

AGENDA

TIP Policy Work Group – Mtg. 11

Tuesday, September 25, 2017

2:30 p.m. (or immediately following TAC)

1290 Broadway

Independence Pass Conference Room – 1st Floor, west side

1. 2:30 Call to Order
2. Public Comment
3. September 12, 2017 Meeting Summary
(Attachment A)
4. 2:35 Update on September 20 Board Discussion on TIP Focus Areas
Doug Rex
5. 2:45 Recommendation on TIP Subregional Share Guidelines
(Attachment B)
6. 3:30 Discussion on Regional/Subregional Quantitative Criteria, Methodology, and Scoring
(Attachment C)
7. 5:00 Adjournment

Persons in need of auxiliary aids or services, such as interpretation services or assisted listening devices, are asked to contact DRCOG at least 48 hours in advance of the meeting by calling (303) 480-6744.



ATTACHMENT A

MEETING SUMMARY TIP POLICY WORK GROUP – Mtg.10 Monday, September 12, 2017

PARTICIPANTS PRESENT:

Jeanne Shreve	Adams County
Kent Moorman	Adams County, City of Thornton
Mac Callison	Arapahoe County, City of Aurora
George Gerstle (Chair)	Boulder County
Kathleen Bracke	Boulder County, City of Boulder
Tom Schomer	Broomfield, City and County
David Gaspers	Denver, City and County
Justin Begley	Denver, City and County
Dan Herrmann	CDOT
Steve Cook	DRCOG
Doug Rex	DRCOG
John Cotton	Douglas County, City of Lone Tree
Steve Durian	Jefferson County
Dave Baskett	Jefferson County, City of Lakewood
Ken Lloyd	RAQC
Ted Heyd	TDM/Non-motor

Others present: Aaron Bustow, FHWA

DRCOG Staff: Todd Cottrell, Brad Calvert, Matthew Helfant, Dan Jerrett, Flo Raitano, Jerry Stigall, Casey Collins

Call to Order

Chair George Gerstle called the meeting to order at 2:30 p.m.

Public Comment

There was no public comment.

August 28, 2017 Meeting Summary

The summary was accepted.

Discussion on Focus Areas

Doug Rex reviewed outcomes of the September 6 Board Work Session (BWS).

- Board directors present at the BWS agreed to bring the following three potential focus areas to the full Board on September 20 for discussion and action:
 - **Improve mobility infrastructure and services for vulnerable populations**
(including improved transportation access to health services)
 - **Increase reliability of existing multimodal transportation network**
 - **Improvement transportation safety and security**
- At the BWS, it was also agreed:
 - focus areas should be a guide for investment decisions, and not a project eligibility component,
 - criteria involving TIP focus areas should be a combination of both quantitative and qualitative, and
 - focus areas should be considered in both the Regional and Subregional Share process.

Mr. Rex asked for suggestions of additional projects examples to include in the focus area narrative for the September 20 Board memo. There was discussion of potential revisions to project/program examples. Based on input, staff updated project/program examples (underlined) for the September 20 Board memo to:

Improve mobility infrastructure and services for vulnerable populations (including improved transportation access to health services).

.....Projects/programs may include, but are not limited to:

- Sidewalk improvements that assist in fulfilling a community's ADA transition plan
- New or expanded transit services, including Call-n-Ride
- Technology-facilitated improvements, such as shared mobility services
- Street design elements to optimize human performance (e.g., pedestrian ~~control~~improvements at intersections, curb radius, signage, devices for lane assignment, etc.)

Increase reliability of existing multimodal transportation network

..... Reliability may be addressed through:

- capacity improvements to any of the region's travel modes
- the elimination of gaps in the system
- operational improvements, such as traffic signal timing, bottleneck improvements, grade separations, transit service, and transportation demand management strategies

Improve transportation safety and security

..... Projects/programs may include, but are not limited to:

- roadway geometric upgrades, including the improvement of design and operations of intersections
- improved interactions between pedestrian/bicycle modes with vehicular traffic (e.g., exclusive bike lanes, pedestrian/bicycle grade separations and crossings, improve line of sight, traffic calming improvements, etc.)
- Intelligent Transportation Systems applications

Discussion on ROI Methodology

Dan Jerrett, DRCOG Chief Economist, presented a third discussion on potential ROI methodologies and assumptions. Mr. Jerrett outlined a potential roadway project benefit/cost analysis example, using the TIGER process.

Comments:

- Kathleen Bracke questioned why Subregional projects' benefits could not be modeled to show benefit, when they would have to be calculated to show aggregated benefit.
 - Steve Cook said staff can model for roadway capacity geographic packages, but non-roadway would be difficult.
- George Gerstle said benefit analysis should include alignment with focus areas and Metro Vision.
- Mr. Jerrett noted there may be difficulties in determining cost/benefit ratio for some project types, which is why a two-dimensional approach is being considered.
- Dan Herrmann asked if assumption is based on federal cost or total cost. Mr. Jerrett said total cost, otherwise benefits are skewed.
- George Gerstle felt there is a tendency to focus on what one can measure, but should be on what we're trying to accomplish.
- Kathleen Bracke asked about the cost of not doing a project; how to incorporate and quantify this concept.
- Dan Jerrett noted SANDAG (the San Diego MPO) only measures roadway projects.

Recommendation on TIP Subregional Share

Todd Cottrell presented the draft Subregional Share process guidelines. With recommendation from the work group, staff will translate this information into text for the draft 2020-2023 TIP Policy document.

Comments

- Kathleen Bracke suggested the title of Table D be changed to Metro Vision Performance Measures (from Metro Vision Outcome Targets).
- George Gerstle summarized the discussion on (performance measures), saying there is no expectation that every project can reach every (measure). He said how a project addresses a measure is more qualitative than quantitative. This approach would be similar to how a portfolio of Subregional projects addresses a measure overall.
 - Mac Callison agreed, but said that how an individual project meets measures should not be used as an eligibility criteria to preclude a project.
- Kathleen Bracke asked if all projects will be considered, even if not directly addressing measures or focus areas. Mr. Cottrell answered yes, but likely wouldn't score well.
- Doug Rex asked if calculations/metrics, e.g., SOV travel delay, etc. should be a universal formula for all Subregions. The work group was favorable, and the work group will begin discussion next meeting on universal scoring of benefits.
- Kent Moorman asked if RTD and CDOT would be considered voting non-voting members of Subregional. Mr. Cottrell said the white paper states non-voting, but their voting membership status could be defined by each subregion.
- Jeanne Shreve asked for clarification if all invited local governments participating are voting members. Mr. Rex said yes.
- Jeanne Shreve asked if there is a list of individual participating members/responsible staff for Subregions.
- Kent Moorman asked if DRCOG would consider providing administrative costs to subregions.
 - George Gerstle asked whether a percentage of the Subregional allocation could be used for administrative costs? Mr. Rex said it would be eligible, but could be administratively difficult.
- Dave Baskett suggested DRCOG generate the first meeting to convene Subregions. Mr. Rex agreed.
- Kent Moorman asked if forum meetings posted on DRCOG website constitutes public notice.
 - Todd Cottrell said jurisdictions of where the meeting is being held should follow their own protocol for posting of their meetings.
 - Doug Rex said all formal meetings associated with funding or development of the TIP should be open to the public (decision-making, i.e., standing or technical committees, not internal staff meetings). He said, at a minimum, DRCOG will post online all Subregional Forum meetings, regardless of where it's being held.
- Brad Calvert suggested clarifying to the Board that Outcome Targets (Performance Measures) are from Metro Vision. He also stated two additional performance measures included within Metro Vision could be considered transportation-related.

The meeting adjourned at 4:50 p.m. The next meeting date is September 25, 2017.

ATTACHMENT B

To: TIP Policy Work Group
From: Todd Cottrell, Senior Transportation Planner
303 480-6737 or tcottrell@drcoq.org

Meeting Date	Agenda Category	Agenda Item #
September 25, 2017	Action	5

SUBJECT

Subregional Share policy topics.

PROPOSED ACTION/RECOMMENDATIONS

Recommendation on the process, eligibility, application information, minimum-required evaluation criteria, and forum selection process guidelines for Subregional Share projects and programs to incorporate into the draft 2020-2023 TIP Policy document.

ACTION BY OTHERS

N/A

SUMMARY

DRCOG staff has revised the draft guidelines for the Subregional Share project/program process and applications based on the previous discussions (Attachment 1).

PREVIOUS DISCUSSIONS/ACTIONS

[August 8, 2017](#)

[August 28, 2017](#)

[September 12, 2017](#)

PROPOSED MOTION

Move to recommend the proposed Subregional Share guidelines for incorporation into the 2020-2023 TIP Policy document.

ATTACHMENT

1. Draft Guidelines for the Subregional Share Projects/Programs Process and Applications

ADDITIONAL INFORMATION

If you need additional information, please contact Todd Cottrell, Senior Transportation Planner, at 303-480-6737 or tcottrell@drcoq.org.

Draft - Guidelines for Subregional Share Project/Program Process and Applications

(September ~~12~~25, 2017)

1. Overall Subregional Forum Process

- A. All local governments within the subregion eligible for federal funding, regardless if they are a DRCOG member or not, must be invited to participate on the forum [as voting members](#).
- B. Regional partner agencies (RTD and CDOT) must be invited to participate. [Their voting membership status will be defined by each subregion](#).
- C. Each forum can invite other agencies and stakeholders to participate.
- D. DRCOG staff will participate and assist to the extent requested, but may attend any forum meeting. It is suggested staff present adopted eligibility rules and procedures at one of the initial forum meetings.
- E. Individual participating members will be determined by the forum and each local government. The Board-accepted White Paper suggests membership be offered to elected officials, who could appoint a designee, if desired.
- F. DRCOG staff will coordinate with existing TIP Policy Work Group members within each forum to gather information such as who was invited, forum meeting summaries, and public notifications until such a time a forum leader is selected. Staff will also provide a minimum level of standard on how to collect and report the information.
- G. Forums may establish technical subcommittees, but must be open to all member entities.
- H. Coordination with other subregional forums is encouraged (e.g., for project development and funding partnerships).
- I. [All forum meetings, including any subcommittees, must be open to the public. The public meeting requirements for the meeting host community will be used. DRCOG will post all meetings on its website.](#)

2. Federal and DRCOG Project Eligibility Rules

- A. Minimum federal funding request is \$100,000.
- B. Minimum 20% non-federal match required.
- C. Projects must be consistent with Board-adopted TIP Focus Area(s).
- D. Projects must be eligible under specific federal rules and guidance for the applicable funding program(s) (CMAQ, STP-M, or TAP) for the type of project. Links to these are available within the TIP Policy document and will be provided to each forum.
- E. Per the 2040 MVRTP, TIP roadway projects must be on the designated Regional Roadway System.
- F. Capacity projects (e.g., rapid transit or roadway widening of a new physical facility longer than a mile) must be defined as eligible for regional funding in the current staging period in the latest approved modeling networks for the 2040 MVRTP, at the time of application. A list of eligible capacity projects by county will be provided to each Subregional Forum.
- G. Roadway operational projects may be located at any location on the 2040 MVRTP designated Regional Roadway System.
- H. For projects with construction phases that require EA or EIS decision documents, they must be signed or reasonably expected to be signed within 2020-2023.
- I. Projects on or within ROW of state highways must have CDOT concurrence to submit. Projects in need of RTD involvement (operations or access to property) must have RTD concurrence.
- J. After Regional Share projects are recommended for inclusion into the draft TIP by the Board, it may be necessary to restrict project type eligibility for the subregions, depending on the types of projects recommended in the Regional Share process. This is due to less-flexible CMAQ funds available through

Draft - Guidelines for Subregional Share Project/Program Process and Applications

(September ~~12~~25, 2017)

DRCOG. For example, roadway capacity or roadway reconstruction projects may not use CMAQ funds. Any restrictions would require an amendment to the adopted TIP Policy.

3. Required Application Information

- DRCOG will provide a standard application format for each forum to tailor to their own needs.
- A. TIP project/program sponsor (local govt/regional/state entity): _____
 - a. The sponsor is contractually and financially responsible for the work through the IGA with CDOT/RTD and project delays with DRCOG. Work elements do not necessarily need to be completed by the project sponsor (i.e., another local government could do the work)
- B. Project/program name: _____
- C. Project/program scope (clearly state all the key components and what will be accomplished)
- D. What adopted plan(s) or document(s) identify the project/program?
- E. DRCOG federal funding request by federal fiscal year (2020-2023)
- F. Local matching funds (20% minimum)
- G. Total cost

4. Required Evaluation Criteria

- Each forum can include additional criteria, but must include the following qualitative and quantitative questions.

Qualitative-related

- A. What specific existing problem(s) will the project/program address?
- B. Describe the public outreach that has taken place for this project/program to date.
- C. What DRCOG Board-defined TIP Focus Area(s) will be addressed?

	DRCOG TIP Focus Areas	Does Project/Program Address Focus Area?	
		Check if yes	Explain how
1	Improve mobility infrastructure and services for vulnerable populations		
2	Increase reliability of existing multimodal transportation network		
3	Improve transportation safety and security		

Draft - Guidelines for Subregional Share Project/Program Process and Applications

(September 1225, 2017)

D. What Metro Vision Plan transportation-related ~~outcome targets~~ performance measure(s) will be addressed?

	<u>Transportation-related Metro Vision Outcome Targets Performance Measures</u>	Does Project Address Target <u>Measure</u> ?	
		Check if yes	Explain how
1	Increase the non-single-occupant-vehicle (non-SOV) mode share to work		
2	Decrease vehicle miles traveled (VMT) per capita		
3	Decrease traffic congestion - average travel time variation (peak vs. off-peak)		
4	Reduce daily person delay per capita		
5	Reduce the number of traffic fatalities		
6	Reduce transportation-related greenhouse gas (GHG) emissions per capita		
7	<u>Increase the share of the region's population living in areas with housing and transportation costs affordable to the typical household in the region</u>		
8	<u>Increase the share of the region's housing and employment near high-frequency transit</u>		

E. How will this project/program prohibit discrimination against individuals with disabilities?

a. If applicable, does this project advance the sponsor's ADA Transition Plan?

F. How will minority and low income persons benefit from the project/program?

G. Define any multimodal elements of the project/program or connectivity improvements to other travel modes.

Quantitative-related ~~(measures and numbers)~~ (Details in this section to be defined)

- ~~Each forum will design specific evaluation criterion or criteria to address each using a forum-derived point system. All Measures should be~~ applicable questions should be tailored answered depending on the project type ~~being submitted~~ and scope.

H. What are the existing conditions and future estimated measures following completion of project?

- Transit Ridership: Current: ____; Estimated Future: ____
- Number of daily bicyclist and pedestrian users: Current: ____; Estimated Future: ____
- SOV Trip Reduction: ____; VMT Reduction: ____
- Average Daily Vehicle Traffic on roadway: Current: ____; Estimated Future: ____
- Existing Pavement and/or Bridge Condition: ____
- Total Traffic Crashes, Serious Injuries, and Fatalities: Current: ____; Estimated Future: ____

Draft - Guidelines for Subregional Share Project/Program Process and Applications

(September ~~12~~25, 2017)

- Applicable Traffic Crashes (per type of project): Current: ____; Estimated Future: ____
 - Congestion and Travel Delay: Current: ____; Estimated Future: ____
- I. DRCOG can provide data attributes to assist sponsors and forums, as requested. Examples include:
- Roadway volumes
 - Data within X feet/miles of project site
 - Demographic or socioeconomic population and/or employment data
 - Travel model data (e.g. bicycle and walk trip activity estimates)

Draft - Guidelines for Subregional Share Project/Program Process and Applications

(September ~~12~~25, 2017)

5. Forum Project Selection Process and Reporting

- A. Call for Projects must be open for a minimum of 4 weeks.
- B. DRCOG staff can assist with compilation of applications, if requested.
- C. DRCOG staff reviews applications for consistency with state and federal rules and TIP Policy guidelines.
- D. Development of project/program selection recommendations
 - Offer opportunity for sponsors to present their projects at forum meeting.
 - Evaluate and rank projects.
 - Select/recommend projects to be funded and amount.
- E. A forum representative will present to the DRCOG Board the recommended projects/programs to be funded, including explanations of:
 - How they will benefit the region and provide a return on investment (ROI),
 - How they will advance the TIP Focus Area(s), and
 - How they are consistent with Metro Vision and the Metro Vision Regional Transportation Plan.
- F. The DRCOG Board has the final authority of projects/programs selected to be included within the TIP.

ATTACHMENT C

To: TIP Policy Work Group
From: Todd Cottrell, Senior Transportation Planner
303 480-6737 or tcottrell@drcoq.org

Meeting Date	Agenda Category	Agenda Item #
September 25, 2017	Discussion	6

SUBJECT

Regional and Subregional Share quantitative benefit criteria.

PROPOSED ACTION/RECOMMENDATIONS

N/A

ACTION BY OTHERS

N/A

SUMMARY

DRCOG staff has prepared for discussion purposes draft quantitative benefit criteria to be considered for use in project applications for both Regional Share and Subregional Share processes (see Attachment C-1). Key points of the draft criteria:

- Project sponsors would fill in values for each criterion applicable to the scope of the project.
- Some criteria values could be calculated by the sponsors, others provided with DRCOG staff assistance.
- The example scoring and point system presented is based on a 3-tiered range of threshold values; low = 1 pt., medium = 3 points, and high = 5 points.
- Specific threshold ranges for point allocation will need to be established. Either:
 - as part of policy document, prior to call for projects (e.g., based on past TIP project values), or
 - determined after applications and results come in, to determine low, medium, and high ranges.
- As proposed, to normalize projects based on magnitude of the project scope, the initial total score would be divided by the number of criteria associated with the project (e.g., 26 points, divided by 8 criteria used for scoring = 3.25 points per criterion). That result is then normalized up to the 50-point maximum by multiplying by 10 (e.g., 3.25 x 10 = 32.5 total quantitative benefit points).
- As presented, it assumes the quantitative criteria would cover 50% of the total possible scoring points.
- The criteria shown is much more detailed than depicted in draft framework guidelines discussed in the previous agenda item (see section 4 of Attachment C-1).
- Some type of surrogate “cost-effectiveness” criteria should be added to the overall criteria. For example, funding requested \$ / Benefit Points. The specific formula cannot be set until the benefit point system is established.

Update

Other Regional Share policy items were taken to the [Board Work Session](#) on September 6. No recommendations were made, and further discussions will be necessary at future Board Work Sessions before taken up by the full Board.

At a future work group meeting, the entire framework for the Regional Share (process, eligibility, application details, criteria, and selection process) will be brought for review and recommendation.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

N/A

ATTACHMENT

1. Draft Quantitative Project/Program Benefit Criteria

ADDITIONAL INFORMATION

If you need additional information, please contact Todd Cottrell, Senior Transportation Planner, at 303-480-6737 or tcottrell@drcog.org.

**Draft – Quantitative Project/Program Benefit Criteria
for Regional and Subregional Share Applications**

(September 25, 2017)

Scoring Instructions:

- Criteria Column: Provide data, as noted, for applicable criteria.
- Scoring Threshold Column: Based on input data, a project scores High, Medium, or Low.
- Points Scored Column: Score: High = 5 pts, Medium = 3 pts, and Low = 1 pt.
- Tally your initial total score.
- Divide by the number of questions answered to receive your average score.
- Multiply your Total Average Score by 10. This score is for the quantitative section of the application.
- The maximum allowed score for this section is 50 points, out of a total 100 for the application.

Quantitative Benefit Criteria for Project	Scoring Thresholds	Points Scored
<p>1. Transit Ridership:</p> <p>a. Existing weekday transit ridership (source RTD): ____</p> <ul style="list-style-type: none"> ▪ <i>Zero, if no service</i> <p>b. Estimated weekday ridership increase: ____</p> <ul style="list-style-type: none"> ▪ <i>Source: applicant, RTD, or DRCOG</i> 	<p>Score for ridership increase:</p> <p>H: xxx + M: xxx-xxx L: xxx-xx</p>	<p>(example values)</p> <p>5</p>
<p>2. Bicycle and Pedestrian Users:</p> <p>a. Existing weekday count: ____ (on, or adjacent to project site)</p> <ul style="list-style-type: none"> ▪ <i>Source: applicant provides all day count or derived from short count</i> <p>b. Estimated weekday increase: ____ user increase</p> <ul style="list-style-type: none"> ▪ <i>based on trip growth factor from 2030 travel model (regional share only) or another technical source (subregional share)</i> 	<p>Score for the bike/ped increase:</p> <p>H: xxx + M: xxx-xxx L: xxx-xx</p>	<p>3</p>
<p>3. SOV Trip and VMT Reduction:</p> <p>a. Transit: 50% of transit increase (from #1 above) = ____ x 9 miles (source: HH survey) = ____ VMT Reduction</p> <p>b. Bicycle/Pedestrian: 50% of bicycle/pedestrian increase (from 2.) = ____ trips 6 miles (Source: HH survey avg. P/B/Transit) = ____ VMT Reduction</p>	<p>Score for the VMT reduction:</p> <p>H: xxxx + M: xxx-xxx L: xxx-xx</p>	<p>5</p>

**Draft – Quantitative Project/Program Benefit Criteria
for Regional and Subregional Share Applications**

(September 25, 2017)

<p>4. Congestion and Travel Delay Reduction:</p> <p>a. Current traffic volume(s) on applicable roadway segments ____ <ul style="list-style-type: none"> ▪ <i>Source: applicant or CDOT</i> </p> <p>b. Estimated Future ____ <ul style="list-style-type: none"> ▪ <i>Source: 2030 travel model (regional share) and yearly growth rate (subregional share)</i> </p> <p>c. Current vehicle and person hours of delay ____ <ul style="list-style-type: none"> ▪ <i>Source: engineering analysis or travel model – depending on type of project</i> </p> <p>d. Future “no-build” Vehicle Hours of Delay (VHD) & Person Hours of Delay (PHD): ____ & ____</p> <p>e. Future “build” with project VHD & PHD: ____ & ____</p> <p>f. Future Reduction VHD & PHD: ____ & ____</p>	<p>Score for delay reduction: H: xxx + M: xx-xxxx L: xx-xxx</p>	<p>3</p>
<p>5. Crash Reduction:</p> <p>Existing Traffic Crashes (min. of a 3-year annual average): ____, Serious Injuries: ____, and Fatalities: ____ <ul style="list-style-type: none"> ▪ <i>Source: applicant</i> </p> <p>a. Estimated reduction in annual <u>applicable</u> traffic crashes, based on the improvements being implemented: Reduced Crashes: ____, Serious Injuries: ____, and Fatalities: ____ <ul style="list-style-type: none"> ▪ <i>Source: applicant; attach engineering analysis. Additional methodology guidelines from DRCOG</i> </p>	<p>Score for crash reduction: H: xxx + M: xxx-xxx L: xx-xx</p>	<p>1</p>
<p>6. Bridge Condition (if rehabbed or replaced):</p> <p>a. ____ <ul style="list-style-type: none"> ▪ <i>Source: CDOT or DRCOG</i> </p>	<p>Score for bridge condition: H: xxx-xxx M: xxx-xxx L: xx-xx</p>	<p>1</p>
<p>7. Roadway Pavement Condition (if road reconstructed):</p> <p>a. ____ Condition measures <ul style="list-style-type: none"> ▪ <i>Source: applicant using their own system. Must convert to a 10-point scale.</i> </p>	<p>Score for pavement condition: H: 1-3 M: 4-6 L: 7-10</p>	<p>5</p>

**Draft – Quantitative Project/Program Benefit Criteria
for Regional and Subregional Share Applications**

(September 25, 2017)

<p>8. Person Hours of Delay:</p> <p>a. Current Person Hours of Delay: _____</p> <ul style="list-style-type: none"> ▪ <i>Source: either Travel Model or other engineering analysis</i> <p>b. Future (e.g. 2030) Person Hours of Delay – Without Project: _____</p> <p>c. Future (e.g. 2030) Person Hours of Delay Reduced – With Project: _____</p>	<p>Score for future Person Hours of Delay:</p> <p>H: xxx + M: xx-xx L: xx-xx</p>	<p>3</p>
Initial Total Score		26
Number of Applicable Criteria		8
Total Average Score		3.25
Score x 10 = TIP application Benefit Points (Max points = 50)		32.5