

## Colorado Transportation Commission

Schedule & Agenda

April 20-21, 2022

For link to YouTube meeting access please see website:

<http://www.coloradodot.info/about/transportation-commission/meeting-agenda.html>

Kathy Hall, Chair

Grand Junction, District 7

Yessica Holquin

Denver, District 1

Don Stanton, Vice-Chair

Arvada, District 2

Eula Adams

Arapahoe County, District 3

Karen Stuart

Broomfield, District 4

Kathleen Bracke

Fort Collins, District 5

Barbara Vasquez

Cowdrey, District 6

Mark Garcia

Pagosa Springs, District 8

Lisa Hickey

Colorado Springs, District 9

Terry Hart

Pueblo, District 10

Gary Beedy

Genoa, District 11

### THE CHAIRWOMAN MAY ALTER THE ITEM SEQUENCE OR TIMES

The times indicated for each topic on the Commission agenda are an estimate and subject to change. Generally, upon the completion of each agenda item, the Commission will immediately move to the next item. However, the order of agenda items is tentative and, when necessary to accommodate the public or the Commission's schedules, the order of the agenda items are subject to change.

Documents posted at <http://www.coloradodot.info/about/transportation-commission/meeting-agenda.html> no less than 24 hours prior to the meeting. The documents are in draft form and for information only until the Commission takes final action.

### **TRANSPORTATION COMMISSION WORKSHOPS**

Wednesday, April 20, 2022

12:00 p.m. Commissioner Lunch (optional)

12:30 p.m. FY '22 Budget Workshop (Jeff Sudmeier & Bethany Nicholas)

1:00 p.m. Innovative Mobility FY '23 Budget Presentation (Kay Kelly, Mike King, Ashley Nylen, Lisa Streisfeld)

1:30 p.m. GHG Policy Directive Update (Commissioner Lisa Hickey, Rebecca White & Theresa Takushi)

2:30 p.m. Strategic Transportation Safety Plan Update (San Lee & Manjari Bhat)

3:15 p.m. Advancing Year 4 Rural Paving Projects from the 10-Year Plan (Rebecca White and Marissa Gaughan)

3:30 p.m. CDOT's ITS Fiber Program (John Lorme & Bob Fifer)

- 4:15 p.m. Small Business Diversity Committee: Equity 360- Office of Environmental Justice and Equity (Marsha Nelson, Greg Diehl, Amber Blake and Anna Mariotti)
- 5:00 p.m. Adjournment

**TRANSPORTATION COMMISSION MEETING**

Thursday, April 21, 2022

- 8:00 a.m. Commissioner Breakfast
- 9:00 a.m. 1. Call to Order, Roll Call
- 9:05 a.m. 2. Open Public Hearing for FY 23-26 STIP (Rebecca White and Jamie Collins)
- 9:10 a.m. 3. Public Comments
- 9:20 a.m. 4. Comments of the Chair and Individual Commissioners
- 9:35 a.m. 5. Executive Director's Management Report (Shoshana Lew)
- 9:40 a.m. 6. Chief Engineer's Report (Steve Harelson)
- 9:45 a.m. 7. CTIO (Formerly HPTE) Director's Report (Nick Farber)
- 9:50 a.m. 8. FHWA Division Administrator Report (John Cater)
- 9:55 a.m. 9. STAC Report (Vincent Rogalski)
- 10:00 a.m. 10. Legislative Report (Andy Karsian)
- 10:05 a.m. 11. Act on Consent Agenda
- a) Proposed Resolution #1: Approve the Regular Meeting Minutes of March 17, 2022 (Herman Stockinger)
  - b) Proposed Resolution #2: IGA Approval >\$750,000 (Steve Harelson)
  - c) Proposed Resolution #3: Frisco Employee Housing Parcel Disposal (David Fox)
  - d) Proposed Resolution #4: Region 3 Disposal- SH 133 Release of Slope Easement SE-9Rev (Zane Znamencek)
  - e) Proposed Resolution #5: Region 5 Disposal- SH 24 Parcel 231-224-EX (Julie Constan)
  - f) Proposed Resolution #6: Maintenance Project \$150k-\$250k Approval (Tyler Weldon)
- 10:10 a.m. 12. Discuss and Act on Proposed Resolution #7: 9th Budget Amendment of FY 2022 (Jeff Sudmeier and Bethany Nicholas)
- 10:15 a.m. 13. Discuss and Act on Proposed Resolution #8: 7<sup>th</sup> Budget Supplement of FY 2022 (Jeff Sudmeier and Bethany Nicholas)
- 10:20 a.m. 14. Discuss and Act on Proposed Resolution #9: Central 70 Globeville and Elyria-Swansea (GES) Tolling Equity Program and CTIO Intra Agency Agreement (Nick Farber & Simon Logan)

- 10:25 a.m. 14. Discuss and Act on Proposed Resolution #10: Advancing Year 4 Rural Paving Projects from the 10-Year Plan (Rebecca White and Marissa Gaughan)
- 10:30 a.m. 15. Close Public Hearing for FY 23-26 STIP (Rebecca White and Jamie Collins)
- 10:35 a.m. 16. Recognitions: Environmental Awards (Rebecca White and Jane Hann)
- 10:50 a.m. 17. Other Matters
- 10:55 a.m. 18. Adjournment

The Bridge Enterprise Board of Directors meeting will begin immediately following the adjournment of the Transportation Commission Meeting. Est. Start Time: 10:35 a.m.

### **BRIDGE AND TUNNEL ENTERPRISE BOARD OF DIRECTORS MEETING**

Thursday, April 21, 2022

- 10:50 a.m. 1. Call to Order and Roll Call
2. Public Comments (provided to commissioners in writing before meeting)
3. Act on Consent Agenda
- Proposed Resolution #BTE1: to Approve the Regular Meeting Minutes of March 17, 2022 (Herman Stockinger)
4. Discuss and Act on Proposed Resolution #BTE2: Bridge & Tunnel Enterprise 8th Budget Supplement for FY'22 (Jeff Sudmeier)
5. Other Matters
6. Adjournment

### **ADDITIONAL WORKSHOP**

Thursday, April 21, 2022

- 11:00 a.m. I-270 Project Update (Jessica Myklebust and Andrew Stratton)

### **INFO ONLY**

- Project Budget/Expenditure Memo (Jeff Sudmeier)
- Quarterly Revenue Forecast Update Memo (Jeff Sudmeier & Bethany Nicholas)
- Transit 10-Year Plan Update (Amber Blake)
- CDOT Request to Extend CDOT/Economic Development Commission Intra-Agency Loan Agreement (Nick Farber)
- Grants Memo (Hannah Reed)



**MEMORANDUM**

**TO: THE TRANSPORTATION COMMISSION**  
**FROM: JEFF SUDMEIER, CHIEF FINANCIAL OFFICER**  
**BETHANY NICHOLAS, BUDGET DIRECTOR**  
**DATE: APRIL 20, 2022**  
**SUBJECT: FY 2021-22 BUDGET AMENDMENT**

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**Purpose**

To review the seventh budget amendment to the FY 2021-22 Annual Budget in accordance with Policy Directive (PD) 703.0.

**Action**

The Division of Accounting and Finance (DAF) is requesting the Transportation Commission (TC) to review and approve the seventh budget amendment to the FY 2021-22 Annual Budget, which consists of three items that require TC approval. The seventh budget amendment allocates \$62.4 million in new flexible federal revenue to the 10 Year Plan Projects - Capital Mobility line to provide additional funding for 10 year plan projects, reallocates \$5.9 million from Innovative Mobility Programs to the 10 Year Plan Projects - Capital Mobility line to provide additional funding for 10 year plan projects, and reallocates \$1.0 million from the 10 Year Plan Projects - Capital Mobility line to the Colorado Transportation Investment Office (CTIO) Agency Operations line for the Central 70 Globeville and Elyria-Swansea Tolling Equity Program.

**Infrastructure Investment and Jobs Act (IIJA)**

On November 15, 2021, President Biden signed into law the Infrastructure Investment and Jobs Act, or the IIJA, and the corresponding annual appropriations act was signed on March 15, 2022. The IIJA includes a reauthorization of surface transportation funding over five years and authorizes \$550 billion in new federal infrastructure investment over federal fiscal years 2022 through 2026. This includes an increased level of funding to existing US Department of Transportation (USDOT) formula programs, funding for new formula programs, and several new grant funding opportunities. The Department estimates that it will receive a total of \$3.9 billion over five years under the IIJA, of which approximately \$209.9 million per year is new funding. This includes an average increase of \$116.9 million per year to existing federal-aid highway programs over the previous FAST Act and \$93.1 million to four new programs: Carbon Reduction Program; the Promoting Resilient Operations for Transformative, Efficient and Cost-saving Transportation (PROTECT) Program; the National Electric Vehicle Formula Program; and the FHWA Bridge Program. Federal transit funding to Colorado would also increase by about \$140 million to \$183.0 million per year for five years.

For FY 2021-22, FHWA apportionments to Colorado under the IIJA total \$769.9 million, which is \$171.7 million in new funding. After accounting for the Department's assumption for obligation limitation, new FHWA apportionments total \$719.7 million, which is \$163.5 million over the initial budget that was approved by the TC in March 2021. With anticipated local match, total new funding in FY 2021-22 is \$169.1 million. Please see Attachment A for a list of impacts to the FY 2021-22 Amended Budget, by budget line.

The new funding is reflected in the FY 2021-22 Amended Annual Budget (see Attachment B). To ensure transparency around the new programs and spending, staff added several new budget lines and renamed lines to more accurately report on funding that is allocated to the Department's 10 Year Plan. The new lines include:

- **10 Year Plan Projects - Capital AM** - this is a new line that includes the new Bridge Formula Program and the PROTECT Formula Program, as well as any additional flexible FHWA revenue that the Transportation Commission may choose to allocate for capital projects that relate to asset management.
- **10 Year Plan Projects - Capital Mobility** - this line was renamed from "Strategic Projects" to enhance transparency around allocations available for the Department's 10 Year Plan. This line includes the remaining incremental flexible revenue from STBG and NHPP that is available under the IIJA, the CDOT portion of the new Carbon Reduction Program, and any funds that will roll forward from previous years from SB267 COPs.
- **National Electric Vehicle Program** - this is a new line for the National Electric Vehicle formula program that was created under the IIJA.
- **10 Year Plan Projects - Multimodal** - This line was previously called "Strategic Transit and Multimodal Projects" and includes statewide transit funding from SB 17-267 and CDOT's portion of the Multimodal Transportation Options Program funds. It could also include any additional flexible FHWA revenue that the Transportation Commission may choose to allocate in the future for multimodal projects.
- **Multimodal Options Program - Local** - this line includes the 85% local share of the Multimodal Transportation Options Program.
- **Carbon Reduction Program - Local** - this line includes the portion of the new Carbon Reduction Program that will be suballocated to MPOs.

Additionally, the Multimodal Services section of the report was renamed, "Multimodal Services and Electrification" to more accurately reflect the allocations in this section.

#### **FY 2021-22 Budget Amendment**

The seventh budget amendment consists of three items requiring TC approval:

##### **1. IIJA Funding for 10 Year Plan Projects**

Of the \$169.1 million added to the budget for FY 2021-22, \$106.6 million is dedicated revenue for specific FHWA programs. Per Policy Directive 703.0, this revenue will be allocated to the associated programs without additional approval by the Transportation Commission. These amounts are reflected in the FY 2021-22 Amended Annual Budget (Attachment B) under EMT and Staff-approved Adjustments.

The remaining \$62.4 million is flexible FHWA revenue from STBG and NHPP and the CDOT share of the Carbon Reduction Program, and will be allocated at the Transportation Commission's direction. Staff recommends allocating the full amount to the 10 Year Plan Projects - Capital Mobility line (formerly called Strategic Projects) for FY 2021-22. This amount is reflected in the Proposed TC Amendments column.

**The seventh budget amendment allocates \$62.4 million to the 10 Year Plan Projects - Capital Mobility line (Line 19) to provide additional funding for the Department's 10 Year Plan.**

## **2. Transfer from Innovative Mobility to 10 Year Plan Projects**

Staff is requesting to reprioritize federal funds from a 2017 RoadX project in the amount of \$5.9 million. These funds will be moved to the 10 Year Plan Projects - Capital Mobility program line. These funds will be added to the total available amount to the 10 Year Plan Projects to be allocated as the Plan is updated in the coming months.

**The seventh budget amendment reallocates \$5,900,000 from the Innovative Mobility Programs line (Line 44) to the 10 Year Plan Projects - Capital Mobility line (Line 19) to provide additional funding for the Department's 10 Year Plan.**

## **3. CTIO Central 70 Globeville and Elyria-Swansea Tolling Equity Program**

Staff is requesting to move \$1.0 million from the 10 Year Plan Projects - Capital Mobility line (formerly called Strategic Projects) to the CTIO Agency Operations line. This request will be funded with the existing Central 70 project contingency that has been made available for this purpose and will cover the costs associated with the start-up and program administration of the Central 70 GES Tolling Equity Program in the initial years. Funding for this initiative comes directly from the Central 70 project contingency. It will be paid to CTIO via an Intra-Agency Agreement between CDOT and CTIO presented for approval this month under a separate agenda item. Please see the Central 70 GES Tolling Equity Program memo and Intra Agency Agreement between CDOT and CTIO included in the April packet for more information.

**The seventh budget amendment reallocates \$1,000,000 from the 10 Year Plan Projects - Capital Mobility line (Line 19) to the CTIO Agency Operations line (Line 95) for the Central 70 Globeville and Elyria-Swansea Tolling Equity Program.**

### **Information Only Item**

Staff increased the FY 2021-22 budget for the Division of Aeronautics by \$7.0 million based on an updated revenue forecast. The original budget approved by the CO Aeronautical Board in January 2021 was \$20 million; however, the current forecast for FY 2021-22 is \$40 million as a result of customer demand starting to return to pre-pandemic levels and the high oil prices. The additional \$7 million is needed for the Division to make statutorily required disbursements of tax revenue to the originating airport and the current budget was insufficient to make the full disbursement as required. This increase is reflected in the FY 2021-22 Amended Revenue Allocation Plan, attachment B, and is provided here as an informational item since it does not require formal approval from the TC pursuant to PD 703.0.

### **Next Steps**

- Spring 2022: Staff will allocate new federal revenue under the IJA.
- Summer 2022: Staff will return to the Commission with proposed uses of new funding, including project lists for feedback and approval.

### **Attachments**

- Attachment A - IJA FY22 Budget Impacts by Budget Line
- Attachment B - FY 2021-22 Amended Revenue Allocation Plan
- Attachment C - Presentation

## Attachment A - IJA FY22 Budget Impacts by Budget Line

FY 2021-22 Budget Impacts of IJA				
Line Number	Budget Line	TC Amendment	Staff Adjustment	Total Change
10	10 Year Plan Projects - Capital AM*		\$55.5 M	\$55.5 M
12	Highway Safety Improvement Program		\$6.5 M	\$6.5 M
13	Railway-Highway Crossings Program		\$0.1 M	\$0.1 M
19	10 Year Plan Projects - Capital Mobility**	\$62.4 M	\$0.0 M	\$62.4 M
20	National Highway Freight Program		-\$1.8 M	-\$1.8 M
45	National Electric Vehicle Program		\$8.4 M	\$8.4 M
47	10 Year Plan Projects - Multimodal		\$0.0 M	\$0.0 M
54	STBG-Urban (STP-Metro)		\$7.5 M	\$7.5 M
55	Congestion Mitigation and Air Quality		\$0.0 M	\$0.0 M
56	Metropolitan Planning		\$1.3 M	\$1.3 M
57	Off-System Bridge Program		\$11.0 M	\$11.0 M
61	Transportation Alternatives Program		\$8.8 M	\$8.8 M
63	Multimodal Options Program - Local		\$0.0 M	\$0.0 M
64	Carbon Reduction Program - Local		\$7.7 M	\$7.7 M
76	Planning and Research		\$1.6 M	\$1.6 M
		<b>\$62.4 M</b>	<b>\$106.6 M</b>	<b>\$169.1 M</b>
* Includes the new Bridge Formula Program and the PROTECT Formula Program				
** Includes flexible STBG and NHPP revenue and the CDOT portion of the Carbon Reduction Program				

**Attachment A: FY 2021-22 CDOT AMENDED ANNUAL BUDGET (April 2022)**

Line	Budget Category / Program	Rollforward from FY 2020-21	FY 2021-22 Allocation Plan	Proposed TC Amendments	Approved TC Amendments	EMT and Staff Approved Adjustments	Total FY22 Program Budget Available including Changes	Directed By	Funding Source
<b>1</b>	<b>COLORADO DEPARTMENT OF TRANSPORTATION</b>								
2	Capital Construction	\$876.2 M	\$972.3 M	\$67.3 M	\$207.7 M	\$53.6 M	\$2,177.1 M		
3	Asset Management	\$38.1 M	\$336.1 M	\$0.0 M	\$0.0 M	\$70.6 M	\$444.8 M		
4	Surface Treatment	\$11.8 M	\$223.3 M	\$0.0 M	\$0.0 M	\$0.0 M	\$235.1 M	TC	FHWA / SH / SB 09-108
5	Structures	\$0.5 M	\$61.9 M	\$0.0 M	\$0.0 M	\$0.0 M	\$62.4 M	TC	FHWA / SH / SB 09-108
6	System Operations-AM	\$1.3 M	\$34.3 M	\$0.0 M	\$0.0 M	-\$1.4 M	\$34.2 M	TC	FHWA / SH
7	Geohazards Mitigation	\$0.1 M	\$10.1 M	\$0.0 M	\$0.0 M	\$0.0 M	\$10.2 M	TC	SB 09-108
8	Permanent Water Quality Mitigation	\$2.3 M	\$6.5 M	\$0.0 M	\$0.0 M	-\$0.6 M	\$8.2 M	TC	FHWA / SH
9	Emergency Relief	\$22.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$17.1 M	\$39.1 M	FR	FHWA
10	10 Year Plan Projects - Capital AM	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$55.5 M	\$55.5 M	TC / FR	FHWA
11	Safety	\$29.7 M	\$115.3 M	\$0.0 M	\$18.0 M	-\$11.5 M	\$151.5 M		
12	Highway Safety Improvement Program	\$4.8 M	\$33.1 M	\$0.0 M	\$0.0 M	\$6.5 M	\$44.4 M	FR	FHWA / SH
13	Railway-Highway Crossings Program	\$0.0 M	\$3.6 M	\$0.0 M	\$0.0 M	\$0.1 M	\$3.7 M	FR	FHWA / SH
14	Hot Spots	\$0.0 M	\$2.2 M	\$0.0 M	\$0.0 M	-\$0.2 M	\$2.0 M	TC	FHWA / SH
15	FASTER Safety	\$13.8 M	\$69.2 M	\$0.0 M	\$18.0 M	-\$17.9 M	\$83.0 M	TC	SB 09-108
16	ADA Compliance	\$11.1 M	\$7.2 M	\$0.0 M	\$0.0 M	\$0.0 M	\$18.3 M	TC	FHWA / SH
17	Mobility	\$808.4 M	\$520.9 M	\$67.3 M	\$189.7 M	-\$5.5 M	\$1,580.8 M		
18	Regional Priority Program	\$0.0 M	\$48.4 M	\$0.0 M	\$0.0 M	\$0.0 M	\$48.4 M	TC	FHWA / SH
*19	10 Year Plan Projects - Capital Mobility	\$765.0 M	\$450.0 M	\$67.3 M	\$189.7 M	-\$2.4 M	\$1,469.5 M	SL	FHWA / SB 17-267 / SB 21-260
20	National Highway Freight Program	\$43.4 M	\$22.5 M	\$0.0 M	\$0.0 M	-\$3.1 M	\$62.9 M	FR	FHWA / SH
21	Maintenance and Operations	\$31.1 M	\$347.7 M	\$0.0 M	\$8.3 M	\$2.9 M	\$390.0 M		
22	Asset Management	\$27.4 M	\$312.3 M	\$0.0 M	\$13.8 M	\$5.4 M	\$358.8 M		
23	Maintenance Program Areas	\$2.9 M	\$263.5 M	\$0.0 M	\$9.5 M	\$0.0 M	\$275.8 M		
24	Roadway Surface	\$0.0 M	\$40.4 M	\$0.0 M	\$9.5 M	\$0.0 M	\$49.8 M	TC	SH
25	Roadside Facilities	\$0.0 M	\$21.4 M	\$0.0 M	\$0.0 M	\$0.0 M	\$21.4 M	TC	SH
26	Roadside Appearance	\$0.0 M	\$9.8 M	\$0.0 M	\$0.0 M	\$0.0 M	\$9.8 M	TC	SH
27	Structure Maintenance	\$0.0 M	\$5.4 M	\$0.0 M	\$0.0 M	\$0.0 M	\$5.4 M	TC	SH
28	Tunnel Activities	\$0.0 M	\$4.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$4.0 M	TC	SH
29	Snow and Ice Control	\$0.0 M	\$79.1 M	\$0.0 M	\$0.0 M	\$0.0 M	\$79.1 M	TC	SH
30	Traffic Services	\$0.0 M	\$69.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$69.0 M	TC	SH
31	Materials, Equipment, and Buildings	\$0.0 M	\$17.5 M	\$0.0 M	\$0.0 M	\$0.0 M	\$17.5 M	TC	SH
32	Planning and Scheduling	\$0.0 M	\$16.8 M	\$0.0 M	\$0.0 M	\$0.0 M	\$16.8 M	TC	SH
33	Express Lane Corridor Maintenance & Operations	\$1.3 M	\$5.0 M	\$0.0 M	\$0.0 M	\$0.6 M	\$6.9 M	TC	SH
34	Property	\$0.7 M	\$19.9 M	\$0.0 M	\$0.0 M	\$6.5 M	\$27.1 M	TC	SH
35	Capital Equipment	\$8.7 M	\$23.9 M	\$0.0 M	\$4.3 M	\$1.4 M	\$38.3 M	TC	SH
36	Maintenance Reserve Fund	\$13.9 M	\$0.0 M	\$0.0 M	\$0.0 M	-\$3.2 M	\$10.7 M	TC	SH
37	Safety	\$3.2 M	\$11.4 M	\$0.0 M	-\$5.5 M	-\$1.4 M	\$7.7 M		
38	Strategic Safety Program	\$3.2 M	\$11.4 M	\$0.0 M	-\$5.5 M	-\$1.4 M	\$7.7 M	TC	FHWA / SH
39	Mobility	\$0.5 M	\$24.0 M	\$0.0 M	\$0.0 M	-\$1.0 M	\$23.5 M		
40	Real-Time Traffic Operations	\$0.3 M	\$14.0 M	\$0.0 M	\$0.0 M	-\$1.0 M	\$13.3 M	TC	SH
41	ITS Investments	\$0.3 M	\$10.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$10.2 M	TC	FHWA / SH
42	Multimodal Services & Electrification	\$159.5 M	\$69.8 M	-\$5.9 M	\$36.5 M	\$23.6 M	\$283.5 M		
43	Mobility	\$159.5 M	\$69.8 M	-\$5.9 M	\$36.5 M	\$23.6 M	\$283.5 M		
44	Innovative Mobility Programs	\$20.5 M	\$11.1 M	-\$5.9 M	\$0.0 M	-\$0.1 M	\$25.7 M	TC	FHWA / SH
45	National Electric Vehicle Program	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$8.4 M	\$8.4 M	FR	FHWA
46	Carbon Reduction Program - CDOT	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	FR	FHWA
**47	10 Year Plan Projects - Multimodal	\$126.3 M	\$50.0 M	\$0.0 M	\$22.0 M	\$16.2 M	\$214.5 M	TC	FHWA / SB 17-267, SB 21-260
48	Rail Commission	\$0.0 M	\$0.4 M	\$0.0 M	\$14.5 M	\$0.0 M	\$14.9 M	SL	SL
49	Bustang	\$12.7 M	\$8.3 M	\$0.0 M	\$0.0 M	-\$1.0 M	\$20.0 M	TC	SB 09-108 / Fare Rev.
50	Suballocated Programs	\$500.0 M	\$224.1 M	\$0.0 M	\$0.0 M	\$31.5 M	\$755.6 M		
51	Aeronautics	\$16.6 M	\$19.3 M	\$0.0 M	\$0.0 M	\$7.8 M	\$43.6 M		
52	Aviation System Programs	\$16.6 M	\$19.3 M	\$0.0 M	\$0.0 M	\$7.8 M	\$43.6 M	AB	SA
53	Highway	\$281.8 M	\$126.5 M	\$0.0 M	\$0.0 M	\$12.1 M	\$420.3 M		
54	STBG-Urban (STP-Metro)	\$206.5 M	\$56.0 M	\$0.0 M	\$0.0 M	\$7.1 M	\$269.6 M	FR	FHWA / LOC
55	Congestion Mitigation and Air Quality	\$56.2 M	\$50.7 M	\$0.0 M	\$0.0 M	-\$6.8 M	\$100.1 M	FR	FHWA / LOC
56	Metropolitan Planning	\$1.6 M	\$9.2 M	\$0.0 M	\$0.0 M	\$0.3 M	\$11.1 M	FR	FHWA / FTA / LOC
57	Off-System Bridge Program	\$17.5 M	\$10.6 M	\$0.0 M	\$0.0 M	\$11.5 M	\$39.6 M	TC / FR	FHWA / SH / LOC
58	Transit and Multimodal	\$201.7 M	\$78.4 M	\$0.0 M	\$0.0 M	\$11.6 M	\$291.7 M		
59	Recreational Trails	\$2.6 M	\$1.6 M	\$0.0 M	\$0.0 M	-\$2.7 M	\$1.5 M	FR	FHWA
60	Safe Routes to School	\$9.4 M	\$3.1 M	\$0.0 M	\$0.0 M	-\$0.3 M	\$12.3 M	TC	FHWA
61	Transportation Alternatives Program	\$27.9 M	\$12.0 M	\$0.0 M	\$0.0 M	\$6.9 M	\$46.8 M	FR	FHWA / LOC
62	Transit Grant Programs	\$161.8 M	\$61.7 M	\$0.0 M	\$0.0 M	\$0.0 M	\$223.4 M	FR / SL / TC	FTA / LOC / SB 09-108
**63	Multimodal Options Program - Local	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	SL	SB 21-260
64	Carbon Reduction Program - Local	\$0.0 M	\$0.0 M	\$0.0 M	\$0.0 M	\$7.7 M	\$7.7 M	FR	FHWA / LOC
65	Administration & Agency Operations	\$11.3 M	\$102.7 M	\$1.0 M	\$8.3 M	\$1.5 M	\$124.9 M		
66	Agency Operations	\$8.6 M	\$62.6 M	\$1.0 M	\$8.0 M	-\$2.5 M	\$77.7 M	TC / AB	FHWA / SH / SA / SB 09-108
67	Administration	\$0.0 M	\$37.5 M	\$0.0 M	\$0.4 M	\$0.0 M	\$37.9 M	SL	SH
68	Project Initiatives	\$2.7 M	\$2.6 M	\$0.0 M	\$0.0 M	\$4.0 M	\$9.3 M	TC	SH
69	Debt Service	\$64.8 M	\$9.6 M	\$0.0 M	\$124.0 M	\$142.1 M	\$340.5 M		
70	Debt Service	\$64.8 M	\$9.6 M	\$0.0 M	\$124.0 M	\$142.1 M	\$340.5 M	DS	SH
71	Contingency Reserve	\$84.2 M	\$0.0 M	\$0.0 M	-\$16.0 M	\$38.6 M	\$106.8 M		
72	Contingency Fund	\$64.8 M	\$0.0 M	\$0.0 M	-\$6.0 M	-\$0.1 M	\$58.8 M	TC	FHWA / SH
73	Reserve Fund	\$19.4 M	\$0.0 M	\$0.0 M	-\$10.0 M	\$38.6 M	\$48.0 M	TC	FHWA / SH
74	Other Programs	\$31.8 M	\$24.8 M	\$0.0 M	\$2.0 M	\$3.0 M	\$61.6 M		
75	Safety Education	\$22.5 M	\$9.9 M	\$0.0 M	\$2.0 M	\$1.0 M	\$35.4 M	TC/FR	NHTSA / SSE
76	Planning and Research	\$4.7 M	\$14.7 M	\$0.0 M	\$0.0 M	\$2.0 M	\$21.4 M	FR	FHWA / SH
77	State Infrastructure Bank	\$4.62 M	\$0.2 M	\$0.0 M	\$0.0 M	\$0.0 M	\$4.8 M	TC	SIB
78	<b>TOTAL - CDOT</b>	<b>\$1,758.9 M</b>	<b>\$1,751.1 M</b>	<b>\$62.4 M</b>	<b>\$370.9 M</b>	<b>\$296.7 M</b>	<b>\$4,240.0 M</b>		

**Key to Acronyms:**  
 TC = Transportation Commission  
 FR = Federal  
 SL = State Legislature  
 AB = Aeronautics Board  
 SH = State Highway  
 SIB = State Infrastructure Bank  
 LOC = Local  
 SB = Senate Bill  
 DS = Debt Service



Line	Budget Category / Program	Rollforward from FY20 21	FY 2021-22 Allocation Plan	Proposed TC Amendments	Approved TC Amendments	EMT and Staff Approved Adjustments	Total FY22 Program Budget Available including Changes	Directed By	Funding Source
<b>79</b>	<b>COLORADO BRIDGE &amp; TUNNEL ENTERPRISE</b>								
80	Capital Construction	\$21.3 M	\$105.8 M	\$0.0 M	\$0.0 M	-\$10.1 M	\$117.0 M		
81	Asset Management	\$21.3 M	\$105.8 M	\$0.0 M	\$0.0 M	-\$10.1 M	\$117.0 M		
82	Bridge Enterprise Projects	\$21.3 M	\$105.8 M	\$0.0 M	\$0.0 M	-\$10.1 M	\$117.0 M	BTEB	SB 09-108
83	Maintenance and Operations	\$0.7 M	\$0.5 M	\$0.0 M	\$0.0 M	\$0.0 M	\$1.1 M		
84	Asset Management	\$0.7 M	\$0.5 M	\$0.0 M	\$0.0 M	\$0.0 M	\$1.1 M		
85	Maintenance and Preservation	\$0.7 M	\$0.5 M	\$0.0 M	\$0.0 M	\$0.0 M	\$1.1 M	BTEB	SB 09-108
86	Administration & Agency Operations	\$3.2 M	\$1.9 M	\$0.0 M	\$0.0 M	\$0.0 M	\$5.1 M		
87	Agency Operations	\$3.2 M	\$1.9 M	\$0.0 M	\$0.0 M	\$0.0 M	\$5.1 M	BTEB	SB 09-108
88	Debt Service	\$0.6 M	\$17.2 M	\$0.0 M	\$0.0 M	-\$9.1 M	\$8.7 M		
89	Debt Service	\$0.6 M	\$17.2 M	\$0.0 M	\$0.0 M	-\$9.1 M	\$8.7 M	BTEB	FHWA / SH
<b>90</b>	<b>TOTAL - BRIDGE &amp; TUNNEL ENTERPRISE</b>	<b>\$25.8 M</b>	<b>\$125.3 M</b>	<b>\$0.0 M</b>	<b>\$0.0 M</b>	<b>-\$19.3 M</b>	<b>\$131.9 M</b>		

<b>91</b>	<b>COLORADO TRANSPORTATION INVESTMENT OFFICE (CTIO)</b>								
92	Maintenance and Operations	\$59.2 M	\$9.9 M	\$0.0 M	\$4.0 M	\$0.5 M	\$73.6 M		
93	Express Lanes Operations	\$59.2 M	\$9.9 M	\$0.0 M	\$4.0 M	\$0.5 M	\$73.6 M	CTIOB	Tolls / Managed Lanes Revenue
94	Administration & Agency Operations	\$4.5 M	\$4.1 M	\$1.0 M	\$0.0 M	\$0.3 M	\$9.8 M		
95	Agency Operations	\$4.5 M	\$4.1 M	\$1.0 M	\$0.0 M	\$0.3 M	\$9.8 M	CTIOB	Fee for Service
96	Debt Service	\$0.0 M	\$8.7 M	\$0.0 M	\$0.0 M	\$0.0 M	\$8.7 M		
97	Debt Service	\$0.0 M	\$8.7 M	\$0.0 M	\$0.0 M	\$0.0 M	\$8.7 M	CTIOB	Fee for Service
<b>98</b>	<b>TOTAL - COLORADO TRANSPORTATION INVESTMENT OFFICE</b>	<b>\$63.6 M</b>	<b>\$22.7 M</b>	<b>\$1.0 M</b>	<b>\$4.0 M</b>	<b>\$0.7 M</b>	<b>\$92.1 M</b>		
<b>99</b>	<b>TOTAL - CDOT AND ENTERPRISES</b>	<b>\$1,848.4 M</b>	<b>\$1,899.2 M</b>	<b>\$63.4 M</b>	<b>\$374.9 M</b>	<b>\$278.2 M</b>	<b>\$4,464.0 M</b>		

\*SB 17-267 directed the State Treasurer to execute lease-purchase agreements on existing state facilities to generate revenue for priority transportation projects. At least 10 percent of these proceeds must be used for transit projects. Of the \$50 million in estimated revenue for transit projects, the department anticipates spending \$2.4 million on Administration, \$27.6 million on the construction of bus and pedestrian facilities, and \$20.0 million on rolling stock.

\*\*SB 18-001 created the Multimodal Transportation Options Fund, and allocated \$71.75 million to the fund in FY 2018-19 and \$22.5 million to the fund in FY 2019-20. This funding is annually appropriated by the General Assembly. The FY 2018-19 appropriation is available until the close of FY 2022-23 pursuant to SB 19-125, and the FY 2019-20 appropriation is available until the close of FY 2023-24 pursuant to SB 19-207. Of the total funding, the department will spend approximately \$6 million on administration and operating costs, approximately \$14 million for CDOT bus purchase and facility construction, and approximately \$74 million will be passed through to local agencies for rolling stock purchases.



**COLORADO**

Department of Transportation

# April 2022 TC Workshop *FY22 Budget Amendment*



- Infrastructure Investment & Jobs Act
  - Impacts to FY22 Budget
  - Changes to Revenue Allocation Plan
- FY22 Budget Amendment
  - New Revenue from IIJA
  - Transfer from Innovative Mobility
  - CTIO Central 70 Transfer
- Info Only Item for Aeronautics





# Infrastructure Investment and Jobs Act (IIJA)

Total new funding resulting from the IIJA for FY22 is \$169.1 million

Increased Funding to Existing Flexible Programs (STBG and NHPP)	\$54.9 million
Increased Funding to Existing Inflexible / Dedicated Programs (e.g. HSIP, CMAQ, Bridge Off-system, TAP, etc.)	\$29.5 million
New Programs:	
- Bridge Formula Program (85% of \$45 M)	\$38.3 million
- PROTECT Program	\$17.2 million
- National Electric Vehicle Program	\$8.4 million
- Carbon Reduction Program (CDOT and local share)	\$15.2 million
Estimated Local Match	\$5.6 million
<b>Total New Funding for FY22</b>	<b>\$169.1 million</b>



# Structural Changes to the One Sheet

**10 Year Plan Projects - Capital AM**  
**\$55.5 M**

- PROTECT Program
- Bridge Formula Program
- Flexible STBG and NHPP revenue

**10 Year Plan Projects - Capital Mobility**  
**\$62.4 M**

- Formerly "Strategic Projects"; one-time SB001, SB267, SB260 from prior years
- Flexible STBG and NHPP, CDOT portion of Carbon Reduction Program

**National Electric Vehicle Program**  
**\$8.4M**

- National Electric Vehicle Program

**10 Year Plan Projects - Multimodal**  
**\$0 M**

- Formerly "Strategic Transit and Multimodal" - SB267 from prior years and CDOT portion of Multimodal Transportation Options Program
- Flexible STBG and NHPP revenue

**Carbon Reduction Program - Local**  
**\$7.7 M**

- Suballocated portion of the Carbon Reduction Program



# FY22 Budget Amendments

## Budget Amendments Requiring TC Approval:

Item #	Description of Request	Amount	Transfer From Line	Transfer To Line
1	New Flexible Federal Revenue from IIJA	\$62.4 M	n/a	10 Year Plan Projects - Capital Mobility (Line 19)
2	Transfer to 10 Year Plan Projects	\$5.9 M	Innovative Mobility Programs (Line 44)	10 Year Plan Projects - Capital Mobility (Line 19)
3	Transfer to CTIO for Central 70	\$1.0 M	10 Year Plan Projects - Capital Mobility (Line 19)	CTIO - Agency Operations (Line 95)

See the following slides for more detail on each request.



# FY22 Budget Amendments

## New Revenue from IIJA

### Budget Amendment #1:

Allocate \$62.4 M in new flexible federal revenue from the IIJA to the 10 Year Plan Projects - Mobility line to provide additional funding for 10 year plan projects.

(Other allocations will be updated as staff adjustments, per PD703.0)

FY 2021-22 Budget Impacts of IIJA				
Line Number	Budget Line	TC Amendment	Staff Adjustment	Total Change
10	10 Year Plan Projects - Capital AM*		\$55.5 M	\$55.5 M
12	Highway Safety Improvement Program		\$6.5 M	\$6.5 M
13	Railway-Highway Crossings Program		\$0.1 M	\$0.1 M
19	<b>10 Year Plan Projects - Capital Mobility**</b>	<b>\$62.4 M</b>	<b>\$0.0 M</b>	<b>\$62.4 M</b>
20	National Highway Freight Program		-\$1.8 M	-\$1.8 M
45	National Electric Vehicle Program		\$8.4 M	\$8.4 M
47	10 Year Plan Projects - Multimodal		\$0.0 M	\$0.0 M
54	STBG-Urban (STP-Metro)		\$7.5 M	\$7.5 M
55	Congestion Mitigation and Air Quality		\$0.0 M	\$0.0 M
56	Metropolitan Planning		\$1.3 M	\$1.3 M
57	Off-System Bridge Program		\$11.0 M	\$11.0 M
61	Transportation Alternatives Program		\$8.8 M	\$8.8 M
63	Multimodal Options Program - Local		\$0.0 M	\$0.0 M
64	Carbon Reduction Program - Local		\$7.7 M	\$7.7 M
76	Planning and Research		\$1.6 M	\$1.6 M
		<b>\$62.4 M</b>	<b>\$106.6 M</b>	<b>\$169.1 M</b>

\* Includes the new Bridge Formula Program and the PROTECT Formula Program

\*\* Includes flexible STBG and NHPP revenue and the CDOT portion of the Carbon Reduction Program



# FY22 Budget Amendments Transfer from Innovative Mobility

**Budget Amendment #2:** Reallocate \$5.9 million from Innovative Mobility Programs to the 10 Year Plan Projects - Capital Asset Management line to provide additional funding for 10 year plan projects.

- These are unspent funds from a RoadX pool that is no longer used
- This is an additional amount that will be factored into the total dollars made available to projects as the Plan is revised in the coming months.







# FY22 Budget Amendments

## CTIO Central 70 Transfer

**Budget Amendment #3:** Reallocate \$1.0 million from the Strategic Projects line to the Colorado Transportation Investment Office (CTIO) Agency Operations line for the Central 70 Globeville and Elyria-Swansea Tolling Equity Program.

- Covers start-up and admin costs of the program (these costs are estimated to be \$100,000 per year over 10 years)
- Administration costs include third-party vendor staff time to register eligible residents of GES in the program, marketing, promotion, public outreach, and program evaluation costs
- Will be paid to CTIO via an Intra-Agency Agreement between CDOT and CTIO





# Timeline and Next Steps

DAF will continue to address the following items to incorporate the IIJA into the FY22 Budget:

- Spring 2022: Staff will allocate new federal revenue under the IIJA.
- Summer 2022: Staff will return to the Commission with proposed uses of new funding, including project lists for feedback and approval.





**MEMORANDUM**

**TO:** THE TRANSPORTATION COMMISSION  
**FROM:** Kay Kelly, Chief, Office of Innovative Mobility  
**DATE:** April 20, 2022  
**SUBJECT:** Office of Innovative Mobility (OIM) FY23 Budget

**Purpose:** This memorandum provides a review of OIM accomplishments in FY22 and proposes an OIM project budget for FY23.

**Action:** Informational only. The Commission will be asked to approve the FY 23 OIM project budget as part of the May 2022 Budget Supplement.

**Background:** The goals and objectives of OIM are to reduce pollution in our air and congestion on our roads by expanding multimodal transportation options and using traditional and emerging mobility technologies. OIM's work is in alignment with many of the transportation recommendations in the state greenhouse gas roadmap which calls for increased vehicle electrification, behavior change that reduces VMT and increased mobility options. OIM is organized into three program areas:

- **Electrification and Energy** - working with partners across the public and private sectors to facilitate the expansion of both electric vehicles and infrastructure across Colorado.
- **Mobility Services** - exploring ways to make transportation efficient and more accessible to underserved populations by working with technology, legislation, and conducting research and analysis.
- **Mobility Technology** - guiding Colorado's strategy and policy on connected, autonomous and emerging transportation technologies.

FY22 OIM Accomplishments

OIM received \$10,150,000 in funds for FY22, which were allocated to projects across the three program areas. In addition, a \$4.1M liquidation of remaining RoadX funding was transferred to the Mobility Technology budget in Fall 2021. FY22 Accomplishments by program area are as follows:

**Mobility Services -**

- Projects in the Emerging Mobility category included planning for an eBike deployment at Chatfield State Park and pre-NEPA and risk analysis efforts for Front Range Passenger Rail.
- Mobility Data Integration projects focused on vendor selection for the Connected Colorado digital mobility platform for transit trip planning and ticketing and phase 1 of the Transit Emissions Dashboard tool, along with collaboration with DRCOG on micromobility data.
- Projects in the Strategic TDM area included successful launch of our pilot TDM grant program, co-hosting a successful statewide TDM conference and supporting CDOT employee TDM. The team is also supporting the inclusion of TDM elements into the State Freight Plan, working with TDM priority areas identified through the 1601 process and exploring opportunities for Health Care mobility.



**Mobility Technology -**

- The Connected Vehicles projects focused on launching CDOT’s Connected Vehicle (CV) digital backend, which was the first deployment of the ITS-JPO Operational Data Environment (ODE) in the cloud. The team provided over a dozen updates to USDOT on the ODE to improve functionality.
- The Automated Vehicles projects focused on supporting CDOT’s original autonomous truck mounted attenuator (ATMA) and successful deployment of a second ATMA for Region 5. The ATMA work was recognized with an AASHTO Innovation Initiative Award. The team also developed and published the Colorado Work Zone Data Exchange feed demonstrating standardized work zone data on COTRIP.

**Electrification and Energy**

- MHD Vehicle Electrification projects included OIM supporting the Colorado Clean Trucking Strategy, and planning efforts to expand CDOT fleet charging infrastructure to 23 CDOT facilities via SB230 funding.
- Charging Infrastructure projects included continued support for grants to close gaps in EV charging corridors and award of over \$1M in grants to sites along scenic byways, parks, and rural tourist destinations, along with efforts to develop the National EV Infrastructure (NEVI) program plan that will direct \$57 million in new federal funding.
- Transit Electrification projects included completing the Transit ZEV roadmap and awarding 4 ZEV transition planning grants to local transit agencies. The team is also supporting the new Clean Transit Enterprise and leading development of the enterprise 10 year plan.
- Workforce Development projects contributed zero emission traffic incident management (TIM) training to 100+ CDOT employees and the team continues to collaborate with Colorado Community College System to develop an EV/hybrid curriculum and coordinate with CDLE and partners on future workforce development support opportunities.

FY23 OIM Budget Proposal

The total funds approved for OIM projects in FY23 is \$8,000,000 and we are requesting that funds be distributed among the three program areas as follows:

Program Area	Projects Included	FY23 Budget Request
Mobility Services	Emerging Mobility, Mobility Data Integration, Strategic TDM	\$5,000,000
Mobility Technology	Autonomous Vehicles, CDOT Equipment Automation, Connected Vehicles	\$ 0
Electrification and Energy	Charging Infrastructure, Workforce Development, MHD Electrification, Transit Electrification, Educations & Outreach	\$3,000,000
<b>OIM FY23 Budget Total</b>		<b>\$ 8,000,000</b>

**Mobility Technology** is not requesting any FY23 funds due to the large RoadX balance that was transferred into Mobility Technology in Fall 2021.

Proposed projects within the other two program areas include:



## **Mobility Services**

- Projects within Emerging Mobility propose to focus on the pilot micromobility in a state park project, an emerging mobility survey and a micromobility safety effort.
- Mobility Data Integration projects are requested to continue supporting the Connected Colorado digital trip planning and ticketing platform along with further development of the transit emissions dashboard and integration of new mobility data into CDOT platforms.
- Strategic TDM projects are proposed to focus on continuation of the TDM grant program, including support of TDM workgroups and a statewide TDM conference. In addition, the team will continue to support 1601 TDM efforts, CDOT employee TDM efforts and incorporation of freight TDM strategies into the state freight plan.

## **Electrification and Energy -**

- Charging Infrastructure projects include on-going support for the EV byways and tourism program and CDOT EVSE investments.
- Workforce Development projects would aim to support development of community college and technical school training programs, along with internal CDOT training
- MHD Electrification funds are requested to support fleet electrification grants for MHD planning, along with CDOT make-ready and charging infrastructure needs
- Transit Electrification funds are requested to provide on-going support for transit fleet electrification planning, training/workshops and technical support.
- Education and Outreach project funds are requested to continue supporting public education, engagement, outreach, and marketing support for adoption of electric vehicles statewide in partnership with other state agencies and stakeholders, including utilities, auto dealers, OEMs, and local governments.

**Next Steps:** The FY23 OIM budget approval will be included in the Budget Supplement at the May 2022 Commission meeting.

**Attachment:** B - 2022-04-20 OIM Budget Workshop Presentation





**COLORADO**

Department of Transportation

# Office of Innovative Mobility FY23 Budget Request

Wednesday, April 20, 2022  
Transportation Commission Workshop



# Office of Innovative Mobility

*Reduce pollution in our air and congestion on our roads by expanding multimodal transportation options, utilizing traditional and emerging mobility technologies.*



Transit & Rail



Mobility Services



Mobility Technology

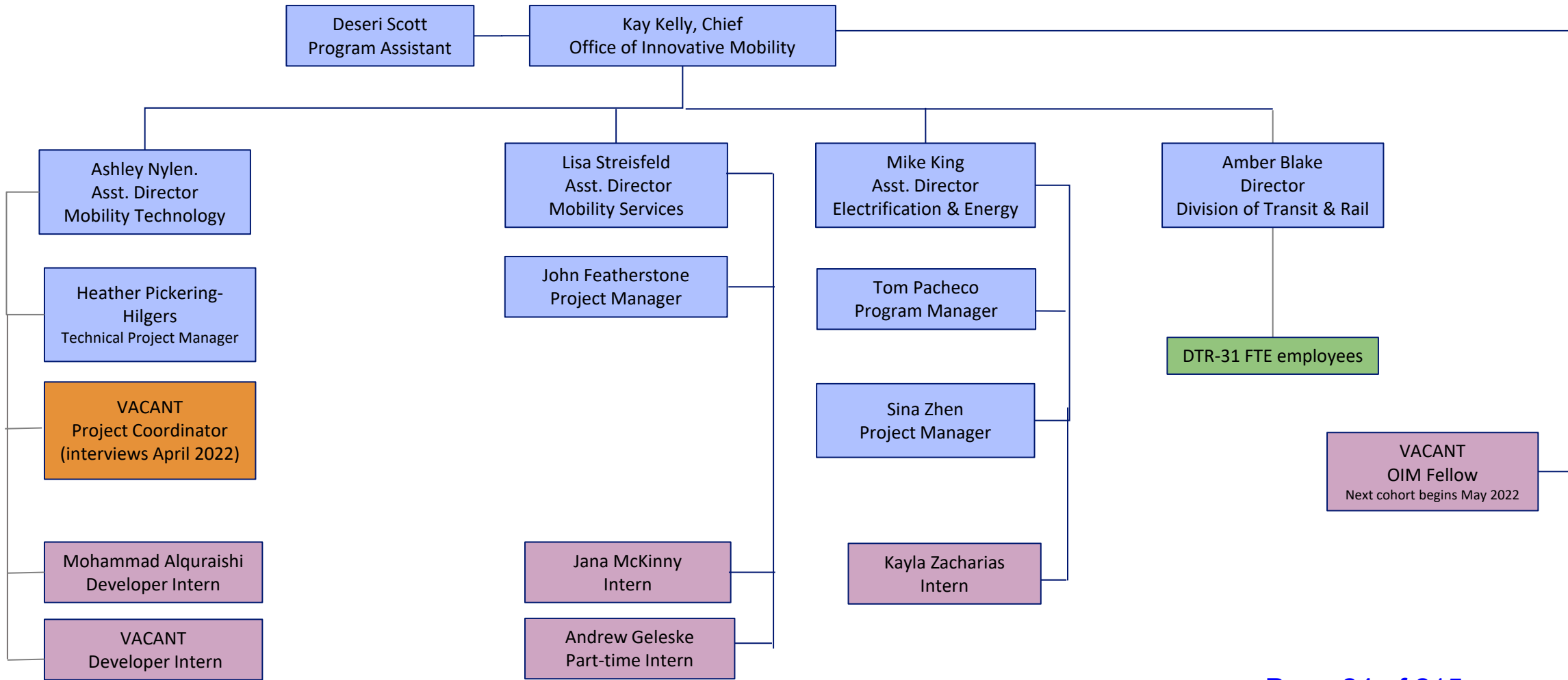


Electrification



# Office of Innovative Mobility Org Chart

as of April 2022







# OIM Good News Items

- Nearly fully staffed!
  - New FTEs to support growing programs
  - A couple promotions to recognize exceptional performance
  - Increased intern team to support growing workload and workforce development in emerging fields
  - Hosted first OIM Fellow
- OIM work area changes
  - Office moves allowing OIM team to sit together and facilitate more face-to-face collaboration
- Team-Building and Community Service
  - “Field Trip” to the Denver Auto Show
  - Tour of new Rivian service center in Denver
  - OIM-sponsored Holiday Food Drive for Rocky Mountain Food Bank
    - 173 lbs of Food Donated
    - \$1015 Raised



Delivery to Rocky Mt. Food Bank:  
173 lbs and \$1015 raised



# OIM is Building Partnerships

## Division of Transit & Rail



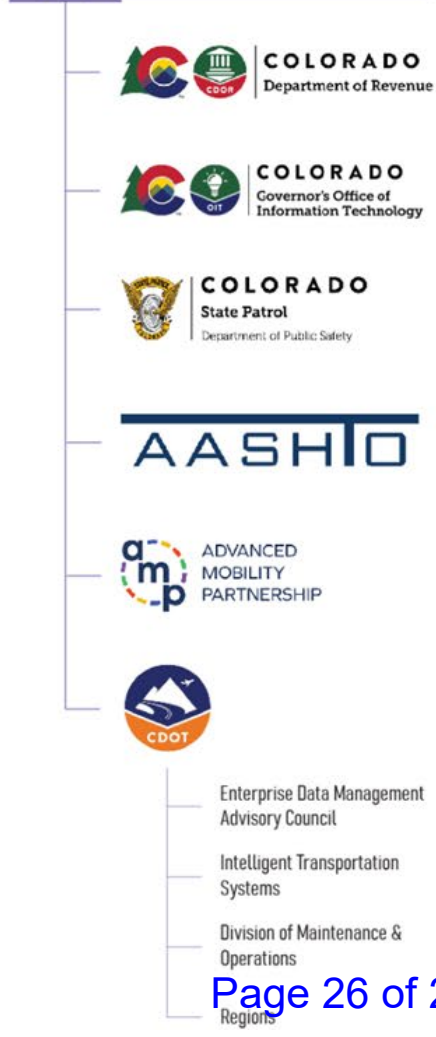
## Electrification & Energy



## Mobility Services



## Mobility Technology





# FY22 OIM Project Accomplishments Review



# Mobility Technology FY22 Accomplishments

## Connected Vehicles

- Foundational CV ecosystem system (Operational Data Environment - tool supported by USDOT) launched in production in CDOT's cloud with connections to the ATMS, ATIS and data workbench - allows for ingestion, analysis, transformation, security of CV data. Built, maintained, and managed by CDOT staff in CDOT resources
- CDOT CV team provided over a dozen updates to the open source Operational Data Environment to the USDOT, including 9 significant updates
- Development of tool to manage devices (pictured right: RSU manager)

RSU	Road	Count
10.11.81.12	Region 1	0
10.11.81.13	Region 1	0
10.11.81.14	Region 1	0
10.11.81.18	Region 1	0
10.11.81.19	Region 1	0
10.11.81.20	Region 1	0
10.11.81.21	Region 1	0
10.11.81.22	Region 1	0
10.11.81.23	Region 1	0
10.11.81.24	Region 1	0
10.11.81.25	Region 1	0
10.11.81.26	Region 1	0
10.11.81.27	Region 1	0
10.11.81.28	Region 1	0
172.16.28.131	I70	2491
172.16.28.132	I70	2154
172.16.28.133	I70	1372
172.16.28.134	I70	596
172.16.28.135	I70	451
172.16.28.136	I70	3409
172.16.28.137	I70	1697
172.16.28.138	I70	2014
172.16.28.141	I70	2361
172.16.28.143	I70	1572

**Number of Unique CV Data Messages Processed**  
**Basic Safety Messages: 154,961,400**      **Traffic Signals: 1,196,471,149**

## Automated Vehicles

- Updates to the Autonomous Mobility Task Force (expedited review process outlined)
- Development and publication of the Colorado Work Zone Data Exchange feed (standardizing work zone data) - LIVE FEED ON COTRIP IS BELOW!
- Successful deployment of CDOT's 2nd Autonomous Truck Mounted Attenuator in Region 5: Alamosa/Durango
- ATMA Receives AASHTO Innovation Initiative Award



test.data.cotrip.org/api/v1/wzdx?apiKey=RYW6AB6-YB6M6KY-KPK5RRS-MK7FY9M

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event_feed_info": {"feed_info_id": "49253be7-0c6a-4a65-8113-450f9041f989", "update_date": "2022-02-25T00:20:52Z", "contact_email": "ashley.nylen@state.co.us", "update_frequency": 300, "version": "4.0", "license": "https://creativecommons.org/licenses/by/4.0/"}
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# Electrification & Energy FY22 Accomplishments

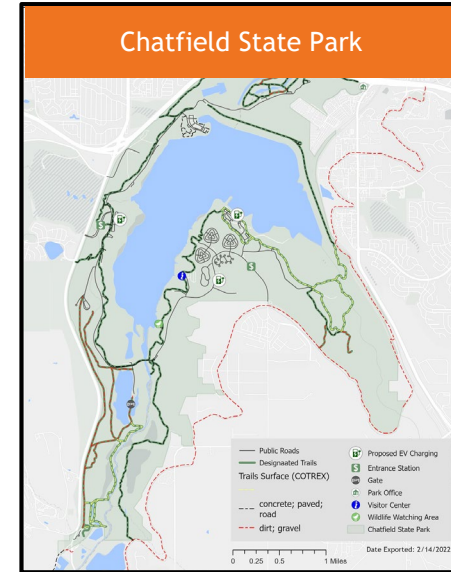
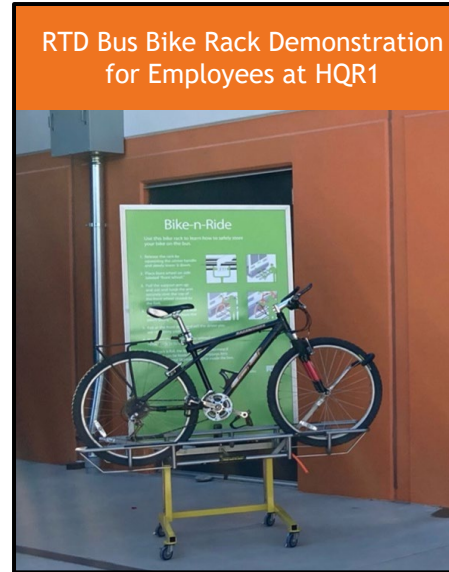


- Completed development of **Transit ZEV Roadmap** to achieve statewide goals; now developing the **Clean Transit Enterprise 10-Year Plan** due June 1st; awarded 4 ZEV Transition Planning grants to local agencies in latest Super Call.
- Finalizing the **Clean Truck Strategy** to achieve MHD electrification goals; **expanding CDOT fleet charging infrastructure** to 23 CDOT facilities via SB 230 funding.
- Awarded **over \$1 million in EV charging grants** to sites along scenic byways and rural tourist destinations; developing National EV Infrastructure (NEVI) program plan to direct **\$57 million in new federal funding**.
- Provided online **zero-emission traffic incident management (TIM) training** to 100+ CDOT employees; ongoing collaboration with Colorado Community College System to **develop EV/hybrid curriculum**; hired and onboarded 2 new OIM electrification & energy team members.



# Mobility Services FY22 Accomplishments

- **Emerging Mobility**
  - Pre-NEPA Studies, Risk Analysis and Passenger Experience Memos for Front Range Passenger Rail
  - Planning for E-bike Deployment at Chatfield State Park
- **Mobility Data Integration**
  - Connected Colorado Vendor Selection for Digital Mobility Platform for Transit Trip Planning and Ticketing
  - Phase 1 Transit Emissions Dashboard
  - Collaboration with DRCOG on Ride Report Micromobility Data
- **Strategic Transportation Demand Management (TDM)**
  - TDM Grant Program
    - TMO Support Grants: \$518,000 (9 TMOs)
    - Innovation TDM Grants: \$347,000 (7 projects)
    - Seed Funding TDM Grants \$145,000 (Glenwood Springs & Fort Collins)
    - Second TDM Grant notice of funding opportunity April 18
    - Kick-off of Statewide TDM Workgroups
  - Fall TDM Conference with ACT
  - CMAQ TDM Grant Administration
  - Support to State Freight Plan to include TDM elements
  - Health Care For Transportation Work Groups
  - Incorporate TDM Plans for PD #1601 interchange approval process
    - I-70 Harvest House/Aerotropolis
    - I-70 Quail Run
    - I-25 Crystal Valley Road
  - CDOT Employee TDM Efforts: EcoPass Reinstatement, Guaranteed Ride Home, Statewide Transit Pass Reimbursement Program
  - CDOT E-bikes re-deployment and training

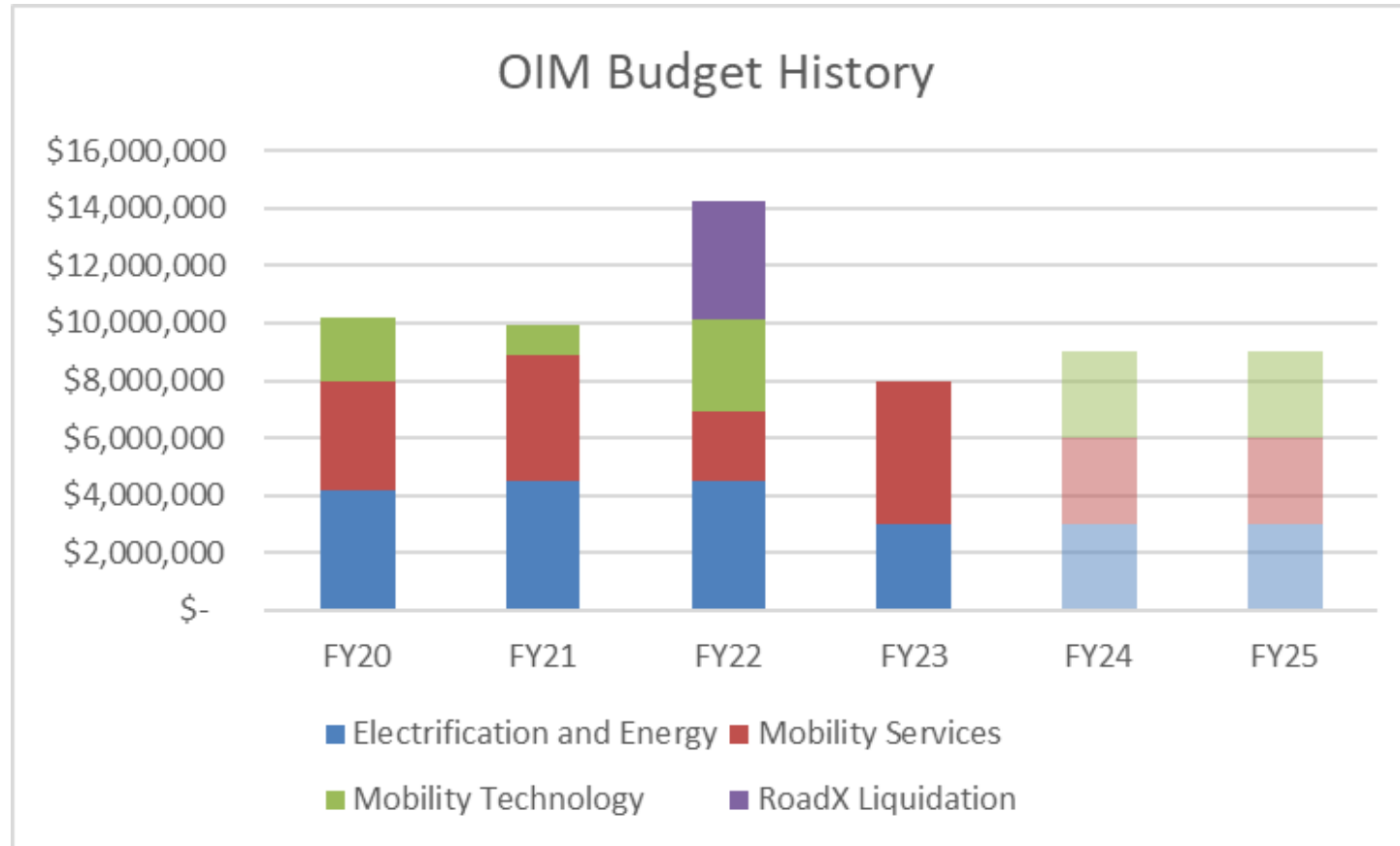




# FY23 OIM Budget Request



# OIM Budget History



The Mobility Technology group is not requesting funds for FY23 due to the large RoadX balance that was transferred in Fall 2021. We anticipate another budget request for Mobility Technology in FY24.





# Transition to Sustainable Transportation Electrification Funding Streams

- TC support has been crucial for maintaining CDOT's transportation electrification momentum between FY20 and FY22 - **THANK YOU!**
- The passage of SB21-260 in Colorado and the Infrastructure Investment & Jobs Act (IIJA) at the federal level have created new, sustainable funding sources to carry this work forward in FY23 and beyond
  - The Clean Transit Enterprise (CTE) will have \$134 million over 10 years to support transit electrification planning, vehicle replacements, infrastructure, and facility upgrades
  - The National EV Infrastructure (NEVI) program will provide \$57 million in EV fast-charging corridor build-out over the next 5 years
  - OIM is working with state and local partners to pursue additional competitive funding for hydrogen fueling, Level 2 charging, zero-emission transit projects, and more
- These new funding sources will allow OIM to be more strategic with Electrification & Energy budget requests, targeting more internally-focused projects and planning efforts and statewide topic areas not addressed through the new funding sources (e.g. planning, workforce, education and outreach, technical support, etc.)



# Electrification & Energy - FY23

Program/Project	Project Description	FY23 Budget Request
Charging Infrastructure	Ongoing support for EV Byways & Tourism program and CDOT EVSE investments	\$ 1,500,000
Workforce Development	Support for development of community college and technical school training programs and internal CDOT training	\$ 250,000
MHD Electrification	Support for fleet electrification grants to support MHD planning; CDOT make-ready, and charging infrastructure	\$ 500,000
Transit Electrification	Ongoing support for transit fleet electrification planning, training/workshops, and technical support	\$ 500,000
Education & Outreach	Support public education, engagement, outreach, and marketing support for adoption of electric vehicles statewide; in partnership with other state agencies and stakeholders, including utilities, auto dealers, OEMs, and local governments.	\$ 250,000
<b>Electrification and Energy Subtotal</b>		<b>\$ 3,000,000</b>



# Mobility Services - FY23

Program	Projects	FY23 Budget Request
Emerging Mobility	<ul style="list-style-type: none"> <li>• Micromobility in a state park, emerging mobility survey, micromobility safety (e.g. helmet program)</li> </ul>	\$600,000
Mobility Data Integration	<ul style="list-style-type: none"> <li>• Connected Colorado: on-going support for digital transit trip planning and ticketing platform</li> <li>• Data acquisition &amp; integration into CDOT platforms: transit emissions dashboard, state fleet emissions dashboard, micromobility/TNC/DNC data, parking information</li> </ul>	\$ 1,100,000
Strategic TDM	<ul style="list-style-type: none"> <li>• TDM Grant program - TMO Support, TDM Seed Funding, TDM Innovation</li> <li>• Statewide TDM Support and Workgroups</li> <li>• 2022 TDM Conference</li> <li>• Support for 1601 Applicant TDM Plans</li> <li>• Freight and Construction TDM strategies to support State Freight Plan</li> <li>• CDOT Employee TDM</li> </ul>	\$ 3,300,000
<b>Mobility Services Subtotal</b>		<b>\$ 5,000,000</b>



# FY23 Budget Request

Program Area	Projects Included	FY23 Budget Request
Mobility Services	Emerging Mobility, Mobility Data Integration, Strategic TDM	\$5,000,000
Mobility Technology	Autonomous Vehicles, CDOT Equipment Automation, Connected Vehicles	\$ 0
Electrification and Energy	Charging Infrastructure, Workforce Development, MHD Electrification, Transit Electrification, Educations & Outreach	\$3,000,000
<b>OIM FY23 Budget Total</b>		<b>\$ 8,000,000</b>



# Next Steps

- OIM's FY23 budget request will be included in the May Budget Supplement for TC decision/action
- Next Quarterly OIM Committee Meeting - May 2022
- Staff anticipate formalizing and documenting a process for establishing the annual allocation of funds for Innovative Mobility programs and projects, reviewing that process with the Commission, and proposing changes to related PD 703 approval processes in August.



**COLORADO**

Department of Transportation

# Questions/Discussion





**COLORADO**  
Department of  
Transportation

**DATE:** April 13, 2022

**TO:** Transportation Commission

**FROM:** Herman Stockinger, Deputy Director  
Rebecca White, Director, Division of Transportation Development  
Theresa Takushi, Greenhouse Gas Program Specialist

**SUBJECT:** Policy Directive Development - GHG Mitigation Measures &  
Update on Compliance with GHG Pollution Reduction Standard

### Purpose

This memo provides an update on the status of the development of the Policy Directive on GHG Mitigation Measures and an update on the progress towards compliance for the Greenhouse Gas (GHG) Pollution Reduction Standard for Transportation Planning. Staff will also present a proposed interpretation for two key terms (Regionally Significant and Transportation Capacity).

### Action

Discussion only.

### Background

As outlined in the Rule, approved by the Commission in December: "...CDOT in consultation with the MPOs shall establish an ongoing administrative process and guidelines, through a public process, for selecting, measuring, confirming, verifying, and reporting GHG Mitigation Measures" (Section 8.02.4).

This month, CDOT staff will present an updated Draft Policy Directive including Appendix A with specific GHG Mitigation measures. The Transportation Commission may consider the PD for approval at the May Commission meeting. This workshop is intended to share progress to date.

## **Details**

CDOT staff has been working with the Ad Hoc Agency Coordination Committee to develop the GHG Mitigation Policy Directive. Staff has also been continuously working with the Metropolitan Planning Organizations and other stakeholders to discuss modeling and GHG Mitigation measures/methodology.

Following the March Commission workshop, and with specific guidance from the Ad Hoc Committee, CDOT staff is now bringing forward the Draft Policy Directive which includes both a broader framework and guidance as well as an Appendix listing the draft approved GHG Mitigation Measures, their scores, and the calculation methodology behind the scores. The calculation methodology outlined is based on state of the practice and cites the best thinking and information on this work available nationwide. The scores associated with each GHG Mitigation Measure are based on actual GHG reductions, where 1 point is equivalent to 1 ton of CO2 reduced.

The four main sections of the Draft Policy Directive include:

1. Process for Establishing GHG Mitigation Measures
2. Proposing New GHG Mitigation Measures
3. Broad overview of scoring approach for GHG Mitigation Measures
4. Developing a Mitigation Action Plan & Status Report
5. Appendix - Approved GHG Mitigation Measures

## **Next Steps**

Development of this Policy Directive is an important piece of implementing the GHG Rule. By October 1, 2022, CDOT, DRCOG and NFRMPO must update their plans pursuant to the requirements of the rule and demonstrate compliance with the GHG reduction levels. Each agency must submit a GHG Transportation Report to the Commission, demonstrating the emissions analysis for their regions and, if necessary, a Mitigation Action Plan which details mitigation measures used to help them meet their reduction levels.

## **Attachments**

- Slide presentation
- Draft GHG Policy Directive including Appendix A (GHG Mitigation Measures)





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## GHG Pollution Standard for Transportation Planning: Policy Directive Development and Rule Implementation Update

April 20, 2022

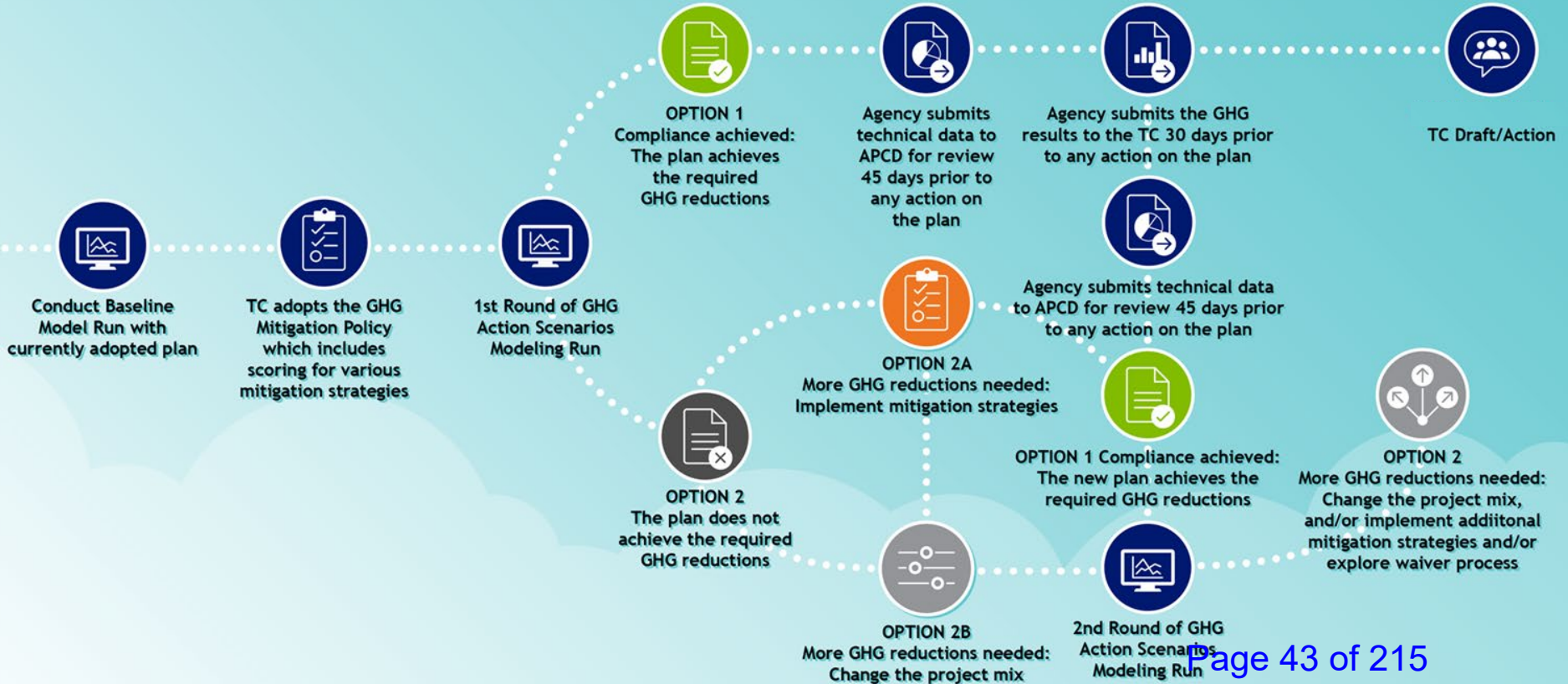
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- Current Status of Rule Implementation
- Policy Directive
  - Overview
  - Appendix A



# GHG Rule Planning Process





- April: TC and STAC Workshops (GHG Mitigation Policy Directive)
- May: TC Workshop and potential Approval of PD
- 10 Yr Plan Update and GHG Report to TC
  - CDOT, DRCOG and NFRMPO must have updated plans in place - before Oct 2022



# GHG Mitigations: Background

- GHG mitigation strategies are a key concept within the GHG Rule providing another pathway toward meeting the GHG reduction levels in the Rule.
- Staff has been working to develop both the overall guidance for these mitigation strategies as well as the detailed quantification of how much each measure would reduce GHG emissions.
- At last month's Transportation Commission meeting it was decided that all of this detailed work would live in a single Policy Directive to be adopted by the Commission.
- The Commission's Ad Hoc Committee has been meeting weekly to advise on the development of this Directive. Staff also has been meeting with CEO, CDPHE and the Interagency Consultation Team to receive their input.



# DRAFT GHG Mitigations Policy Directive

## Overarching framework

- Explains intent of mitigations and process for scoring
- High level enough to consider the 30 year life of the rule
- Reporting requirements

## Appendix A

- Lists actual GHG Mitigation Measures
- Scoring matrix
- Detailed calculation methodology with citations



# DRAFT Framework for GHG Policy Directive

Four main sections:

1. Process for Establishing GHG Mitigation Measures
2. Proposing and Approving New GHG Mitigation Measures
3. Scoring approach for GHG Mitigation Measures
4. Mitigation Action Plan & Status Report Requirements



- Table 1 - GHG Mitigation Measures and points
  - State of the practice: Table 11 citations
  - Same measure has different impacts over time
  - Different measures have different lifetimes
    - Infrastructure - 30 years
    - Investment - 1 year
- Table 2-6 - Calculation Methodology
- Table 7 - Citations





# Mitigation Measures and their Point/Metric - Bike/Ped

Project Type	Metric	Project Lifetime (Years)	Points/Metric <sup>1</sup> Now - 2024 <sup>2</sup>	Points/Metric 2025-2030	Points/Metric 2031-2040	Points/Metric 2041-2050	Additional Multipliers
<b>Pedestrian/Bicycle</b>							
Bike lane/facility - urban <sup>3</sup>	Miles of two way facility built between plan year 1 and evaluation year	30	10	8	4	2	2.0 – separated / protected lane or bike boulevard
Bike lane/facility – suburban			3	3	1	1	
Bike lane/facility – rural			1	1	1	1	
Sidewalk/ pedestrian facility - urban			9	8	4	1	1.5 – within mixed-use district or ½ mi of transit station or school
Sidewalk/ pedestrian facility - suburban			1	1	1	1	
Sidewalk/ pedestrian facility – rural			1	1	1	1	
Shared-use path - urban			22	18	9	3	
Shared-use path – suburban			7	6	3	1	
Shared-use path – rural			1	1	1	1	



# DRAFT Calculation Methodology - Bike/Ped

## PEDESTRIAN AND BICYCLE STRATEGIES

Ref	Parameter	Value				Source/Calculation	Metric & Notes	
		2025	2030	2040	2050			
<b>Parameters Common Across Strategies</b>								
A	grams CO2 per vehicle-mile (auto)	303	256	119	46	GHG Rule CBA (MOVES model) - high EV scenario		
Prior drive mode share of new bikers/walkers								
B1	Owned bikes	60%					Transportation Investment Strategy Tool, Table A.4	
B2	Shared bikes and scooters	40%					Buehler et al (2019), Mobility Lab (2019), NABSA (2020), Ramboll (2020), MacArthur	
Average trip length (mi)								
C1	Bike	2.3					2009 National Household Travel Survey	
C2	Walk	0.7					2009 National Household Travel Survey	
C3	Shared bike	1.4					PBOT (2020) and NABSA (2020)	
C4	Scooter	1.1					PBOT (2020) and NABSA (2020)	
D	Annualization factor	365						
<b>Per New Facility-Mile:</b>								
		<b>New Users (Daily)</b>	<b>Displaced Auto Miles/yr</b>					<b>Source/Calculation</b>
	Bike lane/facility - urban	80	40,296					New users: Transportation Investment Strategy Tool documentation, Table A.4
	Bike lane/facility - suburban	25	12,593					Displaced auto miles: New users * C1 * B1 * D
	Bike lane/facility - rural	5	2,519					
	Sidewalk/ pedestrian facility - urban	247	124,414					New users: Transportation Investment Strategy Tool documentation, Table 4.11
	Sidewalk/ pedestrian facility - suburban	13	6,548					Displaced auto miles: New users * C1 * B1 * D
	Sidewalk/ pedestrian facility - rural	2	1,007					



# DRAFT Calculation Methodologies

Change in tons CO2 per new facility-mile (annual):	2025	2030	2040	2050	Source/Calculation	Metric & Notes
Bike lane/facility - urban	(12.2)	(10.3)	(4.8)	(1.8)	= Displaced auto miles * A / 1000000	
Bike lane/facility – suburban	(3.8)	(3.2)	(1.5)	(0.6)		
Bike lane/facility – rural	(0.8)	(0.6)	(0.3)	(0.1)		
Sidewalk/ pedestrian facility - urban	(37.7)	(31.8)	(14.8)	(5.7)		
Sidewalk/ pedestrian facility - suburban	(2.0)	(1.7)	(0.8)	(0.3)		
Sidewalk/ pedestrian facility – rural	(0.3)	(0.3)	(0.1)	(0.0)		
Shared-use path - urban	(26.6)	(22.5)	(10.4)	(4.0)		
Shared-use path – suburban	(8.3)	(7.0)	(3.3)	(1.3)		
Shared-use path – rural	(1.7)	(1.4)	(0.7)	(0.3)		
“Complete Streets” reconstruction - urban	(49.9)	(42.1)	(19.6)	(7.5)		
“Complete Streets” reconstruction – suburban	(5.8)	(4.9)	(2.3)	(0.9)		

Change in tons CO2 per 100 new shared vehicles (annual):	2025	2030	2040	2050	Source/Calculation	Metric & Notes
Shared bike	(16.1)	(13.6)	(6.3)	(2.4)	= Displaced auto miles * A / 1000000	
Scooter	(15.6)	(13.1)	(6.1)	(2.3)		

Points per new facility-mile:	2025	2030	2040	2050		
Bike lane/facility - urban	12	10	5	2	Providing a minimum of 1 point, even if CO2 estimate rounds to 0 tons	
Bike lane/facility – suburban	4	3	1	1		
Bike lane/facility – rural	1	1	1	1		



- Staff will continue to refine the PD based on input at April's workshops and additional stakeholder discussions.
- The Rule also provides for a formal review period for the Air Pollution Control Division. Staff has initiated that review in time for a May adoption of the PD.
- As noted in earlier meetings, this work will continue to evolve over time as both our models increase in sophistication and we receive additional data on the real-world impact of these mitigations.



Questions?  
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**DRAFT**  
**4/13/22**

<b>COLORADO DEPARTMENT OF TRANSPORTATION</b>		<input checked="" type="checkbox"/> <b>POLICY DIRECTIVE</b> <input type="checkbox"/> <b>PROCEDURAL DIRECTIVE</b>
<b>Subject</b> <b>Greenhouse Gas Mitigation Measures</b>		<b>XXX</b>
<b>Effective</b> <b>5/01/22</b>	<b>Supersedes</b> <b>New</b>	<b>Originating Office</b> <b>Division of Transportation Development</b>

**I. PURPOSE**

The purpose of this Policy Directive is to fulfill the requirements of the Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions (the Rule), which directs the Colorado Department of Transportation (CDOT), in consultation with the Metropolitan Planning Organizations (MPOs), to establish an ongoing administrative process and guidelines for selecting, measuring, confirming, verifying, and reporting Greenhouse Gas (GHG) Mitigation Measures. CDOT and MPOs may use GHG Mitigation Measures in order to assist them in meeting the Regional GHG Planning Reduction Levels in 2 CCR 601-22. This Policy Directive sets forth the intent and principles of GHG mitigations, the process for establishing, verifying, and the calculation methodology for such measures, and the GHG reduction/score.

**II. AUTHORITY**

Transportation Commission pursuant to § 43-1-106 (8)(a), C.R.S.  
§ 43-1-128, C.R.S.  
2 CCR 601-22, Rules Governing Statewide Transportation Planning Process and Transportation Planning Regions (the “Rule”).

**III. APPLICABILITY**

This Policy Directive shall apply to all CDOT Divisions, Regions, Branches, and Offices, the state’s current five MPOs: Denver Regional Council of Governments (DRCOG), North Front Range Metropolitan Planning Organization (NFRMPO), Pikes Peak Area Council of Governments (PPACG), Grand Valley Metropolitan Planning Organization (GVMPO), and

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Pueblo Area Council of Governments (PACOG), as well as any MPOs created during the lifetime of the Rule.

**IV. BACKGROUND**

The broad purpose of this Policy Directive is to help achieve the objectives of the Rule, which is intended to reduce greenhouse gas (GHG) emissions from the transportation sector. Specifically, the Policy Directive fulfills the following requirement within 2 CCR 601-22, Section 8.02.4:

“By May 1, 2022, CDOT in consultation with the MPOs shall establish an ongoing administrative process and guidelines, through a public process, for selecting, measuring, confirming, verifying, and reporting GHG Mitigation Measures. CDOT and MPOs may incorporate one or more GHG Mitigation Measures into their plans in order to assist in meeting the Regional GHG Planning Reduction Levels in Table 1. Such a process and guidelines shall include, but not be limited to, how CDOT and MPOs shall determine the relative benefits and impacts of GHG Mitigation Measures, and measure and prioritize localized benefits to communities and Disproportionately Impacted Communities in particular. The mitigation credit awarded to a specific solution shall consider both regional and community benefits.”

GHG Mitigation Measures are an important, but voluntary, component of the Rule as they provide an additional option to demonstrate compliance with the GHG Reduction Levels (Table 1). For this reason, the GHG reductions achieved by Mitigation Measures must be real and quantifiable. The Mitigation Measures included in this Policy Directive--and the scores or reduction levels assigned to these measures--are based on the best available research, calculation methodology and forecasting tools available nationwide.

It also is important to understand how Mitigation Measures relate to transportation plans (“Applicable Planning Documents” in the Rule), which include a range of projects-- from roadway expansions to new transit and bike lanes. The Rule requires CDOT and MPOs to model “at a minimum... Regionally Significant Projects” to demonstrate compliance. This language provides the flexibility to model projects that would not be considered Regionally Significant. This approach has the benefit of providing a full analysis of all the projects within a plan and, further, of realizing the benefits of a model to capture the interrelationships of these strategies across the transportation network.

However, not all projects can be accurately modeled yet. This is either because they are too small to be detected within a model (e.g. a segment of bike lane) or are beyond the current overall capability of an agency’s model. Thus, this Policy largely focuses on GHG Mitigation

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Measures that cannot yet be accurately quantified within CDOT or an MPO’s travel demand modeling runs. The Commission recognizes that this dynamic will change over time, as models continue to improve, which may require amendments to this Policy.

**V. DEFINITIONS**

The defined terms in this Policy Directive have the same meaning as in the Rule except as explicitly set forth herein. Some definitions are repeated here for convenience.

“Applicable Planning Document”, as stated in the Rule (1.02), are MPO Fiscally Constrained Regional Transportation Plan (RTP), Transportation Improvement Program (TIP) for MPOs in Non-Attainment Areas, CDOT’s 10-Year Plan and Four-Year Prioritized Plan in Non-MPO areas, and amendments to the MPO RTPs and CDOT’s 10-Year Plan and Four-Year Prioritized Plan in Non-MPO areas that include the addition of Regionally Significant Projects.

“Disproportionately Impacted Communities”, as stated in the Rule (1.11), is defined in § 24-38.5-302(3), C.R.S. as a community that is in a census block group, as determined in accordance with the most recent United States Decennial Census where the proportion of households that are low income is greater than forty percent (40%), the proportion of households that identify as minority is greater than forty percent (40%), or the proportion of households that are housing cost-burdened is greater than forty percent (40%).

“Greenhouse Gas (GHG)”, as stated in the Rule (1.16), are pollutants that are anthropogenic (man-made) emissions of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, nitrogen trifluoride, and sulfur hexafluoride

“Greenhouse Gas (GHG) Mitigation Measures”, as stated in the Rule (1.18) or “Mitigation Measures”, are non-Regionally Significant Project strategies that reduce transportation GHG pollution and help meet the GHG Reduction Levels.

“Greenhouse Gas (GHG) Reduction Level”, as stated in the Rule (1.17), is the amount of the GHG expressed as CO2e reduced that CDOT and MPOs must attain through transportation planning.

“GHG Transportation Report” is the report that is required to be submitted as part of the Rule which shows compliance toward meeting the reductions levels.



“Metropolitan Planning Organization” or “MPO”, as stated in the Rule (1.28), is an organization designated by agreement among the units of general purpose local governments and the Governor, charged to develop the Regional Transportation Plans (RTPs) and programs in a Metropolitan Planning Area pursuant to 23 U.S.C. § 134. Colorado currently includes five designated MPOs: DRCOG, PPACG, PACOG, GVMPO and NFRMPO.

“Mitigation Action Plan” (MAP) is an element of the GHG Transportation Report that specifies which GHG Mitigation Measures shall be implemented that help achieve the GHG Reduction Levels.

“Off-Model” means tools are better suited to use independent of the travel model, including calculation methodology in order to quantify or estimate the effects of GHG reductions.

“Policy Directive” is a document adopted by the Transportation Commission that specifies organizational and Commission goals and policies and is used to help implement the Rule.

“Regionally Significant Project”, as stated in the Rule (1.42), is a transportation project that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network or state transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel. Modifications of this definition shall be allowed if approved by the State Interagency Consultation Team. If the MPOs have received approval from the Environmental Protection Agency (EPA) to use a different definition of regionally significant project as defined in 40 C.F.R. § 93.101, the State Interagency Consultation Team will accept the modified definition. Necessary specificity for MPO Models or the Statewide Travel Model will be approved by the State Interagency Consultation Team. The Transportation Commission may issue guidance for implementation of this definition based on population density or other defined factors from time to time.

“State Interagency Consultation Team” (IACT), as stated in the Rule (1.44), consists of the Division Director or the Division Director’s designee, the Colorado Department of Public Health and Environment (CDPHE) Director of Air Pollution Control Division or the Director’s designee, the Director of each MPO or their designee, and the Colorado Energy Office Director or Director’s designee. The Division Director may appoint additional member(s) from outside of these organizations. The State Interagency Consultation Team works collaboratively and consults appropriately to approve modifications to Regionally Significant definitions, to address

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classification of projects as Regionally Significant, and to consult on issues that may arise regarding modeling assumptions and projects that reduce GHG emissions.

**VI. POLICY**

The Transportation Commission adopts the processes and priorities stated herein to guide the development of GHG Mitigation Measures, the approval of new GHG Mitigation Measures, the elements of a Mitigation Action Plan and GHG Mitigation Measure Status Report, and the analysis of the efficacy of GHG Mitigation Measures.

**A. Overall Process for Establishing GHG Mitigation Measures**

This Policy Directive includes a list of approved GHG Mitigation Measures (Appendix A) that have been reviewed, vetted, and scored by the Department’s subject matter experts, reviewed by the Interagency Coordination Team, and submitted to the Air Pollution Control Division as required by the Rule, Section 8.04.2. In order for a GHG Mitigation Measure to be included in a Mitigation Action Plan for compliance, it must be included in Appendix A.

Due to the evolving nature of evaluation techniques it is expected that Appendix A may be reviewed and amended in the early months and years of this Policy Directive.

**1. Proposing and Approving New GHG Mitigation Measures**

This Policy recognizes the need to balance appropriate analytical rigor around the expected GHG reductions of GHG Mitigation Measures with encouraging new ideas and adapting to advancements in measurement methodologies. To that end, any individual or organization may nominate a new GHG Mitigation Measure for review and potential approval. CDOT shall develop an online form on CDOT’s website to receive these nominations.

Additionally, CDOT staff will establish a regular process of inventorying best practices from around the country with a focus on identifying a range of effective GHG Mitigation Measures for urban, suburban, and rural contexts throughout the state. Staff shall engage CDOT’s Environmental Justice branch in this process to help ensure that GHG Mitigation Measures and policy updates are regularly adapted to, and developed with, input from Disproportionately Impacted Communities.

In order to be included in Appendix A as an approved GHG Mitigation Measure, all new measures must follow the process outlined below:

- Assessment by CDOT GHG Program staff according to the framework listed in Table 1. The individual or group submitting the new measure shall be expected to provide, to the extent possible, this information and data upon submission of a proposed GHG Mitigation Measure,
- Review and recommendation by the Interagency Coordination Team.
- Confirmation and verification by the Air Pollution Control Division (APCD) (as required by 8.04.2), and
- Approval by the Transportation Commission for incorporation into Appendix A.

Staff, in consultation with the Transportation Commission, reserves the discretion to prioritize newly nominated GHG Mitigation Measures based on the information available and the effort required to assess.

Once a proposed GHG Mitigation Measure has been approved by the Transportation Commission, CDOT and the MPOs may immediately use the new GHG Mitigation Measure in their Mitigation Action Plans.

Table 1: Framework for Submitting New GHG Mitigation Measures

New GHG Mitigation Measure Submission Components	Description of New GHG Mitigation Measure
Strategy Description	Describe the overall strategy, including: <ul style="list-style-type: none"> <li>● The nexus with the transportation sector</li> <li>● Description of what the strategy implements</li> <li>● Identification of how the strategy reduces CO<sub>2</sub>e emissions</li> <li>● If possible, identification of how the strategy is not already reflected in land use and travel modeling tools, thus warranting an off-model estimate of CO<sub>2</sub>e emission reductions</li> </ul>
Quantification Methodology	Describe the methodology for quantifying CO <sub>2</sub> e emissions reductions from the strategy <ul style="list-style-type: none"> <li>● Base methodology on empirical evidence supported by verifiable data sources</li> <li>● Clearly document all assumptions, sources of data, and calculations</li> </ul>
Challenges and Constraints	<ul style="list-style-type: none"> <li>● Potential challenges and constraints with quantifying and implementing strategy</li> </ul>

**B. Process for Scoring Approved GHG Mitigation Measure**

Approved GHG Mitigation Measures will be scored and the scores included in Appendix A. The scoring is related to the ability of a GHG Mitigation Measure to reduce GHGs relative to a certain metric. It also provides a way to distinguish and value the location and context of these Mitigation Measures.

The scores are based on the following factors:

1. Metric
2. Points/metric
3. Additional multipliers

**C. GHG Mitigation Action Plan**

Subsection 8.02.6.3 of the Rule states as follows: “If (GHG) Mitigation Measure(s) are needed to count toward the GHG Reduction Levels in Table 1, the MPO or CDOT may submit a Mitigation Action Plan that identifies GHG Mitigation Measures, if any, needed to meet the GHG Reduction Levels within Table 1”. The Transportation Commission will evaluate Mitigation Action Plans and determine their sufficiency to assure that the Plan meets the GHG Reduction Levels needed for compliance.

The following information must be included in a Mitigation Action Plan:

- a. GHG Emissions Reductions: Summary of emissions analysis from GHG Transportation Report, including the estimated gap to achieve the GHG Reduction Levels specified for each horizon year.
- b. GHG Mitigation Measure Summary/Description: Each measure shall include the following details as listed in Table 2.

Table 2: Description for Each Mitigation Measure

Component	Description of information to be submitted with application.
Measure Description	A description of the measure, including scale, location, and how it would affect travel activities expected to result in GHG reductions.
Timing	Anticipated start date, completion date, and dates of any other key milestones.
GHG Reductions	Using the scores in Appendix A, in each year of the project’s lifetime.
Co-benefits	Quantification, where possible, of specific co-benefits including reduction of co-

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	pollutants (PM2.5, NOx, etc.) as well as travel impacts (changes to VMT, pedestrian/bike use, transit ridership, etc. as applicable), for each relevant compliance year in the project’s lifetime.
Benefits to Disproportionately Impacted Communities	A description of the benefits to Disproportionately Impacted Communities and stakeholder engagement conducted with those communities. Include an accounting of the amount of mitigation dollars directly spent in--or designed to serve--Disproportionately Impacted Communities as a subset of total dollars.
Measure History	If a project was specifically identified in a previous fiscally constrained plan(as of January 30, 2022 , it is not eligible as a GHG Mitigation Measure in a new plan UNLESS the new GHG Mitigation Measure is funded from a pool of non-specific projects (and not otherwise modeled in a previous plan), in which case it may be used as a GHG Mitigation Measure in the new plan.
Funding/Resources/Partnerships	Funding source(s), including if those funds are confirmed if any partnerships have been made or in-kind/matches are included.
Other Info As Needed	Any other relevant information that may be needed for thorough review of the proposed GHG Mitigation Measure.

**D. GHG Mitigation Measure Status Reports and Follow-Up Analysis.**

**1. Submitting a GHG Mitigation Measure Status Report.**

Following the approval and implementation of a GHG Mitigation Action Plan, CDOT and the MPOs are required to submit an annual status report for each GHG Mitigation Measure to the Transportation Commission starting on April 1 of each calendar year subsequent to the approval of the MAP. The following information shall be included in each status report (as outlined in the Rule):

- The implementation timelines;
- The current status
- For measures that are in progress or completed, quantification of the annual benefit of such measures
- For measures that are delayed, canceled, or substituted, an explanation of why that decision was made and, how these measures or the equivalent will be achieved
- For measures located in a Disproportionately Impacted Community that are delayed, canceled, or substituted, an explanation of why that decision was made and, how these measures or the equivalent will still be achieved in Disproportionately Impacted Communities

The Commission shall consider failure to submit reports and any analysis therein in subsequent review of plans presented for consideration.

## **2. Analyzing the Efficacy of GHG Mitigation Measures.**

On a periodic basis, but no later than 2026 on the first occasion, CDOT shall evaluate the effectiveness of implemented GHG Mitigation Measures against predicted achievement of those measures. Such analysis shall be provided to the Interagency Coordination Team for their review and consideration as to whether this information merits a change to the score applied to relevant measure(s). The Commission shall incorporate subsequent review and revisions into this Policy Directive.

## **V. IMPLEMENTATION PLAN**

This Policy Directive shall be effective immediately upon approval by the Transportation Commission.

The Office of Policy and Government Relations shall post this Policy Directive on CDOT's intranet as well as on public announcements.

## **VI. REVIEW DATE**

This Directive shall be reviewed by January, 2023, following the adoption of various transportation plans in 2022. Further, this Directive shall be reviewed no later than \_\_\_\_\_, 2025.

\_\_\_\_\_  
Herman Stockinger  
Transportation Commission Secretary

\_\_\_\_\_  
Date of Approval

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**APPENDIX A.**

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- [Table 1. GHG Mitigation Measures and their points/metric in each compliance year.](#)
- [Table 2. GHG Point Estimate Calculation Methodologies - Pedestrian and Bicycle Strategies](#)
- [Table 3. GHG Point Estimate Calculation Methodologies - Transit Strategies](#)
- [Table 4. GHG Point Estimate Calculation Methodologies - Parking Strategies](#)
- [Table 5. GHG Point Estimate Calculation Methodologies - Travel Demand Management Strategies](#)
- [Table 6. GHG Point Estimate Calculation Methodologies - Traffic Operation Strategies](#)
- [Table 7. GHG Point Estimate Calculation Methodologies - Sources](#)

**Table 1. GHG Mitigation Measures and their points/metric in each compliance year.**

Project Type	Metric	Project Lifetime (Years)	Points/Metric <sup>1</sup> Now - 2024 <sup>2</sup>	Points/Metric 2025-2030	Points/Metric 2031-2040	Points/Metric 2041-2050	Additional Multipliers		
<b>Pedestrian/Bicycle</b>									
Bike lane/facility - urban <sup>3</sup>	Miles of two way facility built between plan year 1 and evaluation year	30	10	8	4	2	2.0 – separated / protected lane or bike boulevard		
Bike lane/facility – suburban			3	3	1	1			
Bike lane/facility – rural			1	1	1	1			
Sidewalk/ pedestrian facility - urban					9	8	4	1	1.5 – within mixed-use district or ½ mi of transit station or school
Sidewalk/ pedestrian facility - suburban			1	1	1	1			
Sidewalk/ pedestrian facility – rural			1	1	1	1			
Shared-use path - urban			22	18	9	3			
Shared-use path – suburban			7	6	3	1			

<sup>1</sup> 1 point corresponds to 1 metric ton of CO2 reduced.

<sup>2</sup> Year of emissions factor basis for points: now-2024: 2025; 2025-2030: 2030; 2031-2040: 2040; and 2041-2050: 2050.

<sup>3</sup> For pedestrian and bicycle facilities, “urban” corresponds to census tract or block group population density of greater than 4,000 persons per square mile; “suburban” to density between 500 and 4,000 persons per square mile; and “rural” to density of less than 500 persons per square mile. “Sharrows” are not considered bike facilities in this application; however, a bike boulevard (low-volume street that includes pavement markings, signage, and traffic calming measures) is considered a bike facility. A “mixed-use district” is a street along which both residential and commercial (including retail) uses are permitted by zoning and where multiple non-residential uses (including retail) are present or planned.



Project Type	Metric	Project Lifetime (Years)	Points/Metric <sup>1</sup> Now - 2024 <sup>2</sup>	Points/Metric 2025-2030	Points/Metric 2031-2040	Points/Metric 2041-2050	Additional Multipliers
Shared-use path – rural			1	1	1	1	
“Complete Streets” reconstruction - urban		30	19	16	8	3	2.0 – separated / protected lane or bike boulevard vs. bike lane
“Complete Streets” reconstruction - suburban			4	3	1	1	1.5 – within mixed-use district or ½ mi of transit station or school
Bikeshare	Per 100 vehicles in service in evaluation year	2	16	14	6	2	
Scooter share			16	13	6	2	
<b>Transit</b>							
New/increased fixed-route transit service - urban/suburban - electric		1	27	23	11	4	
New/increased fixed-route transit service - urban/suburban - electric/diesel fleet average			7	18	11	4	

Project Type	Metric	Project Lifetime (Years)	Points/Metric <sup>1</sup> Now - 2024 <sup>2</sup>	Points/Metric 2025-2030	Points/Metric 2031-2040	Points/Metric 2041-2050	Additional Multipliers
New/increased transit service - inter regional	Per 1,000 additional vehicle revenue-hours in evaluation year <sup>4</sup>	1	7	18	11	4	
Reduce transit fares 25%	Per million annual trips current ridership base		90	75	35	14	
Reduce transit fares 50%			180	150	70	30	
Free fares			360	300	140	55	
Implement bus priority treatments <sup>5</sup>	Per 1,000 vehicle revenue-miles per weekday of affected service in evaluation year	30	20	12	5	2	
<b>Transportation Demand Management</b>							
Trip Reduction program - voluntary	Per program \$1,000 expenditure in evaluation year	1	30	25	12	5	
Trip Reduction marketing	Per program \$1,000 expenditure in evaluation year		2	2	1	1	

<sup>4</sup> "Evaluation year" is the year for which projected GHG mitigation is being compared against a target, i.e., 2025, 2030, 2040, 2050.

<sup>5</sup> Bus priority treatments will need to meet minimum standards, e.g., anticipated >+10% travel time reduction on high-frequency (<=20 min headway) routes.

Project Type	Metric	Project Lifetime (Years)	Points/Metric <sup>1</sup> Now - 2024 <sup>2</sup>	Points/Metric 2025-2030	Points/Metric 2031-2040	Points/Metric 2041-2050	Additional Multipliers
Employer sponsored vanpool	# of participants in evaluation year		1	1	1	1	
Carshare program	# of cars provided in evaluation year		14	12	5	2	3.0 for EVs
<b>Traffic Operations</b>							
Retime/optimize arterial signals	Per 10,000 AADT per signal optimized within five years prior to evaluation year	5	75	65	35	20	
Replace signalized intersection with roundabout in urban area	Per roundabout constructed between current year and evaluation year	30	150	120	70	45	
<b>Parking Management</b>							
Reduce minimum parking requirements to “smart growth” levels <sup>6</sup> and set maximum levels no more than 125% of “smart growth” levels	# of DUs that can be built in rezoned area between current year and evaluation year	30	650	550	250	95	

<sup>6</sup> “Smart growth” parking levels are defined as minimum requirements of less than 1 space per dwelling unit or 2 spaces per 1,000 sq. ft. of commercial floor area, and maximum requirements of no more than 1.25 spaces per dwelling unit or 2.5 spaces per 1,000 sq. ft. of commercial floor area. Additional definitions for other land use types may be added.

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Project Type	Metric	Project Lifetime (Years)	Points/Metric <sup>1</sup> Now - 2024 <sup>2</sup>	Points/Metric 2025-2030	Points/Metric 2031-2040	Points/Metric 2041-2050	Additional Multipliers
Unbundle residential parking	# of parking spaces rented for at least \$100 per month in evaluation year	1	160	130	60	25	
Additional tax or fee on public and/or private parking	Per # of parking spaces per \$1 fee in evaluation year	1	170	140	65	25	

**Definitions:**

**Bus priority treatments:** Infrastructure and/or operational improvements to reduce run times and improve reliability. These may include transit signal priority, queue jump lanes, exclusive bus lanes, bulb-outs, and/or other treatments. Treatments should reduce run times by at least 10% along the improved segment on high-frequency (<=20 min headway) routes.

**Trip reduction program:** Minimum requirements for such programs include staff dedicated to performing outreach to employers to promote and provide information on travel options for employees; resources for employers to communicate travel options to employees (e.g., websites, flyers, social media, trip planning tools, model telework policies, vanpool support); guaranteed ride home program; ride matching platform; incentives for participation (e.g., prizes, recognition); and support for measuring and tracking performance (e.g., participation in alternative mode use) via apps or surveys.

**Support medium/heavy truck fleet electrification:** Supporting actions may include providing rebates/incentives for depot charging; constructing or supporting public charging intended to serve trucks; providing funding for other electricity infrastructure/grid improvements to support high-speed charging; and/or providing technical support for charging development and/or vehicle procurement.

**Unbundle residential parking:** Developers of residential projects charge tenants or unit buyers per parking space rather than including parking costs as part of the rent or sale price.

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**“Complete Streets” reconstruction:** Reconstruct streets to include or enhance bicycle and pedestrian facilities as well as transit priority treatments if appropriate.

**Additional comments:**

Transit: Expressing service expansion in vehicle-hours captures a wide range of specific actions including adding route-miles, reducing headways, and extending service hours or days. Ridership elasticities are available to relate to overall service metrics, but will be less available for more specific actions. Data to support ridership response to other improvements (e.g., bus stops and other amenities) will be less available.

Lifetime Effectiveness of GHG Mitigation Measures: The table lists the number of years after implementation or expenditure for which a strategy remains effective. Some infrastructure projects have long lasting effects, while other programs must be annually reinstated e.g., transit operations and parking pricing. For those programs that must be annually reinstated, agencies may take credit for as many years as the applicable planning document commits to funding said program. An agency may take credit for the GHG reductions of a given project over its lifetime effectiveness.

**Table 2. GHG Point Estimate Calculation Methodologies - Pedestrian and Bicycle Strategies**

PEDESTRIAN AND BICYCLE STRATEGIES						
		Value				
Ref	Parameter	2025	2030	2040	2050	Source/Calculation
<b>Parameters Common Across Strategies</b>						

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A	grams CO2 per vehicle-mile (auto)	303	256	119	46	CDOT (2021) - high EV scenario
Prior drive mode share of new bikers/walkers						
B1	Owned bikes	60%				Transportation Investment Strategy Tool, Table A.4
B2	Shared bikes and scooters	40%				Buehler et al (2019), Mobility Lab (2019), NABSA (2020), Ramboll (2020), MacArthur et al (2018)
Average trip length (mi)						
C1	Bike	2.3				2009 National Household Travel Survey
C2	Walk	0.7				2009 National Household Travel Survey
C3	Shared bike	1.4				PBOT (2020) and NABSA (2020)
C4	Scooter	1.1				PBOT (2020) and NABSA (2020)
D	Annualization factor	365				
<b>Per New Facility-Mile:</b>		<b>New Users (Daily)</b>	<b>Displaced Auto Miles/yr</b>	<b>Source/ Calculation</b>		
	Bike lane/facility - urban	80	40,296	New users: Transportation Investment Strategy Tool documentation, Table A.4		
	Bike lane/facility – suburban	25	12,593	Displaced auto miles: New users * C1 * B1 * D		

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	Bike lane/facility – rural	5	2,519		
	Sidewalk/ pedestrian facility - urban	247	124,414		New users: Transportation Investment Strategy Tool documentation, Table 4.11
	Sidewalk/ pedestrian facility - suburban	13	6,548		Displaced auto miles: New users * C1 * B1 * D
	Sidewalk/ pedestrian facility – rural	2	1,007		
	Shared-use path - urban	174	87,845		New users: Transportation Investment Strategy Tool documentation, Table A.4
	Shared-use path – suburban	55	27,452		Displaced auto miles: New users * C1 * B1 * D
	Shared-use path – rural	11	5,490		
	“Complete Streets” reconstruction - urban	327	164,710		= Sum of value for bike lane + pedestrian improvements
	“Complete Streets” reconstruction – suburban	38	19,141		
	<b>Per New Shared Vehicle:</b>	<b>Trips per Day</b>	<b>Annual Person-Miles</b>	<b>Displaced Auto Miles</b>	<b>Source/ Calculation</b>
	Shared bike	2.6	1329	531	Trips per day: PBOT (2020) and NABSA (2020)
	Scooter	3.2	1285	514	Annual person-miles: Trips per day * [C3 or C4]* 365

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						Displaced auto miles: Annual person-miles * B2
<b>Change in tons CO2 per new facility-mile (annual):</b>	<b>2025</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>Source/ Calculation</b>	
Bike lane/facility - urban	-12.2	-10.3	-4.8	-1.8	=Displaced auto miles * A / 1000000	
Bike lane/facility – suburban	-3.8	-3.2	-1.5	-0.6		
Bike lane/facility – rural	-0.8	-0.6	-0.3	-0.1		
Sidewalk/ pedestrian facility - urban	-37.7	-31.8	-14.8	-5.7		
Sidewalk/ pedestrian facility - suburban	-2	-1.7	-0.8	-0.3		
Sidewalk/ pedestrian facility – rural	-0.3	-0.3	-0.1	0		
Shared-use path - urban	-26.6	-22.5	-10.4	-4		
Shared-use path – suburban	-8.3	-7	-3.3	-1.3		
Shared-use path – rural	-1.7	-1.4	-0.7	-0.3		
“Complete Streets” reconstruction - urban	-49.9	-42.1	-19.6	-7.5		



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	“Complete Streets” reconstruction – suburban	-5.8	-4.9	-2.3	-0.9	
	<b>Change in tons CO2 per 100 new shared vehicles (annual):</b>	<b>2025</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>Source/Calculation</b>
	Shared bike	-16.1	-13.6	-6.3	-2.4	= Displaced auto miles * A / 1000000
	Scooter	-15.6	-13.1	-6.1	-2.3	
	<b>Points per new facility-mile:</b>	<b>2025</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	
	Bike lane/facility - urban	12	10	5	2	Providing a minimum of 1 point, even if CO2 estimate rounds to 0 tons
	Bike lane/facility – suburban	4	3	1	1	
	Bike lane/facility – rural	1	1	1	1	
	Sidewalk/ pedestrian facility - urban	38	32	15	6	
	Sidewalk/ pedestrian facility - suburban	2	2	1	1	
	Sidewalk/ pedestrian facility – rural	1	1	1	1	

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Shared-use path - urban	27	22	10	4
Shared-use path – suburban	8	7	3	1
Shared-use path – rural	2	1	1	1
“Complete Streets” reconstruction - urban	50	42	20	8
“Complete Streets” reconstruction – suburban	6	5	2	1
<b>Points per 100 new shared vehicles:</b>	<b>2025</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
Shared bike	16	14	6	2
Scooter	16	13	6	2

**Table 3. GHG Point Estimate Calculation Methodologies - Transit Strategies**

TRANSIT STRATEGIES						
		Value				
Ref	Parameter	2025	2030	2040	2050	Metric; Source/Calculation
<b>Parameters Common Across Strategies</b>						

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Vehicle revenue-miles per revenue-hour						
A1	Fixed-route bus	13	13	13	13	NTD (2019), Colorado agencies
Passenger-miles per vehicle-mile						
B1	Fixed-route bus	11.5	11.5	11.5	11.5	NTD (2019), Colorado agencies - Rapid Bus (RB) service
grams CO2 per vehicle-mile						
C1	Fixed-route bus	1,555	399	-	-	CDOT (2021) - high bus electrification (100% electric by 2033)
C3	Auto	303	256	119	46	CDOT (2021) - high bus electrification
grams CO2 per vehicle-hour						
C4	Fixed-route bus	3,966	1,018	-	-	CS (2021), scaled by g/mi from CDOT (2021) for future years
D	Prior drive mode share of new riders	60%	60%	60%	60%	CS (2021)
Average trip length (mi)						
F1	Fixed-route bus	9.9	9.9	9.9	9.9	FHWA (2017), average trip length (all modes/purposes) * average transit work trip length / average all mode work trip length

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G	Annualization factor	300	300	300	300	
	<b>New/increased fixed-route bus service - urban/suburban</b>					<b>1,000 new vehicle revenue-hours</b>
	Tons CO2 per new VRH					
	Displaced auto	-27.2	-22.9	-10.7	-4.1	=A1 * B1 * C3 * D/1000
	New bus (fleet average)	20.2	5.2	-	-	=C1 * A1 * 1000/1000000
	New bus (electric)	-	-	-	-	
	Net (fleet average bus)	-7.0	-17.7	-10.7	-4.1	= new bus + displaced auto
	Net (electric bus)	-27.212.9	-2210.9	-10.75.1	-4.11.9	
	Points per new VRH (fleet average bus)	7	18	11	4	
	Points per new VRH (electric bus)	27	23	11	4	
	<b>Reduce transit fares</b>					<b>1 million base annual trips</b>
	Fare elasticity	-0.3	-0.3	-0.3	-0.3	TCRP Report 95, Chapter 12; CAPCOA (2021)
	Effects per million annual trip base @ 100% fare reduction (annual)					
	New trips	300,000	300,000	300,000	300,000	= 1000 * -(fare elasticity)

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Change in auto VMT	-1,191,094	-1,191,094	-1,191,094	-1,191,094	= new riders * F1 * D
Change in tons CO2	-361	-304.4	-141.4	-54.3	= change in auto VMT * C3 / 1000000
Points per million trips - free fares	361	304	141	54	
Points per million trips - 50% fare reduction	181	152	71	27	
Points per million trips - 25% fare reduction	90	76	35	14	
<b>Implement bus priority treatments</b>					<b>Affected 1,000 VRM per weekday</b>
Bus ridership travel time elasticity	-0.4	-0.4	-0.4	-0.4	TCRP Report 95, Chapter 12
Typical travel time change (%)	-10%	-10%	-10%	-10%	CAPCOA (2021)
Effects per 1,000 affected VRM (annual)					
New bus passenger-miles	98,400	98,400	98,400	98,400	= B1 * elasticity * travel time change * G * 1000
Change in auto VMT	-39,360	-39,360	-39,360	-39,360	= new passenger-mi * D
Change in auto emissions (t CO2)	-12	-10	-5	-2	= change in auto VMT * C3 / 1000000

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Change in bus idle emissions (t CO2)	-9	-2	-	-
Change in tons CO2	-21	-12	-5	-2
Points per 1,000 affected weekday VRM	21	12	5	2

**Table 4. GHG Point Estimate Calculation Methodologies - Parking Strategies**

PARKING STRATEGIES						
Ref	Parameter	Value				Metric; Source/Calculation
		2025	2030	2040	2050	
<b>Parameters Common Across Strategies</b>						
A	grams CO2 per vehicle-mile (auto)	303	256	119	46	CDOT (2021) - high EV scenario
B	Average trip length (mi) - all purposes	10.5				FHWA (2018)s, Table 6b
C	Annualization factor	300				
	Annual miles driven					
D1	Per vehicle	10,450				CDOT (2021)
D2	Per household	19,642				FHWA (2018)
D3	Per worker (commuting)	6,400				FHWA (2018) - 2017 NHTS work trip length * 2 * 250

Additional Fee on Parking		Per covered spaces per daily dollar fee			
Elasticity of driving w/r/t fuel price	-0.12				Small and van Dender (2007)
Price of gasoline (\$/gal)	\$3.11				AEO 2022 Reference case for 2021
Average mpg	23.8				AEO 2020 Reference Case, Table 7
\$1 parking fee equivalent cost per mile	\$0.10				\$1.00 / B
\$1 parking fee equivalent cost per gallon	\$2.27				= Cost per mile * miles per gallon
Leakage factor (destination change)	0%				Placeholder for people to shift trip destination rather than paying fee. No good research.
% VMT change for affected trips	-9%				= Fee cost per gallon / gas cost per gallon * elasticity
Trips per covered space per day	2				Assumes 1 round trip to a workplace or home. For short-term parking, fee is prorated.
Change in annual VMT per space per \$	-551	-551	-551	-551	
Change in annual tons CO2 per space per \$	-167	-140.8	-65.4	-25.1	= Change in VMT * 1000 * A / 1000000
Points per space per \$ daily fee	167	141	65	25	
<b>Unbundle Residential Parking</b>		<b>Per covered spaces @ \$100/mo</b>			

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Annual parking cost per space	\$1,200				= \$100 * 12
Annual vehicle cost	\$9,666				AAA (2021)
Elasticity of vehicle ownership with respect to total vehicle cost	-0.4				Litman (2021)
Adjustment factor from vehicle ownership to VMT	1.01				FHWA (2017), as cited in CAPCOA (2021)
Percent reduction in miles per vehicle	-5.00%				= (parking cost) / (vehicle cost) * elasticity * adjustment factor
Change in annual VMT per space per \$100/mo	-524	-524	-524	-524	= D1 * percent reduction
Change in annual tons CO2 per space per \$	-158.9	-133.9	-62.2	-23.9	= Change in VMT * 1000 * A / 1000000
Points per space per \$100 monthly cost	159	134	62	24	
<b>Eliminate minimum parking requirements and set maximum levels (residential)</b>					<b>Per dwelling unit (DU)</b>
% change in commute driving for workers with limited parking (<1 space/unit)	-37%				Chatman (2013), as cited in CAPCOA (2021)
% of vehicle-travel that is commute travel	29%				FHWA (2018), based on 2017 NHTS



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% change in vehicle-travel from limited parking	-11%					= % change in commute driving * % travel that is commute travel
Change in annual VMT per DU	-2,136	-2,136	-2,136	-2,136		= D2 * percent reduction
Change in annual tons CO2 per DU	-647.5	-546	-253.7	-97.3		= Change in VMT * 1000 * A / 1000000
Points per DU	648	546	254	97		

**Table 5. GHG Point Estimate Calculation Methodologies - Travel Demand Management Strategies**

TRAVEL DEMAND MANAGEMENT STRATEGIES							
Ref	Parameter	Value	2025	2030	2040	2050	Metric; Source/Calculation
<b>Parameters Common Across Strategies</b>							
grams CO2 per vehicle-mile							
A1	Auto	303	256	119	46	CDOT (2021) - high EV scenario	
A2	Vanpool	758	639	250	38	Base year assumed 10 mpg, future year efficiency/electrification adjustments proportional to auto	
Average work trip length (mi)							
B1	Auto	12.7	12.7	12.7	12.7	FHWA (2018), Table 26	
B2	Vanpool	25	25	25	25	TCRP Report 95, Chapter 5. Typical average length is close to 25 miles (p. 5-13, Table 5-5)	
C	Annualization factor	250	250	250	250	TCRP Report 95, Chapter 5, Table 5-6	

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Trip Reduction Program - Voluntary					Per Program \$1,000
Change in annual VMT per program \$	-100				MWCOG (2009), as analyzed by CS for Colorado DOT (2010) and updated 2022
Change in annual tons CO2 per \$1,000	-30.3	-25.6	-11.9	-4.6	= Change in VMT * 1000 * A1 / 1000000
Points per program \$1,000	30	26	12	5	
Trip Reduction Program - Marketing					Per Program \$1,000
Annual VMT reduced per program \$	7	7	7	7	MWCOG (2009), as analyzed by CS for Colorado DOT (2010) and updated 2022
Change in annual tons CO2 per \$	-2.1	-1.8	-0.8	-0.3	= Change in VMT * 1000 * A1 / 1000000
Points per program \$1,000	2	2	1	-	
Employer Sponsored Vanpool					Per New Vanpool
Average vanpool occupancy	5.8	5.8	5.8	5.8	CDOT (2019), total participants / total vans
Prior drive mode share of new vanpoolers	65%	65%	65%	65%	TCRP Report 95, Chapter 5, p. 5-34. Total prior auto drivers, counting in carpool drivers, are in the 45 to over 65% range

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Vanpool circuitry factor	1.2	1.2	1.2	1.2	Estimate
Annual VMT change per new vanpool					
Auto	-23,563	-23,563	-23,563	-23,563	= occupancy * prior drive mode share * B1 * C
Vanpool	7,500	7,500	7,500	7,500	= circuitry factor * B1 * C
Change in annual tons CO2 per new vanpool					
Auto	-7.1	-6.0	-2.8	-1.1	= Change in auto VMT * A1 / 1000000
Vanpool	5.7	4.8	1.9	0.3	= Change in vanpool VMT * A2 / 1000000
Net	-1.5	-1.2	-0.9	-0.8	= Sum of auto and vanpool change
Points per new vanpool	1	1	1	1	
<b>Carshare</b>					
				<b>Per # cars provided</b>	
Households served per car	15				Litman (2018) - typically 10-20 members per vehicle
Annual VMT reduction per HH served	3,000				Litman (2018) - carshare HHs are typically lower mileage HHs who reduce travel 50% (6,000 to 3,000 annual miles)
Change in annual CO2 per car (tons)	-14	-12	-5	-2	
Points per new carshare vehicle	14	12	5	2	

**Table 6. GHG Point Estimate Calculation Methodologies - Traffic Operation Strategies**

TRAFFIC OPERATION STRATEGIES						
		Value				
Ref	Parameter	2025	2030	2040	2050	Metric; Source/Calculation
<b>Parameters Common Across Strategies</b>						
	grams CO2 per vehicle-mile (auto)	313	256	119	46	CDOT (2021) - high EV scenario
	grams CO2 per vehicle-mile (heavy truck)	1,307	1,199	1,074	1,074	Based on AEO forecast mpg (no electrification)
	CO2 fraction from heavy vehicles (2019)	21%				National average based on AEO data
	kg CO2 per hour of delay (all traffic)	3.5	2.9	1.6	1	2019 based on TTI (2021), future years adjusted by relative efficiency improvement of autos and heavy trucks
<b>Retime/optimize arterial signals</b>						<b>Per 10,000 AADT per signal</b>
	Sample corridor length (mi)	1				Assumption
	Signals per mile	2				Assumption
	Baseline corridor travel speed (mph)	20				Assumption

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Corridor travel time reduction (%)	12%				USDOT (2010), p. 4-24: travel time reductions of 8-25% possible for preset signals, or 8-41% for actuated signals
New corridor travel speed (mph)	22.7				Calculation
Average daily arterial traffic volume at signal	10,000				Assumption
Change in travel time per vehicle (hours)	-0.006				Calculation
Daily total delay reduction (hours)	-60				Calculation
Annual change in tons CO2 per signal	-75.7	-63.3	-35.7	-21.8	Calculation
Points per signal per 10,000 AADT	76	63	36	22	
<b>Roundabout</b>					<b>Per roundabout</b>
Annual t CO2 reduced per roundabout	147	122	70	43	Based on San Diego County and NYT (2021) citing 20,000 gallons saved/year; reducing 22% to account for 2025 vs. 2012 fuel consumption rates
Points per roundabout	147	122	70	43	

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**Table 7. GHG Point Estimate Calculation Methodologies - Sources**

SOURCES	
Short Name	Citation
AAA (2021)	AAA (2021). Your Driving Costs.
AEO	U.S. Department of Energy, Annual Energy Outlook Reference Case, 2019 or 2022
Buehler (2012)	Buehler, R., and J. Pucher (2012). "Cycling to Work in 90 Large American Cities: New Evidence on the Role of Bike Paths and Lanes." <i>Transportation</i> 39:409–432.
CAPCOA (2021)	California Air Pollution Control Officers Association (2021). Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity.
CDOT (2019)	Colorado Department of Transportation (2019). Statewide Transportation Demand Management Plan. Phase 1 Report: Colorado Transportation Options. Prepared by Wilson & Company, Inc.
CDOT (2021)	Analysis conducted by Cambridge Systematics for Colorado DOT in support of GHG Rule Cost-Benefit Analysis (September 2021)
CS (2010)	Cambridge Systematics and Sprinkle Consulting (2010). Transportation Demand Management Project Evaluation and Funding Methods in the Denver Region. Prepared for Colorado DOT.
CS (2021)	Cambridge Systematics (2021). Transportation Investment Strategy Tool Documentation, 2021. Prepared for Georgetown Climate Center.
FHWA (2018)	McGuckin, N. and A. Fucci (2018). Summary of Travel Trends: 2017 National Household Travel Survey. U.S. Department of Transportation, Federal Highway Administration, FHWA-PL-18-019.

Subject	Number
<b>GHG Mitigation Measures Policy Directive</b>	XXX

ITF (2020)	International Transport Forum (ITF). (2020). "Good to Go? Assessing the Environmental Performance of New Mobility."
Litman (2018)	Litman, T. (2018). TDM Encyclopedia: Carsharing. Victoria Transport Policy Institute.
Litman (2021)	Litman, T. (2021). TDM Encyclopedia: Parking Requirement Impacts on Housing Affordability. Victoria Transport Policy Institute.
MacArthur (2018)	MacArthur, J., C. Cherry, M. Harpool and D. Scheppke. (2018). A North American Survey of Electric Bicycle Owners. NITC-RR-1041. Portland, OR: Transportation Research and Education Center (TREC). <a href="https://dx.doi.org/10.15760/trec.197">https://dx.doi.org/10.15760/trec.197</a>
Mobility Lab (2019)	Mobility Lab, Arlington County Commuter Services (ACCS). (2019). Arlington County Shared Mobility (SMD) Pilot Evaluation Report.
MWCOG (2009)	LDA Consulting et al for Metro Washington Council of Governments (2009). Transportation Emission Reduction Analysis Report, FY 2006–2008.
NABSA (2020)	North American Bikeshare Association (NABSA). (2020). 1st Annual Micromobility State of the Industry Report. <a href="https://doi.org/10.7922/G2057D6B">https://doi.org/10.7922/G2057D6B</a>
NACTO (2018)	National Association of City Transportation Officials (NACTO). (2018). Shared Micromobility in the U.S.: 2018.
NTD (2019)	2019 National Transit Database (data analysis by Cambridge Systematics)
NYT (2021)	Buckley, Cara, "These Americans Are Just Going Around in Circles", New York Times, Nov. 20, 2021.
PBOT (2020)	Portland Bureau of Transportation (2020). E-Scooter Findings Report. <a href="https://www.portlandoregon.gov/transportation/article/709719">https://www.portlandoregon.gov/transportation/article/709719</a>
Ramboll (2020)	Ramboll. (2020). Achieving Sustainable Micro-mobility. < <a href="https://ramboll.com/-/media/files/rgr/documents/markets/transport/m/ramboll_micro-mobility_greenpaper_a4_0320_lowres_v.pdf?la=en">https://ramboll.com/-/media/files/rgr/documents/markets/transport/m/ramboll_micro-mobility_greenpaper_a4_0320_lowres_v.pdf?la=en</a> >

Subject <b>GHG Mitigation Measures Policy Directive</b>	Number XXX
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San Diego County (no date)	San Diego County. "Modern Roundabouts: Reduce Congestion and Improve Safety on Main Roads"
Small and van Dender (2007)	Small, K. and K. Van Dender (2007). Fuel Efficiency and Motor Vehicle Travel: The Declining Rebound Effect. The Energy Journal, 28:1.
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TCRP Report 95 Chapter 5	Evans, J.E., and R. H. Pratt, et al (2005). TCRP Report 95, Traveler Response to Transportation System Changes. Chapter 5: Vanpools and Buspools. Transportation Research Board, Washington, D.C.
TTI (2021)	Texas A&M Transportation Institute (2021). Urban Mobility Report. As analyzed in Cambridge Systematics (2021).
U.S. EPA (2016)	U.S. Environmental Protection Agency (EPA) (2016). Population and Activity of On-road Vehicles in MOVES2014. EPA-420-R-16-003.
USDOT (2010)	U.S. Department of Transportation (2010). Transportation's Role in Reducing U.S. Greenhouse Gas Emissions.
WSCTRB (2017)	Washington State Commute Trip Reduction Board (2017). 2017 Report to the Legislature.





**COLORADO**  
Transportation Commission

2829 W. Howard Place  
Denver, CO 80204

**DATE:** April 13, 2022  
**TO:** Transportation Commission  
**FROM:** San Lee, PE - State Traffic Engineer  
 Manjari Bhat, PE - Statewide Safety Champion  
 David Swenka, PE, PTOE - Safety Programs, Data, and Analysis Unit Manager  
**SUBJECT:** Strategic Transportation Safety Plan (STSP) and Highway Safety Improvement Program (HSIP) Update

**Purpose and Action**

To provide the Transportation Commission updates on current progress in implementing the Strategic Transportation Safety Plan (STSP) and recent changes to the statewide Highway Safety Improvement Program (HSIP) funding allocation due to the Infrastructure Investment and Jobs Act (IIJA).

**Details**

**STSP Updates and Achievements:**

According to most recently available data from NHTSA (2020), Colorado is currently ranked 27<sup>th</sup> for Traffic Deaths per 100 Million Vehicle Miles Traveled. There are several notable trends in safety performance data for 2019, 2020, and 2021. Please note that 2021 data is updated as of March 16<sup>th</sup>, 2022 and is subject to change.

	2019		2020		2021*		Change (2019 to 2021)	
Travel Volume (100 MVMT) <sup>1</sup>	546		486		540		▼	-1%
Total Crashes	121,600		87,000		92,300		▼	-24%
<b>Total Fatalities</b>	<b>597</b>		<b>622</b>		<b>693</b>		▲	16%
<b>Fatality Rate</b>	<b>1.09</b>		<b>1.28</b>		<b>1.28</b>		▲	17%
<b>Total Serious Injuries</b>	<b>3,197</b>		<b>2,841</b>		<b>3,363</b>		▲	5%
<b>Serious Injury Rate</b>	<b>5.85</b>		<b>5.85</b>		<b>6.23</b>		▲	6%
	<b># of Fatalities</b>	<b>% of Total Fat.</b>	<b># of Fatalities</b>	<b>% of Total Fat.</b>	<b># of Fatalities</b>	<b>% of Total Fat.</b>		
Urban	353	59%	388	62%	385	56%	▲	9%
Rural	244	41%	234	38%	308	44%	▲	26%
Off-System	255	43%	248	40%	257	37%	▲	1%
On-System	342	57%	374	60%	436	63%	▲	27%
Pedestrian	76	13%	93	15%	94	14%	▲	24%
Bicycle	20	3%	15	2%	15	2%	▼	-25%
Motorcycle/Scooters	103	17%	140	23%	136	20%	▲	32%
Suspected Impaired <sup>2</sup>	176	29%	212	34%	254	37%	▲	44%

1. Million Vehicle Miles of Travel
2. Alcohol/Drugs



The STSP is a collaborative effort between four lead agencies: the Colorado Department of Revenue (DOR), the Colorado Department of Public Health and Environment (CDPHE), the Colorado Department of Transportation (CDOT), and Colorado State Patrol (CSP). In April of 2020, DOR, CDPHE, CDOT, and CSP approved the current Strategic Transportation Safety Plan to supersede the 2013 Strategic Highway Safety Plan (SHSP). The plan identifies key safety needs in Colorado to guide investment decisions towards tiered strategies and countermeasures to reduce fatalities and serious injuries on all public roads. Each state is required by FHWA to submit a highway safety plan that meets the conditions outlined under the Highway Safety Improvement Program (23 U.S.C. § 148).

The vision of the STSP is: The future of Colorado is zero deaths and serious injuries so all people using any transportation mode arrive at their destination safely. Furthermore, the mission of this plan is: Colorado agencies and partners will cooperatively implement strategies that eliminate transportation system fatalities and serious injuries.

The plan identifies strategies aimed at reducing fatalities and serious injuries and establishes a performance target for the 2020 to 2023 period: a 15% reduction in fatalities and serious injuries for both on-system and off-system crashes by June 30<sup>th</sup>, 2023.

Four key emphasis areas are identified in the STSP to promote critical thinking and achieve performance targets. These emphasis areas are as follows:

- **High-Risk Behaviors:** This area targets behaviors such as aggressive driving, distracted driving, and impaired driving.
- **Vulnerable Roadway Users:** This area, which encompasses all occupant protection efforts, targets both motorized and non-motorized vulnerable roadway users, including: motorcyclists, bicyclists, pedestrians, older drivers, younger drivers, work zone staff, and first responders.
- **Severe Crash Mitigation:** This area targets safety-driven infrastructure and engineering improvements in rural and urban areas, the reduction of crashes at identified high-risk locations including intersections, and various severe crash types such as roadway departures.
- **Programmatic:** This area targets safety and crash data, safety program coordination and cooperation, emergency medical services and law enforcement, and legislation.

Based on the emphasis areas, stakeholders identified 15 Tier I (highest priority) strategies that focus on proven countermeasures and targeted deployment, utilize current technologies, and identify roles and responsibilities for implementation. Several of the Tier I strategies require significant long-term collaboration between internal CDOT partners (the CDOT Highway Safety Office and CDOT Traffic Safety and Engineering Services Branch), as well as other state agencies and key safety stakeholders across the state.



CDOT staff under the Statewide Safety Champion have made significant progress in implementing several Tier I strategies in the STSP, with key accomplishments as follows:

- Strategy A:

The Statewide Safety Champion in CDOT Traffic Safety and Engineering Services assembled a team of experts to lead a proactive safety program and the implementation of the STSP.

- Strategy D:

The Statewide Safety Champion manages the following activities:

CDOT Executive Management approved an SBAR for the creation of one consolidated Quarterly Safety Executive Oversight Committee that combines the executive team members from CDPHE, CDOT, CSP, and DOR.

Additionally, the Safety Circuit Rider Program, which targets off-system facilities, is currently growing with the aim of coordinating and educating locals on how to utilize HSIP funding to implement safety improvements on their facilities.

The Statewide Access Management Program continues to serve an essential role in reinforcing and upholding the access permit process for local agencies, developers, and private landowners; this program educates locals on how to implement safety improvements related to access, which is of utmost importance given that 30% of crashes both on-system and off-system are access-related.

The CCA/ATSSA/CDOT Working Group is currently collaborating to promote best practices for work zone safety, workforce development for work zones, and technological interventions for Smart Work Zones in Colorado.

- Strategy L:

The Statewide Safety Champion is overseeing regular coordination around the acquisition and maintenance of crash data for safety analyses. Additionally, the CDOT Traffic Safety and Engineering Services Branch has successfully produced an updated STSP webpage on the external CDOT website, as well as an interactive Crash Data Dashboard to provide high-level crash data and data analytics for all key stakeholders.

Additionally, significant progress is occurring in the implementation of Tier I Strategies M and N in the STSP. The following deliverables are currently in development:

- Safety Executive Oversight Committee: The Statewide Safety Champion is overseeing the development and coordination of a Quarterly Safety Executive Oversight Committee that includes key decision-makers for transportation safety from the STSP lead agencies. This is an essential step in the creation of a Safety Coalition that will include STSP lead and supporting agencies. This Safety Coalition will promote consistent safety messaging statewide and produce significant collaboration that will allow for effective implementation of the remaining strategies in the STSP. The first meeting of this committee will occur on May 24<sup>th</sup>, 2022.



- Colorado Traffic Safety Summit: The CDOT Highway Safety Office is holding this summit in July of 2022. The Statewide Safety Champion and CDOT Traffic Safety & Engineering Services Branch will support this effort, highlighting education and behavior-based strategies from the STSP.
- Webinar Development: The Statewide Safety Champion is overseeing the development of several targeted webinars for the topics of STSP, Crash Data Resources, and HSIP Funding.
- Guardrail Safety Design Project: CDOT Traffic Safety and Engineering Services is emphasizing safety and operational updates to guardrail end treatments statewide. Projects are currently in advertisement in Region 4.
- Self-Guided Online Meetings: The Statewide Safety Champion is managing the creation of an online portal that houses all webinar materials and allows key safety stakeholders to revisit education materials relating to the STSP, crash data, and how to apply for and utilize HSIP funding.
- Real Time Pattern Recognition/Level of Service of Safety (LOSS) for Off-System Facilities: CDOT Traffic Safety and Engineering Services is currently researching how to effectively provide this information to locals who want to determine what is happening on their facilities.

#### **HSIP and the IIJA Updates:**

Current statewide HSIP funding allocation is approximately \$33 million annually. HSIP apportionment is estimated to increase by about 30% through the IIJA, resulting in extra funding up to \$8 Million annually. CDOT staff propose that \$25 million of these HSIP funds be set aside over four years for 10-year project plan support.

However, funded projects from the 10-year plan must meet HSIP eligibility. These projects will be evaluated to incorporate the following data-driven safety analysis metrics:

- Level of Service of Safety (LOSS) analysis,
- Whether the project addresses identified crash pattern or risk factor,
- And Benefit Cost Analysis (BCA), which may be used for prioritization or ranking, but a project is not required to meet a minimum benefit cost ratio (BCR).

#### **Attachments**

Strategic Transportation Safety Plan (STSP) Update for Transportation Commission: April 2022

Strategic Transportation Safety Plan (Full Document): <https://www.codot.gov/safety/traffic-safety/assets/stsp/strategictransportationsafetyplan.pdf>





**COLORADO**  
Department of Public  
Health & Environment



**COLORADO**  
Department of Revenue

# Strategic Transportation Safety Plan (STSP)

Update for Transportation Commission: April 2022  
San Lee, PE & Manjari Bhat, PE



# Agenda

01

**Where Colorado is Today**

02

**About STSP**

03

**STSP Updates & Achievements**

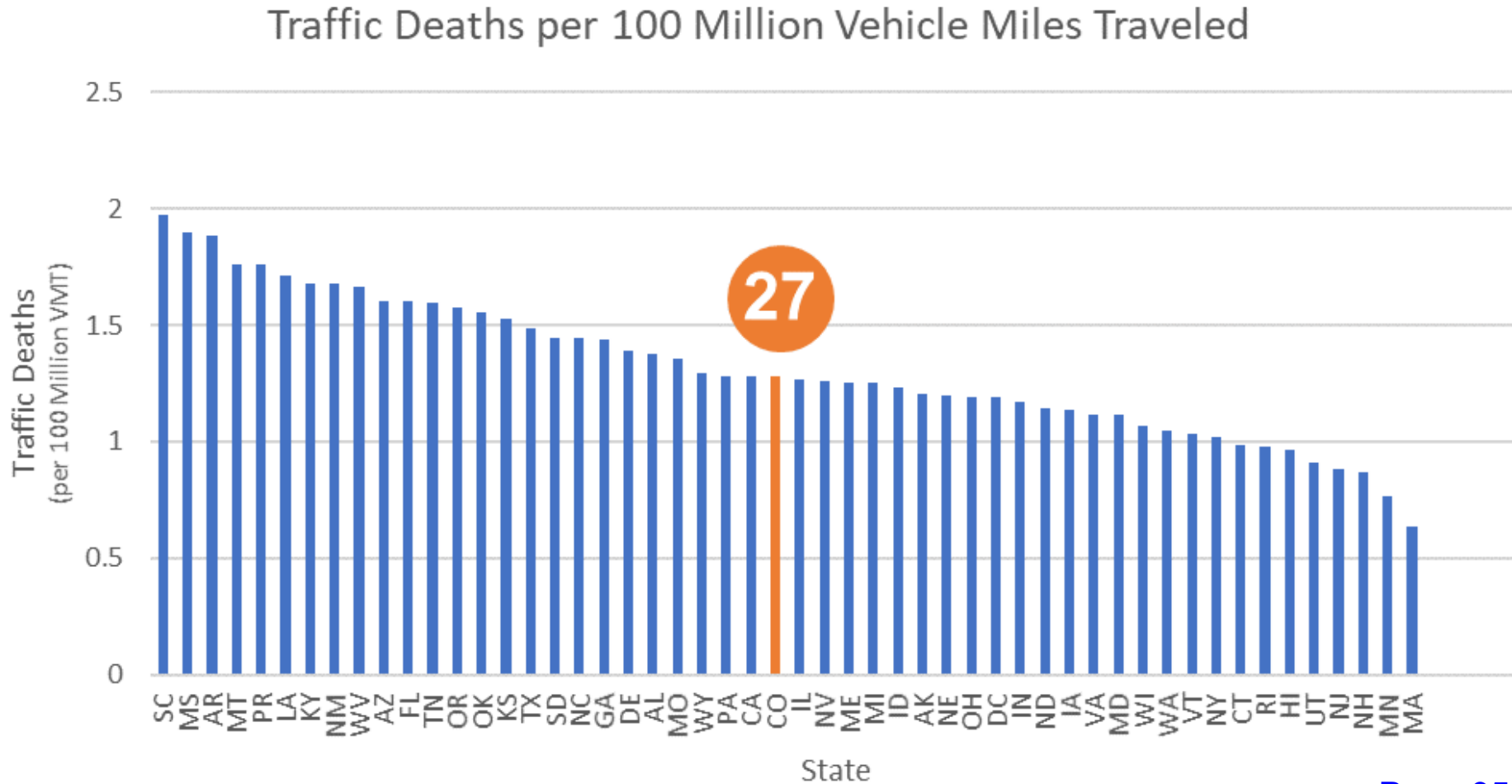
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**STSP Next Steps**

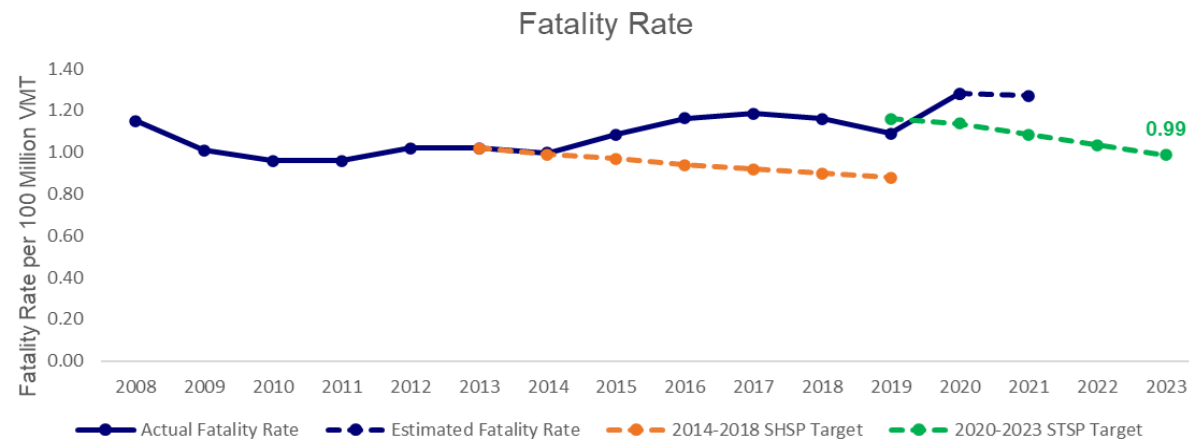
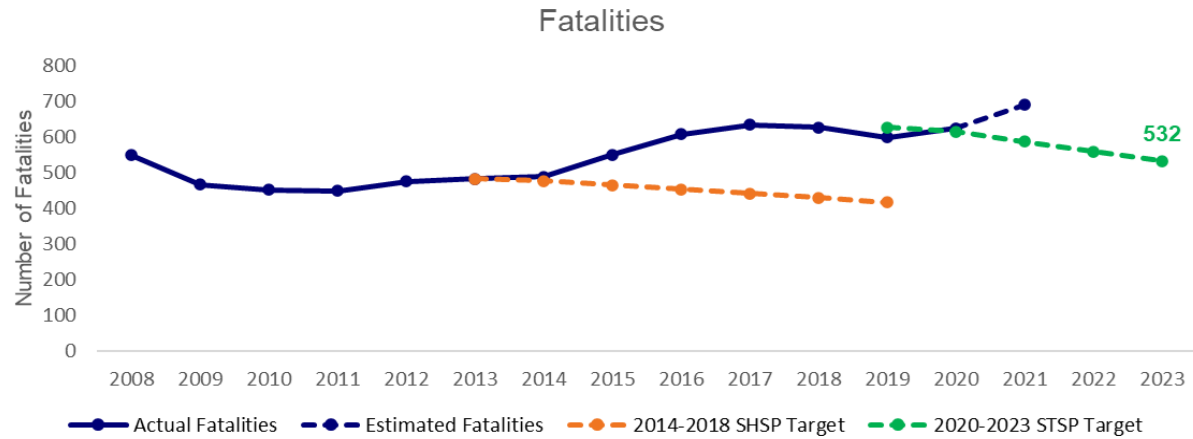
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**Highway Safety Improvement Program (HSIP)  
& the IIJA**

## Colorado's Current National Rank

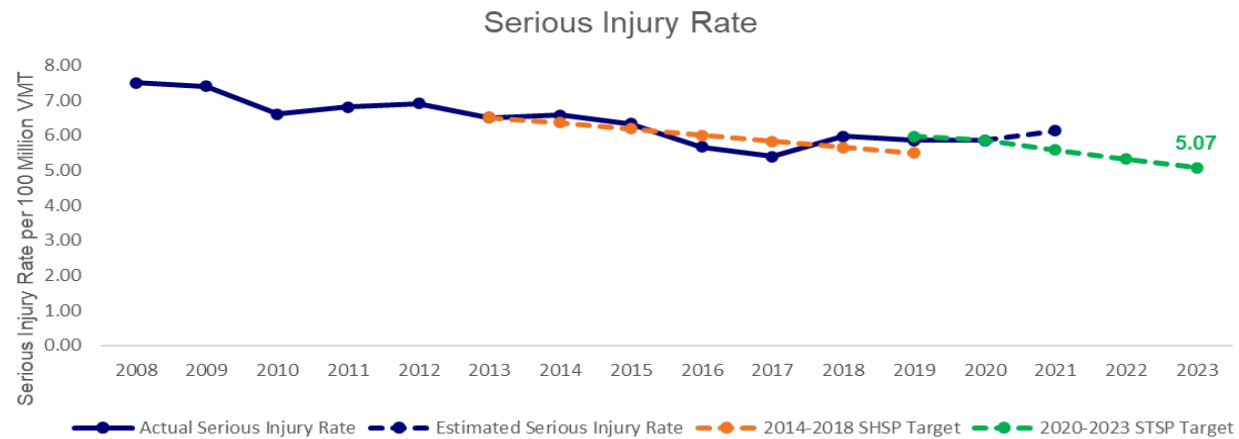
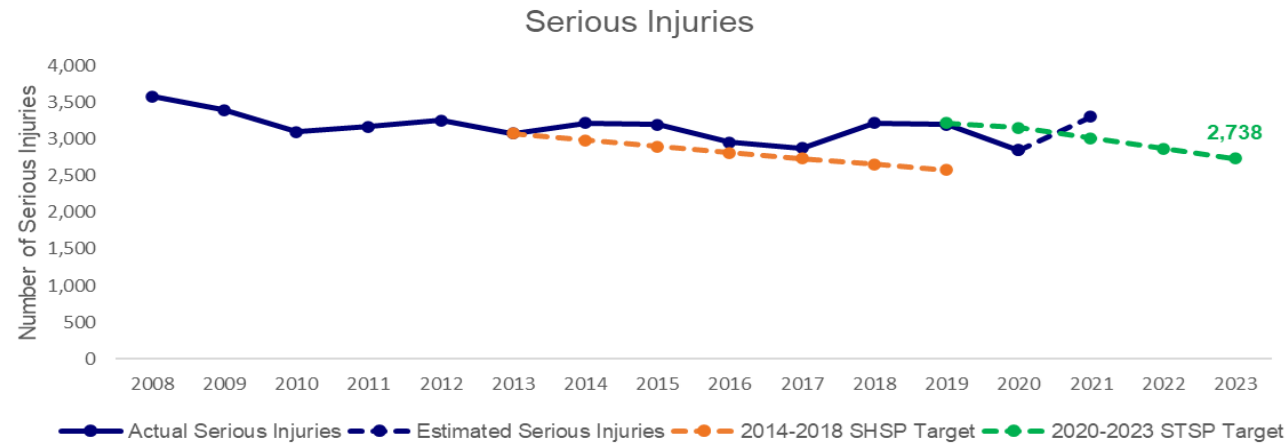


## Colorado Fatality Trends





## Colorado Serious Injury Trends



# Where Colorado is Today

	2019		2020		2021*		Change (2019 to 2021)	
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Total Crashes	121,600		87,000		92,300		▼	-24%
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<b>Rural</b>	<b>244</b>	<b>41%</b>	<b>234</b>	<b>38%</b>	<b>308</b>	<b>44%</b>	▲	<b>26%</b>
Off-System	255	43%	248	40%	257	37%	▲	1%
<b>On-System</b>	<b>342</b>	<b>57%</b>	<b>374</b>	<b>60%</b>	<b>436</b>	<b>63%</b>	▲	<b>27%</b>
<b>Pedestrian</b>	<b>76</b>	<b>13%</b>	<b>93</b>	<b>15%</b>	<b>94</b>	<b>14%</b>	▲	<b>24%</b>
Bicycle	20	3%	15	2%	15	2%	▼	-25%
<b>Motorcycle/Scooters</b>	<b>103</b>	<b>17%</b>	<b>140</b>	<b>23%</b>	<b>136</b>	<b>20%</b>	▲	<b>32%</b>
<b>Suspected Impaired <sup>2</sup></b>	<b>176</b>	<b>29%</b>	<b>212</b>	<b>34%</b>	<b>254</b>	<b>37%</b>	▲	<b>44%</b>

1. Million Vehicle Miles of Travel    2. Alcohol/Drugs

\*2021 Data as of March 16, 2022. Subject to change.

## What is the STSP?

Each state is required by FHWA to submit a highway safety plan that meets the conditions outlined under the Highway Safety Improvement Program (HSIP) (23 U.S.C. § 148).

**April 2020:** DOR, CDPHE, CDOT, and CSP approved the STSP to supersede the 2013 Strategic Highway Safety Plan (SHSP). The plan **identifies key safety needs** in Colorado to **guide investment decisions** towards tiered strategies and countermeasures to reduce fatalities and serious injuries on all public roads.

## Lead Agencies



Colorado  
Department of  
Revenue



Colorado  
Department of  
Public Health &  
Environment



Colorado  
Department of  
Transportation



Colorado State  
Patrol

## VISION

The future of Colorado is zero deaths and serious injuries so all people using any transportation mode arrive at their destination safely.

## IDENTIFY STRATEGIES

STSP identifies strategies that will help Colorado become a national leader in safety.

## MISSION

Colorado agencies and partners will cooperatively implement strategies that eliminate transportation system fatalities and serious injuries.

## SET PERFORMANCE TARGETS

STSP sets performance targets for fatal and serious injury off-system and on-system crashes that supports the movement Towards Zero Deaths.

**TARGET**  
**2020 - 2023**

**15 % REDUCTION IN FATALITIES AND  
SERIOUS INJURIES**

## Where is the STSP program headed?

- Four key emphasis areas identified to promote critical thinking and achieve performance targets.

### High-Risk Behaviors

- ✓ Aggressive Driving
- ✓ Distracted Driving
- ✓ Impaired Driving

### Vulnerable Roadway Users

- ✓ Motorcyclists
- ✓ Bicyclists and Pedestrians
- ✓ Older Drivers
- ✓ Young Drivers
- ✓ Work Zones
- ✓ First Responders



### Severe Crash Mitigation


- ✓ Infrastructure (Rural and Urban)
- ✓ Crash Reduction Locations
- ✓ Intersections
- ✓ Roadway Departures


### Programmatic

- ✓ Data
- ✓ Safety Program Coordination and Cooperation
- ✓ Emergency Medical Services & Law Enforcement
- ✓ Legislation

## Tier 1 Strategies

- A. Name a safety champion to lead a proactive safety program.
- B. Build a safety advocacy coalition.
- C. Institutionalize safety roles and responsibilities.
- D. Coordinate with existing safety programs.
- E. Promote consistent safety messaging.
- F. Develop education campaigns for high-risk behaviors.
- G. Provide Transportation safety education to student and families.
- H. Prioritize transportation safety funding.
- I. Prioritize safety in transportation planning, facility design, and project selection.
- J. Educate decision-makers on the effectiveness of occupant protection laws.
- K. Increase requirements for new and renewal driver licensing.
- L. Establish framework for streamlining data management.
- M. Prioritize and promote proven safety toolbox strategies.
- N. Implement systemic infrastructure safety improvement strategies.
- O. Increase education on and implementation of data-driven and automated enforcement.

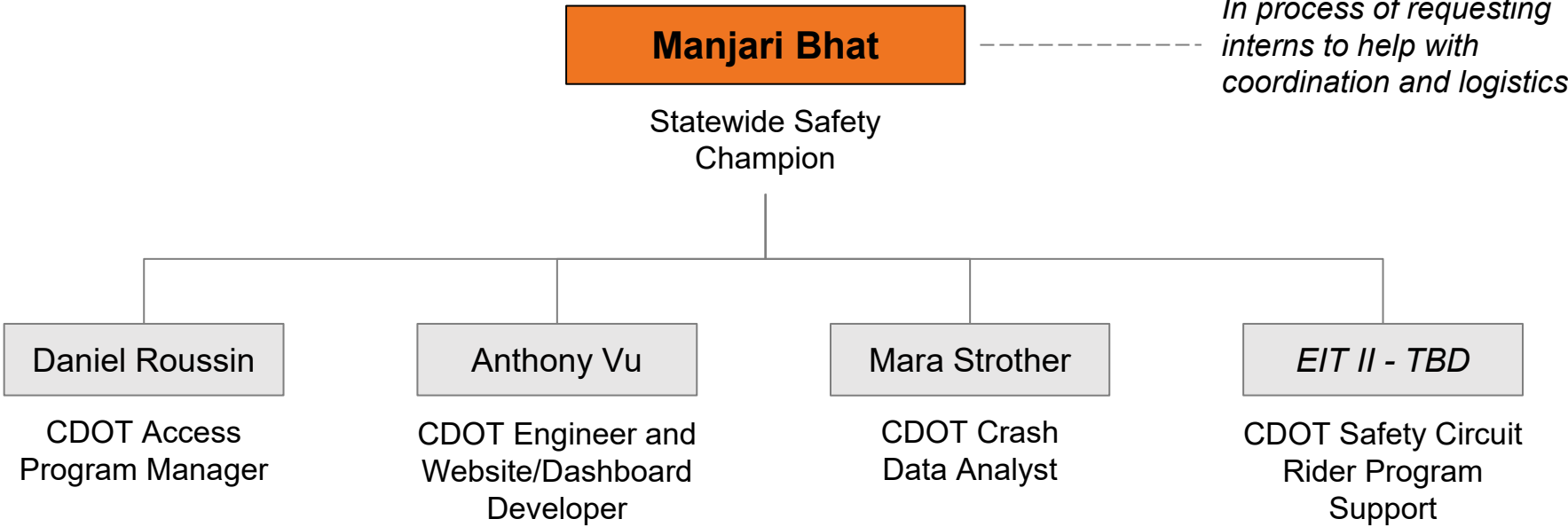
 Strategies that CDOT Traffic Safety & Engineering Services is directly responsible for implementing.

 Strategies that require collaboration with the CDOT Highway Safety Office and other state agencies.

### Tier 1 Strategies

- A. Name a safety champion to lead a proactive safety program.**
- D. Coordinate with existing safety programs.
- L. Establish framework for streamlining data management.
- M. Prioritize and promote proven safety toolbox strategies.
- N. Implement Systemic Infrastructure safety improvement strategies.

Assemble a team of experts.



## Tier 1 Strategies

- A. Name a safety champion to lead a proactive safety program.
- D. Coordinate with existing safety programs.**
- L. Establish framework for streamlining data management.
- M. Prioritize and promote proven safety toolbox strategies.
- N. Implement Systemic Infrastructure safety improvement strategies.

- Future Quarterly Safety Executive Oversight Committee
  - Approval of SBAR
    - Utilize STRAC to promote STSP and discuss major initiatives.
    - Build safety coalition to include STSP lead and supporting agencies.
- Safety Circuit Rider (off-system facilities) (~257 related fatalities in 2021)
  - Coordinate and educate locals for implementation of safety improvements.
  - Utilize HSIP funding for safety improvements.
- Access Program (~27,690 related crashes in 2021)
  - 30% of crashes on on-system & off-system facilities are access-related.
  - Coordinate and educate locals for implementation of safety improvements.
  - Reinforce the access permit process for local agencies/developers.
- Work Zone Safety Coordination with CCA/ATSSA/CDOT Working Group (7 fatalities)
  - Workforce Development (Flaggers, TCS, and Training)
  - Best Practices (Education & Formalizing into Specs and Standards)
  - Technology (Smart Work Zones)



### Tier 1 Strategies

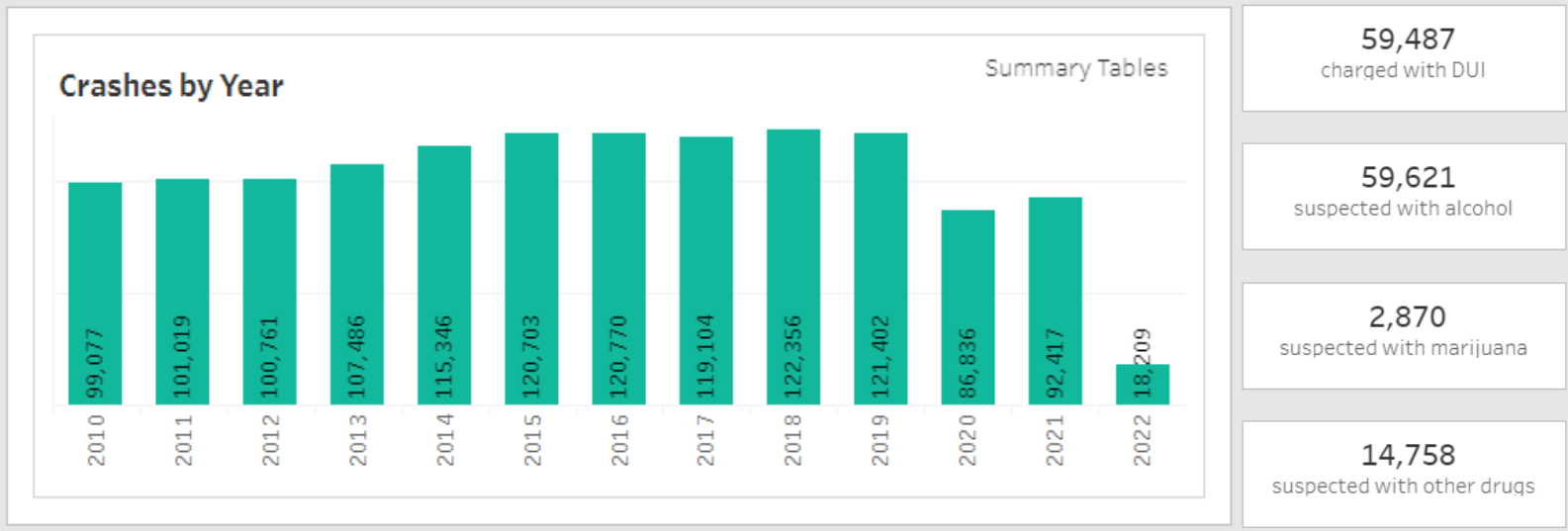
- A. Name a safety champion to lead a proactive safety program.
- D. Coordinate with existing safety programs.
- L. Establish framework for streamlining data management.**
- M. Prioritize and promote proven safety toolbox strategies.
- N. Implement Systemic Infrastructure safety improvement strategies.

### Safety Analysis and Data


- Coordinate on a regular basis to acquire the most up-to-date data.

### Website and Crash Data Dashboard Development - <https://www.codot.gov/safety/stsp>

- Developed an external facing website for STSP information and updates.
- Published Crash Data Dashboard to provide high-level crash data and data analytics for Statewide Summary, Performance Tracking, Occupant Protection, and Non-Motorist Protection.
- First time we have had this tool available for local agencies.



## Crash Data Dashboard Demonstration



### Colorado Crash Data Dashboard

Disclaimer: Colorado traffic crashes as presented in this dashboard are approximate and subject to change. The official number of traffic fatalities in Colorado can be found on the National Highway Traffic Safety Administration's Fatal Analysis Reporting System (FARS) website.

**Statewide Summary**

**Performance Tracking**

**Occupants**

**Non-Motorists**

**Date Range**  
1/1/2010 4/3/2022

**TPR**  
(All)

**County**  
(All)

**City**  
(All)

**CDOT Region**  
(All)

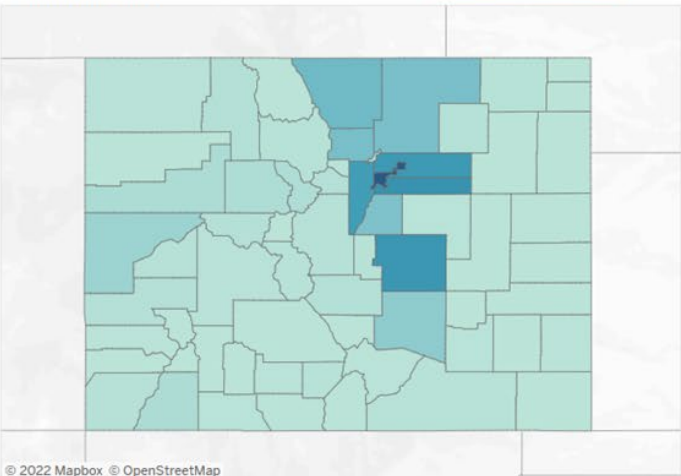
**Injury Level**  
(All)

**Weather**  
(All)

Questions and Feedback

#### County Heat Map


12 ▬ 235,328



© 2022 Mapbox © OpenStreetMap

#### Crashes by Year

Summary Tables



Year	Crashes
2010	99,077
2011	101,019
2012	100,761
2013	107,486
2014	115,346
2015	120,703
2016	120,770
2017	119,104
2018	122,356
2019	121,402
2020	86,829
2021	92,426
2022	18,379

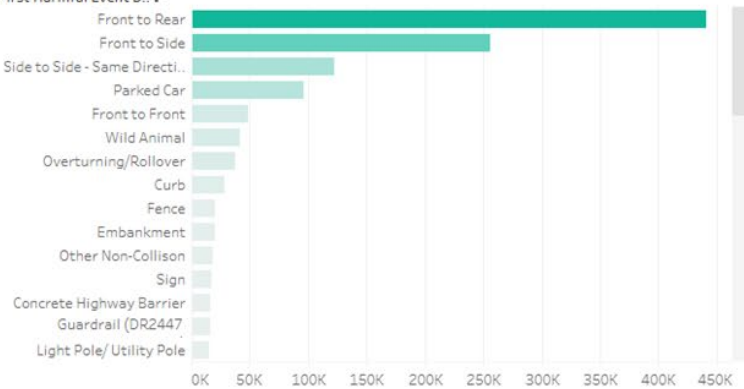
#### Week at a Glance

Weekday of... 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Sunday																								
Monday																								
Tuesday																								
Wednesday																								
Thursday																								
Friday																								
Saturday																								

#### First Harmful Event

First Harmful Event D. F



Event Type	Approx. No. of Crashes
Front to Rear	430K
Front to Side	260K
Side to Side - Same Directi..	130K
Parked Car	100K
Front to Front	60K
Wild Animal	50K
Overturning/Rollover	40K
Curb	30K
Fence	20K
Embankment	15K
Other Non-Collision	10K
Sign	5K
Concrete Highway Barrier	5K
Guardrail (DR2447)	5K
Light Pole/ Utility Pole	5K

## Tier 1 Strategies

- A. Name a safety champion to lead a proactive safety program.
- D. Coordinate with existing safety programs.
- L. Establish framework for streamlining data management.

**M. Prioritize and promote proven safety toolbox strategies.**

**N. Implement Systemic Infrastructure safety improvement strategies.**

Deliverable	Details	Metric	Schedule
<b>Safety Executive Oversight Committee</b>	SBAR that was approved by Executive Director Lew to create one consolidated quarterly meeting that combines the executive team members from CDPHE, CSP, CDOT, and DOR.	<ul style="list-style-type: none"> <li>❖ Formation of Committee</li> <li>❖ No. of Stakeholders</li> <li>❖ No. of Meetings</li> </ul>	First meeting on May 24, 2022 at 10am. Meetings quarterly thereon.
<b>Colorado Traffic Safety Summit</b>	Behavior-based summit with an overlay of STSP behavior-based implementation strategies.	<ul style="list-style-type: none"> <li>❖ No. of Attendees</li> </ul>	Planned for July 18th to July 20th, 2022 in Loveland, CO.
<b>Webinars</b>	<p>Create targeted webinars for the topics of STSP, Crash Data Resources, and HSIP Funding.</p> <p>Future topics also include: Access Management 101 and the Safety Circuit Rider Program.</p>	<ul style="list-style-type: none"> <li>❖ No. of Attendees</li> <li>❖ No. of Webinars delivered</li> <li>❖ No. of Jurisdictions represented</li> <li>❖ No. of Hits on STSP website</li> </ul>	<p><i>STSP 101</i> (March 7 &amp; 31, 2022)</p> <p><i>Crash Data Resources</i> (April 11 &amp; 25, 2022)</p> <p><i>HSIP Funding &amp; CMFs</i> (May 5 &amp; 19, 2022)</p>

## Tier 1 Strategies

- A. Name a safety champion to lead a proactive safety program.
- D. Coordinate with existing safety programs.
- L. Establish framework for streamlining data management.

**M. Prioritize and promote proven safety toolbox strategies.**

**N. Implement Systemic Infrastructure safety improvement strategies.**

Deliverable	Details	Metric	Schedule
<b>Guardrail Safety Design</b>	Design and solicit bids.	<ul style="list-style-type: none"> <li>❖ No. Designed</li> <li>❖ No. Replaced</li> </ul>	Projects currently going to AD in Region 4.
<b>Self-Guided Online Meeting</b>	<p>Develop an online portal that houses all webinar materials.</p> <p>Allows participants to revisit educational materials.</p>	<ul style="list-style-type: none"> <li>❖ No. of Participants</li> <li>❖ No. of Survey responses</li> <li>❖ Time spent on the online meeting site</li> <li>❖ Percentage of the curriculum completed</li> </ul>	Roll out content following the webinar schedule (March-May, 2022).
<b>Real Time Pattern Recognition/Level of Service of Safety (LOSS) for Off-System Facilities</b>	Provide high-level information for locals to determine what is happening on their facilities.	<ul style="list-style-type: none"> <li>❖ No. of Hits on the related dashboard page</li> <li>❖ No. of Related HSIP Applications</li> </ul>	Make available on the Crash Data Dashboard by June 30, 2022.

Current statewide HSIP funding allocation is approximately \$33 Million annually. HSIP apportionment estimated to increase by about 30% through the IIJA, resulting in extra funding up to \$8 Million annually.

**Proposal:** Set aside \$25M over four years for 10-year project plan support.

**Criteria:** Funded projects from the 10-year plan must meet HSIP eligibility. Evaluation to incorporate the following data-driven safety analysis metrics:

- Level of Service of Safety (LOSS) analysis
- Project addresses identified crash pattern or risk factor
- Benefit Cost Analysis (BCA) can be used for prioritization or ranking, but project is not required to meet a minimum benefit cost ratio (BCR)



**DATE:** April 21, 2022  
**TO:** Transportation Commission  
**FROM:** Rebecca White, Director, Division of Transportation Development  
Marissa Gaughan, Multimodal Planning Branch Manager  
**SUBJECT:** Advancing Year 4 Rural Paving Projects of the 10-Year Plan

**Purpose**

This memo outlines a request to approve the advancement of one rural paving project from Year 4 of the 10-Year Plan in CDOT Engineering Region 4.

**Action**

Staff is requesting approval to advance one rural paving project from Year 4 of the 10-Year Plan that was previously approved by the Transportation Commission in Resolution #TC-19-11-7.

**Background**

In November 2019, the Transportation Commission approved a list of transportation projects from the 10-Year Plan for fiscal years 2020-2022. Many projects from that list have since been advanced for funding for the first three years, with only a set of Year 4 projects now remaining. Staff is requesting approval of one rural paving project in Year 4 be advanced now, because if not approved now, we would lose the ability to advertise it in time for the construction season. This project is in addition to three other Year 4 rural paving projects in Regions 3 and 5 that were approved in December 2021 to be advanced for the same reason.

Rural paving projects are an important investment in addressing our rural pavement goals. The following is the Region 4 rural pavement project being requested to advance:

- US 385 North of Cheyenne Wells near Smoky Hill River to County Road GG from MP 157 to MP 170: This project is requesting to advance \$14.8 M from Year 4 of the 10-Year Plan to fully fund the project so it can go to advertisement.

In proposing this project move forward, staff is cognizant of both the larger planning update process as well as the rulemaking on greenhouse gas emissions. Because several additional months are needed for the plan update, it is not possible to hold this project for that process without losing the summer of 2022 construction season. Further, as rural paving projects are outside metropolitan areas, they fall outside the scope of the GHG rule in that rural paving would not be considered regionally significant nor would it be anticipated to have any long-term impact on GHG emissions.

As additional background, below is the entire Year 4 10-Year Plan project list which identifies the rural paving project being requested to advance. (The three rural paving projects staff TC approved to advance in December 2021 are noted with an asterisk):

CDOT REGION	PROJECT TYPE	PROJECT	YEAR 4 PROPOSED DOLLARS
1	Capital	I-270: Widening from I-76 to I-70	\$170,000,000
1	Transit	Castle Rock Mobility Hub	\$13,470,000

1	Transit	Denver Heavy Maintenance Facility	\$4,500,000
1	Transit	Bustang Fleet Purchases	\$1,200,000
1	Transit	Floyd Hill (I-70 Bustang Pegasus Park-n-Rides)	\$18,000,000
2	Capital	I-25 Through Pueblo New Freeway	\$45,500,000
2	Transit	Fairplay Mobility Hub	\$3,500,000
2	Transit	Colorado Springs Transit Center	\$2,000,000
2	Transit	Woodmen Road Mobility Hub	\$5,400,000
2	Transit	Monument Park-n-Ride (design)	\$400,000
3	Capital	US 50 Passing Lanes Blue Mesa	\$6,000,000
3	Capital	Intersection Improvements at SH 50/550	\$3,250,000
3	Rural Paving	SH 92 Hotchkiss to Crawford*	\$3,500,000
3	Rural Paving	SH 318 Browns Park East	\$9,500,000
3	Rural Paving	SH 14 Grizzly Ranch North*	\$7,000,000
3	Rural Paving	SH 125 Walden North	\$1,000,000
3	Capital	US 6 Fruita to Palisade Safety Improvements	\$6,000,000
3	Transit	Grand Junction Mobility Hub	\$3,500,000
4	Capital	SH 119 Safety / Mobility Improvements & SH 119 BRT Elements	\$32,800,000
4	Rural Paving	SH 52 Resurfacing Prospect Valley (Phase 2)	\$5,100,000
4	Rural Paving	US 385 North of Cheyenne Wells near Smoky Hill River	\$14,800,000
4	Transit	Bustang and Outrider Fleet Purchases	\$625,000
4	Capital	SH 119 Safety / Mobility Improvements & SH 119 BRT Elements	\$32,800,000
5	Capital	US 50/285 Intersection Reconstruction (Round-a-bout)	\$3,900,000
5	Rural Paving	US 50 North of 285 Resurfacing	\$3,500,000
5	Rural Paving	SH 370 Resurfacing*	\$1,500,000
5	Rural Paving	SH 114 Resurfacing and Shoulders	\$12,000,000
5	Capital	US 550 Pacochupuk South Roadway Mobility and Safety Improvements	\$1,850,000

\*Rural paving projects approved by the TC to advance in December 2021.

**Next Steps**

Staff is seeking the approval of this important rural paving project in Region 4.

**Attachment**

Approving Resolution

MEMORANDUM

**TO:** Transportation Commission  
**CC:** Shoshana Lew, CDOT Executive Director Herman Stockinger, Deputy Executive Director; John Lorme, Division of Maintenance & Operations Director  
**FROM:** Bob Fifer, Deputy Director of Operations  
**DATE:** April 2022  
**SUBJECT:** CDOT's ITS Fiber Program

---

Purpose

To provide background information on CDOT's ITS Fiber Program, how and why we use fiber, and the relationship between fiber and broadband.

Action

No action at this time, this memo is Informational only.

Background

For over 25 years, CDOT has been installing fiber optics to improve highway operations, situational awareness, and safety. CDOT fiber cabling is installed along more than 1,600 miles of state maintained highways for improving system reliability and user safety. As vehicle volumes rapidly increase, it is important that CDOT leverage fiber optic technology to monitor, detect, and respond to on highway emergencies (incidents, natural disasters and weather events). The earlier incidents are detected, responded to, and mitigated, the lesser the effects on network dependability, reduced economic/environmental impacts, and can potentially reduce injuries and save lives.

In 1997, the Colorado Assembly passed Colorado Revised Statutes ("C.R.S") Section 43-1201(1-5); which enable CDOT to enter into public private partnership (P3s) for access to CDOT's rights of way for the installation of telecommunication fiber optic cabling. This Statute has enabled CDOT to receive over 700 miles of fiber at zero taxpayer dollars, valued at over \$80M of assets.

Since the beginning of the COVID-19 pandemic, there has been unprecedented demand on broadband. This ongoing demand for broadband (also known as the high-speed internet) have affected both private and public sector who are struggling to meet this growing demand.

*Per Pew Research: "90% of Americans say the internet has been essential or important to them, many made video calls and 40% used technology in new ways. But while tech was a lifeline for some, others faced struggles".*

Since CDOT is the state's primary infrastructure builder, many look to CDOT to expand our fiber backbone into communities that are lacking high-speed internet. Where our traditional highways were once the most important means to transport good and services, fiber has become the **digital highway** (infrastructure). Both public and private industry are looking to the DOTs to help solve access to fiber infrastructure, connecting communities as they traditionally once looked to DOTs to connect communities.

In this informational presentation, we will explain the difference between the fiber infrastructure and broadband, how CDOT uses, maintains, and operates its fiber network, leverages P3s and lease excess fiber programs.





**Next Steps**

None at this time.

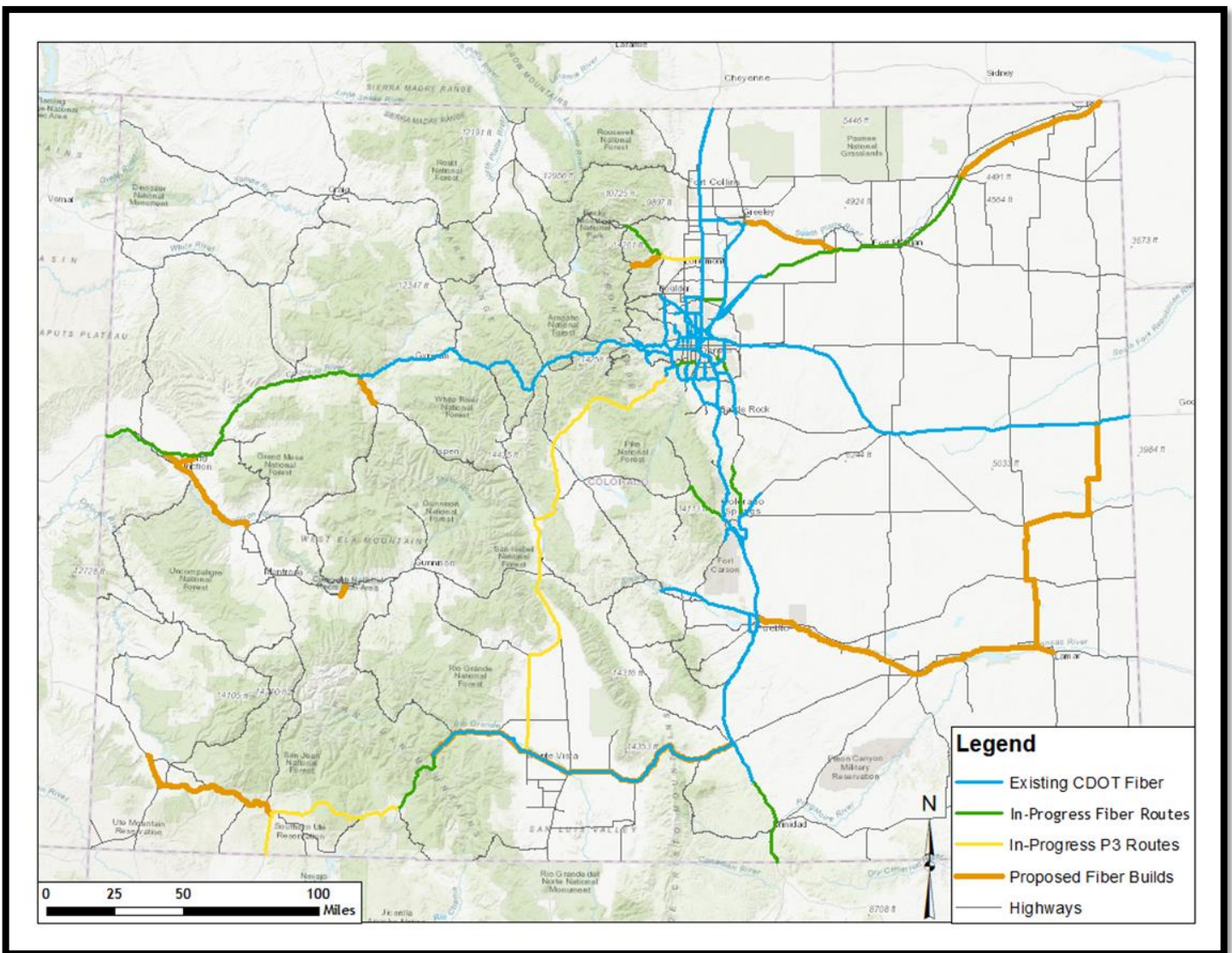
**Point of Contact**

Bob Fifer, Deputy Director of Operations

Bob.fifer@state.co.us

720.323.0674

CDOT's Current Fiber Map (2021)





# FIBER AND BROADBAND BRIEF



# COLORADO

## Department of Transportation

Division of Maintenance and Operations



# WHAT IS FIBER

- Fiber optic cables are created from thin strands of glass known as optical fibers, and when we say thin, we mean thin.
- Fiber optic cables use light, rather than electricity for communications.
- The light travels through the cable at incredible speeds without leaking. The cable's structure keeps the light inside the conduit.
- Don't let it's size fool you, though!





# HOW IS FIBER INSTALLED



- ① Directional Drill machine
- ② Rotating and pressing pipes
- ③ Pilot drill begins ground penetration
- ④ Technician with locator receiver box
- ⑤ Pilot head drilling and pressing for direction
- ⑥ Enlargement and pull-back with Reamer
- ⑦ Swivel attached to Reamer and Pipe
- ⑧ Utility Pipe being Pulled Back





## Broadband

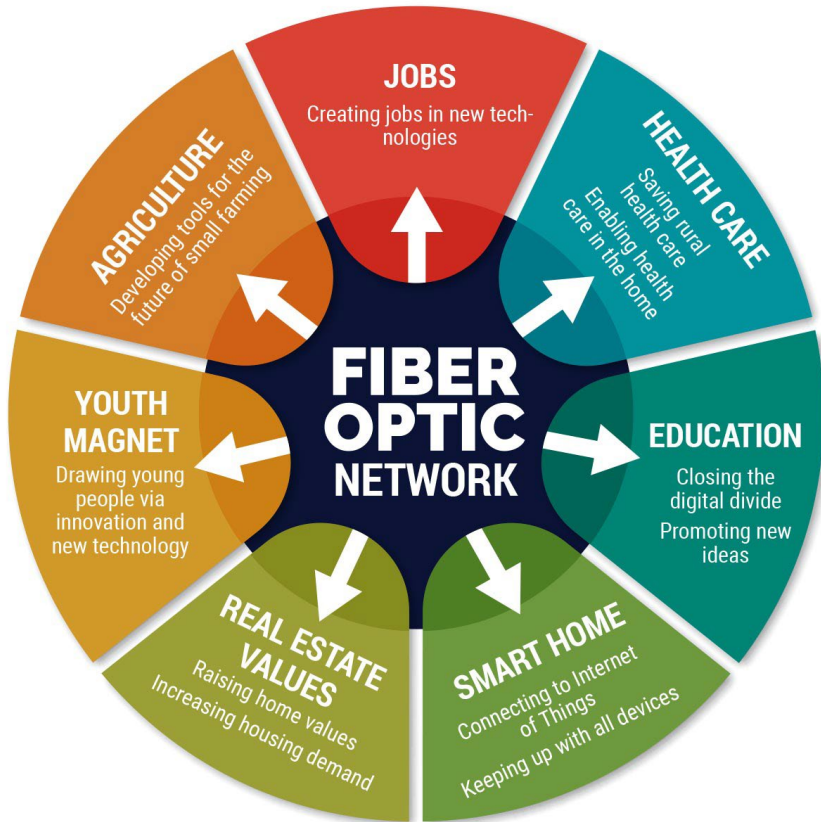
Broadband is a type of internet service that provides high-speed internet to its service. The broadband is capable of wide bandwidth type transmission that transports multiple signals.

*The medium used by the broadband is optical fiber, coaxial cable, twisted pair ("copper") and radio. The broadband provided over fiber is comparatively faster than mediums used to deliver broadband, and the connection is reliable.*





# WHY IS BROADBAND THE BUZZ?



	Dial-up Internet Connection 50 kbps	Minimum Broadband Connection 25 Mbps	Fast DSL Connection 100 Mbps	Gigabit Fiber Connection 1,000 Mbps
<i>War and Peace</i> <sup>2</sup> (3 MB)	8.0 min.	1.0 sec.	0.24 sec.	0.02 sec.
The Beach Boys <i>Pet Sounds</i> <sup>3</sup> (1.2 GB)	2.2 days	6.4 min.	96.0 sec.	9.6 sec.
<i>Lord of the Rings</i> Trilogy – Special Edition <sup>4</sup> (61 GB)	113.0 days	5.4 hrs.	81.3 min.	8.1 min
<i>Grand Theft Auto V</i> (70 GB)	130.0 days	6.2 hrs.	93.3 min.	9.3 min
Library of Congress' Digital Collections <sup>5</sup> (74 TB)	375.4 yrs.	274.0 days	68.5 days	6.9 days

2009 @ 1Tbps = 8.97 min

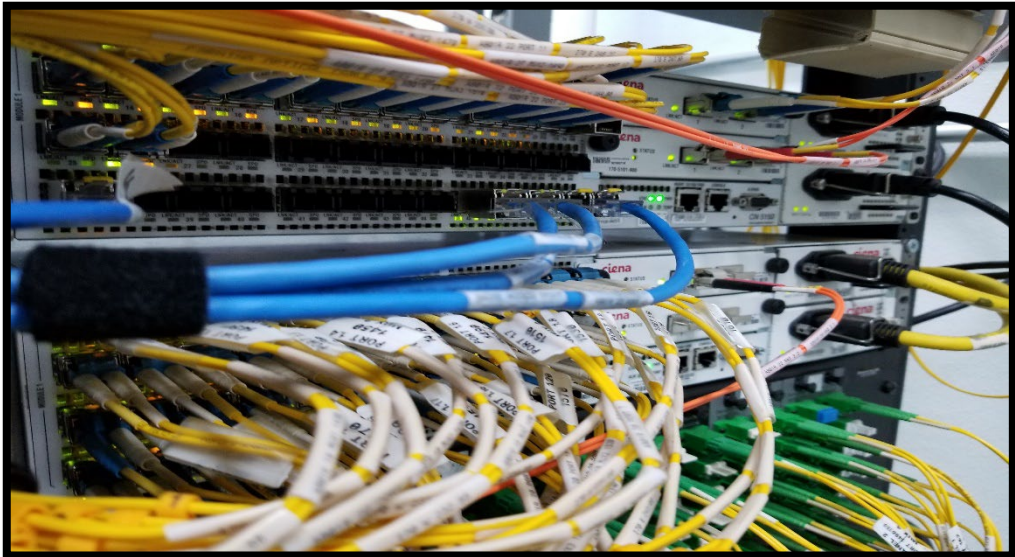
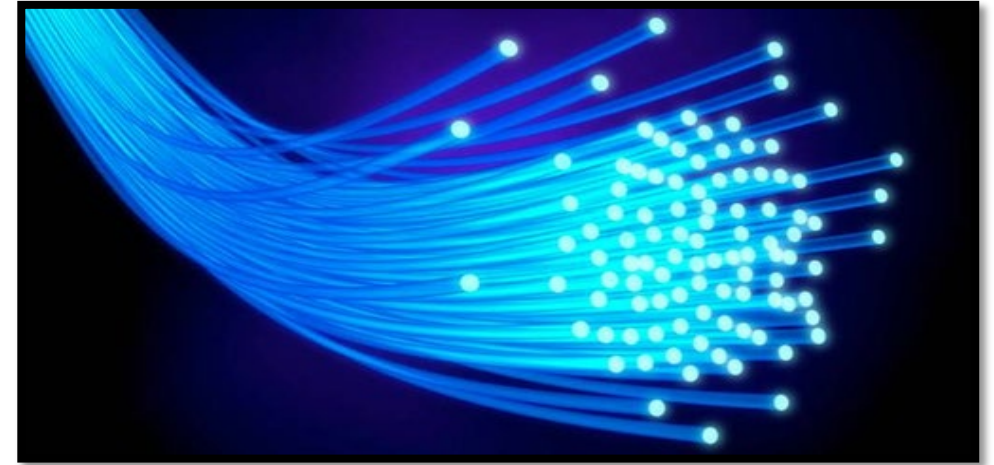
2014 @ 43Tbps = 12.52 sec.

**TODAY @ 10.16Pbps = 0.5299 sec.**



# DARK FIBER AND BROADBAND PROVIDERS

- Today, the term “dark fiber” is used to discuss the ever-growing, popular procedure of leasing out fiber optic cables to a network or service provider.
- It is also fiber infrastructure that isn't owned by network or service providers.



- Broadband Service Provider, (aka Internet) telephone company, cable company or other carrier that offers high-speed communications to homes and businesses, typically for Internet access
- Because fiber is reliable and have the capabilities for high speeds and larger capacity; Providers either have lease or build fiber; or as a last resort, lease a circuit, to provide internet services to a community.



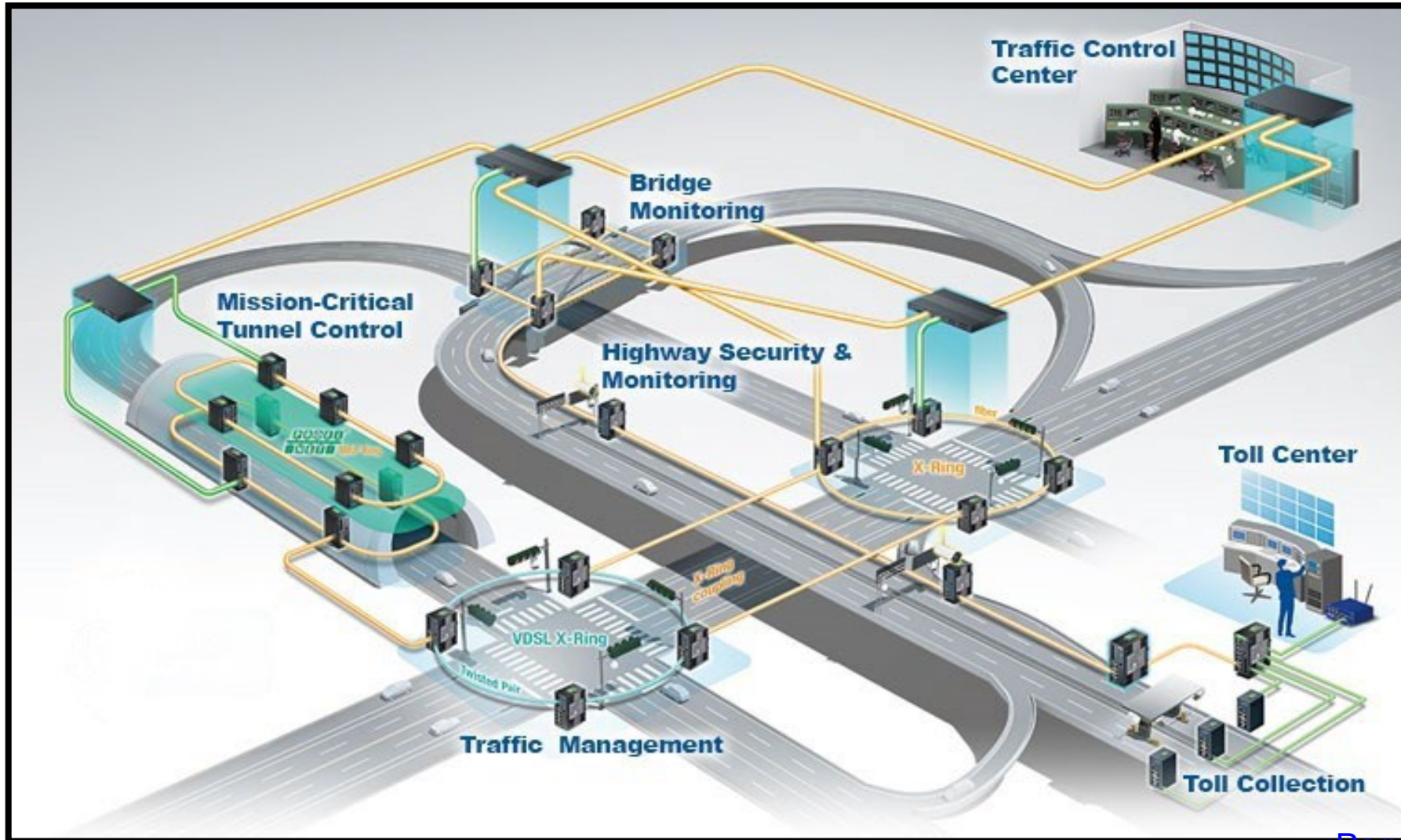
# WHY DOES CDOT OWN FIBER

- The CDOT uses fiber optic infrastructure to provide a fast, reliable and adaptable means for communications with highway technology and data transmission.
- Fiber optics cabling is part of CDOT's intelligent transportation systems (ITS) and is key to our Smart Mobility Plan. It is the foundation for traffic monitoring, real-time communication to traveling public, and emerging vehicle communication technologies.
- CDOT's Fiber provides communications between multiple CDOT Maintenance Facilities and CDOT's Intelligent Transportation Center located in Golden Colorado.
- CDOT already has fiber optic conduit along most major Interstates and US Highways.
- CDOT ever expanding fiber optic backbone means connectivity along major corridors, in turn makes our highways safer and smarter while offering the potential for partners to help make Colorado a better place to live and do business.



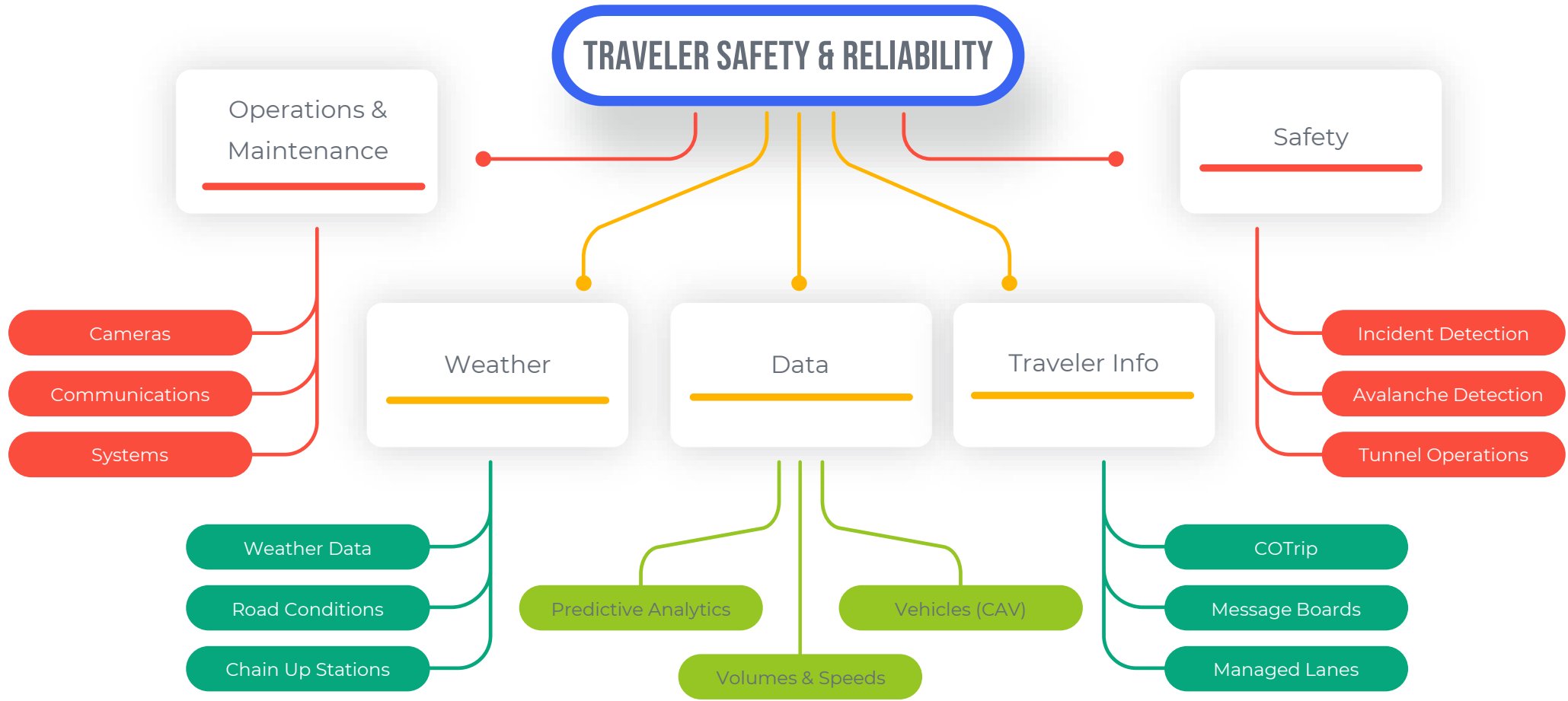


# HOW FIBER FITS IN TO CDOT



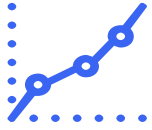


# HOW FIBER FITS IN TO CDOT





# FIBER DASHBOARD



Expansion Rate\*

**~700 miles**  
(~40%)



Fiber Valuation\*\*

**~\$296M+**



Current Fiber Miles

**~1,600**  
~135k fiber strand miles



Fiber Structures

**~8,000**



Annual Emergencies  
& Damages Requests

**2,356**



Annual  
Locate Requests

**54,005**



P3 Agreements

**77**



Current FTEs

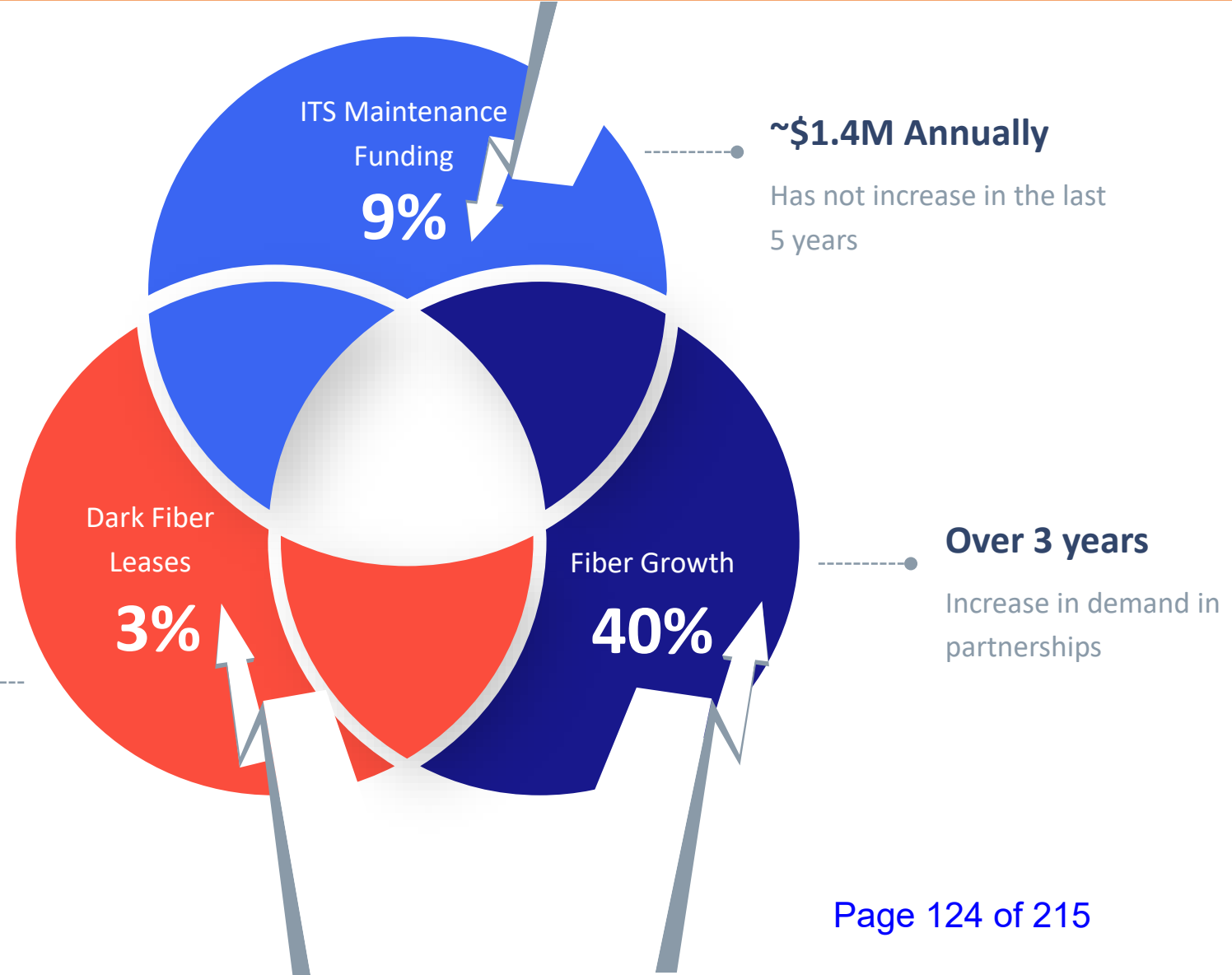
**2 Maintenance FTEs  
3 Contracting &  
Administration FTEs**



\*Expansion Rate: Within 3 years added 700 miles of fiber (85,200 strand miles) through public private partnerships with zero State dollars.  
\*\*Fiber Valuation: 1,600 mile x \$35 per foot to rebuild or if leased 135,000 fiber strand miles x \$2,650 = ~\$358M



# FIBER DASHBOARD



## Fiber Lease Fees

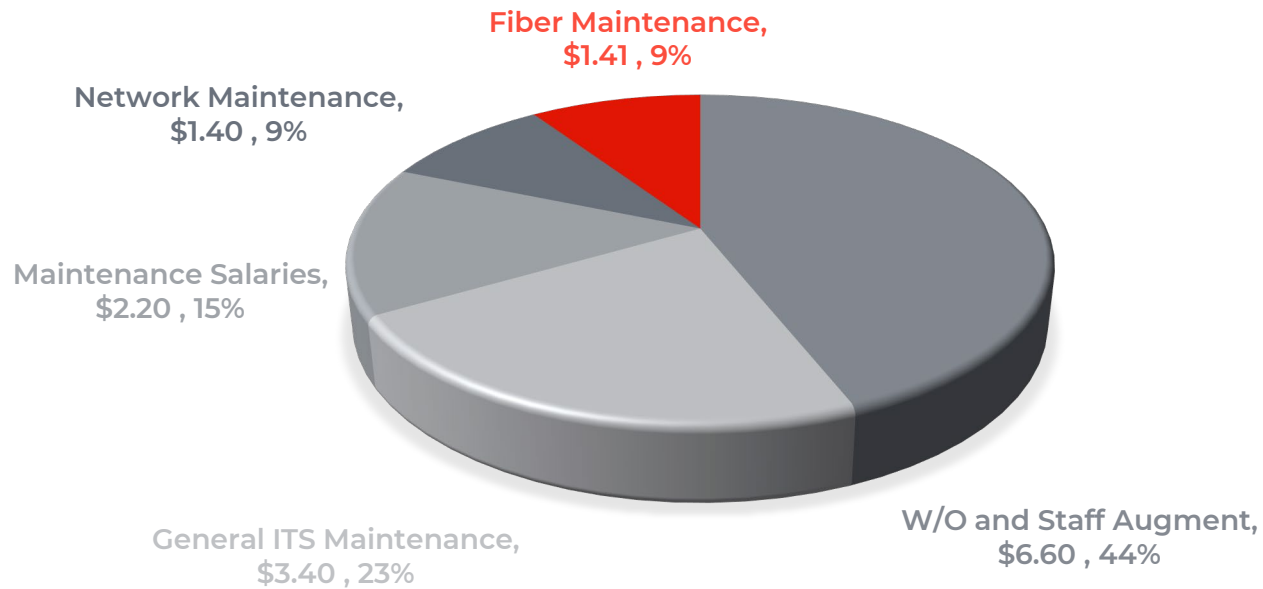
Sharp increase in demand in the last 12 months; forecast 80% increase annually



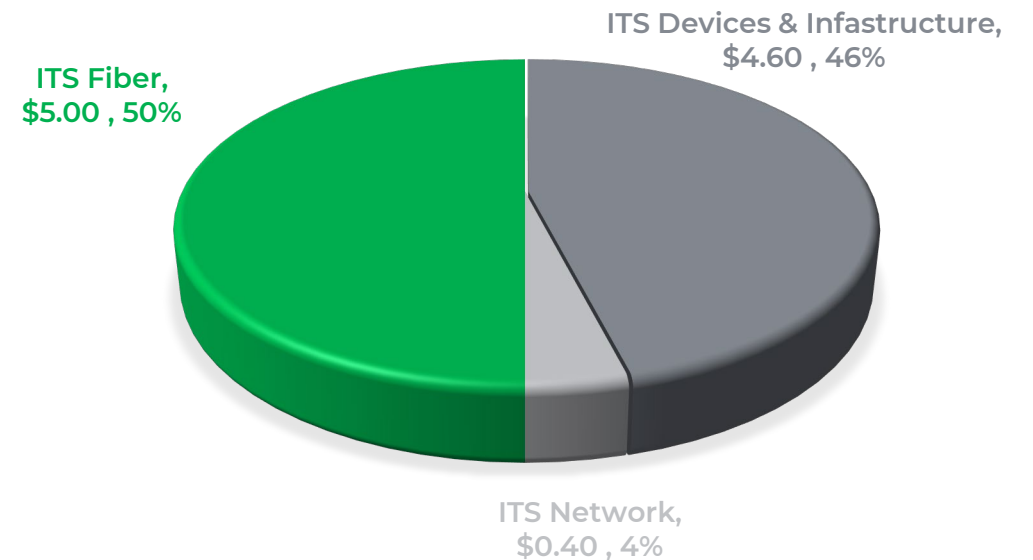
# FIBER FUNDING

With limited funding available, it is impossible to fully fund CDOT's overall asset management needs. Fluctuations in asset categories, like ITS, make it difficult to maintain and repair in a timely manner.

### ITS ASSET MANAGEMENT BUDGET AVERAGE



### ITS CAPITAL BUDGET AVERAGE



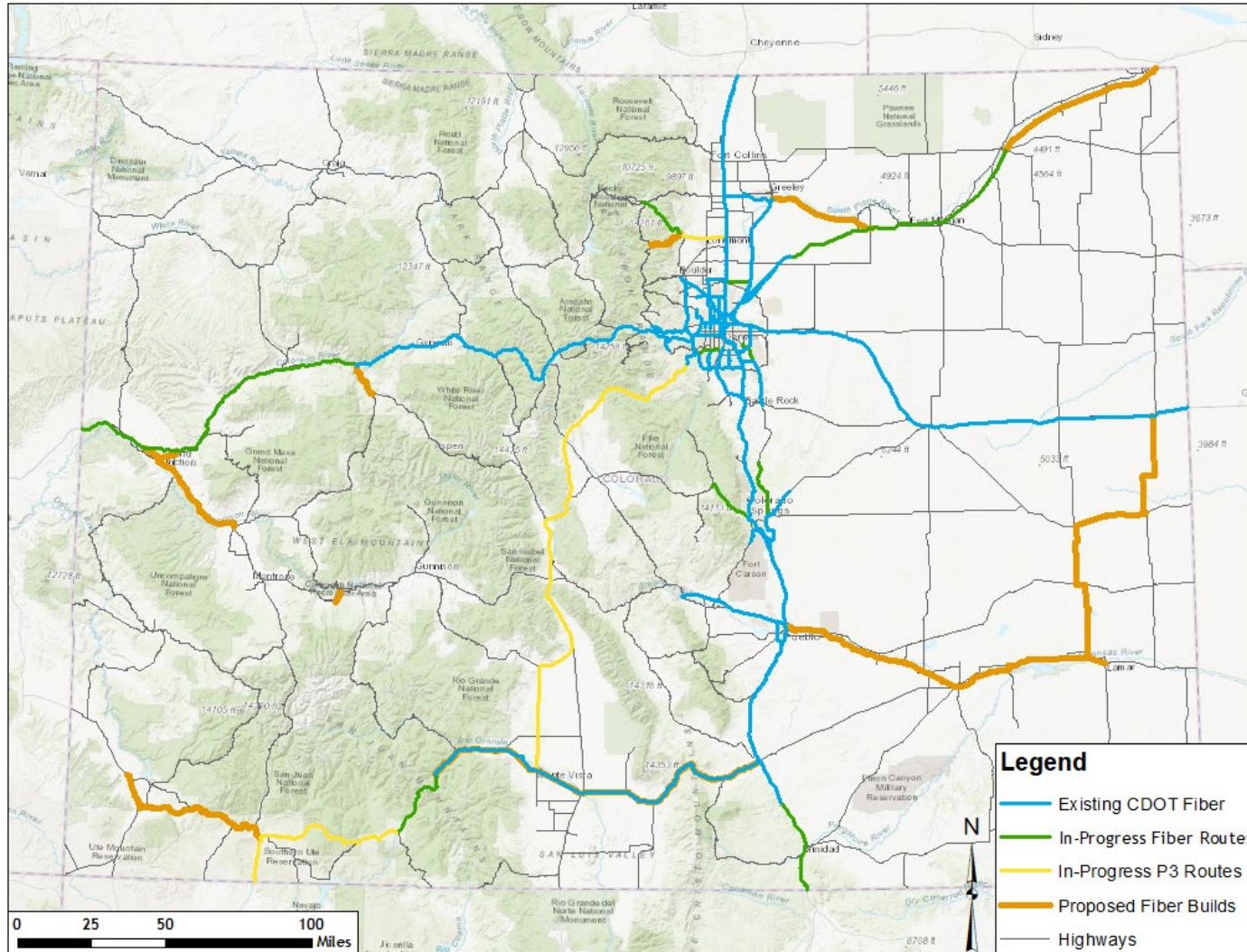


# FIBER P3 PROCESS





# QUESTIONS



Questions

John Lorme, Director of DMO

[John.lorme@state.co.us](mailto:John.lorme@state.co.us)

303.512.5218

Bob Fifer, Deputy Director of Operations

[Bob.fifer@state.co.us](mailto:Bob.fifer@state.co.us)

720.323.0674

More technical and process details

Bob Fifer, Deputy Director of Operations

[Bob.fifer@state.co.us](mailto:Bob.fifer@state.co.us)

720.323.0674



# COLORADO

Department of Transportation

Office of the Chief Engineer

2829 W. Howard Place  
Denver, CO 80204-2305

## MEMORANDUM

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**TO: THE TRANSPORTATION COMMISSION**  
**FROM: CHIEF EQUITY OFFICER, MARSHA NELSON**  
**DATE: 4.8.22**  
**SUBJECT: PRELIMINARY ANALYSIS AND VISION FOR NEWLY-CREATED EQUITY AND ENVIRONMENTAL JUSTICES BRANCH**

### Purpose

Introduction of the newly hired Chief Equity Officer and team to the Transportation Commission. The Chief Equity Officer will provide an overview of preliminary findings and a future vision of the newly created Equity and Environmental Justice Branch. Discussion will include Nondiscrimination compliance for Project Delivery, Environmental Justice & Outreach and Engagement, and Workforce Development.

### Action

This presentation will provide a status update to the Transportation Commission on the existing resources and foundational programs associated with the Civil Rights and Business Resource Center while identifying areas for future enhancement and collaboration as the Equity and Environmental Justice Branch is further developed and structured. This allows the Transportation Commission an opportunity to provide input and feedback on the vision to further strengthen the Department's commitment to equity, diversity, and inclusion principles.

### Background

Passed in Spring 2021, Senate Bill 260 required the creation of an Equity and Environmental Justice Branch. The function of the branch is to work directly with disproportionately impacted communities as well as with other department programs, in the project planning, environmental study and project delivery phases of transportation capacity projects. The branch is tasked with identifying and addressing technological, language, and information barriers that may prevent disproportionately impacted communities from participating fully in transportation decisions that affect health, quality of life, and access for disadvantaged and minority businesses in project delivery. A Chief Equity Officer was hired in December 2021 to lead the Equity and Environmental Justice Branch in achieving these tasks. This also includes evaluating existing external equity, diversity and inclusion efforts in an effort to align and coordinate resources as well as develop strategic initiatives focused on enhancing and transforming agency programs.

### Next Steps

Present initial appraisal and highlight strategic opportunities associated with an "EQUITY360" vision designed to further the integration of EDI principles across the Department.

### Attachments

Presentation – Title: *April 2022*





**COLORADO**

Department of Transportation

# EQUITY360



## Waze to Connect the DOT

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## 90-Day Assessment

**360 listening sessions:** gain understanding of how CDOT does business & learn departments structures

Deep-dive meetings with Civil Rights and Environmental staff to determine best way to integrate Environmental Justice concepts more holistically within CDOT



## Initial Findings

Strong foundation of nondiscrimination compliance

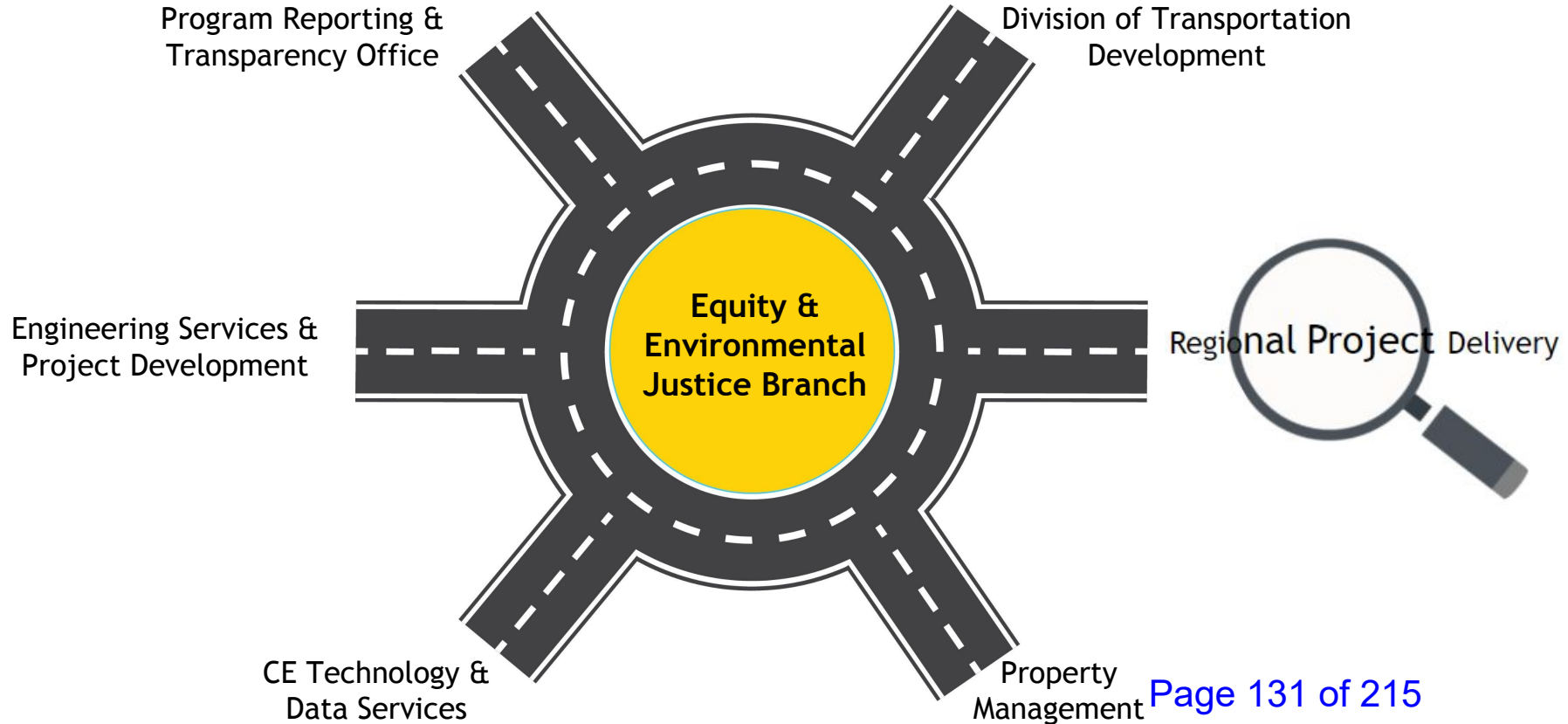
Equity efforts occurring in several departments/work units

Need for increased cohesion, education and clarity of roles and responsibilities

So much opportunity!

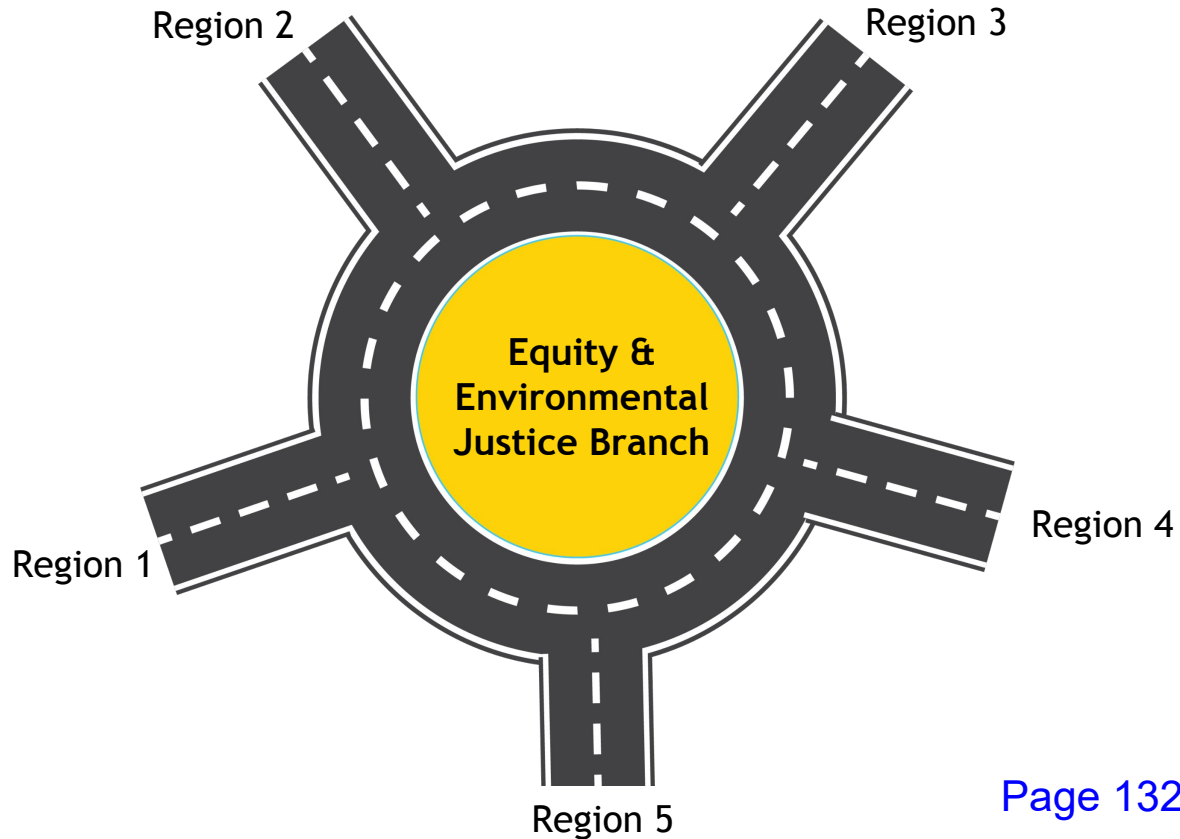


# Office of Chief Engineer





# Zoom in on Regional Project Delivery





# Scenic Tour through Equity & Environmental Justice Branch

Equity & Environmental Justice Branch



## Workforce

Establishing a diverse applicant pool & linking people to work-based learning to help them be successful



## Environmental Justice

Integrates community engagement & outreach into planning & project delivery processes to impact agency decisions



## Nondiscrimination Compliance

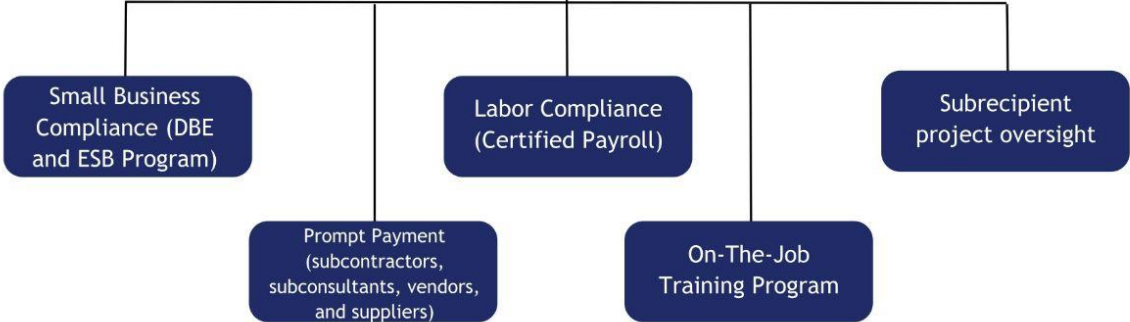
Project delivery & compliance: Ensures compliance with regulatory requirements (state & federal)



## Civil Rights and Business Resource Center

### Project Delivery

### External Programs





# Nondiscrimination Compliance

## *Skills and Tasks*

### Skills

VS

### Tasks

- Analytical
- Proficient communication skills
- Excellent organizational skills
- Critical thinking
- Understanding Federal and State regulatory guidelines and policies
- Up-to-date knowledge for business technology

- Assessing agency risks
- Conducts audits to ensure adherence to Federal and State standards, laws and regulations
- Identifying compliance issues
- Develop risk management strategies and processes
- Investigation of compliance procedures



# Exciting Initiatives and Opportunities



## Initiatives

Local Agency projects in Civil Rights systems (B2GNow/LCPtracker)

ESB Targets and Potential Incentives for state-funded construction projects

Increased pool of DBE & ESB certifications

ESB Mentor-Protege Program

Connect2DOT

Updating ADA Transition Plan

Evaluating all CDOT solicitation and contract templates to ensure legal compliance with Title VI (coordinated effort with FHWA)



## Potential Opportunities

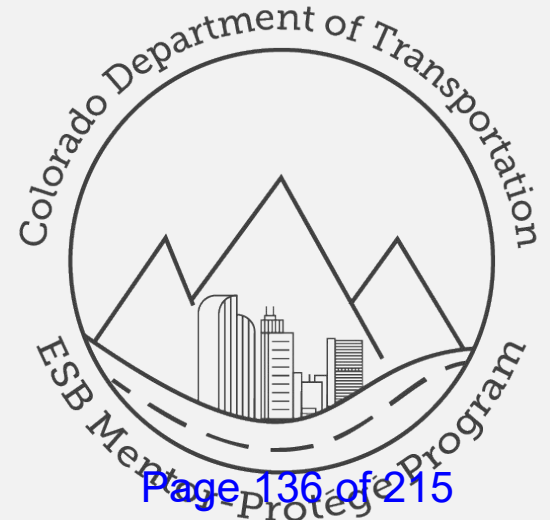
ESB Targets and Potential Incentives for all projects

Transit Project Delivery tracking in Civil Rights systems (B2GNow/LCPtracker)



## Emerging Small Business

**connect  
2DOT**







## Increased Strategic Community (public citizens & traveling public)

### Engagement & Outreach to Impact Decision Making



Bridge connections  
between  
community &  
agency

Individuals, community-based organizations, other public agencies, students, and academia

Robust training series for CDOT personnel on Transportation Equity and Environmental Justice expectations

Develop CDOT Environmental Justice expectations for projects

To include equity analysis and LEP (language translation) requirements

Increased integration in planning efforts

Leverage recent restructure of planning process to ensure Environmental Justice is incorporated early



### Skills

VS

### Tasks

- Strong communication skills
- Creative & innovative approach to problem solving
- Understanding in Transportation/Construction industry contracting and practices
- Understanding environmental science guidelines and policies
- Presentation skills
- Human-centric approach

- Increase citizen engagement
- Identifies, recruits, engages and convenes strategic and diverse groups of stakeholders
- Develop relationships with community leaders
- Conduct outreach and coordinate events



# Exciting Initiatives and Opportunities



## Exciting Initiatives

Equity analysis implementation for transit projects

CDOT being represented at the EJATF (Colorado Environmental Justice Act) Subcommittee to be in alignment with CDPHE

Greenhouse Gas Mitigation Efforts

Internal EJ taskforce & community advisory committee



## Potential Opportunities

Enhanced use of GIS mapping to support project staff to strategically engage with impacted communities

Increased use of census data and more robust statistical analysis in decision-making



### Helping develop the highway construction labor workforce through work-based learning, training, and other methods:

OJT Supportive Services (FHWA construction only)

Increase the number of minorities and women in OJTs/RAPs

Highway Construction Workforce Partnership Grant - Commercial Drivers License Pipeline

Identify, train, and place workers in highway construction careers

2017 - Central 70 was part of the first HCWP pilot - created WORKNOW





# Current CDOT Construction Workforce Development Initiatives

**Youth Program**  
Gr. 6 -8



National Summer  
Transportation  
Institute

**Adult Programs**  
Ages 16+



Exploring Careers in  
Construction &  
Transportation



Traffic Safety  
Workforce  
Advancement



Commerical Driver's  
License Pipeline  
Development



# Exciting Initiatives & Opportunities

## Cradle to Career Investments



## Adult Workforce Investments





## Skills

VS

## Tasks

- Strong communication skills
- Creative & collaborative approach to program development
- Ability to identify strategic gaps
- Impact, outcomes-oriented
- Understanding construction and transportation career pathways, OJTs, and registered apprenticeships
- Worker-focused approach

- Budget, grant management, and impact reporting
- Identify, recruit, engage and convene strategic and diverse groups of industry stakeholders
- Leverage other resources to create programmatic connection points
- Strategically fund identified gaps
- Coordinate with internal and external subject matter experts



# Charting a New Course



A journey focused on integrating  
and connecting all of CDOT

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# Introducing



## What is EQUITY360?

EQUITY360 describes an agency mindset and philosophy that establishes a holistic approach toward integrating equity, inclusion and diversity principles into processes, procedures and programs that directly impact the residents, businesses and visitors in which CDOT serves. This philosophy will guide the Equity & Environmental Justice Branch in developing strategic plans and initiatives over the next 3-5 years to embed EDI principles into the CDOT organizational culture, in partnership with the Internal Inclusion Excellence team.

## Mission:

Develop the best and most efficient route to equity, inclusion and cohesiveness.





# Guiding Principles

In addition to the CDOT Mission, Vision, and Values, EQUITY360 will integrate the following guiding principles in its execution:

## Proactive Compliance

Strive for 100% comprehensive compliance on all Federal and State laws and regulations, which require 100% of department and subrecipients to comply 100% of the time

## Creativity & Innovation

Embrace change.  
Be courageous.  
Envision an equitable and inclusive future.  
Challenge the status quo and drive creative transformation through experimental discovery.

## Knowledge

Embrace challenging processes and seek to understand different perspectives and experiences to achieve improvements. Develop measures that lead to equitable outcomes.

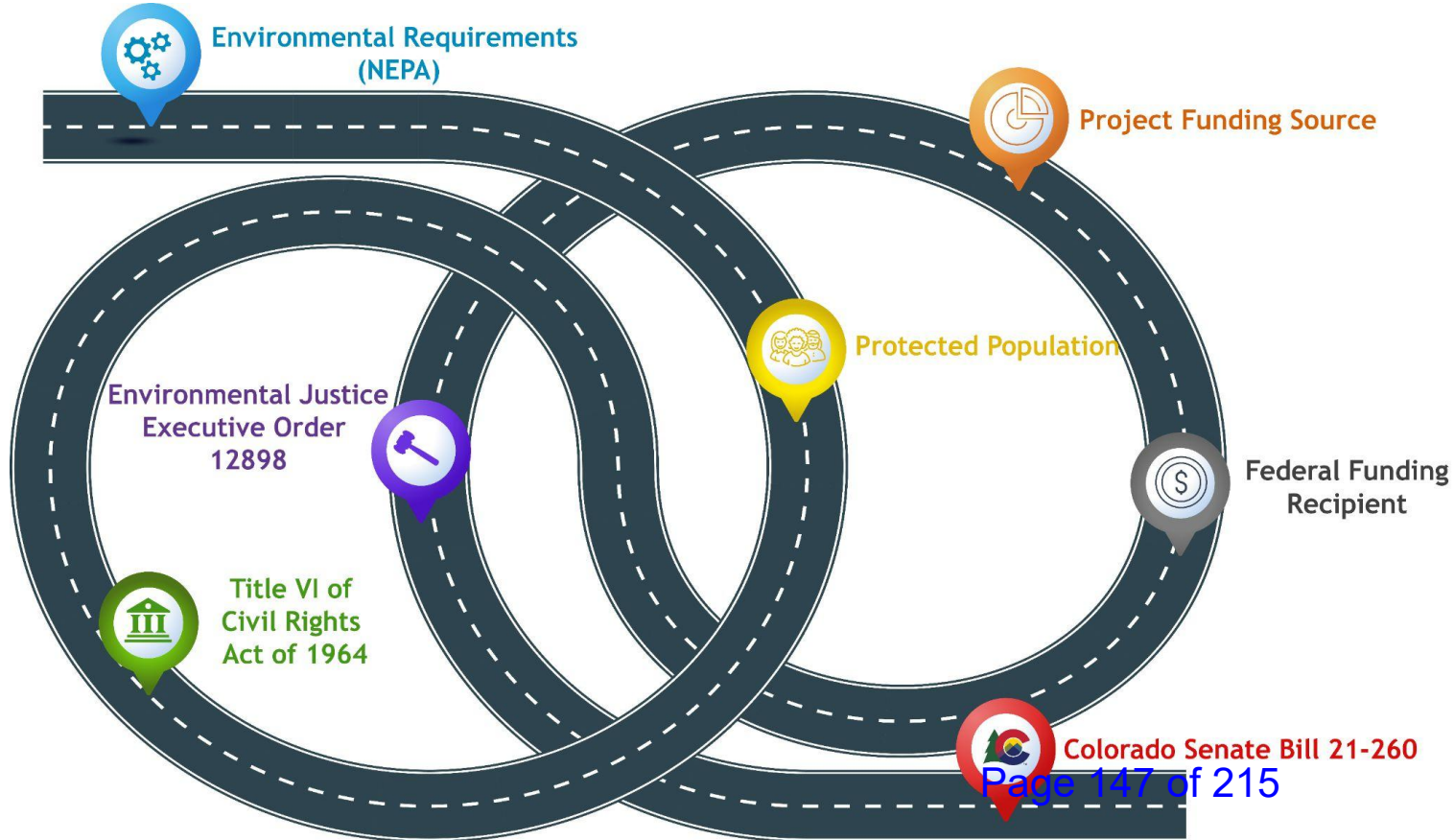
## Humility & Respect

Exemplify intellectual honesty. Treat others and opinions with honesty, dignity, respect, and sensitivity. Appreciate and embrace the value of diversity.



# Navigating Equity Requirements

Challenge & Opportunity





# Example

## Varying regulations have varying scopes for identifying protected populations

### Environmental Justice Executive Order 12898

Minority

Low-income

### Title VI Civil Rights Act of 1964

Race, color,  
national origin

Limited English  
proficiency

### Senate Bill 21-260

Per census block group, where more than 40% of households are one of the following:

1. low income (income less than or equal to 200% of federal poverty line)
2. identify as minority
3. housing cost-burdened (spends more than 30% of income on housing)



# Conclusion



**EQUITY360**



**EQUITY360 mindset and philosophy allows CDOT to go beyond simply navigating regulations.**

**CDOT has an opportunity to pave the way and be a leader in equity, diversity, and inclusion.**



# Special Thanks!

Thank  
you

## SPECIAL THANKS TO:

Amber Blake  
Anna Mariotti  
Brian Fauver  
Chessie Price  
Emily Crespin  
Greg Diehl  
Jennifer Uebelher  
Kim Kinnison  
Marie Nakagawa  
Zoë Wilhelmsen

## Transportation Commission (TC) Meeting Minutes

Workshops – Wednesday, March 16, 2022, 1:00 pm – 5:00 pm, Virtual Meeting via Zoom

Recording: <https://youtu.be/QUxeKZKSael>

### Call to Order, Roll Call

All eleven Commissioners were present, either via zoom or in-person: Commissioners Kathy Hall (TC Chair), Don Stanton (TC Vice Chair), Karen Stuart, Gary Beedy, Kathleen Bracke, Mark Garcia, Lisa Tormoen Hickey, Barbara Vasquez, and Eula Adams, Yessica Holguin, and Terry Hart.

### **1. Joint Session with Colorado Transportation Investment Office (CTIO) and TC (Nick Farber and Simon Logan) – 00:01:50**

**Purpose & Action:** Provided background information related to the proposed Central 70 Globeville, Elyria, and Swansea (GES) Low-Income Tolling Equity Program. No action requested currently - information only.

#### **Discussion Summary:**

- Staff presented an overview of efforts taken and continuing to develop options for a preferred program for reduced tolling program for the residents in the area adjacent to the new Central 70 tolled corridor, including outreach and research, costs, accessibility and implementation considerations.
- The CTIO currently recommends both a transit pass component and a tolling benefit to begin in 2023 and those programs to share the program funding based on ongoing community feedback and input. It is proposed to fund the program with \$1 million of the Central 70 contingency fund, to be repaid over 10 years from tolling revenues.
- Commissioners had questions about how to create assurance that funding would be available to the program regardless of the likely low levels of tolling revenues collected in the initial years.

### **2. ROW Condemnation Authorization (Stephen Harelson) – 00:43.45**

**Purpose & Action:** Provided background to inform the TC prior to taking action at the March regular meeting to authorize the initiation of condemnation proceedings for Region 3 Project US 6 & I-70 B in Clifton, Project Code 21415.

#### **Discussion Summary:**

- Commissioners sought to clarify that the owner's claimed loss of access was indeed mitigated by CDOT's change of design to a mountable curb that vehicles can easily drive over.

### **3. Budget Workshop (Jeff Sudmeier) – 00:51:47**

**Purpose & Action:** Presented the FY 2022-23 Final Annual Budget Allocation Plan for TC adoption. The TC was being requested to adopt the FY 2022-23 Final Annual Budget Allocation Plan at the regular meeting.

#### **Discussion Summary:**

- The total FY2023 budget includes approximately \$1.8 billion in new revenues, including about \$100 million more than presented last month to reflect the confirmed surplus FY2021 state revenues expected to be transferred to the Multimodal Mitigation Options Fund (MMOF). Approximately \$373 million of that amount are funds passed through to local agencies.
- The proposed FY2023 budget and spending plan includes approximately \$2.2 billion of funds being rolled over from FY2022 to FY2023, and approximately the same amount to be spent in the fiscal year.
- Cash projections indicate that CDOT will spend down the majority of its current balances in the next two years.
- Commissioners and staff discussed recent and anticipated inflation and how that is managed as the large number of planned projects are implemented.
- Staff will bring to a future TC meeting some discussion on how CDOT plans to address the personnel needs for maintenance operations.

- This being the final budget proposal for FY2023, CDOT will submit this to the Governor’s office before the April 15 deadline, presuming it is adopted by the Commission.

#### **4. Rest Area Update (Hope Wright) – 01:34:14**

**Purpose & Action:** Rest areas are vital to CDOT’s transportation network and exist to provide the traveling public a safe place to pullover and rest. This workshop served to provide an update to the TC about rest areas since they were identified as an asset in 2019, how they compare to other states and an update on future rest area projects thanks to dedicated funding beginning in FY2023. No action requested.

**Discussion:**

- Staff presented short, mid and long-term rest area strategies, including formation of an advisory committee to help guide CDOT’s approach to maintaining facilities.
- Commissioners stressed the benefit of more numerous rest areas, such as there are in New Mexico, but recognized that not all need to be very large or sophisticated to fill their need.
- Current federal restrictions prohibit charging fees for use of public electric vehicle charging facilities on rest areas. Commissioners discussed various partnership models that may make some facility enhancements possible.

#### **5. Greenhouse Gas (GHG) Mitigation Policy Directive Update (Rebecca White and Theresa Takushi) – 02:14:20**

**Purpose & Action:** This workshop provided an update on the status of the development of the Policy Directive on GHG Emissions Mitigation Measures and an update on the progress towards compliance for the GHG Pollution Reduction Standard for Transportation Planning. No action requested, discussion only.

**Discussion:**

- Regarding the content and updates of related Procedural Directives, Commission expressed the desire to have opportunity to review them but recognized possible unnecessary hinderance of CDOT management’s role in maintaining and updating them. Staff’s recommendation, therefore, is to include everything in the Policy Directive adopted by the TC and have that updated every six months and not have Procedural Directives.
- The Commission emphasized that their role includes serving as a forum for public comments and appeals to Procedural Directives.

#### **6. 10-Year Plan (Rebecca White and Amber Blake) – 03:00:28**

**Purpose & Action:** The purpose of this workshop was to provide the TC with an update on the projects with in the 10-Year Plan. No action required.

**Discussion:**

- The Commission preferred Option B, which removes the State MMOV Program funding from the 10-year Plan to fund the needed Operations and Maintenance of the Bustang services and Mobility Hubs, while maintaining the 10% minimum of the remaining funds in the Plan.

#### **7. CDOT’s Intelligent Transportation System (ITS) Fiber Program (John Lorme and Bob Fifer)**

- Item postponed to March 17 following the conclusion of the regular meeting.

**Workshop concluded at 4:53pm.**



## Regular Meeting - Thursday, March 17, 2022, 9:00 am to 10:30 am

Recording Link: <https://www.youtube.com/watch?v=JyVGfDd9gQ>

### 1. Call to Order, Roll Call – Video link [00:00:23](#)

Ten Commissioners were present: Commissioners Don Stanton (TC Vice Chair), Karen Stuart, Terry Hart, Yessica Holguin, Gary Beedy, Kathleen Bracke, Mark Garcia, Lisa Tormoen Hickey, Eula Adams, and Barbara Vasquez. Kathy Hall (TC Chair) was excused

### 2. Public Comments – Video link [00:03:45](#)

Provided to the Commission in writing prior to the meeting:

- Danny Katz, Executive Director of Colorado Public Interest Research Group (CoPIRG) commented on the types of projects that CoPIRG would like to see get prioritized for funding to comply with the GHG rule including Safety/Vision Zero projects, Revitalizing Main Streets program projects, transit, biking, and land use. He pointed out that funding programs such as the Highway Safety Improvements Program (HSIP), 15% of which needs to be spent on vulnerable users, and the new Safe Streets and Roads for All, a new \$5 billion competitive grant program should be used for such projects.
- Jenny Gaeng of Conservation Colorado commented on the importance of directing funding to disproportionately impacted (DI) communities by investing in public transit in rural communities. She also urged an equity score for project prioritization.
- Thomas Easley, of the Rocky Mountain Climate Organization applauded the clean trucking effort, but does not appreciate the delay on clean trucking rulemaking, and stressed the importance of early implementation of the new SB260 enterprises. He stressed the importance that scoring mitigation measures should be based on actual benefits, and should not give extra points in DI communities. Also asked that a mechanism linking mitigation to performance over time be incorporated.
- Molly McKinley, of the Denver Streets Partnership, urged a rebalancing of transportation investments prioritizing land use and public transit. Pointed out the importance of a regionally network of bus rapid transit (BRT), diverse transit routes, and expanded operations. Pointed out the many options for funding transit and multimodal projects.
- Matt Frommer, Southwest Energy Efficiency Project (SWEEP) stressed the importance of smart land use to meet the transportation goals and pointed out that the benefits of smart growth are evident in modeling.
- Piep van Heuven, of Bicycle Colorado, commented that public transit is the best way to reduce VMT. Urged prioritization of bike/ped projects. Lots of funding available now including HSIP, which now requires a certain portion to be directed to multimodal projects.
- Three Written Comments were submitted into the record.

### 3. Comments of the Chair and Individual Commissioners – Video link [00:29:00](#)

- Commissioners expressed gratitude for the public comments on the GHG rule and commented on various transportation topics including the importance of educating the public in an effort to increase the safety on our roads, the importance of rest stops, the importance of maintaining the integrity of the planning process through the Transportation Planning Regions (TPRs), and a need to take another look at how speeds are set for the roads.

4. **Executive Director's Management Report (Shoshana Lew) – Video link [01:09:37](#)**
  - Executive Director Lew congratulated Mike Goolsby on retirement, and commented on his remarkable service considering his ability to handle some of the most difficult problems CDOT has seen as an organization.
  - Staff was recognized for all the hard work completed clearing the roads during the storm.
5. **Chief Engineer's Report (Steve Harelson) – Video link: [01:12:45](#)**
  - Chief Engineer Harelson congratulated Mike Goolsby on his service to CDOT, and gave a touching homage to his grandmother in honor of Women in Transportation.
6. **High Performance Transportation Enterprise (HPTE)/Colorado Transportation Investment Office (CTIO) Director's Report (Nick Farber) – Video link: [01:22:40](#)**
  - Governor Polis signed HB22-1074 allowing enforcement of express lanes with existing technology. This allows the CTIO Board to amend rulemaking, which will start in the near future.
  - The CTIO Board adopted the FY22 budget, and FY 23 fee for service, which will come before TC for approval soon.
  - ROADIS got an extension on their resubmittal for the I-25N unsolicited proposal until April 14, 2022.
7. **Federal Highway Administration (FHWA) Colorado Division Administrator's Report (John Cater) – Video link: [01:26:00](#)**
  - Complete Streets training was a huge success. Addressing the needs of all users is very difficult, and will depend on looking at context rather than designing based on a check list.
8. **Statewide Transportation Advisory Committee (STAC) Report (STAC Chair, Vince Rogalski) – Video link: [01:31:30](#)**
  - Vince Rogalski gave a summary of STAC discussion on the 10-year Pipeline and transit targets, Bustang expansion, and the GHG mitigation measures.
9. **Legislative Report (Andy Karsian) – Video link: [01:43:50](#)**
  - Acknowledged Mike Goolsby for his service. HB22-1074 managed lane bill was signed into law. All Commissioners came through confirmation successfully, and they responded very well to Senator Scott's questions.
  - Bill regarding broadband and bike safety stop bill passed out of Senate committee and amended it to accommodate CDOT's requests, including ability to sign intersections deemed unsafe for safety stops. Wildlife crossing bill is delayed and will be heard on March 28<sup>th</sup>.
10. **Act on Consent Agenda – Video link: [01:47:11](#)**

A Motion by Commissioner Beedy to approve Consent Agenda Resolutions 1-4, seconded by Commissioner Stuart, passed unanimously.

  - a) Proposed Resolution #1: Approve the Regular Meeting Minutes of February 17, 2022 (Herman Stockinger)
  - b) Proposed Resolution #2: IGA Approval >\$750,000 (Steve Harelson)
  - c) Proposed Resolution #3: Former Kit Carson Maintenance Site Disposal (Heather Paddock)
  - d) Proposed Resolution #4: FTA 5311 Distribution (Amber Blake)
  - e) Proposed Resolution #5: Right of Way Condemnation Authorization Request 1 (Steve Harelson) (removed from Consent Agenda by motion from Commissioner Stuart, and seconded by Commissioner Beedy).

**11. Proposed Resolution #5: Right of Way Condemnation Authorization Request 1 (Steve Harelson) –**

**Video link: [01:48:50](#)**

Proposed condemnation of fee parcel and two temporary easements in Town of Clifton near US 6 with a motion by Commissioner Beedy to approve, and seconded by Commissioner Hickey, passed unanimously.

**12. Discuss and Act on Proposed Resolution #6: 6th Budget Supplement of FY 2022 (Jeff Sudmeier) – Video link: [01:50:16](#)**

A Motion by Commissioner Vasquez to approve, and seconded by Commissioner Garcia, passed unanimously.

**13. Discuss and Act on Proposed Resolution #7: FY 2022-23 Final Budget Allocation Plan (Jeff Sudmeier and Bethany Nichols) – Video link: [01:52:28](#)**

A Motion by Commissioner Garcia to approve, and seconded by Commissioner Bracke, passed unanimously.

**14. Discuss and Act on Proposed Resolution #8: FY 2022-23 CTIO Fee for Service IAA Approval (Nick Farber) – Video link: [01:54:27](#)**

A Motion by Commissioner Stuart to approve, and seconded by Commissioner Garcia, passed unanimously.

**15. Recognitions: No recognitions**

**16. Other Matters:**

- Bob Fifer, CDOT Division of Maintenance and Operations, and John Lorme, CDOT Director of the Division of Maintenance and Operations, announced that the fiberoptic workshop will be moved to April.

**Meeting Adjourned: 11:01**

**TC Ad Hoc Agency Coordination Committee – Wednesday, March 2, 2022, 1-2 p.m., Tuesday, March 15, 4-5 p.m., Wednesday, March 23, 1-2 p.m., and Thursday, March 31, 3:30-4:30 p.m.**

On May 20, 2021, the TC Chair established a TC Ad Hoc Committee to study and discuss how to amend the TC planning rules to incorporate pollution reduction standards as required by 2021 legislation. On March 2, 2022, March 15, 2022, March 23, 2022, and March 31, 2022, Committee members Commissioner Hickey, Commissioner Stuart, and Commissioner Vasquez met with counsel from the Attorney General's Office and CDOT staff to continue discussing next steps that are needed in connection the Transportation Commission Planning Rules that were amended in December 2021 to include pollution mitigation measures including the drafting of a policy directive outlining allowable mitigation measures.



**COLORADO**  
Department of Transportation  
Office of the Chief Engineer

Engineering Contracts  
2829 W. Howard Place, Ste. 339  
Denver, CO 80204-2305

## Memorandum

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**TO: Transportation Commission**

**FROM: Marci Gray & Lauren Cabot**

**DATE: April 5, 2022**

**SUBJECT: Intergovernmental Agreements over \$750,000.00**

Purpose Compliance with CRS §43-1-110(4) which requires intergovernmental agreements involving more than \$750,000 must have approval of the Commission to become effective. In order stay in compliance with Colorado laws, approval is being sought for all intergovernmental agencies agreements over \$750,000 going forward.

Action CDOT seeks Commission approval for all IGAs contracts identified in the attached IGA Approved Projects List each of which are greater than \$750,000. CDOT seeks to have this approval extend to all contributing agencies, all contracts, amendments and option letters that stem from the original project except where there are substantial changes to the project and/or funding of the project.

Background CRS §43-1-110(4) was enacted in 1991 giving the Chief Engineer the authority to negotiate with local governmental entities for intergovernmental agreements conditional on agreements over \$750,000 are only effective with the approval of the commission.

Most contracts entered into with intergovernmental agencies involve pass through funds from the federal government often with matching local funds and infrequently state money. Currently, CDOT seeks to comply with the Colorado Revised Statutes and develop a process to streamline the process.



Next Steps Commision approval of the projects identified on the IGA Project List including all documents necessary to further these projects except where there are substancial changes to the project and/or funding which will need reapproval. Additionally, CDOT will present to the Commission on the Consent Agenda every month listing all of the known projects identifying the region, owner of the project, project number, total cost of the project, including a breakdown of the funding source and a brief description of the project for their approval. CDOT will also present any IGA Contracts which have already been executed if there has been any substantial changes to the project and/or funding.

Attachments IGA Approved Project List





**COLORADO**  
**Department of Transportation**

Office of the Chief Engineer  
2829 W. Howard Place  
Denver, CO 80204-2305

**MEMORANDUM**

**TO:** Transportation Commission  
**CC:** Shoshana Lew, CDOT Executive Director Herman Stockinger, Deputy Executive Director  
**FROM:** David Fox, Deputy Program Manager  
**DATE:** April 2022  
**SUBJECT:** Proposed Affordable Housing Project (Proposing To Dispose)

**Purpose**

CDOT Region 3 is proposing to dispose of ~24,500 square feet (0.56 acres) located at 619 Granite Street in Frisco, Colorado (“the Granite Street Property”). The Granite Street Property will be conveyed to the Town of Frisco (“the Town”). The Town has agreed to build 22 affordable housing units on the Granite Street Property. When construction is complete the Town will convey 11 units back to CDOT to own and rent to employees. The fair market value of the property will be applied towards CDOT’s share of construction costs.

**Action**

CDOT Region 3 is requesting a resolution approving the disposal of the Granite Street Property.

**Background**

The Granite Street Property was acquired in 1974 for use as an employee mobile home park. In addition, the Town developed around the Granite Street Property making the mobile home park incongruent with its surroundings. CDOT has had trouble filling vacancies in Summit County because of the high cost and lack of housing inventory. The Town is likewise attempting to create more affordable housing inventory for entry level Town employees, service industry workers, teachers and other critical workforce. CDOT’s ownership of the Granite Street Property presented the Town and the Department with an incredible opportunity to partner with each other to create a project that serves both entities needs.

**Details**

In 2021 CDOT and the Town engaged Studio Architecture to create design plans for the project. The planning stage included members of CDOT staff including John Lorme, Director of Maintenance and Operations, Mike Goolsby, former Region 3 RTD, and Erin Lucero, CDOT Program Architect. The Town also had input in the design including staff planners, affordable housing and sustainability directors as well as Planning Commission Members. The final project contains a mix of studios, one and two-bedroom units. The design plans have been approved by the Town Planning Commission. CDOT had the Granite Street Property appraised by a Certified General Appraiser. The project has also had a third party cost estimator as part of the team during design. The project cost allocation between CDOT and the Town below is based on the appraisal and the current cost estimate.

<i>Appraised Value of the Land:</i>	<i>\$2,438,694</i>
<i>Construction Cost Estimate:</i>	<i>\$6,747,017</i>
<i>Total Project Cost:</i>	<i>\$9,185,711</i>
<i>Each Agencies 1/2 Cost:</i>	<i>\$4,592,856</i>
<i>CDOT Land Credit:</i>	<i>-\$2,438,694</i>
<i>CDOT Cash Owed:</i>	<i>\$2,154,162</i>



CDOT will fund the additional cash owed for the project using its existing Property management Capital Construction Budget. During construction, CDOT and the town will procure a firm to manage the leasing and maintenance of the complex. The costs of the management company will be split between CDOT and the Town based on the total square footage of the complex each entity owns.

When construction is complete, CDOT will obtain ownership of 11 of the units. The entire project will be deed restricted to only allow for up to 100% Average Median Income (AMI) rentals. CDOT employees generally make less than 100% of AMI. Importantly, CDOT will have full control over the amount of rent it will charge for its units, which ensures that the units will be affordable for our employees. If for any reason CDOT is unable to rent all of its units to employees CDOT can choose to rent to members of the public at a rate of up to 100% AMI and collect revenue from those leases to help offset the initial capital cost of the project, maintenance and management fees.



CDOT will also retain a right of first refusal to purchase the Granite Street property back from the Town if the town ever desires to sell its units or the property.

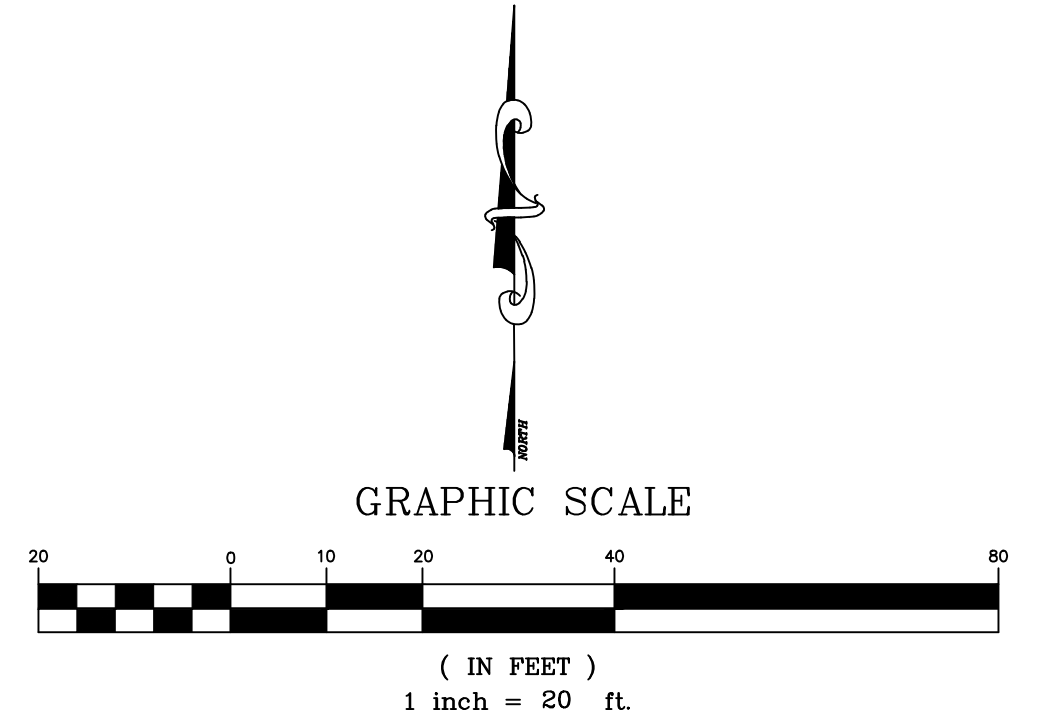
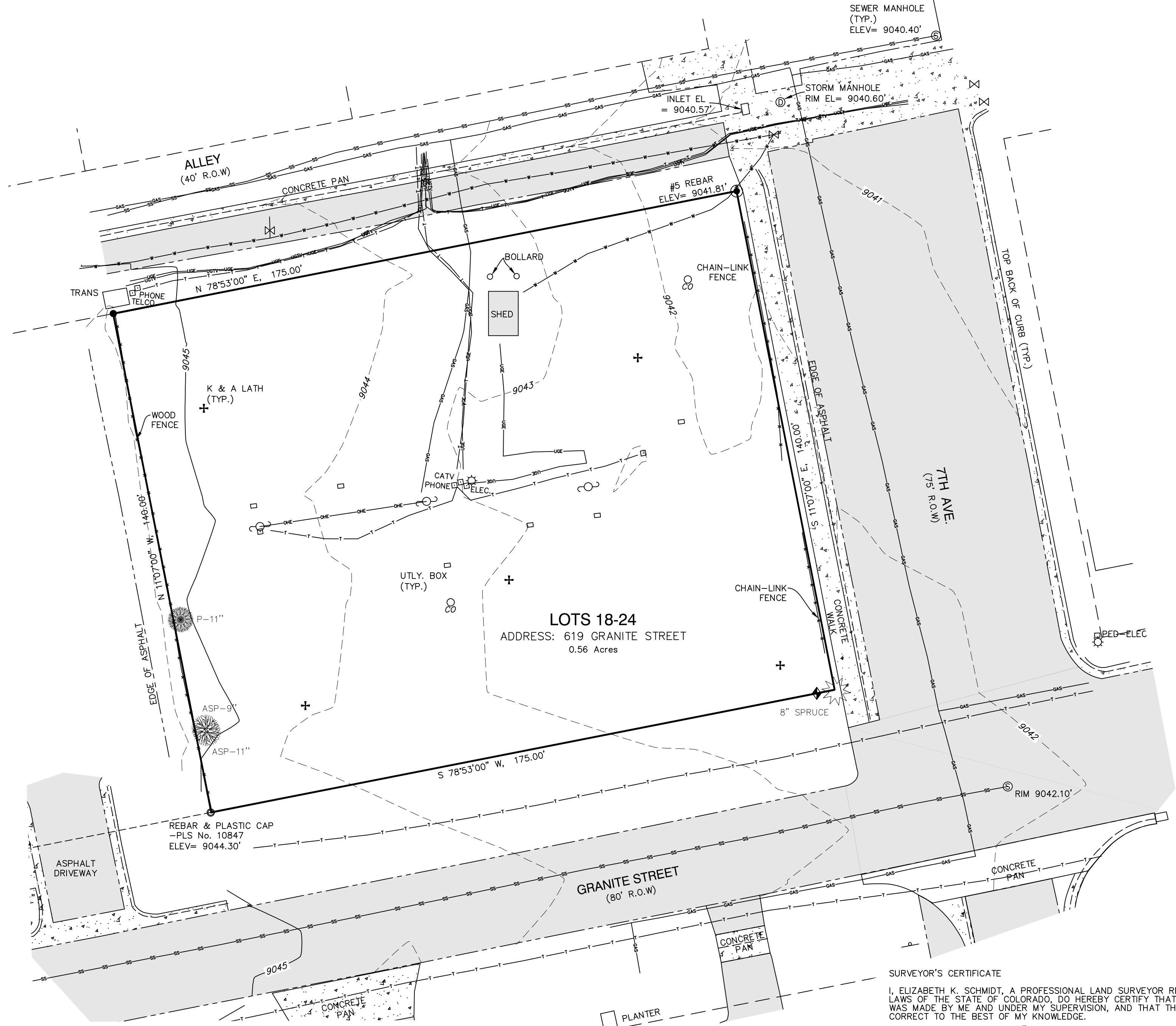
### **Next Steps**

Upon approval of the Transportation Commission, and the execution of an intergovernmental agreement between the CDOT and the Town, the Department will convey the Granite Street Property to the Town. The Town will issue an RFP to procure a General Contractor for construction of the project. CDOT will be an equal party with the Town for the selection of the General Contractor. The project has been designed to meet both state and Town building codes and sustainability standards. CDOT and the town will jointly inspect the construction project to ensure its quality and adherence to the plans.

### **Attachments**

Exhibit Depicting the Granite Street Property

IMPROVEMENT SURVEY PLAT AND TOPOGRAPHIC SURVEY  
**LOTS 18-24, BLOCK 12, FRISCO TOWN SUBDIVISION**  
 TOWN OF FRISCO, SUMMIT COUNTY, COLORADO



LEGEND	
	FOUND #5 REBAR
	FOUND REBAR & PLASTIC CAP -PLS No. 10847
	SET REBAR & PLASTIC CAP -PLS No. 37047
	SET REBAR & ALUM. CAP -PLS No. 37047 (5.0' WITNESS CORNER)
	WATER VALVE
	STORM SEWER MANHOLE
	SEWER MANHOLE
	SEWER CLEANOUT
	UTILITY POLE
	UTILITY PEDESTAL
	SIGN
	ASPEN TREE WITH TRUNK DIAMETER
	SPRUCE TREE WITH TRUNK DIAMETER
	PINE TREE WITH TRUNK DIAMETER
	K & A LATH
	WATER LINE
	UNDER GROUND CATV
	UNDERGROUND ELECTRIC
	UNDERGROUND TELCO.
	UNDERGROUND GAS
	SANITARY SEWER
	OVERHEAD ELECTRIC LINE

GENERAL NOTES

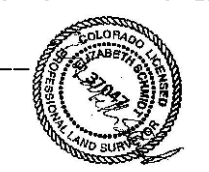
- DATE OF SURVEY: NOVEMBER 3 & 5, 2020.
- CONTOUR INTERVAL = ONE FOOT.
- ELEVATIONS BASED ON NGS MONUMENT W449 NEAR INTERSECTION OF STATE HIGHWAY NO. 9 AND INTERSTATE 70. NAVD 88 ELEVATION 9058.09 FEET.
- BASIS OF BEARINGS: THE SOUTHWEST AND NORTHEAST PROPERTY CORNER OF LOTS 18-24, BLOCK 12, FRISCO TOWN SUBDIVISION.
- SCHMIDT LAND SURVEYING, INC. DID NOT PERFORM A TITLE SEARCH OF THE SUBJECT PROPERTY TO ESTABLISH OWNERSHIP, EASEMENTS OR RIGHTS-OF-WAY OF RECORD.

NOTICE:  
 ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF CERTIFICATION SHOWN HEREON.

SURVEYOR'S CERTIFICATE

I, ELIZABETH K. SCHMIDT, A PROFESSIONAL LAND SURVEYOR REGISTERED UNDER THE LAWS OF THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS TOPOGRAPHIC MAP WAS MADE BY ME AND UNDER MY SUPERVISION, AND THAT THE MAP IS ACCURATE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

DATE: \_\_\_\_\_  
  
 ELIZABETH K. SCHMIDT  
 COLORADO P.L.S. 37047



Drawn EKS/TMB	Dwg 2462 TP.dwg	Project 2462
Date 11/20/20	Scale 1" = 20'	Sheet 1 of 1

**SCHMIDT**  
 LAND SURVEYING, INC.  
 P.O. Box 5761  
 FRISCO, CO 80443 970-409-9963





**MEMORANDUM**

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**TO: THE TRANSPORTATION COMMISSION**  
**FROM: STEPHEN HARELSON, P.E. CHIEF ENGINEER**  
**DATE: APRIL 6, 2022**  
**SUBJECT: RELEASE OF SLOPE EASEMENT SE-9REV**

**Purpose**

CDOT Region 3 is proposing to release Slope Easement (SE-9Rev) of project STA 133A-039 that is no longer needed for transportation or maintenance purposes. The release will unencumber the land for the underlying property owner.

**Action**

CDOT Region 3 is requesting a resolution approving the release of SE-9Rev that is no longer needed for transportation or maintenance purposes.

**Background**

Slope Easement SE-9Rev was acquired in 2013 as part of project STA 133A-039. Slope easements are acquired to guarantee the stability of the highway improvements. CDOT did not pay any money to acquire the slope easement. The slope easement contained language that said it would remain in effect until the Grantor brought the grade to a level that guaranteed the safety of the highway improvements. In the case of SE-9Rev the underlying property has been developed and the slope has been brought to grade with the highway improvements. Region 3 has determined that the highway improvements are safe as result of the adjacent property development and the easement is no longer needed for transportation purposes.

**Next Steps**

Upon approval of the Transportation Commission, CDOT will execute a “release of slope easement” and the easement will be extinguished.

**Attachments**

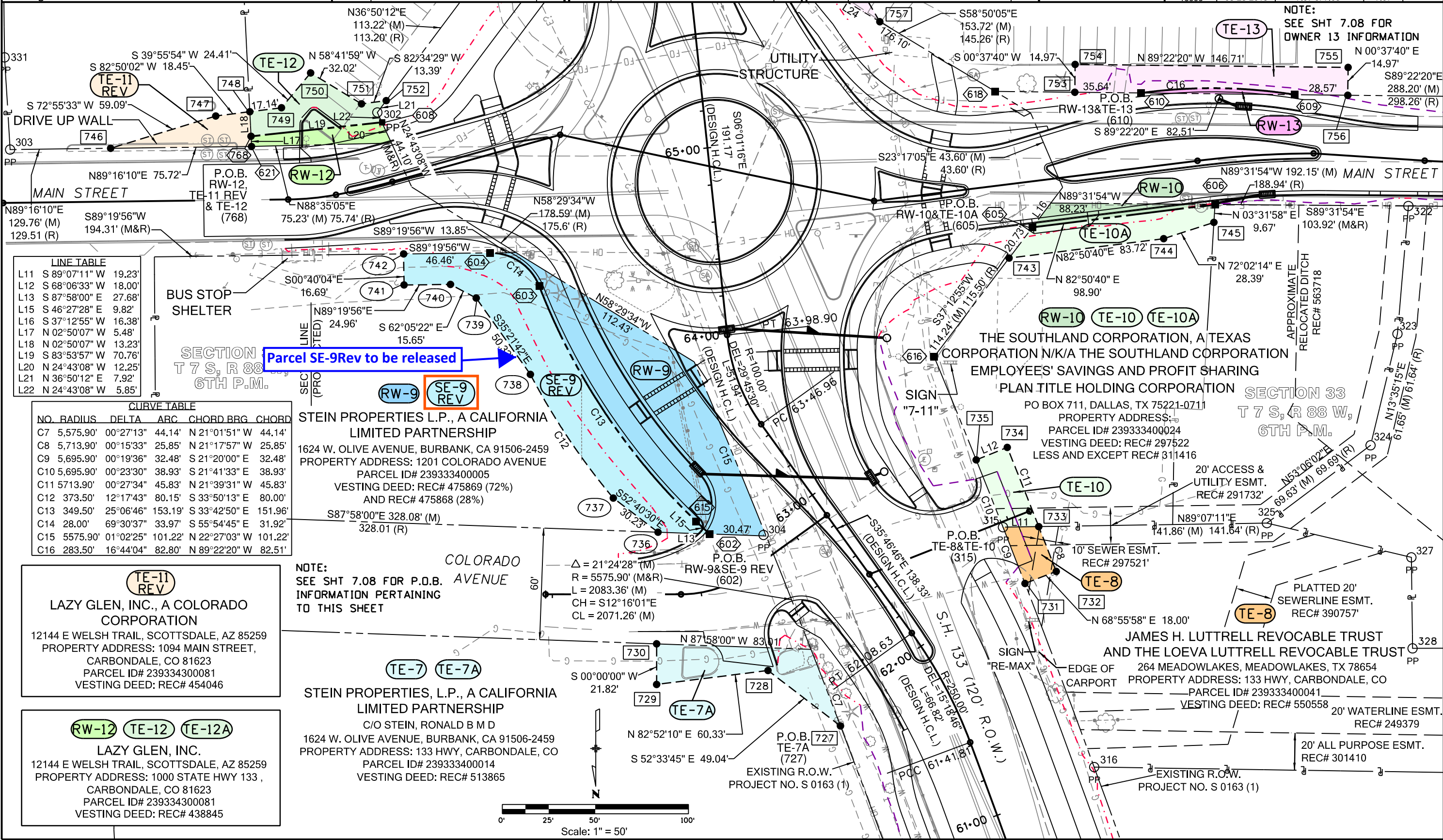
Exhibits Depicting SE-9Rev



Sheet Revisions		
Date	Description	Initials
07-17-13	Changed R89W to R88W	JAD
08-15-13	Added sign and building labels	JAD
08-28-13	Revised parcels TE-11, SE-9, and associated information - Updated design information	JAD

Sheet Revisions		
Date	Description	Initials

Sheet Revisions		
Date	Description	Initials



**LINE TABLE**

LINE	BEARING	DISTANCE
L11	S 89°07'11" W	19.23'
L12	S 68°06'33" W	18.00'
L13	S 87°58'00" E	27.68'
L15	S 46°27'28" E	9.82'
L16	S 37°12'55" W	16.38'
L17	N 02°50'07" W	5.48'
L18	N 02°50'07" W	13.23'
L19	S 83°53'57" W	70.76'
L20	N 24°43'08" W	12.25'
L21	N 36°50'12" E	7.92'
L22	N 24°43'08" W	5.85'

**CURVE TABLE**

NO.	RADIUS	DELTA	ARC	CHORD	BRG	CHORD
C7	5,575.90'	00°27'13"	44.14'	N 21°01'51" W	44.14'	
C8	5,713.90'	00°15'33"	25.85'	N 21°17'57" W	25.85'	
C9	5,695.90'	00°19'36"	32.48'	S 21°20'00" E	32.48'	
C10	5,695.90'	00°23'30"	38.93'	S 21°41'33" E	38.93'	
C11	5,713.90'	00°27'34"	45.83'	N 21°39'31" W	45.83'	
C12	373.50'	12°17'43"	80.15'	S 33°50'13" E	80.00'	
C13	349.50'	25°06'46"	153.19'	S 33°42'50" E	151.96'	
C14	28.00'	69°30'37"	33.97'	S 55°54'45" E	31.92'	
C15	5575.90'	01°02'25"	101.22'	N 22°27'03" W	101.22'	
C16	283.50'	16°44'04"	82.80'	N 89°22'20" W	82.51'	



**MEMORANDUM**

**TO: THE TRANSPORTATION COMMISSION**  
**FROM: STEPHEN HARELSON, P.E. CHIEF ENGINEER**  
**DATE: APRIL 6, 2022**  
**SUBJECT: REGION 5 DISPOSAL – SH 24 PARCEL 231-224-EX**

**Purpose**

CDOT Region 5 is proposing to dispose of 6,229 (0.143 acres) square feet of right of way as described in Book 231 Page 224 of the Chaffee County Clerk and Records records and heretofore referred to as Parcel 231-224-EX

**Action**

CDOT Region 5 is requesting a resolution approving the disposal of Parcel 231-224-EX that is no longer needed for transportation or maintenance purposes.

**Background**

CDOT acquired Right of Way in 1938 for the construction of SH 24. After the acquisition of the right of way it was determined that a building containing a general store encroached upon an area where the roadway need to be built. CDOT agreed to pay to move the building and to provide a permanent easement on Department property for the building to be rebuilt. The Permanent easement was described in Book 231 Page 224 of the Chaffee County Clerk and Recorder records. Book 231 Page 373 further clarified that the permanent easement shall also be transferred to the owner's heirs and assigns. The property has been bought and sold numerous times since 1938, but the property is now up for sale again and the purchasers attorney is not comfortable with CDOT owning the property underlying the permanent easement. Region 5 Right of Way Appraisal staff have evaluated this property and determined it has \$0.00 fair market value considering the language of the permanent easement grants perpetual use to the building owner.

**Next Steps**

Upon approval of the Transportation Commission, CDOT will convey Parcel 231-224-EX in accordance with C.R.S. 43-1-210(5). CDOT will execute a quitclaim deed to convey the subject property. The deed will be recorded in the office of the Chaffee County Clerk and Recorder.

**Attachments**

Copy of Book 231-224 Chaffee County Clerk and Recorder  
Exhibit Depicting Parcel 231-224-EX



gaged property, or any part thereof, from the County of Chaffee, without the written consent of said mortgagee or its assigns, or in case said above described property, or any part thereof, shall be seized on legal process, or if said mortgagee shall for any reason deem itself insecure, then said mortgagee may declare all of said indebtedness at once due and payable, and may take possession of said chattels, with or without legal process and sell the same at public or private sale, with or without notice, in said County or in any County where the property may be found. Notice of public sale may be given by publishing a notice stating the time, place and terms of said sale, three consecutive weeks in a weekly newspaper regularly published in the County wherein such sale is to be held. The proceeds of said sale shall be applied, first, to the costs of said sale; second, to the payment of the above described indebtedness; and third, any surplus shall be paid to the maker hereof. At any such public sale either party hereto, to-wit, the mortgagee or mortgagor, may bid for said property and become the buyer thereof.

It is further agreed that, should it become necessary to force collection of this note by special collector, or by attorney, 10% of the face value shall be added to the above amount as liquidated damages.

(1) Post Office Salida State Colo. }  
County \_\_\_\_\_ R.F.D.No. \_\_\_\_\_ } (1) \_\_\_\_\_  
(2) Post Office \_\_\_\_\_ State \_\_\_\_\_ }  
County \_\_\_\_\_ R.F.D.No. \_\_\_\_\_ } (2) George A. Curtis  
(Sign in ink.)

STATE OF COLORADO }  
County of Chaffee } SS.

This mortgage was acknowledged before me by George A. Curtis Mortgagor(s) this 2nd day of August 1938.

Mary F. Rawson  
Notary Public

My Commission expires: March 20- 1941  
(Notarial Seal)

Filed for record August 5, 1938 at 2:15 o'clock P. M.  
A. W. Samson  
Recorder

Book 231 Page 224

AGREEMENT  
PWA 5003-B

THIS AGREEMENT, made this 9th day of July, 1938, between the COLORADO STATE HIGHWAY DEPARTMENT, hereinafter called the Department, and MRS. R. G. NISJA, of Granite, Colorado, hereinafter called the Owner, refers to and confirms an understanding reached between the Parties on May 27, 1938, and

WITNESSETH, That the Department has heretofore made plans, specifications, and estimate for, and has awarded a contract and effected the construction of highway improvements known as Project PWA 5003-B, through the community known as Granite, Colorado, in Chaffee County, and in connection with this constructions has acquired rights of way and has made use of rights of way previously secured necessary for the construction of the project; and

That the Owner is the possessor of a store building opposite approximately Station 913+30 of the center line of above mentioned project, and also has certain rights to the site upon which the building is located, which site is situated and encroaches upon the right of way required for the project construction:

IT IS THEREFORE agreed that the Owner will completely remove the building from its present site, and will relinquish and does hereby relinquish all her rights in the said site to the Department, and that the Department will furnish to the Owner and will grant and hereby does grant a perpetual easement to a site for a new building, said site being described as follows:

Beginning at corner No. 1 which is located fifty (50) feet right of center line station 911+25 of survey for PWA 5003 from whence corner No. 2 of Robert George Mill site, U. S. Survey No. 99B, bears South thirty-eight (38) degrees and eight (08) minutes West, a distance of two hundred nineteen (219) feet; thence North sixty-nine degrees and thirty-two (32) minutes West, a distance of forty-four and nine-tenths (44.9) feet to corner No. 2; thence North twenty (20) degrees and forty-four (44) minutes West a distance of ninety-six (96) feet to corner No. 3; thence North seventy-nine (79)degrees and sixteen (16) minutes East a distance of seventy-eight (78) feet to corner No. 4 which is a point fifty feet (50) right of station 910+10 of centerline survey for PWA 5003; thence in a southerly direction along the arc of a curve parallel to and fifty (50) feet westerly from centerline survey of PWA 5003 a distance of one hundred twenty (120) feet, more or less, to corner No. 1, the place of beginning, containing in all 0.143 acres, more or less. Said parcel of land being entirely within the boundaries of Robert George Millsite, U. S. Survey 99B.

and does grant to the owner rights to erect proper buildings and carry on a legal mercantile business similar to that carried on in the old store; and

Further, That the Department agrees to pay the Owner the sum of \$2500.00 to cover all her rights in the old building site and to cover all damages of every character in connection with the clearing of the right of way for the purpose indicated, and

FURTHER, the Owner hereby releases the Highway Department and Chaffee County from any claims of any

character arising out of this transaction

IN WITNESS WHEREOF, the Parties hereto have set their hands the day and date above written.

COLORADO STATE HIGHWAY DEPARTMENT  
CHAS. D. VAIL, State Highway Engineer

BY O T Reedy  
O. T. REEDY  
Senior Asst. Highway Engineer

Mrs R. G. Nisja  
MRS. R. G. NISJA, Owner  
SIGNATURE GUARANTEED  
FIRST NATIONAL BANK, Salida, Colo.

By J Ford White AUG 5 - 1938  
President-Cashier

Filed for record August 5, 1938 at 2:30 o'clock P. M.  
A. W. Samson  
Recorder

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DECREE OF HEIRSHIP

STATE OF COLORADO, )  
 ) SS.  
City and County of Denver, )

IN THE COUNTY COURT

In the Matter of the Estate of )

No. 41325...

ALBERT R. MILLER )

Deceased. )

DECREE OF HEIRSHIP

Now, on this day comes Helen A. Miller, Administratrix of said Estate,

and thereupon the matter of the ascertainment and determination of the heirs of the said deceased coming on regularly to be heard upon the affidavit of intestacy of Helen A. Miller pursuant to order of Court heretofore entered herein. And it appearing to the Court from the records and files herein that notices have been regularly issued and served upon the claimants as heirs at law, said to reside in the state of Colorado, mentioned in said affidavit of intestacy (~~except these issued to \_\_\_\_\_, who cannot be found~~), as evidenced by the returns thereon, and it further appearing that said notice has been regularly published according to law, as evidenced by the affidavit of the publisher of The Daily Journal filed herein. And thereupon, the Court having received, and having considered said affidavit of intestacy, and being sufficiently advised in the premises, doth

FIND, ASCERTAIN AND DETERMINE that said deceased died on or about the 20th day of August, A. D. 1927, while a resident of the State of Colorado and City and County of Denver, leaving intestate lands, tenements or hereditaments; that due and sufficient notice hereof has been had according to law; that the sole and only heirs at law of said Albert R. Miller, deceased, and their interests in said estate, are as follows, to-wit:

NAME Relationship Fractional Interest

successors or assigns of the parties hereto, or either of them; and that the words used in the singular number to designate parties hereto shall be construed to mean and include any person, persons, firm or corporation named as a party to this mortgage.

IN WITNESS WHEREOF, The party of the first part has hereunto set his hand this...<sup>25th</sup>.....day of  
...~~JANUARY~~....., A. D. 19.<sup>39</sup>..

.....Audie Roberts.....(SEAL)  
.....(SEAL)

STATE OF COLORADO. ) ss.  
County of....~~Chaffee~~.....)

This mortgage was acknowledged before me this...<sup>25th</sup>.....day of ~~January~~....., A. D. 19.<sup>39</sup>.,  
by.....~~Audie Roberts~~.....~~fax~~....., Mortgagor..

My commission expires...~~Sept. 3-~~....., A. D. 19.<sup>40</sup>.

(Notarial Seal)

.....William N. Baird.....  
NOTARY PUBLIC.

Filed for record January 26, 1939 at 9.30 o'clock A.M.  
A. W. Samson  
Recorder.

BOOK 231 PAGE 373

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SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, Made this 25 day of January, 1939, between the COLORADO STATE HIGHWAY DEPARTMENT, hereinafter called the "Department", and MRS. R. G. NISJA, of Granite, Colorado, hereinafter called the "Owner", refers to a certain agreement between the parties dated July 9, 1938, concerning rights of way required in connection with the construction of highway improvements known as project PWA 5003-B, through the community known as Granite, Colorado, in Chaffee County, and is for the purpose of clarifying and making more definite the paragraph beginning with line twenty (20) of the aforesaid agreement by inserting the words (her heirs and assigns" between the word "Owner" and the word "and" in the 24th line, and likewise the same words "her heirs and assigns" between the word "Owner" and the word "rights" in the 41st line.

COLORADO STATE HIGHWAY DEPARTMENT  
CHAS. D. VAIL, State Highway Engineer

By O.T. Reedy  
O.T. REEDY  
Senior Assistant Highway Engineer

Mrs R. G. Nisja  
MRS. R. G. NISJA, Owner.

Filed for record January 26, 1939 at 3.55 o'clock P. M.  
A. W. Samson  
Recorder.





# COLORADO

## Department of Transportation

Division of Maintenance & Operations  
425C Corporate Circle  
Golden, CO 80401

### TRANSPORTATION COMMISSION REQUEST

**TO:** Transportation Commission  
**FROM:** John Lorme, Director of Maintenance & Operations  
**CC:** Herman Stockinger, Deputy Director and Director of Policy

**DATE:** April 21, 2022  
**SUBJECT:** FY 22 Maintenance Project List

#### Purpose

The Maintenance Sections have identified 1 project valued at between \$150,000 and \$250,000 for construction in FY 22. The resolution details additions to project locations, type, and dollar value.

#### Action Requested

Per CRS 24-92-109, and PD 703.0 require CDOT to prepare estimates of proposed work exceeding \$150,000 up to \$250,000 for Transportation Commission approval prior to undertaking the work.

#### Background

The program allows the Maintenance Sections the flexibility to react to current needs by treating individual segments of highways showing distress.

Sufficient funds exist within the appropriate MPA's to pursue these projects. The projects are in accordance with the directive and all other requirements. The Division of Maintenance & Operations recommends approval of the FY 22 over \$150,000 project list.

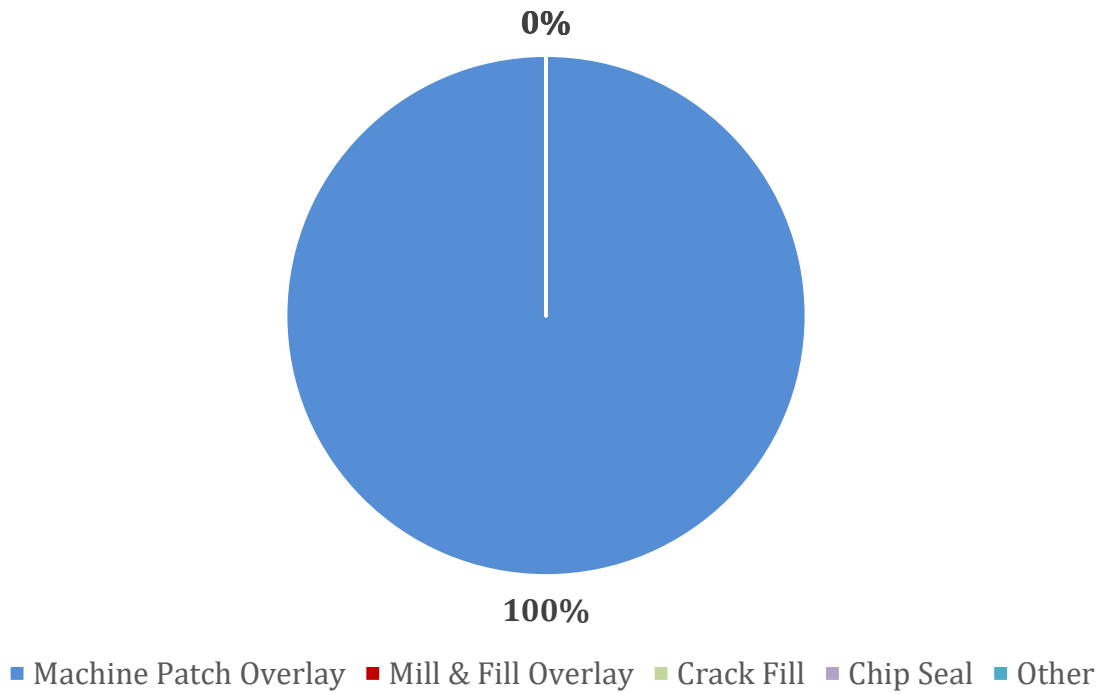
#### Key Benefits

Approval of these projects will allow the Maintenance forces to proceed with these projects ensuring the safety and mobility of the traveling public and enabling the continuation of commerce along the state highway system.





## Fiscal-Year-to-Date Percentage for Each Project Category



### Next Steps

Upon approval, the Maintenance forces will proceed with construction of these projects in FY 22.

### Attachments

Resolution for Transportation Commission Approval - Includes Project List





**MEMORANDUM**

**TO:** THE TRANSPORTATION COMMISSION  
**FROM:** JEFF SUDMEIER, CHIEF FINANCIAL OFFICER  
BETHANY NICHOLAS, BUDGET DIRECTOR  
**DATE:** APRIL 21, 2022  
**SUBJECT:** TENTH BUDGET SUPPLEMENT - FY 2021-2022

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**Region 3**

\$4,250,000- **Transportation Commission Contingency Reserve - I-70 Glenwood Canyon** - CDOT R3 Glenwood Springs staff have been diligently working with a blended team of consultants, Federal Highway Administration (FHWA), and the United States Forest Service (USFS) to improve the resiliency and safety of I-70 through the Glenwood Canyon. In August 2021, over a dozen material/debris flows, occurred in Glenwood Canyon, some of which caused catastrophic infrastructure damage to the Interstate. Recovery and repair work continues but there are still destabilized slopes that make the canyon susceptible to post-fire debris flows.

The purpose of the 24767 PR I-70 Material Flows 2021 (ER 0702-420) project is to preemptively install mitigation measures designed to improve the resiliency of the I-70 infrastructure and ultimately produce financial savings by reducing emergency closures and expenditures. The CDOT team has been closely coordinating with and received endorsement from both FHWA and the USFS to proceed with the current scope of work. This project will qualify for federal emergency reimbursement from FHWA, but to meet the critical construction schedule funding is requested from the Transportation Commission (TC) to be able to advertise this project in April 2022.

The TC already approved \$10 M for emergency repairs and emergency response in August 2021 to address the debris flows caused by the Grizzly Creek Fire burn scars which ignited in August of 2020. While much of the cost of the emergency repairs and response will ultimately be reimbursed to CDOT via federal emergency relief funds, CDOT must first cover costs prior to reimbursement.

At this point in the response there is approximately \$2.2 M remaining of the initial \$10 M allocated by the TC and the \$11.6 M of FHWA early release emergency funds. The Region is requesting \$4.25 M in additional TC Contingency funds to complete the proposed mitigation measures. Once the contracts with the Contractors currently working on repairs and debris removal within the canyon are completed, the process of reimbursement from FHWA for expenses incurred will continue.

Approval of this funding request of an additional \$4.25 M help optimize the resiliency of Glenwood Canyon and improve the safety of the traveling public and infrastructure. The additional funds will allow some elements to be constructed prior to the upcoming 2022 monsoon season and work will continue through the duration of the 2022 construction season



**Region 1**

\$550,949 - **Strategic Projects-EJMT GROUT BED REPAIR AND PANEL RESETS**- In July 2021 the TC approved \$50 M in funding through the 10-Year Plan for EJMT tunnel repair and maintenance (using a combination of SB 267 and federal ARPA stimulus funding). These funds in turn have been allocated to a series of discrete repair and maintenance projects in the EJMT. In the case of this bed repair and panel project, bids came in higher than anticipated and above the engineer’s estimate. Pursuant to PD 703 the increase is greater than 15% of the original budget and greater than \$500,000. The Region does not anticipate readvertisement will result in lower bids. As such, TC approval of the additional funding is requested in order to approve the project to the low bidder.

**EJMT GROUT BED REPAIR AND PANEL RESETS**  
*Budget Components by Phase, Funding Program, Fiscal Year*

Phase of Work	Funding Program	Original Budget	Funding Request				Revised Budget	Expended To-Date
			Previous Adjustments	Current Request	Total Adjustments	Total Adjustment Percent		
Design	<i>Strategic Projects</i>	\$190,000	\$0	\$0	\$0		\$190,000	\$85,966
	<b>Total Design</b>	<b>\$190,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>0%</b>	<b>\$190,000</b>	<b>\$85,966</b>
Construction	<i>Strategic Projects</i>	\$1,272,600	\$0	\$550,949	\$550,949		\$1,823,549	\$0
	<b>Total Construction</b>	<b>\$1,272,600</b>	<b>\$0</b>	<b>\$550,949</b>	<b>\$550,949</b>	<b>43%</b>	<b>\$1,823,549</b>	<b>\$0</b>
	<b>Total Project</b>	<b>\$1,462,600</b>	<b>\$0</b>	<b>\$550,949</b>	<b>\$550,949</b>	<b>38%</b>	<b>\$2,013,549</b>	<b>\$85,966</b>

*Per Policy Directive 703.0, this project is being included in the Budget Supplement as an increase of greater than 15% of the original budget and greater than \$500,000.*

**Information Only**

\$3,173,000 - **Maintenance Reserve-Snow and Ice**- Pursuant to PD 703, transfers from the Snow and Ice account of the Maintenance Reserve are approved by the Executive Management Team. A transfer of funds from the Maintenance Reserve Fund was completed in March in order to reimburse maintenance cost centers across the state for snow and ice expenditures in excess of planned amounts, including:

- Greeley - \$100,000
- Grand Junction - \$902,000
- Durango - \$431,000
- Pueblo - \$707,000
- Aurora - \$100,000
- Craig - \$363,000
- Alamosa - \$470,000
- EJMT - \$100,000

*Per Policy Directive 703.0, transfers from the Maintenance Reserve are approved by the Executive Management Team and present as informational to the Transportation Commission in the following meeting.*



**Transportation Commission Contingency Reserve Fund Reconciliation  
Tenth Supplement FY 2022 Budget**

<b>Transaction Date</b>	<b>Transaction Description</b>	<b>Amount</b>	<b>Balance</b>	<b>Reference Document</b>
June-21	<i>Balance 12S21</i>		\$48,025,918	
July-21	<i>Balance 1S22</i>		\$48,043,920	
August-21	<i>Balance 2S22</i>		\$31,971,890	
September-21	<i>Balance 3S22</i>		\$31,971,890	
October-21	<i>Balance 4S22</i>		\$31,971,890	
November-21	<i>Balance 5S22</i>		\$31,973,906	
December-21	<i>Balance 6S22</i>		\$31,900,607	
January-22	<i>Balance 7S22</i>		\$31,879,892	
February-22	<i>Balance 8S22</i>		\$36,681,542	
March-22	<i>Balance 9S22</i>		\$36,780,008	
	<i>Insurance Reimbursement from Diesel spill I-70 Glenwood Canyon Slides</i>	\$ 475,409		1000299989
		\$ (4,250,000)		Pending
April-22	<i>Pending Balance 10S22</i>		\$33,005,416	

**Transportation Commission Contingency COVID Reserve Fund Reconciliation  
Tenth Supplement FY 2022 Budget**

<b>Transaction Date</b>	<b>Transaction Description</b>	<b>Amount</b>	<b>Balance</b>	<b>Reference Document</b>
June-21	<i>Balance 12S21</i>		\$1,000,000	
July-21	<i>Balance 1S22</i>		\$1,000,000	
August-21	<i>Balance 2S22</i>		\$1,000,000	
September-21	<i>Balance 3S22</i>		\$1,000,000	
October-21	<i>Balance 4S22</i>		\$1,000,000	
November-21	<i>Balance 5S22</i>		\$1,000,000	
December-21	<i>Balance 6S22</i>		\$1,000,000	
January-22	<i>Balance 7S22</i>		\$1,000,000	
February-22	<i>Balance 8S22</i>		\$1,000,000	
March-22	<i>Balance 9S22</i>		\$1,000,000	
March-22	<i>Pending Balance 10S22</i>		\$1,000,000	

**Transportation Commission Program Reserve Fund Reconciliation  
Tenth Supplement FY 2022 Budget**

<b>Transaction Date</b>	<b>Transaction Description</b>	<b>Amount</b>	<b>Balance</b>	<b>Reference Document</b>
June-21	<i>Balance 12S21</i>		\$17,558,266	
July-21	<i>Balance 1S22</i>		\$17,199,014	
August-21	<i>Balance 2S22</i>		\$16,199,014	
September-21	<i>Balance 3S22</i>		\$16,199,014	
October-21	<i>Balance 4S22</i>		\$46,692,784	
November-21	<i>Balance 5S22</i>		\$46,692,784	
December-21	<i>Balance 6S22</i>		\$45,992,784	
January-22	<i>Balance 7S22</i>		\$45,992,784	
February-22	<i>Balance 8S22</i>		\$44,992,784	
March-22	<i>Balance 9S22</i>		\$44,843,734	
	<i>Federal reimbursement of DBE Support Services</i>	\$ 164,675		1000299903
April-22	<i>Pending Balance 10S22</i>		\$45,008,409	



**Transportation Commission Maintenance Reserve Reconciliation  
Tenth Supplement FY 2022 Budget**

<b>Transaction Date</b>	<b>Transaction Description</b>	<b>Amount</b>	<b>Balance</b>	<b>Reference Document</b>
June-21	<i>Balance 12S21</i>		<b>\$13,863,597</b>	
July-21	<i>Balance 1S22</i>		<b>\$13,863,597</b>	
August-21	<i>Balance 2S22</i>		<b>\$13,863,597</b>	
September-21	<i>Balance 3S22</i>		<b>\$13,863,597</b>	
October-21	<i>Balance 4S22</i>		<b>\$13,863,597</b>	
November-21	<i>Balance 5S22</i>		<b>\$13,863,597</b>	
December-21	<i>Balance 6S22</i>		<b>\$13,863,597</b>	
January-22	<i>Balance 7S22</i>		<b>\$13,863,597</b>	
February-22	<i>Balance 8S22</i>		<b>\$13,863,597</b>	
March-22	<i>Balance 9S22</i>		<b>\$13,863,597</b>	
	<i>Snow and Ice Distribution</i>	\$ (3,173,000)		1000299675
April-22	<i>Pending Balance 10S22</i>		<b>\$10,690,597</b>	

**Transportation Commission Contingency Reserve Fund  
Emergency and Permanent Repairs-Nonparticipating costs and state match**

**No Activity**



FY 2021-2022 Contingency Reserve Fund Balance Projection		
March TC Contingency Balance (Emergencies)	\$32,879,892	
<i>Pending Requests:</i>		
Insurance Reimbursement Diesel Spill	\$475,409	
I-70 Glenwood Canyon Slides	(\$4,250,000)	
Pending March TC Contingency Reserve Balance	\$29,105,301	
<i>Projected Outflow:</i>		
	Low Estimate	High Estimate
State Match for Emergency Relief/Permanent Recovery	(\$2,000,000)	(\$5,000,000)
<i>Projected Inflow:</i>		
	Low Estimate	High Estimate
I-70 Glenwood Canyon Slides Repayment	\$0	\$10,000,000
Projected FY 2021-2022 YE Contingency Balance	\$27,105,301	\$34,105,301
<b>TCCRF Surplus (Deficit) to Reach \$25M Balance July 1, 2022</b>	<b>\$2,105,301</b>	<b>\$9,105,301</b>

FY 2021-2022 Program Reserve Fund Balance Projection		
March TC Program Reserve Balance	\$45,992,784	
<i>Pending Requests:</i>		
FHWA Reimbursement DBE Supportive Services	\$164,675	
Pending March TC Program Reserve Fund Balance	\$46,157,459	
<i>Projected Outflow:</i>		
	Low Estimate	High Estimate
	\$0	\$0
<i>Projected Inflow:</i>		
	Low Estimate	High Estimate
Reimbursement for US85 Settlement Loan Region 4	\$18,060,000	\$18,060,000
FRPR Loan Repayment	\$1,620,000	\$1,620,000
Projected FY 2021-2022 YE Program Reserve Balance	\$65,837,459	\$65,837,459

FY 2021-2022 Maintenance Reserve Fund Balance Projection		
March TC Maintenance Reserve Balance	\$13,863,597	
<i>Pending Requests:</i>		
Snow and Ice Distribution	(\$3,173,000)	
Pending March TC Maintenance Reserve Fund Balance	\$10,690,597	
<i>Projected Outflow:</i>		
	Low Estimate	High Estimate
	\$0	\$0
<i>Projected Inflow:</i>		
	Low Estimate	High Estimate
	\$0	\$0
Projected FY 2021-2022 YE Maintenance Reserve Balance	\$10,690,597	\$10,690,597





**CTIO**  
COLORADO  
**Transportation  
Investment Office**

**TO:** THE COLORADO TRANSPORTATION COMMISSION  
**FROM:** NICK FARBER, CTIO DIRECTOR, AND SIMON LOGAN, CTIO LIAISON AND PROGRAM COORDINATOR  
**SUBJECT:** CENTRAL 70 GLOBEVILLE & ELYRIA-SWANSEA (GES) TOLLING EQUITY PROGRAM CTIO AND CDOT IAA  
**DATE:** APRIL 21, 2022

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**Purpose:**

To present the Intra Agency Agreement (IAA) between the Colorado Transportation Investment Office (CTIO)<sup>1</sup> and the Colorado Department of Transportation (CDOT) for start-up and program administration costs in the initial years of the Central 70 GES Tolling Equity Program. The funds, totaling \$1 million, will be drawn from the Central 70 project contingency fund in one lump sum payment.

**Action**

CTIO staff is seeking approval of Proposed Resolution #9 authorizing the IAA between CTIO and CDOT for startup and program administration costs for the Central 70 GES Tolling Equity Program.

**Background:**

The 2017 Record of Decision (ROD) for the Central 70 project included a commitment for CTIO to explore ways to provide discounted access to the Express Lanes for low-income residents of the Globeville and Elyria-Swansea (GES) neighborhoods. As a result, CTIO embarked on a year-long process to comply with this commitment.

This effort included significant engagement with peer agencies nationwide, the GES community, and other local stakeholders. CTIO staff presented an overview of the steps taken between March 2021 and March 2022 to develop a program option to bring to the CTIO Board of Directors for approval on April 20<sup>th</sup>, 2022. See the TC Packet from March for further background information.

**Overview of the IAA**

IAAs between CDOT and HPTE document the substantive terms of how CDOT and CTIO work together and allocate rights and responsibilities on shared projects. This IAA states that CDOT agrees a payment of \$1 million to CTIO for start-up and program administration costs of the Central 70 GES Tolling Equity Program drawn from the existing Central 70 project contingency fund. The administration costs are estimated at an average of \$100,000 per year over ten years.

**Options/Decision Matrix**

1. **Staff recommendation:** Approve the IAA between CDOT and CTIO
2. Review but do not approve the IAA. Provide instructions on changes or revisions.

**Next Steps**

- CTIO will work with E-470 on how to integrate the CTIO program into the existing back office.
- CTIO will identify an organization that is already active and trusted within the community to support GES resident outreach.
- A program launch and community outreach are anticipated in the fall of 2022, three months ahead of tolling go live.
- Per the IAA, CTIO will submit to CDOT an annual progress report on the implementation of the GES Tolling Equity Program prior to January 15<sup>th</sup> of each fiscal year.

**Attachments**

- A. Central 70 GES Tolling Equity Program Intra-Agency Agreement
- B. TC Proposed Resolution #9

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<sup>1</sup> The High Performance Transportation Enterprise (HPTE) is now doing business as the Colorado Transportation Investment Office (CTIO). CTIO is how the enterprise refers to itself now and in the future. However, the HPTE name is retained for legislative and legal documents.

**CENTRAL 70 GLOBEVILLE & ELYRIA-SWANSEA (GES) TOLLING EQUITY  
PROGRAM INTRA-AGENCY AGREEMENT**

THIS AGREEMENT (“**Agreement**”) is made this \_\_\_\_ day of \_\_\_\_\_, 2022 by and between the STATE OF COLORADO for the use and benefit of the COLORADO DEPARTMENT OF TRANSPORTATION (“**Department**” or “**CDOT**”) and the COLORADO HIGH PERFORMANCE TRANSPORTATION ENTERPRISE, a government-owned business and a division of CDOT (“**Enterprise**” or “**HPTE**”) (individually “**Party**” and collectively “**Parties**”).

**RECITALS**

A. CDOT is an agency of the State of Colorado authorized under § 43-1-105, C.R.S. to plan, develop, construct, coordinate, and promote an integrated transportation system in cooperation with federal, regional, local and other state agencies;

B. Under § 43-1-110, C.R.S., the executive director of CDOT, is authorized to execute certain agreements on behalf of CDOT;

C. HPTE was created under § 43-4-806(2), C.R.S. and operates as a government-owned business within CDOT;

D. Under § 43-4-806(6)(g), C.R.S., HPTE is empowered to enter into contracts or agreements with any public entity to facilitate a public-private partnership, including, but not limited to, an agreement in which the Enterprise, on behalf of CDOT, provides services in connection with a surface transportation infrastructure project;

E. HPTE is further empowered, under § 43-4-806(6)(h), C.R.S., to make and enter into all other contracts and agreements, including intergovernmental agreements under § 29-1-103, C.R.S., that are necessary or incidental to the exercise of its powers and performance of its duties;

F. The business purpose of HPTE, as provided for in § 43-4-806(2)(c), C.R.S. is to pursue public-private partnerships and other innovative and efficient means of completing surface transportation infrastructure projects, which HPTE may agree to complete for CDOT under agreements;

G. On or about November 17, 2017, HPTE and the Colorado Bridge and Tunnel Enterprise, a government-owned business within CDOT, on behalf of CDOT, entered into an agreement with Kiewit Meridiam Partners LLC for the Central I-70 Interstate Redevelopment Project (“**Project**”);

H. As part of the Project, HPTE committed to exploring ways to provide discounted access to planned Express Lanes for the low-income residents of the Globeville and Elyria Swansea (GES) neighborhoods;



I. HPTE established a Steering Committee and Stakeholder Advisory Group to guide the process and conducted a literature review and interviews with other tolling agencies across the nation that have or are in the process of implementing a tolling equity program;

J. HPTE held numerous meetings with the Steering Committee, the Stakeholder Advisory Group, GES residents, and City and County of Denver council members. Additionally, HPTE held two public meetings in the GES community and circulated a public survey to GES residents to understand community needs and travel patterns;

K. After the above-referenced feedback, HPTE determined that a program providing the following would make the most impact to the GES community: (1) eligible participants will receive a switchable transponder and promotional credit totaling a monetary value of one hundred dollars (\$100) when they enroll in the program, (2) additional funds will be made available annually for the GES community to decide how to allocate the funds either towards free transit passes or to add credit to the previously enrolled tolling equity Express Lanes accounts after the first year;

L. HPTE also explored a possible contribution to the program from CDOT. After discussion between the Parties, CDOT determined the Projects budget included funds available to cover the costs associated with start-up and program administration services HPTE will provide in the initial years of the program;

M. The Parties identified project start-up and administration costs to include, but are not limited to, management of third-party vendor staff time to register eligible residents of GES, marketing, promotional, and public outreach services, and periodic program evaluation services (“**Services**”);

N. To further the efficient completion of Project and CDOT’s development of an integrated transportation system, CDOT desires to fund HPTE’s start-up and program administration costs in creating a tolling equity program for GES residents affected by the Project;

O. HPTE shall continue to be an enterprise for purposes of Section 20 of Article X of the Colorado Constitution (“**TABOR**”), so long as it receives less than ten percent (10%) of its total revenues in grants from all Colorado state and local governments combined;

P. Under §§ 24-77-102(7)(b) and 43-4-803(13)(b), C.R.S., grants do not include revenues or income derived from any authorized rate, fee, assessment, or other charge imposed by an enterprise for the provision of goods or services by such enterprise.

Q. On March 11, 1997, in Opinion No. 97-01, the Colorado Attorney General also concluded, *inter alia*, that a designated enterprise may continue to qualify as an enterprise under TABOR, even though it receives a direct appropriation of monies, so long as the appropriation constitutes revenues resulting from the provision of goods or services under § 24-77-102(7)(b)(II), C.R.S.

R. Citing *Nicholl v. E-470 Public Highway Authority*, 896 P.2d 859 (Colo. 1995), the Colorado Attorney General further noted that the very concept of an enterprise under TABOR envisions an entity that is owned by a government institution but is financially distinct from it, and also, that the financial affairs of the enterprise must be those of a self-supporting business-like activity that provides goods and services for a fee;

S. On February 29, 2016, in Opinion 16-01, the Colorado Attorney General also concluded, *inter alia*, that an enterprise must charge a fee in exchange for a government service, and a fee for service arrangement – broadly construed – is nearly synonymous with enterprise status;

T. CDOT and HPTE each hereby affirm, consistent with Colorado law, amounts of money paid by CDOT to HPTE under this Agreement are not grants of money from CDOT to HPTE, but rather, payment for the Services to be provided by HPTE as more particularly set forth herein;

U. The Parties are authorized under law to execute this Agreement.

**NOW, THEREFORE, IN CONSIDERATION OF THE FOREGOING RECITALS, THE PARTIES TO THIS AGREEMENT HEREBY AGREE AS FOLLOWS:**

1. Scope of Work and Responsibilities.

a. HPTE shall provide Services for the GES Tolling Equity Program (“**Program**”) on the Project.

b. No later than January 15th of the fiscal year following the Effective Date, HPTE shall submit to CDOT a progress report on the Program. The progress report shall include a narrative summary of HPTE’s activities during the previous year and a report on HPTE’s progress performance of the Services.

2. Payment Amount and Procedures.

a. The Parties agree CDOT shall provide payment in the amount of One Million Dollars (\$1,000,000) to HPTE for the provision of the Services (“**Payment Amount**”).

b. The Services to be provided and the Payment Amount are for the start-up and administration costs covered by this Agreement, as may be amended from time to time. Services provided by HPTE hereunder shall be compensated as part of the Payment Amount.

3. Term. The term of this Agreement shall be from the date first executed by the HPTE Director below (“**Effective Date**”) until HPTE performs the Services unless the Parties mutually agree in writing to earlier termination (“**Term**”).

4. Availability of Funds. Payment under this Agreement is subject to and contingent upon the continuing availability of funds appropriated for the purposes hereof. If any of said

funds become unavailable, as determined by CDOT, either Party may immediately terminate or seek to amend this Agreement.

5. Record Keeping Requirements. HPTE shall maintain a complete file of all books, records, papers, accounting records, and other documents pertaining to its execution of the Services under this Agreement. It shall make such materials available to CDOT upon request for three (3) years.

6. Right to Audit. HPTE shall permit CDOT, the State Auditor and/or their designee(s) to inspect all records of HPTE and audit all activities which are or have been undertaken under this Agreement.

7. Consideration; Exchange Transaction. The Parties acknowledge that the mutual promise and covenants contained herein, and other good and valuable consideration, are sufficient and adequate to support this Agreement. The Parties further acknowledge that, for accounting purposes, this Agreement represents an exchange transaction for CDOT's purchase of specific services provided by HPTE at the market value of such services.

8. Dispute Resolution. Any dispute concerning the performance of this Agreement shall be referred to the CDOT Chief Engineer and the HPTE Director. Failing resolution by such officers, the dispute shall be submitted in writing by both parties to the State Controller, whose decision on the dispute shall be final.

9. Default; Termination. Any failure of either Party to perform per the terms of this Agreement shall constitute a breach of the Agreement. CDOT reserves the right to terminate this Agreement upon thirty (30) days written notice to HPTE of its nonperformance of the Services; provided, however, that HPTE shall not be in default under this Agreement if it has promptly commenced a cure of such nonperformance and is diligently pursuing the same. Any finding of nonperformance and failure to cure under this Section shall be referred for dispute resolution as provided in Section 9 before any termination becomes effective. In the event of termination, including voluntary termination by the Parties under Section 3, HPTE shall be required to reimburse CDOT for the value of the Services not yet completed as of the date of termination.

10. Delegation. Except as identified or otherwise implied herein, the duties and obligations of HPTE concerning the provision of the Services under this Agreement shall not be assigned, delegated, or subcontracted without the prior consent of CDOT. All subcontractors will be subject to the requirements of this Agreement.

11. Modification. This Agreement is subject to such modifications as may be required by changes in federal law, state law or their implementing regulations. Any such required modification shall automatically be incorporated into and be part of this Agreement on the effective date of such change as if fully set forth herein.

12. Severability. To the extent that this Agreement may be executed and performance of the obligations of the Parties may be accomplished within the intent of the Agreement, the terms of this Agreement are severable, and should any term or provision hereof be declared invalid or

become inoperative for any reason, such invalidity or failure shall not affect the validity of any other term or provision hereof.

13. Waiver. The waiver of any breach of a term, provision, or requirement of this Agreement shall not be construed or deemed as a waiver of any subsequent breach of such term, provision, or requirement, or of any other term, provision or requirement, or the same term, provision or requirement upon subsequent breach.

14. No Third-Party Beneficiaries. This Agreement shall inure to the benefit of and be binding only upon the Parties hereto and their respective successors and assigns. No third party beneficiary rights or benefits of any kind are expressly or impliedly provided herein. It is expressly understood and agreed that the enforcement of the terms and conditions and all rights of action relating to such enforcement shall be strictly reserved to the Parties. Nothing contained in this Agreement shall give or allow any claim or right of action whatsoever by any other third person. The express intention of the Parties is that any such person or entity, other than CDOT or HPTE, receiving services or benefits under this Agreement shall be deemed an incidental beneficiary only.

15. Entire Understanding. This Agreement is intended to integrate all understandings between the Parties completely. Any prior or contemporaneous addition, deletion, or other amendments hereto shall have no force or effect. Except as otherwise provided in this Agreement, no subsequent renewal, addition, deletion, or other amendments hereto shall have any force or effect unless embodied in a writing executed and approved by the Parties.

16. Governmental Immunity. No term or condition of this Agreement shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, of the Colorado Governmental Immunity Act, C.R.S. § 24-10-101 *et seq.*, or the Federal Tort Claims Act, 28 U.S.C. §§ 1346(b) and 2671 *et seq.*, as applicable now or hereafter amended.

17. Adherence to Laws. During the performance of this Agreement, HPTE shall strictly adhere to all applicable federal and state laws, rules, and regulations that have been or may hereafter be established, including, but not limited to state and federal laws respecting discrimination and unfair employment practices.

18. Legal Authority. The Parties each warrant that they possess the legal authority to enter into this Agreement and that each has taken all actions required by its procedures, by-laws, and/or applicable law to exercise that authority and to lawfully authorize its undersigned signatory to execute this Agreement and to bind CDOT or HPTE, as applicable, to its terms. The persons executing this Agreement on behalf of CDOT and HPTE each warrant that they have full authority to execute this Agreement.

19. Notices. All communications relating to the day-to-day activities for the work shall be exchanged between representatives of CDOT and HPTE. All communication, notices, and correspondence shall be addressed to the individuals identified below. From time to time, either Party may designate in writing new or substitute representatives.

If to CDOT:

Steve Harelson, Chief Engineer  
Colorado Department of Transportation  
2829 W. Howard Place, 5<sup>th</sup> Floor  
Denver, CO 80204

If to HPTE:

Nicholas Farber  
HPTE Director  
Colorado Department of Transportation  
2829 W. Howard Place, 5<sup>th</sup> Floor  
Denver, CO 80204

20. Controller's Approval. This Agreement shall not be deemed valid until the State Controller or such assistant has approved it as they may designate.

*[Signature page follows.]*

**IN WITNESS WHEREOF**, the parties hereto have executed this Agreement as of the day and year first above written.

STATE OF COLORADO  
Jared S. Polis, Governor

COLORADO HIGH PERFORMANCE  
TRANSPORTATION ENTERPRISE

By: \_\_\_\_\_  
SHOSHANA LEW  
EXECUTIVE DIRECTOR  
DEPARTMENT OF TRANSPORTATION

By: \_\_\_\_\_  
Nicholas Farber  
HPTE DIRECTOR

APPROVED AS TO FORM:

Philip J. Weiser  
ATTORNEY GENERAL

By: \_\_\_\_\_  
ASSISTANT ATTORNEY GENERAL

**ALL CONTRACTS REQUIRE APPROVAL BY THE STATE CONTROLLER**

**§ 24-30-202, C.R.S. requires the State Controller to approve all State Contracts. This Agreement is not valid until signed and dated below by the State Controller or delegate of the State of Colorado.**

**STATE CONTROLLER**  
**Robert Jaros, CPA, MBA, JD**

By: \_\_\_\_\_

Date: \_\_\_\_\_



**COLORADO**

**Department of Transportation**

Division of Transportation Development  
2829 W. Howard Place  
Denver, CO 80204-2305

## MEMORANDUM

**TO:** THE TRANSPORTATION COMMISSION  
**FROM:** REBECCA WHITE, DIRECTOR, DIVISION OF TRANSPORTATION DEVELOPMENT  
JANE HANN, MANAGER, DTD ENVIRONMENTAL PROGRAMS BRANCH  
**DATE:** APRIL 20, 2022  
**SUBJECT:** CDOT 2021 ENVIRONMENTAL AWARDS

### Purpose

Presentation of the CDOT 2021 Environmental Awards at the April 2022 Transportation Commission Meeting.

### Action

No action required. Announcement and recognition of award winners for the CDOT 2021 Environmental Awards.

### Background

For 2021, there were 19 total submittals in four categories. The selection panel comprised seven representatives from three regions and EPB and included a broad range of experience and disciplines.

### 2021 Award Winners:

#### Innovative Environmental Process

#### CDOT Donations of Rare Plants and Shale Rock to Denver Botanic Gardens Display

Submitted by: Vanessa Santistevan, Region 4 Environmental

Team Members Involved: Jason Roth, CDOT Region 4 Environmental Project Manager;



Christopher Willis, CDOT Nederland patrol; Mike Bone, Denver Botanic Gardens; Kevin Williams, Denver Botanic Gardens; Sonya Anderson, Denver Botanic Gardens; Jennifer Ramp Neale, Denver Botanic Gardens

### **Environmental Support by Maintenance**

#### **Chattanooga Beaver Exclusion Fence Project**

Submitted by: Tim Funk, Region 5 Environmental

Team Members Involved: Clint Rhoades Region 5 Maintenance, Kyle Benke Region 5 Maintenance

### **Special Contributor**

#### **Presley Fowler, Region 1 Deputy Communications Manager: Region 1 History Videos Project**

Submitted by: Barbara Stocklin-Steeley, Region 1 Historian

### **Project Winner**

#### **Partnering Creates Environmental Wins for US 36 Flood Recovery**

Submitted by: Brian Varrella, Region 4 PE II

Team Members Involved: Stacy DeWitt, R4 PE I; Brian Varrella, R4 PE II; Monte Malik, R4 PE I; Nicholas Schipanski, R4 Environmental; Jason Roth, R4 Environmental; Various other CDOT specialty units and staff; Flatiron Construction; US Forest Service; Colorado Parks and Wildlife; Atkins Global; RockSol; and Jacobs Engineering

### **Next Steps**

N/A

### **Attachments**

- Summary of CDOT 2021 Environmental Awards
- Presentation - CDOT 2021 Environmental Awards







**COLORADO**

Department of Transportation

# CDOT 2021 Environmental Awards

## April 21, 2022



## Four Award Categories

- Innovative Environmental Process
- Environmental Support by Maintenance
- Special Environmental Contributor
- Best Environmental Project



## Innovative Environmental Process

*CDOT Donations of Rare Plants and Shale Rock to Denver Botanic Gardens Display*

**Team Members Involved:** Jason Roth, CDOT Region 4 Environmental Project Manager; Christopher Willis, CDOT Nederland patrol; Mike Bone, Denver Botanic Gardens; Kevin Williams, Denver Botanic Gardens; Sonya Anderson, Denver Botanic Gardens; Jennifer Ramp Neale, Denver Botanic Gardens



Jason Roth



Christopher Willis





## Environmental Support by Maintenance

*Chattanooga Beaver Exclusion Fence Project*

Team Members Involved: Clint Rhoades Region 5  
Maintenance, Kyle Benke Region 5 Maintenance



Clint  
Rhoades



KYLE  
BENKE





## Special Environmental Contributor

*Presley Fowler, Region 1 Deputy Communications Manager: Region 1 History Videos Project*



Presley Fowler



Feb. 2021 Region 1 History Feature: Historic Streetcar Systems of Colorado Study  
119 views · 9 months ago

CDOT Employee Channel

This Region 1 History Feature is about the Historic Streetcar Systems of Colorado Study. The study documented the history of ...



Jan. 2021 Region 1 History Feature: The History of KOA  
139 views · 10 months ago

CDOT Employee Channel

This Region 1 History Feature is the history of the KOA facility out on East Colfax Avenue and Tower Road



September 2021 Region 1 History Feature: History of the Old South Holly Street Complex  
199 views · 2 months ago

CDOT Employee Channel

September's Region 1 history feature is about the old Region 1 Headquarters Building at 2000 S Holly. When the site was being ...



May Region 1 History Feature: Shep the Turnpike Dog  
88 views · 6 months ago

CDOT Employee Channel

Join Presley Fowler, Region 1 Communications Coordinator, and Barbara Stocklin-Steely,



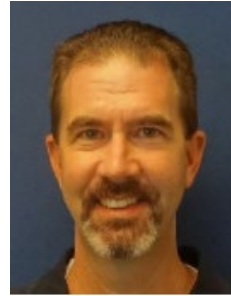
## Best Environmental Project

*Partnering Creates Environmental Wins for US 36 Flood Recovery*

Team Members Involved: Stacy DeWitt, R4 PE I; Brian Varrella, R4 PE II; Monte Malik, R4 PE I; Nicholaus Schipanski, R4 Environmental; Jason Roth, R4 Environmental; Various other CDOT specialty units and staff; Flatiron Construction; US Forest Service; Colorado Parks and Wildlife; Atkins Global; RockSol; and Jacobs Engineering



STACY DEWITT



Brian Varrella



Jason Roth



MONTE MALIK



Nicholaus Schipanski

**Colorado Bridge and Tunnel Enterprise Board**  
**Meeting Minutes**  
**March 17, 2022**

PRESENT:           Yessica Holguin, District 1  
                  Don Stanton, District 2  
                  Eula Adams, District 3  
                  Karen Stuart, Chair, District 4  
                  Kathleen Bracke, District 5  
                  Barbara Vasquez, District 6  
                  Kathy Hall, Vice Chair, District 7  
                  Mark Garcia, District 8  
                  Lisa Hickey, District 9  
                  Terry Hart, District 10  
                  Gary Beedy, District 11

AND: Staff members, organization representatives, and broadcast publicly

An electronic recording of the meeting was made and filed with supporting documents in the Transportation Commission office.

In March, the Bridge and Tunnel Enterprise Board of Directors

- Approved Resolution #BTE1: the minutes from the February Board Meeting
- Approved Resolution #BTE2: Bridge & Tunnel Enterprise 7th Budget Supplement for FY'22
- Approved Resolution BTE#3: FY2022 RAISE Grant Applications
- Approved Resolution BTE#4: FY2022-23 Final Budget Allocation Plan



## MEMORANDUM

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**TO: THE BRIDGE AND TUNNEL ENTERPRISE BOARD OF DIRECTORS**  
**FROM: JEFF SUDMEIER, CHIEF FINANCIAL OFFICER**  
**DATE: APRIL 21, 2022**  
**SUBJECT: EIGHTH SUPPLEMENT TO THE FISCAL YEAR 2021-22 BRIDGE AND TUNNEL ENTERPRISE BUDGET**

### Purpose

This month the Bridge Tunnel Enterprise (BTE) Board of Directors (Board) is being asked to approve a budget supplement request for two projects located in Region 2 and Region 4:

- 1) Region 2: To increase to the construction phase budget for H-13-G (US 285 over South Fork of the South Platte River) in Park County.
- 2) Region 4: To establish the miscellaneous phase budget to allow for the Long Lead Time Procurement (LLTP) of Concrete Box Culverts (CBCs) for the replacement of the BTE eligible structures C-22-K & D-24-O as part of the Eastern Plains Timber Bridge Project - Package 2.

### Action

Staff is requesting Board approval of Proposed Resolution #BTE2, the eighth budget supplement to the Fiscal Year 2021-22 BTE budget.

### Background

Region 2: H-13-G, US 285 over South Fork South Platte River

Request to increase the construction phase budget to continue construction activities for the BTE eligible H-13-G, US 285 over South Fork South Platte River. Construction funding was originally approved by the Board on October 15, 2020. This poor-rated, scour critical bridge has remained in the top tier of the Bridge Prioritization Plan since it was initially programmed and funded. The project was awarded and proceeded to construction, however, the use of US285 as a detour route during closures of Glenwood Canyon in the summer of 2021 prevented the closure of the bridge and the associated detour work. In late September 2021, the approval to close the bridge was given, but the project team determined that it was too late in the season to close the bridge and proceed with construction given the high probability that severe weather at the site would result in additional inefficiencies due to winter shutdown. Due to the owner-caused delay, the project is incurring additional costs including items such as remobilization, increased material costs, and increased labor costs. In addition, the schedule change reduced CDOT staff availability and resulted in the need for increased consultant participation for project construction management activities.



**US 285 over South Fork South Platte River in Park County**  
 (Old H-13-G) (New H-13-H) (SAP Project # 22865/1000...)  
*Budget Components by Phase, Funding Program, Fiscal Year*

Phase of Work	Funding Program	Current Budget	BE Supplement Action				Revised Budget	Expended To-Date
			Year of Budget			Total Request		
			FY 2022	FY 2023	FY 2024			
Design	<i>FASTER Bridge Funds</i>	\$ 473,405	\$ -	\$ -	\$ -	\$ -	\$ 473,405	\$ 473,405
	<b>Total Design</b>	\$ 473,405	\$ -	\$ -	\$ -	\$ -	\$ 473,405	\$ 473,405
Construction	<i>FASTER Bridge Funds</i>	\$3,662,750	\$ 1,094,800	\$ -	\$ -	\$ 1,094,800	\$ 4,757,550	\$ 925,781
	<b>Total Construction</b>	\$ 3,662,750	\$ 1,094,800	\$ -	\$ -	\$ 1,094,800	\$ 1,094,800	\$ 925,781
<b>Total Project Budget &amp; Expenditure</b>		\$ 4,136,155	\$ 1,094,800	\$ -	\$ -	\$ 1,094,800	\$ 1,568,205	\$ 1,399,186
			Year of Expenditure			Total Request		
			FY 2022	FY 2023	FY 2024			
			\$ 200,000	\$ 894,800	\$ -	\$ 1,094,800	Timber	

Region 4: Eastern Plains  
 Bridge Project – Package 2

Request to establish the Miscellaneous Phase for the LLTP of CBCs for the replacement of C-22-K on US 6 in Morgan County and D-24-O on US 34 in Washington County being delivered using construction manager/general contractor (CM/GC) procurement. Due to the price escalation and limited availability of precast CBCs, purchasing the structures in advance of construction will help lower schedule risk and potentially reduce cost when compared to waiting for the project to negotiate the Construction Agreed Price (CAP) with the contractor in July and then ordering the CBCs. Both bridges are top tier structures in the January 2022 Bridge Prioritization Plan.

The two CBCs are part of the second package of the Eastern Plains Timber Bridge Replacement Program. In total, the entire project will replace seven BTE-eligible structures and three non-eligible structures throughout eastern Colorado. The additional non-eligible structures have been combined with the BTE eligible structures into one project to leverage economies of scale.

**Eastern Plains Timber Bridge Project - Package 2 in Morgan and Washington Counties**  
 (C-22-K, D-24-O) (New 006J372826BL, 034B198852BL) (SAP Project # 24405/1000...)  
*Budget Components by Phase, Funding Program, Fiscal Year*

Phase of Work	Funding Program	Current Budget	BE Supplement Action				Revised Budget	Expended To-Date
			Year of Budget			Total Request		
			FY 2022	FY 2023	FY 2024			
Design	<i>FASTER Bridge Funds</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	<b>Total Miscellaneous</b>	\$ -	\$ 30,700	\$ -	\$ -	\$ 30,700	\$ -	
Miscellaneous	<i>FASTER Bridge Funds</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	<b>Total Miscellaneous</b>	\$ -	\$ 326,500	\$ -	\$ -	\$ 326,500	\$ -	
<b>Total Project Budget &amp; Expenditure</b>		\$ -	\$ 357,200	\$ -	\$ -	\$ 357,200	\$ -	
			Year of Expenditure			Total Request		
			FY 2022	FY 2023	FY 2024, FY 2025			
			\$ 357,200	\$ -	\$ -	\$ 357,200		

**Next Steps**

- 1) Approval of the budget supplement and Resolution #BTE2 will provide the necessary budget to allow the construction phase of H-13-G to continue.
- 2) Approval of the budget supplement and Resolution #BTE2 will allow for the LLTP of CBCs for the Eastern Plains Timber Bridge Program - Package 2 BTE eligible structures, C-22-K & D-24-O, to proceed.

**Attachments**

Attachment A: Proposed Resolution #BTE02



**MEMORANDUM**

**TO:** THE TRANSPORTATION COMMISSION  
**FROM:** JEFF SUDMEIER, CDOT CHIEF FINANCIAL OFFICER  
**DATE:** APRIL 21, 2022  
**SUBJECT:** MONTHLY CASH BALANCE UPDATE

**Purpose**

To provide an update on cash management, including forecasts of monthly revenues, expenditures, and cash balances in Fund 400, the State Highway Fund.

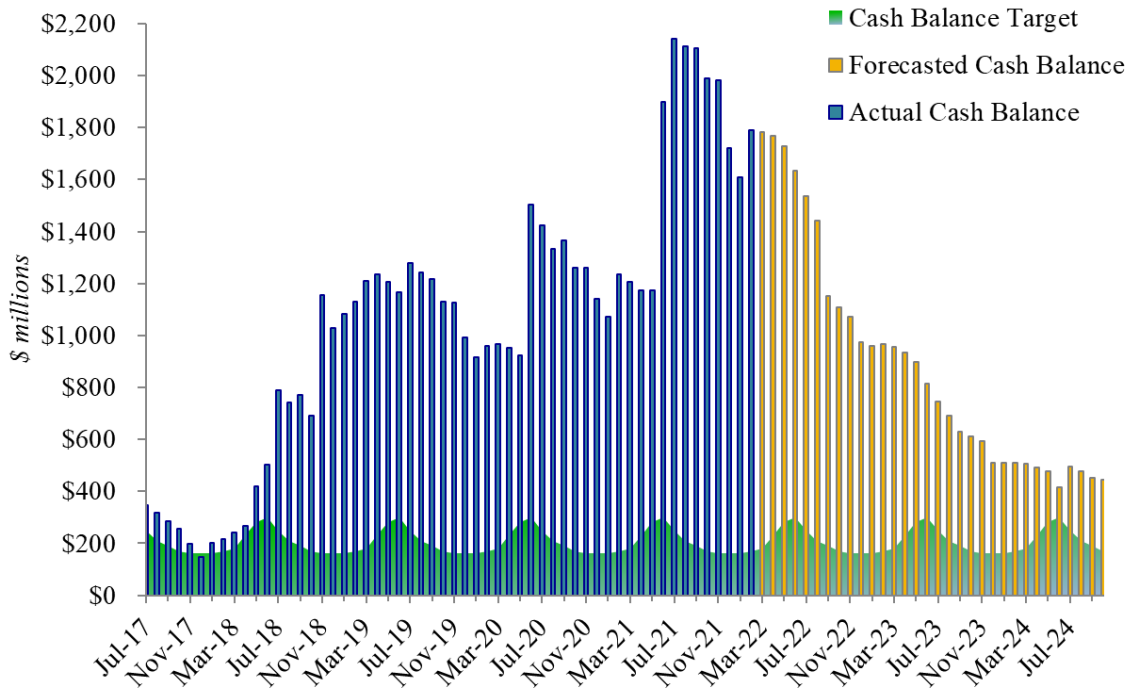
**Action**

No action is requested or required at this time.

**Background**

Figure 1 below depicts the forecast of the closing Fund 400 cash balance in each month, as compared to the targeted minimum cash balance for that month (green shaded area). The targeted minimum cash balances reflect the Transportation Commission’s directive (Policy Directive #703) to limit the risk of a cash overdraft at the end of a month to, at most, a probability of 1/1,000 (1 month of 1,000 months ending with a cash overdraft).

*Figure 1 – Fund 400 Cash Forecast*





### Summary

Due to the events in response to the global COVID-19 pandemic, the Department anticipated a significant and immediate impact to revenue collections, followed by a longer downturn overall. The current forecast continues to assume a 2.5% reduction in pre-pandemic monthly gross gallons of gasoline consumed from July 2021 through June 2022. Staff will modify fuel sale assumptions as traffic patterns continue to adjust.

The actual closing cash balance for February 2022 was \$1.79 billion; \$1.62 billion above that month's cash balance target of \$170 million. February's cash balance is comprised of \$882 million in the State Highway Fund, and \$910 million in the Senate Bill 267 trustee account. February's closing cash balance for the State Highway Fund is \$168 million higher than January's forecast of that balance due to the addition this month of \$182,160,000 from Fund 40C (SB-21-260 ARPA stimulus funds) to the cash balance. The February 2022 forecasted vs. actual cash balance was \$14M, due to higher than expected FHWA reimbursements, offset by lower than anticipated State revenues and local contributions.

The large cash balance results from the additional revenues listed below.

### Cash Revenues

The forecast of revenues and capital proceeds includes:

Senate Bill 17-267: \$425 million in November 2018, \$560 million in June 2020, \$623 million in June 2021, and \$0 thereafter.

Senate Bill 18-001: \$346.5 million in July 2018, and \$105 million in July 2019.

Senate Bill 19-262: \$60 million in July 2019.

Senate Bill 21-110: \$30 million in May 2021

Senate Bill 21-260: \$182 million in June 2021, and \$170 million in July 2021

Senate Bill 21-265: \$124 million in July 2021

The forecast does not include \$500 million of revenues in FY22 from SB 17-267 COP proceeds. The cash balance forecast continues to report on only projects and revenues related to the State Highway Fund, and does not include revenue and expenditures associated with any pre-existing or new enterprises created through SB 21-260, including:

- Statewide Bridge and Tunnel Enterprise
- Clean Transit Enterprise
- Nonattainment Area Air Pollution Mitigation Enterprise

Cash balances will be drawn down closer to the target balances over the course of fiscal years 2022, 2023, and 2024 as projects funded with SB 18-001, SB 17-267, and SB 19-262 progress through construction.





**Cash Payments to Construction Contractors**

The current forecast of payments to construction contractors under state contracts (grants paid out under inter-government agreements for construction are accounted for elsewhere in the expenditure forecast) from Fund 400 is shown in Figure 2 below.

*Figure 2 – Forecasted Payments - Existing and New Construction Contracts*

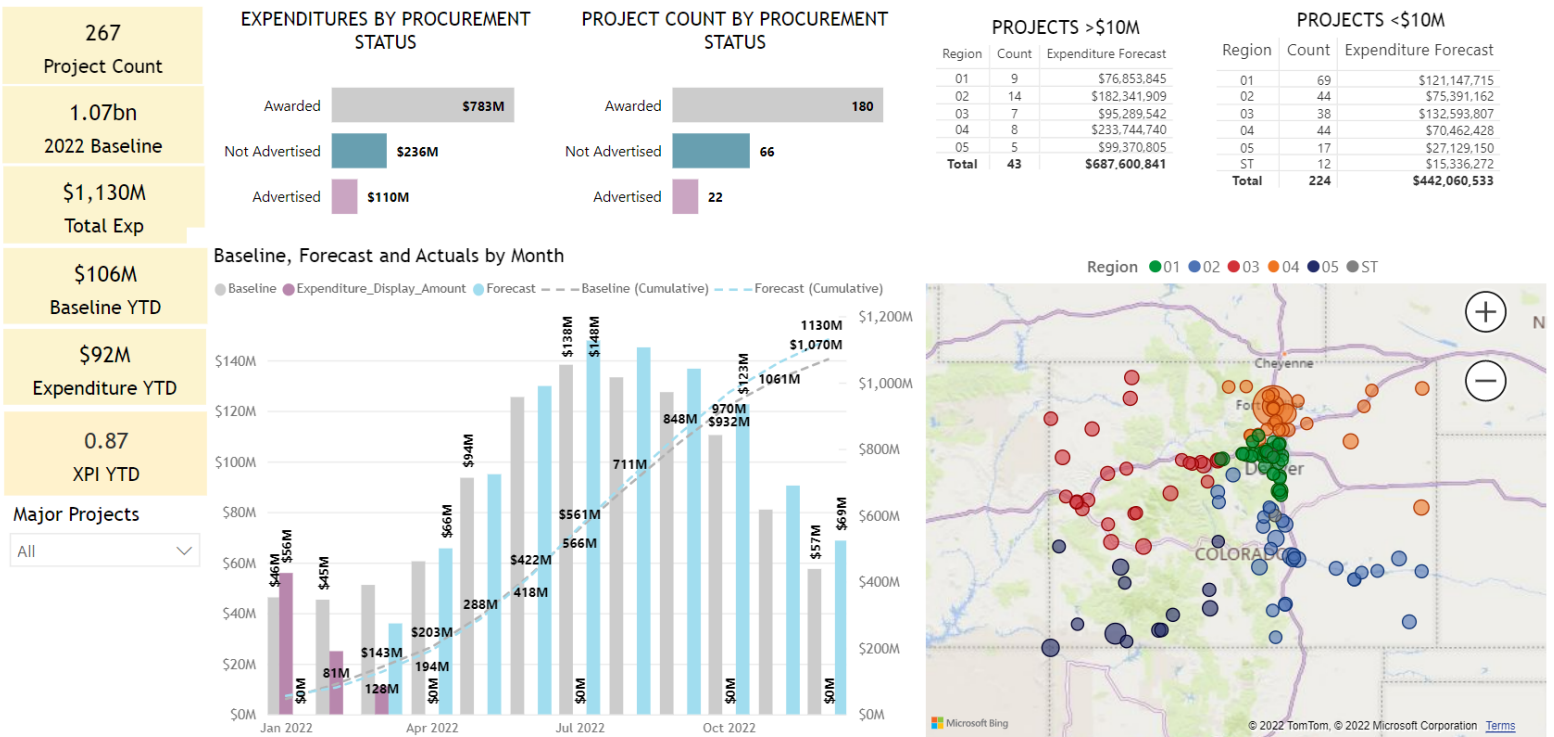
\$ millions	CY 2017 (actual)	CY 2018 (actual)	CY 2019 (actual)	CY 2020 (actual)	CY 2021 (actual)	CY 2022 (forecast)	CY 2023 (forecast)	CY 2024 (forecast)
Expenditures	\$642	\$578	\$669	\$774	\$714	\$937	\$685	\$420

The graph below details CY22 baseline, forecast, and actual expenditures (based on February month end SAP data). Results to date correlate with an XPI of .87(actual expenditures vs. baseline); listing of number of projects planned to incur construction expenditures in CY22; listing of CY22 baseline and project count by procurement status (awarded, not advertised and advertised); and count of projects by region that have CY22 forecast greater than \$10 million dollars and less than \$10 million dollars.



**CY22 Construction Activity Overview**

Help Reset Filter Feedback





**MEMORANDUM**

**TO: THE TRANSPORTATION COMMISSION**  
**FROM: JEFF SUDMEIER, CHIEF FINANCIAL OFFICER**  
**DATE: APRIL 21, 2022**  
**SUBJECT: FY 2021-22 Q3 ANNUAL REVENUE FORECAST UPDATE**

---

**Purpose**

To provide a quarterly update to the annual Highway User Tax Fund (HUTF) revenue forecast.

**Action**

This is for information purposes only. No action is requested from the Transportation Commission at this time.

**Background**

The Office of Financial Management and Budget (OFMB) maintains an annual revenue model that is used to guide CDOT's budget-setting process. OFMB's revenue team updates the model each quarter to monitor the course of a current year's fiscal performance, as well as inform the budget for future out-years. Some of the data used by the model includes, but is not limited to:

- National economic performance indicators, such as the year-over-year percent change in real U.S. GDP growth.
- State population and demographic data, annual vehicle miles traveled (VMT) in Colorado, and the historical performance of the state's HUTF.
- Bureau of Labor Statistics & Bureau of Economic Analysis data, such as historical and forecasted year-over-year percent changes in personal income and the consumer price index.
- The forecasted and aggregated annual interest rates on new car loans, and future retail gasoline prices from the Energy Information Administration.
- Estimated vehicle costs, including federal or state rebates for certain vehicles, as well vehicle fuel efficiency, and annual vehicle scrappage rates.

The model also includes federally or state-appropriated funding from grants or other sources, such as the Federal Highway Administration and Federal Transit Administration (FHWA & FTA), and the National Highway Traffic Safety Administration (NHTSA).

The Department uses the revenue forecast to develop the Annual Revenue Allocation Plan using outputs from this model. During the annual budget development process, CDOT staff reconcile annual projected revenues with approved requests for expenditures. Staff provides draft and final versions of the Revenue Allocation Plan for formal review and approval by the Transportation Commission. The final plan becomes CDOT's official budget for the next fiscal year.

**Summary**

CDOT's revenue forecast for motor fuel consumption and vehicle registrations in FY 2021-22 and FY 2022-23 is largely the same as last quarter's projection.

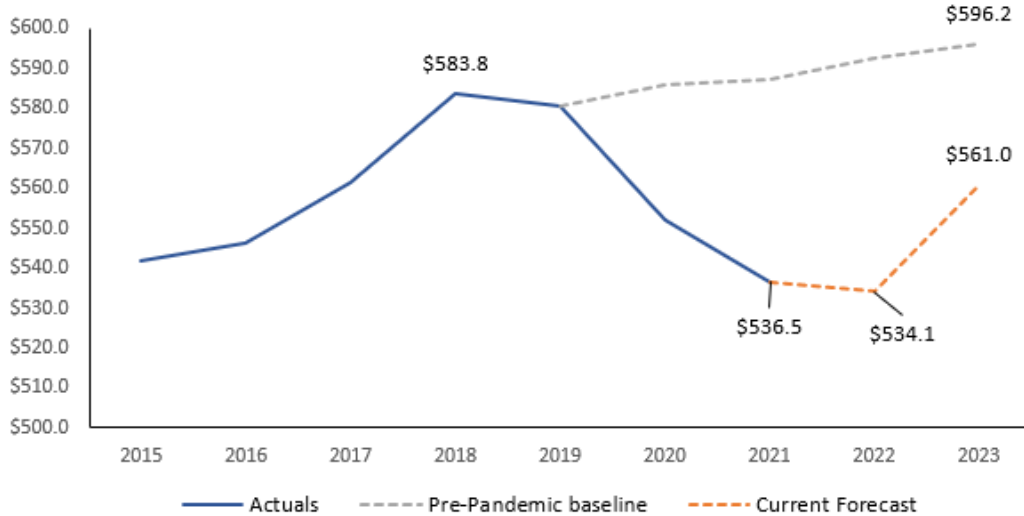
The figure below represents the estimated HUTF distributions to CDOT based on the latest quarterly forecast update relative to the baseline of assumed revenues prior to the onset of the COVID-19 pandemic.





**CDOT HUTF Distribution Outlook**

FY 2021-22 Q3 Forecasts, Actuals, and Pre-Pandemic Baseline  
 in millions \$



**Colorado VMT**

The state’s Vehicle Miles Traveled (VMT), as measured by the Division of Transportation Development (DTD), remained variable in the spring and early summer. However, statewide VMT from June to October largely reached parity with the 2019 traffic patterns, with year-over-year VMT growing slightly since 2019 in most months.

**FASTER Safety Reduction**

SB 21-260: “Sustainability of the Transportation System” reduced the FASTER Road Safety Surcharge by \$11.10 in 2022 and \$5.55 in 2023. It is estimated that these discounts will decrease statewide FASTER revenues by \$30.4 million in FY 2021-22 and \$46.3 million in FY 2022-23. Although this will decrease the total amount of FASTER revenue to CDOT, this impact will be partially offset by using \$18.0 million in state stimulus funds to backfill this lost revenue.

While fuel and registration revenue projections are improved compared to estimates one year ago, the total estimated decrease in FASTER fees to CDOT will outpace those gains. Staff plans to address any revenue shortfall through the Department’s normal revenue reconciliation process, which occurs after the final accounting close of the fiscal year. Staff anticipates bringing this to the Commission at that time.

**Office of State Planning and Budget (OSP) and Legislative Council Staff (LCS) September Forecasts**

Each quarter, the Office of State Planning and Budgeting (OSP) and Legislative Council Staff (LCS) provide quarterly forecasts to the Joint Budget Committee. These forecasts are used as the basis for statewide budget planning.

Additionally, both statewide forecasts show state revenue significantly surpassing the Referendum C TABOR Cap. Much of this revenue increase is driven by increased cash fund revenue. Since TABOR refunds are paid from the General Fund, the additional cash fund revenue will squeeze the General Fund budget in future years. While this won’t directly impact CDOT cash fund revenue, it may disrupt future General



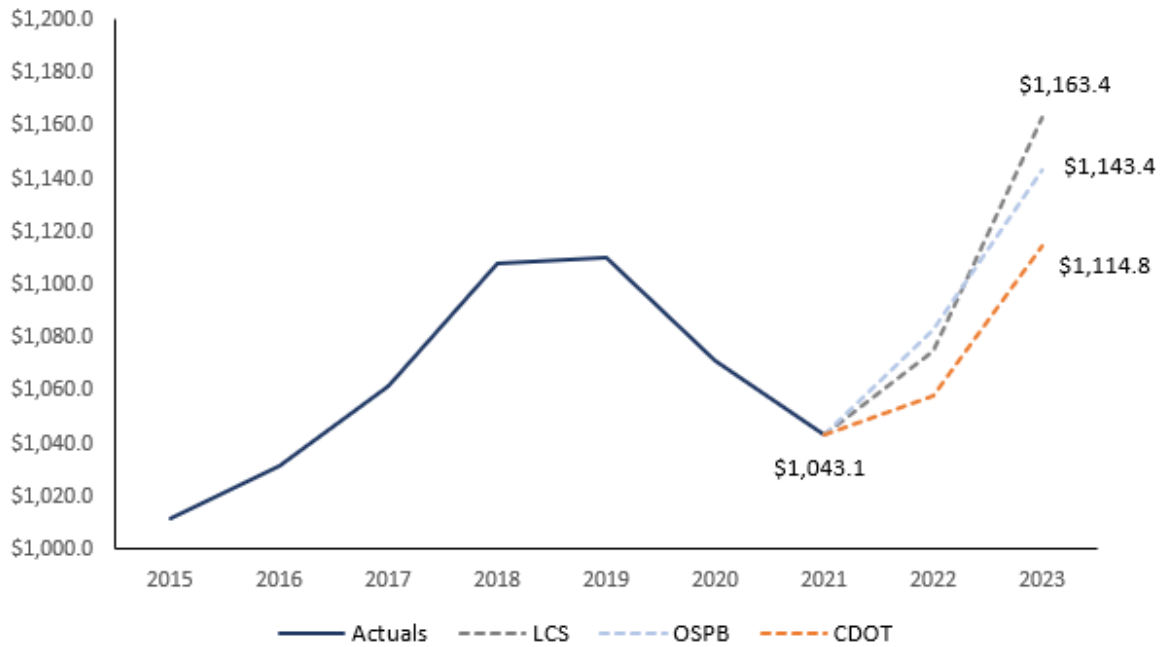


Fund transfers if the General Assembly decides to reallocate the General Fund budget elsewhere to cover other commitments.

### CDOT, LCS, and OSPB Statewide HUTF Forecasts

FY 2021-22 Forecasts and Actuals

Millions \$





# COLORADO

## Department of Transportation

Division of Transportation Development  
2829 W. Howard Place  
Denver, CO 80204-2305

**DATE:** April 15, 2022  
**TO:** Transportation Commission  
**FROM:** Amber Blake, Director, Division of Transit and Rail  
Rebecca White, Director, Division of Transportation Development (DTD)  
**SUBJECT:** 10-Year Plan Update - Transit

### Purpose

The purpose of this memo is to provide the Transportation Commission (TC) with an update on the 10-Year Plan transit considerations that were discussed at the March TC meeting regarding funding for Transit Operations and Maintenance.

### Action

No action is required. This memo is for informational and discussion purposes only.

### Background

The 10-Year Plan is being updated to reflect state SB260 and federal infrastructure bill revenues, along with the recently adopted GHG pollution reduction planning rules, and the progress thus far in delivering the original first four years of the 10-Year Plan. This plan update has provided an opportunity to take a more strategic approach toward planning, transparency and accountability as transit projects are more fully integrated into the 10-Year plan. As we work to update the plan for the reasons noted above, staff is considering the following transit specific issues, Transit Allocation Target, Transit Equity Target, Statewide Transit Operations and Maintenance.

### Details

This memo follows last month's discussion on transit projects within the plan and the need for dedicated long-term transit operations and maintenance funding. The helpful input we received from the Commission has led to the approach outlined below.

### Statewide Transit Operations and Maintenance (O/M)

The development of a comprehensive multimodal 10-Year plan moves the Department towards achieving its vision and the Commission's guiding principles. As transit becomes a more prominent part of our state transportation system, ensuring dedicated long-term funding for State transit and operations is critical.

In March, Staff presented an approach to the State Transportation Advisory Committee (STAC) and Transit and Rail Advisory Committee (TRAC) that would fund State Transit O/M and rolling stock within the 10 Year Plan before applying the regional equity formula. However, this approach impacted the transit funding available within the 10 Year Plan for regional capital transit projects. Based on the discussions with STAC, TRAC and Plan stakeholders, an alternative approach to funding State Transit O/M was developed and presented to the Transportation Commission at the March TC workshop.



The alternative approach removes State Transit Operations and Maintenance from the 10 Year Plan. Rollingstock and other transit capital projects remain in the 10 Year Plan. To make this work, the state's MMOF dollars (the 15% CDOT receives) would be removed as a funding source for the plan and focused entirely on transit O/M. In addition, staff is evaluating a combination of other funds to fully meet the O/M funding needs (including, but not limited to: Non-Attainment Enterprise, CMAQ, and the SB260 Retail Delivery Fee). This approach provides focused funding for State transit O/M needs, while maintaining the original 10 Year Plan fiscal transit equity funding allocations amongst the regions. Moreover, this approach separates State transit operations and maintenance projects from capital construction projects (all modes) increasing transparency and clarity in the planning process.

TC received a brief summary of this alternative at the March meeting. After discussions with STAC, Stakeholders, and the TC, the alternative approach has received support. Staff will continue to move forward based on the alternative approach outlined. This will include further refinement of a four-year funding plan. As costs and funding plans are finalized, we anticipate returning to the TC for appropriate funding approval actions via budget amendment, supplement, or resolution.

**Next Steps:**

DTR will continue to work in partnership with DTD and the Regions on the plan's development.



# COLORADO

## Department of Transportation

Office of the Executive Director

2829 W. Howard Place  
Denver, CO 80204-2305

April 21, 2022

Mr. Jeff Kraft  
Director of Business Funding and Incentives  
Colorado Office of Economic Development  
1600 Broadway, Suite 2500  
Denver, Colorado 80202

Dear Mr. Kraft,

The Colorado Department of Transportation (CDOT) respectfully requests a one-year extension of the Burnham Yard Interagency Loan Agreement per section 7(a) of the May 26, 2021, Burnham Yard Interagency Loan Agreement. Over the previous eleven months, CDOT and the Colorado High-Performance Transportation Enterprise (HPTE) have made progress towards the transportation planning process and towards hiring an owner's representation to assist with the development of the property.

### OVERVIEW

#### Burnham Yard Purchase

Burnham Yard (the property) is located in central Denver between four of Denver's main road arteries: I-25, Colfax Avenue., Speer Boulevard, and 6th Avenue, and is less than one mile from Empower Field at Mile High, the Denver Art Museum, and Denver's Central Business District. It is a centrally located area that is currently not being utilized. The site sits across from the Denver Housing Authority's Mariposa District redevelopment and the Santa Fe Arts District to the east, with RTD's 10th & Osage light rail station located near the center of the site. The banana-shaped property is approximately one mile long and extends from 13th Avenue at its northern extent to 4th Avenue at the south. Reaching its maximum width of approximately 0.20 miles between 8th and 9th Avenues, the site is bounded by the RTD's light rail lines, UPRR historical right-of-way to the east, and a mixture of commercial and industrial properties to the west.

UPRR decommissioned Burnham Yard in 2016, leaving it mostly unused for the past five years. Since late 2019, the HPTE worked with the UPRR to purchase the Burnham Yard property, culminating in an Intra-Agency Agreement with CDOT in September 2019 that requested qualified developers to submit proposals that would add value to UPRR's RFQ. Despite the developers' best efforts and UPRR's willingness to negotiate, CDOT and HPTE found little value-added based on the proposals received. As a result, UPRR and HPTE agreed to negotiate in good faith for a fee simple transaction with no third-party developer.

In May of 2021 HPTE borrowed \$40 million to acquire the property through two bank loans. CDOT contributed \$7.5 million from SB 267 transit funds, and the Colorado Economic Development Commission also contributed \$7.5 million. HPTE set aside approximately \$5 million to cover environmental, land use planning, and/or other costs during the next three to five years on improvements to the property, which would be expected to increase property value and facilitate a disposition to a developer. CDOT and HPTE anticipate retaining around 17 acres for future transportation uses, and, after planning work associated with this RFP is near complete, HPTE will be working with the City and County of Denver and stakeholders to complete a small area planning process, determine specific community, land use, mobility, and other infrastructure needs, and potentially identify purpose and need for other potential projects.

### PLANNING PROGRESS

With the \$5 million set aside to facilitate land use planning and the property's disposition to a developer, the HPTE is finishing up work on two requests for proposals (RFP). The transportation planning study will primarily focus on track alignment through the property so the Consolidate Main Lane's, CDOT's, Front Range Passenger Rail's, and



RTD's right-of-way needs can be determined. Hiring an owner's representative for the development will allow the HPTE to start the City and County of Denver's (the City's) planning process, which will likely increase the value of the remnant parcel(s)

### **Transportation Planning Study**

HPTE has determined that the City's planning process can commence concurrently while HPTE/CDOT determines the transportation uses, mainly track alignments for the relocated CML, expanded RTD light rail, and FRPR right-of-way through the property. CDOT has also determined that the funds do not exist for the widening of I-25 between 6th Avenue and Alameda Avenue and that only relocating the CML off I-25 must be studied; therefore, the Federal Railroad Administration's (FRA) National Environmental Policy Act (NEPA) process for the project must be followed. FRA has indicated to HPTE that a pre-NEPA process that examines track alignment, noise and vibration, historic analysis, environmental conditions, and public input must be completed before moving into NEPA. HPTE is nearing completion of a Requests for Proposals for this work that will cover track alignment options (including the potential addition of two to three lines), meeting facilitation with stakeholders, coordinating with the HPTE's Owner's Representative, noise and dust analysis, and leveraging Front Range Passenger Rail planning efforts. Once the transportation planning process has been completed, CDOT and HPTE will move forward with a NEPA study that will conduct additional public outreach, analyze air quality, noise and vibration, historic aspects of the property, hazardous materials, visual impacts, analyze environmental justice issues, water resources, and other biological resources.

### **Burnham Yard Project Manager**

Once the transportation planning work has commenced, CDOT and HPTE plan to hire a Project Manager to assist with the City's planning process. The Project Manager will serve as a part of the HPTE and CDOT team staff, providing professional advice on large development and transit-oriented development in the City, assisting with the City's Large Development Review and Infrastructure Master Planning Process, advising HPTE on development implications, site plan impacts, and economic considerations of various transportation and planning-related determinations, represent the HPTE in all aspects of the City's Small Area and Master Planning processes and participate in meeting facilitation with stakeholders. HPTE and CDOT expect the City's planning process to take two to two and a half years.

### **NEXT STEPS**

HPTE plans to issue the RFPs in the coming weeks and have the work started by this summer. The transportation planning work is expected to take eight months to a year to complete, and the project manager's work will largely coincide with the City's planning work, which is expected to take two years. CDOT, HPTE, and OEDIT are also in discussions about hiring an OEDIT project manager who would oversee the owner's representative as that kind of work is more suited to OEDIT than CDOT. Over the next year, CDOT and HPTE plan to coordinate with OEDIT staff on this work, and we will report back to the EDC as significant milestones are reached.

Regards,

Shoshana Lew  
Executive Director, Colorado Department of Transportation





**MEMORANDUM**

**TO:** COLORADO TRANSPORTATION COMMISSION  
**FROM:** HERMAN STOCKINGER, DEPUTY DIRECTOR AND DIRECTOR OF POLICY  
**DATE:** APRIL 8TH, 2022  
**SUBJECT:** PROGRESS UPDATE TO TRANSPORTATION COMMISSION ON CURRENT AND FORTHCOMING COMPETITIVE GRANT APPLICATIONS FOR FUNDING UNDER IIJA DISCRETIONARY PROGRAMS

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**Purpose**

To share progress on current RAISE applications; discuss projects for submittal and funding opportunities by CDOT under the MPDG program; and provide brief overviews of the NSBP and 5339 programs.

**Action**

No action this month. Similar to last month, the BTE will be asked to support the bridge components of project application on I-76 and US 160 in May.

**Background**

The U.S. Department of Transportation (USDOT) recently released the 2022 Notice of Funding Opportunities for:

1. REBUILDING AMERICAN INFRASTRUCTURE WITH SUSTAINABILITY AND EQUITY (RAISE): Formerly known as BUILD and TIGER.
2. MULTIMODAL PROJECTS DISCRETIONARY GRANT PROGRAM (MPDG): A combined solicitation for three grant programs: 1) The Nationally Significant Multimodal Freight and Highways Projects (INFRA); 2) the National Infrastructure Project Assistance Program (Mega); and 3) The Rural Surface Transportation program (Rural).
3. NATIONAL SCENIC BYWAYS PROGRAM (NSBP): NSBP grants will support projects related to the planning, design, development, construction, management, protection, and/or marketing of a State of Tribal scenic byway or scenic byway program. Only State DOTs and Indian Tribes are eligible to apply, but local entities are encouraged to coordinate their own applications for CDOT to submit on their behalf.
4. 5339(b) and 5339(c): A combined solicitation for the Low or No Emission Vehicle Program and the Bus and Bus Facilities Program. Local entities are encouraged to coordinate their own applications for CDOT to submit on their behalf.

Eligible applicants can submit up to three applications for RAISE; up to three unique applications for each subprogram of MPDG (nine applications total) or can use a single application to submit for multiple subprograms at once; and there does not seem to be an explicit limit on applications for the NSBP or the 5339 programs.

MPDG applications will be evaluated based on the following criteria:

- Safety
- State of Good Repair
- Economic Impacts, Freight Movement, and Job Creation
- Climate Change, Resiliency, and the Environment
- Equity, Multimodal options, and Quality of Life

- Innovative Technology, Project Delivery, and Financing

Other notable details of the MPDG program are:

- Up to \$1B will be available for the Mega subprogram in FY22
- Up to \$1.55B will be available for the INFRA subprogram in FY22
- Up to \$300M will be available for the Rural subprogram in FY22
  - Only approximately \$30M will be available for “small” projects that request under \$25M in grant award funding.
- INFRA is the only program with precedent from previous years; Mega and Rural are new funding opportunities through IJA.
  - INFRA project eligibility has been expanded this year to include wildlife crossing projects; marine highway corridor projects; projects on the National Multimodal Freight Network; surface transportation projects within or adjacent to an international border crossing; and transportation facilities owned by a Federal, State, or local government entity.

#### Details

Based on the criteria in the NOFOs and discussions with executive management, the following candidate projects have been identified for the RAISE and MPDG solicitations:

#### **RAISE - Previously reviewed in detail with Commission in March**

1. Mobility Options for a Vibrant and Equitable (MOVE) Western Slope: The Westward Three
2. US 6th & Wadsworth Boulevard Interchange Improvements
3. SH/CO119 Safety and Mobility Project
  - a. Boulder County will be submitting this application with support from CDOT to increase competitiveness

#### **MPDG**

1. The I-70 Floyd Hill to Veterans Memorial Tunnels Improvements Project (INFRA & Mega)
  - a. Complete final construction on the stretch of I-70 west of Denver to improve safety, travel time, and trip reliability; benefit nearby communities; provide resiliency to the corridor and its infrastructure; and foster new economic opportunities by improving recreation access and facilitating efficient freight movement.
2. The US50B Passing Lanes Project (Rural)
  - a. Construct westbound and eastbound passing lanes along six segments between Pueblo and the Kansas state line in the rural southeastern Colorado along US50B and implement safer wildlife crossings to make traveling through the corridor safer, faster, and more comfortable.
3. The US40 Passing Lanes Project (Rural)
  - a. Construct two passing lanes (one eastbound and one westbound) on a segment of US40 between Kremmling and Steamboat Springs, to improve traveler safety and operational efficiency with safe passing locations and standard width shoulders, prioritize other safety and mobility improvements, and increase resiliency of a high profile detour route for I-70 closures.
4. The I-76 Reconstruction and Repavement Project (Rural & INFRA)
  - a. Reconstruction of 1.45 miles of concrete pavement, replacement of four bridges, two concrete box culverts, conversion of the partial clover interchange into a tight diamond, and installation of a park-n-ride and potential transit facility to improve overall operational efficiencies for commercial freight traffic and safety and accessibility of

multimodal transportation.

5. The US160 Safety and Mobility Improvement Projects (Rural & INFRA)
  - a. Construction of a four-lane facility with 1.5-mile two-way left turn lane, expansion of 2.5 miles of two-lane highway to four lanes with a center median, construction of a round-a-bout, addition of five wildlife underpasses and deer fencing, and other safety and mobility improvements to address notable safety concerns and significant congestion issues on US 160, east of Durango.
  - b. Because CDOT is already committing to three applications under the Rural subprogram, CDOT will be supporting this application to be submitted by La Plata County.

#### **Options and Recommendation**

The Bridge and Tunnel Enterprise (BTE) Board of Directors, through their Resolution in March, is supporting the 6th and Wadsworth RAISE application with a commitment of \$20M in BTE match funding to this project should it be awarded funds through RAISE.

The I-76 Reconstruction and Repavement Project and the US160 Safety and Mobility Improvement Projects will be requesting BTE match funding for eligible bridge components for resolution during the May 2022 Transportation Commission.

#### **Next Steps**

The RAISE grant applications are due on April 14th, 2022.

The MPDG applications are due on May 23rd, 2022.

The 5339(b & c) applications are due on May 31st, 2022.

The NSBP letters of intent are due April 25th, 2022, and applications are due on June 20th, 2022.



MEMORANDUM

TO: TRANSPORTATION COMMISSION

FROM: REBECCA WHITE, DIRECTOR, DIVISION OF TRANSPORTATION DEVELOPMENT  
JAMIE COLLINS, STIP MANAGER, DIVISION OF TRANSPORTATION DEVELOPMENT

DATE: APRIL 21, 2022

SUBJECT: INFORMATION REGARDING THE STIP PUBLIC HEARING AND PUBLIC COMMENT PERIOD FOR  
THE FY2023 - FY2026 STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

Purpose

To provide background and contact information regarding the STIP Public Hearing and the public comment period for the FY2023 - FY2026 STIP.

Action

This memo serves as the formal request to open the Public Hearing during the Transportation Commission's regular meeting on April 21, 2022.

Background

The STIP is a four-year plan of transportation projects and is developed pursuant to 23 U.S.C. 135. At this time, the Draft FY2023 - FY2026 STIP has been released for public review and comment. As part of the comment period, the Transportation Commission holds a public hearing to allow for further comments on the plan. The public hearing will take place during the Commission's regular meeting on April 21, 2022. The public comment period will close on Wednesday, May 11, 2022.

This year's STIP acknowledges both state and federal funding initiatives (SB260 and the Infrastructure Investment and Jobs Act (IIJA)).

Comments regarding the STIP may be submitted to Jamie Collins, STIP Manager at [jamie.collins@state.co.us](mailto:jamie.collins@state.co.us). The Draft STIP can be found on the external CDOT website [here](#).

Next Steps

Staff will return to the Transportation Commission in May to request adoption of the FY2023 - FY2026 STIP.





# COLORADO

## Department of Transportation

Region 1

Transportation Director  
2829 W. Howard Place  
Denver, CO 80204-2305

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**TO:** THE TRANSPORTATION COMMISSION  
**FROM:** JESSICA MYKLEBUST, R1 TRANSPORTATION DIRECTOR  
**DATE:** 04/08/2022  
**SUBJECT:** I-270 CRITICAL BRIDGES REPLACEMENT PROJECT

### Purpose

Several I-270 bridges were built over 50 years ago and have reached the end of their service life. The proposed I-270 Critical Bridges Replacement Project contains 8 closely spaced bridges (4 pairs of structures) which in combination present a growing maintenance challenge for CDOT Region 1. Frequent emergency closures to repair holes within the I-270 travel lanes cause significant impacts to traffic, exposure to maintenance workers, and coordination with Class 1 railroads (BNSF and UP). 6 of these 8 structures are rated as 'poor' and eligible for replacement using Bridge & Tunnel Enterprise funds.

### Action

CDOT is briefing the Transportation Commission on an approach to address infrastructure safety issues along I-270 with a bridges replacement project between York Street and Vasquez Boulevard.

### Background

The ongoing Environmental Assessment (EA) for I-270 has been extended to perform additional air quality modeling and analysis in response to SB-260 Greenhouse Gas rulemaking. The proposed Bridges Replacement Project was created to address the safety concerns of failing infrastructure within the corridor. The subject bridges are located within a 1-mile segment centrally located within the 6-mile EA boundary, between the York Street and Vasquez Boulevard interchanges. The preliminary cost estimate for the critical bridges replacement project is \$175 Million. Funding sources for design and construction include Bridge & Tunnel Enterprise and SB-267 funds.

### Next Steps

Further details will be worked on to determine final scope, schedule, delivery method, and funding for the I-270 Critical Bridges Replacement Project. As the region continues to move forward, we will be coming back to you to discuss these items and perhaps ask for your approval if we move to an alternative delivery method.

### Attachments

April TC I-270 Critical Bridges Project Presentation







# I-270 Critical Bridges Replacement Project

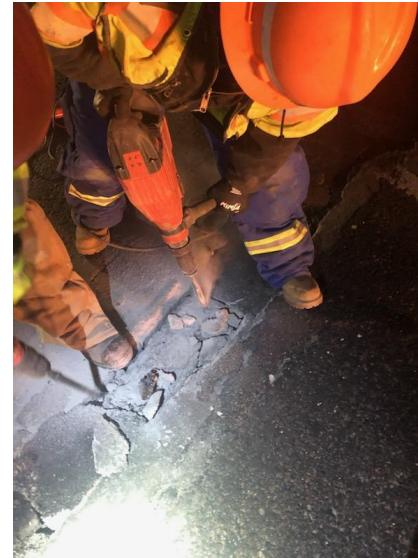
April, 2022





# I-270 bridges in critical condition

- ❖ Several bridges built over 50 years ago are now at the end of their service life and require frequent emergency repairs which impact the traveling public, railroad operations, and maintenance staff
- ❖ Over 300 emergency maintenance repairs since 2006 totaling over \$1M
- ❖ narrow shoulders





# Critical Bridge Locations





# Conceptual Project Scope

- ❖ Replacement of 8 structures (4 pairs, most pairs to be replaced with a single bridge) between Vasquez Blvd. and York St. Of these, 6 structures are BTE-eligible
- ❖ Pavement: Full reconstruction at bridge approaches
- ❖ Total project length = approx. 1.3 miles
- ❖ \$175M preliminary estimate



# Project Funding

- ❖ Bridge & Tunnel Enterprise
- ❖ SB 267 I-270 funds as needed



# I-270 Corridor Background

- ❖ The reconstruction of I-270 is a critical project for the region - addresses long-standing safety, structural, and congestion issues
- ❖ I-270 has been a significant part of the 10-Year Plan, following the completion of Central 70, it will become one of the region's largest projects
- ❖ Total Project Cost is \$600 M (includes express lanes direct connect to I-70)
- ❖ Environmental Assessment (EA) study began in May 2020
- ❖ CDOT's focus on the environment--as well as new legislative requirements--require the highest level of community outreach and in-depth analysis on air quality
- ❖ Replacing safety critical bridges is first step of corridor improvements



# I-270 Bridges Next Steps

- ❖ Finalize scope, schedule, and budget for a bridge replacement project
- ❖ Finalize Project Delivery Selection Matrix
- ❖ If Alternative Delivery is selected:
  - Alternative Delivery Recommendation Memo to Chief Engineer
  - Hold Industry Public Briefing
  - Seek approval from Transportation Commission on Alternative Delivery Method