop of over \$1B!) Here's what it stated in their Memorandum- "During the Final EIS review period, the I-70 Project Team received numerous comments that the cost estimate was too high. Therefore, a new cost estimate was prepared by CDOT, which came in at approximately \$3.2 billion.." ---16/22 (12)

(So, just like that, a drop in cost by over a quarter because they did a new cost estimate! Meanwhile, the revised estimate is still wildly expensive compared to **T-REX** and other projects on a per lane mile (LM) basis. What's interesting here, however, is how they could have overestimated it by \$1B before! So even by their own numbers, which are still too high, it's a giant swing and throws into question their entire process of determining costs and also why the public should trust their numbers to begin with. This also includes their traffic analysis and assumptions that show "Increased Congestion" if the I-270/I-76 option were pursued and I-70 turned into a 6-lane arterial where the viaduct is now.) Here's the link to their 2017 Revised Elimination of I-270/I-76 Memorandum: <a href="http://www.i-70east.com/ROD/I-70EastEIS\_ROD\_AttC1\_Revised-Elimination-I270-I76-Reroute-Alt.pdf">http://www.i-70east.com/ROD/I-70EastEIS\_ROD\_AttC1\_Revised-Elimination-I270-I76-Reroute-Alt.pdf</a>