

From: [Forrest, Steve](#)
To: [Robinson, Scott](#);
CC:
Subject: New Business for this month"s MPO-CAC mtg.
Date: Monday, June 16, 2008 9:21:49 PM
Attachments:

Scott,

Here's a New Business agenda item for the June CAC meeting:

In my essay on Complete Streets I noted that the Vision Statement in the LRTP supported my interpretation of what a complete streets policy should entail.

At the last meeting, Buff Brown suggested that all transportation projects should be evaluated in terms of the vision statement. I believe he also suggested some kind of scoring or rating system to evaluate individual projects. I agree that this is important. It might take considerable effort to devise a scoring system, but would be worthwhile if it gave us some reasonably objective rating to prioritize projects, or to reject projects that do not score high enough.

WHEREAS, the Long Range Transportation Plan is the MPO's most comprehensive and far-reaching policy document; and

WHEREAS, the Vision Statement describes the "future transportation goals and objectives" for the BMC/MPO;

THEREFORE, let us resolve to devise a rating system to ensure that the individual projects that we are presented with are in conformity with our long range vision.

At a previous meeting I referred to the "institutional inertia" of large bureaucracies (such as INDOT). In such bureaucracies there is a tendency to proceed with business-as-usual, even when there is a desire and a need for a new way of doing things. In order for our work to be effective in pursuing our goals, it is necessary that we

review proposals in the light of our own stated goals. If we don't, then we will end up approving projects which are contrary to our goals; and if we act against our stated goals, then we might as well not exist as an organization.

-Steve Forrest, CAC member
submitted 6-16-08

TRANSPORTATION VISION STATEMENT

Consistent with the planning requirements of the Transportation Equity Act for the 21st Century (TEA-21) and the input of community leaders and citizens on transportation policies and problems, future transportation goals and objectives were prepared to reflect a vision for the City of Bloomington, Monroe County, and the Town of Ellettsville. The Vision Statement highlights the need to:

- Develop a truly multi-modal system;
- Create a fully developed network of alternative transportation facilities;
- Reduce the number and length of auto trips;
- Achieve a better relationship between land uses to reduce auto dependency;
- Achieve the widest possible range of alternatives to the automobile;
- Make transportation investments that are consistent with comprehensive plans;
- Make transportation investments that protect the environment, promote energy conservation, and improve quality of life;
- Increase safety for all users of the transportation system;
- Support economic vitality through strategic transportation investments;
- Improve the movement of goods through the transportation system;
- Promote fiscally sound transportation investments and maximize financial resources; and
- Preserve existing transportation investments through operational improvements.

INTRODUCTION

The 2030 Long Range Transportation Plan provides a means of focusing and prioritizing community transportation investments. The Vision Statement serves as a policy guide for the development of the system-wide, multi-modal, Long Range Transportation Plan. It also establishes the framework for on-going transportation planning activities including the Transportation Improvement Program, corridor or sub-area improvement studies, detailed plans for individual modes, and transportation management systems efforts. Each of these activities should be considered within the context of the vision, goals, and objectives expressed here.

FUTURE TRANSPORTATION VISION

The future transportation system for Bloomington, Ellettsville, and Monroe County should reflect a commitment to the following core principles:

- Community sustainability
- Environmental stewardship
- Fiscal responsibility
- Connectivity for all forms of transportation
- Economic vitality & economic development
- Multi-modal accessibility
- Cross-jurisdictional coordination

Transportation plays a vital role in the quality of life of the community. Residents should be afforded the ability to move safely throughout the community using a variety of modes of transportation. While strategic roadway improvements will be needed in the future, support must be increased for alternative transportation options such as public transit, walking and bicycling. Enhancing alternative modes of travel reduces automobile dependency, increases community accessibility for people of all economic means, reduces emissions of polluting gases and supports a more sustainable community. Ensuring the development of a multi-modal transportation system that meets the needs of both current and future generations is consistent with efforts to promote sustainability as a community-wide goal.

The following goals and objectives are designed to provide specific guidance for achieving the transportation vision set forth in the Plan.

Mobility is an integral component of economic activity, recreation, education and travel. The network of transportation facilities that serves the community has been instrumental in creating a society that is highly dependent on the continuing efficiency and economy of both freight and passenger services. However, changes to this transportation network have been one of the factors which have caused an expanded metropolitan area, a dispersal of shopping and industry and the growing number of rural residents who live an urban life without living in an urban community. As a result, the transportation network of the future must provide a menu of effective choices for community mobility without creating an unnecessary expansion of Bloomington's urbanized area.

GOAL 1

Develop a well-integrated, multi-modal transportation system for the efficient and economic movement of people and goods while supporting the land use policies of the respective communities Comprehensive Plans.

- | | |
|----------------------|--|
| <i>Objective 1.1</i> | Provide for better access between the arterial roadway network and major employment and activity centers. |
| <i>Objective 1.2</i> | Ensure connectivity of the transportation system, including all modes of travel, between jurisdictions. |
| <i>Objective 1.3</i> | Enhance the efficient movement of freight through maintenance, operational and capital investment decisions. |
| <i>Objective 1.4</i> | Identify transportation needs for individuals with limited resources and/or limited access to a personal vehicle. |
| <i>Objective 1.5</i> | Identify opportunities for improved coordination and cost effective delivery of transportation services associated with human services destinations such as schools, hospitals, and social service agencies. |
| <i>Objective 1.6</i> | Increase public transit capital and operating investment to expand, enhance, and increase the use of transit services. |

GOAL 2

Create a network of multi-use pathways, bicycle routes, greenways and sidewalks that traverses the community, connects activity centers, and links recreation opportunities.

- | | |
|----------------------|---|
| <i>Objective 2.1</i> | Ensure transit, bicycle, and pedestrian facility design standards are incorporated into the design standards for thoroughfares as set forth in alternative transportation plans, thoroughfare plans, subdivision control ordinances and site design review processes. |
| <i>Objective 2.2</i> | Provide walkways, bikeways, and aesthetic features in association with all thoroughfare improvements to ensure their integration with the overall transportation network. |
| <i>Objective 2.3</i> | Identify and solicit transportation enhancement projects for the metropolitan area in a coordinated and unified manner, and aggressively pursue funding of selected projects. |
| <i>Objective 2.4</i> | Pursue all opportunities for the expansion of the community's alternative transportation and greenways networks, including rail-to-trail and rail-with-trail projects. |

TRAFFIC MITIGATION

Traffic mitigation refers to actively reducing the demand for automobile trip-making, and in turn reducing the traffic impacts associated with trip-making. This principle is intended to reduce the frequency and length of auto trips through the application of a variety of key land use and transportation principles. The first component of traffic mitigation is mixed-use development, which reduces travel demand by placing residential areas in closer proximity to the shopping, employment and recreation destinations they seek. In addition, support of a compact urban form for development will keep trip lengths low, and allow more areas to be serviced by alternative modes of travel. Finally, investment in and support for these alternative modes of travel, such as walking, bicycling and public transit, must be significant and sustained to make them truly viable alternatives to personal motor vehicles.

GOAL 1

Reduce the number, length, and frequency of automobile trips on a per capita basis.

- Objective 1.1* Promote land use and development policies that encourage the use of alternative transportation modes over the single-occupant vehicle.
- Objective 1.2* Increase by one percent per year the transit vehicle revenue hours providing service with a frequency of 15 minutes or less.
- Objective 1.3* Promote the location of new institutional, commercial, and employment destinations in close proximity to transit nodes.
- Objective 1.4* Identify actions that improve physical access and remove physical barriers to the use of public transportation.

GOAL 2

Optimize the flow of traffic and the relationship between land uses to reduce traffic congestion, trip length, and trip frequencies.

- Objective 2.1* Pursue transportation network design and operational policies that separate high speed/through traffic from neighborhood/local traffic.
- Objective 2.2* Ensure the continuity of major thoroughfares.
- Objective 2.3* Provide major thoroughfares around rather than through neighborhoods.
- Objective 2.4* Provide for connectivity in the transportation network.

TRAFFIC MITIGATION (CONT.)**GOAL 3**

Develop the widest possible range of transportation alternatives to automobile trip-making by residents.

- Objective 3.1* Preserve abandoned rights-of-way for future transportation corridors for all modes.
- Objective 3.2* Ensure the connection of street stubs for local circulation and linkage of residential areas to neighborhood shopping and services, educational facilities, and recreational areas.
- Objective 3.3* Facilitate the most direct access by all modes from residential areas to major transit corridors.
- Objective 3.4* Study the future potential of alternative transportation options such as light rail, dedicated bus lanes, high occupancy vehicle lanes, and a ridesharing/commuter transportation connection between Bloomington and Indianapolis.
- Objective 3.5* Encourage the integration of City, County and Indiana University mass transit systems into a single, regional authority.

LAND USE, TRANSPORTATION & QUALITY OF LIFE

Growing traffic congestion, concerns over traffic safety, and the increasing cost of upgrading roads have elevated the importance of managing access to the roadway system. Traditionally, growth has followed a cycle whereby as an area develops, existing roads cannot effectively handle the increased traffic. When new, multi-lane facilities are constructed to relieve the pressure, they attract more traffic with the promise of limited delays and reasonable travel speeds. Additional development is naturally attracted to these facilities and a variety of new growth begins to compound, leading once again to traffic congestion that overwhelms the transportation network. This cycle typically continues until it becomes physically or economically impossible to add more capacity to the roadway. Access management together with effective land use management can preserve roadway capacity and, in turn, effectively slow down or even halt the cycle.

GOAL 1

Make transportation infrastructure investments that support the development policies of the City of Bloomington Growth Policies Plan, the Monroe County Comprehensive Land Use Plan, the Town of Ellettsville Comprehensive Plan and the Indiana University Master Plan.

- Objective 1.1* Improve the aesthetics of transportation facilities with streetscape features compatible with the abutting area, consistent with the community's comprehensive plan and neighborhood plans.
- Objective 1.2* Connect all high intensity activity centers to public transit.
- Objective 1.3* Direct all future high intensity land uses toward those roadway corridors with the greatest reserve traffic carrying capacity.
- Objective 1.4* Increase transit service frequency and route coverage so that more people can live within 1/4 mile of transit service with a frequency of 20 minutes or less.
- Objective 1.5* Where appropriate, encourage transit-oriented development proposals featuring building-forward design and limited parking.

GOAL 2

Make transportation infrastructure investments in a manner that protects and enhances the environment, promotes energy conservation, and improves quality of life.

- Objective 2.1* Examine the overall short and long-term social, economic, energy, and environmental (social, natural, and human-made) effects of major transportation investments.
- Objective 2.2* Ensure transportation investments contribute to the overall improvement of air quality for the metropolitan area and support actions reducing the dependency on single-occupant vehicles.
- Objective 2.3* Give priority and encouragement to alternative fuels, fuel efficiency and new technologies to reduce pollution and usage of non-renewable resources.
- Objective 2.4* Plan, design, develop, construct, and maintain transportation facilities to minimize adverse impacts on environmentally sensitive areas, public parks and recreation areas, historic structures, and neighborhoods.

SAFETY & SECURITY

A safe travel environment is a high priority for motorists, bicyclists, pedestrians and neighborhoods. The 2030 Long Range Transportation Plan is committed to reducing human and economic losses from death and injury attributed to mobility. The increased use of seat belts and airbags, as well as improvements in the crash resistance of vehicles, has increased transportation safety. However, it is important that complementary improvements to the transportation system and the built environment are made. Innovative approaches to accident reduction should be included in the planning process, including the use of electronics and telecommunications for driver guidance and warning, improved roadway design and lighting, and increased enforcement.

GOAL 1

Increase the safety and security of the motorized and non-motorized surface transportation systems.

- Objective 1.1* Prioritize additional bicycle facilities, removal of dangerous curves, improved street surfaces, and improved connections between neighborhoods over other types of street improvements.
- Objective 1.2* Pursue transit capital investments that improve the security for transit riders and drivers including, but not limited to, improved lighting at major bus stops.
- Objective 1.3* Improve one (1) high accident location per year as identified in the annual Traffic Accident Report.
- Objective 1.4* Pursue the construction of railway/roadway grade separation.
- Objective 1.5* Reduce the number of injuries and incidents per 100 million transit passenger miles.
- Objective 1.6* Take advantage of funding opportunities provided by the Safe Routes to School Program to enhance walking and bicycling routes for school children.

ECONOMIC VITALITY

The places people live and work in a mobile society and the changing behavior patterns and lifestyles enabled by ease of access are supported by a less visible network for the transportation of goods and materials. A mobile society also involves a high degree of industrial specialization, with transport linking the many suppliers of parts and components with the final assembly plants. Recent emphasis on increasing industrial productivity to help compete internationally has focused on the importance of economy and reliability in transportation as a means of reducing production costs.

GOAL 1

Support economic vitality of the metropolitan area through transportation investments that enhance competitiveness, productivity, and efficiency.

Objective 1.1 Provide adequate access to the Monroe County Airport, inter-modal facilities, major freight terminals and major freight distribution routes.

Objective 1.2 Ensure that transportation investment decisions consider the recreational travel and tourism needs of Bloomington and Monroe County, particularly the State recreation areas on Lake Monroe.

GOAL 2

Improve the movement of goods through the transportation system as a means to enhance the region's economic competitiveness.

Objective 2.1 Continually evaluate the arterial street system through traffic counting and intersection analysis in order to program improvements to enhance efficiency without the need for roadway widening.

Objective 2.2 Make strategic investments such as frontage roads, grade separation of access points, signal timing improvements, and reduction of curb cuts to maximize local connectivity to the highway system.

Paying the bill for transportation facilities is a challenge in every community. Limited fiscal resources are met with the demand for improvement not only in roadway capacity, but also for bicycle, pedestrian and public transit enhancements. Careful consideration must be given to the overall program of transportation improvements so that the return on the community's investment can be maximized. This includes being strategic in selecting preferred roadway upgrades and investing in programs that reduce the need for such road projects. In addition, alternative sources of funding for transportation improvements should be utilized, including dedicated TIF districts and construction of certain facilities as a component of private development projects. Payments for transportation improvements should be viewed as long-term investments in the overall quality of life of the community.

GOAL 1

Develop transportation plans and improvement programs on the basis of an integrated and comprehensive viewpoint of transportation expenditures and revenues for the maintenance, operation, and capital investment in all surface transportation modes.

- Objective 1.1* Examine the effects of transportation projects within the metropolitan area without regard to the source of funding.
- Objective 1.2* Increase public transit capital and operating investment to expand, enhance, and increase the use of transit services; and increase the funding for transit operations even if the funding for streets must be reduced.
- Objective 1.3* Ensure transportation maintenance, operational, and capital investment decisions enhance the efficient movement of freight.
- Objective 1.4* Increase the return of Bloomington/Monroe County Federal highway and transit tax dollars to the Bloomington metropolitan area for transportation improvements.

GOAL 2

Preserve the investment in existing surface transportation systems and promote efficient system management and operation.

- Objective 2.1* Use life-cycle costs (maintenance, operational, and capital costs) in the evaluation of the transportation alternatives and in the design and engineering of bridges, tunnels, and pavements.

CITIZENS ADVISORY COMMITTEE (CONT.)**CITIZENS ADVISORY COMMITTEE VISION STATEMENT**

As indicated above, the Citizens Advisory Committee formulated a vision statement that reflected its priorities for the future of transportation in the community. The CAC vision statement, as adopted by that Committee on December 14, 2005, is as follows:

We believe the next twenty-five years challenge us to decrease our dependence upon the automobile and increase our usage of alternative forms of transportation such as mass transit, walking, and bicycling. We feel these forms of transportation should be given priority and encouragement to replace a significant portion of automobile transportation by 2030. We feel it is both possible and necessary for all forms of mechanical transport to operate with less pollution and increased fuel efficiency by 2030 and, by giving priority and encouragement to alternative fuels, fuel efficiency, and technologies, our environment can be improved and our vehicles made to waste less of our precious nonrenewable resources.

Recommendations

- *The 2030 Long Range Transportation Plan (2030 Plan) must encourage land use decisions that reduce automobile usage. Land uses prescribed by the Bloomington Growth Policies Plan such as mixed-use activity centers, Neighborhood Activity Centers (NAC's), and Community Activity Centers (CAC's) must be developed to provide urban infill and limit fringe area development. Appropriate land uses must be sought which decrease our reliance on the automobile and increase our reliance on pedestrian, bicycle, and mass transportation.*
- *The 2030 Plan must encourage the connectivity prescribed by the Bloomington Growth Policies Plan within and between neighborhoods, and between the neighborhoods and retail and commercial zones. Improved connectivity will encourage use of pedestrian, bicycle, and mass transportation systems and will reduce usage of the automobile.*
- *The 2030 Plan must encourage the integration and expansion of city, county, and university mass transportation systems. A single mass transportation system must be developed that provides seamless and efficient transportation between rural and metropolitan areas and reduces usage of the automobile.*
- *The 2030 Plan must encourage Indiana University to recognize its responsibility to the community and participate fully in transportation planning with the City of Bloomington, Monroe County, and the Town of Ellettsville. The university must join in developing a common vision of city and county transportation and must provide resources and cooperation to develop a system that reduces automobile usage.*
- *The 2030 Plan must encourage the use of high efficiency technologies and low polluting fuels in all mechanized vehicles operating within Monroe County.*
- *The 2030 Plan must encourage ride-sharing between Bloomington and Indianapolis as a short term alternative to single passenger automotive travel. In the long term it must encourage a mass transportation system between Bloomington, Indianapolis and other commuter destinations to reduce usage of the automobile.*

The Saginaw Metropolitan Area Transportation Study



Transportation Improvement Project Prioritization

Prioritization Process

A project would be considered eligible if it:

- Is in the Long Range Plan (LRP) project listing or recommended for such listing by the MPO staff and the Technical Advisory Committee (TAC).
- Is on the National Functional Classification (NFC) map.

To receive Surface Transportation Project (STP) funds, projects will be categorized into the following five categories for the targeted percentage of the STP funds before point assignment. Funds can be moved among categories if there are not enough projects in any one category.

Capacity Improvement Projects: Addition of through lanes or widening lanes that would improve the traffic carrying capacity of the street.

Preservation and Rehabilitation Projects: Rehabilitation and reconstruction of a facility without adding or widening through lanes.

Intersection Improvement Projects: Improvement of the operational capacity by adding right or left turn lanes, adding improvement of signalization, and making geometric improvements.

Bicycle Projects: Construct, rehabilitate, or upgrade bikeways.

Pedestrian/ADA Ramps: Construct, rehabilitate, or upgrade pedestrian and ADA ramps.

In addition to the objective ranking of the projects within each of the above categories, the TAC will also recommend to the TPC a percentage of the total available funds that should be allocated to each of the categories. The TPC is not obligated to accept this recommendation and may make adjustments between categories as it determines necessary.

SCORING

The MPO staff will review all projects before presenting them to the Technical Advisory Committee (TAC) to check for their presence on the Long Range Plan (LRP) and appearance on the National Functional Classification map. Projects will be categorized based on the work description provided by the entities. The projects will be assigned points on the basis of information provided on the project submittal form and then transfer the scores on the project scoring sheet (Appendix 'A'). The projects will be ranked into the following priority groups on the project scoring sheet based on the points they would get.

<i>Group</i>	<i>Points</i>
A	171-200
B	141-170
C	111-140
D	80 – 110

The Transportation Policy Committee (TPC) will be provided with the priority groupings and individual scores to recommend project listing for public meetings and hearings. The grouping of projects will decide about the project's appearance on the TIP and year of implementation.

The following are the point values assigned to performance measures.

<i>Performance Measure</i>	<i>Points</i>
Road Capacity	40
Road Safety	40
Inter-modal Connection/Economic Development	30
Project Readiness	40
Land Use Suitability	20
Congestion Management & Resource Conservation	20
Extra Project Benefits	10

A. ROAD CAPACITY

- 1) What is the current Volume to Capacity Ratio (V/C) during a weekday highest peak hour?
 (The volume is defined as the total number of vehicles that passes over a given point. The capacity of a roadway link is defined as the maximum number of vehicles which can pass a given point during a specified time period under prevailing road condition.)

0.4 < V/C # 0.7.....= 10 points
 0.7 < V/C # 1.0.....= 15 points
 1.0 < V/C # 1.2.....= 30 points
 V/C > 1.2.....= 40 points
 (Note: A total of five (5) points will be assigned to a project for which V/C is not available.)

B. ROAD SAFETY

- 1) What is the accident/million entering vehicles for intersection?

$$\text{Intersection Accident Rate} = \text{Total \# of Accidents} / \text{AADT} \times 365 \times 100,000.$$

- 2) What is the accident per hundred million vehicle miles for midblock location?

$$\text{Road Segment Accident Rate} = \text{Total \# of Accidents} / \text{AADT} \times 365 \times \text{Length of Road} \times 100,000$$

A total of 10 points are assigned for the accident related to transportation system deficiency. Since there is no such measure which can differentiate an accident from another, the points will be assigned at the time of project submission after comparing projects.

- 3) Does the proposed project have any of the following deficiencies?

Check one that applies:

- a) Is the roadway shoulder meet MDOT standard?

If meets MDOT standards.....= 0 points

If under MDOT standards.....= 10 points

- b) Does the proposed projects include a sidewalk?

Sidewalk exist.....= 0 points

Sidewalk does not exist and is part of the project.....= 10 points

- c) Does the proposed project com ply with the Americans with Disability Act (ADA) deficiency?

ADA ramp exist.....= 0 points

ADA ramp does not exist and is part of the project...= 10 points

C. INTER-MODAL CONNECTION / ECONOMIC DEVELOPMENT

- 1) Does the proposed project provide freight access to the following modes of transportation within a one mile radius?

- a) Air b) Water (port) c) Highway d) Rail

Three or more modes.....= 15 points

Any two modes.....= 10 points

Any one mode.....= 0 points

2) Does the proposed project provide, or improve, passenger access to the following listed facilities within a one mile radius?

- a) Bus terminal (intercity) b) Intra city c) Air d) Highway e) Passenger Rail f) Water

Four or more modes.....= 15 points
 Any three modes.....= 10 points
 Any two modes.....= 5 points
 Any one mode.....= 0 points

D. PROJECT READINESS

1) Does the project require Right of Way (ROW) acquisition ?

NO..... = 10 points
 (If Yes answer the following)
 ROW acquisition in progress and will be acquired before the let date.....= 5 points

2) Does the project require utilities relocation?

NO..... = 10 points
 (If yes answer the following)
 Utilities relocation in progress.....= 5 points
 Utility relocation funded.....= 3 points
 Utility relocation not funded.....= 0 points

3) What is the status of 20% local matching funds?

Check one that applies:
 20% local match has been obligated by the government body.....= 10 points
 20% local match has not been allocated.....= 0 points

4) What is the status of the engineering or environmental assessment of the proposed project?

Preliminary Engineering or Environmental Assessment completed.....= 10 points
 Preliminary Engineering or Environmental Assessment in progress.....= 5 points
 Preliminary Engineering or Environmental Assessment not initiated.....= 0 points

E. LAND-USE SUITABILITY

1) Is the proposed project supported by two or more jurisdictions?

One jurisdiction participation.....= 0 points
 Two or more jurisdiction participation.....= 10 points

2) Does the proposed project improve access to any of the following types of land uses within 0.5 mile radius? Check one that applies and briefly explain in the space provided.

- a)Public Uses b)Commercial c)Residential d)Industrial

One land use.....= 0 points
 Two land use.....= 5 points
 Three or more.....= 10 points

F. CONGESTION MANAGEMENT & RESOURCE CONSERVATION

1) Does the proposed project support any of the following congestion management (CM) strategies?

Check from the following list:

- a) Intelligent Transportation System (ITS)
- b) Access Management (AM)

Project supports one of the CM strategy.....= 5 points

Project supports both CM strategies.....= 10 points

2) Will the proposed project scope include bike, hike, or a landscape element?

- a) Bike trail
- b) Hike trail
- c) Landscape Element

Project support one of the above elements.....= 5 points

Project support two or more of the above elements.....= 10 points

G. EXTRA PROJECT BENEFITS

Identify and explain additional funding to be committed to this project beyond minimum match or other benefits of this project which were not addressed in any of the above listed questions? As an example, a project that enhances non-motorized facilities would be considered an extra benefit.

Project has no extra benefits.....= 0 points

Project has extra benefits.....= 10 points



Metropolitan Transportation Improvement Program

*Portland Metro Area
Federal Fiscal Years
2008 through 2011*

January 2008



METRO

PEOPLE PLACES
OPEN SPACES

Adopted by Metro
Resolution No. 07-3825

BICYCLE TECHNICAL EVALUATION CRITERIA

1. GOAL: Modal performance (25 points)

Maximize bicycle ridership (Usage) What is the project's potential ridership based on travel shed, existing socio-economic data and existing travel behavior survey data consistent with 2020 modal targets?

1.a Numerical change between existing year riders and forecast year riders (10 points).

- 10 points - High
- 7 points - Medium
- 3 points - Low

1.b Total forecast year population and employment within one-half mile of the project (5 points).

- 5 points - High
- 3 points - Medium
- 1 point - Low

1.c System connectivity: project completes a gap in the Regional Bikeway System (from RTP) (10 points).

- 10 points - Regional access function
- 7 points - Regional corridor function
- 3 points - Community connector function

2. GOAL: Safety (20 points)

2.a Target roadway a deterrent to bicycling (15 points)

The staff resource to be used for this measure is the 2005 Metro "Bike There!" Map. The map rates roadways where bicyclists currently share the travel lane with motorists. The map uses a suitability rating to describe low, moderate and high-motorized traffic volumes, based on fieldwork and existing traffic counts in the region. The map also identifies "caution areas" where bicyclists may encounter one or more of the following barriers: narrow travel lanes, sharp curves/limited visibility, large trucks, difficult intersections and high traffic volumes.

- 15 points - High auto speed and volume (daily traffic volumes greater than 10,000 and speeds greater than 35 miles per hour) and "caution areas"
- 8 points - Moderate auto speed and volume (daily traffic volumes of 3,000 to 10,000 and speeds of 25 to 35 miles per hour)
- 3 points - Low auto speed and volume (daily traffic volumes of less than 3,000 and speeds of less than 25 miles per hour)

2.b Project design includes safety-enhancing elements beyond a standard bike lane, such as separation from auto traffic (multi-use trail), traffic calming devices, colored bike lanes, advanced stop lines / “bike boxes”, signal detection, bicycle signal heads, etc. (5 points).

- 5 points - Yes
- 0 points - No

3. GOAL: Address 2040 land use objectives (40 points)

3.a New bike trips serve Centers (10 points).

- 10 points - High (greater than 67 percent of bike trips to and within centers)
- 7 points - Medium (34 to 66 percent of bike trips to and within centers)
- 3 points - Low (0 to 33 percent of bike trips to and within centers)

3.b Region 2040 Land Use Designation (10 points).

- 10 points - Central city, regional and town centers, main streets, industrial areas
- 7 points - Corridors and employment areas
- 3 points - Inner and outer neighborhoods

3.c Economic and Community Development - See Attachment B1/B2 in the Solicitation Packet. (20 points)

4. GOAL: Cost effectiveness (15 points)

4.a Total project cost divided by ridership usage points (8 points).

- 8 points - Low cost
- 4 points - Medium cost
- 0 points - High cost

4.b Total Project cost divided by linear miles of project (7 points).

- 7 points - Low cost
- 3 points - Medium cost
- 0 points - High cost

Special notes and instructions for bike projects:

1. Provide specific alignment information for the entire project to facilitate ridership calculation.
2. Direct any questions to John Mermin at (503) 797-1758 or merminj@metro.dst.or.us

BOULEVARD TECHNICAL EVALUATION CRITERIA

1. GOAL: Modal performance (25 points)

Reduction of motor vehicle speeds and enhancement of walking, biking and use of transit

1.a Implement design elements that will help to reduce automobile speeds¹ along boulevard segments, with a goal of reducing speeds to 25 miles per hour, or less (10 points).

- 10 points - 5 or more design elements that reduce speeds
- 7 points - 4 design elements that reduce speeds
- 3 points - 3 design elements that reduce speeds
- 0 points - 2 or fewer design elements that reduce speeds

1.b Does project achieve optimum sidewalk width of at least 10 feet? – (5 points)

(Note: Candidate projects that are constrained by narrow right-of-way may obtain full 5 points upon demonstration that all practical means are employed to maximize sidewalk width including: narrowing travel lanes and center median, elimination of on-street parking on one or both sides of street and transfer of bike facilities to parallel facility. Credit for transfer of bike lanes to a parallel facility may only occur if the parallel facility is in reasonable proximity and is included in the jurisdiction's transportation system plan with bike preferential treatments and improvements.)

1.c Project includes design elements that enhance walking, biking and use of transit² (10 points).

- 10 points - 7 or more design elements
- 7 points - 5 design elements
- 3 points - 3 design elements
- 0 points - 2 or fewer design elements

¹ Design elements that reduce automobile speeds include narrowed travel lanes, on-street parking, reduced turn radii, street trees, curb extensions, ITS elements (signal timing and speed detection) and pedestrian crossing demarcated with texture / color / platform treatment.

² Design elements that enhance alternative modes include transit amenities, landscaped buffer, curb extensions, raised pedestrian refuge median, increased pedestrian crossings (including mid-block crossings), bike lanes (on or parallel street), removing obstructions from the primary pedestrian-way and street amenities such as benches, pedestrian scale lighting, public art, ITS tools (real-time traveler information), etc.

2. GOAL: Safety (20 points)

Project corrects an existing safety problem and reduces potential for collisions involving pedestrians and bicyclists. Very wide roads with fast moving traffic make crossing difficult and dangerous. Factors such as high number of collisions involving pedestrians or bicyclists, traffic volume, posted speed greater than 30 mph, number of travel lanes, road width, complexity of traffic environment³ and existence of sidewalks will be considered in determining critical safety problems. Project applications should document these factors.

2.a Project addresses a documented safety problem (10 points).

- 10 points - High
- 7 points - Medium
- 3 points - Low

2.b Project addresses existing hazards to walking, biking and use of transit⁴ and reduces potential for collisions involving pedestrians and bicyclists (10 points).

- 10 points - 7 or more safety factors addressed
- 7 points - 5 safety factors addressed
- 3 points - 3 safety factors addressed
- 0 points - 2 or fewer safety factors addressed

3. GOAL: Address 2040 land use objectives (40 points)

3.a 2040 Land Use (10 points)

- 10 points - Central city, regional centers
- 7 points - Town centers, main streets, station communities
- 3 points - Corridors
- 0 points - All other 2040 areas

3.b Regional Street design hierarchy (10 Points)

- 10 points - Located in a boulevard designation
- 7 points - Located in a street designation and a mixed-use area
- 0 points - Located outside of above areas

3.c Economic and Community Development – see Attachment B1 or B2 in the Solicitation Packet (20 points)

³ Complexity of traffic environment refers to number of driveways and turning movements in project area.

⁴ Project includes actions to correct the following safety factors: travel speeds greater than 40 mph, lack of pedestrian refuge, more than 330 feet between marked pedestrian crossings, poor vertical delineation of pedestrian-way (e.g., no curb, intermittent curb, substandard width), numerous driveways, sight distance and high incidence of collisions with pedestrians and bicyclists.

4. GOAL: Cost effectiveness (15 points)

4.a Implement maximum feasible, highest priority boulevard design elements at lowest cost.

- 15 points - Low cost/effectiveness
- 8 points - Medium cost/effectiveness
- 0 points - High cost/effectiveness

Note: Cost effectiveness = (Total Project Cost/Use factor points⁵) / Linear miles of project

5. GOAL: Implement proven green street elements (10 bonus points)

5.a Project includes planting of street trees consistent with the Trees for Green Streets handbook; see page 17 for tree species and page 56 for planting area dimensions.

- 5 points - Yes
- 0 points - No

5.b Project includes any of the Green Street design elements described in Section 5.3, other than street trees, of the Green Streets handbook.

- 5 points - Yes
- 0 points - No

Special notes and instructions for boulevard projects:

1. Under-grounding of utilities is not eligible for federal reimbursement nor may such costs be counted as local contribution toward matching fund requirements.
2. Direct any questions to John Mermin at (503) 797-1747 or merminj@metro.dst.or.us

⁵ Use Factor points = Reduce motor vehicle speeds Score+ enhance alternative modes of travel Score

FREIGHT TECHNICAL EVALUTION CRITERIA

1. Goal: Modal performance (25 points)

Improve Freight Network Reliability & Efficiency.

1.a Travel Time Reliability (10 points)

Project increases travel time reliability in a freight corridor:

- 10 points – Highly congested corridor (PM Peak V/C > 1.0)
- 7 points – Moderately congested corridor (PM Peak V/C > .80)
- 0 points – Minimal congestion (PM Peak V/C < .80)

1.b Network Connectivity (15 points)

Project improves freight network connectivity:

- 15 points – Removes an existing barrier or averts a future barrier such as a weight or height restriction on a regional freight route.
- 10 points – Removes an existing barrier or averts a future barrier such as a weight or height restriction on a locally identified freight route.
- 7 points – Improves existing connection or adds new connection to or within an industrial or employment area.
- 0 points – Has no impact on network connectivity.

2. Goal: Safety (20 points)

Enhance Freight Network Safety

2.a Freight Safety (15 points)

A professional panel will develop a sliding scale scoring system and assign up to 15 points to each project based on the factors below.

- Geometric
- Reduction in potential conflicts between freight and other modes
- High crash location
- Site distance
- System management
- Other relevant factors identified by applicant

2.b Safety for Other Modes (5 points)

Project adds pedestrian and/or bicycle facilities where no or substandard facilities exist:

- 5 points – 2.5 for each design element

3. Goal: Address 2040 land use objectives (40 Points)

Support Industrial and Employment Lands

3.a Regional Transportation System Plan Freight Designation (10 points)

Project is located on or in:

- 10 points – Regional Main Roadway Route, Railroad Main Line, or Freight Facility or identified on the National Highway System.
- 7 points – Regional Roadway Connector or Railroad Branch Line.
- 5 points – Freight route identified in a local TSP.
- 0 points – Location not identified as a freight route or facility.

3.b Industrial Lands Access (10 Points)

Project is improving freight access to or within:

- 10 points – Regionally Significant Industrial Area.
- 7 points – Industrial Area.
- 5 points – Employment Area.
- 0 points – Other

3.c Economic and Community Development – see Attachment B2 in the Solicitation Packet: Industrial and Employment Economic and Community Development (20 points)

4. Goal: Cost effectiveness (15 points)

Balance Project Benefits and Costs

4.a VMT/Travel Time Reduction (8 points)

Reduction in freight travel time and vehicle miles traveled compared with estimated project cost and requested funding amount:

- 8 points – High benefit to cost ratio
- 4 points – Medium benefit to cost ratio
- 0 points – Low benefit to cost ration.

4.b Multimodal Freight Benefits (7 points)

Project benefits multiple freight modes (air, marine, pipeline, rail, truck):

- 7 points – Three or more freight modes
- 4 points – Two freight modes
- 0 points – One freight mode

Special notes and instructions for freight projects:

1. Metro will determine the area of effect of a freight project and may collaborate with Portland State University to determine the traded sector relationship of freight projects.
2. Direct any questions to Deena Platman at 503-797-1754 or platmand@metro.dst.or.us

GREEN STREET DEMONSTRATION: RETROFIT PROJECT TECHNICAL EVALUATION CRITERIA

Note: A Performance monitoring plan that includes before and after measurements of storm water runoff quantity and quality is required for allocation of regional flexible funds to this project category.

1. GOAL: Modal performance (55 points)

Project will be effective at removing storm water runoff from piped system and infiltration of storm water near source of runoff.

1.a Size of project area (10 points)

- 10 points - High
- 7 points - Medium
- 3 points - Low

1.b Design Elements (45 points)

- Preserving existing large trees and/or planting trees consistent with recommendations of Trees for Green Streets guidebook (10 points)
- Removal of impervious surface area (10 points)
 - 10 points - High
 - 7 points - Medium
 - 3 points - Low
- Sidewalks and/or low traffic areas constructed with pervious material (10 points)
- Curb options consistent with handbook options (5 points)
- Use of Infiltration and/or detention devices (swale, filter strip, infiltration trench, linear detention basin, street tree well, engineered products) (10 points)

2. GOAL: Safety (20 points)

2.a A panel of transportation professionals will rank projects based on a description of safety issues, including:

- Crash rate per vehicle mile (use ODOT Rate Book when available): per vehicle for intersections.
- Sight line distance improvements.
- Vehicle channelization (turn pockets – new or replacing free left turn lane, refined vehicle lane definition at intersections, etc.).
- Design elements to reduce speeds where speed is an identified safety issue and existing speeds are higher than appropriate for the street's functional classification.
- Other relevant factors as identified by the applicant.

The professional panel will develop a sliding scale scoring system and assign between 0 and 15 points to each project/program based on the issues listed above.

2.b New pedestrian and/or bicycle facilities added where no or substandard facilities previously existed.

- 5 points - 2.5 for each design element

3. GOAL: Address 2040 land use objectives (10 points)

3.a 2040 Land Use Designation (10 points)

- 10 points - Central city, regional centers, regionally significant industrial areas
- 7 points - Town centers, main streets, station communities, local industrial areas
- 3 points - Corridors
- 0 points - All other areas

4. GOAL: Cost effectiveness (15 points)

4.a Amount of project area that is infiltrated versus project cost

- 15 points - High
- 8 points - Medium
- 0 points - Low

Special notes and instructions for green street demonstration projects:

1. Performance monitoring plan that includes before and after measurements of storm water runoff quantity and quality is required for allocation of regional flexible funds to this project
2. Direct any questions to Amy Rose (503) 797-1776 or rose@metro.dst.or.us

GREEN STREET DEMONSTRATION: NEW CONSTRUCTION TECHNICAL EVALUATION CRITERIA

Note: Performance monitoring plan that includes before and after measurements of storm water runoff quantity and quality is required for allocation of funds to this project category.

1. GOAL: Modal performance (55 points)

Project will be effective at removing storm water runoff from piped system and infiltration of storm water near source of runoff.

1.a Size of project area (10 points)

- 10 points - High
- 7 points - Medium
- 3 points - Low

1.b Design Elements (45 points)

- Protect and restore existing habitat and native vegetation and soils. Including stream crossing designs of:
 - Number and location consistent with Green Street handbook guidelines
 - Bridge structures for crossings of hydraulic openings of 15 feet or greater
 - Stream simulation culvert designs for culvert crossings (10 points)
- Planting trees consistent with Trees for Green Streets guide book (10 points)
- Sidewalks and/or low traffic areas constructed with pervious material (10 points)
- Curb options consistent with handbook options (5 points)
- Use of Infiltration and/or detention devices (swales, filter strip, infiltration trench, linear detention basin, street tree wells, engineered products) (10 points)

2. GOAL: Safety (20 points)

2.a A panel of transportation professionals will rank projects based on a description of safety issues, including:

- Crash rate per vehicle mile on adjacent facility (use ODOT Rate Book when available) if new facility will accommodate trips from that facility and thereby reduce exposure to crash potential on that facility.
- Design elements to encourage driving at posted speeds or expected posted speed for the street's functional classification.
- Reduction in exposure to accident potential through the provision of an alternative or more direct trip route.
- Other relevant factors as identified by the applicant.

The professional panel will develop a sliding scale scoring system and assign between 0 and 20 points to each project/program based on the issues listed above.

3. GOAL: Address 2040 land use objectives (10 points)

3.a 2040 Land Use Designation

- 10 points - Central city, regional centers, regionally significant industrial areas
- 7 points - Town centers, main streets, station communities, local industrial areas
- 3 points - Corridors
- 0 points - All other areas

4. GOAL: Cost effectiveness (15 points)

4.a Amount of project area that is infiltrated versus project cost

- 15 points - High
- 8 points - Medium
- 0 points - Low

Special notes and instructions for green street demonstration projects:

1. Performance monitoring plan that includes before and after measurements of storm water runoff quantity and quality is required for allocation of funds to this project category.
2. Direct any questions to Amy Rose (503) 797-1776 or rose@metro.dst.or.us

GREEN STREET DEMONSTRATION: CULVERT PROJECT TECHNICAL EVALUATION CRITERIA

Note: Culvert must be on regional inventory of culverts on regional facilities identified as inhibiting fish passage. A geomorphology analysis is required as part of preliminary engineering of the project to prevent negative impacts. Design solution should be consistent with Green Street handbook design guidance. Multiple culvert projects on the same stream system may be rated as one project to maximize overall benefit to the stream system.

1. GOAL: Modal performance (70 points)

1.a Type of fish passage solution (20 points)

Fish barrier replaced or retrofitted with:

- 20 points - Bridge structure over natural hydraulic area
- 13 points - Stream simulation culvert
- 5 points - Repair of fish ladder, jump pools, etc.

1.b Amount of upstream habitat (stream miles) with improved fish passage (25 points)

- 25 points - High
- 15 points - Medium
- 5 points - Low

1.c Quality of habitat at fish barrier passage (10 points)

- 10 points - High
- 7 points - Medium
- 3 points - Low

1.d Presence of downstream fish barriers (15 points)

- 15 points - None
- 10 points - One
- 5 points - Two
- 0 points - Three or more

2. GOAL: Cost effectiveness (30 points)

2.a **Amount** of habitat (stream miles) with new or improved fish access versus project cost.

- 30 points - High
- 15 points - Medium
- 5 points - Low

Special notes and instructions for green street culvert demonstration projects:

1. Culvert must be on regional inventory of culverts on regional facilities identified as inhibiting fish passage.
2. A geomorphology analysis is required as part of preliminary engineering of the project to prevent negative impacts of erosion or head cutting.
3. Design solution should be consistent with Green Street guidebook design guidance.
4. Multiple culvert projects on the same stream system may be rated as one project to maximize overall benefit to the stream system.
5. Direct any questions to Amy Rose at (503) 797-1776 or rose@metro.dst.or.us

PEDESTRIAN TECHNICAL EVALUATION CRITERIA

1. GOAL: Modal performance (25 points)

Project will encourage walking as a form of travel. The following elements will be considered in determining the projected increase in pedestrian mode share, consistent with 2040 modal targets:

1.a Project is located in an area with a high potential for pedestrian activity (15 points)

- 15 points - Most potential (within a Pedestrian district)¹
- 10 points - Moderate potential (along² a Rail, Rapid Bus, Frequent Bus corridor³ and within a 1/4 mile of a major transit stop, school, civic complex or cultural facility)
- 5 points - Less potential (along a Transit/mixed-use corridor location not specified above)
- 0 points - Least Potential (other areas)

1.b Project will correct a deficiency or significantly enhance the pedestrian system in the area such that new pedestrian trips will be generated (10 points)

- 5 points - Completes missing sidewalk link
- 5 points - Removes pedestrian obstacles⁴

2. GOAL: Safety (20 points)

Project corrects a safety problem. Very wide roads with fast moving traffic make crossing difficult and dangerous. Factors such as high number of collisions involving pedestrians, traffic volume, posted speed greater than 30 mph, number of travel lanes, road width, complexity of traffic environment⁵ and existence of sidewalks will be considered in determining critical safety problems.

2.a Project addresses a documented safety problem (10 points)

- 10 points - High
- 7 points - Medium
- 3 points - Low

¹ Refer to Figure 1.19 in the Regional Transportation Plan, which designates pedestrian districts and transit/mixed-use corridors.

² Same as 1.

³ Refer to Figure 1.16 in the Regional Transportation Plan, which designates Rail, Frequent Bus corridors and major transit stops.

⁴ Obstacles include missing curb ramps, >330' spacing between pedestrian crossing and lack of pedestrian refuges.

⁵ Complexity of traffic environment refers to number of driveways and turning movements in project area.

2.b Project location includes factors that deter walking⁶ (10 points)

- 10 points - 5 or more factors that deter walking
- 7 points - 3-4 factors that deter walking
- 3 points - less than 3 factors that deter walking

3. GOAL: Address 2040 land use objectives (40 points)

3.a 2040 Land Use – 20 points

- 20 points - Project is located in the Central city, a regional center, or a regionally significant industrial area
- 13 points - Project is located in a Town center, main street, station communities, or local industrial area
- 5 points - Project is located in all other areas

3.b Economic and community Development - see Attachment B1 or B2 in the Solicitation Packet (20 points)

4. GOAL: Cost effectiveness (15 points)

4.a Provide Mobility at Reasonable Cost

- 15 points - Low/Cost/increase pedestrian mode share
- 10 points - Moderate Cost/increase pedestrian mode share
- 5 points - High Cost/Increase pedestrian mode share

Note: Cost effectiveness = Total project cost is divided by use factor points (increase pedestrian mode share)

⁶ Factors that impact walking safety include: travel speeds greater than 30 mph, lack of landscaped pedestrian buffer, curb to curb widths greater than 70 feet, more than 20,000 ADT, more than 2 travel lanes, complex traffic environment, lack of sidewalks, poor pedestrian delineation and lack of marked pedestrian crossings.

ROAD AND BRIDGE CAPACITY TECHNICAL EVALUATION CRITERIA

Points in this category are awarded based on the project’s location (“setting”) and design elements (“attributes”) where applicable.

1. Goal: Modal performance (25 points)

The purpose of this goal is to promote investment in locations where congestion is already significant and where it is expected to increase. The goal is also intended to encourage project sponsors to focus on making the existing road network operate more effectively.

Setting (15 points):

- What are the levels of congestion on the existing facility currently and according to future projections? Points are allotted based on the following table of V/C ratios:

V/C Ratio	Current (pm peak 2 hour/direction, RTP base network)	Modeled Future (pm peak 2 hour/direction, No-Build on RTP FC system)
>1.0	5	10
0.9 – 1.0	4	7
<0.9	2	3

Attributes (10 points):

- Does the project create a new through street connection with an existing or planned street? (5 points)
- Does project utilize system management and/or operations approaches, including intelligent transportation systems (ITS) to reduce congestion? (5 points)

2. Goal: Safety (20 points)

The purpose of this goal is to ensure that when funds are spent on transportation infrastructure in the Portland metropolitan area, they go to projects that increase safety for all users of the system.

Setting:

- A panel will evaluate safety conditions on the existing facility based on factors provided by the applicant such as crash rate per vehicle mile (segments) or per vehicle (intersections), sight line limitations, roadway design, etc.

Attributes:

- A panel will evaluate potential improvements to the safety of the facility by considering proposed project attributes such as sight line distance improvements, use of advanced technology, vehicle channelization improvements, appropriate reduction of speed, provision of route alternative, etc.)
- Does the project create or bring up to standard bicycle (2.5 points) or pedestrian (2.5 points) facilities?

3. Goal: Address 2040 land use objectives (40 points)

The purpose of this goal is to emphasize the connection between transportation and land use. Metro seeks to invest in corridors that provide access to areas that are prioritized in the 2040 Growth Concept.

Setting (40 points):

- Using the following matrix, is a high proportion of travel (10 points) or a high number of vehicles (10 points) on the project link seeking access to/from a mixed-use or industrial area?

	High	Medium	Low
2040 Tier I land-use area	10	7	5
2040 Tier II land-use area	7	5	3
Other 2040 land-use area	3	0	0

- Economic Development: See Attachment B1/B2 in the Solicitation Packet (20 points)

4. Goal: Cost effectiveness (15 points)

The purpose of this goal is to reward project sponsors who find ways to improve access to priority land use areas and to reduce congestion at the lowest possible cost.

Attributes (15 points):

Cost per vehicle hour of delay (VHD) eliminated: $VHD_{eliminated} = Plan_{horizon\ year} - No-Build\ VHD - Build\ VHD$

- 15 points - High
- 8 points - Medium
- 0 points - Low

5. Bonus Points (10 points)

The purpose of offering bonus points is to encourage projects to incorporate specific design elements. These elements represent programs and policy objectives that are promoted in the Regional Transportation Plan.

Transit & Freight Benefits (5 bonus points):

- Project is located on a regional transit route and will implement road-related capital elements of transit system in agreement with transit service provider¹ (2.5 points) or is located on a regional freight or freight connector route and will remove barriers to freight movements on the freight facility² (2.5 points).

¹ Examples of road-related capital elements of a transit system include bus stop pads, signal priority, queue-bypass lanes etc.

² Examples of freight elements include turning radius improvements, intelligent transportation systems that improve traffic flow, access management, etc.

Green Streets (5 points):

- Project includes preservation of existing large trees and/or planting of street trees consistent with the Trees for Green Streets guidebook or is the construction of a new bridge consistent with Section 7.3 of the Green Streets guidebook (2.5 points). Project includes storm water infiltration/retention elements noted in Section 5.3 of the Green Streets guidebook (2.5 points).

Special Notes and Instructions for Road Capacity Projects:

1. Mainline freeway right-of-way or construction projects are not eligible for regional flexible funds.
2. Project information regarding relief of congestion from spot improvements at intersections or interchanges is not included in this measure as that information is not uniformly available throughout the region. Applicants may provide such information when known as a part of the qualitative considerations in Attachment A.
3. Direct any questions to Jon Makler at (503) 797-1873 or maklerj@metro.dst.or.us

ROAD AND BRIDGE RECONSTRUCTION TECHNICAL EVALUATION CRITERIA

Points in this category are awarded based on the project’s location (“setting”) and design elements (“attributes”) where applicable.

1. Goal: Modal performance (25 points)

The purpose of this goal is to address the fact that infrastructure that is in poor condition is less productive and often more dangerous for users. The intention is to prioritize projects that help maintain as much of the system as possible in a state of good repair, at the most cost-effective time in the life cycle of the pavement.

Setting (20 points):

- What is the facility’s current and future (10-year) pavement condition, assuming no earlier improvement is made? Points are allotted based on the following table.¹

		2016 Condition <i>(Without earlier improvement)</i>		
		Fair	Poor	Very Poor
2006 Condition	Fair	12	16	20
	Poor	8	12	16
	Very Poor	4	8	12

Attributes (5 points):

- Project adds urban design elements where they do not currently exist or where they are currently substandard² (5 points).

2. Goal: Safety (20 points)

The purpose of this goal is to ensure that when funds are spent on transportation infrastructure in the Portland metropolitan area, they go to projects that increase safety for all users of the system.

Setting:

- A panel will evaluate safety conditions on the existing facility based on factors provided by the applicant such as crash rate per vehicle mile (segments) or per vehicle (intersections), sight line limitations, roadway design, etc.

¹ Conditions (Fair, Poor, Very Poor) will be determined based on the relevant bridge, pavement, and/or safety data and descriptions included in the Technical Evaluation Questions section of the project application.

² Examples of urban design elements include sidewalks, pedestrian crossings, transit stop improvements, bike facilities, storm water facilities and lighting.

Attributes:

- A panel will evaluate potential improvements to the safety of the facility by considering proposed project attributes such as sight line distance improvements, use of advanced technology, vehicle channelization improvements, appropriate reduction of speed provision of route alternative, etc.)

Project creates or brings up to standard bicycle (2.5 points) or pedestrian (2.5 points) facilities.

3. Goal: Addresses 2040 land use objectives (40 points)

The purpose of this goal is to emphasize the connection between transportation and land use. Metro seeks to invest in corridors that provide access to areas that are prioritized in the 2040 Growth Concept.

Setting (40 points):

- Using the following matrix, is a high proportion of travel (10 points) or a high number of vehicles (10 points) on the project link seeking access to/from a mixed-use or industrial area?

	High	Medium	Low
2040 Tier I land-use area	10	7	5
2040 Tier II land-use area	7	5	3
Other 2040 land-use area	3	0	0

- Economic Development: See Attachment B1/B2 in the Solicitation Packet (20 points)

4. Goal: Cost Effectiveness (15 points)

The purpose of this goal is to reward project sponsors who employ innovative techniques to minimize project cost in proportion to the volume of traffic utilizing the facility in question.

Attributes (15 points):

- Project utilizes transportation system management and operations (TSMO)? (5 points)
- Cost effectiveness is calculated on the basis of vehicle miles traveled for links and vehicle counts for spots (bridges and intersections). 10 Points are allotted according to the following table:

Bridges/Intersections	Interstate Links	Roadway Links	Score
<\$0.50/Veh	<\$0.50/VMT	<\$0.33/VMT	15
\$0.51-0.99/Veh	\$0.51-0.99/VMT	\$0.34-0.99/VMT	8
>\$1.00/Veh	>\$1.00/VMT	>\$1.00/VMT	0

5. Bonus Points (10 points)

The purpose of offering bonus points is to encourage projects to incorporate specific design elements. These elements represent programs and policy objectives that are promoted in the Regional Transportation Plan.

Transit & Freight Benefits (5 points):

- Project is located on a regional transit route and will implement road-related capital elements of transit system in agreement with transit service provider³ (2.5 points) or is located on a regional freight or freight connector route and will remove barriers to freight movements on the freight facility⁴ (2.5 points).

Green Streets (5 points):

- Project includes preservation of existing large trees and/or planting of street trees consistent with the Trees for Green Streets guidebook or is the construction of a new bridge consistent with Section 7.3 of the Green Streets guidebook (2.5 points). Project includes storm water infiltration/retention elements noted in Section 5.3 of the Green Streets guidebook (2.5 points).

Special Notes and Instructions for Road Reconstruction Projects:

1. Cost scales per vehicle or VMT will be updated to reflect current costs and/or points may be assigned for low medium and high cost to distinguish between candidate projects.
2. Provide safety, bridge and pavement condition related data and descriptions in the Road and Bridge Reconstruction application in the Solicitation Packet.
3. Direct any questions to Jon Makler at (503) 797-1873 or maklerj@metro.dst.or.us

³ Examples of road-related capital elements of a transit system include bus stop pads, signal priority, queue-bypass lanes, etc.

⁴ Examples of freight elements include turning radium improvements, intelligent transportation systems that improve traffic flow, access management, etc.

REGIONAL TRANSPORTATION OPTIONS (RTO) PROGRAM TECHNICAL EVALUATION CRITERIA

Regional Transportation Options (RTO) Program: Financially Constrained System

The Regional Travel Options (RTO) Program 5-Year Strategic Plan was adopted by Metro Council in January 2004. Program components include: Collaborative Marketing, Employer Outreach, Regional Rideshare, Wilsonville/SMART TDM, Regional TMA Program, Region 2040 Initiatives Program, Regional Telework and the Business Energy Tax Credit (BETC) Program. Administration of a number of program components is currently under transition from TriMet to Metro. The RTO Financially Constrained System for FY 2006/07 through 2009/10 represents a base program budget and will be included under the Planning category.

RTO Program: Preferred System Implementation

The RTO Program Preferred System Implementation is described in the RTO Program 5-Year Strategic Plan, and describes new and expanded RTO program elements in addition to those described above in the RTO Financially Constrained System. RTO projects are programs added through Preferred System Implementation must be consistent with the RTO Program 5-Year Strategic Plan.

Special notes and instructions for RTO projects:

Direct any questions to Pam Peck at (503) 797-1758 or peckp@metro.dst.or.us

TRANSIT ORIENTED DEVELOPMENT (TOD) TECHNICAL EVALUATION CRITERIA

1. GOAL: Modal performance (25 points)

Increase the share of transit, bike and walk trips.

1.a The number of transit, bike and walk trips over the number that would be expected from a development that did *not* include these public funds for the TOD project.

- 25 points - High: 50 percent or greater increase in non-auto trips
- 13 points - Medium: 25 percent or greater increase in non-auto trips
- 0 points - Low: less than 25 percent increase in non-auto trips

2. GOAL: Density (20 points)

2.a How much does the TOD project increase the density of residential units and/or employment on the project site above the level that would result without these public funds?

- 20 points - High: 50 percent or greater increase in persons per acre
- 10 points - Medium: 25 percent or greater increase in persons per acre
- 0 points - Low: less than 25 percent increase in persons per acre

3. GOAL: Addresses 2040 land use objectives (40 points)

3.a Is the project located in a Tier I 2040 mixed-use land-use area? (10 points)

- 10 points - Central city or regional center
- 5 points - Town center, main street or station community
- 2 points - Corridor
- 0 points - Other

3.b Is the project located in an area projected in the 2040 Growth Concept to have a large increase of mixed-use development between 1996 and 2020? (10 points)

- 10 points - High change
- 5 points - Medium change
- 0 points - Low change

3.c Economic and Community Development: See Attachment B1/B2 in the Solicitation Packet (20 points)

4. GOAL: Cost effectiveness (15 points)

4.a Cost per VMT reduced

- 15 points - Low cost/VMT reduced
- 8 points - Medium cost/VMT reduced
- 0 points - High cost/VMT reduced

Special notes and instructions for TOD projects:

1. Direct any questions to Marc Guichard at (503) 797-1944 or guichardm@metro.dst.or.us

TRANSIT: START-UP SERVICE TECHNICAL EVALUATION CRITERIA

Note: Applicant must demonstrate the ability and a commitment to continue new service after the expiration of application funding to be eligible for allocation of regional flexible funds.

1. GOAL: Increase Ridership (25 points)

1.a New Boardings per vehicle revenue hour

- 25 points - High boardings per revenue hour
- 15 points - Medium boardings per revenue hour
- 5 points - Low boardings per revenue hour

2. Goal: Safety (20 points)

The purpose of this goal is to minimize exposure of general and special needs populations to safety related issues when accessing the transit system.

2.a Increase in households within ¼ mile of transit service with proposed service (10 points).

2.b Increase in transit dependent population within ¼ mile of transit service with proposed service (10 points).

3. GOAL: Address 2040 Land Use Objectives (40 points)

3.a Access to Centers, Central City, Regional and Town centers (10 points)

- Number of centers served

3.b Access to Mixed-Use development (10 points)

- Population in Priority 2040 land use areas served (high/medium/low)
- Employment in Priority 2040 land use areas served (high/medium/low)

3.c Economic and Community Development - See Attachment B1 or B2 to the Solicitation Packet (20 points)

4. GOAL: Provide Cost Effective Improvements (15 points)

4.a Cost/New Boarding

- 15 points - Low Cost per new boarding
- 10 points - Medium cost per new boarding
- 5 points - High cost per new boarding

Special notes and instructions for transit projects:

1. Direct any questions to Ted Leybold at (503) 797-1759 or leyboldt@metro.dst.or.us.

TRANSIT: CAPITAL TECHNICAL EVALUATION CRITERIA**1. GOAL: Modal performance (25 points)**

1.a Increase ridership

Project includes transit preferential and stop spacing treatments that reduce travel time and /or provide new access to transit that increases riders. Measure is average weekday new riders = plan year horizon transit riders with improvement – plan year horizon transit riders without improvement. (15 points)

- 15 points - High increase in new riders
- 10 points - Medium increase in new riders
- 5 points - Low increase in new riders
- 0 points - No increase in new riders

1.b Improve schedule reliability

Project includes improvements such as signal preemption, communications equipment, queue by-pass lane, stop design or spacing or other improvements that increase schedule reliability. (5 points)

- 5 points - Yes
- 0 points - No

1.c Improve passenger experience

Project includes improvements such as shelters, benches, real time schedule information and other elements that improve the passenger experience.

- 5 points - Yes
- 0 points - No

2. GOAL: Safety and security (20 points)

2.a Project includes attributes that improve system security such as video monitoring, emergency communications equipment, etc.

- 10 points - High number of riders served by new attributes
- 7 points - Medium number of riders served by new attributes
- 3 points - Low number of riders served by new attributes
- 0 points - No safety or security attributes

2.b Project includes attributes that improve passenger safety such as sidewalks, pedestrian crossings, curb extensions, etc.

- 10 points - High number of riders served by new attributes
- 7 points - Medium number of riders served by new attributes
- 3 points - Low number of riders served by new attributes
- 0 points - No safety or security attributes

3. GOAL: Address 2040 Land Use Objectives (40 points)

3.a Project location

- 15 points - Central City, regional center, regionally significant industrial area or inter-modal facility
- 10 points - Town center, main street, station community, local industrial area
- 5 points - Inner and outer neighborhoods, employment area

3.b Economic and Community Development: - See Attachment B1/B2 to the Solicitation Packet (20 points)

3.c Capital investment that has demonstrated ability to attract development to surrounding area.

- 5 points -Yes
- 0 points - No

4. GOAL: Cost Effectiveness (15 points)

4.a Cost effective transit improvement

Cost per rider (may be cost per AWD rider or amortized over estimated life of capital facility depending on type of applications received).

- 15 points - Low cost per new riders
- 10 points - Medium cost per new riders
- 5 points - High cost per new riders

-OR-

4.b Coordination with regional, transit agency and local planning efforts

- Project is part of local Capital Improvement Plan with local resource contribution (5 points)
- Project is part of local Transportation System Plan (5 points)
- Project is part of and consistent with description in transit agency capital improvement plan and is linked to planned service improvements (5 points)

Special notes and instructions for transit projects:

1. Direct any questions to Ted Leyboldt at (503) 797-1759 or leyboldt@metro.dst.or.us

**POLICY ON
TRANSPORTATION IMPROVEMENT PROGRAM (TIP) PREPARATION**
Procedures for preparing the 2007-2012 TIP

**Adopted June 15, 2005
Amended October 19, 2005
Amended January 18, 2006
Amended September 20, 2006**

**Denver Regional Council of Governments
4500 Cherry Creek Drive South, Suite 800
Denver, Colorado 80246**

Preparation of this report has been financed in part through grants from the Federal Transit Administration and the Federal Highway Administration of the U. S. Department of Transportation

Transportation Advisory Committee (TAC) and Regional Transportation Committee (RTC) before consideration and formal adoption by the DRCOG Board of Directors. DRCOG, CDOT and RTD are continuing a process of integrating these three project selection processes; this is an evolving effort being implemented over several TIP cycles. For the 2007-2012 TIP, three steps toward process integration will be conducted:

- A strategic corridor focus is hereby adopted as a unifying theme. The means by which each agency will implement this within its selection process is identified in this document.
- The three agencies will participate in each other's separate meetings, discussions and public forums leading to project selection.
- The three agencies will hold an interagency review and comment on each other's **draft** lists of recommended projects and those not recommended, prior to committee review.

All project sponsors will identify the multimodal connectivity elements planned as part of the projects on their draft lists of recommended TIP projects.

C. Eligibility Requirements and Commitments for All TIP Projects

1. Eligible Applicants

County and municipal governments, RTD, the State, the Regional Air Quality Council (RAQC), and DRCOG are eligible to submit projects. With the exception of applicants for FTA Section 5310 and 5311 funds, private, non-profit and civic organizations must submit projects through government agencies.

2. Project Eligibility

All projects to be granted federal funds through the TIP must implement the improvements and/or policies contained in the 2030 Metro Vision RTP. The types of projects eligible for specific federal funding sources have been established in the Transportation Equity Act for the 21st Century (TEA-21) and are listed in Appendices A and B.

3. Air Quality Commitments

The TIP **must** implement any submitted State Implementation Plan (SIP) Transportation Control Measures (TCMs) identified in the fiscally constrained 2030 Metro Vision RTP air quality conformity finding. The only remaining TCM is the Southeast Corridor light rail transit line.

4. Eligibility of Roadway Capacity Projects and Project Staging

For TIP roadway capacity projects (i.e., highway widening, new roadways, new interchanges, interchange reconstruction, and Bus/HOV/Bus Rapid Transit lanes), the fiscally constrained 2030 Metro Vision RTP contains a specific list of eligible projects that implement its objectives (see Appendix D). The fiscally constrained Metro Vision RTP's conformity finding is based on the implementation of these capacity

improvements over time (project “staging” specified in Appendix 5 of the 2030 Metro Vision RTP document). For the 2007-2012 TIP, any regionally significant roadway capacity project identified in the fiscally constrained 2030 Metro Vision RTP list is considered eligible for TIP funding. If projects are selected that are not specifically consistent with RTP staging, new air quality conformity modeling will be conducted to support TIP and Plan conformity findings.

5. 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. For DRCOG-selected projects, a sponsor’s submittal of a funding request constitutes this commitment as described by the sponsor on the funding request application form.

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 funds and match equal to the increase or make accommodating reductions in other TIP projects they sponsor to compensate for the increase. If project costs increase on DRCOG-selected projects, sponsors are expected to make up any shortfalls with non-federal funds. Project sponsors with more than one project included in the TIP under the same federal funding source may shift federal funds and match between projects, subject to the administrative and policy amendment process herein and the ability to obligate all federal funds. All projects involved in such amendments must be completed as defined in the application from the project sponsor.

All commitments in 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 made during project development must be funded as part of the project.

6. 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 and RTC) and a public hearing at the regional level provide opportunities for public comment prior to Board action on adoption of the TIP or major TIP policy amendments.

7. 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.

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.

In order to receive future reimbursement for an Advance Construction project, the sponsor must have FHWA “designate” the project and approve it as an Advance Construction project. This process must be initiated through the TIP development process or as an amendment to an adopted TIP. Because the TIP does not specifically identify the federal/CDOT funding component for CDOT projects, CDOT works directly with FHWA on projects for which it desires Advance Construction designation.

III. DRCOG PROCESS

This chapter describes the DRCOG selection process.

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

1. Eligibility by Project Type

For the purpose of selecting specific projects for federal funding, DRCOG has established project types. These project types are consistent with the 2030 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, in addition to the eligibility requirements and commitments listed in the previous chapter.

2. Projects on State Highways

Funding requests for any projects on State Highways must be submitted by, or with the concurrence of, CDOT.

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 form is an agreement by the sponsor to use the standard CDOT contract, available from DRCOG, without revision of any of the boilerplate language.

4. Project Submittal Limitations

Each municipality and county in the TIP area may submit up to the following number of new funding requests based on DRCOG's latest estimate of population or employment:

- Two requests for jurisdictions with a population or employment up to 9,999;
- Four requests for jurisdictions with population or employment between 10,000 and 49,999;
- Six requests for jurisdictions with population or employment between 50,000 and 99,999; and
- Eight requests for communities with a population or employment of 100,000 or more.

The maximum number of funding requests jurisdictions that are both a city and county can submit is double the above listed amounts (reflecting the dual nature). Table 3 lists the number of new funding request submittals allowed by jurisdiction. Other eligible applicants may submit up to eight funding requests.

5. Financial Requirements

Sponsors must have committed local/state financial support for the match identified for each funding request submitted for consideration. To minimize the administrative burden of managing numerous small projects, sponsors must request at least the following amount of federal funds in any funding request submitted as a candidate for DRCOG selection:

- \$75,000 for non-construction projects
- \$200,000 for construction projects

6. Commitment to Implement Project and Project Delays

As stated in the previous chapter, submittal of a funding request for DRCOG selection shall constitute a commitment to complete the project (if selected) in a timely manner as described in the application form by the project sponsor. Any part of the project scope credited in awarding evaluation points becomes a permanent part of the project scope and must be implemented.

In order to ensure that all obligation authority made available to the region is used, 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 schedule of implementation programmed in the TIP.

Implementation of a project may be delayed only twice by the project sponsor. A delay is defined as a situation where a project's federal funding is reprogrammed from the originally identified year to a later year, requiring a change in the year federal funding is obligated. Any single delay is defined as a one-year deferral. This applies to delays reflected by formal TIP amendments, by year-end rollovers, or by sponsor funding-deferral requests for carryover projects during resubmittal for the new TIP. If the deferrals are requested by DRCOG, they are not counted as a delay.

The first such delay will be dealt with administratively by DRCOG staff. At the second delay, the sponsor must appear before the Transportation Advisory Committee, Regional Transportation Committee, and DRCOG Board to explain the reasons for the continued delays and receive DRCOG Board approval of the second delay. Failure to appear will result in automatic deletion from the TIP without appeal to the Board (and reimbursement of all federal funds expended on the project). Any conditions applied by the Board in approving the second delay become policy. Any third yearly-obligation delay or breach of second delay Board conditions will result in automatic deletion from the TIP (and reimbursement of all federal funds expended on the project). This action may be appealed to the DRCOG Board. In subsequent contracts with any sponsor that has experienced a third yearly-obligation delay on a project, CDOT may include a "termination for performance" clause.

B. Funding Request Application Form Preparation and Submittal

DRCOG staff shall provide TIP funding request application materials and instructions. For the 2007-2012 TIP, a self-guiding web-based electronic submittal method will be available. At the initiation of the TIP process, DRCOG staff shall conduct a training workshop to explain the TIP process and identify application requirements for project sponsors. DRCOG staff will assist jurisdictions preparing funding request applications, as needed.

All funding request application forms must be complete when submitted to DRCOG as candidates for selection. Incomplete applications will NOT be evaluated for this funding cycle. Any agency contemplating submitting an application with questions regarding the data required to complete its application must contact DRCOG staff at 303-455-1000 **at least two weeks prior to the application deadline**. Information available from DRCOG includes regional travel model estimates, traffic volumes and volume/capacity (V/C) ratios, crash data, and population and employment estimates by traffic analysis zone (TAZ).

Complete funding request applications, with formal project commitment forms, will be due no sooner than six weeks after the date of the announcement of the solicitation for funding requests. **Applicants that desire first year TIP funding (i.e., fiscal year 2007) must also submit CDOT's design data form 463 and checklist with the application.** For all other projects selected for TIP funding, form 463 and the checklist must be completed at least four months in advance of the beginning of the first fiscal year of funding shown in the TIP.

Special Requirement - Roadway Capacity Projects

Many of the individual roadway capacity projects in the fiscally constrained 2030 Metro Vision RTP (Appendix D) are quite costly. To allow for more flexibility in funding consideration in the TIP process, applicants must submit implementation funding requests for only the "next meaningful phase" of the project in the 2007-2012 TIP. The "next meaningful phase" should be jointly established by the sponsor, CDOT and DRCOG staff in advance of the submittal. The functional implication of a "meaningful phase" is that a completed phase creates something usable. The technical attribute evaluation of a submitted phase will be based on the full project. Projects that receive TIP funding for an implementation phase also receive a TIP commitment to continue funding future phases of such projects as long as the phases are meaningful and the sponsor continues to provide match. Specific details of this commitment will be developed for the 2009-2014 TIP Policy.

C. Carryover Projects

Projects carried over from the 2005-2010 TIP (i.e., funds shown in fiscal year 2007 or 2008) **must be resubmitted for inclusion in the 2007-2012 TIP.** Carryover projects will be automatically recommitted if four conditions are met in the sponsor's resubmittal:

- the project scope is not reduced;
- no additional federal funds are requested;
- the CDOT design data form 463 and its checklist are included to demonstrate sponsor readiness to start the contracting process; and
- some advance work on engineering, right-of-way acquisition or environmental clearance work has progressed since the project was originally submitted (this must include, at minimum, conceptual design as specified in Appendix C).

Note: Past TIP funding of a study does not imply a commitment to fund implementation of the study's recommendations; such implementation is not a carryover project.

D. Evaluation and Ranking for New Project Funding Requests

Newly submitted funding requests are considered as follows:

1. Eligibility review, in which the applications are reviewed for completeness and to determine if submitted requests meet the eligibility requirements. Applications not meeting the requirements are rejected and not further evaluated.
2. Scoring review, in which 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 for that project type to compute a score. **The evaluation criteria for each project type are shown in tables 4 through 13.** Scoring inaccuracies will be corrected by DRCOG staff during the review period. A peer review panel may be convened to assist in scoring validation. With the concurrence of the applicant, DRCOG staff may reassign the funding request to another project type than the one selected by the project sponsor, if it will improve either the project's scoring or its chances for selection.
3. Ranking, in which a list rank-ordered by validated score is created of eligible funding requests for each project type.

Any submitted SIP TCMs for air quality and any specifically identified air quality conformity actions identified in the RTP shall be selected for the TIP without evaluation.

E. Funding Assessment

DRCOG staff will estimate how much funding will be available, by funding source, for fiscal years 2007, 2008, and 2009, in consideration of control totals provided by CDOT and other sources. The total three-year program funding must fund the federal share of both carryover projects and new funding requests. DRCOG staff will first make fiscal allowance to fund all approved carryover projects.

1. Congestion Management Programs/Pools

The following four programs and pools will be funded in the amounts shown herein from the CMAQ fund source:

- Regional Transportation Demand Management (TDM) program - \$750,000 federal in fiscal year 2007; \$775,000 federal in fiscal year 2008; and \$800,000 federal in fiscal year 2009.
- RideArrangers Program - \$1,875,000 federal in fiscal year 2007; \$1,950,000 federal in fiscal year 2008; and \$2,030,000 federal in fiscal year 2009.
- Regional Traffic Signal System Improvement Program - \$3,900,000 federal per year.
- Regional Intelligent Transportation Systems (ITS) Pool - \$750,000 federal in fiscal year 2007; \$900,000 federal in fiscal year 2008; and \$1,000,000 federal in fiscal year 2009.

DRCOG staff will make fiscal allowance to fund these congestion management pools. Remaining funding (referred to as not-yet-programmed funding) is designated for selection of new projects from the eligible funding requests.

2. Eligibility of Funding Requests for Pool-eligible Projects

Because TDM, ITS, and signal system/coordination projects have specific pools devoted to them, **funding requests for those pool-eligible projects are ineligible to be submitted in this TIP process.** Contact DRCOG staff for further information on the pool programming processes. In the TDM program, startups of new Transportation Management Organizations/ Transportation Management Agencies (TMOs/TMAs) are only eligible for two years of funding, with a required second year local match of 50 percent.

F. **First Phase Selection**

In the first phase, new projects are selected directly from the ranked lists of eligible funding requests, to a maximum of 75 percent of not-yet-programmed funding. **Funding targets** per project type or groups are established below to implement the objectives in the 2030 Metro Vision RTP. These funding targets are used to establish the maximum selection in the first phase for each project type. Funding requests must score a minimum of 50 points to be selected in the first phase. The results of first phase selection will be presented to the Transportation Advisory Committee and Metro Vision Issues Committee.

This TIP Policy reflects an intent to provide \$10 million (total) to the I-70 Brighton Boulevard to Colorado Boulevard viaduct repair project, contingent on voter approval of Referendum C and Referendum D. This TIP funding commitment was agreed to as part of the development of the project list for these referenda. If the referenda are approved, \$10 million of STP-Metro funds will be programmed to this project “off-the-top.” Thus, depending on the outcome of the election, the commitment affects the amount of funds that are not-yet-programmed, not the funding targets themselves.

This TIP Policy also reflects an intent to provide two years of funding at \$7.5 million per year beginning in fiscal year 2008 to support the implementation of FasTracks. Further commitments at \$7.5 million per year (to a total of \$60 million) are envisioned but not specifically granted herein. Of the allocation for fiscal years 2008 and 2009, 75 percent is addressed in first phase selection, the remainder in the second phase. This commitment is independent of voter action on Referendum C and Referendum D.

<u>Funding targets for first phase selection by funding category (75% of not-yet-programmed funding)</u>	
STP-Metro	
Roadway Capacity Projects , includes roadway widening, new roadways, new interchanges, interchange reconstruction, Bus/HOV/BRT lane	61.6%
Roadway Operational Improvements	16.4%
Roadway Reconstruction	18.8%
Studies , includes capacity project and operational improvement studies	3.2%%
CMAQ	
Transit Capacity Projects as part of FasTracks, includes rapid transit, transit passenger facilities, Bus/HOV/BRT	63.8%
Air Quality Improvement Projects	24.9%
Studies , includes station area planning studies	11.3%
New bus service	0%
Non-FasTracks Transit Passenger Facilities	0%
STP-Enhancement	
Enhancement Activities , includes bicycle and pedestrian projects, other enhancement projects	100%

G. Second Phase Selection

The remaining 25 percent of not-yet-programmed funding will be programmed in this second phase of selection, based on these criteria:

- Financial equity of project awards among DRCOG members at the county level.
- Potential cost savings (design, EA, ROW or construction) from merging projects.
- Projects in strategic corridors (see Section II.B and Appendix F).
- Project readiness for construction.
- Projects in very small communities (less than 10,000 population or employment per Table 3).

Financial equity shall be calculated by totaling the federal dollars programmed by county for the past ten years (in current and previous TIPs), proposed for projects in the 2007-2012 TIP from the CDOT and RTD selection processes, and recommended for projects in the 2007-2012 TIP from the first phase selection. Those totals shall be

compared to the percent contribution from each county to the region, based on three weighted factors: population (40 percent), gross vehicle miles of travel (40 percent), and transportation-related sales tax revenues (20 percent).

While funding request scoring within each project type category will not be the primary consideration for the second selection phase, no projects scoring below 50 points will be considered except for projects in very small communities (which must score a minimum of 40 points). The Metro Vision Issues Committee will make funding request selection recommendations in the second phase.

**Table 4
Roadway Capacity Projects**

Eligibility Criteria

Only regionally-funded roadway widening, new road, new interchange, interchange reconstruction, and Bus/HOV/BRT projects identified in the fiscally constrained *2030 Metro Vision Regional Transportation Plan* (listed herein in Appendix D) are eligible for implementation funding. Submittals can only be for “next meaningful phase” of the project jointly defined by applicant, CDOT, and DRCOG. Evaluation for first seven criteria based on entire (full) project, not individual phase. Within the urban growth boundary, arterial roadway projects must adhere to urban design standards and must demonstrate that sidewalks are present or will be provided 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.

Evaluation Criteria	Points	Scoring Instructions
Current congestion	0-12	Based on the degree of current (2005) congestion: 12 points will be awarded to projects with current 2-hour v/c ratio of 1.10 or more; 0 points to projects with current 2-hour v/c ratio of 0.85 or less; with straight-line interpolation between. Congestion is peak-directional link in the project area per each period. Congestion for new road and interchange projects based on current travel paths. <i>Source: DRCOG 2005 model data (a.m. and p.m. peak hours; sponsor may supply location-specific volume data to augment model data.)</i>
Safety	0-5	Based on the project’s estimated crash reduction and weighted crash rate in comparison to the statewide average, up to 5 points will be awarded. Appendix E explains the point allocation.
Cost-effectiveness	0-10	Based on the project’s current (2005) forecast cost per daily person-miles-of-travel (PMT), up to 10 points will be awarded as follows: <ul style="list-style-type: none"> • For Bus/HOV/BRT, roadway widening, and new road projects: 10 points will be awarded to projects with a cost per PMT of \$50 or less; 0 points to projects with a cost per PMT of \$550 or more; with straight line interpolation between. • For interchange reconstruction and new interchange projects: 10 points will be awarded to projects with a cost per PMT of \$250 or less; 0 points to projects with a cost per PMT of \$2,750 or more; with straight line interpolation between. • PMT for new road and interchange projects based on modeled usage estimates. <i>Source: DRCOG 2005 model data (daily)</i>
Condition of major structure	0-5	Based on the CDOT inspection per the National Bridge Inspection Standards of the included structure, nearby structure, or structure on current travel path, and the resultant bridge sufficiency rating: 5 points will be awarded if the bridge sufficiency rating is 20 or lower; 0 points will be awarded if the bridge sufficiency rating is 80 or higher; with straight line interpolation between. <i>Source: DRCOG from CDOT</i>
Long range plan score	0-15	Based on the score computed by DRCOG for project consideration in the fiscally constrained 2030 Metro Vision RTP process: 15 points will be awarded if the project’s long range score was 80 or higher; 0 points will be awarded if the project’s long-range score was 50 or lower; with straight line interpolation between. <i>Source: DRCOG</i>

**Table 4 (cont.)
Roadway Capacity Projects**

Evaluation Criteria	Points	Scoring Instructions
Transportation system management	0-5	1 point will be awarded for each of the following features to be added to or provided as part of the project, up to 5 points (of a possible 6): <ul style="list-style-type: none"> • Provision of raised, depressed, or barrier medians • Access control/consolidation • Provision of left-turn lanes at signalized intersections • Provision of signal interconnection • Provision of ITS infrastructure • Provision of infrastructure that implements an approved incident management plan.
Multimodal connectivity	0-10	Up to 10 points (of a possible 12) will be awarded for the following features being included in and constructed by the project or otherwise committed by the sponsor: <ul style="list-style-type: none"> • 2 points for constructing project elements in a way that allows implementation of future transit facilities identified in the 2030 Metro Vision Plan or 2030 Metro Vision RTP. • 1 point for each of the following: <ul style="list-style-type: none"> ○ including transit operational features (e.g., bus pads, queue jump lanes) ○ including transit amenities (e.g., bus shelters, multimodal information kiosks) ○ building a new path, bike lanes, or extra-width curb lanes to accommodate a bike facility on a regional or locally adopted plan ○ grade separating an existing trail from the road ○ providing bike amenities (e.g., bike racks, bike lockers) ○ building pedestrian links to adjacent key pedestrian-generating facilities (e.g., parks, transit stations/lots, businesses) ○ incorporating transit priority or bicycle activation at project signals ○ providing new public parking in destination areas or origin areas (e.g., park-n-pool lot) ○ establishing or financially committing to continue an existing transportation management organization serving the project corridor ○ funding telework, carpooling, and/or vanpooling promotion efforts, targeted to the project corridor (part of the project, by a TMO, or by a regional agency)
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.
Project-related Metro Vision implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F.
Sponsor-related Metro Vision Implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G explains the specific criteria.
Total	100	

**Table 5
Roadway Operational Improvement Projects**

Eligibility Criteria

Projects on any roadway shown on the 2030 Metro Vision Regional Roadway System (Figure 32 of the 2030 Metro Vision RTP document) are eligible. Grade separations of any at-grade railroad crossing on the 2030 Metro Vision Regional Roadway System as depicted on Figure 25 of the 2030 Metro Vision RTP are eligible. Within the urban growth boundary, arterial roadway projects must adhere to urban design standards and must demonstrate that sidewalks are present or will be provided 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.

Evaluation Criteria	Points	Scoring Instructions
Current congestion	0-15	Based on the degree of current (2005) congestion: 15 points will be awarded to projects with current 2-hour v/c ratio of 1.10 or more; 0 points to projects with current 2-hour v/c ratio of 0.85 or less; with straight-line interpolation between. Congestion is computed for major roadway (peak-directional link in the project area per each period). For grade separations, reduce capacity by the fraction of an average hour that trains disrupt traffic, computed as: [number of trains per hour] * [average closure time] * [estimated recovery time]/60. <i>Sources: Roadways: DRCOG 2005 model data (a.m. and p.m. peak hours); 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 model or default data.</i>
Safety	0-7	Based on the project's estimated crash reduction and weighted crash rate in comparison to the statewide average, up to 7 points will be awarded. Appendix E explains the point allocation.
Cost-effectiveness	0-16	Based on the project's current estimated cost per vehicle hour of travel (VHT) reduced during the peak hour: 16 points will be awarded to projects with a cost per VHT reduced of \$20,000 or less; 0 points to projects with a cost per VHT reduced of \$200,000 or more; with straight line interpolation between. For intersection operations , use intersection operations software (for multiple intersections, sum individual intersection improvements). For grade separations , compute delay by [(average closure time) * (estimated recovery time)/2]*[number of trains per hour]*[volume in peak hour]/60. <i>Source: applicant computations. Grade separations as above.</i>
Usage	0-9	Based on current AWDT/lane of the major roadway (average for overall project length): projects with AWDT/lane of 17,000 or more will receive 9 points; projects with AWDT/lane of 5,000 or less will receive 0 points; with straight line interpolation between.
2030 MVRTP emphasis corridors	0-3	3 points will be awarded to projects on <i>emphasized</i> freeways (mainline or ramps) or major regional arterials on the 2030 Metro Vision RTP <u>Emphasis Corridors</u> map (Figure 27 of that document). 2 points will be awarded to projects on <i>emphasized</i> principal arterial segments on that map.

**Table 5 (cont.)
Roadway Operational Improvement Projects**

Evaluation Criteria	Points	Scoring Instructions
Transportation system management	0-5	1 point will be awarded for each of the following features to be added to or provided as part of the project, up to 5 points (of a possible 6): <ul style="list-style-type: none"> • Provision of raised, depressed, or barrier medians • Access control/consolidation • Provision of left-turn lanes at signalized intersections • Provision of signal interconnection • Provision of ITS infrastructure • Provision of infrastructure that implements an approved incident management plan.
Multimodal connectivity	0-7	Up to 7 points (of a possible 8) will be awarded for the following features being included in and constructed by the project: <ul style="list-style-type: none"> • 2 points for constructing project elements in a way that allows implementation of future transit facilities identified in the 2030 Metro Vision Plan or 2030 Metro Vision RTP. • 1 point for each of the following: <ul style="list-style-type: none"> ○ including transit operational features (e.g., bus pads, queue jump lanes) ○ including transit amenities (e.g., bus shelters, multimodal information kiosks) ○ building a new path, bike lanes, or extra-width curb lanes to accommodate a bike facility on a regional or locally adopted plan ○ providing bike amenities (e.g., bike racks, bike lockers) ○ building pedestrian links to adjacent key pedestrian-generating facilities (e.g., parks, transit stations/lots, businesses) ○ incorporating transit priority or bicycle activation at project signals
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.
Project-related Metro Vision implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F.
Sponsor-related Metro Vision Implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G explains the specific criteria.
Total	100	

**Table 6
Roadway Reconstruction Projects**

Eligibility Criteria

Projects on any roadway shown on the 2030 Metro Vision Regional Roadway System (Figure 32 of the 2030 Metro Vision RTP document) are eligible. Projects must reconstruct the travel way; other surface treatment projects are ineligible. Within the urban growth boundary, arterial roadway projects must adhere to urban design standards and must demonstrate that sidewalks are present or will be provided 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.

Evaluation Criteria	Points	Scoring Instructions
Pavement condition	0-20	Based on the pavement condition index computed per Appendix H: 20 points will be awarded to projects with a condition index of 25 or lower; 0 points to projects with a condition index of 50 or greater; with straight line interpolation between.
Safety	0-5	Based on the project's estimated crash reduction and weighted crash rate in comparison to the statewide average, up to 5 points will be awarded. Appendix E explains the point allocation.
Cost-effectiveness	0-16	Based on the project's current (2005) estimated cost per daily person-miles-of-travel (PMT): projects with a cost per PMT of \$40 or less will receive 16 points; projects with a cost per PMT of \$200 or more will receive 0 points; with straight line interpolation between.
Usage	0-9	Based on current AWDT/lane (average for overall project length): projects with AWDT/lane of 17,000 or more will receive 9 points; projects with AWDT/lane of 5,000 or less will receive 0 points; with straight line interpolation between.
Transportation system management	0-5	1 point will be awarded for each of the following features to be added to or provided as part of the project, up to 5 points (of a possible 6): <ul style="list-style-type: none"> • Provision of raised, depressed, or barrier medians • Access control/consolidation • Provision of left-turn lanes at signalized intersections • Provision of signal interconnection • Provision of ITS infrastructure • Provision of infrastructure that implements an approved incident management plan

**Table 6 (cont.)
Roadway Reconstruction Projects**

Evaluation Criteria	Points	Scoring Instructions
Multimodal connectivity	0-7	Up to 7 points (of a possible 8) will be awarded for the following features being included in and constructed by the project: <ul style="list-style-type: none"> • 2 points for constructing project elements in a way that allows implementation of future transit facilities identified in the 2030 Metro Vision Plan or 2030 Metro Vision RTP. • 1 point for each of the following: <ul style="list-style-type: none"> ○ including transit operational features (e.g., bus pads, queue jump lanes) ○ including transit amenities (e.g., bus shelters, multimodal information kiosks) ○ building a new path, bike lanes, or extra-width curb lanes to accommodate a bike facility on a regional or locally adopted plan ○ providing bike amenities (e.g., bike racks, bike lockers) ○ building pedestrian links to adjacent key pedestrian-generating facilities (e.g., parks, transit stations/lots, businesses) ○ incorporating transit priority or bicycle activation at project signals
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.
Project-related Metro Vision implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F.
Sponsor-related Metro Vision Implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G explains the specific criteria.
Total	100	

**Table 7
Rapid Transit Projects**

Eligibility Criteria

Only fixed guideway transit projects identified in the rapid transit system of the fiscally constrained 2030 Metro Vision RTP (Figure 33 of that document) are eligible for funding. The Regional Transportation District is the only eligible implementing agency (applicant).

Evaluation Criteria

The fiscally constrained rapid transit system reflects the results of a voter-approved initiative called FasTracks. Corridors and implementation timing were part of the package approved by the voters. The Policy herein reflects an intent to provide two years of funding at \$7.5 million per year to assist the implementation of FasTracks (fiscal years 2008 and 2009). Further commitments are envisioned but not specifically granted herein. RTD is required to submit funding request applications for relevant, meaningful, identifiable aspects of its approved FasTracks plan for DRCOG to honor the policy. Because the corridors and timing have voter approval, and because the DRCOG selection contribution is modest in comparison to the entire FasTracks program, it is not required that RTD funding requests in this project type be evaluated.

**Table 8
Transit Passenger Facilities Projects**

Eligibility Criteria

Any stations, transfer facilities, or park-n-Ride lots identified in the 2030 Metro Vision RTP (Appendices 1 and 2 of that document).

Evaluation Criteria	Points	Scoring Instructions
Usage	0-35	Based on the estimated average number of persons to be served per day at the new facility six months after its completion: 35 points will be awarded to projects serving more than 5,000 people; 0 points to facilities serving less than 1,500; with straight-line interpolation between.
Multi-modal Connectivity	0-27	On the basis of number of modes ¹ served at the new facility, 3 points will be awarded for each mode of travel served up to a maximum of 27 points.
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.
Metro Vision project-related implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F
Metro Vision sponsor-related Implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G explains the specific criteria.
Total	100	

¹ 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, ski train, etc.);
- Private inter-city bus and charter bus service;
- Bicycle;
- Pedestrian;
- Auto parking;
- Rental car.

**Table 9
New Bus Service Projects**

Eligibility Criteria

Any new bus service sponsored by local governments.

Evaluation Criteria	Points	Scoring Instructions
Usage	0-16	Based on projected daily boardings, 12 months after initiation of service: 16 points will be awarded to projects with boardings above the RTD 25% Service Standard; 0 points to projects with boardings below the RTD 10% Service Standard; with straight-line interpolation between. These standards are based on the class of new bus service: Urban Local, Suburban Local, Express, Regional or call-n-Ride. A detailed description of the estimated ridership must be supplied with the submittal, per Appendix I. An independent/peer review will be performed on the ridership estimates.
Cost-effectiveness	0-16	Based on the projected subsidy per passenger, 12 months after initiation of service: 16 points will be awarded to projects with a subsidy below the RTD 25% Service Standard; 0 points to projects with a subsidy above the RTD 10% Service Standard; with straight-line interpolation between. These standards are based on the class of new bus service: Urban Local, Suburban Local, Express, Regional or call-n-Ride.
Usage support programs	0-8	4 points will be awarded for new services that employ a marketing program to identify how to reach prospective riders. 1 point will be awarded for each action taken to increase pedestrian access between origins and destinations with the transit service (up to 2 points). <i>One example is constructing sidewalks with direct connections to the new service.</i> 1 point will be awarded for each action taken to reduce the cost of transit service (up to 2 points). <i>One example is ECO-Pass promotion by employers.</i>
Long-term funding	0-14	14 points awarded to projects with 5 years of program funding support from either: 1. An independent funding source; 2. RTD via a letter of support; or 3. A combination of the two. Zero points will be awarded to projects that do not define 5 years of funding support.
Connectivity	0-8	4 points will be awarded if the new service fills an existing service gap. 2 points will be awarded if the new service connects to existing park-n-Ride lots and transit stations. 1 point will be awarded for each transit route connected (up to 2 routes)

**Table 9 (cont.)
New Bus Service Projects**

Evaluation Criteria	Points	Scoring Instructions
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.
Project-related Metro Vision implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F
Sponsor-related Metro Vision Implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G explains the specific criteria.
Total	100	

**Table 10
Bicycle/Pedestrian Projects**

Eligibility Requirements

The following three conditions must be met in order to be eligible in this category:

1. Pedestrian and bicycle projects must be on facilities contained in an **adopted** local or regional plan.
2. Projects must accomplish connectivity. Examples of connectivity include, but are not limited to:
 - Closing a gap between two existing bicycle facility sections
 - Improving access to transit
 - Providing pedestrian and bicycle facilities connecting to schools, parks, shopping, and/or employment
 - Eliminating barriers
 - Linking a bicycle facility to a 2030 Metro Vision RTP roadway that serves bicyclists
3. Projects must be new facilities; reconstruction of existing pedestrian and bicycle facilities is not eligible.

Evaluation Criteria	Points	Scoring Instructions
RTP Priority Corridors	0-4	<ul style="list-style-type: none"> • 4 points will be awarded for bike projects on 2030 Metro Vision RTP Regional Bicycle Corridors (Figure 23 of that document) • 2 points will be awarded for bike projects on Community Bicycle Corridors (also Figure 23) • 1 point will be awarded for bike projects on an adopted local plan • 4 points will be awarded for pedestrian projects along 2030 Metro Vision RTP major regional arterials (Figure 32 of the 2030 Metro Vision RTP document) • 2 points will be awarded for pedestrian projects along 2030 Metro Vision RTP principal arterials (also Figure 32) • 1 point will be awarded for pedestrian projects on a corridor on an adopted local plan
Safety	0-12	<p>Projects will be evaluated on the anticipated <i>improvement</i> of existing safety problems to be made by building new facilities for non-motorized travel.</p> <p>Three measures of safety improvement will be awarded:</p> <ol style="list-style-type: none"> 1. Relevant crash history Based on the number of <i>documented</i> injury accidents: <ul style="list-style-type: none"> ○ created by the interaction between motorized and non-motorized traffic; ○ in the area to be affected by the proposed new facility; and ○ occurring over the last three-year period for which data is available. 1 point will be awarded for each applicable injury accident, up to a maximum of 5 2. Conflict factor If the existing facilities are roadways that allow interaction between motorized and non-motorized traffic, and if the project will build new facilities for the non-motorized traffic, to eliminate or reduce the conflict factor, the project will earn safety points. Based on the speed limit on the existing facilities, up to 5 points will be awarded as follows: <ul style="list-style-type: none"> • 1 point will be awarded if the existing speed limit is 25 MPH or less; • 2 points will be awarded if the existing speed limit is 26-34 MPH;

**Table 10 (cont.)
Bicycle and Pedestrian Projects**

Evaluation Criteria	Points	Scoring Instructions
Safety (cont.)		<ul style="list-style-type: none"> • 3 points will be awarded if the existing speed limit is 35-44 MPH; • 4 points will be awarded if the existing speed limit is 45-54 MPH; or • 5 points will be awarded if the existing speed limit is 55 MPH or above. <p>3. Facility lighting 2 points will be awarded to projects that will provide lighting to facilitate non-motorized travel on the planned facilities, if sufficient lighting is not currently available.</p>
Connectivity	0-18	<p>Up to 18 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>Connectivity measures - gap closure (score points for only one of these two)</p> <ul style="list-style-type: none"> • 4 points - completely closing a gap between two existing bicycle facility/sidewalk sections • 2 points - completely closing a gap between an existing pedestrian/bicycle facility and an RTP roadway that serves pedestrian/bicyclists <p>Connectivity measures - access (score points for only one of these three)</p> <ul style="list-style-type: none"> • 5 points - provide direct access (project directly touching) to an employment center with greater than 2,000 jobs • 3 points - provide direct access to such destinations as employment, shopping, government buildings, and/or schools • 1 point - provide direct access to recreational destinations such as parks <p>Connectivity measures - barrier elimination (score points for only one of these three)</p> <ul style="list-style-type: none"> • 5 points - entirely eliminate a barrier (railway, highway, waterway) for pedestrians or cyclists by grade separating • 3 points - entirely eliminate a barrier (railway, highway, waterway) for pedestrians or cyclists by providing a controlled crossing where one does not currently exist (demonstrate achievement of signal warrant if signal proposed) • 1 point - make improvements toward eliminating a barrier (railway, highway, waterway) <p>Connectivity measures - transit (score if applicable)</p> <ul style="list-style-type: none"> • 4 points - provide new direct access to transit or indirect access (serving via an existing linkage) within 1.5 miles for bike projects and within 0.5 miles for pedestrian projects. Transit is existing or under construction stations, park-n-Ride lots, or transit terminals; or existing bus stops serving 3 or more routes
Multiple enhancements	0-4	<p>Up to 4 points (of a possible 6 each project could score) will be awarded for multiple enhancements (score all that apply):</p> <ul style="list-style-type: none"> • 2 points if project will provide facilities for bidirectional use by both bicycles and pedestrians (10 ft. minimum width) • 1 or 2 points if project will provide bicycle lockers or racks; 1 point for each 10 racks or 3 lockers, up to 2 points • 1 point if project includes acquiring scenic easements or scenic or historic sites (see Appendix B) • 1 point if project includes Rails-to-Trails conversion of an abandoned railway corridor (see Appendix B)

**Table 10 (cont.)
Bicycle and Pedestrian Projects**

Evaluation Criteria	Points	Scoring Instructions
Usage	0-12	Up to 12 points will be awarded based on the estimated user base within a 1.5 mile radius of a bicycle projects or within a 0.5 mile radius of a pedestrian project as follows: projects with a user base above 50,000 will receive 12 points; those with a user base below 3,000 will receive 0 points; with straight line interpolation between. The project's user base is the combined sum of the DRCOG 2015 traffic analysis zone (TAZ) population and employment estimates, except where applicants can document an alternate user base for the project.
Cost-effectiveness	0-12	Based on the user base calculated above: projects with a total cost per user base below \$2 will receive 12 points; projects with a total cost per user base above \$50 will receive 0 points; with straight line interpolation between.
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.
Project-related Metro Vision implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F.
Sponsor-related Metro Vision Implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G explains the specific criteria.
Total	100	

**Table 11
Other Enhancement Projects**

Eligibility Criteria

Any other transportation-related projects meeting FHWA eligibility rules, as outlined in Appendix B.

Evaluation Criteria	Points	Scoring Instructions
Benefit	0-32	<p>Transportation-Related Historic Preservation / Archaeological Projects will be awarded:</p> <ul style="list-style-type: none"> • 16 points if this project is part of a local, regional or state preservation or archaeological effort. • 8 points if this project positively affects the regional transportation system (see 2030 Metro Vision RTP). • 8 points if this project is a good use of public dollars. The economic benefits (i.e., revitalization of tourism and/or reduction in public and private expenditures) must be quantified. <p>Transportation Aesthetics and Scenic Values Projects will be awarded:</p> <ul style="list-style-type: none"> • 8 points if this project is part of the state’s scenic highway program. • 8 points if this project removes a visual blight. • 8 points if the project enhances the visual environment. • 8 points if this project is a good use of public dollars. The economic benefits must be quantified. <p>Projects which Mitigate Water Pollution due to Highway Runoff will be awarded:</p> <ul style="list-style-type: none"> • 16 points for a project which implements mitigation measures identified in the Colorado Department of Health Non-Point Source Management Program and/or DRCOG Clean Water Plan for a demonstrated water quality problem. • 8 points if evidence is provided that the proposed mitigation will improve water quality, preserve wetlands or create new ones. • 8 points if this project is a good use of public dollars. The economic and environmental benefits must be quantified.
Cost-effectiveness	0-30	All projects in this category will be compared by their cost per benefit point calculated above: projects with a total cost per benefit point below \$8,000 will receive 30 points; projects with a total cost per benefit point above \$80,000 will receive 0 points; with straight line interpolation between..
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.
Project-related Metro Vision implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F.
Sponsor-related Metro Vision Implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G. explains the specific criteria.
TOTAL	100	

Table 12
Air Quality Improvement Projects

Eligibility Criteria

CMAQ-eligible transportation-related air quality improvement projects (see Appendix A). All submitted funding requests must provide an estimate of air pollutant emissions reduction. TDM, ITS, and signal system/coordination projects eligible for funding in specific pools (see Section III.E) are ineligible to be submitted as funding requests in the TIP process. Pedestrian/bicycle, rapid transit, HOV, new bus service, roadway, operations and study funding requests should be submitted in appropriate project types, not as air quality improvement projects.

Evaluation Criteria	Points	Scoring Instructions
Benefit	0-31	<p><i>For projects which would indirectly reduce air pollution by reducing VHT or VMT:</i> Based on the daily reduction in pounds of <i>total</i> air pollutants expected from the project, as a percentage of the regional total from mobile sources, 31 points will be awarded to projects which would reduce above 0.3% of the regional total; 0 points to projects which would reduce no pollution; with straight-line interpolation between.</p> <p><i>For projects which directly address reduction of a specific air pollutant (NOx, CO, PM10 or VOC):</i> Based on the daily reduction in pounds of any <i>single</i> pollutant as a percentage of the regional mobile source total from that pollutant: 31 points will be awarded to projects which would reduce above 0.3% of the regional total; 0 points to projects which would reduce no pollution; with straight-line interpolation between.</p> <p>Only projects scoring at least one point for Benefit are eligible for funding under this project type.</p>
Cost-effectiveness	0-31	Based on the anticipated daily cost in dollars per pound of total daily air pollutant reduction expected from the project: 31 points will be awarded to projects which would cost below \$0.25 per pound; 0 points to projects which would cost above \$1.00 per pound; with straight-line interpolation between.
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.

**Table 12 (cont.)
Air Quality Improvement Projects**

Evaluation Criteria	Points	Scoring Instructions
Metro Vision project-related implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F.
Metro Vision sponsor-related Implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G explains the specific criteria.
Total	100	

**Table 13
Studies**

Eligibility Criteria

Only three types of studies are eligible for funding requests for the 2007-2012 TIP:

- **Roadway, capacity project** studies to further project development for regionally-funded roadway widening, new road, new interchange, interchange reconstruction, and Bus/HOV/BRT projects identified in the fiscally constrained 2030 Metro Vision RTP (Appendix D);
- **Operational improvement** studies to identify low-cost system management and operational improvements to reduce congestion on an arterial corridor (or portion thereof) shown on the 2030 Metro Vision Regional Roadway System (Figure 32 of the 2030 Metro Vision RTP document); and
- Next step studies to further implementation of the fiscally constrained rapid transit system (Figure 33 of the 2030 Metro Vision RTP document).

Such studies include the three types of station area planning studies described below.

- Corridor-wide TOD workshops focusing on:
 - Maximizing both transit operations and TOD
 - Involving all the local jurisdictions and other major stakeholders
 - Completing a TOD action plan identifying, on a corridor basis, such things as needed plan updates, code revisions, and financial or regulatory incentives
- Creation and adoption of a station area master plan (2020 horizon or beyond). The scope for such a study/plan **must include**:
 - Definition of station area activity focus (character, nature, typology)
 - Market study
 - Identification (map) of type and density of future land uses
 - Circulation plan(s) (maps) for motor vehicles, transit, bicycle and pedestrian modes
 - Identification (map) of pedestrian areas and characteristics
 - Public spaces plan (map)
 - Identification of the transportation impacts and air quality benefits of the proposed plan (CMAQ benefits reporting requirement)
 - Identification of land use and other actions necessary to accomplish the station area master plan
 - Active involvement by RTD and the public in the development of the plan
- Additional studies to further the development of the station area if a station area master plan has already been adopted. Examples of such studies are:
 - Land assembly plan
 - Zoning plan
 - Action plan (phasing plan, implementation plan)

No more than three stations can be included in any single funding request for a station area master plan or additional studies. Funding requests for corridor-wide workshops have no limit on number of stations. When multiple stations are included, all evaluation criteria refer to the average conditions for those locations.

Evaluation Criteria	Points	Scoring Instructions
		For roadway capacity project studies and operational improvement studies
Current congestion	0-20	Based on the degree of current (2005) congestion: 20 points will be awarded to projects with current 2-hour v/c ratio of 1.10 or more; 0 points to projects with current 2-hour v/c ratio of 0.85 or less; with straight-line interpolation between. Congestion is peak-directional link in the project area per each

Evaluation Criteria	Points	Scoring Instructions
		period. For studies for new roads or new interchange projects, congestion based on current travel paths. <i>Source: DRCOG 2005 model data (a.m. -and p.m. peak hours; sponsor may supply location-specific volume data to augment model data.)</i>
Usage	0-16	Based on estimated 2005 AWDT/lane of the major roadway (average for overall project length): projects with AWDT/lane of 17,000 or more will receive 16 points; projects with AWDT/lane of 5,000 or less will receive 0 points; with straight line interpolation between. <i>Source: DRCOG 2005 model (daily)</i>
Other criticality criteria	0-26	<p>For roadway capacity project studies: A maximum of 15 points will be awarded based on the score computed by DRCOG for project consideration in the fiscally constrained 2030 Metro Vision RTP process: 15 points will be awarded if the project’s long-range score was 80 or higher; 0 points will be awarded if the project’s long-range score was 50 or lower; with straight line interpolation between. <i>Source: DRCOG</i> AND a maximum of 5 points will be awarded based on the CDOT inspection per the National Bridge Inspection Standards of the included structure, nearby structure, or structure on current travel path, and the resultant bridge sufficiency rating: 5 points will be awarded if the bridge sufficiency rating is 20 or lower; 0 points will be awarded if the bridge sufficiency rating is 80 or higher; with straight line interpolation between. <i>Source: DRCOG from CDOT</i> AND a maximum of 6 points will be awarded based on the project’s current (2005) forecast cost per daily person-miles-of-travel (PMT):</p> <ul style="list-style-type: none"> • For Bus/HOV/BRT, roadway widening, and new road projects: 6 points will be awarded to projects with a cost per PMT of \$50 or less; 0 points to projects with a cost per PMT of \$550 or more; with straight line interpolation between. • For interchange reconstruction and new interchange projects: 6 points will be awarded to projects with a cost per PMT of \$250 or less; 0 points to projects with a cost per PMT of \$2,750 or more; with straight line interpolation between. • PMT for new road and interchange projects based on modeled usage estimates. <i>Source: DRCOG 2005 model data (daily)</i> <p>For operational improvement studies: A maximum of 20 points will be awarded based on the weighted crash rate of the study (area) corridor in comparison to the statewide average. Appendix E explains the point allocation. AND a maximum of 6 points will be awarded based on inclusion on the 2030 Metro Vision RTP <u>Emphasis Corridors</u> map (Figure 27 of that document): 6 points will be awarded to major regional arterial corridors. 3 points will be awarded to emphasized principal arterial corridors.</p>
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.
Project-related Metro Vision implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F.
Sponsor-related Metro Vision implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G explains the specific criteria.
TOTAL	100	

**Table 13 (cont.)
Studies**

Evaluation Criteria	Points	Scoring Instructions
		For station area planning studies
Current congestion	0-20	Based on the degree of current (2005) congestion: 20 points will be awarded to projects with current 2-hour v/c ratio of 1.10 or more; 0 points to projects with current 2-hour v/c ratio of 0.85 or less; with straight line interpolation between. Congestion is peak-directional link for nearby freeway segment (or major regional arterial for select corridors) per period. <i>Source: DRCOG 2005 model data (a.m. and p.m. peak hours; sponsor may supply location-specific volume data to augment model data.)</i>
Ridership potential	0-10	Based on daily (average) 2030 station usage: 10 points will be awarded for productions/attractions of 5,500 or more; 0 points for productions/attractions of 500 or less; with straight line interpolation between. <i>Source: DRCOG 2030 model data</i>
Existing station area land use, ownership, income, and ethnicity	0-32	A maximum of 6 points will be awarded based on the percentage of the study area that is brownfields: 6 points will be awarded if the study area is 50% or more brownfields; 0 points will be awarded if the study area is 0% or less brownfields; with straight line interpolation between. AND a maximum of 6 points will be awarded based on the number of different property owners within 1/4 mile of the station: 6 points will be awarded if there are 20 or more owners; 0 points will be awarded if there are 2 or fewer owners; with straight line interpolation between. AND a maximum of 10 points will be awarded based on the percentage of the study area that would be infill/redevelopment area as opposed to currently-undeveloped land: 10 points will be awarded if the study area is 75% or more infill/redevelopment; 0 points will be awarded if the study area is 25% or less infill/redevelopment (i.e., 75% or more currently undeveloped); with straight line interpolation between. AND a maximum of 10 points will be awarded based on the percentage of the study area in low income or minority areas (reference 2030 Metro Vision RTP Figure 34): 10 points will be awarded if the study area is 50% or more low income or minority area; 0 points will be awarded if the study area is 0% or less low income or minority area; with straight line interpolation between.
Overmatch	0-12	Based on providing <i>above</i> the minimum 20 percent local funding match: 12 points will be awarded to projects with local match of 50 percent or more; 0 points to projects with the minimum 20 percent local match; with straight line interpolation between.
Project-related Metro Vision implementation and strategic corridor focus	0-12	Up to 12 points will be awarded as described in Appendix F.
Sponsor-related Metro Vision implementation	0-14	Up to 14 points will be awarded for sponsor actions implementing Metro Vision. Appendix G explains the specific criteria.
TOTAL	100	