

# Appendix H: Project Categorization Table

## CO 52 PEL

### Categorization of Potential Projects

#### Worksheet Overview

##### **Categorization Tab**

Potential projects for the CO 52 corridor are listed in arbitrary order from west to east.

A Project ID is assigned to each project for worksheet cross-references purposes only.

Based on its estimated effectiveness in addressing each element of purpose and need, each project is rated with a score of 1 to 5 for each respective element.

A low to high range of estimated cost is provided for each project.

Ease of implementation is summarized for each project, regarding impact on environmental resources, alignment with local community support, and need for right-of-way.

##### **Score Definitions Tab**

Definitions and assumptions of the rating methods are described for each topic

##### **Intersection Improvements Tab**

Details of the potential improvements at each intersection are summarized

Improvements on roadway segments are grayed out

##### **Funding Sources Tab**

Typical funding sources are briefly described including eligibility criteria

##### **Funding Categories Tab**

For each potential project, its expected eligibility of funding categories are identified

## CO 52 PEL

### Categorization of Potential Projects

#### Instructions

On the Categorization Tab, select any cell within the body of the table.

From the "Home" tab on the Excel Ribbon, click on the Sort and Filter button (1) and choose Filter (2) - Skip if drop-down arrows are already present in the Header (Row 2).

In the Header (Row 2), click on the drop-down arrow in the column you wish to sort by (3) and select the sort method (4)

To restore the table to the default order, sort the Project ID column from Smallest to Largest (5).

The screenshot displays the Excel interface with the following elements:

- Excel Ribbon:** The 'Home' tab is active, showing the 'Sort & Filter' button (1) and the 'Filter' option (2) in the dropdown menu.
- Table:** A table with the following data:

| Purpose & Need Measurements    |                       |  |                    | Environment |
|--------------------------------|-----------------------|--|--------------------|-------------|
| Operational Improvements Score | Traveler Safety Score | Multimodal Infrastructure & Safety Score | Overall Need Score |             |
| 3                              | 3                     | 5  | 11                 |             |
| 1                              | 3                     | 5  | 9                  |             |
| 4                              | 1                     | 4  | 11                 |             |
| 1                              | 1                     | 5  | 7                  |             |
| 2                              | 1                     | 5  | 8                  |             |
| 1                              | 1                     | 5  | 7                  |             |
| 3                              | 3                     | 5  | 11                 |             |
| 3                              | 1                     | 5  | 9                  |             |
| 4                              | 5                     | 4  | 13                 |             |
| 5                              | 1                     | 4  | 10                 |             |
| 5                              | 3                     | 2  | 10                 |             |
- Sort Menu:** The 'Overall Need Score' header dropdown (3) is open, showing 'Sort Smallest to Largest' (4) selected.
- Filter Menu:** The 'Project ID' header dropdown (5) is open, showing 'Sort Smallest to Largest' selected.

## CO 52 PEL

### Categorization of Potential Projects

#### P&N Measurements Score

##### Operational Improvements (Quantitative score )

- 1 Would not improve intersection LOS or segment travel time
- 2 Low potential to improve intersection LOS (1 peak hour letter grade)
- 3 Moderate potential to improve intersection LOS (2 peak hour letter grades) or segment travel time (5% to 15% change)
- 4 Above average potential to improve intersection LOS (3 peak hour letter grades)
- 5 High potential to improve intersection LOS (3 peak hour letter grades) or segment travel time (>15% change)

##### Traveler Safety (Qualitative score)

- 1 Not expected to improve safety.
- 3 Expected to have a positive safety impact.
- 5 Improves safety by addressing an identified safety issue.

##### Multimodal Infrastructure and Safety (Qualitative score)

- 1 Does not provide multimodal infrastructure or safety improvements
- 2 Provides minor improvements such as widening of existing shoulders that are already four-feet or greater
- 3 Provides shoulders of at least four-foot width where no multimodal facilities already exist
- 4 Provides on-street bicycle lanes or other dedicated improvements
- 5 Provides separated bicycle/pedestrian infrastructure, such as multi-use path

#### Ease of Implementation - Brief Summary of Key Data

##### ROW, Environmental, and Local Support

- Substantial challenges associated with ROW (involves acquisition of a structure), Environmental, and/or Local Support
- Moderate challenges associated with ROW (ROW line close to a structure), Environmental, and/or Local Support
- No anticipated challenges associated with ROW, Environmental, and/or Local Support

#### Cost Attributes

##### Cost Range

Highest cost items are roughly quantified. These items included at least pavement removal, proposed pavement, excavation and embankment, detour paving and structures (box culvert, bridges, and walls). A percentage of cost was applied to the other items that were not quantified including clearing and grubbing, minor drainage, and mobilization. An overall contingency of 40% was applied, in addition to 8% for a Force Account. The cost also assumed right-of-way, design, and NEPA.

**CO 52 PEL**

**Categorization of Potential Projects**

| <b>FUNDING SOURCE</b>  | <b>Project Type</b>   |
|--|---|
| RAISE Grant  | All (would have to be packaged)   |
| INFRA Grant  | All (would have to be packaged)   |
| Competitive Highway Bridge Program                               | All bridges (would have to be packaged)   |
| Surface Transportation Program (STP)-Metro                       | All intersections, multimodal, and segment projects                               |
| Congestion Mitigation and Air Quality (CMAQ) Improvement Program | All multimodal and congestion-related projects                                    |
| Transportation Alternatives Program (TAP)                        | All multimodal projects   |
| Asset Management: Surface Treatment                              | Only rehabilitation-focused segment projects                                      |
| Asset Management: Structures                                     | All projects affecting existing bridges   |
| Asset Management: Systems Operations                             | All intersections   |
| Asset Management: Geohazards Mitigation                          | Assumed not applicable at the PEL information level                               |
| Asset Management: Permanent Water Quality Management             | Major drainage improvements (not culvert replacements)                            |
| Safety: Highway Safety Improvement Program                       | Intersections   |
| Safety: Rail-Highways Crossings Program                          | Rail-highway crossings  |
| Safety: Hot Spots  | Intersections and reverse-curve (would need to be refined on site-specific basis) |
| Safety: FASTER Bridge  | Bridge projects   |
| Safety: FASTER Safety  | Intersections and reverse-curve (would need to be refined on site-specific basis) |
| Safety: ADA Compliance   | Intersections   |
| Mobility: Regional Priority Program                              | All   |
| Mobility: Strategic Projects                                     | All   |
| Mobility: National Highway Freight Program                       | Intersections   |
| Highways: Bridge Off-System                                      | None  |
| Transit and Multimodal: Safe Routes to School                    | Proximity to existing schools   |
| Transit and Multimodal: Transit Grant Program                    | None  |
| Transit and Multimodal: Multimodal Options Program               | Multimodal  |
| Property Tax   | All   |
| Tax Increment Financing (TIF) District                           | All   |
| Development Mitigation/Impact Fees                               | All   |
| Real Estate Transfer Tax   | All   |
| Land Contribution or Other Asset Sales                           | All   |
| Developer Contributions  | All   |

| Location and Project Description |  |  |  | Purpose & Need Measurements    |                       |  |                    | Ease of Implementation  |                           |   | Cost Attributes |               |
|----------------------------------|--|--|--|--------------------------------|-----------------------|--|--------------------|---|---------------------------|---|-----------------|---------------|
| Project ID                       | Segment  | Location                                       | Improvement  | Operational Improvements Score | Traveler Safety Score | Multimodal Infrastructure & Safety Score | Overall Need Score | Environment   | Local Planning            | Right-of-Way  | Low             | High          |
| 1                                | Segment 1<br>CO 119 to County Line Rd          | CO 119 to County Line Rd                       | 2-Lane Resurfacing<br>Shoulder Widening                      | 3                              | 3                     | 5  | 11                 | Three Historic Sites and Open Space   | No anticipated challenges | County Owned ROW and/or Conservation easements<br>ROW line close to structure   | \$ 41,200,000   | \$ 50,300,000 |
| 2                                | Segment 1<br>CO 119 to County Line Rd          | CO 119 to Monarch Pl                           | Multi-Use Trail  | 1                              | 3                     | 5  | 9                  | Three Historic Sites and Open Space   | No anticipated challenges | County Owned ROW and/or Conservation easements<br>ROW line close to structure   | \$ 2,200,000    | \$ 2,700,000  |
| 3                                | Segment 1<br>CO 119 to US 287                  | 71st Ave                                       | Intersection Improvements                                    | 3                              | 1                     | 5  | 9                  | Open space located near 71st street intersection , CO 52 Historic   | No anticipated challenges | County Owned ROW and/or Conservation easements<br>ROW line close to structure   | \$ 4,500,000    | \$ 5,500,000  |
| 4                                | Segment 1<br>CO 119 to US 287                  | 79th Ave                                       | Intersection Improvements                                    | 1                              | 1                     | 5  | 7                  | Crosses Boulder Left-hand ditch , Historic - Alan Farm House, and Boulder and White Rock Ditch, and CO 52, County owned open space that leads to a trail                                      | No anticipated challenges | County Owned ROW and/or Conservation easements  | \$ 9,000,000    | \$ 10,900,000 |
| 5                                | Segment 1<br>CO 119 to US 287                  | Hover St/95th Ave                              | Intersection Improvements                                    | 2                              | 1                     | 5  | 8                  | Bald Eagle habitat, CO 52 Historic  | No anticipated challenges | County Owned ROW and/or Conservation easements  | \$ 8,300,000    | \$ 10,100,000 |
| 6                                | Segment 1<br>US 287 to County Line Rd          | US 287 - Option 1                              | Intersection Improvements<br>(Traditional Configuration)     | 1                              | 1                     | 5  | 7                  | Johnson-Vallet Farm and Open space, sensitive noise receptors residential , CO 52 Historic  | No anticipated challenges | County Owned ROW and/or Conservation easements<br>ROW line close to structure   | \$ 11,800,000   | \$ 14,400,000 |
| 7                                | Segment 1<br>US 287 to County Line Rd          | US 287 - Option 2                              | Intersection Improvements<br>(Non-Traditional Configuration) | 3                              | 3                     | 5  | 11                 | Johnson-Vallet Farm and Open space, sensitive noise receptors residential , CO 52 Historic  | Substantial challenges    | County Owned ROW and/or Conservation easements<br>County support for non-traditional intersection lacking   | \$ 21,100,000   | \$ 25,800,000 |
| 8                                | Segment 2<br>County Line Rd to WCR 7           | County Line Rd                                 | Intersection Improvements                                    | 3                              | 1                     | 5  | 9                  | Potential for residential noise receptors   | No anticipated challenges | ROW line close to structure   | \$ 23,100,000   | \$ 28,300,000 |
| 9                                | Segment 2<br>County Line Rd to WCR 7           | WCR 3  | Intersection Improvements                                    | 4                              | 5                     | 4  | 13                 | CO 52 Historic  | No anticipated challenges | ROW line close to structure   | \$ 10,300,000   | \$ 12,500,000 |
| 10                               | Segment 2<br>County Line Rd to WCR 7           | WCR 5  | Intersection Improvements                                    | 5                              | 1                     | 4  | 10                 | CO 52 Historic, bald eagle habitat (nest), sensitive noise receptors (residential), proposed off-street trail paved   | No anticipated challenges | ROW line close to structure   | \$ 8,900,000    | \$ 10,800,000 |
| 11                               | Segment 2<br>County Line Rd to WCR 7           | County Line Rd to WCR 7                        | 4-Lane Widening<br>Shoulder Widening                         | 5                              | 3                     | 2  | 10                 | CO 52 Historic, bald eagle habitat (nest), sensitive noise receptors (residential), proposed off-street trail paved   | No anticipated challenges | ROW line close to structure   | \$ 30,400,000   | \$ 37,100,000 |
| 12                               | Segment 2<br>WCR 7 to I-25 SB FR               | WCR 7  | Intersection Improvements                                    | 4                              | 3                     | 4  | 11                 | CO 52 Historic and residential home historic, bald eagle habitat, sensitive noise receptors (residential).  | No anticipated challenges | No anticipated challenges   | \$ 10,300,000   | \$ 12,500,000 |
| 13                               | Segment 2<br>WCR 7 to I-25 SB FR               | WCR 7 to I-25 SB FR                            | 6-Lane Widening<br>Shoulder Widening                         | 3                              | 3                     | 4  | 10                 | CO 52 Historic, sensitive noise receptors (residential, place of worship, businesses with outdoor seating ), Bald eagle and red tailed hawk habitat   | Moderate challenges       | No anticipated challenges   | \$ 24,900,000   | \$ 30,500,000 |
| 14                               | Segment 2<br>I-25 NB FR to Silver Birch (York) | I-25 NB FR to Silver Birch (York)              | 6-Lane Widening<br>Shoulder Widening                         | 1                              | 3                     | 4  | 8                  | CO 52 Historic South Platte Supply Canal - Coalridge Ditch, wetlands, Red-tailed Hawk Habitat, existing on-street bike facility, Sensitive noise receptors (businesses with outdoor seating). | Moderate challenges       | No anticipated challenges   | \$ 28,100,000   | \$ 34,300,000 |
| 15                               | Segment 2<br>Silver Birch (York) to WCR 15     | Silver Birch Rd (York)                         | Intersection Improvements                                    | 3                              | 1                     | 4  | 8                  | CO 52 and Nelson Farm Historic, red-tail hawk habitat, south platte supply canal (wetlands)   | No anticipated challenges | No anticipated challenges   | \$ 14,300,000   | \$ 17,500,000 |
| 16                               | Segment 2<br>Silver Birch (York) to WCR 15     | Colorado Blvd                                  | Intersection Improvements                                    | 3                              | 1                     | 4  | 8                  | CO 52 UP (dent branch-segment) and Sharpe Farmstead Historic, sensitive noise receptors   | No anticipated challenges | No anticipated challenges   | \$ 10,000,000   | \$ 12,200,000 |
| 17                               | Segment 2<br>Silver Birch (York) to WCR 15     | Glen Creighton/Frederick Way                   | Intersection Improvements                                    | 4                              | 3                     | 4  | 11                 | CO 52 Historic, sensitive noise receptors, open space and trail,  | No anticipated challenges | No anticipated challenges   | \$ 10,200,000   | \$ 12,500,000 |
| 18                               | Segment 2<br>Silver Birch (York) to WCR 15     | WCR 15   | Intersection Improvements                                    | 4                              | 1                     | 4  | 9                  | CO 52 Historic, sensitive noise receptors   | No anticipated challenges | No anticipated challenges   | \$ 5,700,000    | \$ 6,900,000  |
| 19                               | Segment 2<br>Silver Birch (York) to WCR 15     | Silver Birch (York) to WCR 15                  | 4-Lane Widening<br>Shoulder Widening                         | 5                              | 3                     | 4  | 12                 | CO 52 Historic, sensitive noise receptors   | No anticipated challenges | No anticipated challenges   | \$ 19,800,000   | \$ 24,200,000 |
| 20                               | Segment 2<br>WCR 15 to WCR 19                  | Reverse Curves - Option 1                      | Realignment<br>(4% Superelevation)                           | 1                              | 3                     | 2  | 6                  | CO 52 Historic, oil well  | Moderate challenges       | Amount of ROW acquisition depends on superelevation design, but is expected to be substantial. WCR 17 improvements may include realignment/consolidation. | \$ 26,000,000   | \$ 31,700,000 |
| 21                               | Segment 2<br>WCR 15 to WCR 19                  | Reverse Curves - Option 2                      | Realignment<br>(6% Superelevation)                           | 1                              | 3                     | 2  | 6                  | CO 52 Historic, oil well  | No anticipated challenges | Amount of ROW acquisition depends on superelevation design, but is expected to be substantial. WCR 17 improvements may include realignment/consolidation. | \$ 26,500,000   | \$ 32,400,000 |
| 22                               | Segment 2<br>WCR 15 to WCR 19                  | WCR 15 to WCR 19                               | 2-Lane Resurfacing<br>Shoulder Widening (Interim)            | 1                              | 3                     | 2  | 6                  | CO 52 Historic, oil well  | Moderate challenges       | No anticipated challenges   | \$ 19,200,000   | \$ 23,400,000 |
| 23                               | Segment 3<br>WCR 19 to US 85                   | WCR 19 to US 85                                | 4-Lane Widening<br>Shoulder Widening                         | 5                              | 3                     | 2  | 10                 | CO 52 Historic, open space, park, sensitive noise receptors, potential for wetlands, oil wells  | No challenges             | No anticipated challenges   | \$ 13,000,000   | \$ 15,800,000 |
| 24                               | Segment 3<br>WCR 19 to US 85                   | WCR 19 to US 85                                | 2-Lane Resurfacing<br>Shoulder Widening (Interim)            | 1                              | 3                     | 2  | 6                  | CO 52 Historic, open space, park, sensitive noise receptors, potential for wetlands, oil wells  | Moderate challenges       | No anticipated challenges   | \$ 23,900,000   | \$ 29,100,000 |
| 25                               | Segment 3<br>US 85 to Denver Ave               | Through Fort Lupton                            | 2-Lane Resurfacing<br>Urban                                  | 3                              | 1                     | 5  | 9                  | CO 52 Historic, sensitive noise receptors (homes and businesses)  | Substantial challenges    | No anticipated challenges   | \$ 5,300,000    | \$ 6,500,000  |
| 26                               | Segment 3<br>US 85 to Denver Ave               | Through Fort Lupton                            | 4-Lane Widening<br>Urban                                     | 5                              | 3                     | 5  | 13                 | CO 52 Historic, sensitive noise receptors (homes and businesses)  | No challenges             | Acquisition of structure  | \$ 5,700,000    | \$ 7,000,000  |
| 27                               | Segment 3<br>Denver Ave to WCR 31              | Denver Ave to WCR 31                           | 4-Lane Widening<br>Urban                                     | 5                              | 3                     | 5  | 13                 | CO 52 Historic, potential for wetlands, sensitive noise receptors, scattered oil wells  | No challenges             | ROW line close to structure   | \$ 5,400,000    | \$ 6,500,000  |
| 28                               | Segment 3<br>Denver Ave to WCR 31              | Denver Ave to WCR 31                           | 2-Lane Resurfacing<br>Shoulder Widening (Interim)            | 1                              | 3                     | 5  | 9                  | CO 52 Historic, potential for wetlands, sensitive noise receptors, scattered oil wells  | Moderate challenges       | No anticipated challenges   | \$ 8,300,000    | \$ 10,100,000 |
| 29                               | Segment 3<br>WCR 19 to US 85                   | WCR 19   | Culvert Replacement<br>(In progress)                         | 1                              | 1                     | 1  | 3                  | CO 52 Historic, potential for wetlands  | No challenges             | No anticipated challenges   | \$ 1,900,000    | \$ 2,300,000  |
| 30                               | Segment 3<br>WCR 19 to US 85                   | WCR 19   | Intersection Improvements                                    | 5                              | 5                     | 4  | 14                 | CO 52 Historic, potential for wetlands  | No challenges             | No anticipated challenges   | \$ 14,700,000   | \$ 17,900,000 |
| 31                               | Segment 3<br>WCR 19 to US 85                   | WCR 23   | Intersection Improvements                                    | 3                              | 1                     | 4  | 8                  | CO 52 Historic, sensitive noise receptors, scattered oil wells  | No challenges             | Impact to commercial property, but no impact to structure.  | \$ 9,300,000    | \$ 11,400,000 |
| 32                               | Segment 3<br>WCR 19 to US 85                   | Pedestrian Underpass<br>West of US 85          | Multimodal Connections                                       | 1                              | 1                     | 5  | 7                  | CO 52 Historic, open space, park, sensitive noise receptors, potential for wetlands, oil wells  | No challenges             | No anticipated challenges   | \$ 3,500,000    | \$ 4,300,000  |
| 33                               | Segment 3<br>US 85 to Denver Ave               | US 85 Interchange                              | Intersection Improvements                                    | 5                              | 5                     | 5  | 15                 | CO 52 Historic, open space, park, sensitive noise receptors, potential for wetlands, oil wells  | No challenges             | Possible impacts to commercial store fronts. No structure impacts anticipated.  | \$ 5,900,000    | \$ 7,300,000  |
| 34                               | Segment 3<br>US 85 to Denver Ave               | Grand Ave                                      | Intersection Improvements                                    | 5                              | 5                     | 5  | 15                 | CO 52 Historic, open space, park, sensitive noise receptors, potential for wetlands, oil wells  | No challenges             | Possible impacts to commercial store fronts. No structure impacts anticipated.  | \$ 2,300,000    | \$ 2,800,000  |
| 35                               | Segment 3<br>US 85 to Denver Ave               | Fulton Street                                  | Intersection Improvements                                    | 4                              | 3                     | 5  | 12                 | CO 52 Historic, sensitive noise receptors   | No challenges             | Possible impacts to commercial store fronts. No structure impacts anticipated.  | \$ 3,200,000    | \$ 3,900,000  |
| 36                               | Segment 3<br>US 85 to Denver Ave               | Grand Ave to Denver Ave                        | Multimodal Ped Connections                                   | 1                              | 5                     | 5  | 11                 | CO 52 and additional historic buildings - Historic, sensitive noise receptors, town parks   | No challenges             | Possible impacts to commercial store fronts. No structure impacts anticipated.  | \$ 2,100,000    | \$ 2,500,000  |
| 37                               | Segment 3<br>Denver Ave to WCR 31              | WCR 29.5                                       | Intersection Improvements                                    | 2                              | 3                     | 5  | 10                 | CO 52 Historic, sensitive noise receptors, potential for wetlands, openspace/parks, Aims Community College  | No challenges             | No anticipated challenges   | \$ 7,300,000    | \$ 8,900,000  |
| 38                               | Segment 3<br>WCR 19 to US 85                   | Structure D-17-1<br>(Bridge Over South Platte) | Structure Replacement<br>Structure Widening                  | 1                              | 1                     | 1  | 3                  | CO 52 Historic, wetlands, sensitive noise receptors, trail, open space  | No challenges             | No anticipated challenges   | \$ 16,300,000   | \$ 19,900,000 |

| Location and Project Description |                               |                                   |   | Purpose & Need Measurements    |                       |  |                    | Ease of Implementation  |                     |  | Cost Attributes |                |
|----------------------------------|-------------------------------|-----------------------------------|---|--------------------------------|-----------------------|--|--------------------|---|---------------------|--|-----------------|----------------|
| Project ID                       | Segment                       | Location                          | Improvement   | Operational Improvements Score | Traveler Safety Score | Multimodal Infrastructure & Safety Score | Overall Need Score | Environment   | Local Planning      | Right-of-Way   | Low             | High           |
| 39                               | Segment 4<br>WCR 31 to WCR 49 | WCR 31 to WCR 43                  | 4-Lane Widening (future) Shoulder Widening                  | 1                              | 3                     | 3  | 7                  | CO 52 Historic, sensitive noise receptors, oil wells, railroad                          | No challenges       | ROW line close to a few structures   | \$ 46,100,000   | \$ 56,300,000  |
| 40                               | Segment 4<br>WCR 31 to WCR 49 | WCR 31 to WCR 43; Holly to WCR 49 | 2-Lane Resurfacing Shoulder Widening                        | 1                              | 3                     | 3  | 7                  | CO 52 Historic, sensitive noise receptors, oil wells, railroad                          | No challenges       | No anticipated challenges  | \$ 71,900,000   | \$ 87,800,000  |
| 41                               | Segment 4<br>WCR 31 to WCR 49 | Through Hudson                    | 2-Lane Widening Urban                                       | 1                              | 3                     | 4  | 8                  | CO 52 Historic, town parks, sensitive noise receptors, potential for wetlands, railroad | No challenges       | Possible impacts to commercial store fronts. No structure impacts anticipated. | \$ 10,000,000   | \$ 12,200,000  |
| 42                               | Segment 4<br>WCR 31 to WCR 49 | WCR 31                            | Intersection Improvements                                   | 1                              | 3                     | 4  | 8                  | CO 52 Historic, sensitive noise receptors, oil wells                                    | No challenges       | No anticipated challenges  | \$ 8,400,000    | \$ 10,300,000  |
| 43                               | Segment 4<br>WCR 31 to WCR 49 | WCR 37                            | Intersection Improvements                                   | 3                              | 3                     | 4  | 10                 | CO 52 Historic, sensitive noise receptors   | No challenges       | ROW line close to structure  | \$ 7,400,000    | \$ 9,000,000   |
| 44                               | Segment 4<br>WCR 31 to WCR 49 | WCR 41                            | Intersection Improvements (In Progress)                     | 1                              | 5                     | 4  | 10                 | CO 52 Historic, oil wells, sensitive noise receptors                                    | No challenges       | No anticipated challenges  | \$ 8,200,000    | \$ 10,100,000  |
| 45                               | Segment 4<br>WCR 31 to WCR 49 | WCR 45                            | Intersection Improvements                                   | 1                              | 3                     | 4  | 8                  | CO 52 Historic, town parks, sensitive noise receptors, potential for wetlands, railroad | No challenges       | Possible impacts to commercial store fronts. No structure impacts anticipated. | \$ 1,300,000    | \$ 1,600,000   |
| 46                               | Segment 4<br>WCR 31 to WCR 49 | Railroad Pedestrian Crossing      | Multimodal Ped Connections                                  | 1                              | 5                     | 5  | 11                 | CO 52 Historic  | No challenges       | Possible impacts to commercial property. No structure impacts anticipated.     | \$ 700,000      | \$ 900,000     |
| 47                               | Segment 5<br>WCR 49 to CO 79  | WCR 49 to CO 79                   | 2-Lane Resurfacing Shoulder Widening                        | 1                              | 3                     | 3  | 7                  | CO 52 Historic  | No challenges       | No anticipated challenges  | \$ 107,000,000  | \$ 130,700,000 |
| 48                               | Segment 5<br>WCR 49 to CO 79  | WCR 53                            | Intersection Improvements                                   | 1                              | 3                     | 4  | 8                  | CO 52 Historic  | No challenges       | No anticipated challenges  | \$ 7,300,000    | \$ 8,900,000   |
| 49                               | Segment 5<br>WCR 49 to CO 79  | WCR 59                            | Intersection Improvements (Roundabout)                      | 3                              | 5                     | 3  | 11                 | CO 52 Historic  | Moderate challenges | Acquisition of structure   | \$ 10,000,000   | \$ 12,000,000  |
| 50                               | Segment 5<br>WCR 49 to CO 79  | CO 79                             | Intersection Improvements (Note: ROW and Irrigation Issues) | 1                              | 1                     | 3  | 5                  | CO 52 Historic  | No challenges       | Acquisition of multiple structures.  | \$ 5,000,000    | \$ 6,200,000   |
| 51                               | Segment 5<br>WCR 49 to CO 79  | Bridge at MP 32.825               | Structure Replacement                                       | 1                              | 1                     | 1  | 3                  | CO 52 Historic  | No challenges       | ROW line close to structure  | \$ 4,100,000    | \$ 5,000,000   |

|            |  | Segment Identification            |                                      | Project Recommendations  |  |
|------------|--|-----------------------------------|--------------------------------------|--|--|
| Project ID | Segment  | SubSegment                        | Location                             | Improvement  | Intersection Improvement Details   |
| 1          | SEGMENT 1:<br>CO 119 to west of County Line Rd | CO 119 to County Line Rd          | CO 119 to County Line Rd             | 2-Lane Resurfacing<br>Shoulder Widening  | Roadway Project  |
| 2          |  | CO 119 to County Line Rd          | CO 119 to Monarch Pl                 | Multi-Use Trail  | Roadway Project  |
| 3          |  | CO 119 to US 287                  | 71st Ave                             | Intersection Improvements  | Existing project to realign 71st to right-angle and add northbound right-turn lane.<br>Signalize intersection when warrants are met.<br>Pedestrian/Bicycle Improvement(s)<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.   |
| 4          |  | CO 119 to US 287                  | 79th Ave                             | Intersection Improvements  | Currently signalized.<br>No required capacity improvements; however, consider adding right-turn lanes as conditions warrant.<br>Pedestrian/Bicycle Improvement(s)<br>• Provide bicycle crossing improvements east-west and north-south.<br>• Evaluate bicycle detection for on-shoulder alternative and potential signal for multiuse path alternative.<br>• Improve crossing for left-turning bicyclists<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.   |
| 5          |  | CO 119 to US 287                  | Hover St/95th Ave                    | Intersection Improvements  | Currently signalized.<br>Assuming 2-Lane Cross Section:<br>- Add second through lane in each direction on CO 52 (secondary through lanes terminate)<br>Pedestrian/Bicycle Improvement(s)<br>• Evaluate bicycle detection for on-shoulder alternative and potential signal for multiuse path alternative.<br>• Improve crossing for left-turning bicyclists<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.  |
| 6          |  | US 287 to County Line Rd          | US 287 - Option 1                    | Intersection Improvements<br>(Traditional Configuration)   | Base Condition (Traditional Intersection Improvements): Dual left-turns on all approaches, two-through lanes, channelized right-turn lanes. (CO 52 secondary through lanes terminate in 2-Lane alternatives).<br>- Significant queuing, in particular due to heavy southbound left-turn movements (550 - 800 vph), result in bottleneck/gridlock conditions.<br>Grade Separated Intersection: Would improve operations but even minimal footprint options have significant infrastructure needs.<br>Pedestrian/Bicycle Improvement(s)<br>• Evaluate bicycle detection for on-shoulder alternative and potential signal for multiuse path alternative.<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.   |
| 7          |  | US 287 to County Line Rd          | US 287 - Option 2                    | Intersection Improvements<br>(Non-Traditional Configuration)   | Continuous Flow Intersection was modeled and could substantially improve operations (LOS F to LOS C).<br>Pedestrian/Bicycle Improvement(s)<br>• Evaluate bicycle detection for on-shoulder alternative and potential signal for multiuse path alternative.<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.  |
| 8          | SEGMENT 2:<br>County Line Rd to west of WCR 19 | County Line Rd to WCR 7           | County Line Rd                       | Intersection Improvements  | Currently signalized.<br>Assuming 4-Lane cross section (2-Lanes west of intersection):<br>- Add second through lane in each direction on CO 52 (secondary lanes to terminate on 2-Lane approaches)<br>- Maintain separate left and right-turn lanes.<br>- Add dual southbound left-turns, maintain single northbound left-turn lane, add right-turn lanes.<br>- Add second through lane in each direction on CLR (secondary lanes terminate beyond intersection).<br>Note: Significant growth projected at this location. Widening CLR provides more bandwidth for CO 52 movements. Narrower CLR cross sections would likely lead to significant side-street delays without providing dual left-turn lanes at CO 52, which would also necessitate widening on CLR to provide receiving lanes.<br>Pedestrian/Bicycle Improvement(s)<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.<br>• For multiuse path alternative, provide bicycle crossing improvements for eastbound bicyclists to transition from multiuse path to shoulder. |
| 9          |  | County Line Rd to WCR 7           | WCR 3                                | Intersection Improvements  | Irrigation Ditch<br>Expected to remain unsignalized.<br>Add eastbound right-turn decel, and accel lane on eastbound CO 52 for northbound to eastbound right-turn movement.<br>Add westbound left-turn lane.<br>Note: Lane recommendations per CDOT access code.<br>Pedestrian/Bicycle Improvement(s)<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.  |
| 10         |  | County Line Rd to WCR 7           | WCR 5                                | Intersection Improvements  | Signalize intersection when warrants are met (currently unsignalized)<br>Assuming 4-Lane Cross Section:<br>- Add eastbound and westbound right-turn lanes.<br>- Add left-turn and right-turn lanes on WCR 5.<br>Pedestrian/Bicycle Improvement(s)<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.   |
| 11         |  | County Line Rd to WCR 7           | County Line Rd to WCR 7              | 4-Lane Widening<br>Shoulder Widening   | Roadway Project  |
| 12         |  | WCR 7 to I-25 SB FR               | WCR 7                                | Intersection Improvements  | Currently signalized.<br>Assuming 4-Lane cross section to west, 6-Lane cross section to east:<br>- Add eastbound and westbound right-turn lanes.<br>- Westbound right-turn lane-drop<br>- Eastbound right-turn lane-add<br>Pedestrian/Bicycle Improvement(s)<br>• Evaluate bicycle detection for on-shoulder alternative and potential signal for multiuse path alternative.<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.<br>• Improve bicycle connections to the north.   |
| 13         |  | WCR 7 to I-25 SB FR               | WCR 7 to I-25 SB FR                  | 6-Lane Widening<br>Shoulder Widening   |  |
| 14         | I-25 NB FR to Silver Birch (York)              | I-25 NB FR to Silver Birch (York) | 6-Lane Widening<br>Shoulder Widening |  |  |
| 15         | Silver Birch (York) to WCR 15                  | Silver Birch Rd (York)            | Intersection Improvements            | Currently signalized<br>Assuming 6-Lane cross section to west, 4-Lane cross section to east:<br>- Provide eastbound dual left-turn lane (Add left-turn lane and northbound receiving lane (terminates).<br>- Add northbound right-turn lane.<br>- Eastbound right-turn lane-drop.<br>- Westbound right-turn lane-add.<br>- Expand northbound and southbound storage to accommodate queues.<br>Pedestrian/Bicycle Improvement(s)<br>• Evaluate bicycle detection for on-shoulder alternative.<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative or bring bikes to the intersection and have them cross with pedestrians.<br>• Install turn islands and provide pedestrian accessibility improvements at intersection. |  |
| 16         | Silver Birch (York) to WCR 15                  | Colorado Blvd                     | Intersection Improvements            | Currently signalized<br>Assuming 4-Lane Cross Section:<br>- All approaches to have dual left-turn lanes, two thru lanes, and a channelized right-turn lane.<br>Pedestrian/Bicycle Improvement(s)<br>• Evaluate bicycle detection for on-shoulder alternative.<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative or bring bikes to the intersection and have them cross with pedestrians.<br>• Consider tunnel or ped/bike bridge for Old Railroad Trail.   |  |



| Segment Identification |  | Project Recommendations                        |   |  |  |
|------------------------|--|--|---|--|--|
| Project ID             | Segment  | SubSegment                                     | Location                                    | Improvement  | Intersection Improvement Details   |
| 17                     | SEGMENT 2:<br>County Line Rd to west of WCR 19 | Silver Birch (York) to WCR 15                  | Glen Creighton/Frederick Way                | Intersection Improvements  | Currently signalized<br>Assuming 4-Lane Cross Section:<br>- Add southbound left-turn lane.<br>- Extend northbound storage and modify lane designations for one left-turn, shared left-turn/thru lane, and right-turn lane (maintains split phasing).<br>- Maintain eastbound and westbound right-turn lanes.<br>Note: Proximity to WCR 15 suggests westbound right-turn auxiliary lane between intersections.<br>Pedestrian/Bicycle Improvement(s)<br>• Evaluate bicycle detection for on-shoulder alternative.<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative or bring bikes to the intersection and have them cross with pedestrians.<br>• Future connection to proposed off-street paved trail to the north.<br>• Provide pedestrian accessibility improvements at intersection. |
| 18                     |  | Silver Birch (York) to WCR 15                  | WCR 15                                      | Intersection Improvements  | Signalize intersection when warrants are met (currently unsignalized).<br>Assuming 4-Lane Cross Section:<br>- Secondary through lane terminates east of intersection in 2-Lane alternatives<br>- Add northbound left-turn lane<br>- Add southbound left-turn and right-turn lanes<br>- Maintain westbound right-turn lane<br>Pedestrian/Bicycle Improvement(s)<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative<br>• Provide pedestrian accessibility improvements at intersection.<br>• Future connection to proposed off-street paved trail north.<br>• Install crossing visibility improvements.   |
| 19                     |  | Silver Birch (York) to WCR 15                  | Silver Birch (York) to WCR 15               | 4-Lane Widening<br>Shoulder Widening   | Roadway Project  |
| 20                     |  | WCR 15 to WCR 19                               | Reverse Curves - Option 1                   | Realignment<br>(4% Superelevation)   | Roadway Project  |
| 21                     |  | WCR 15 to WCR 19                               | Reverse Curves - Option 2                   | Realignment<br>(6% Superelevation)   | Roadway Project  |
| 22                     |  | WCR 15 to WCR 19                               | WCR 15 to WCR 19                            | 2-Lane Resurfacing<br>Shoulder Widening (Interim)  | Roadway Project  |
| 23                     | SEGMENT 3:<br>WCR 19 to west of WCR 31         | WCR 19 to US 85                                | WCR 19 to US 85                             | 4-Lane Widening<br>Shoulder Widening   | Roadway Project  |
| 24                     |  | WCR 19 to US 85                                | WCR 19 to US 85                             | 2-Lane Resurfacing<br>Shoulder Widening (Interim)  | Roadway Project  |
| 25                     |  | US 85 to Denver Ave                            | Through Fort Lupton                         | 2-Lane Resurfacing<br>Urban  | Roadway Project  |
| 26                     |  | US 85 to Denver Ave                            | Through Fort Lupton                         | 4-Lane Widening<br>Urban   | Roadway Project  |
| 27                     |  | Denver Ave to WCR 31                           | Denver Ave to WCR 31                        | 4-Lane Widening<br>Urban   | Roadway Project  |
| 28                     |  | Denver Ave to WCR 31                           | Denver Ave to WCR 31                        | 2-Lane Resurfacing<br>Shoulder Widening (Interim)  | Roadway Project  |
| 29                     |  | WCR 19 to US 85                                | WCR 19                                      | Culvert Replacement<br>(In progress)   | Roadway Project  |
| 30                     |  | WCR 19 to US 85                                | WCR 19                                      | Intersection Improvements  | Signalize intersection when warrants are met (currently unsignalized).<br>Assuming 2-Lane Cross Section:<br>- Add eastbound and westbound left-turn and right-turn lanes<br>- Add northbound and southbound left-turn lane<br>Note: High volume for 2-Lane facility. Consider adding auxiliary thru lane at intersection in 2-Lane alternative.<br>Pedestrian/Bicycle Improvement(s)<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative   |
| 31                     |  | WCR 19 to US 85                                | WCR 23                                      | Intersection Improvements  | Signalize intersection when warrants are met (currently unsignalized).<br>Assuming 2-Lane Cross Section:<br>- Add eastbound and westbound left-turn and right-turn lanes<br>- Add northbound and southbound left-turn lane<br>Note: High volume for 2-Lane facility. Consider adding auxiliary thru lane at intersection in 2-Lane alternative.<br>Pedestrian/Bicycle Improvement(s)<br>• Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative   |
| 32                     |  | WCR 19 to US 85                                | Pedestrian Underpass<br>West of US 85       | Multimodal Connections   | Roadway Project  |
| 33                     |  | US 85 to Denver Ave                            | US 85 Interchange                           | Intersection Improvements  | Currently Signalized<br>Assuming 2-Lane Cross Section:<br>- Widen bridge west of interchange to 4-Lanes to extend eastbound storage and westbound auxiliary lane.<br>- Add westbound thru lane under bridge to allow for northbound dual-left-turn lanes.<br>- Consider adding northbound right-turn lane on ramp.<br>- Extend westbound left-turn lane storage through Grand Avenue intersection (Grand Avenue to RIRO).<br>Intersection proximity between US 85, Grand, and Fulton will require coordination.  |
| 34                     |  | US 85 to Denver Ave                            | Grand Ave                                   | Intersection Improvements  | Currently unsignalized, offset intersection within 250-ft of US 85 ramps.<br>- Restrict access to 3/4 movement (not recommended) or RIRO (recommended)<br>- Accommodating left-turns from sidestreet would require signal to be combined with US 85 signal due to proximity (not recommended)<br>Note: Assumed RIRO in models due to excessive delay for side-street movements. Traffic rerouted to Fulton Avenue.<br>Pedestrian/Bicycle Improvement(s)<br>• Multiuse path and pedestrian crossing improvements<br>Intersection proximity between US 85, Grand, and Fulton will require coordination.  |
| 35                     | US 85 to Denver Ave                            | Fulton Street                                  | Intersection Improvements                   | Signalize intersections when warrants are met (currently unsignalized).<br>Assuming 2-Lane or 4-Lane Cross Section:<br>- Provide left-turn lanes from Fulton Street and a southbound right-turn lane to accommodate redirected traffic.<br>Note: Location has the potential to meet signal warrants with or without traffic redirected from Grand Avenue.<br>Pedestrian/Bicycle Improvement(s)<br>• Multiuse path and pedestrian crossing improvements<br>Intersection proximity between US 85, Grand, and Fulton will require coordination. |  |
| 36                     | US 85 to Denver Ave                            | Grand Ave to Denver Ave                        | Multimodal Ped Connections                  | • Install multiuse path crossing improvements.<br>• Consider a bicycle signal at signalized intersections for the proposed multi use path on the north side  |  |
| 37                     | Denver Ave to WCR 31                           | WCR 29.5                                       | Intersection Improvements                   | Currently Unsignalized<br>Assuming 2-Lane Cross Section:<br>- Add eastbound and westbound right-turn lanes<br>- Extend eastbound and westbound left-turn lanes<br>- Add northbound and southbound left-turn lanes<br>Note: Per CDOT Access Code<br>Pedestrian/Bicycle Improvement(s)<br>• Multiuse path and pedestrian crossing improvements   |  |
| 38                     | WCR 19 to US 85                                | Structure D-17-1<br>(Bridge Over South Platte) | Structure Replacement<br>Structure Widening | Roadway Project  |  |

|            |  | Segment Identification       |                                   | Project Recommendations   |   |
|------------|--|------------------------------|-----------------------------------|---|---|
| Project ID | Segment                                | SubSegment                   | Location                          | Improvement   | Intersection Improvement Details  |
| 39         | SEGMENT 4:<br>West of WCR 31 to WCR 49 | WCR 31 to WCR 49             | WCR 31 to WCR 43                  | 4-Lane Widening (future)<br>Shoulder Widening   | Roadway Project   |
| 40         |  | WCR 31 to WCR 49             | WCR 31 to WCR 43; Holly to WCR 49 | 2-Lane Resurfacing<br>Shoulder Widening   | Roadway Project   |
| 41         |  | WCR 31 to WCR 49             | Through Hudson                    | 2-Lane Widening<br>Urban  | Roadway Project   |
| 42         |  | WCR 31 to WCR 49             | WCR 31                            | Intersection Improvements   | Currently Unsignalized<br>Assuming 2-Lane Cross Section:<br>- Add southbound right-turn lane<br>- Extend lanes to Access Code standards<br>Pedestrian/Bicycle Improvement(s)<br>•Multiuse path begins to the west. Bicycles on shoulder to the east.<br>•Provide bicycle crossing improvements for eastbound bicyclists to transition from multiuse path to shoulder. |
| 43         |  | WCR 31 to WCR 49             | WCR 37                            | Intersection Improvements   | Currently Unsignalized<br>Assuming 2-Lane Cross Section:<br>- Add eastbound and westbound left-turn and right-turn lanes<br>- Add northbound and southbound left-turn lanes<br>Note: Per CDOT Access Code<br>Pedestrian/Bicycle Improvement(s)<br>•Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative           |
| 44         |  | WCR 31 to WCR 49             | WCR 41                            | Intersection Improvements<br>(In Progress)  | Pedestrian/Bicycle Improvement(s)<br>•Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative.<br>•Evaluate bicycle detection for on-shoulder alternative.   |
| 45         |  | WCR 31 to WCR 49             | WCR 45                            | Intersection Improvements   | Currently Unsignalized<br>Assuming 2-Lane Cross Section:<br>- Add eastbound right-turn<br>- Add westbound left-turn<br>Note: Per CDOT Access Code<br>Pedestrian/Bicycle Improvement(s)<br>•Provide crossing improvements  |
| 46         | WCR 31 to WCR 49                       | Railroad Pedestrian Crossing | Multimodal Ped Connections        | •Ensure bike facility crosses tracks at 60 - 90 degrees.<br>•Include similar treatment for westbound bicyclists as the existing path on the south side for eastbound bicyclists.<br>•Potential to utilize existing trail on the south side of 52 (would require wayfinding/guiding westbound bicyclists to use existing crossin at Beech St and Hudson Dr). |   |
| 47         | SEGMENT 5:<br>WCR 49 to SH 79          | WCR 49 to CO 79              | WCR 49 to CO 79                   | 2-Lane Resurfacing<br>Shoulder Widening   | Roadway Project   |
| 48         |  | WCR 49 to CO 79              | WCR 53                            | Intersection Improvements   | Currently Unsignalized<br>Assuming 2-Lane Cross Section:<br>- Add eastbound right-turn<br>- Add westbound left-turn<br>Note: Per CDOT Access Code<br>Pedestrian/Bicycle Improvement(s)<br>•Include bike lanes through the intersection located left of right-turn lanes for on-shoulder alternative   |
| 49         |  | WCR 49 to CO 79              | WCR 59                            | Intersection Improvements<br>(Roundabout)   | Roundabout: Single lane high-speed roundabout would allow for significant safety improvements while allowing consistent operation throughout the day.<br>Pedestrian/Bicycle Improvement(s)<br>•Install bicycle crossing treatments for left-turns onto/off of CO 52   |
| 50         |  | WCR 49 to CO 79              | CO 79                             | Intersection Improvements<br>(Note: ROW and Irrigation Issues)  | Irrigation ditch issues; ROW issues<br>Currently Unsignalized<br>Assuming 2-Lane Cross Section:<br>- Add lanes per access code pending evaluation of ROW impacts.<br>Note: No operational deficiencies noted.<br>Pedestrian/Bicycle Improvement(s)<br>•Provide pedestrian accessibility improvements  |
| 51         | WCR 49 to CO 79                        | Bridge at MP 32.825          | Structure Replacement             | Roadway Project   |   |

| Funding Reference Number | Federal Competitive Grants                     | Description  | Key Criteria  | Schedule  | Total Funds Available / Typical Award  | Applicable Project Categories  |
|--------------------------|--|--|---|---|--|--|
| 1                        | <b>USDOT RAISE Grant</b>                       | Projects that leverage resources, encourage partnership, catalyze investment and growth, fill a critical void in the transportation system or provide a substantial benefit.   | Merit criteria include safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation, and partnership. Within these criteria, USDOT will prioritize projects that can demonstrate improvements to racial equity, reduce impacts of climate change, and create good-paying jobs. | Current application cycle: July 12, 2021        | Total available nationwide (this cycle): \$900 million; historically the largest awards have been approximately \$20 million, and the <b>average award has been \$10 to \$12 million.</b>  | Capital: Roadway, Transit, and Active Transportation                 |
| 2                        | <b>USDOT INFRA Grant</b>                       | Projects that address critical issues facing our nation's highway and bridges, specifically highway and freight projects of national or regional significance.   | Criteria focus on economic vitality, climate change and environmental justice, racial equity, leveraging Federal funding to attract non-Federal sources, innovation, and performance.   | Most recent application cycle: March 19, 2021   | Total available nationwide (last cycle): \$889 million in 2021 funds, and up to \$150 million remaining from prior authorizations; 2020 <b>awards ranged from \$6 million to \$35 million</b> (20% to 56% of total costs) in the Small Project category, and from \$25 million to \$135 million (4% to 60% of total costs) in the Large Project category | Capital: Roadway (specifically improving freight and goods movement) |
| 3                        | <b>FHWA Competitive Highway Bridge Program</b> | By law, the funds are restricted to states with a population density of less than 100 people per square mile. Colorado is one of the 25 states that qualify. The funds must be used for highway bridge replacement or rehabilitation projects on public roads that leverage the efficiencies associated with "bundling" at least two highway bridge projects into a single contract. | Selection criteria include innovation, support for economic vitality, lifecycle cost and state of good repair, and project readiness.   | Most recent application cycle: December 4, 2018 | Total available nationwide (last cycle): \$225 million 2019 <b>awards ranged from \$2 million to \$33 million</b>  | Capital: Roadway   |

| Funding Reference Number | FHWA Formula Grants: Programmed by DRCOG & NFRMPO  | Description / Eligible Expenses   | Annual Funding Estimates             | Applicable Project Categories                        |
|--------------------------|--|---|--------------------------------------|--|
| 4                        | <b>FHWA - Surface Transportation Program (STP)-Metro</b>   | Provides funds for constructing new streets or widening, improving, or reconstructing existing streets classified as Federal Aid Eligible (FAE) freeways, highways, arterials, or collectors. Funds can also be used for bridge replacement; intersection improvements; projects which reduce traffic demand, such as transit capital improvements and active transportation; and other projects as provided for in federal law.                                  | Programmed Funding<br>2019: \$41.7 M | Capital: Roadway, Transit, and Active Transportation |
| 5                        | <b>FHWA – Congestion Mitigation and Air Quality (CMAQ) Improvement Program</b>                           | Provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). | Programmed Funding<br>2019: \$42.6 M | Capital: Roadway, Transit, and Active Transportation |
| 6                        | <b>FHWA – Transportation Alternatives Program (TAP) (note: CDOT also awards TAP Funding – see below)</b> | Provides funding for a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.  | Programmed Funding<br>2019: \$2.4 M  | Capital: Active Transportation                       |

| Funding Reference Number | FHWA Formula Grants: Programmed by CDOT                                      | Description / Eligible Expenses   | Annual Funding Estimates                   | Applicable Project Categories  |
|--------------------------|--|---|--|--------------------------------|
| 7                        | <b>FHWA –TAP (Note: DRCOG and NFRMPO also award TAP Funding - see above)</b> | Provides funding for projects that enhance safety and expand options for non-drivers, mitigate environmental impacts, and convert former interstate facilities to new uses. Examples include on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities (historic preservation and vegetation management, and environmental mitigation related to storm water and habitat connectivity); recreational trail projects; and safe routes to school projects. | Programmed Funding<br>FY 2018-19: \$13.9 M | Capital: Active Transportation |

| Funding Reference Number  | CDOT Revenue Allocation Programs                            | Description / Eligible Expenses  | Annual Funding Estimates                 | Applicable Project Categories                        |
|---|---|--|--|--|
| <b>Construction Programs (Asset Management, Safety, and Mobility)</b> |   |  |  |  |
| 8   | <b>Asset Management: Surface Treatment</b>                  | Provides funding to maintains the quality of the pavement on state highways at the highest possible level. Department staff utilizes pavement management software and annual data collection to make recommendations on the segments of the state highway system should be prioritized for rehabilitation.   | Programmed Funding<br>FY 2021-22: \$223M | Capital: Roadway                                     |
| 9   | <b>Asset Management: Structures</b>                         | Provides funding for the inspection and inventory of the statewide structures, manages all essential repairs and critical findings for statewide structural asset programs, and evaluates permits required for oversize and overweight vehicles.   | Programmed Funding<br>FY 2021-22: \$62M  | Capital: Roadway                                     |
| 10  | <b>Asset Management: Systems Operations</b>                 | Funding to implement new and innovative technology, deploy and integrating statewide Intelligent Technology Systems (ITS), incorporate automated performance measures, and extend technical resources to CDOT regions in the areas of traffic signal and ramp metering. This program also leads and/or participates in the development and implementation of arterial and freeway management strategies throughout the state.. | Programmed Funding<br>FY 2021-22: \$34M  | Capital: Roadway                                     |
| 11  | <b>Asset Management: Geohazards Mitigation</b>              | Funding to design mitigation plans, review consultant designs, perform site inspections during construction, respond to rock falls, and other geological hazards-related emergencies. Other work includes responding to requests from Maintenance, Engineering, and the public when slope issues are observed.   | Programmed Funding<br>FY 2021-22: \$10M  | Capital: Roadway                                     |
| 12  | <b>Asset Management: Permanent Water Quality Management</b> | Provides funding to treat pollution in stormwater from CDOT roadways before it flows into Colorado's rivers, lakes and streams. Pollutants from CDOT roadways includes oil and grease, copper, any fluids from vehicles, lead and chloride.  | Programmed Funding<br>FY 2021-22: \$7M   | Capital: Roadway                                     |
| 13  | <b>Safety: Highway Safety Improvement Program</b>           | Funding for project that will achieve a significant reduction in fatalities and serious injuries on all publicly maintained roads. This includes public roads not owned by the state and roads on tribal lands.  | Programmed Funding<br>FY 2021-22: \$33M  | Capital: Roadway                                     |
| 14  | <b>Safety: Rail-Highways Crossings Program</b>              | Funds projects that eliminate the hazards at railway-highway crossings. The purpose of this program is to reduce the number of injuries and fatalities at public crossings throughout the state.   | Programmed Funding<br>FY 2021-22: \$4M   | Capital: Roadway                                     |
| 15  | <b>Safety: Hot Spots</b>                                    | Provides funding to mitigate minor unforeseen issues that need immediate attention, as well as add funding to ongoing projects for unforeseen safety issues discovered during the project implementation process.  | Programmed Funding<br>FY 2021-22: \$2M   | Capital: Roadway                                     |
| 16  | <b>Safety: FASTER Bridge</b>                                | Funding for bridge replacement projects  | Programmed Funding<br>FY 2021-22: \$?M   | Capital: Bridges                                     |
| 17  | <b>Safety: FASTER Safety</b>                                | Funding for road safety projects including pavement and other asset management projects, intersection and interchange improvements, shoulders and safety-related widening, and wildlife fencing  | Programmed Funding<br>FY 2021-22: \$69M  | Capital: Roadway                                     |
| 18  | <b>Safety: ADA Compliance</b>                               | Funds ADA programs or activities including but not limited to roadways, contiguous walkways, intersections, rest areas, roadside emergency telephones, public conveyances such as buses and light rail, and literature related to any of these.  | Programmed Funding<br>FY 2021-22: \$7M   | Capital: Roadway, Transit, and Active Transportation |

| Funding Reference Number                                      | CDOT Revenue Allocation Programs   | Description / Eligible Expenses   | Annual Funding Estimates  | Applicable Project Categories                                |
|---|--|---|---|--|
| 19  | <b>Mobility: Regional Priority Program</b>   | Supplements the formula-driven funding allocations to the five CDOT engineering regions with flexible state funding. This funding is used at the discretion of each Regional Transportation Director, in consultation with local elected officials and other stakeholders in each region. RPP funds are distributed to the CDOT Regions according to a formula that is weighted on these factors: 50 percent population, 35 percent state highway system lane miles, and 15 percent state highway system truck Vehicle Miles Traveled (VMT).  | Programmed Funding<br>FY 2021-22: \$48M   | Capital: Roadway, Freight, Transit and Active Transportation |
| 20  | <b>Mobility: Strategic Projects</b>  | Funding from General Fund transfers that primarily goes to strategic construction projects.   | Programmed Funding<br>FY 2021-22: \$450M  | Capital: Roadway, Freight, Transit and Active Transportation |
| 21  | <b>Mobility: National Highway Freight Program</b>  | Funding to improve the efficient movement of freight on the National Highway Freight Network (NHFN). The NHFN includes the interstates, several small segments of other corridors important to freight movement, and approximately 240 miles of Critical Urban and Critical Rural Freight Corridors to be designated by the state   | Programmed Funding<br>FY 2021-22: \$23M   | Capital: Freight   |
| <b>Suballocated Programs (Highway and Transit/Multimodal)</b> |  |   |   |  |
| 22  | <b>Highway: STP - Metro</b>  | DRCOG and NFRMPO select project to receive funding (see Table 2)  |   |  |
| 23  | <b>Highways: CMAQ Program</b>  | DRCOG and NFRMPO select project to receive funding (see Table 2)  |   |  |
| 24  | <b>Highways: Bridge Off-System</b>   | The Joint Highway Commission oversees the program and accepts project applications on an annual basis. The program improves public safety and reduces ongoing maintenance costs associated with aging infrastructure. The structure must be a location on a rural minor collector or urban or rural local road.   | Programmed Funding<br>FY 2021 -22: \$11 M   | Capital: Roadway   |
| 25  | <b>Transit and Multimodal: Safe Routes to School</b>   | Funds projects that improve safety for pedestrians and bicyclists in school areas, and encourage children in K-8 to safely bicycle and walk to and from school.   | Programmed Funding<br>FY 2021-22: \$3 M   | Capital: Active Transportation                               |
| 26  | <b>Transit and Multimodal: TAP (Note: DRCOG and NFRMPO also award TAP Funding - see above)</b> | Provides funding for projects that enhance safety and expand options for non-drivers, mitigate environmental impacts, and convert former interstate facilities to new uses. Examples include on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities (historic preservation and vegetation management, and environmental mitigation related to storm water and habitat connectivity); recreational trail projects; and safe routes to school projects. | Programmed Funding<br>FY 2021-22: \$12 M  | Capital: Active Transportation                               |
| 27  | <b>Transit and Multimodal: Transit Grant Program</b>   | Funding for projects to purchase or replacement of transit vehicles, construction of multimodal stations, and acquisition of equipment for consolidated call centers.   | Programmed Funding<br>FY 2021-22: \$50 M  | Capital: Transit   |
| 28  | <b>Transit and Multimodal: Multimodal Options Program</b>                                      | Senate Bill 18-001 allocated \$94.25 million to the Multimodal Transportation Options Fund. Of this funding, 85 percent (\$80.12 million) must be used for local multimodal projects, and 15 percent (\$14.13 million) must be used for statewide multimodal projects   | Programmed Funding<br>FY 2021-22: \$0 M (funding authorized in SB 18-001 totaled \$94.25 M) | Capital: Transit   |

| Funding Reference | Existing Taxes                         | Description   | Initial Comments                  |
|-------------------|--|---|-----------------------------------|
| A                 | Property Tax                           | For a specific project or projects, increase city-wide property tax to fund the improvements.   |                                   |
| Funding Reference | Value Capture Sources                  | Description   | Initial Comments                  |
| B                 | Tax Increment Financing (TIF) District | Property tax revenues generated beyond an established baseline are pledged specifically for infrastructure-related improvements within an area or district.   |                                   |
| C                 | Development Mitigation / Impact Fees   | A one-time charge imposed by local governments to mitigate the impact on local infrastructure caused by new development. Growth in the form of new homes and businesses requires expansion or enlargement of public facilities to maintain the same level and quality of public services for all residents of a community. Impact fees help fund expansion of public facilities necessary to accommodate new growth |                                   |
| D                 | Real Estate Transfer Tax               | A tax is collected whenever the ownership of a property changes. This tax typically reflects a percentage of the sale price.  | Current rate is 0.01% in Colorado |
| E                 | Land Contribution or Other Asset Sales | Revenues generated from the disposition of excess land owned by counties, cities, or local agencies. Right-of-way contributions are also possible.  |                                   |
| Funding Reference | Private Sector Funding                 | Description   | Initial Comments                  |
| F                 | Developer Contributions                | Private developers along project alignments may pay for enhanced access/connection to transportation facilities. Especially applicable to adjacent retail developments.   |                                   |

| POTENTIAL PROJECTS |  |                                   |  | USDOT       |             | FHWA                               | DRCOG (TIP)                                |  |   | CDOT                                |                              |                                      |   |  |  |   |                   |                       |                       |                        |                                     |                              |  | Other                       |   |   |  |              |  |                                    |                          |  |                         |   |
|--------------------|--|-----------------------------------|--|-------------|-------------|------------------------------------|--|--|---|-------------------------------------|------------------------------|--------------------------------------|---|--|--|---|-------------------|-----------------------|-----------------------|------------------------|-------------------------------------|------------------------------|--|-----------------------------|---|---|--|--------------|--|------------------------------------|--------------------------|--|-------------------------|---|
| Project ID         | Segment  | Location                          | Improvement  | RAISE Grant | INFRA Grant | Competitive Highway Bridge Program | Surface Transportation Program (STP)-Metro | Congestion Mitigation and Air Quality (CMAQ) Improvement Program | Transportation Alternatives Program (TAP) | Asset Management: Surface Treatment | Asset Management: Structures | Asset Management: Systems Operations | Asset Management: Geohazards Mitigation | Asset Management: Permanent Water Quality Management | Safety: Highway Safety Improvement Program | Safety: Rail-Highways Crossings Program | Safety: Hot Spots | Safety: FASTER Bridge | Safety: FASTER Safety | Safety: ADA Compliance | Mobility: Regional Priority Program | Mobility: Strategic Projects | Mobility: National Highway Freight Program | Highways: Bridge Off-System | Transit and Multimodal: Safe Routes to School | Transit and Multimodal: Transit Grant Program | Transit and Multimodal: Multimodal Options Program | Property Tax | Tax Increment Financing (TIF) District | Development Mitigation/Impact Fees | Real Estate Transfer Tax | Land Contribution or Other Asset Sales | Developer Contributions |   |
| 1                  | Segment 1<br>CO 119 to County Line Rd          | CO 119 to County Line Rd          | 2-Lane Resurfacing<br>Shoulder Widening                      | x           | x           |                                    |  | x  | x   | x                                   |                              |                                      |   |  |  | x                                       |                   |                       |                       |                        | x                                   | x                            |  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 2                  | Segment 1<br>CO 119 to County Line Rd          | CO 119 to Monarch Pl              | Multi-Use Trail  | x           | x           |                                    |  | x  |   |                                     |                              |                                      |   |  |  |   |                   |                       |                       |                        | x                                   | x                            |  |                             |   |   | x  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 3                  | Segment 1<br>CO 119 to US 287                  | 71st Ave                          | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 4                  | Segment 1<br>CO 119 to US 287                  | 79th Ave                          | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 5                  | Segment 1<br>CO 119 to US 287                  | Hover St/95th Ave                 | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 6                  | Segment 1<br>US 287 to County Line Rd          | US 287 - Option 1                 | Intersection Improvements<br>(Traditional Configuration)     | x           | x           | x                                  | x  | x  |   |                                     | x                            | x                                    |   | x  | x  |   | x                 | x                     | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 7                  | Segment 1<br>US 287 to County Line Rd          | US 287 - Option 2                 | Intersection Improvements<br>(Non-Traditional Configuration) | x           | x           |                                    |  | x  |   |                                     |                              |                                      |   | x  |  |   |                   |                       |                       |                        | x                                   | x                            |  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 8                  | Segment 2<br>County Line Rd to WCR 7           | County Line Rd                    | Intersection Improvements                                    | x           | x           | x                                  | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 9                  | Segment 2<br>County Line Rd to WCR 7           | WCR 3                             | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 10                 | Segment 2<br>County Line Rd to WCR 7           | WCR 5                             | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 11                 | Segment 2<br>County Line Rd to WCR 7           | County Line Rd to WCR 7           | 4-Lane Widening<br>Shoulder Widening                         | x           | x           |                                    |  | x  |   |                                     |                              |                                      |   |  |  |   |                   |                       |                       |                        | x                                   | x                            |  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 12                 | Segment 2<br>WCR 7 to I-25 SB FR               | WCR 7                             | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 13                 | Segment 2<br>WCR 7 to I-25 SB FR               | WCR 7 to I-25 SB FR               | 6-Lane Widening<br>Shoulder Widening                         | x           | x           |                                    |  | x  |   |                                     |                              |                                      |   |  |  |   |                   |                       |                       |                        | x                                   | x                            |  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 14                 | Segment 2<br>I-25 NB FR to Silver Birch (York) | I-25 NB FR to Silver Birch (York) | 6-Lane Widening<br>Shoulder Widening                         | x           | x           |                                    |  | x  |   |                                     |                              |                                      |   |  |  |   |                   |                       |                       |                        | x                                   | x                            |  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 15                 | Segment 2<br>Silver Birch (York) to WCR 15     | Silver Birch Rd (York)            | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 16                 | Segment 2<br>Silver Birch (York) to WCR 15     | Colorado Blvd                     | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 17                 | Segment 2<br>Silver Birch (York) to WCR 15     | Glen Creighton/Frederick Way      | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 18                 | Segment 2<br>Silver Birch (York) to WCR 15     | WCR 15                            | Intersection Improvements                                    | x           | x           |                                    | x  | x  |   |                                     |                              | x                                    |   |  | x  |   | x                 |                       | x                     | x                      | x                                   | x                            | x  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 19                 | Segment 2<br>Silver Birch (York) to WCR 15     | Silver Birch (York) to WCR 15     | 4-Lane Widening<br>Shoulder Widening                         | x           | x           |                                    |  | x  |   |                                     |                              |                                      |   |  |  |   |                   |                       |                       |                        | x                                   | x                            |  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 20                 | Segment 2<br>WCR 15 to WCR 19                  | Reverse Curves - Option 1         | Realignment<br>(4% Superelevation)                           | x           | x           |                                    |  | x  |   |                                     |                              |                                      |   |  |  |   | x                 |                       | x                     |                        | x                                   | x                            |  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 21                 | Segment 2<br>WCR 15 to WCR 19                  | Reverse Curves - Option 2         | Realignment<br>(6% Superelevation)                           | x           | x           |                                    |  | x  |   |                                     |                              |                                      |   |  |  |   | x                 |                       | x                     |                        | x                                   | x                            |  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |
| 22                 | Segment 2<br>WCR 15 to WCR 19                  | WCR 15 to WCR 19                  | 2-Lane Resurfacing<br>Shoulder Widening (Interim)            | x           | x           |                                    |  | x  | x   |                                     |                              |                                      |   |  |  |   |                   |                       |                       |                        | x                                   | x                            |  |                             |   |   |  | x            | x                                      | x                                  | x                        | x                                      | x                       | x |



