

# POLICY ON TRANSPORTATION IMPROVEMENT PROGRAM (TIP) PREPARATION

Procedures for preparing the 2016-2021 TIP

Adopted XXXXX, 2014

**Draft Action Version for  
July RTC**



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**POLICY ON  
TRANSPORTATION IMPROVEMENT PROGRAM (TIP)  
PREPARATION**

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*Procedures for preparing the 2016-2021 TIP*

Adopted **XXXXX**, 2014

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### **I. INTRODUCTION**

The *2016-2021 Transportation Improvement Program* (TIP) will specifically program the federally-funded transportation improvements and management actions to be completed by the Colorado Department of Transportation (CDOT), the Regional Transportation District (RTD), local governments, and other project sponsors over a six-year period.

The *Metro Vision 2035 Plan* serves as a comprehensive guide for future development of the region with respect to growth and development, transportation, and the environment. One component of the *Metro Vision 2035 Plan*, is the *2035 Metro Vision Regional Transportation Plan* (2035 Metro Vision RTP). It presents the vision for a multimodal transportation system that is needed to respond to future growth, as well as to influence how the growth occurs. It specifies strategies, policies, and major capital improvements that advance the objectives of the *Metro Vision 2035 Plan*. The fiscally constrained 2035 Metro Vision RTP defines the specific transportation elements and services that can be provided to year 2035 based on reasonably expected revenues. The 2035 Metro Vision RTP is available on the DRCOG website at: <https://drcog.org/programs/transportation-planning/regional-transportation-plan>

The *Metro Vision 2035 Regional Transportation Plan* (2035 Metro Vision RTP) is currently being revised to 2040 and is anticipated to be adopted in December 2014. The networks and regionally significant projects that will comprise the fiscally constrained 2040 Metro Vision RTP will be adopted by the DRCOG Board for testing by July 2014. The 2016-2021 TIP will specifically identify and program projects for federal funding based on the Metro Vision RTP.

As required by federal law, the TIP must be fiscally constrained to funds expected to be available. All projects selected to receive federal surface transportation funds, and all regionally significant projects regardless of funding type, must be identified in the TIP.

The TIP is prepared and adopted by the Denver Regional Council of Governments (DRCOG), the region's Metropolitan Planning Organization (MPO), in cooperation with CDOT and RTD. This document establishes policies for developing the TIP and selecting projects to be included.

#### **A. Authority of the MPO**

Federal law charges MPOs with the responsibility for developing and approving the TIP. DRCOG directly selects projects funded with Surface Transportation Program (STP) - Metro, Transportation Alternatives Program (TAP), and Congestion Mitigation/Air Quality (CMAQ) funds. DRCOG reviews CDOT and RTD submitted projects for consistency with regional plans.

**B. Geographic Area of the TIP**

The TIP is prepared for the area shown in Figure 1.

**C. Time Period of the TIP**

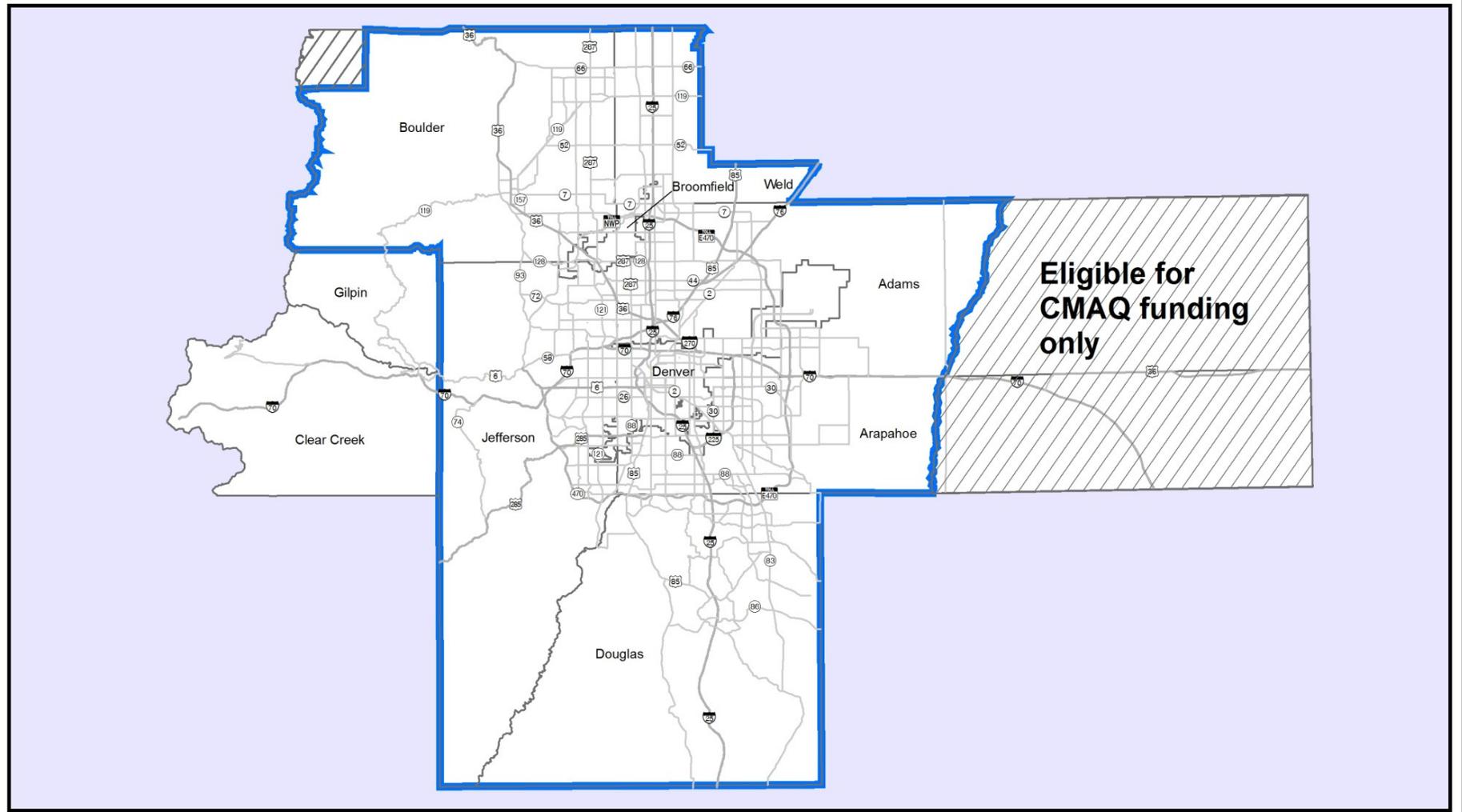
The first four years of the 2016-2021 TIP contain committed, programmed projects. The last two years of the TIP are typically limited to non-DRCOG projects to align with other CDOT and RTD planning products.

**D. TIP Development Schedule**

Table 1 shows the process and tentative schedule for developing the 2016-2021 TIP. A more detailed schedule, along with DRCOG funding request application forms and instructions, will be distributed with the solicitation for funding requests and posted on the DRCOG website.

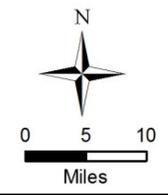
**Table 1. Transportation Improvement Program Development Schedule**

<b>TIP Process Element</b>	<b>Nominal Schedule</b>
TIP Policy, Process, and Criteria Revision	October 2013—July 2014
Solicitation for DRCOG Funding Requests	July-August 2014
Evaluation of DRCOG Requests and 1 <sup>st</sup> /2 <sup>nd</sup> Phase Selection	September 2014—January 2015
Draft TIP Document Preparation	January 2015
Public Hearing on Draft TIP	February 2015
Committee Review of Draft TIP	February—March 2015
Board Action	March 2015



**LEGEND**

-  Transportation Management Area MPO (TIP Area)
-  DRCOG County Boundaries
-  Eligible for CMAQ Funding Only



This data is intended for informational purposes only. DRCOG provides this information on an "as is" basis and makes no guarantee, representation or warranty, either express or implied, that the data will be error free. DRCOG further makes no guarantees, representations or warranties, either express or implied, as to the completeness, accuracy or correctness of the data, or as to merchantability or fitness of the data for a particular use or purpose. DRCOG is not responsible to any user for any costs, expenses, liabilities or damages arising from inconsistencies in its data or from any use of the information.  
Source: DRCOG  
Projection: Colorado State Plane, NAD 83  
PJ 5/2/2014

## **II. AGENCY ROLES AND REQUIREMENTS**

This chapter identifies the funding programmed by DRCOG, CDOT, and RTD, the steps that will be taken to integrate the three processes, and common requirements for all TIP projects.

### **A. Agency Roles**

Each of the three primary regional transportation planning partners—**DRCOG, CDOT, and RTD**—selects projects for the federal funds over which it has authority. These three selection processes are conducted separately until they are integrated into a draft TIP by DRCOG staff. Please see Section IV.A.4 for additional details.

**DRCOG** selects projects to receive Federal Highway Administration (FHWA) funds from the following three programs. Please see Appendix B for examples of projects by funding source.

- Surface Transportation Program (STP)-Metro;
- Transportation Alternatives Program (TAP); and
- Congestion Mitigation/Air Quality (CMAQ).

**CDOT** selects TIP projects using a variety of federal, state, and local revenues. These are listed in the TIP under the following categories:

- 7th Pot (statewide strategic projects);
- Regional Priorities Program (RPP) (strategic regional CDOT priorities);
- Congestion Relief Program (regional CDOT priorities to improve congestion on the state highway system);
- Surface Treatment (repaving projects);
- Bridge (On-system, Off-system, Discretionary);
- Safety Projects;
- FASTER Projects: Bridge, Safety, and Transit (state revenues for eligible projects);
- Intelligent Transportation Systems;
- Safe Routes to School;
- Transportation, Community and System Preservation (TCSP);
- RAMP (Responsible Acceleration of Maintenance and Partnerships); and
- Other projects using federal discretionary funds.

**RTD** selects projects using a variety of federal funds and RTD revenues to fund regional transit system construction, operations, and maintenance. Its projects follow their Strategic Business Plan (SBP) and are listed in the TIP under the following categories:

- FTA Section 5307 (transit capital, operations, capital maintenance, studies);
- FTA Section 5339 (capital improvements);
- FTA Section 5310 (transit capital for elderly & disabled services);
- FasTracks; and
- Other projects using federal discretionary funds.

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All project sponsors are strongly encouraged to meet with relevant agencies before their funding requests are submitted to discuss their potential projects (for example: CDOT with affected local agencies; local agencies with CDOT on projects that affect state highways even if the project itself does not touch the state highway; local agencies requesting funds for station area planning with RTD; DRCOG for project eligibility).

### **B. Eligibility Requirements and Commitments for All TIP Projects**

#### 1. Eligible Applicants

Eligible applicants for DRCOG-selected projects are listed in Section III.A.4. CDOT and RTD establish applicant eligibility for the programs in which they select projects.

#### 2. Project Eligibility

All projects to be granted federal funds through the TIP must implement the improvements and/or policies in the Metro Vision RTP and abide by federal and state laws. The types of projects eligible for specific federal funding sources have been established in MAP-21.

#### 3. Air Quality Commitments

The TIP must implement any submitted State Implementation Plan (SIP) Transportation Control Measures (TCMs), which are detailed in the air quality conformity finding. No TCMs remain from the current 2035 Metro Vision RTP conformity; none are anticipated for the 2040 Metro Vision RTP.

#### 4. Eligibility of Roadway Capacity Projects

For the 2016-2021 TIP, only roadway capacity projects (i.e., highway widening, new roadways, new interchanges, interchange capacity, and HOT/BRT/HOV), approved for the fiscally constrained 2040 Metro Vision RTP (Appendix C) will be considered eligible for TIP funding.

#### 5. Freight

In the DRCOG selection process, freight facility and freight-related pollutant reduction projects are eligible to be submitted within the air quality improvements set-aside. Further, other DRCOG project types (such as roadway capacity, roadway operational, roadway reconstruction, and studies) may benefit freight movement or freight facilities. For example, the roadway capacity projects selected for the fiscally constrained 2040 Metro Vision Regional Transportation Plan were evaluated based on several criteria including proximity to intermodal facilities and severity of traffic congestion, each of which is important to freight movement. Also, traffic congestion is explicitly considered in the specific TIP evaluation criteria for several project types. Projects benefiting freight movement will be discussed in the interagency review of projects (Section IV.A.3).

6. Commitment to Implement Project

Since the TIP is dependent on a satisfactory air quality conformity finding, inclusion of a project in the TIP shall constitute a commitment to complete the project in a timely manner.

Any funding necessary to complete the project *beyond* the federal share allocated in the TIP must be borne by the project sponsor. If project costs increase on CDOT- and RTD-selected projects, they may provide additional federal, state, or local funds equal to the increase. If project costs increase on DRCOG-selected projects, sponsors must make up any shortfalls with non-federal funds.

All project components (within each funded TIP phase) contained within Environmental Impact Statements (EISs)/Records of Decision (RODs), Environmental Assessments (EAs)/Findings of No Significant Impact (FONSIs), or other National Environmental Policy Act (NEPA) decision documents must be funded as part of the project.

7. Public Involvement

Public involvement is appropriate at all stages of project development and the responsibility for seeking it lies with the project sponsor. For projects seeking DRCOG-selected funding, early public input is most appropriate as the sponsoring agency is preparing its funding request submittal. The DRCOG committee review process (TAC, MVIC, and RTC) and a public hearing at the regional level provide opportunities for public comment prior to Board action on adoption of the TIP amendments. The TIP public involvement process also serves as the public involvement process for RTD's Program of Projects using FTA Section 5307 funding, and the public hearing is noticed accordingly.

8. Advance Construction

For projects selected for TIP funding, a sponsor wishing to accelerate the completion of a project with non-federal funds may do so through a procedure allowed by the FHWA and referred to as Advance Construction. If any sponsor wishes to advance construct a project in the TIP, it must seek CDOT and FHWA permission to do so.

Through Advance Construction, a project sponsor can independently raise up-front capital for a project and preserve eligibility for future federal funding for that project. At a later point, federal funds can be obligated for reimbursement of the federal share to the sponsor. This technique allows projects to be implemented that are eligible for federal aid when the need arises, rather than when obligation authority for the federal share has been identified. The project sponsor may access capital from a variety of sources, including its own funds and private capital in the form of anticipation notes, commercial paper, and bank loans.

### **III. DRCOG SELECTION PROCESS**

#### **A. Eligibility Requirements and Commitments for DRCOG-Selected TIP Projects**

1. Eligibility by Project Type

For the purpose of selecting projects for federal funding, DRCOG has established specific project types. These project types are consistent with the Metro Vision RTP and are listed in Table 2. Funding requests submitted as candidates for DRCOG selection must identify the specific project type and must satisfy the eligibility requirements of that project type. Funding requests must also adhere to appropriate requirements below and to the eligibility requirements and commitments listed in the previous chapter.

2. Projects Requiring Concurrence by CDOT or RTD

Funding requests for any projects on State Highways must be submitted by, or with the concurrence of, CDOT. Funding requests in need of RTD involvement (operations or access to property) must request concurrence with RTD in advance of the funding request deadline.

3. Projects Requiring a Contract with CDOT

For any projects requiring the sponsor to contract with CDOT to receive federal funds, completion and submittal of the funding request application is an agreement by the sponsor to use the CDOT contract, available from CDOT region offices, without revision of any of the standard language.

4. Eligible Applicants and Number of Submittals

Eligible applicants for projects to be selected by DRCOG as part of the overall TIP call for funding requests are:

- County and municipal governments;
- Regional agencies (specifically RTD, the Regional Air Quality Council (RAQC), and DRCOG); and
- the State of Colorado.

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Each municipality and county in the TIP area may submit up to the following number of funding requests based on DRCOG's latest estimate of population or employment (2012). Table 3 lists the number of new funding request submittals allowed by jurisdiction:

- Five (5) requests for jurisdictions with population or employment up to 10,000;
- Eight (8) requests for jurisdictions with population or employment between 10,001 and 100,000;
- Ten (10) requests for jurisdictions with population or employment between 100,001 and 600,000; and
- Fifteen (15) requests for jurisdictions with a population or employment of 600,000 or more.

Other eligible applicants may submit up to the following number of funding requests:

- Six (6) requests for regional and state agencies, other than CDOT;
- Eight (8) requests for CDOT (total all regions).

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**Table 2. Project Types for DRCOG-Selected Projects**

<b>Project Type</b>	<b>Eligibility Requirements and Evaluation Criteria</b>
<b>Roadway Capacity Projects</b> , which include: <ul style="list-style-type: none"> <li>• Roadway widening</li> <li>• New road</li> <li>• New interchange</li> <li>• Interchange capacity</li> <li>• HOT/BRT/HOV</li> </ul>	See Table 4
<b>Roadway Operational Improvements Projects</b>	See Table 5
<b>Roadway Reconstruction Projects</b>	See Table 6
<b>Transit Passenger Facilities Projects</b>	See Table 7
<b>Transit Service Projects</b> <ul style="list-style-type: none"> <li>• New, Expanded, or Rapid Transit</li> </ul>	See Table 8
<b>Bicycle/Pedestrian Projects</b> <ul style="list-style-type: none"> <li>• New, Upgrade, or Reconstruction</li> </ul>	See Table 9
<b>Other Enhancement Projects</b>	See Table 10
<b>Studies (transportation-related)</b>	See Table 11
<p>The following project types will only be considered as part of the 2<sup>nd</sup> phase selection process and not scored:</p> <ul style="list-style-type: none"> <li>• Other Enhancement Projects</li> <li>• Studies (roadway, transit, other)</li> </ul>	
<p>The following set-asides and programs are funded through the TIP with project selection made through a future separate process for each. Contact DRCOG staff for further information.</p> <ul style="list-style-type: none"> <li>• Regional TDM Set-Aside (includes regional partnerships, marketing, and infrastructure)</li> <li>• DRCOG Way-To-Go Program</li> <li>• Regional Transportation Operations Set-Aside (includes traffic signals and ITS)</li> <li>• Station Area Master Plans/Urban Center Planning Studies Set-Aside</li> <li>• Air Quality Set-Aside (includes RAQC fleet and outreach projects, and local project selections)</li> </ul>	

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**Table 3: Population and Employment Estimates and Maximum TIP Project Submittals**

Place	2012 Population	2012 Employment	Max # of Submittals
Adams County	459,600	214,200	10
Arapahoe County	594,700	294,200	10
Arvada	109,200	55,300	10
Aurora	339,300	159,900	10
Bennett	2,400	1,000	5
Boulder	100,800	53,600	10
Boulder County	305,300	158,600	10
Bow Mar	900	400	5
Brighton	34,800	15,300	8
Broomfield (City & County)	58,300	30,000	8
Castle Pines	10,700	5,000	8
Castle Rock	50,800	25,000	8
Centennial	103,400	53,300	10
Cherry Hills Village	6,200	2,600	5
Columbine Valley	1,300	600	5
Commerce City	48,000	21,300	8
Dacono	4,300	2,100	5
Deer Trail *	600	200	5
Denver (City & County)	634,600	316,700	15
Douglas County	298,200	150,000	10
Edgewater	5,300	2,800	5
Englewood	31,100	16,600	8
Erie	19,600	9,900	8
Federal Heights	11,900	5,600	8
Firestone	10,900	4,900	8
Fort Lupton	7,600	4,600	5
Foxfield	700	400	5
Frederick	9,500	4,300	5
Glendale	4,300	3,100	5
Golden	19,300	9,500	8
Greenwood Village	14,400	7,400	8
Hudson	2,600	1,200	5
Jamestown	300	-	5
Jefferson County	546,700	282,100	10
Lafayette	26,000	13,500	8
Lakeside	-	1,000	5
Lakewood	146,000	73,000	10
Larkspur	200	100	5
Littleton	43,100	21,100	8
Lochbuie	5,200	300	5
Lone Tree	11,500	5,900	8
Longmont	88,900	43,300	8
Louisville	19,000	10,500	8
Lyons	2,100	1,100	5
Mead	3,700	1,800	5
Morrison	400	200	5
Mountain View	500	100	5
Nederland	1,500	800	5
Northglenn	37,000	18,100	8
Parker	47,000	24,100	8
Sheridan	6,500	2,500	5
Superior	12,800	7,100	8
Thornton	124,100	60,800	10
Ward	200	-	5
Weld County (DRCOG Only)	75,000	9,000	8
Westminster	109,500	57,100	10
Wheat Ridge	30,800	15,100	8

~ = less than 100  
 \* = eligible for CMAQ only

Source: U.S. Census Bureau. Source: U.S. Census Bureau.  
 ACS, 5-Year Estimates, 2008-2012

5. Financial Requirements

Sponsors must commit 20% match from local/state financial resources for each funding request submitted for consideration. Sponsors must request **a minimum of \$100,000 in federal funds** for any request submitted to be a candidate for DRCOG selection.

6. Commitment to Implement a Project

Inclusion of a project in the TIP shall constitute a commitment by the sponsor to complete their project in a timely manner. A sponsor's submittal of a funding request for DRCOG selection shall constitute a commitment to complete each project phase as described in the application form and committed by the sponsor's signature, if the project is selected for funding. Any part of the project scope credited in awarding evaluation points becomes a permanent part of the project scope and must be implemented.

Sponsors with funding requests selected for inclusion in the TIP shall work with CDOT or RTD to ensure that all federal requirements are followed, and that the project follows the project phases programmed in the TIP.

7. Project Delays

Implementation of an entire project or single project phase (if project has federal funding in more than one year) may be delayed only one year by the project sponsor.

A delay occurs when a project phase, as identified during project submittal and contained within the TIP project descriptions, has not been initiated in the identified year. A project that has only one year of federal funding receives a delay if the project did not go to ad (construction projects), did not hold its kick-off meeting (studies), or didn't conduct similar project initiation activities (other types of projects) by the end of the federal fiscal year for which it was programmed. For projects that have more than one year of federal funding, each phase (year) will be reviewed to see if the objectives defined for that phase have been initiated.

DRCOG defines the initiation of a project phase in the following manner as of September 30 for the year with federal funding in the TIP that is being analyzed:

- Design: IGA executed with CDOT AND if consultant – consultant contract executed and Notice To Proceed (NTP) issued; if no consultant – design scoping meeting held with CDOT project staff
- Environmental: IGA executed with CDOT AND if consultant – consultant contract executed and NTP issued; if no consultant – environmental scoping meeting held with CDOT project staff
- ROW: IGA executed with CDOT AND completion of ROW plans
- Construction: project advertised
- Study: IGA executed (with CDOT or RTD) AND kick-off meeting has been held
- Bus Service: IGA executed with RTD AND service has begun

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- Equipment Purchase: IGA executed AND RFP/RFQ/RFB (bids) issued
- Other: IGA executed AND at least one invoice submitted to CDOT/RTD for work completed

When a project phase encounters a delay (project phase being analyzed has not been initiated by September 30), DRCOG will list the reasons why the phase has not been initiated within its annual report. Sponsors must be available to appear before the Transportation Advisory Committee, Metro Vision Issues Committee, Regional Transportation Committee, and DRCOG Board to explain the reasons for the delay(s) and receive DRCOG Board approval to continue. Any conditions established by the Board in approving the delay become policy.

After a delay is encountered, DRCOG, along with the sponsor and CDOT or RTD, will discuss the project and the reasons for its delay. The end result will be an action plan enforceable by CDOT/RTD, which will be reported to the DRCOG committees and Board. For a sponsor that has a phase of any of its projects delayed, the sponsor must report the implementation status on all of its federally-funded projects.

If, in the following year, the sponsor fails to achieve initiation of the delayed phase, OR has breached the Board conditions placed upon that delay, the project will be automatically deleted from the TIP and the sponsor is required to reimburse all federal funds expended on the project. This action cannot be appealed to the DRCOG Board. In subsequent contracts with any sponsor that has experienced a deletion of a project due to such delay, RTD or CDOT may include a “termination for performance” clause.

### **B. Funding Request Application**

#### 1. Form

DRCOG staff shall provide TIP application materials and instructions. For the 2016-2021 TIP, a web-based application will be used.

#### 2. Required Training

At the initiation of the TIP Call for Projects, DRCOG staff shall conduct mandatory training workshops to cover and explain the submittal process, eligibility and evaluation, construction and development requirements for construction projects, and sponsor responsibilities. The training will also allow CDOT and RTD staff to cover basic requirements for implementing federal projects.

During the training, CDOT, RTD, and DRCOG staff will be available to assist jurisdictions in preparing funding request applications, as needed. As an outcome of this required training, those in attendance will become “certified” to prepare TIP applications. Only those applications prepared by eligible sponsors in attendance at this mandatory training will be considered as “eligible” submittals.

3. Submittals

Any agency contemplating submitting an application with questions regarding the data required to complete its application must contact DRCOG staff **at least two weeks prior to the application deadline**. The information that is required by the sponsors to complete applications is either noted within the project type tables and/or embedded within the website application.

Funding request applications, with formal project commitment forms, will be due approximately eight weeks after the date of the announcement of the solicitation for funding requests. All applicants must also submit CDOT's design data form 463 and checklist with the application. Applicants will also be required to submit a project implementation schedule with their funding requests, which will be available on the website application. All funding request application forms must be complete when submitted to DRCOG as candidates for selection. Incomplete applications will NOT be evaluated.

Applications from eligible sponsors must be prepared by those that have been certified as attending required training (see Section III.B.2). The application must be signed by either the applicant's City or County Manager, Chief Elected Official (Mayor or County Commission Chair) for local governments, or agency director or equivalent for other applicants.

**C. Special Requirements for Multi-Phase Projects**

Most of the regionally significant roadway and transit projects in the fiscally constrained 2040 Metro Vision RTP are quite costly. To allow for more flexibility in funding consideration in the TIP process, applicants are allowed to submit implementation funding requests for only the "next meaningful phase" of such projects. The "next meaningful phase" should be jointly established by the sponsor, CDOT or RTD, and DRCOG staff in advance of the submittal. The functional implication of a "meaningful phase" is that a completed phase creates something usable. Projects that receive TIP funding for an implementation phase also receive a TIP commitment to expeditiously continue funding future phases of such projects as long as the phases are meaningful and the sponsor continues to provide match. At the time of project selection, DRCOG will determine its TIP funding commitment to future phases of either the overall project or the overall NEPA approved alternative. Sections III.F and III.G identify how such projects will be considered during project selection.

For projects that require an Environmental Assessment (EA) or an Environmental Impact Statement (EIS), the EA or Draft EIS Disclosure Document must be signed, or be reasonably expected to be signed by the relevant federal agency within FY2016-2019. TIP funding for a NEPA study (in this TIP cycle), does not constitute a commitment to expedite funding for implementation in a coming TIP cycle. Funding for implementation will be based on relevant evaluation criteria in that (future) TIP process.

## **D. Evaluation and Ranking for Project Funding Requests**

Newly submitted funding requests are considered as follows:

### 1. Eligibility and completeness review

The applications received by DRCOG staff are reviewed for completeness and to determine if submitted requests meet the eligibility requirements listed within each of the project type evaluation tables. Applications not meeting the requirements are rejected and not evaluated further.

### 2. Scoring review

The submitted scoring for each eligible funding request is reviewed for accuracy by DRCOG staff. Each application form requires the sponsor to identify a project type and provide project and sponsor information relevant to the identified evaluation criteria to compute a score. **The evaluation criteria for each project type are shown in tables 4 through 11.** Scoring inaccuracies will be corrected by DRCOG staff during the review period and reviewed by a peer panel to assist in scoring validation, as necessary. With the concurrence of the applicant, DRCOG staff may reassign the funding request to another project type other than the one selected by the project sponsor, if the project type was inappropriate or it will improve either the project's scoring and its chances for selection.

### 3. Ranking

A list rank-ordered by validated score is created of eligible funding requests for each project type.

## **E. Funding Assessment and Initial Programming**

DRCOG staff will estimate how much funding will be available, by funding source, for fiscal years 2016, 2017, 2018 and 2019 in consideration of control totals provided by CDOT and other sources. The total four-year program funding must fund the federal share of all carryover projects, "off-the-top" commitments, and new funding requests.

### 1. Carryover Projects

DRCOG staff will make fiscal allowance to fund all approved carryover projects from the 2012-2017 TIP.

### 2. Off-the-Top Set-Asides and Programs

This TIP Policy reflects intent to fund the following programs "off-the-top", in the amounts shown for years 2016-2019. Any projects eligible for these set-asides and programs are ineligible to submit during the general TIP Call for Projects and are selected at other times throughout the TIP.

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- Regional Transportation Demand Management (TDM) set-aside
  - \$1,600,000 federal per year in fiscal years 2016-2019
  - \$560,000 per year is allocated for regional partnership TMAs, with the remaining set-aside target splits of \$640,000 per year for traditional TDM marketing projects and \$400,000 per year for multimodal supportive infrastructure
- Way-To-Go Program
  - \$1,800,000 federal per year in fiscal years 2016-2019
- Regional Transportation Operations set-aside (traffic signals and ITS)
  - \$4,200,000 federal per year in fiscal years 2016-2019
- Station Area Master Plans/Urban Center Planning Studies set-aside
  - \$600,000 federal per year in fiscal years 2016-2019
- Air Quality Improvements set-aside
  - \$1,800,000 federal per year in fiscal years 2016-2019
  - Regional Air Quality Council (RAQC) will receive \$1,200,000 per year for vehicle fleet technology and \$400,000 per year for the Ozone Aware Outreach Program. RAQC will allocate and administer \$200,000 per year to local projects (e.g., PM-10 sweeper, de-icer projects)

### 3. Other Commitments

This TIP Policy intends to fund three additional commitments:

- Completion of two separate FasTracks “commitment in principle” allocations set by the Board in 2004 and 2008. The total to be allocated over fiscal years 2016 and 2017 will be \$25,610,000 federal from a mixture of STP-Metro and CMAQ funding (additional details can be found in Section IV.A.1).
- \$25 million towards the I-70 East Viaduct reconstruction project over fiscal years 2016-2019.

### 4. Selection Process

Once carryover projects, off-the-top programs and other commitments are allocated, the remaining funds are designated for new projects from the requests in a two-phase process.

**F. First Phase Selection**

In the first of the two phases, new projects are selected directly from the ranked lists of funding requests, to a maximum of 75 percent of not-yet-programmed funding. **Funding targets** per project type are established below to implement the objectives in the RTP. These funding targets are used to establish the maximum selection in the first phase for each project type. Project types not listed (Other Enhancements projects and Studies) are not scored and will be considered in the second phase selection process only.

<b>Funding Targets for First Phase Selection by Project Type (75% of not-yet-programmed funding)</b>	
<b>Roadway Capacity</b>	<b>38%</b>
<b>Roadway Operational Improvements</b>	<b>22%</b>
<b>Roadway Reconstruction</b>	<b>15%</b>
<b>Transit Service</b>	<b>6%</b>
<b>Transit Passenger Facilities</b>	<b>3%</b>
<b>Bicycle/Pedestrian</b>	<b>16%</b>
<b>Total</b>	<b>100%</b>

The number of projects awarded between \$100,000 and \$300,000 in federal funding will be capped at 10, with the remaining placed on the waiting list.

**G. Second Phase Selection**

Language for the second phase selection process will be discussed, acted upon, and amended into the document later in 2014.

**DRAFT**

**Table 4. Roadway Capacity Projects**

**Eligibility Criteria**

- Only regionally-funded roadway widening, new road, new interchange, interchange capacity, and HOT/BRT/HOV projects approved for the fiscally constrained *2040 Metro Vision Regional Transportation Plan* are eligible.
- Only eligible projects with a NEPA disclosure document signed or expected to be signed between FY2014-2019 by the appropriate agencies can submit for funding unless CDOT concurs in writing that the project can be cleared via a categorical exclusion. If a sponsor desires funding for NEPA, it must be submitted under the *Studies* category (Table 11).
- Submittals can only be for “next meaningful phase” of the project jointly defined by applicant, CDOT, and DRCOG as described in Section III.C. At the time of project selection, DRCOG will determine its TIP funding commitment to future phases of either the overall project or the overall NEPA approved alternative.
- Within the urban growth boundary, arterial roadway projects must adhere to urban design standards and must demonstrate that sidewalks are present and will be maintained or added as part of the project (minimum width of 5 feet). Outside the urban growth boundary, roadway projects must adhere to non-urban design standards and incorporate a high degree of access control.
- Existing bicycle or transit infrastructure shall not be eliminated as a result of the proposed project.

Evaluation Criteria	Max Points	Scoring Instructions
Current congestion	15	<p>Based on the degree of current (2011) congestion on the most congested segment of the project:</p> <p>15 points will be awarded to projects with a congestion score of 18 or more; 0 points to projects with a congestion score of 3 or less; with straight-line interpolation between. Congestion for new road and interchange projects based on adjacent roadways.</p> <p><i>Source: DRCOG congestion management program; sponsor may supply location-specific volume data to augment DRCOG data in computation of congestion score.</i></p>
Crash reduction (Safety)	7	<p>Based on the project’s estimated crash reduction and weighted crash rate, up to 7 points will be awarded. Appendix D explains the point allocation.</p> <p><i>Source: DRCOG or sponsor supplied crash data</i></p>
Funding-effectiveness	12	<p>Based on the project’s requested federal funds per daily person-miles-of-travel (PMT), up to 12 points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>• <b>For HOT/BRT/HOV, roadway widening, and new road projects:</b> 12 points will be awarded to projects with a federal funding request per PMT of less than \$100; 0 points to projects with a federal funding request per PMT greater than \$650; with straight line interpolation between.</li> </ul>

**Table 4. Roadway Capacity Projects**

Evaluation Criteria	Max Points	Scoring Instructions
		<ul style="list-style-type: none"> <li>• <b>For interchange capacity and new interchange projects:</b> 12 points will be awarded to projects with a federal funding request per PMT of less than \$250; 0 points to projects with a federal funding request per PMT greater than \$3,000; with straight line interpolation between.</li> </ul> <p><i>Source: DRCOG 2015 model data. PMT for new road and interchange projects based on current usage estimates.</i></p>
Condition of applicable bridge	5	<p>Based on the CDOT inspection per the National Bridge Inspection Standards:</p> <p>5 points will be awarded if the bridge sufficiency rating is 20 or lower; 0 points will be awarded if the rating is 60 or higher; with straight line interpolation between.</p> <p><i>Source: DRCOG from CDOT</i></p>
2040 RTP project score	10	<p>Based on the score computed by DRCOG for project consideration in the fiscally constrained 2040 Metro Vision RTP process:</p> <p>10 points will be awarded if the project's long-range score was 60 or higher; 0 points will be awarded if the project's long-range score was less than 30; with straight line interpolation between.</p> <p><i>Source: DRCOG</i></p>
Transportation system management	5	<p>1 point will be awarded for each of the following features to be added to or newly provided as part of the project, up to 5 points (of a possible 7 features):</p> <ul style="list-style-type: none"> <li>• Provision of raised, depressed, or barrier medians for the entire length of the project</li> <li>• Access consolidation (driveways, side streets)</li> <li>• Provision of left-turn lanes at signalized intersections</li> <li>• Provision of signal interconnection</li> <li>• Provision of ITS infrastructure</li> <li>• Provision of infrastructure that implements an approved incident management plan</li> <li>• Provision of bicycle detection at signalized locations (in-pavement loops, video, microwave).</li> </ul>
Multimodal connectivity	18	<p>Up to 18 points (of a possible 45), will be awarded for the following features existing and being retained, or being included in and newly constructed by the project:</p>

**Table 4. Roadway Capacity Projects**

Evaluation Criteria	Max Points	Scoring Instructions
		<ul style="list-style-type: none"> <li>• 8 points for providing a physically-protected facility (includes, but not limited to the use of bollards, landscaping, curb) for bicycle travel for the entire length of the project</li> <li>• 8 points for adding a new travel lane or redesignating an existing general purpose travel lane for transit/HOV use for a continuous distance longer than a transit/carpool queue jump lane</li> <li>• 5 points for including major transit/HOV operational features – transit/carpool queue jump lanes</li> <li>• 4 points for adding a new bike lane, shoulders, or multi-use path</li> <li>• 2 points for including transit amenities (e.g., bus shelters, benches, multimodal information kiosks)</li> <li>• 2 points for a bicycle and/or pedestrian facility directly touching school property; OR 1 point if facility is within 1/8 mile</li> <li>• 2 points for a bicycle and/or pedestrian facility directly touching passenger rail, BRT station, park-N-Ride lot, transit terminal (all currently open on or before 2025), or existing bus stops serving multiple routes or high frequency service; OR 1 point if facility is within 1/8 mile</li> <li>• 2 points for detaching sidewalks to a minimum buffer of 6 feet from the roadway</li> <li>• 2 points for widening sidewalks to a minimum width of 8 feet</li> <li>• 2 points for incorporating transit priority at project traffic signals</li> <li>• 2 points for providing one or more protected roadway crossings for pedestrians (e.g., center refuge, bump-outs, flashing lights, raised pedestrian crossing on turn lanes, etc.)</li> <li>• 1 point for building pedestrian linkages to other adjacent land uses (other than schools)</li> <li>• 1 point for including minor transit operational features - bus pads</li> <li>• 1 point for providing bike amenities (e.g., bike racks, bike lockers)</li> <li>• 1 point for installing bicycle counters at newly constructed facilities</li> <li>• 1 point for providing pedestrian-oriented street lighting for the entire length of the project</li> <li>• 1 point for providing street trees and/or a landscaped buffer between the roadway and sidewalk within the street zone for the entire length of the project</li> </ul>
Environmental justice	3	3 points will be awarded if 75% or more of the project length is located within and provides benefits to a 2040 RTP-defined environmental justice area. The sponsor must identify the benefits and disadvantages the project may have on the environmental justice community.
Project-related Metro Vision implementation	17	Up to 17 points will be awarded as described in Appendix E.
Sponsor-related Metro Vision implementation	8	Up to 8 points will be awarded as described in Appendix F.
<b>Total</b>	<b>100</b>	

**Table 5. Roadway Operational Improvement Projects**

**Eligibility Criteria**

- Projects shall be located on the 2040 Metro Vision Regional Roadway System.
- Roadway operational projects may add through-lanes if:
  - Turn lane additions at appropriate intersections are also part of the project; and
  - The maximum length of any added through-lanes total less than one centerline mile.
- Roadway operational projects at interchanges are allowed, with the exception of:
  - New travel movements (e.g., constructing a missing ramp)
  - New major flyover (or flyunder) ramps.
- Within the urban growth boundary, arterial roadway projects must adhere to urban design standards and must demonstrate that sidewalks are present and will be maintained or will be added as part of the project (minimum width of 5 feet). Outside the urban growth boundary, roadway projects must adhere to non-urban design standards and incorporate a high degree of access control.
- Existing bicycle or transit infrastructure shall not be eliminated as a result of the proposed project.

Evaluation Criteria	Max Points	Scoring Instructions
Current congestion	12	Based on the degree of current (2011) congestion on the most congested approach or segment of the project:  12 points will be awarded to projects with a congestion score of 16 or more; 0 points to projects with a congestion score of 4 or less; with straight-line interpolation between.  <i>Sources:</i> <ul style="list-style-type: none"> <li>• <i>Roadway Projects: DRCOG congestion management program.</i></li> <li>• <i>Grade Separation Projects: The DRCOG congestion management program will use the following data: Number of trains/day: CDOT (divide by 24 for hourly estimate); Default average closure time = 3 min.; Default estimated recovery time multiplier=1.5. Sponsor may supply location-specific data to augment DRCOG or default data.</i></li> </ul>
Crash reduction (Safety)	7	Based on the project’s estimated crash reduction and weighted crash rate, up to 7 points will be awarded. Appendix D explains the point allocation.  <i>Source: DRCOG or sponsor supplied crash data.</i>

**Table 5. Roadway Operational Improvement Projects**

Evaluation Criteria	Max Points	Scoring Instructions
Delay reduction	18	<p>Based on the project’s current estimated person hours of travel (PHT) reduced during the AM peak hour <u>plus</u> the PM peak hour:</p> <p>18 points will be awarded to projects reducing 198 PHT or more during the two peak hours; 0 points to projects reducing 10 PHT or less; with straight line interpolation between.</p> <p>PHT Calculation:</p> <ol style="list-style-type: none"> <li>1. <u>Calculate vehicle hours of travel (VHT) using sponsor-supplied traffic data for both peak hours</u> <ol style="list-style-type: none"> <li>a) <u>For intersection projects</u>, use intersection operations software (for multiple intersections, sum individual intersection improvements).</li> <li>b) <u>For grade separation projects</u>, compute delay by [(average closure time) x (estimated recovery multiplier)] x [number of trains per hour] x [total volume in peak hour] /60.</li> </ol> </li> <li>2. <i>Calculate Average Vehicle Occupancy (AVO) =((# of vehicles in both peak hours x 1.36) + total transit riders in both peak hours) / (# of vehicles in both peak hours)</i></li> <li>3. <i>Calculate Person Hours Travel (PHT) = VHT x AVO</i></li> </ol> <p><i>Source: sponsor computations based on sponsor-supplied traffic data. Use “Max Load” from RTD’s Ridecheck data to calculate total transit riders in the peak hours (total all routes and runs that intersect project location within the AM and PM peak hours)</i></p>
Funding-effectiveness	12	<p>Based on the project’s requested federal funds per person hour of travel (PHT) reduced during the AM peak hour <u>plus</u> the PM peak hour:</p> <p>12 points will be awarded to projects with a federal funding request per PHT reduced of \$0; 0 points to projects with a federal funding request per PHT reduced of \$240,000 or more; with straight line interpolation between.</p> <p><i>Source: Sponsor computations</i></p>
Transportation system management	5	<p>1 point will be awarded for each of the following features to be added to or newly provided as part of the project, up to 5 points (of a possible 7 features):</p> <ul style="list-style-type: none"> <li>• Provision of raised, depressed, or barrier medians for the entire length of the project</li> <li>• Access consolidation (driveways, side streets)</li> <li>• Provision of left-turn lanes at signalized intersections</li> <li>• Provision of signal interconnection</li> </ul>

**Table 5. Roadway Operational Improvement Projects**

Evaluation Criteria	Max Points	Scoring Instructions
		<ul style="list-style-type: none"> <li>• Provision of ITS infrastructure</li> <li>• Provision of infrastructure that implements an approved incident management plan</li> <li>• Provision of bicycle detection at signalized locations (in-pavement loops, video, microwave).</li> </ul>
Multimodal connectivity	18	<p>Up to 18 points (of a possible 45), will be awarded for the following features existing and being retained, or being included in and newly constructed by the project:</p> <ul style="list-style-type: none"> <li>• 8 points for providing a physically-protected facility (includes, but not limited to the use of bollards, landscaping, curb) for bicycle travel for the entire length of the project</li> <li>• 8 points for adding a new travel lane or redesignating an existing general purpose travel lane for transit/HOV use for a continuous distance longer than a transit/carpool queue jump lane.</li> <li>• 5 points for including major transit/HOV operational features – transit/carpool queue jump lanes</li> <li>• 4 points for adding a new bike lane, shoulders, or multi-use path</li> <li>• 2 points for including transit amenities (e.g., bus shelters, benches, multimodal information kiosks)</li> <li>• 2 points for a bicycle and/or pedestrian facility directly touching school property; OR 1 point if facility is within 1/8 mile</li> <li>• 2 points for a bicycle and/or pedestrian facility directly touching passenger rail, BRT station, park-N-Ride lot, transit terminal (all currently open on or before 2025), or existing bus stops serving multiple routes or high frequency service; OR 1 point if facility is within 1/8 mile</li> <li>• 2 points for detaching sidewalks to a minimum buffer of 6 feet from the roadway</li> <li>• 2 points for widening sidewalks to a minimum width of 8 feet</li> <li>• 2 points for incorporating transit priority at project traffic signals</li> <li>• 2 points for providing one or more protected roadway crossings for pedestrians (e.g., center refuge, bump-outs, flashing lights, raised pedestrian crossing on turn lanes, etc.).</li> <li>• 1 point for building pedestrian linkages to other adjacent land uses (other than schools)</li> <li>• 1 point for including minor transit operational features - bus pads</li> <li>• 1 point for providing bike amenities (e.g., bike racks, bike lockers)</li> <li>• 1 point for installing bicycle counters at newly constructed facilities</li> <li>• 1 point for providing pedestrian-oriented street lighting for the entire length of the project</li> <li>• 1 point for providing street trees and/or a landscaped buffer between the roadway and sidewalk within the street zone for the entire length of the project</li> </ul>
Environmental justice	3	<p>3 points will be awarded if 75% or more of the project length is located within and provides benefits to a 2040 RTP-defined environmental justice area. The sponsor must identify the benefits and disadvantages the project may have on the environmental justice community.</p>

**Table 5. Roadway Operational Improvement Projects**

<b>Evaluation Criteria</b>	<b>Max Points</b>	<b>Scoring Instructions</b>
Project-related Metro Vision implementation	17	Up to 17 points will be awarded as described in Appendix E.
Sponsor-related Metro Vision implementation	8	Up to 8 points will be awarded as described in Appendix F.
<b>Total</b>	<b>100</b>	

**Table 6. Roadway Reconstruction Projects**

**Eligibility Criteria**

- Projects shall be located on the 2040 Metro Vision Regional Roadway System (exception: 16<sup>th</sup> Street Mall in Denver is eligible).
- The pavement condition index score (calculated with DRCOG’s PCI program) must be 40 or lower to be eligible.
- Projects must replace the sub-base, base, and surface material with an equivalent or increased pavement structure; rehabilitation and resurface projects are ineligible (exception: any project proposed on the 16<sup>th</sup> Street Mall in Denver may include non-traditional reconstruction activities).
- Projects may include bridge deck pavement reconstruction. Additional bridge improvements (new or improved structure) are not eligible.
- Within the urban growth boundary, arterial roadway projects must adhere to urban design standards and must demonstrate that sidewalks are present and will be maintained and replaced or will be added as part of the project. Outside the urban growth boundary, roadway projects must adhere to non-urban design standards and incorporate a high degree of access control.
- Existing bicycle or transit infrastructure shall not be eliminated as a result of the proposed project.

Evaluation Criteria	Max Points	Scoring Instructions
Pavement condition	25	<p>Based on the pavement condition index computed per Appendix G:</p> <p>25 points will be awarded to projects with a condition index of 5 or lower; 0 points to projects with a condition index of 40; with straight line interpolation between.</p> <p><i>Source: Sponsor computations</i></p>
Crash reduction (Safety)	5	<p>Based on the project’s estimated crash reduction and weighted crash rate, up to 5 points will be awarded. Appendix D explains the point allocation.</p> <p><i>Source: DRCOG or sponsor supplied crash data</i></p>
Funding-effectiveness	10	<p>Based on the project’s federal funds requested per daily person-miles-of-travel (PMT):</p> <p>Projects with a federal funding request per PMT of \$100 or less will receive 10 points; projects with a federal funding request per PMT of \$400 or more will receive 0 points; with straight line interpolation between.</p> <p><i>Source: Sponsor computations</i></p>

**Table 6. Roadway Reconstruction Projects**

Evaluation Criteria	Max Points	Scoring Instructions
Usage	9	<p>Based on current average weekday traffic (AWDT) per lane (average for overall project length):</p> <p>Projects with AWDT/lane of 8,000 or more will receive 9 points; projects with AWDT/lane of 2,000 or less will receive 0 points; with straight line interpolation between.</p> <p><i>Source: Sponsor data</i></p>
Transportation system management	5	<p>1 point will be awarded for each of the following features to be added to or newly provided as part of the project, up to 5 points (of a possible 7 features):</p> <ul style="list-style-type: none"> <li>• Provision of raised, depressed, or barrier medians for the entire length of the project</li> <li>• Access consolidation (driveways, side streets)</li> <li>• Provision of left-turn lanes at signalized intersections</li> <li>• Provision of signal interconnection</li> <li>• Provision of ITS infrastructure</li> <li>• Provision of infrastructure that implements an approved incident management plan</li> <li>• Provision of bicycle detection at signalized locations (in-pavement loops, video, microwave)</li> </ul>
Multimodal connectivity	18	<p>Up to 18 points (of a possible 45), will be awarded for the following features existing and being retained, or being included in and newly constructed by the project:</p> <ul style="list-style-type: none"> <li>• 8 points for providing a physically-protected facility (includes, but not limited to the use of bollards, landscaping, curb) for bicycle travel for the entire length of the project</li> <li>• 8 points for adding a new travel lane or redesignating an existing general purpose travel lane for transit/HOV use for a continuous distance longer than a transit/carpool queue jump lane</li> <li>• 5 points for including major transit/HOV operational features – transit/carpool queue jump lanes</li> <li>• 4 points for adding a new bike lane, shoulders, or multi-use path</li> <li>• 2 points for including transit amenities (e.g., bus shelters, benches, multimodal information kiosks)</li> <li>• 2 points for a bicycle and/or pedestrian facility directly touching school property; OR 1 point if facility is within 1/8 mile</li> <li>• 2 points for a bicycle and/or pedestrian facility directly touching passenger rail, BRT station, park-N-Ride lot, transit terminal (all currently open on or before 2025), or existing bus stops serving multiple routes or high frequency service; OR 1 point if facility is within 1/8 mile</li> <li>• 2 points for detaching sidewalks to a minimum buffer of 6 feet from the roadway</li> <li>• 2 points for widening sidewalks to a minimum width of 8 feet</li> <li>• 2 points for incorporating transit priority at project traffic signals</li> <li>• 2 points for providing one or more protected roadway crossings for pedestrians (e.g., center</li> </ul>

**Table 6. Roadway Reconstruction Projects**

Evaluation Criteria	Max Points	Scoring Instructions
		refuge, bump-outs, flashing lights, raised pedestrian crossing on turn lanes, etc.) <ul style="list-style-type: none"> <li>• 1 point for building pedestrian linkages to other adjacent land uses (other than schools)</li> <li>• 1 point for including minor transit operational features - bus pads</li> <li>• 1 point for providing bike amenities (e.g., bike racks, bike lockers)</li> <li>• 1 point for installing bicycle counters at newly constructed facilities</li> <li>• 1 point for providing pedestrian-oriented street lighting for the entire length of the project</li> <li>• 1 point for providing street trees and/or a landscaped buffer between the roadway and sidewalk within the street zone for the entire length of the project</li> </ul>
Environmental justice	3	3 points will be awarded if 75% or more of the project length is located within and provides benefits to a 2040 RTP-defined environmental justice area. The sponsor must identify the benefits and disadvantages the project may have on the environmental justice community.
Project-related Metro Vision implementation	17	Up to 17 points will be awarded as described in Appendix E.
Sponsor-related Metro Vision implementation	8	Up to 8 points will be awarded as described in Appendix F.
<b>Total</b>	<b>100</b>	

**Table 7. Transit Passenger Facilities Projects**

**Eligibility Criteria**

- Any station, transfer facility, or park-n-Ride lot identified in the Metro Vision RTP.
- Sponsor must obtain concurrence from the appropriate transit agency and/or CDOT for projects associated with their services or property.

Evaluation Criteria	Max Points	Scoring Instructions
Use and Benefits	44	<p>Up to 44 points will be awarded based on calculated “indicator units” (to represent likelihood of ridership) for project benefits:</p> <p>Results greater than 100,000 will receive 44 points; results less than 8,000 receive 1 point; with straight line interpolation between.</p> <p><i>Source: DRCOG model data and US Census. DRCOG staff will tabulate the project's indicator units within a half-mile buffer of the facility. Sponsors can request DRCOG to compute indicator units up to no later than 2 weeks before the application deadline.</i></p>
Multimodal connectivity	28	<p>Based on the number of modes directly served at the new facility, 4 points will be awarded for each mode of travel served, up to a maximum of 28 points.</p> <p><i>Modes are defined as: Local or limited bus service, express or regional bus service, mall shuttle or circulator bus, intra-regional commuter rail, inter-regional commuter rail, light rail, inter-city van/limo (gaming, ski areas), inter-city rail (AMTRAK, etc.), private inter-city bus and charter bus service, bicycle, pedestrian, car sharing, auto parking, and rental car.</i></p>
Environmental justice	3	<p>3 points will be awarded if 75% or more of the project length is located within and provides benefits to a 2040 RTP-defined environmental justice area. The sponsor must identify the benefits and disadvantages the project may have on the environmental justice community.</p>
Metro Vision project-related implementation	17	<p>Up to 17 points will be awarded as described in Appendix E.</p>
Metro Vision sponsor-related implementation	8	<p>Up to 8 points will be awarded as described in Appendix F.</p>
<b>Total</b>	<b>100</b>	

## Table 8. Transit Service Projects

### Eligibility Criteria

Three types of transit service projects are eligible:

1. **New Bus Service** is defined as service where no other similar transit service for use by the general public currently exists.
2. **Expanded Bus Service** projects must be for expanded service only (extended hours, shorter headways, additional route distance).
3. **Rapid Transit or Fixed Guideway Service** projects must be identified in the Fiscally Constrained *2040 Metro Vision RTP*.

### All Projects:

- Funding: The TIP will cover 3 years of federal funding. All proposals must provide detailed and allocated program funding that includes line item budgets for vehicles, physical improvements, marketing, and operations.
- Marketing program: Transit proposals must employ a marketing program to identify and reach prospective riders, in both the short and long term. Sponsors must describe this program in the application and should include its costs unless another funding source is committed.
- Any sponsor proposal for a transit agency to run the daily operation of a requested transit service must obtain written acknowledgement from the transit agency prior to the application deadline. The transit agency will only consider this request if sponsors submit formal desires to the transit agency no later than 7 days after the solicitation for funding requests is announced.
- Any requests for a transit agency's concurrence on other aspects of transit service, such as long-term funding support or any requests that directly impact or touch existing or future transit agency property must be submitted and received by the transit agency 30 days in advance of the funding request submittal deadline. The transit agency will consult with the proposed project sponsor to work out a suitable arrangement for these types of connections, and may request additional information and/or data prior to issuing any concurrence.

Evaluation Criteria	Max Points	Scoring Instructions
Use and benefits	25	<p>Up to 25 points will be awarded based on the calculated "indicator units" (to represent likelihood of ridership) for project benefits:</p> <p>Results greater than 100,000 will receive 25 points; results less than 5,000 receive 1 point, with straight line interpolation between.</p> <p><i>Source: DRCOG model data and US Census. DRCOG staff will tabulate the project's indicator units within a half-mile buffer around a fixed-route transit project site and the total area covered by call and ride service projects. Sponsors can request DRCOG to compute indicator units up to <u>no later than 2 weeks before</u> the application deadline.</i></p>

**Table 8. Transit Service Projects**

Evaluation Criteria	Max Points	Scoring Instructions
Funding-effectiveness	15	<p>The project's federal funds requested will be divided by the calculated indicator units:</p> <p>Up to 15 points will be awarded based on the federal dollars requested per indicator unit; \$6 or lower receives 15 points; \$45 or higher receive 1 point, with straight line interpolation between.</p>
Long-term funding	12	<p>12 points awarded to projects with an additional 2 years of total program funding support, beyond the required 3 years of federal funding (5 years total), which must be obtained in writing from either:</p> <ol style="list-style-type: none"> <li>1. an independent funding source;</li> <li>2. a recognized transit agency via a letter of support; or</li> <li>3. a combination of the two.</li> </ol> <p>0 points will be awarded to projects that do not define an additional 2 years of funding support.</p>
Connectivity	20	<ul style="list-style-type: none"> <li>• 3 points will be awarded for each existing or future route(s) (operational by the end of 2025) that connects with the proposed service, up to a maximum of 5 routes; AND</li> <li>• 5 points will be awarded if the proposed service connects to or intersects with a rapid transit station.</li> </ul>
Environmental justice	3	<p>3 points will be awarded if 75% or more of the project length is located within and provides benefits to a 2040 RTP-defined environmental justice area. The sponsor must identify the benefits and disadvantages the project may have on the environmental justice community.</p>
Project-related Metro Vision implementation	17	<p>Up to 17 points will be awarded as described in Appendix E.</p>
Sponsor-related Metro Vision implementation	8	<p>Up to 8 points will be awarded as described in Appendix F.</p>
<b>Total</b>	<b>100</b>	

**Table 9. Bicycle/Pedestrian Projects**

**Eligibility Requirements**

- New construction projects will result in a paved facility (hard, all-weather surface comprised of new/recycled asphalt and/or concrete) where pedestrian and/or bicycle infrastructure does not currently exist.
- Upgrade construction projects provide safety/operational improvements to an existing facility that is not currently designed appropriately to accommodate its current use (ADA and AASHTO design standards are still applicable).
- Reconstruction projects must reconstruct the total pavement of a facility due to pavement deterioration. To be eligible, the Pavement Condition Index, computed according to the methods in Appendix G, must have a PCI score of 25 or less for asphalt surfaces and 35 or less for concrete surfaces.
- Projects must be on facilities contained in an adopted local plan.
- Any new pavement must be designed and constructed to withstand occasional vehicle travel (emergency vehicles).
- If project consists of multiple, non-contiguous elements, all elements must either be a) on the same facility (primary corridor) OR b) within .25 miles of the largest element of the project.
- All projects intended for multiple user types (bicycle and pedestrian) are required to be constructed to a minimum width of 8 feet for the entire length of the project.
- All projects must score a minimum of 1 point in the connectivity evaluation criterion to be eligible.

Evaluation Criteria	Max Points	Scoring Instructions
RTP priority corridors	5	<p>If project consists of multiple elements not all on the same corridor, scoring in this category will be based on the largest contiguous element. Score 5 points maximum:</p> <p><b>Bicycle or Bicycle/Pedestrian Projects:</b></p> <ul style="list-style-type: none"> <li>• 5 points will be awarded for projects that are on or within .25 miles of a Regional Bicycle Corridor represented in the Metro Vision RTP AND fulfills the function of the Regional Bicycle Corridor facility</li> <li>• 3 points will be awarded for projects on or within .25 miles of a Community Bicycle Corridor represented in the RTP <u>AND</u> fulfills the function of the Community Bicycle Corridor facility</li> <li>• 1 point will be awarded for all other projects</li> </ul> <p style="text-align: center;"><b>OR</b></p> <p><b>Pedestrian Only Projects:</b></p> <ul style="list-style-type: none"> <li>• 5 points will be awarded for projects along or within 1/8 mile of a Metro Vision RTP major regional arterial and above or rapid transit <u>AND</u> fulfills the function of that facility</li> <li>• 3 points will be awarded for projects along or within 1/8 mile of a Metro Vision RTP principal arterials <u>AND</u> fulfills the function of pedestrian movement for that facility</li> <li>• 1 point will be awarded for all other projects</li> </ul>

**Table 9. Bicycle/Pedestrian Projects**

Evaluation Criteria	Max Points	Scoring Instructions
Safety	12	<p>Projects will be evaluated on the anticipated <i>improvement</i> of existing safety problems related to the following measures:</p> <ol style="list-style-type: none"> <li>1. <b>Relevant crash history</b> Based on the number of <i>documented</i> injury and fatal crashes: <ul style="list-style-type: none"> <li>○ involving non-motorized traffic;</li> <li>○ in the area <u>affected</u> by the facility; and</li> <li>○ occurring over the last three-year period for which data is available.</li> </ul> <ul style="list-style-type: none"> <li>• 1 point will be awarded for each applicable injury accident, up to a maximum of 5</li> </ul> </li> <li>2. <b>Speed limit</b> If the existing facility is a roadway that allows interaction between motorized and non-motorized traffic, and if the project will build a new facility for the non-motorized traffic that eliminate or reduce the conflict factor, the project will earn safety points. Based on the speed limit of the existing facility, up to 4 points will be awarded as follows: <ul style="list-style-type: none"> <li>• 4 points will be awarded if the existing speed limit is 40 MPH or more</li> <li>• 2 points will be awarded if the existing speed limit is either 30 or 35 MPH; or</li> <li>• 1 point will be awarded if the existing speed limit is less than 30 MPH, or the project is not near and doesn't interact with a roadway.</li> </ul> </li> <li>3. <b>Facility lighting</b> <ul style="list-style-type: none"> <li>• 1 point will be awarded to projects that will provide new or upgraded ADA/AASHTO compliant lighting to facilitate non-motorized travel on the proposed facility.</li> </ul> </li> <li>4. <b>Protected or grade separated facilities</b> <ul style="list-style-type: none"> <li>• 2 points will be awarded for constructing an at-grade physically-protected bicycle facility (includes, but not limited to the use of bollards, landscaping, curb) or a grade-separated facility.</li> </ul> </li> </ol>
Connectivity	25	<p>Up to 25 points will be awarded for specific project attributes that address existing local or regional connectivity of non-motorized travel. Points will be awarded as follows:</p> <p><b>Gap closure (score points for only one of these two)</b></p> <ul style="list-style-type: none"> <li>• 7 points - constructing a new facility that completely closes a gap between two existing similar bicycle facility/sidewalk sections (trail to trail, sidewalk to sidewalk, path to path, bike lane to bike lane)</li> <li>• 5 points – constructing a new facility that completely closes a gap between an existing pedestrian/bicycle facility and an RTP roadway (arterial and above) that currently serves pedestrian/bicyclists</li> </ul>

**Table 9. Bicycle/Pedestrian Projects**

Evaluation Criteria	Max Points	Scoring Instructions
		<p><b>Access (score points for only one of these three)</b></p> <ul style="list-style-type: none"> <li>• 4 points – facility directly touches a school property</li> <li>• 3 points – facility directly touches an employment center with greater than 2,000 jobs</li> <li>• 2 point – facility directly serves such destinations as employment, shopping, dining, or government buildings, or recreational destinations such as parks or recreational facilities.</li> </ul> <p><b>Barrier elimination (score points for only one of these four)</b></p> <ul style="list-style-type: none"> <li>• 6 points - entirely eliminate a barrier (railway, highway, waterway) for pedestrians or cyclists by constructing a new grade separation (bridge or underpass) or upgrading an existing one which provides a continuity of motion (i.e., no bike dismount or use of elevator)</li> <li>• 4 points - entirely eliminate a barrier (railway, highway, waterway) for pedestrians or cyclists by constructing a new grade separation or upgrading an existing one which DOES NOT provide a continuity of motion (i.e., bike dismount or use of elevator required)</li> <li>• 3 points - eliminate a barrier (railway, highway) for pedestrians or cyclists by providing a new controlled crossing where one does not currently exist (demonstrate achievement of signal warrant if signal proposed) or by upgrading an existing one to meet ADA and/or AASHTO standards</li> <li>• 1 point - construct or upgrade at least one phase of a multi-phase improvement (as identified in an approved plan) towards eliminating a barrier (railway, highway, waterway).</li> </ul> <p><b>Transit (score points for only one of these two)</b></p> <ul style="list-style-type: none"> <li>• 6 points - provide <u>direct</u> access to “transit”. Direct means physically touching the transit site or stop</li> <li>• 3 points - provide <u>indirect</u> access (extends the service of an existing linkage) to “transit” within 1 mile for bike projects and within 0.25 miles for pedestrian projects. Distance measured from closest point of project to the specific transit platform or stop.</li> </ul> <p>“Transit” in this circumstance is defined as rail or BRT stations, park-N-Ride lots, transit terminals (all currently open or before 2025), and existing bus stops serving multiple routes or high frequency service.</p> <p><b>Location (score points for only one of these two)</b></p> <ul style="list-style-type: none"> <li>• 2 points – project touches more than one local governmental entity</li> <li>• 1 point – project connects 2 or more existing neighborhoods</li> </ul>

**Table 9. Bicycle/Pedestrian Projects**

Evaluation Criteria	Max Points	Scoring Instructions
Multiple enhancements	5	<p>Up to 5 points (of 7 available) will be awarded for multiple enhancements (score all that apply):</p> <ul style="list-style-type: none"> <li>• 2 points if the project will provide a multi-use bi-directional facility (new or upgraded to) for use by both bicycles and pedestrians to a minimum width of 10 feet for 90% or greater of the length of the project</li> <li>• 2 points if the project site includes signage/wayfinding with destinations and distances.</li> <li>• 1 point if the project provides 20 or more bicycle spaces within ½ mile of the project and fulfills the function of that facility</li> <li>• 1 point if at least 10 of the provided spaces are covered and/or considered long-term parking spaces that are secure</li> <li>• 1 point if the project connects or is adjacent to a bikeshare station</li> </ul>
Use and Benefits (VMT Reduction)  <b>(New Construction projects only)</b>	15	<p>Up to 15 points will be awarded based on the calculated “indicator units” for project benefits:</p> <p>Results greater than 120,000 will receive 15 points; results less than 1,000 receive 1 point, with straight line interpolation between.</p> <p><i>Source: DRCOG model data and US Census. The project's indicator units are tabulated within a 1.5 mile radius of the project area. Sponsors can request DRCOG to compute indicator units up to <u>no later than 2 weeks before the application deadline</u>.</i></p> <p><i>For projects with non-contiguous elements, DRCOG will compute the indicator units for each element. The project's overall indicator units are the weighted average based on the percent of the project length in each element compared to the overall length.</i></p>
Existing Users  <b>(Upgrade/Reconstruct projects only)</b>	15	<p>Based on current recorded users:</p> <p>Facilities with 200 or more users during the 2-hour AM peak will receive 15 points; facilities with 25 or less users during the 2-hour AM peak will receive 0 points; with straight line interpolation between. Users are to be counted at a representative location in the project area.</p> <p><i>Source: Actual count from applicant between 7 AM and 9 AM on a Tuesday, Wednesday, or Thursday during the open Call for Projects.</i></p>
Funding-effectiveness	10	<p>Projects with a total federal funding request per the calculated indicator unit \$1 or less will receive 10 points; projects with a total federal funding request per indicator unit above \$60 will receive 0 points; with straight line interpolation between.</p>

**Table 9. Bicycle/Pedestrian Projects**

<b>Evaluation Criteria</b>	<b>Max Points</b>	<b>Scoring Instructions</b>
Environmental justice	3	3 points will be awarded if 75% or more of the project length is located within and provides benefits to a 2040 RTP-defined environmental justice area. The sponsor must identify the benefits and disadvantages the project may have on the environmental justice community.
Project-related Metro Vision implementation	17	Up to 17 points will be awarded as described in Appendix E.
Sponsor-related Metro Vision implementation	8	Up to 8 points will be awarded as described in Appendix F.
<b>Total</b>	<b>100</b>	

**Table 10. Other Enhancement Projects**

**Eligibility Criteria**

- Projects will not be scored.
- Projects will be considered in the second phase selection process only.
- Three types of projects are eligible:
  - **Transportation Aesthetics and Scenic Values**
  - **Historical Preservation**
  - **Environmental Mitigation (to address water pollution or wildlife mortality)**

## Table 11. Studies

### Eligibility Criteria

- All types of transportation-related studies are eligible.
- Projects will not be scored. Studies will be considered in the second phase selection process only.
  - Roadway studies must be associated with the DRCOG-defined Regional Roadway System.
  - Roadway capacity studies must further the development of regionally-funded projects identified in the fiscally constrained RTP (i.e., design, NEPA).
  - Station area master plan and urban center planning studies are not eligible.
  - Studies submitted by DRCOG must have been approved by their Board.
  - Studies submitted by RAQC must have been approved by their Board.

## IV. TIP DEVELOPMENT, ADOPTION, AND AMENDMENT

This chapter describes the processes for development, adoption, and amendment of the TIP.

### A. TIP Development

#### 1. Funding Requests Related to FasTracks Implementation

Section III.E.3 has identified a TIP commitment to support FasTracks implementation. The first remaining commitment (\$8 million in 2016-2017) can be used by RTD for any FasTracks-related improvement that might emanate during the normal course of project development, and such improvements may be implemented by agencies other than RTD.

The second remaining commitment (\$11.59 million in 2016-2017 has yet to be committed) is specifically targeted to individual FasTracks corridors and will only be programmed in a manner agreed upon by all the corridor partners. A corridor request submitted per the requirements of the resolution granting this “commitment in principle” (#20, 2008) will be allocated funding as available.

#### 2. Peer Discussion

Applicants are encouraged to discuss potential funding requests with CDOT and/or RTD as appropriate. As a minimum, this discussion should take place for any submittal for which CDOT or RTD concurrence is required. Sponsors may also benefit from discussing other potential submittals to better understand the implications of federal requirements on the specific submittal.

#### 3. Interagency Review

After each agency has proceeded far enough through its individual process to identify preliminary selection recommendations, staff from DRCOG, CDOT, and RTD will meet to review and comment on each other’s preliminary selections, as well as requests not selected. The objective of this review is to look for conflicts and synergies among projects, and for opportunities in strategic corridors. Each agency may consider feedback from the interagency review to revise selection decisions or adjust implementation scheduling.

#### 4. Draft TIP Preparation

After the individual agency preliminary selection processes and interagency reviews are completed, DRCOG staff will prepare a draft TIP. This program of projects will respond to the comments, ensure that construction funding for long-range projects is commensurate with the proposed construction schedule, and include an air quality conformity analysis and finding. The draft program will be referred to the Transportation Advisory Committee, Metro Vision Issues Committee, and Regional Transportation

Committees for recommendation, and made available for public comment at a public hearing by the DRCOG Board of Directors.

The draft TIP will include:

- all DRCOG-selected, RTD, and CDOT federally-funded projects;
- all CDOT state-funded projects; and
- any regionally-significant transportation projects, regardless of funding source.

The draft TIP will demonstrate adequate resources are available for program implementation. It will indicate public and private resources that are reasonably expected to be available to carry out the program. The plan may also recommend innovative financing techniques to fund needed projects and programs including value capture, tolls, and congestion pricing.

The Clean Air Act requires that DRCOG find the TIP to conform to the State Implementation Plan for Air Quality. The finding must be based on the most recent forecasts of emissions determined from the latest population, employment, travel, and congestion estimates by DRCOG. DRCOG staff will prepare the technical documentation supporting a conformity finding coincident with preparation of the draft TIP. The conformity document will list regionally-significant non-federally funded projects anticipated to be implemented within the TIP time horizon.

## **B. Adoption**

### 1. Public Involvement and Hearings

A public hearing to consider the draft TIP and the air quality conformity finding will be held prior to Board action in adopting a new TIP or making major amendments (see Section IV.C) to an existing TIP. Sponsoring agencies are encouraged to provide opportunities for public comment on funding requests submitted to DRCOG.

### 2. Appeals

After the public hearing on the draft TIP, any applicant may appeal project scoring or exclusion of a project from the draft. That appeal should be made to the Transportation Advisory Committee at its meeting following the public hearing.

### 3. TIP Adoption

In response to the federal requirements identified in MAP-21, the TIP shall be adopted at least every four years by the DRCOG Board of Directors. Adoption of the TIP by the Board of Directors shall be upon recommendation of the Regional Transportation Committee, following consideration by the Transportation Advisory Committee and the Metro Vision Issues Committee.

Once the TIP is approved by DRCOG, and air quality conformity is demonstrated, federal law requires that the TIP also be approved by the Governor and incorporated directly without modification into the State Transportation Improvement Program (STIP) by CDOT.

## C. TIP Revisions

The TIP is subject to revision, either administratively by staff or, through TIP amendments adopted by the DRCOG Board of Directors. Revisions reflect project changes that may affect the TIP's programming. Listed below are two levels of revisions that can be made to the TIP.

DRCOG staff will process any TIP revision by:

- entering the requested revisions into the TIP project database;
- posting the revisions on the DRCOG website, and
- emailing a monthly summary to the TIP notification list.

If a sponsor submits a TIP revision and DRCOG staff denies it, the sponsor may appeal DRCOG staff's decision to the Board of Directors. To do so, the sponsor shall have its DRCOG Board representative transmit a letter to the DRCOG Board Chair and DRCOG's Executive Director requesting its appeal to be put on a future Board agenda. The letter shall identify the specifics of the appeal and the sponsor's justification.

### 1. TIP Amendments

TIP amendments are required for the following actions:

- adding a new project or changing an existing project that would affect the air quality conformity finding;
- changing a regionally-significant project:
  - delete or significantly change a feature (for example, change the project termini);
  - delete or defer it from the first four years of the TIP;
- changing a project to be inconsistent with Metro Vision;
- adding or deleting federal or state funding for any project by more than \$5 million over the first four years of the TIP.

TIP amendments will be processed as soon as possible after they are received, considering committee schedules. TIP amendments will be recommended by the Transportation Advisory Committee and Regional Transportation Committee for DRCOG Board consideration and action. Formal public hearings are not typically held. Public notification of the actions will be posted on the DRCOG website and input will be accepted during the public comment period of any of the committee or Board meetings considering the amendments.

TIP amendments requiring a new conformity finding will only be processed twice a year, concurrent with the Metro Vision Plan Assessment process (typically commenced in January and June). These amendments are subject to formal public hearings by the DRCOG Board prior to Transportation Advisory Committee and Regional Transportation Committee recommendation and Board adoption.

## 2. Administrative Modifications

Administrative Modifications include all revisions other than those listed under TIP Amendments and will be processed as they are received by DRCOG staff. Administrative Modifications do not require committee review or approval.

As stated in Section III.A.6, there is an expectation that DRCOG-selected projects will be implemented with the scope defined in the funding request application. Sometimes sponsors desire to revise the scope within the same federal budget. In circumstances when these revisions affect project elements that were used to score the project (in the TIP process), sponsors must submit an analysis to DRCOG staff showing that the “revised” project would have scored approximately the same number of points as the project originally submitted. If the sponsor’s analysis confirms this demonstration, DRCOG staff will process the request as an Administrative Modification.

In circumstances when the revisions are to add items to the scope (within the current project budget), as long as the request is a meaningful addition to the project and the cost is modest (in comparison to the overall budget), DRCOG staff will concur with the request and may (if necessary) process the request as an Administrative Modification. In either instance, if the proposed revisions affect air quality conformity, they will be treated as TIP amendments.

## **D. Changes in Federal Funding Allocations**

Under MAP-21, actual allocations are determined annually with no guaranteed amount. The 2016-2021 TIP is being prepared under the best estimate of available funds by CDOT, DRCOG, and RTD. As federal funds change, it may be necessary to add, advance, or postpone projects through TIP revisions.

### 1. Federal Funding Increase

If federal revenues increase, the additional revenues will be allocated to projects as follows:

- First, existing funds will be advanced for projects already awarded funds in the TIP, as applicable. In some circumstances, funds may be flexed between categories to advance projects.
- After options for advancing currently funded projects have been exhausted, new projects may be selected with remaining monies. Rank-ordered “waiting lists” of projects submitted, evaluated, and ranked, but not selected for the current TIP, will be maintained for each DRCOG-selected federal funding category.

### 2. Federal funding Decrease

If federal revenues decrease, some TIP projects will need to be deferred in order to maintain fiscal constraint. The method to obtain deferrals is as follows:

### *Step 1 - Voluntary Deferrals*

DRCOG staff will first query project sponsors to discern if they will voluntarily defer one or more of their current TIP projects. Any project deferred would receive “project immunity”. Project immunity means a project will NOT be subject to involuntary deferral at a later date.

### *Step 2 - Involuntary Deferrals*

If voluntary deferrals are insufficient, involuntary deferrals will be necessary.

- A. DRCOG staff will FIRST create lists of relevant projects that will be EXEMPT from involuntary deferral according to the following:
  - Previously granted project immunity
  - Project readiness (projects, regardless of sponsor, that are or will be ready for ad in the next 3 months, as jointly determined by CDOT/RTD and the sponsor)
- B. DRCOG staff will defer relevant non-exempt projects on the basis of TIP scoring (lowest scoring relevant projects deferred).

Any project deferral, either voluntary or involuntary, will not be counted as a project delay for purposes of Section III.A.7.



## APPENDIX A

### RTD AND CDOT SELECTION PROCESSES

This chapter describes RTD and CDOT selection processes.

#### **A. RTD Process**

All projects submitted by RTD for inclusion into the TIP first must be included in RTD's adopted Strategic Business Plan (SBP). The fiscally constrained SBP documents RTD's six-year capital and operating plan. It is updated and adopted each year by the RTD Board of Directors. The one exception to this process is the FasTracks projects, which are reported in the FasTracks SB 208 plan as described below.

##### **1. RTD Solicits SBP Projects**

RTD solicits projects both internally and from local governments. The project form requires a detailed project description and project justification as well as the respective capital and or operating and maintenance costs per year of the SBP cycle.

**INTERNAL PROJECTS**—In January of each year, RTD solicits SBP projects from each division. Project applications are submitted to the Finance department for review of completeness. The vast majority of internally submitted projects are projects necessary to keep the existing transit system in a state of good repair and are not regionally significant from a TIP standpoint.

**LOCAL GOVERNMENTS**—Typically in August (depending on the timing of Local Government Meetings) of each year, RTD solicits SBP project applications from local governments. Project applications are submitted to the Planning Department for review of completeness.

**FASTRACKS PROJECTS**—Since the FasTracks plan was approved by the voters in the RTD District in 2004; and since prior to the election the DRCOG Board approved the FasTracks SB 2008 plan, RTD will automatically submit all FasTracks corridor projects for inclusion in the TIP. However, because of the FasTracks commitments made to the voters and pursuant to the DRCOG SB 208 approval, FasTracks capital projects will not be included in the regular RTD SBP process and they will not be subject to SBP evaluation. Rather, all FasTracks projects are budgeted and tracked separately by RTD and will be reported annually to DRCOG.

##### **2. Regionally Significant Projects are Identified**

RTD staff will compile a list of all submitted projects. Using the criteria noted below, the project list is reviewed to determine which projects can be classified as Regionally Significant Projects or as being required to be in the TIP.

- Does the project enhance or advance the goals of FasTracks?
- Is the project required to be put into the TIP? (This would include projects that rely on grant funding.)
- Does the project serve more than one facility or corridor?
- Does the project serve several jurisdictions or a large geographic area?
- Will the project have a positive impact on regional travel patterns?

Upon completion of the SBP process, those projects identified as Regionally Significant will then be submitted to DRCOG for inclusion in the TIP. As noted above, because of the regionally significant nature of FasTracks, all FasTracks corridors will be submitted for inclusion into the TIP, but will not be subject to the regular SBP review process. Projects that are not considered to be Regionally Significant will be considered in RTD's internal SBP process.

### 3. Projects Subjected to Screening Criteria

RTD staff compiles all Regionally Significant projects into two lists: one for capital projects and one for operating projects. Items in the lists are grouped according to the category of the project, such as park-n-Rides, Information Technology, Vehicle Purchases, etc. The projects are then scored based on the following screening criteria by RTD's Senior Leadership:

- Does the project conform to RTD's mission statement?\*
- Safety Benefit
- Provision of Reliable Service
- Provision of Accessible Service
- Provision of Cost-effective Service
- Meets Future Needs
- Operational Benefit
- Business Unit Benefit
- Risk of No-action

### 4. Subject Projects to Fiscal Constraints/Develop Cash Flow

RTD's Finance Division subjects the remaining project list to a cash flow analysis. Since cash flow will vary from year-to-year depending on availability of federal funds, grants, outstanding capital and operating commitments, and debt, available project funds may vary considerably by year. Typically, additional cuts or project adjustments must be made to satisfy the cash flow requirements. Lower rated projects are deleted while others may be reduced in scope or deferred in order for them to be carried forward into the final SBP.

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\* RTD's mission statement is as follows: *To meet our constituents' present and future public transit needs by offering safe, clean reliable, courteous and cost-effective service throughout the District.*

5. Title VI Review

After the cash flow analysis has been completed, the project list is then reviewed by RTD's Disadvantaged Business Enterprise (DBE) officer. The DBE officer evaluates the project list for environmental justice considerations. The primary focus is to ensure projects are distributed in a manner that provides benefit to all segments of the RTD district population, including low income and minority neighborhoods.

6. Board Review and Adoption

Following final review by RTD's Senior Staff, financial review and DBE review, the complete SBP is presented first to the RTD Finance Committee for review and then to RTD's Local Governments group. Following completion of the Local Governments group review, the SBP is presented to the full RTD Board for review and adoption.

**B. CDOT Processes**

1. Basic underlying premises

Projects that are currently funded in the TIP, along with ones that are part of a NEPA decision document commitment, will have a top priority and will continue to be funded.

CDOT Regions will provide documentation to DRCOG describing the factors considered, assumptions used, and underlying rationale for projects selected for inclusion for the TIP document. This documentation will be submitted to DRCOG when projects are submitted for inclusion in the TIP.

2. Detail by Funding Program

REGIONAL PRIORITY PROGRAM—CDOT uses a qualitative assessment to determine RPP funding priorities. The assessment is based on several factors, including but not limited to the priorities discussed at the county hearings, availability of funding, project readiness (design, environmental and right of way clearances), pertinent Transportation Commission policies, and geographic equity. CDOT Regions have a need for a small, unprogrammed pool of RPP funds to address unplanned needs that require relatively small funding investments. Therefore, CDOT also may choose to reserve a small pool of RPP funds to address these needs. In all RPP project selection, CDOT will also consider how well the project supports the elements of Metro Vision. The CDOT region will prepare documentation describing the factors used for RPP projects selected for inclusion in the TIP.

BRIDGE—The selection of projects eligible for bridge pool funding is performance based. Other factors that affect bridge project selection include public safety, engineering judgment, and other funding sources available to repair/replace selected bridge, project readiness, and funding limits.

**SAFETY**—CDOT Traffic & Safety Branch selects hazard elimination safety projects based on a variety of factors including cost/benefit ratios, recent public safety concerns, engineering judgment, and funding limits. The projects constitute the Integrated Safety Plan. The Traffic & Safety Branch also selects projects for the Federal Rail-Highway Safety Improvement Program. This grant program covers at least 90 percent of the costs of signing and pavement markings, active warning devices, illumination, crossing surfaces, grade separations (new and reconstruction), sight distance improvements, geometric improvements to the roadway approaches, and closing and/or consolidating crossings. Projects are selected based on accident history, traffic counts and engineering judgment.

CDOT Regions are also provided safety funds for hot spot, traffic signal, and safety enhancement programs.

**SURFACE TREATMENT**— The selection of projects for surface treatment funding is based on a performance management system known as the Driveability Life. CDOT regions work to select project locations and appropriate treatments as identified by the statewide system. Projects considered for selection will be based upon management system recommendations, traffic volumes, severe pavement conditions, preventative maintenance that delays or eliminates further major investments in the near future, public safety, and funding limitations.

**CONGESTION RELIEF**—The Transportation Commission adopted guidelines for the selection of congestion relief projects based on CDOT's STIP guidelines and process. Congestion relief funds must be applied to projects on the State Highway System that experience congestion at or above 0.85 volume-to-capacity ratio. To be considered for the congestion relief funding, project proposals must include the goal of the project, the baseline data for evaluating project performance and measures of cost-effectiveness developed by the CDOT Region. The current policy only funds heavy tow and courtesy patrol with these funds.

**7TH POT STRATEGIC HIGHWAY PROJECTS**— S.B. 97-001, a funding source specifically targeted to Strategic Projects, has been eliminated by the legislature, but is still listed in some older CDOT projects in the TIP. At the time funding was available, this program was used to fund 28 high-cost and high priority projects that were identified in 1996. The projects addressed corridors of State and regional significance. The funds that supported the construction of these projects are commonly referred to as the 7th Pot. Projects, or elements of projects, were selected for funding based on a statewide prioritization of available funds. A project was selected for funding when it was environmentally cleared and ready for advertisement.

**STRATEGIC TRANSIT PROJECTS**—Similar to above, funding for this program was eliminated by the legislature. At the time funding was available, state statute required that 10 percent of S.B. 97-001 funds be spent on transit capital projects. Projects competed for funding statewide and must have increased transit ridership by improving transit connections between communities and/or increased access to critical destinations. Projects must have met the following basic criteria: 20 percent local cash

match, commitment to sustain the project overtime, consistency with RTP, and ready-to-go in the year for which funds were requested.

**FASTER BRIDGE PROJECTS**—This program is comprised of bridge replacement projects for bridges statewide that are considered to be structurally deficient and have a sufficiency rating below 50. Factors that affect bridge project selection include public safety, engineering judgment, project readiness, and funding limits. The funding for this program comes from the fees generated through the FASTER legislation and is directed by the Bridge Enterprise.

**FASTER SAFETY PROJECTS**—The Transportation Commission adopted guidelines for the selection of FASTER Safety projects based on the FASTER legislation. The guiding principles for selection of these projects include a focus on safety, preservation of the system and optimizing system efficiency, and enhancing multi-modal and intermodal mobility. Projects selected must address a safety need.

**FASTER TRANSIT PROJECTS**—The FASTER legislation required that a portion of the state and local FASTER revenues totaling \$15 million/year be set aside for transit. The Transportation Commission adopted guidelines for the selection of projects using the \$5 million/ year designated for local transit grants. The evaluation criteria are: criticality, financial capacity, financial need, project impacts, and readiness. DRCOG and the CDOT regions jointly review and recommend these projects.

**TRANSIT PROGRAM**—CDOT administers Federal Transit Administration grants through its Division of Transit and Rail. The program is expansive in what it can support.

**SAFE ROUTES TO SCHOOL (SRTS)** —This is a federal-aid program administered by CDOT to enable and encourage children to walk and bicycle to school. Eligible applicants include any political subdivision of the state (school district, city, county, state entity). Nonprofits may also apply by partnering with a state subdivision as the administrator. Funds are awarded through a statewide competitive process, and in proportion to the geographic distribution of the student population in K-8 grades. Projects are selected by a 9-member appointed panel consisting of bicyclists, pedestrians, teachers, parents, law enforcement, MPO, and TPR representatives. 10-30% of the total SRTS funds are dedicated to non-infrastructure (education and encouragement) projects, with remaining funds going towards infrastructure (capital) projects and staffing a full-time Safe Routes Coordinator position at CDOT.

## APPENDIX B

### ELIGIBLE PROJECTS BY FUNDING SOURCE

The funding categories established by MAP-21 and the types of projects eligible for funding within each category, provided they are consistent with the RTP, are summarized below. See criteria tables for specific eligibility requirements for this DRCOG TIP Call for Projects.

#### 1. Congestion Mitigation/Air Quality (CMAQ)

All CMAQ projects must have a transportation focus and reduce air emissions. The following are example projects, methods, strategies, and transportation system management actions that are eligible:

- Those likely to contribute to the attainment of a national ambient air quality standard;
- Those described in section 108(f) of the Clean Air Act (except clauses (xii) and (xvi));
- Those included in an approved State Implementation Plan for air quality;
- Traffic signal coordination;
- Intelligent transportation systems;
- Arranged ridesharing;
- Trip reduction programs;
- Travel demand management;
- Vehicle inspection and maintenance programs;
- Variable work hours programs;
- Bicycle and pedestrian travel projects;
- Rapid and bus transit improvements (new/expanded/capital service);
- HOV/HOT lanes;
- Traffic flow improvements;
- Extreme low-temperature cold start programs;
- Alternative fuels infrastructure and vehicles;
- Diesel engine retrofits;
- Truck stop electrification;
- Idle reduction projects;
- Intermodal freight facilities that reduce truck VMT or overall pollutant emissions (examples include: transportation-focused rolling stock, ground infrastructure, rail, etc.); and
- Studies as necessary to plan and implement the above.

Detailed guidance is available at:

[http://www.fhwa.dot.gov/environment/air\\_quality/cmaq/policy\\_and\\_guidance/2013\\_guidance/index.cfm](http://www.fhwa.dot.gov/environment/air_quality/cmaq/policy_and_guidance/2013_guidance/index.cfm)

## 2. Surface Transportation Program (STP-Metro)

The following types of projects are eligible:

- Construction/reconstruction, rehabilitation, resurfacing, restoration, preservation, and operational improvements of the existing system;
- Capital costs for transit projects, subject to Senate Bill 208 construction approval;
- Carpool projects;
- Fringe and corridor parking facilities and program;
- Highway and transit safety infrastructure improvements and programs;
- Highway and transit research programs;
- Capital and operating costs for traffic monitoring, management, and control;
- Surface transportation planning as contained in a Unified Planning Work Program;
- Transportation alternatives activities;
- Transportation control measures listed in the Clean Air Act, except as noted in MAP-21;
- Wetland mitigation associated with project construction;
- Transportation system management actions; and
- Studies as necessary to plan and implement the above.

Detailed guidance is available at:

<https://www.fhwa.dot.gov/map21/guidance/guidestp.cfm>

## 3. Transportation Alternatives Program (TAP)

The following types of projects are eligible:

- Construction, planning, and design of on-road and off-road trail facilities and related infrastructure;
- Conversion and use of abandoned railroad corridors for trails;
- Turnouts, overlooks, and viewing areas;
- Community improvement activities (outdoor advertising, historic transportation facilities, vegetation management practices, archaeological activities);
- Environmental mitigation activity (stormwater management, vehicle-caused wildlife mortality);
- Recreational trails program;
- Safe routes to school program

Detailed guidance is available at:

<https://www.fhwa.dot.gov/map21/guidance/guidetap.cfm>



## APPENDIX D

### ROADWAY CRASH REDUCTION (SAFETY) CRITERIA

Crash reduction (safety) is an evaluation criterion for all roadway project types: roadway capacity, operational improvements, and reconstruction. Of relevance in the point computation is:

- Current annualized weighted crash rate per 1,000 ADT; and/or
- Estimated reduction in number of crashes.

Sponsors are encouraged to use qualified traffic personnel for the crash reduction computations.

#### Current Weighted Crash Rate Computation

To compute this measure, applicants will provide the following information in the DRCOG TIP funding request application:

##### 1. Roadway data

The applicant must provide the following: 1) crash reduction computation area length, and 2) average traffic volumes (ADT).

For intersection funding requests, the suggested length of the crash reduction computation area is 1/10 mile for each approach leg. Sponsors may use a longer distance if they wish to include intersection-induced crashes further away. The crash data submitted should be for the distance identified.

For new roadway projects, the length and volumes should be for the current travel path. For new interchanges and intersection operational improvements, data should be provided for the primary roadway and the cross street (if applicable). The minimum ADT information to be provided is one count on each of the primary roadway and cross street; more desirable is one count on each leg.

##### 2. Number of crashes over three years

The applicant must supply the number of crashes by severity category over the three most recent years for which data is available. The severity categories are: fatal crashes, injury crashes, and property damage only (PDO) crashes.

The crashes should be tallied at all appropriate intersections, approaches, and road segments along the identified crash reduction computation area length.

## Estimated Reduction in Number of Crashes

For all funding requests for roadway projects, the applicant is asked to estimate the potential reduction in number of crashes from the project. The estimates are used to determine levels (low, medium, high) of improvement to award crash reduction points. They are not meant to imply precise predictions of eliminated crashes. The reduction should be reported for a three-year period (similar to crash data provided).

For new roadways, the number of crashes reduced shall be based on the reduction in volume on the current travel path due to the new roadway. In other words, [ADT decrease/current ADT] \* [current number of crashes]. Source for volumes: DRCOG.

For requests for other roadway projects, the estimated crash reductions should consider all individual elements of the project. Table D-1 presents Crash Reduction Factors that should be used to estimate crash reduction. It presents specific percentage reductions **for relevant crashes due to specific improvement elements**. Sponsors must document how the crash reductions were determined. Crash reduction factors must only be applied to specific sites along the project length and for relevant crash types. Total crash reduction estimates may not exceed 75 percent of the original three-year crash total. The professional judgment of qualified personnel will be necessary in the crash reduction determination process.

## Crash Reduction (Safety) Points

The funding request application program will compute and award the crash reduction points scored. The steps in the process are:

### 1. Calculate the annual crash rate for the existing roadway(s) or intersection

From the entered volume, crash reduction computation area length, and crash data, the program will calculate the following:

Rate= annualized PDO crashes + (annualized injury crashes x 5) + (annualized fatal crashes x 12) / 1,000 ADT x length

### 2. Identify the crash range

Using the computed annual crash rate, the application will assign the appropriate crash range; low, medium, and high, representing the weighted crashes per 1,000 ADT per mile.

- Low = < 1.00
- Medium = 1.00 – 3.00
- High = 3.01 +

3. Identify the estimated crash reduction level (as applicable)

Using the estimated number of crashes reported by the applicant for the three-year period, the application will convert that to a per-mile basis (using the crash reduction computation area length) and will assign the crash reduction level as follows:

- Low (0 to 5 crashes reduced per mile)
- Medium (6-15)
- High (16+)

If no data is provided by the applicant, the low crash reduction level will be assigned.

4. Award the safety points

The following tables show the number of crash reduction points the application will award, based on the estimated crash reduction level and the weighted crash rate.

<b>Roadway Capacity and Operational Projects</b>			
<b>Weighted Crash Rate</b>	<b>Estimated # of Crashes Reduced per Mile (3-years)</b>		
	0-5	6 – 15	16 +
0 - .99	0 pts	2 pts	4 pts
1.00 – 3.00	1 pt	4 pts	6 pts
3.01 +	3 pts	5 pts	7 pts

<b>Roadway Reconstruction Projects</b>			
<b>Weighted Crash Rate</b>	<b>Estimated # of Crashes Reduced per Mile (3-years)</b>		
	0-5	6 – 15	16 +
0 - .99	0 pts	2 pts	3 pts
1.00 – 3.00	1 pt	3 pts	4 pts
3.01 +	2 pts	3 pts	5 pts

**Table D-1**

**DRCOG TIP Project Evaluation Crash Reduction (Safety) Criteria**

**Sample of Suggested Vehicle, Bicycle, and Pedestrian Crash Reduction Factors**

Improvement Characteristics	Percentage Reduction in Relevant Crashes (at applicable crash locations)	Example Relevant Crash Types
<b>Intersections</b>		
New traffic signal	20%	right-angle, turns
Upgrade traffic signal (heads)	20%	rear-end, red light run
Add new approach turn lanes (either left or right)	25%	rear-end
Add accel/decel lane	25%	rear-end, sideswipe
Convert to roundabout	40%	right-angle
Convert to interchange	40%	right-angle
Increase turn radii	15%	turn crashes
Skid accident reduction	20%	rear-end
<b>Railroad</b>		
Automatic gate	75%	vehicle-train
Grade separate	100%	vehicle-train, rear-end
<b>Roadside/Bridges</b>		
Guardrail-install/upgrade	60% fatal, 40% injury	run off road
Shoulder widening/addition/paving	20%	run off road, overtake ped/bike
Bridge widening	40%	bridge
Remove fixed objects	50% fatal, 15% injury	fixed object
Separated bicycle/pedestrian path	80%	overtake ped/bike
<b>Roadways</b>		
Curve reconstruction	50%	run off road, head-on
Vertical realignment	45%	head-on, limited sight
Median barriers	60% fatal, 10% injury	head-on
Raised median	40%	turn crashes, turn-related rear-ends
Rural climbing/passing lane	60%	passing, rear-end
Lane widening	20%	sideswipe (multi-lane)
Ramp geometric reconstruction	25%	ramp
Widen from 2-lane to 4-lane road	30%	rear-end, head-on
Continuous center-left turn lane	30%	rear-end
Shoulder rumble strips	60%	run off road
Centerline rumble strips	25%	head-on, sideswipe
<b>Other</b>		
Lighting improvement	90%	night-time crashes
Close median opening	30%	turn crashes

- Crash reduction factors are for TIP project scoring guidance only.
- The factors are not meant to imply precise predictions of eliminated crashes.
- Rates should be applied only to specific applicable sites within the project area.
- Rates should only be applied to relevant crash types and crash directions addressed by the improvement.
- Do not double-count similar improvement types or eliminated crashes.
- Crash reduction factors may be applied to improvement and crash types not shown on this table; however, applicant must provide justifying documentation.

**APPENDIX E**  
**PROJECT LOCATION-**  
**RELATED METRO VISION IMPLEMENTATION**

<b>Evaluation Criteria</b>	<b>Max Points</b>	<b>Scoring Instructions</b>
Project location related to Urban Centers and Rural Town Centers	5	Project is within .25 miles of an urban center or rural town center identified in the adopted Metro Vision 2035.
Other characteristics of the Urban Center or Rural Town Center identified in the Metro Vision 2035 Plan	5	<p>If project exhibits at least <u>three</u> of the following characteristics, it will receive 5 points:</p> <ul style="list-style-type: none"> <li>• Proposed project is located within an urban center or rural town center served by transit with 30 minute combined service headways or less in the peak periods</li> <li>• Proposed project is located within an urban center or rural town center where the community has implemented zoning or development plans that allow a mix of uses</li> <li>• Proposed project is located within an urban center or rural town center where the community has adopted parking management strategies that minimize the potential negative effects of parking on urban center development and multimodal access</li> <li>• Proposed project is located within an urban center with community commitment to preserve or develop affordable housing (rentals available to households earning 0-60% of Area Median Income and/or for-sale units for households earning 0-80% of AMI). Preservation means replacing existing affordable units on a 1-for-1 basis. Community commitment for new affordable units could include approved developments with an affordable component, inclusionary housing ordinances, housing trust fund, or other development incentives (e.g. permit streamlining, fee reductions, etc.).</li> <li>• Proposed project is identified in an adopted Urban Center Master Plan or Station Area Master Plan.</li> </ul>
Project location related to the “Modified” Urban Growth Boundary/Area (UGB/A)  (See definition below)	4	<ul style="list-style-type: none"> <li>• 4 points if the project is entirely contained within the established UGB of a UGB community or the “committed area” of a UGA community</li> <li>• 1 point if the project is partially within the established UGB of a UGB community or the “committed area” of a UGA community</li> </ul>

Evaluation Criteria	Max Points	Scoring Instructions
Project location related to job growth and environmental justice area	3	<ul style="list-style-type: none"> <li>• 2 points if 1,000 or more jobs were added between 2005-2013 (or the most recent 2014 data) within a .25 mile radius of the project.</li> <li>• 1 point if 500-999 jobs were added between 2005-2013 (or the most recent 2014 data) within a .25 mile radius of the project.</li> </ul> <p><b>ALSO,</b></p> <p>1 point if the project receiving “job growth” points, is within or touching an environmental justice area. This equates to the project having been designated to receive points under the other specific EJ Criterion per its rules, which also state: “The sponsor must identify the benefits and disadvantages the project may have on the environmental justice community.”</p>
<b>Total Points Possible</b>	<b>17</b>	

Definitions:

- Modified Urban Growth Boundary/Area (UGB/A)
  - For the purposes of evaluating project location, the geographic extent of the UGB/A will include area entirely surrounded by UGB/A that falls into the following categories:
    - Parks and Open Space facilities in DRCOG’s Parks and Open Space layer (last updated in 2013)
    - Bodies of Water
    - Transportation rights-of-way
    - Utility users (e.g. power station, water treatment, etc.)
    - Airports

## APPENDIX F

### SPONSOR-RELATED METRO VISION IMPLEMENTATION CRITERIA

(or the project location's jurisdiction)

Evaluation Criteria	Max Points	Scoring Instructions
Local response to changing demographics	1	Demonstrate jurisdiction's plans, programs, and policies to support healthy and successful aging. Please see the Boomer Bond Assessment Tool and Toolkit for example implementation strategies.
Implement alternative travel mode plans	1	Provide jurisdiction's adopted plan for either bicycle, pedestrian, transportation demand management, or transit forms of travel. Demonstrate implementation showing an example project in the jurisdictions currently adopted capital improvement program, operating budget, or equivalent.
Signed the Mile High Compact	2	Date jurisdiction signed the Mile High Compact.
Subtotal:	4	
Sponsor scores for only one of the PM <sub>10</sub> criterion listed below (PM = Particulate Matter pollutants), depending if it was asked to make a commitment or not.		
Criterion 1: PM <sub>10</sub> conformity commitment (for communities that were asked to make a conformity commitment)	4	<p>If the sponsor or project's local jurisdiction has made a conformity commitment (submitted to DRCOG before July 31, 2014) for the horizon year in the RTP (2040) that exceeds:</p> <ul style="list-style-type: none"> <li>• 30 percent reduction, award 1 point.</li> <li>• 45 percent reduction, award 2 points.</li> <li>• 55 percent reduction, award 3 points.</li> </ul> <p>If the sponsor or project's local jurisdiction is meeting its 2015 conformity commitment in current practice, award 1 additional point to the PM<sub>10</sub> points scored above. The most recent survey of past performance conducted by the RAQC will be compared to the conformity commitments assembled for the 2040 RTP conformity.</p>
	<b>OR</b>	
Criterion 2: Current practice (for communities that were <b>not</b> asked to make a PM <sub>10</sub> conformity commitment)	4	<p>Based on the survey of past performance conducted by the RAQC, if the sponsor or project's local jurisdiction has a current practice that exceeds:</p> <ul style="list-style-type: none"> <li>• 30 percent reduction, award 1 point.</li> <li>• 45 percent reduction, award 2 points.</li> <li>• 55 percent reduction, award 4 points.</li> </ul>
Subtotal:	4	
<b>Total Points Possible</b>	<b>8</b>	

## APPENDIX G

### PAVEMENT CONDITION GUIDELINES

The following elements define the information required to calculate the pavement condition index for roadway and bicycle/pedestrian reconstruction projects. Applicants are required to obtain and use distress data from CDOT (as available) if the reconstruction involves a state highway, in calculating the PCI score.

#### Visual Inspection of Core Distress

Applicants are required to visually investigate and report five key distresses. These specific distresses shall be examined and reported as specified in the Pavement Distress Identification Manual by CTL/Thompson Inc. For reconstruction funding requests on state highways, CDOT will have recent relevant distress information that should be used for this submittal.

#### The key distresses for asphalt roadways are:

alligator cracking (page 1 of the manual)  
rutting/shoving (page 12)  
longitudinal cracking (page 5)  
patching (page 9)  
potholes (page 10)

#### The key distresses for concrete roadways are:

corner cracking (page 23)  
linear cracking (page 25)  
divided slabs (page 27)  
blowup/buckling (page 32)  
faulting (page 33)

**For intersection reconstruction projects**, the distress survey shall be the entire project area. For **roadway reconstruction projects**, a sampling technique can be used. The sample must encompass a contiguous section of at least 10 percent of the project segment (with a minimum survey length of 200 lineal feet). All lanes within the sample section must be evaluated. The sample section must be representative of the average pavement condition for the project. Applications must identify the specific location of the sample. CDOT may not have data for all lanes, but CDOT data will be considered sufficient for state highways.

Specific areas showing multiple distresses should only be reported once. For example, if areas that have been patched are reported under “patches,” other distresses within the patched area should not be reported.

#### Computation of Condition Index

To aid in self-storing, a software program has been developed to compute the pavement condition index (PCI). The program will be included in the web-based funding request application material. The basis for the program is the Corps of Engineers’ PAVER method. Perfect pavements start with a value of 100, and points are deducted from that based on the amount and severity of the stresses reported in the visual survey. A correction curve for multiple distresses is applied.

A copy of the input screens for asphalt pavement (Figure G-1) and concrete pavement (Figure G-2) are attached. After all necessary input data is entered; toggling the "Compute PCI" button will compute the PCI.

### Validation

DRCOG staff and/or subject matter experts may conduct a field review of the top "tier" of reconstruction funding requests to validate the magnitude of distresses reported.

### Contact

The means for obtaining the distress manual and the software program, along with a contact number for clarification/interpretation, will be included in the TIP solicitation packet.

**Figure G-1  
Asphalt Cement Pavement Evaluation Tool**

**DRCOG - Pavement Evaluation Tool** Revised 6/19/99

*Pavement Identification*

Municipality/County

Street Name

From  Survey Area From

To  To

PMSID  Length (ft)  Lanes  Lane Width (ft)

Surface Type  Survey Length (ft)  Survey Area (sq ft)

ADT / Lane  RRD  Estimated Cost \$

Points  Computed PCI  Structural Capacity

*Asphalt Cement Concrete Pavement Distress*

	Low	Moderate	High	
Alligator Cracking (sq ft) pg. 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Compute PCI"/> <input type="button" value="Print Report"/> <input type="button" value="Save Record"/>
Rutting / Shoving ( sq ft ) pg. 12	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Longitudinal Cracking ( ln ft ) pg. 5	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Patching ( sq ft ) pg. 9	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Potholes ( sq ft ) pg. 10	<input type="text"/>	<input type="text"/>	<input type="text"/>	

**Figure G-2  
Portland Concrete Pavement Evaluation Tool**

**DRCOG - Pavement Evaluation Tool** Revised 6/19/99

*Pavement Identification*

Municipality/County

Street Name

From  Survey Area From

To  To

PMSID  Length (ft)  Lanes  Lane Width (ft)

Surface Type  Survey Length (ft)  Survey Slabs (count)

ADT / Lane  RRD  Estimated Cost \$

Points  Computed PCI  Structural Capacity

*Portland Cement Concrete Pavement Distress*

	Low	Moderate	High	
Corner Cracking (slabs) pg.23	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Compute PCI"/> <input type="button" value="Print Report"/> <input type="button" value="Save Record"/>
Linear Cracking (slabs) pg.25	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Divided Slabs (slabs) pg.27	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Blow Ups (slabs) pg. 32	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Faulting (slabs) pg.33	<input type="text"/>	<input type="text"/>	<input type="text"/>	

