







CDOT Transportation Bond Package April 19, 2017



Agenda

- Understanding the legislation's finance and bonding components
- Development Program background
- Ballot List Development
- Schedule
- Other issues to consider



Bond Scenarios

CDOT TRANs Bonding Scenarios						
Term	20 Years					
Interest Rate	4.00%	5.00%	6.00%			
Annual Debt Service	\$250,000,000	\$250,000,000	\$250,000,000			
Total Project Proceeds	\$3,380,552,300	\$3,099,947,375	\$2,853,112,750			
Total Repayment Cost	\$4,499,938,800	\$4,999,956,750	\$4,999,945,400			

<u>Assumption:</u> \$350 million in annual revenue to cover up to \$3.5 billion in bond proceeds with a maximum repayment of \$5.5 billion. Potential exists to expand the list of projects to include "pay-as-you-go" projects.

<u>Target:</u> \$3.5-\$4.0 billion in projects for ballot list, for a combination of bonding and pay-as-you-go projects (subject to Commission direction).



Development Program Background

- Developed in 2015/2016
- Part of the transportation planning process builds on Regional Transportation Plans, identifies major investment needs and establishes priorities with planning partner input
- Consolidates multiple "project lists," including information from 15 Regional Transportation Plans
- Tool to track needs and support planning and project selection processes, including development of the 4- Year Statewide Transportation Improvement Program (STIP), and identification of priorities for different funding opportunities.
- Planning level document various levels of project readiness, scope definition, and cost estimation



Development Program Background

Development Program Inventory of Major Investments

10-Year Development Program Plan

- ~130 major highway projects over \$9 billion in funding need (i.e. "Tier 1" and "Tier 2" projects)
- Transit, operations, and bike/ped projects in development

 ~74 high priority major highway projects and phases – \$2.5 billion in funding need (i.e. "Tier 1" projects), \$3.1 billion total project cost



Ballot List Development

- Initial Project List (complete)
 - a. Identify any Tier 1 projects that should be removed and any Tier 2 projects that should be added
- 2. Scope Refinement (in process)
 - a. Review and refine/update project scopes as initially identified in 10-Year Development Plan
 - b. Update scope to add construction phase where previously design-only
- 3. Cost Refinement (in process)
 - Develop updated, risk-based cost estimates for each project reflecting revised scope (where applicable)
 - b. Escalate project cost estimates based on estimated delivery schedule
- 4. Schedule Refinement (in process)
 - a. Develop risk-based estimated delivery schedule for each project



Ballot List Development

- 5. Review of Other Available Funds (in process)
 - a. Review and verify assumptions for other available funds
- 6. Initial Outreach to Construction Contracting and Engineering Consulting Community
- 7. Continued Work with Our Planning Partners
- 8. Final Draft Project List
 - a. Propose adjustments to project list based on funds available, updated cost and schedule information, and region/planning partner priority.
 - b. Review changes/priorities with TC and STAC



Initial Project List

- Per 3/22 Chief Engineer memo, Regions have been asked to develop prioritized project list utilizing Tier 1 and Tier 2 list from 10-Year Development Program as a starting point
- In general the list should include: Tier 1 projects, Tier 1 projects with smallest logical construction component, and Tier 2 projects with compelling rationale
- The memo also requested that regions identify signature projects which will be subject to a higher level of cost and schedule refinement



MEMORANDUM

TO: CDOT STAFF

FROM: JOSHUA LAIPPLY, CHIEF ENGINEER

DATE: MARCH 22, 2017

SUBJECT: CDOT TRANSPORTATION BOND PACKAGE

As many of you already know HB-17-1242 has proposed a significant level of transportation investment for both the locals and for CDOT. We estimate that as currently drafted CDOT could bond approximately SSB. The bill also states that CDOT must provide a list of projects for bonding within 30 days of the passing of the bill. It goes without saying that the list presented is critically important to transportation in Colorado.

Previously. Deb and her group at DTD worked with you to develop a \$2.58 investment list. (10-Year Development Program "Ter!" Projects. This list should be the starting point from which to work from. PMO will be following up with you shortly with a data request to support the development of updated, risk-based cost estimates for each of the Tiel or projects. Some of these projects do not include any construction. Executive Management believes that anything we go to bond with must have a construction component. Where this is the case we ask that you respond to the data request with a scope that includes a minimal togoid-construction phase. While the Tier I projects are our starting point and focus, we recognize that there may be some instances where we should consider a Tier II project. If so, please identify them Fire II projects and include in your response to the data request. Please recognize, however, that where we are significantly changing project scopes as originally included the projects we will need to set with our local planning parners and make identified in the Tier I tild, or adding new projects we will need to set with our local planning parners and make

Additionally, the executive team has identified several major, signature projects within each region that likely merit more in-depth analysis as part of a risk-based cost estimation workshop. We further ask that you review and provide feedback as to whether these are the "right" projects for such treatment.

We understand that with updated costs estimates, and revision/additions the list may exceed \$38. Once we have your draft information we will work as a team to whittle the list down to what we can deliver for \$38. Please deliver your draft project list to Jane Fisher and Jeff Sudmeler by COB Friday 3/31.

ACTIONS

- Produce your prioritized list utilizing Tier 1, Tier 2 and/or Signature projects listed herein.
 Identify 1 to 2 projects in your region that you believe contain the highest budgetary risk. PMO will coordinate with you to schedule a workshop to assist in obtaining a deeper dive into the project budget with your team members in April, prior to the May commission meeting.
- Vet with your local planning partners to ensure you have their support, both monetarily (some projects assume significant partnership) and politically.
- Complete data collection request provided by PMO so we ensure we are assessing risk similarly statewide e.g. railroad, resources, etc.

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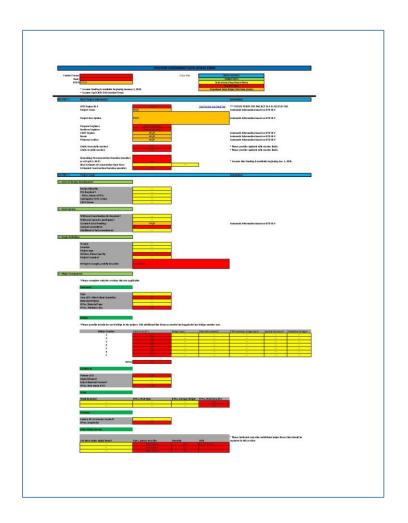


Project Scope Refinement

A data intake worksheet will be completed for each project detailing:

- 1. Basic project information
- 2. Level of design development
- 3. Scope definition
- 4. Major components
- 5. Specialty risks
- 6. Project delivery method
- 7. Current total cost estimate

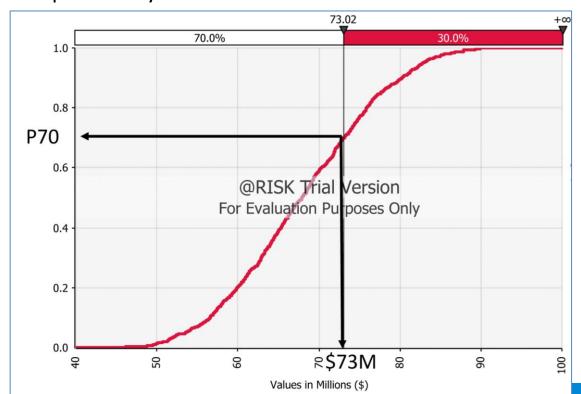
Risk Workshops are also planned for identified signatures projects





Cost Estimate Refinement

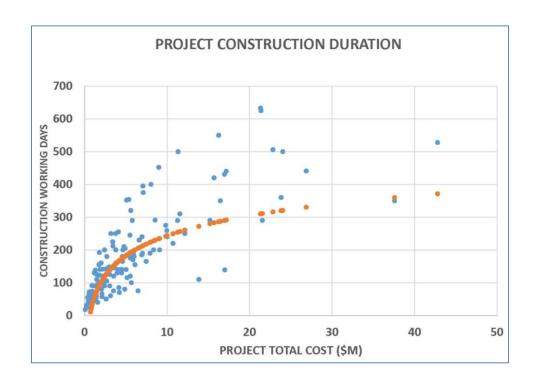
- 1. Cost probability curve will be estimated for each project
- Rationale for establishing probability at the project and program level is still being evaluated (could be based on level of project development, magnitude or complexity, other factors, etc.)
- 3. Risk workshops will also be conducted for signature projects to further refine cost probability distribution





Schedule Refinement

- Schedule probability distribution will be estimated (similar to cost probability approach)
- 2. Risk workshops will also be conducted for signature projects to further refine schedule probability distribution





Market Considerations

- Based on lessons learned from the RAMP program it is recognized a potential increase of this magnitude will impact the market
- So what activities do we have planned to mitigate the impacts?
 - Close coordination with CCA as the project list and associated timing is finalized
 - Close coordination with ACEC to ensure consultant capacity limitations are considered
 - Assessing CDOT design and construction management workload and making provisions to have needed contracting capacity in place
 - Identifying magnitude and timing of various regulatory approvals and associated resource requirements to prepare and process related materials









Schedule

- 1. Finalize initial project list and identify Signature Projects for Risk Workshops: 3/31
- 2. Conduct Signature Project Risk Workshops: 4/5 4/24
- 3. Receive Data Intake Forms from Regions: 4/6
- 4. Complete draft risk based cost estimates and schedules: 4/7 4/28
- 5. Review draft project cost estimates and schedules with Regions and reconcile comments: 5/1 5/5
- 6. Make adjustments to project list based on funds available, updated cost and schedule information, and region/planning partner priority: 5/1 5/12
- 7. Present draft time-phased project list to TC: 5/17
- 8. Incorporate TC comments and present final time-phased project summary (suitable for attachment to ballot initiative): 6/14



Other Issues to Consider

- 1. Include More Projects or Project Scope on Final Ballot List
- 2. Maintenance of the System
 - Adding significant asset management projects to ballot list
 - Using pay-as-you-go funds to sustain existing system
 - Analysis of impacts of expenditures on system
- 3. FASTER Safety
 - Funding existing STIPed projects that have FASTER Safety funds
 - Consider future of FASTER Safety program
- 4. North I-25 project funding
 - Understand impact to TC match commitment for Segments 7 and 8



Questions/Comments?







Advanced Transportation and Congestion Management Grant-ATCMTD

Authorized under Section 503(c)(4) of Title 23 of United States Code to establish grants for model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance and infrastructure return on investment.

- \$60 million available per year nationally
- Individual grant award up to \$12 million
- Match 50:50 (non federal funds must be used as a match)
- Pre-application due May 12, 2017
- Final-application due June 12, 2017 on Grants.gov website
- Award notification September 2017
- ➤ Eligible applicants: state DOTs', cities, counties, MPO's, transit agencies, consortium of research institutions and/or academic institutions
- Public private partnerships are encouraged.



Demonstrate the following benefits with a model deployment:

- 1. Reduce traffic related fatalities and injuries
- 2. Reduce traffic congestion and improved ravel time reliability
- 3. Reduce transportation-related emissions
- 4. Optimize multi-modal system performance
- 5. Improve access to transportation alternatives, including underserved populations
- 6. Public access to real time integrated traffic, transit, and multimodal transportation information to make informed travel decisions
- 7. Cost savings to transportation agencies, business, and the travel public; or
- 8. Other benefits to transportation users and the general public.



Types of projects:

- 1. Advanced traveler information systems
- 2. Advanced transportation management technologies: signals/lane mgt.
- Infrastructure maintenance, monitoring and condition assessment of infrastructure
- 4. Advanced public transportation systems-eg. Remote fleet monitoring
- Transportation system performance data collection, analysis and dissemination systems
- 6. Advanced safety systems: V2V, V2I, autonomous vehicle support, collision avoidance technologies
- 7. Integrate ITS with energy distribution and charging systems
- 8. Electronic pricing and payment systems
- 9. Advanced mobility and access technologies such as dynamic ridesharing and information systems to support human services for elderly and disabled individuals



Application and Award

Notice of Funding Opportunity (NOFO) available on the website

https://www.grants.gov/web/grants/view-opportunity.html?oppld=293139

- Application: 30-pgs: scope, schedule and narrative
- secondary budget submittal
- resumes of staff to work on the project.
- Agencies must have kick off meeting within 4 weeks of award (Sept. 2017)
- Agencies will work with FHWA to develop and implement a plan to collect information and report on the project's performance
- Agencies shall annually report on the project status:
- a) Deployment and operations costs compared to benefits and cost savings provided by the project.
- a) How project has met original expectations: data, performance, effectiveness to public, and



If you are interested:

Please contact CDOT no later than May 5th.

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5311 Funding Distribution April 28, 2017

Activity Since March Workshop

- March 15th TC Workshop
 - Identified need to clarify recommendations and provide additional information
- STAC endorsement on March 24th
- Held TRAC Subcommittee meeting April 5th
 - Considered recent input
 - Modified and enhanced recommendation
 - TRAC endorsement on April 14th
- Transportation Commission approved on April 20th

Additional Policy Guidance

- Consideration of balanced equity
 - Very rural "essential services"
 - Larger mountain communities w/ recreation based economies
 - Resorts
- Multi-county agencies
 - More comprehensive service
 - Economies of scale: coverage, fleet, funding
 - Should encourage, not penalize
- Historical events affecting funding levels
 - Remedy for extenuating circumstances

Modified Subcommittee Recommendation

- 5311 Distribution Methodology framework
 - Categorize by size (5 categories)
 - Apply operating budget factors
 - Very Small agencies have large (up to 50%) budget factors
 - Very Large agencies have small (as low as 3%) budget factors

- "Hold Harmless" those that need assistance most
 - Low-income populations
 - Very low levels of service/large coverage area
 - Extenuating circumstances/historical funding events
 - Durango Mercy Hospital service/JARC grant
 - ✓ Subcommittee revised recommendation
 - Seven (7) agencies held harmless

- Transition Plan to soften impact
 - Five (5) year transition
 - +/- 3% for 2018
 - +/- 3%, 5%, 6%, 7% in years 2-5 (pending)
- Tap 5311 capital pool to cover any funding gap created by the transition plan
 - \$61k for 2018
 - Represents 0.35% of \$17M annual capital program (including \$1M from 5311)

- Authorize one year (2018) of the transition plan for distribution
 - ✓ Subcommittee revised recommendation
- Subcommittee to monitor 2018 process and results
 - Further recommendations for 2019 & beyond
 - Report back to the TC
- Appoint a Transportation Commissioner to Subcommittee to bring TC perspective and provide TC guidance
 - ✓ Subcommittee revised recommendation

- Subcommittee also to address provisions from additional policy guidance
 - Consideration for balanced equity
 - Multi-county agencies
 - Historical events affecting funding levels
 - ✓ Subcommittee revised recommendation
- Report back to the TC with additional provision recommendations
- Hold harmless NECALG for one year
 - Pending new multi-county agency provision
 - ✓ Subcommittee revised recommendation



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	AT	TACHMENT B: METH	HODOLOGY RES	SULTS			
Blue font are anticipated : Drange font are systems i	new systems. t is recommended the current funding	levels at a minimum	be maintained	_			
					Proposed M	ethodology	
	Organization	Operating Budget*	2017 Current Award	Year 1 Award	Difference from 2017	Proposed Year 8 Award	Proposed Difference from 2017
Very Small (50%)	Dolores Co. Seniors	\$134,415	\$35,680	\$36,750	\$1,070	\$87,000	\$31,32
320,000	Archuleta County	\$150,000	\$0	\$75,000	\$75,000	\$75,000	\$75,00
	City of La Junta	\$171,216	\$88,950	671,019	\$2,000	\$86,000	\$17,05
	Montezuma Co. Seniors	\$181,283	\$54,190	\$86,116	\$1,925	\$91,000	\$25,81
		\$636,914	\$168,820	\$248,885	\$80,065	\$319,000	\$150,18
Small (45%)	Durango - Mercy Hospital	\$175,000	\$87,500	\$87,500	\$0	\$87,500	
	Neighbor-to-Neighbor (Salida)	\$199,235	\$100,000	\$97,000	-63,000	\$90,000	7 (510,00
	Teller Senior Coalition	\$200,000	\$100,000	\$97,000	-63,000 SD	\$91,000	-60,00
	East Central COG Lake County	\$349,961 \$254,000	\$182,190 \$95,000	\$182,190 \$97,850	\$2,850	\$182,190 \$120,000	(aD) 525.00
	Clear Creek County	\$300,000	\$90,000	\$92,700	\$2,700	\$135,000	S40.00
	Prowers County	6331,120	\$173,100	\$173,100	50	\$173,160	
	Upper Arkansas Area COG	\$384,000	\$192,900	\$198,587	65,787	6230,004	637,10
	South Central COG	\$439,181	6293,030	6293,630	50	6293,620	
	Crippie Creek	\$445,324	\$158,820	\$163,379	\$4,750	\$202,000	\$43,38
	Via Mobility (Boulder)	\$540,913	\$333,380	\$323,379	-\$10,001	\$245,000	-688,38
	Seniors Resource Center	\$549,617	\$291,880	\$283,124	-68,756	\$249,000	£\$42,88
	SUCAP (Ignecia)	\$555,487	\$163,222	\$163,222	\$0	\$163,223	ത്ര
		64,633,838	\$2,261,422	\$2,252,760	-68,662	\$2,262,643	\$1,22
Medium (21%)	SRDA (Pueblo)	\$588,205	\$88,200	\$70,246	\$2,046	\$122,00¢	\$53,80
1,400,000	Black Hawk / Central City	\$545,000	60	\$134,000	\$134,000	\$134,000	(1) \$134,00
	Gunnison Valley RTA	\$729,837	\$187,100	\$181,487	-65,613	\$151,000	-636,10
	Glenwood Springs	\$1,071,999	\$245,170	\$238,785	-67,385	\$222,0C0	624,17
	All Points Trensit (Montrose)	\$1,121,513	\$238,000	\$238,000	\$D	\$238,000	•
	Northeastern Co ALG	\$1,270,472	\$487,200	\$487,200	50	6263,000	
	Crested Butte	\$1,332,854	\$228,200	\$235,046	\$6,845	\$276,000	(QD) \$47,80
		\$8,760,881	\$1,454,870	\$1,584,764	\$129,894	\$1,408,000	-648,87
arge (14%)	San Miguel Co	\$1,020,214	\$110,000	\$113,300	\$3,300	\$142,000	\$32,00
2,000,000	Durengo	\$2,140,324	\$826,300	\$801,511	-\$24,789	\$299,000	-\$527,30
	Winter Park	\$2,400,000	\$150,000	\$154,500	\$4,500	\$335,0¢¢	\$185,00
	Breckenridge	\$2,456,003	\$159,240	\$164,017	\$4,777	6343,0CC	\$183,76
	Snowmess	\$3,118,323	\$238,450	\$245,504	\$7,154	\$435,000	\$198,55
	Steamboat Springs	\$3,189,504	\$537,290	\$521,171	-\$15,119	\$445,066	-602,20
		\$14,324,368	\$2,021,280	\$2,000,103	-\$21,177	\$1,999,000	-\$22,28
Very Large (3-4%)	Eagle County	\$9,046,026	\$300,000	\$318,270	\$9,270	\$362,000	\$53,00
	Summit County	\$9,405,640	\$482,040	\$467,579	-614,461	\$376,000	-6106,04
	Mtn Village Tram & Bus RFTA (Glenwood Springs)	\$4,067,368 \$29,200,650	\$150,100 \$1,014,550	\$154,603 \$984,114	\$4,503 -\$30,437	\$163,000 \$976,000	\$12,90 -638,55
		\$51,719,684	\$1,955,690	\$1,924,565	-631,125	\$1,877,000	-678,60



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Attachment C: Transition Plan

Grant Size in Year:

Service	2017 Current Award	Proposed 812 Year 6 Award Cated	_	2	<u>3</u>	4	<u> </u>	<u>e</u>	"Cliff" in Year 8
Dolores Co. Seniors	\$35,680	\$67,000 Very Sn	-	_	\$41,289	\$45,005	\$49,956	\$67,000	\$17,044
Archulets County	\$0	\$75,000 Very 8n	nall \$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$0
Montezuma Co. Seniors	\$64,190	\$91,000 Very 8n	nall \$66,116	\$69,421	\$74,281	\$80,966	\$89,873	\$91,000	\$1,127
City of La Junta	\$68,950	\$86,000 Very Sn	nall \$71,019	\$74,069	579,789	\$86,000	586.00	\$86,000	\$0
Cripple Creek	\$158,620	\$202,000 Small	\$163,379	\$171,518	\$183,556	\$200,076	5202,007	5202,000	\$0
Durango - Mercy Hospital	\$87,500	\$87,500 Small	\$87,500	\$87,500	\$37,500	\$87,500	\$87,500	\$87,500	\$0
Lake County	\$95,000	\$120,000 Small	\$97,850	\$102,743	\$109,924	\$119,029	\$120. (Q/	\$120,000	\$0
Teller Senior Coalition	\$100,000	\$91,000 Small	\$97,000	\$94.090	591,000	\$81,000	1	\$91,000	\$0
Neighbor-to-Neighbor (Salida)	\$100,000	\$90,000 Small	\$97,000	\$94,000	\$30,000	\$80,000	0	\$90,000	\$0
East Central COG	\$182,190	\$182,190 Small	\$182,190	\$182,190	\$132,190	\$192,190	90	\$182,190	\$0
Upper Arkansas Area COG	\$192,900	\$230,000 Small	\$198,687	\$208,621	3223,225	\$230,000	(C)	3230,000	\$0
Clear Creek County	\$90,000	\$136,000 Small	\$92,700	\$97,335	\$134,148	\$113,522	600.009	3136,000	\$9,991
Prowers County	\$173,100	\$173,100 Small	\$173,100	\$173,100	\$173,100	\$173(100)	173,100	\$173,100	\$0
Seniors Resource Center	\$291,880	\$249,000 Small	\$283,124	\$274,630	3250,888	\$249,000	\$249,000	5249,000	\$0
South Central COG	\$293,630	\$293,630 Small	\$293,630	\$293,630	\$293,530	\$283.(0)	5293.530	5293,630	\$0
Via Mobility (Boulder)	\$333,380	\$245,000 Small	\$323,379	\$313,677	\$297,993	1247	\$252,192	\$245,000	-\$7,192
SUCAP (Ignacio)	\$163,222	\$163,222 Small	\$163,222	\$163,222	\$183,222	· 700	\$183,222	\$163,222	\$0
Gunnison Valley RTA	\$187,100	\$151,000 Medium	\$181,487	\$176,0/2	\$157,240	(01)	5151,000	3151,000	\$0
SRDA (Pueblo)	\$68,200	\$122,000 Medium	\$70,246	\$73,758	378,821	760124	\$515,487	3122,000	\$26,513
Black Hawk / Central City	\$0	\$134,000 Medium	\$134,000	\$134,000	\$134,000	4,000	\$134,000	\$134,000	\$0
All Points Transit (Montrose)	\$238,000	\$238,000 Medium	\$238,000	\$238,000	\$238,000	1238,000	5238,000	5238,000	\$0
Glenwood Springs	\$246,170	\$222,000 Medium	\$238,785	\$231,621	0/	\$222,000	\$222,000	\$222,000	\$0
Crested Butte	\$228,200	\$276,000 Medium	\$235,046	\$246,790	-	\$276,000	\$276,000	\$276,000	\$0
Northeastern Co ALG	\$487,200	\$263,000 Medium	\$487,200	\$472.584	(07)	\$417,528	5379.950	5263,000	-\$116,950
Breckenridge	\$159,240	\$343,000 Large	\$164,017	\$172,218	3700	\$200,858	5222 852	5343,000	\$120,048
San Miguel Co	\$110,000	\$142,000 Large	\$113,300	\$118,965	8127,293	\$128,749	\$142,000	\$142,000	\$0
Durengo	\$826,300	\$299,000 Large	\$801,511	\$777.488	(3),592	\$806,091	\$825,071	3299,000	-\$326,071
Winter Park	\$150,000	\$335,000 Large	\$154,500	\$162	3173,881	\$189,208	5210,015	3335,000	\$124,985
Steemboat Springs	\$537,290	\$445,000 Large	\$521,171	\$505,036	480,259	\$445,641	\$445,000	3445,000	\$0
Snowmass	\$238,450	\$435,000 Large	\$245,604	\$257,884	\$275,936	\$300,770	\$333,854	\$435,000	\$101,146
Eagle County	\$309,000	\$362,000 Very La	rge \$318,270	\$334,184	\$357,576	\$362,000	\$362,000	\$362,000	\$0
Summit County	\$482,040	\$376,000 Very La	rge \$467,579	\$453,551	\$430,874	\$400,713	\$376,000	\$376,000	\$0
Mtn Village Tram & Bus	\$150,100	\$163,000 Very La	rge \$154,603	\$162,333	\$163,000	\$163,000	\$163,000	\$163,000	\$0
RFTA (Glenwood Springs)	\$1,014,550	\$976,000 Very La	rge \$984,114	\$976,000	\$976,000	\$976,000	\$976,000	\$976,000	\$0
AWARD TOTALS	\$7,862,082	\$7,863,642	\$8,011,077	\$8,007,120	\$7,991,331	\$7,951,084	\$7,913,001	\$7,863,642	
DIFFERENCE FROM BUDGET			-\$61,077	-\$57,120	-\$41,331	-\$1,084	\$36,999	\$86,358	