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DRCOG

OCT 22 2012

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October 18, 2012

Mr. Dennis McCloskey, Chair  
Denver Regional Council of Governments  
1290 Broadway, Suite 700  
Denver, CO 80203

**Subject: 2012 Federal Planning Certification of Denver-Aurora TMA Planning Process**

Dear Mr. McCloskey:

As you are aware, pursuant to 23 United States Code (USC) 134 (i)(5) and 49 USC 5303 (k)(5), the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) must jointly certify the transportation planning processes in Transportation Management Areas (TMA) at least every four years. Past FHWA/FTA certification actions on the Denver Regional Council of Governments (DRCOG) were reflected in reports finalized in 1995, 1998, 2001, 2004, and 2008. An Enhanced Planning Review of the Denver Metropolitan Area was completed in 1994.

The recent certification review of the transportation planning process in the Denver-Aurora area included a desk review, a site visit on March 22-23, 2012, and a public meeting to receive comments on April, 4, 2012. Significant time was spent with staff from DRCOG, the Colorado Department of Transportation (CDOT), the Regional Transportation District (RTD) and the DRCOG Metro Vision Issues Committee (MVIC) to discuss the transportation planning process in the region.

The planning certification review is one of several methods employed by FHWA and FTA to monitor and assess the outcomes of the transportation planning process in the Denver-Aurora region. Other methods include the review and approval of the DRCOG Unified Planning Work Program; review of the Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP); issuance of air quality conformity determinations for the RTP and TIP; issuance of the metropolitan planning finding; and attendance at meetings.

Enclosed for your consideration is the final *2012 Denver Regional Council of Governments (DRCOG) Planning Certification Review*. The report provides an overview of the certification process, highlights major regional issues and activities, summaries discussions from the recent site visit, provides a series of review findings and issues the FHWA/FTA certification action.

The FHWA/FTA review team found the metropolitan planning process satisfies the provisions of 23 USC 134, 49 USC 5303-5306, 23 Code of Federal Regulations (CFR) 450 and other associated federal requirements. Noteworthy practices and strengths are recognized in the report.

Furthermore, the team identified recommendations to improve the current planning process.

Based on overall findings, FHWA and FTA hereby certify the Denver-Aurora TMA's planning process. Representatives from FHWA and FTA will be scheduled to formally present the review findings and the FHWA/FTA certification action at a DRCOG meeting in the near future.

If you have any questions regarding the certification review process and/or the *Certification Review Report*, please contact Mr. William Haas (FHWA) at 720-963-3016 or Mr. David Beckhouse (FTA) at 720-963-3306.

Sincerely yours,



John M. Cater  
Division Administrator

Enclosure: 2012 DRCOG Planning Certification Review Report

cc: Ms. Jennifer Schaufele, DRCOG  
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U.S. Department  
of Transportation

**Federal Highway  
Administration**

**Colorado  
Division**  
Federal Highway  
Administration  
(FHWA)

**Region 8**  
Federal Transit  
Administration  
(FTA)

# Program Review



## 2012 Denver Regional Council of Governments (DRCOG) Planning Certification Review

**October 2012**



**Final Report**



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## **Executive Summary**

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) find the transportation planning process of the Denver Regional Council of Governments (DRCOG) and related partners within the Denver-Aurora Metropolitan Area to be in compliance with federal planning requirements. The same conclusion was reached in the 2008 Planning Certification Review of the DRCOG's Metropolitan Transportation Planning Process. Based on the review and ongoing oversight by FHWA and FTA, the transportation planning process in the Denver-Aurora Metropolitan Area is certified as meeting the transportation planning requirements of 23 United States Code (U.S.C.) 134, 49 U.S.C. 5303-5306 and 23 Code of Federal Regulations (CFR) 450. This review was conducted under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) regulations and guidance. Subsequent to the activities of this certification review, passage of the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) occurred. There are a few references to the MAP-21 when applicable.

## **Commendations**

### *Transportation Planning and Program Process*

- FHWA/FTA 2008 Planning Certification Review Recommendations and Observations
- DRCOG 2012-2017 TIP Policy Guide
- TRIPS Database
- Project Delay Policy/One-Strike Rule
- Innovative Financing

### *Performance Management and Asset Management*

- Transportation Planning and Program Processes
- Data Management and Modeling
- Public Participation, Involvement, and Outreach
- Environmental Justice
- Safety
- Congestion Management Process
- Operations and Maintenance

### *Sustainability and Livability*

#### *Transportation Modeling*

- The Focus model
- Data integration

#### *Public Involvement and Public Participation Procedures*

## **Recommendations**

### *Agreements*

- FHWA/FTA requires that the DRCOG update its Memorandum of Understanding with the AQCC to be in line with current laws and regulations.
- Additionally, FHWA/FTA requires that the DRCOG and its planning partners review all other dated or lapsing agreements, or any agreements which may require re-visiting. e.g. DRCOG – CDOT – RTD (2001) MOA, updated periodically; the DRCOG – CDOT (2002) MOA between CDOT and APCD for Plan and TIP conformity determinations and SIP; DRCOG - CDOT “Memorandum of Understanding” addressing continued coordination, planning and revenue allocation for transportation, lapses June, 2013.

## *Civil Rights*

- The DRCOG needs to document processes by which individuals formally submit complaints under Title VI of the Act. The DRCOG needs to develop documented procedures for their Title VI programs before FTA can agree their programs are satisfactory and in compliance.
- The DRCOG must develop a Limited English Proficiency (LEP) plan to specifically identify LEP populations and document strategies and activities to engage these communities.
- The CDOT must provide a better technical guidance to their sub recipient, the DRCOG. The CDOT should provide orientation on civil rights requirements to its sub recipients as soon as they are eligible to receive federal (DOT) funds and the CDOT should have an on-going monitoring/technical assistance to sub recipients until their sub recipients have fulfilled their civil rights programs compliance requirements from the U.S. DOT (FTA/FHWA).

## *TIP Policy Guide*

- The FHWA/FTA requires the DRCOG to revise the "Major Projects" section of the TIP Development Policy Guide. Specifically to address the concern that this policy statement could lead to the misunderstanding of the Federal Environmental laws and regulations, in which the NEPA document requires the inclusion of project activity and financial commitment in the MVRTP and the TIP. The DRCOG TIP Policy Guide should clearly reflect the NEPA process, perhaps by adding such language as, 'the project must be underway and the Environmental Assessment or the Draft Environmental Impact Statement signed or reasonably expected to be signed within the TIP project selection cycle timeframe.'

## *Safety*

- The CDOT should act early and often, in a pro-active manner, to reach out to the DRCOG (as well as other regional and local partners within the State) to identify safety goals and objectives during the development of the next SPIRS. This will allow the MPOs to utilize the outcomes for their benefit while being able to provide regional perspective and information to better inform the final SPIRS and its Emphasis Areas.
- The CDOT should continue to work with the Department of Revenue to ensure the timely delivery of data to the DRCOG, other MPOs, and their planning partners necessary to provide observably measurable and meaningful planning and project selection.
- The DRCOG and its partners should jointly and cooperatively coordinate the development of safety goals and objectives to cover all modes of transportation (transit, bicyclists, pedestrian, freight).
- The DRCOG and its planning partners should identify and establish safety emphasis areas for the TMA, using the SPIRS as a guidance document. The DRCOG should



include the findings and emphasis areas derived from the SHSP in their regional long range plan.

- When CDOT announces the availability of safety monies, they should inform the DRCOG and the local governments and work with as many communities as possible to educate and inform upon the process of obtaining these funds. DRCOG needs to be further engaged by the CDOT in efforts to capture safety money for safety improvements throughout the region.

### *Management & Operations*

- DRCOG and its planning partners are encouraged to continue developing operations and management strategies that both encourage interagency collaboration and opportunities to leverage resources. DRCOG and its planning partners should conduct a comprehensive and collaborative assessment of the DRCOG metropolitan planning area, develop consistent goals and objectives for use in planning documents, and formalize processes and/or agreements for the partitioning of costs for use by DRCOG in the planning process for the federally supported system in the region.

### *Project and Program Delivery*

- The DRCOG and its planning partners (specifically, CDOT) are strongly encouraged to develop and formalize official cooperative procedures to reconcile projects required to be listed in the TIP/STIP. The DRCOG and its planning partners are strongly encouraged to develop and implement a performance management approach to reconcile projects required to be listed in the TIP/STIP, in conjunction with annual listing of inactive, obligated projects, completed projects (with notation regarding conformity baseline projects). In doing so, the DRCOG and the CDOT should develop a process for increased communication between themselves, and local jurisdictions.
- The FHWA/FTA encourages the DRCOG and the CDOT to emphasize delivering projects quickly, minimizing delay, actively managing the project programming process and completing the project close-out process in a timely fashion.
- The DRCOG and its planning partners (specifically, CDOT) should coordinate TIP/STIP roll-over projects so that a new TIP/STIP will not drop carryover projects from an old TIP/STIP. A similar recommendation was made in the 2011 State Planning Finding concerning rollover transit projects in the state's TPRs and small urban areas. It is incumbent on the CDOT to work collaboratively with the DRCOG on rollover projects.
- The DRCOG is encouraged to update their TIP Policy Guide to incorporate new planning requirements such as the CDOT Annual STIP development and MAP-21 considerations.

*Performance Management*

- The DRCOG and the CDOT should develop metrics to evaluate the effectiveness of planning efforts and goal achievement using similar indices across all the major planning documents. This will be a requirement during the implementation of MAP-21.
- The DRCOG, and its planning partners, should identify and develop performance metrics and techniques to determine progress towards achieving the (8) eight planning factors into the project evaluation, prioritization and selection processes.

*Freight*

- The FHWA/FTA recommend that DRCOG continue to integrate the freight efforts and actions of CDOT (State Rail Plan and Freight Roadmap) into the MPOs own planning products. DRCOG is also encouraged to make sure their planning partners and member governments are aware of ongoing freight activities in which they participate and that have relevance in the metro area.
- The DRCOG should continue to evolve their MVRTP Freight section, such as providing relevant data and maps that allow the public to get a better perspective of the impacts and benefits of the regional freight network.

## **Introduction**

The Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires a continuing, comprehensive and cooperative metropolitan transportation planning process. Although this review was conducted under the regulations of SAFETEA-LU, the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) was on the horizon. There are some brief references to the changes MAP-21 has brought forth, but they are for informational purposes and to begin thinking about the future. MAP-21 was not used as a tool during this review. This includes provisions to ensure that Federal laws and regulations are being incorporated in the metropolitan transportation planning process, and requires a joint Federal Highway Administration (FHWA) Federal Transit Administration (FTA) Planning Certification Review in each area over 200,000 in population, or Transportation Management Area (TMA).

### Preface

In accordance with 23 CFR 450.334(b), FHWA and FTA shall conduct a Planning Certification Review to jointly review and evaluate the metropolitan transportation planning process for each TMA no less than once every four years, and determine whether the planning process meets the requirements of applicable provisions of federal law. Upon review and evaluation of the TMA planning process, FHWA and FTA must jointly decide whether or not to certify the TMA planning process, and document the findings and results in a report of the FHWA/FTA Planning Certification Review.

### Purpose of FHWA/FTA Planning Certification Review

The purpose of the FHWA/FTA Planning Certification Review is to evaluate and determine if:

- Transportation planning activities are conducted in accordance with FHWA/FTA statutes, regulations, policies, procedures and guidance.
- The regional transportation planning process is a continuing, cooperative and comprehensive process that results in the development, implementation, operation and management of surface transportation improvements.
- The UPWP adequately documents transportation planning and programming activities occurring in the region.
- The regional transportation planning products, including the RTP and the TIP, reflect the identified transportation needs, priorities and funding resources in the region.
- Products of the transportation planning and programming process are multimodal in perspective, interrelated, complete and based on current information.
- Requirements and objectives of SAFETEA-LU, the Clean Air Act Amendments (CAAA), the Americans with Disabilities Act (ADA) and Title VI of the Civil Rights Act of 1964 (Title VI), along with subsequent regulations, policies, procedures and guidance, are

considered and incorporated where appropriate into the planning process and supported through development activities.

- The issues raised during the previous Planning Certification Review have been addressed.

The FHWA/FTA Planning Certification Review is one of several methods used by the FHWA and FTA to accomplish the following objectives:

- To evaluate the quality of the metropolitan planning process, compliance with applicable statutes and regulations, and the level and type of technical assistance needed to enhance the effectiveness of the planning process;
- To ensure that major issues facing a metropolitan area are being addressed to improve the effectiveness and efficiency of the planning process;
- To identify noteworthy practices that can be shared with other state DOTs, MPOs, and transit operators;
- To provide an opportunity for continued progress in expanding the art and science of transportation planning;
- To provide a higher-level stewardship assessment of the transportation planning process than day-to-day oversight provides.

#### Scope and Methodology

In general, the FHWA/FTA Planning Certification Review process consists of five primary activities:

1. Desk review of TMA planning documents;
2. Review guide and survey questionnaire
3. On-site visit
4. Public meeting
5. Planning Certification Report that summarizes the review and offers a finding

In February 2012, the FHWA and the FTA team members began the planning certification review for DRCOG and the Denver-Aurora Metropolitan Area with a thorough "desk review" of DRCOG's comprehensive planning documents, studies, agreements and other pertinent material. This included a thorough review of the 2008 Planning Certification Review Report and Findings as well.

The federal review team examined the Metro Vision Plan (MVP) 2035, the 2035 Metro Vision Transportation Plan (MVTP), the Unified Planning Work Program (UPWP), the Transportation Improvement Program (TIP), and the Public Involvement Plan (PIP), and the 2012-2017 TIP Policy Guide, to name a few. These major and supporting documents were essential to developing an understanding of the underlying assumptions and justifications for the primary planning procedures.

Upon review of pertinent documents, the Federal team prepared a detailed review guide and survey questionnaire that was transmitted to DRCOG and its planning partners. The review guide contained questions on the following program topics:

- Organizational Structure of Study Area
- Metropolitan Planning Area Boundaries
- Agreements and Contracts
- Unified Planning Work Program Development
- Transportation Planning Process
- Metropolitan Transportation Plan Development
- Financial Planning
- Air Quality
- Transportation Improvement Program (TIP) Development and Project Selection
- Public Outreach
- Self-certifications
- Title VI And Nondiscrimination
- Executive Orders pertaining to Environmental Justice (EJ) and Limited English Proficiency (LEP)
- Congestion Management Process
- List of Obligated Projects
- Environmental Mitigation
- Management and Operations Considerations
- Transportation Safety Planning
- Security in the Planning Process
- Integrating Freight in the Transportation Planning Process
- Land Use and Livability

Consultation and Coordination was incorporated into each of the other program topics. Additionally, DRCOG and related partners responded to topic-specific questions related to Travel Demand Modeling, Performance Based-Planning and Performance Measurement, and Inactive Projects.

Of particular importance in TMA Certification Reviews are the "Recommendations" and the "Corrective Actions". Recommendations concern technical improvements that would enhance existing processes and procedures, but that are not specifically required. Corrective actions concern situations in which an element of the MPO's planning program, specifically required by Federal laws or regulations, is judged to be inadequate and, therefore, must be addressed to avoid triggering restrictions to the program. Unless the above listed program topics are discussed under **Commendations** or **Recommendations**, the federal team found them to be in compliance with the applicable laws, regulations, policies, procedures and guidance related to the topic.

DRCOG completed the written responses to the survey review guide in a timely fashion. The written responses were used by the federal review team to establish the scope of review in preparation of the site visit. The federal team interviewed staff from DRCOG, the RTD, the Regional Air Quality Council (RAQC), CDOT, and other regional partners during the site visit. An invitation was extended to FHWA and FTA program managers, as well as FHWA Resource Center, the HUD, and the EPA staff experts to attend their related program discussion.

Throughout the year, ongoing planning activities and regular meeting schedules provide the opportunity for continuous review and involvement by the FHWA and FTA, including the update of planning documents such as the UPWP, the MVTP, and the Metropolitan and the Statewide TIP, as well as Air Quality Conformity Determinations. The site visit gives the FHWA/FTA the opportunity to focus on specific topics such as safety, civil rights, security planning, freight planning, livability, and performance-based planning.

The site visit occurred at the DRCOG offices on March 22-23, 2012, with representatives from a variety of agencies, including the Colorado Department of Transportation (CDOT), the Regional Transportation District (RTD), the Regional Air Quality Council (RAQC), and the Colorado Department of Public Health and Environment (CDPHE), in addition to the Colorado Division and Federal Transit Administration, in attendance. Information provided to the review team during the site visit was intended to clarify points about the DRCOG's planning procedures and follow up on additional recommendations from the 2008 DRCOG Certification Report. The agenda for the site visit was structured so that the discussion focused on the same program areas and followed a similar order to the series of questions that were sent to the DRCOG in February and early March. At the close of the review, the review team and agency executives convened once more to discuss preliminary findings from the site visit.

Lastly, the FHWA and FTA held a Public Meeting on April 4, 2012 to allow opportunities for local elected officials and the general public to provide comments on the transportation planning process within the Denver-Aurora area. Notes from the public meeting are provided in the appendix, along with other comments and feedback from the public provided via e-mails and phone calls during the public comment period.

Review Team

<b>Name</b>	<b>Agency</b>	<b>Job Title</b>
Romare Truely	FHWA	Community Planner
David Beckhouse	FTA	Team Leader for Planning and Program Development
Larry Squires	FTA	Community Planner
Aaron Bustow	FHWA	Statewide Transportation Planner
William Haas	FHWA	Planning and Environment Team Leader

## **MPO Description and Background**

### **Denver Regional Council of Governments (DRCOG)**

This FHWA/FTA Planning Certification Review evaluates the metropolitan transportation planning process within the Denver-Aurora Metropolitan Area, as carried forth by the Denver Regional Council of Governments (DRCOG) and its regional transportation planning partners, including the Regional Transportation District (RTD) and the Colorado Department of Transportation (CDOT). The DRCOG is the designated MPO as well as the TMA for the Denver-Aurora area, and both have the same the boundary. It is comprised of the Denver-Aurora, Boulder, Longmont and Louisville-Lafayette-Erie urbanized areas (so-named Louisville-Lafayette-Erie, according to the recent 2010 Census). The Denver-Aurora Metropolitan Area is the largest metropolitan area within the State of Colorado. In 1977, the DRCOG was designated as the MPO of the Denver-Aurora Metropolitan Area by the governor and elected officials.

The DRCOG is a Council of Governments (COG). The DRCOG is the designated Metropolitan Planning Organization (MPO) for the Denver-Aurora, Boulder, Longmont and Louisville-Lafayette-Erie urbanized areas. DRCOG was originally designated as the MPO by the Governor and elected officials from the region in 1977. It is also designated under state law as a Transportation Planning Region (TPR). The TPR and the COG boundary is larger than the MPO boundary of the DRCOG. This area is generally referred to as the *Mountains and Plains* area and includes Gilpin, Clear Creek and the eastern portions of Adams and Arapahoe Counties.

The DRCOG is an association of 56 counties and municipalities within a nine-county region. A complete membership list is available on the DRCOG website: <http://www.drcog.org>. Beyond transportation, the DRCOG's other roles include the Area Agency on Aging and regional planning agency to address growth and development. The DRCOG Board of Directors (BOD) is designated as the MPO policymaking board; however, the Regional Transportation Committee (RTC) addresses transportation matters before the larger BOD acts. The RTC prepares and forwards policy recommendations to the DRCOG BOD. The decisions of the BOD and the RTC are both supported by the active involvement of several standing and ad hoc committees maintained by the DRCOG.

The DRCOG BOD is comprised of representatives of the local governments in the Denver-Aurora Metropolitan Area. Each jurisdiction may designate one local elected official as its member representative (Denver designates two). In addition to the local elected officials, the DRCOG Board includes three non-voting members designated by the Governor. The current appointments represent the CDOT and the Governor's and Lieutenant Governor's transportation policy advisors.

The DRCOG, the CDOT, and the RTD entered into a Memorandum of Agreement (MOA) regarding the operation of the regional transportation planning process on July 10, 2001 to cover the revised MPO boundary. The MOA calls for the development of a Prospectus to

document policies, procedures, coordination mechanisms, etc. for carrying out the regional transportation planning process. As stated in the MOA, the regional transportation planning process is organized around two committees: the Transportation Advisory Committee (TAC) and the RTC. The TAC reviews the work of the regional transportation planning process and provides advice to the RTC and the DRCOG BOD.

The MPO boundary covers the designated TMA that includes the carbon monoxide (CO) and particulate matter less than 10 microns (PM10) attainment/maintenance areas. However, the TMA does not include the entire 8-hour ozone non-attainment area. Nor does the DRCOG cover the entire 8-hour ozone non-attainment area.

The DRCOG signed an agreement in March 2008 with the North Front Range MPO, the CDOT, the Regional Air Quality Council, the Upper Front Range Transportation Planning Region, and the CDPHE-APCD for Transportation Conformity Evaluations conducted under the 8-hour ozone standard. As part of this agreement, the DRCOG will include not only all of the DRCOG area (including the Weld County area added to the TMA/MPO in 2008) but also part of Weld County in the Upper Front Range Transportation Planning Region which is outside the revised TMA, but within the Southern Subarea, in its regional travel demand modeling to estimate emissions and will make conformity determinations for this entire area. The CDOT provided some funding to assist the DRCOG in this effort.

The DRCOG has entered into an agreement with the Air Pollution Control Division (APCD) of the Colorado Department of Public Health and Environment relative to the conduct of transportation conformity modeling and evaluation. This agreement focuses primarily on air quality modeling and the procedures for Air Quality Control Commission (AQCC) review and comment regarding conformity findings. It was executed in December 1998, and augments the conformity SIP regulation #10). Other aspects of air quality planning, including the review of draft documents on the part of the CDOT, the RTD, the APCD, and the RAQC are carried out through the regular coordination structure in place in the regional transportation planning process. Regulation #10 was revised by the AQCC late in 2011 and is awaiting final federal approval.

The DRCOG and the North Front Range MPO entered into an MOA that addresses coordination of transportation along the common boundary and for affected non-member jurisdictions. This undated MOA was executed March, 2008.

In November, 2004, the DRCOG and the CDOT executed a Memorandum of Understanding for purposes of addressing continued coordination, planning and revenue allocation for transportation. This MOU has been extended through June, 2013.

One agreement that affects the DRCOG is an MOA between the CDOT and the APCD for Plan and TIP conformity determinations and SIP. This May 10, 2002 MOA allows the CDOT to review MPO conformity outputs and SIP transportation networks prior to the AQCC approval.

The RAQC and the AQCC, which are directly responsible for the air quality planning process (SIP), are involved in the MPO process. The past and current Governors have appointed several local elected officials to sit on the RAQC governing board, as well as the executive director of the DRCOG. The DRCOG staff is actively involved in the development of the SIP budgets that are used in air quality conformity determinations. The VMT calculations that are



used in the projection of the SIP mobile source emissions inventories come directly from the DRCOG link-based travel demand model.

The DRCOG Agency Coordination Team facilitates the interagency consultation process for the TIP and the RTP development and conformity; the RAQC, the APCD, and the EPA staffs participate. The RAQC executive director is a member of the TAC and the RTC.

The DRCOG staff worked closely with the RAQC and the APCD when transportation control measures were developed over 20 years ago. All of the transportation control measures were funded and completed through past TIPs.

### Denver-Aurora Metropolitan Area Geography and Demographics

The DRCOG MPO/TMA boundary includes 100% of four Census Bureau defined urbanized areas – Denver-Aurora, Boulder, Longmont and Louisville-Lafayette-Erie. The DRCOG had already used the revised census urbanized areas to define the transportation planning urban areas and the roadway functional classifications. These activities were completed with the RTC and the DRCOG Board actions in April 2003 (transportation urban areas) and July 2003 (roadway functional classification). The metropolitan planning area boundary was revised in July 2006 to include the Longmont planning area and parts of Louisville-Lafayette urbanized areas in Weld County, CO. In February 2008, the Governor approved a further extension into Weld County effectively covering the urbanizing portions along I-25 and areas north of Brighton (US-85 to I-76) that are contiguous to the Denver-Aurora Metropolitan Area TMA.

The current TMA boundary, which includes the Carbon Monoxide, 1-hour ozone and PM10 Attainment/Maintenance Areas, is fully included in the metropolitan transportation planning area. However, the Environmental Protection Agency has defined an 8-hour ozone non-attainment area. This area includes the existing DRCOG attainment/maintenance areas for 1-hour Ozone, PM10 and CO and added the remaining eastern portions of Adams and Arapahoe Counties and the Rocky Mountain National Park portion of Boulder County within DRCOG, as well as portions of Larimer and Weld Counties, which include the Ft. Collins-Loveland and Greeley urbanized areas, outside DRCOG. Thus, the DRCOG area does not include the entirety of the non-attainment area.

The DRCOG TMA includes portions of the Arapaho and Pike National Forests and the Indian Peak and Lost Creek Wilderness areas. No known tribal lands are within the DRCOG area. Federal land management agencies operating within the DRCOG region participated in a CDOT led environmental forum in 2007 as part of the 2035 transportation planning process. Draft sections of the 2035 MVRTP were reviewed by federal land management staff, and information and references were added (Chapter 2, Section D). Federal land management agency projects in the TMA are included in the TIP.

The 2010 census added both land area and population to all 4 urbanized areas in the DRCOG region. The DRCOG will consider making an adjustment to the planning area boundary to account for any additional areas expected to be urbanized in the next 20 years based on the changes between 2000 and 2010, within 3 years or with the next scheduled plan update.

Local plans are considered in the Metro Vision Plan for growth, development, environmental, and land use components that are then integrated into the RTP. The DRCOG has started work on the development of the new Metro Vision 2040 Plan and 2040 MVRTP. Part of that work

will evaluate the linkage of transportation to housing and employment. The recently awarded HUD Sustainable Communities Regional Planning Grant (SCRPG) contains many activities that will aid this work. As noted earlier several sustainability goals were established in the 2035 Plans

### DRCOG Issues and Challenges (2012)

Comprehensive, coordinated and continuous planning for a 56-member agency can present a myriad of challenges. Remaining pro-active and innovative in the delivery of federal programs and projects can present both the cure, as well as the curse, of maintaining a high-level of responsiveness to continuous challenges. However, the DRCOG may be considered among the best at turning the adversity of such challenges into innovative and pro-active initiatives.

Despite a comprehensive transportation planning approach, the DRCOG and the Denver-Aurora Metropolitan Area planning partners are faced with consistently deepening challenges and issues consistent with those sweeping the nation. In the Denver-Aurora area planning certification reviews of 2001, 2004, and 2008, several overarching and recurring themes associated with comprehensive planning updates, expanding urbanization and growth, lack of financial resources, traffic congestion and air quality were highlighted. These remain overarching concerns of the region in 2012. In the development and implementation of effective growth management policy and comprehensive planning, the interrelatedness and persistence of these issues remains a significant concern for the DRCOG, the RTD, the CDOT, the FHWA and the FTA.

From an institutional perspective, comprehensive planning and growth management policies are challenged to maintain and enhance the quality of life and economic viability. The region is challenged to preserve the current transportation system, while providing the appropriate facilities and delivering services commensurate with the respective level of growth. During the period between 2008 and 2012, this has occurred with uncertain or limited funding in an unstable economic climate throughout the nation.

While these challenges have persisted, and perhaps *because* they have persisted, despite the development and implementation of effective growth management and comprehensive planning, many of the issues here have become more acute. Therefore, the major focus of the upcoming section re-examines and considers anew, recurring and emerging challenges for the region and its planning partners.

Challenges noted in the 2008 FHWA/FTA Planning Certification Review include:

- Growth and Development: Urban Area Consumption
- Transportation: Limited Capacity and Congestion
- The Impacts of Funding Shortfalls, Limited Financial Resources, and Increasing Costs
- Ozone
- FasTracks Regional Rail Development

DRCOG is faced with similar program and project delivery challenges in 2012:

- Growth and Population Changes
- Limited and Uncertain Funding
- Regional Participation for FasTracks

- Operations and Maintenance
- Emerging Emphasis on Performance Management and Asset Management
- Evolving Programs and Planning Emphasis Areas
- Demands of High-Performance, Innovation and Pro-active Practice

***Evolving Programs and Planning Emphasis Areas under MAP-21***, similar to the emerging emphasis on performance management and asset management, has created areas of concern and challenge, as well as opportunity for the DRCOG and its planning partners.

Of course, one of the planning emphasis areas lies in performance management and asset management. The increased impetus on maintaining a “state-of-good-repair” has fostered an entirely new programmatic approach from the FTA. Several other discretionary programs recently enacted under the FTA and the FHWA (e.g. State of Good Repair, Livability, Clean Fuels, TIGGER, and TIGER) challenge the DRCOG and its planning partners to develop goals and objectives, prioritization and selection criteria, and long-range and short-range planning procedures that remain consistent and competitive under program initiatives. Yet, although these newly established program goals and objectives primarily serve to bolster existing transportation regulations, the release of new programs under various new program names creates some burden on the DRCOG and its planning partners- who, with limited funding, must provide justification to decision-making authorities for efforts to revise and re-align planning initiatives within the Denver-Aurora metropolitan area.

As noted in the discussion related to M&O, the DRCOG and the DRCOG staff are unable to exercise any decision-making authority necessary to institute and implement policy to direct greater M&O considerations. Yet, the increased planning impetus on asset management and performance management, under newly established programs such as State of Good Repair, compels the DRCOG to carry forward the discussion to locations where the priority for decision-makers vary. Similarly, the DOT-HUD-EPA Partnership for Sustainable Communities, recognized in several discretionary programs including Livability, Clean Fuels, TIGGER, and TIGER, the influence the transportation planning process has on the determinant factors that allow the region to be consistently competitive for national grant monies. These discretionary grant funding programs have since been eliminated with the enactment of MAP-21. These newly implemented programs may sometimes appear inconsistent or somewhat in conflict with the priorities set forth in State and local planning by local decision-making authorities. Moreover, federal transportation planning requires the DRCOG and its planning partners to promote consistency between transportation improvements and State and local planned growth and economic development patterns. The manner in which the DRCOG balances these often conflicting interests imposes considerable challenges.

***Emerging Emphasis on Performance Management and Asset Management*** presents opportunities as well as challenges for the DRCOG. The DRCOG certainly recognizes the economic importance of implementing performance management, including performance measures and performance-based planning, and asset management into the planning process. The FHWA and FTA have commended the DRCOG for the pro-active and innovative approach to addressing performance management and asset management into the planning process, by enhancing and improving program delivery with an emphasis on evaluation and monitoring.

The FHWA and FTA commend the CDOT for the pro-active and innovative approach to addressing performance management and asset management into the planning process, by enhancing and improving program delivery with an emphasis on evaluation and monitoring.

The CDOT desires a performance based planning and asset management system that, in practice, allows for flexibility, attainable goals to be set, clear guidance, and good connections between the setting of performance goals and project selection.

With the implementation of Moving Ahead for Progress in the 21 Century Act (MAP-21) on the horizon, performance based planning and asset management will be an integral part of all the DRCOG's major planning documents. Performance measures will have to be connected across all the platforms as to illuminate the story being told by the DRCOG's efforts and successes. The outcomes will have to be coordinated with the CDOT which will feed into a higher level State perspective for transportation accomplishments. This will take lots of hard work and time to complete.

**Growth and Population Changes** present ongoing challenges. The 2010 census added both land area and population to each of the (4) four urbanized areas in the DRCOG region. Most significantly, the Denver/Aurora urbanized area now includes Castle Rock. DRCOG contends with concerns regarding how to address the transportation needs of a region that is growing rapidly. As part of this growth and population, DRCOG is concerned with the challenges of provide a transportation network that will accommodate the needs of a rapidly growing aging population. Providing the resources necessary to support a growing elderly population requires funding, and pro-active and innovative planning techniques that integrate housing and transportation.

As with much of the nation, the Denver metro area is going to be aging at a steady clip. Over the course of the MVRTP, the region is expected to have a population that is 25% over 60 by 2035. This presents a challenge for the DRCOG as this new wave will need different solutions to time tested mechanisms.

**Limited and Uncertain Funding** presents a significant challenge. DRCOG and its planning partners have noted that the SAFETEA-LU extensions under short-term continuing resolutions have not been conducive to long-range planning and programming. DRCOG notes that financial uncertainty and levels of funding in the post-SAFETEA-LU era have led to:

- CDOT taking a very conservative position on estimating upcoming funds per Resource Allocation (actual allocations have recently far exceeded initial estimates).
- DRCOG management taking a conservative perspective on funding for staff (minimal tolerance for increasing FTEs if resources won't be available in future to support them).

Long-term planning with short-term funding has exhausted resources. The work-load is equally, if not more, demanding. There is a very strong desire by all local and regional planning agencies to see a new long-term transportation bill passed by Congress. The benefits would be widely spread over industry and society.

**The Regional Transit District, Fastracks, and Regional Participation** will continue to be tested in the upcoming years. Due to significant cost increases and revenue decreases since the original Fastracks financial plan, the implementation of the Fastracks program has been delayed. The RTD board decided that 2012 was not an opportune time to ask for a revenue

increase to accelerate the implementation of the program. Therefore Fastracks build out will proceed slower than anticipated in the 2035 LRTP. Some portions of the Fastracks program will no longer be achievable within the 2035 plan horizon. An amendment to the 2035 plan was submitted by RTD in the Summer of 2012.

The slower than expected build out of the Fastracks program will continue to test the regional coalition that helped to pass the Fastracks initiative. Without additional revenue some corridors will not be completed until sometime after 2035. While drafting the 2035 plan amendment and developing the 2040 LRTP, decisions about in what order to build the remaining Fastracks corridors will be challenging. This decision will involve consideration of cost effectiveness, regional equity, project readiness, and the ability for projects to qualify for FTA funds. There may also be external factors such as the availability of private partners, local funding initiatives tied to individual corridors, and railroad policy and safety rules to consider.

One of the most significant results of the 2010 Census includes the addition of the City of Castle Rock to the Denver-Aurora urbanized area. Castle Rock is presently outside of the RTD district. Where FTA 5307 formula funds are based, in part, on population and population density, this further increases the regional demand for limited services and funding.

**Transportation Systems Management, Operations, and Maintenance** are concerns from several perspectives. From a funding perspective, these activities are very likely the primary concern for highway and transit providers alike. From a policy perspective, the DRCOG is tasked with fulfilling the federal transportation planning process, which requires the coordination and implementation of system considerations that promote efficient network management and operation, as well as system preservation.

The challenges facing the DRCOG include not determining the level of O&M necessary to deliver services, or maintain assets, at an "adequate" level. Additionally, the DRCOG does not have decision-making authority in the level of funding necessary to deliver an "adequate" level of service. This is, nonetheless, a conundrum facing asset management and operations. As the MAP-21 law and regulations continue to unfold, these activities will continue to be important.

The DRCOG is also in the development of a Regional Concept for Transportation Operations (RCTO). The RCTO is a collaborative process that develops a short-term (typically three to five years) objectives-driven approach to management practices, agreed upon by a diverse group of transportation stakeholders interested in the performance of the region's transportation system. The CDOT is currently emphasizing this activity with the involvement of the regional partners. For more information on RCTO, refer to: [http://plan4operations.dot.gov/reg\\_concept.htm](http://plan4operations.dot.gov/reg_concept.htm).

**Demands of High-Performance, Innovation and Pro-active Practice** presents a challenge in and of itself. The FHWA/FTA commends the DRCOG for the manner in which the DRCOG balances conflicting interests of evolving programs and planning emphasis areas; for efforts to introduce performance management, performance measures and performance-based planning; for realistically addressing the constraints of promoting M&O; for managing the challenges of changing population and growth with limited and uncertain funding; through pro-active and innovative program and project planning.

As recognized by the commendations below, the DRCOG surmounted the challenges, as well as the recommendations and observations denoted in the FHWA/FTA 2008 Planning Certification Review, by responding in a pro-active, innovative, and enthusiastic manner. Yet, the difficulty of producing advanced modeling technology to manage the demands of growth is equaled only by the challenges of maintaining the advanced modeling technology. The DRCOG likewise rose to the challenges of the transportation evaluating and monitoring requirements, as recommended by the previous certification review, examining the planning products, procedures and processes within the DRCOG and the Denver-Aurora Metropolitan Area, and commencing to improve and enhance performance management within the planning. The DRCOG further implemented additional revisions to the planning, prioritization and selection process, to include additional criteria consistent with the (8) eight planning factors under the federal transportation planning requirements, and in consideration of the federal livability and sustainability initiatives. Having risen above the demands of high-performance, the DRCOG is challenged to maintain high-performance.

### DRCOG 2008 Certification Review Findings

The FHWA and the FTA completed an Enhanced Planning Review of the Denver Metropolitan Area in 1994. The first planning certification review of the Denver region was conducted in 1995. Since that time, a planning certification review has been conducted in 1998, 2001, 2004, and 2008.

The 2008 FHWA/FTA Planning Certification Review included four (4) required recommendations:

- Intelligent Transportation Systems (ITS): Implemented systems engineering analysis process and developed associated guidance document in December 2008
- DRCOG/RAQC Agreement: Executed a written agreement in 2011
- Public Involvement Plan/Process: an updated PIP was adopted in 2010
- Public Involvement Process performance measures performance is now monitored to consider effectiveness and refine techniques

The 2008 review also contained twenty four (24) other recommendations in the following areas:

- Environmental Justice
- Financial Stewardship
- Air Quality Conformity Determinations
- Safety
- Security
- Accomplishments and Recognition
- Modeling
- Freight
- Training and Technical Assistance
- Working Together For Cooperative Planning

In each of the subject areas, the FHWA and FTA recommended increased clarity and consistency, cooperation and transparency, including monitoring and evaluation, in the comprehensive planning process and documentation.

The DRCOG complied with the four (4) required recommendations noted above. Additionally, the DRCOG is commended for acting in a pro-active and innovative manner in responding to each of the remaining recommendations and observations, which were suggestions to which the DRCOG and its planning partners eagerly accepted.

## **Commendations**

This 2012 FHWA/FTA Planning Certification Review uncovered several planning areas where the DRCOG undertakes pro-active and innovative approaches to fulfilling the requirement of the transportation planning:

- Transportation Planning and Program Processes
- Performance Management & Asset Management
- Sustainability & Livability
- Transportation Modeling
- Public Participation and Public Involvement Procedures

These strengths will undoubtedly serve the DRCOG and its planning partners very well in dealing with the issues and challenges of the coming years.

### Commendation #1: Transportation Planning and Program Processes

#### ***DRCOG 2012-2017 TIP Policy Guide***

Prior to the development of the FY 2012-2017 TIP, DRCOG updated the policy guide on TIP preparation to develop a schedule, clarify policies, and assist local agencies in the FY 2012-2017 TIP development process. Additionally, the planning, prioritization and selection process provides an ever-increasing framework for incorporating livability and sustainability principles, as noted below.

In keeping with a few of the new FHWA initiatives, such as inactive project reporting, the DRCOG continued to strengthen its policy and procedures around these core missions. This document has done a fine job at handling project requests while documenting the outcomes of decisions and formalizing procedures in a handy, easy to understand manual.

#### ***TRIPS Database***

The DRCOG's Transportation Regional Improvement Projects and Survey (TRIPS) database gives local agencies, planning partners, and the general public easier access to monitor the status and cost of projects scheduled in the TIP and the RTP. The TRIPS database is a transparent tool that allows partners to better understand project details and the overall situation in the region. The TRIPS database provides a process for project tracking and monitoring to ensure the current and timely obligation of federal funds, and completion of federal projects. It provides a foundation for monitoring and evaluation of planning and programming processes, as well as a mechanism for performance management, performance measures, and performance based-planning.

#### ***Project Delay Policy: One-Strike Rule***

The Project Delay Policy created by the DRCOG establishes a "one-strike rule" with local agencies who delay in moving projects forward after the FHWA has obligated funds for those projects. The U.S. DOT has encouraged MPOs to reduce the number of inactive projects to



ensure that federal funds are used in an efficient and expeditious manner. The FHWA/FTA requests that the DRCOG continue to enforce its TIP delay policy.

### ***Innovative Financing***

Funding of transportation projects continues to present a significant challenge. The FHWA/FTA recognizes the CDOT and the RTD's current use of several innovative financing mechanisms for the US 36, Denver Union Station, and Eagle P3 projects. These creative ventures, much like the project delay policy, the TRIPS database, and the TIP Policy Guide, ensures the timely obligation and completion of project funding by leveraging resources and partnering. The FHWA/FTA encourages the CDOT and the RTD to continue using innovative financing techniques as a means for project delivery. MAP-21 may offer additional resources for funding included an updated TIFIA program.

The DRCOG and its planning partners have been pro-active in initiating innovative financing mechanisms to secure funding for planning, operating, and capital projects. For example, the DRCOG recently secured an award through the HUD Sustainable Communities Regional Planning Grant (SCRPG) which will aid in the development of long-range planning documents. Additionally, the CDOT and the RTD have secured innovative financing, including TIFIA loans and TIGER grants for project delivery of the US 36 Improvements and Bus Rapid Transit (BRT), Denver Union Station, and Eagle P3 projects.

### **Commendation #2: Performance Management & Asset Management**

The DRCOG has been pro-active and innovative in advancing planning and programming processes that provide a platform for evaluation and monitoring, or Performance Management & Asset Management. The DRCOG and its partners have pursued initiatives to assess the application of additional performance-based planning and performance measures. Many of the procedures and processes undertaken by the DRCOG also lend themselves to assisting local jurisdictions, as well as State agencies, in the provision of Asset Management strategies, system management and preservation, and M&O strategies.

The DRCOG should be commended for engaging in and focusing on efforts towards performance management and asset management in the following areas:

- Transportation Planning and Program Processes
- Data Management and Modeling
- Public Participation, Involvement and Outreach
- Environmental Justice
- Safety
- Congestion Management Process (CMP)
- Management and Operations (M&O)

### ***Transportation Planning and Program Processes***

The DRCOG and the CDOT have been working to better quantify goals and performance measurement benchmarks. The DRCOG is in the process of establishing both goals and performance metrics. The MVRTP and the UPWP provide several activities and tasks that relate specifically to quantifiable goals (e.g. VMT and GHG reduction) as well as to the 14 key policies and 59 action strategies of the 2035 MVRTP. In the UPWP, several tasks lead directly

to the development of or calculation of performance measures (e.g. activities 3.10, 5.1, 5.3, 6.1, 6.2, and 7.3). The new UPWP identifies a task to conduct a thorough monitoring of the projects that have been implemented in the past few years.

The DRCOG's suite of plans (e.g., the Metro Vision 2035 Plan, 2035 MVRTP, the Transit Element, the Pedestrian/Bicycle Element, and the Regional ITS Strategic Plan) and background data files and management systems (congestion, bridge, CDOT pavement) contain an extensive amount of information. Numerous pieces of specific data (observed, modeled, predicted, etc.) are used in the project evaluation and selection process associated with the TIP and categorical pools, as well as for the identification of regionally funded capacity projects to include in the Fiscally Constrained 2035 MVRTP. The data is used to score specific the TIP or the RTP project criteria that are summed to derive total project evaluation scores. The scores are then a basis upon which funding decisions are made.

The DRCOG notes that the TIP is reasonably successful in serving as a management tool for implementing the MVRTP, as the TIP successfully reflects the policies, investment choices, and priorities identified in the MVRTP. The success is chiefly that the 2012-2017 TIP criteria was closely linked to transportation and land use policies contained in both the Metro Vision 2035 Plan and the 2035 MVRTP. Each of the SAFETEA-LU (8) eight planning factors, as well as the Livability principles, is incorporated into the criteria for project evaluation, selection and prioritization process (as applicable project type). Several criteria related to Livability principles were used for all project types.

### ***Environmental Justice***

The DRCOG has used the census data to define concentrated areas of minority, low-income, mobility impaired, zero-auto, and elderly populations. Performance measures addressing the accessibility to transit and jobs by total population and concentrated minority and low-income areas are documented in the 2035 MVRTP. DRCOG completed a regional household travel survey (12,000+ households) in 2011 and has just started to tap into this valuable source of demographic and travel habit data. Data from both sources has also been incorporated into the new Focus travel model.

Measures and summary analysis for the plan is presented in Chapter 6 Section C of the 2035 MVRTP. Many of the TIP project evaluation criteria are linked to Metro Vision which itself is tied closed to these requirements. In addition, all projects submitted for the TIP receive points if they directly serve the DRCOG's defined environmental justice areas, and sponsors must define the benefits and disadvantages of the project.

The DRCOG uses a home brewed formula to evaluate the effectiveness of public involvement, including its success at engaging low-income and minority residents, although there is no process for specifically evaluating LEP populations. At least every two years, staff compiles a thorough listing of activities conducted, number of participants, etc. and reviews for level of effectiveness.

The DRCOG conducted geographic comparative analysis of the location of major future projects in the 2035 MVRTP related to defined concentration of minority populations and lower income persons was conducted and presented in a map and table in the plan (Chapter 4, Section C). Several of these projects are also currently (or recently) undergoing NEPA level analyses, thus providing much more detailed information on benefits and burdens. Benefits

and proximity of projects to these environmental justice areas was also incorporated into the TIP project scoring.

### **Safety**

The 2035 MVRTP contains a safety policy statement, action strategies, and two specific goals that are derivations from the Colorado Strategic Plan to Improve Roadway Safety (SPIRS). Progress toward the two goals is monitored as data becomes available. The original 2035 MVRTP fatal crash rate reduction goal to 1.0 per 100 million VMT was already surpassed and a new goal of 0.60 was established in the 2035 MVRTP update. The injury crash rate goal was updated to 0.55 per 100 million VMT, a more rigorous goal than the 0.65 level of the original 2035 MVRTP. Based on output from the new and upcoming safety reports and consideration of statewide goals in the SPIRS, the 2040 MVRTP will establish specific goals in some (or all) of these modal areas.

Safety performance measures are incorporated into the planning process by tracking total crashes and fatalities and rates of fatal and injury crashes over time and presenting the data in the MVRTP. Measures are also presented and used within the CMP (crashes by type for each roadway segment). A safety weighted hazard index was used for evaluating roadway capacity projects considered for the Fiscally Constrained 2035 RTP. For TIP roadway project evaluations, the existing safety/crash measures (type and number) are considered as well as the estimated reduction in crashes due to the proposed improvements.

### **Congestion Management Process (CMP)**

With respect to CMP, performance measures are used for trend analysis, as information associated with many specific topic areas, as input for TIP and RTP project evaluation, and for presentation in the MVRTP. Many measures and technical tools are utilized through the CMP to identify congestion at various levels and extents (e.g. regional, corridor, spot location, and time-of-day), and to identify and assess non-recurring congestion (e.g., due to events, traffic incidents, weather). A key element to the CMP is the "Congestion Mobility Grade". The "Congestion Mobility Grade" is calculated for every segment on the MVRTP's designated Regional Roadway System. It incorporates five unique aspects of congestion into one measure.

CMP performance measures directly link to and support several goals, policies, and action strategies of the 2035 MVRTP (e.g., VMT per capita). The data is used to measure and track delay, congestion costs, incident related congestion, and identify key congested locations, causes, and mitigation strategies. The data is incorporated into the scoring of the MVRTP and the TIP projects, and, thus impact the "staging" of projects. Alternatives may range from projects that directly reduce congestion as well as those that help people adapt to or avoid congestion.

The process to examine management strategies as an alternative within all EAs and EISs has been institutionalized in the Denver region. When not selected as the preferred alternative, management elements are incorporated into the final defined project. These analyses are documented within relevant NEPA disclosure and/or decision documents or associated technical reports. All proposals for regionally significant increases in roadway or transit capacity must be identified in a Fiscally Constrained RTP that conforms to air quality requirements.

## **Management and Operations**

The transportation goals and measures defined in the 2035 MVRTP, as captured by Metro Vision Transportation Policy #4, are universal. Meaning all regional efforts, including Management and Operations (M&O), contribute to the measures and performance. The regional travel model and the CMP are used directly to measure performance in attaining the overall numeric target transportation goals. These and other sources also provide data to gauge progress associated with the M&O policy objectives and action strategies identified in the 2035 MVRTP.

Some of these target performance measures are assessed annually. Further review and updating of goals and measures will also be addressed as part of the 2040 Plans.

The DRCOG and its planning partners determine an "adequate" level of M&O, as well as a desired level of service (LOS) and asset condition, through CDOT's robust pavement management system process that considers desired level of condition. The CDOT Bridge management system covers all bridges. Calculations for local roads are more simplified since there are at least 20 different unique condition scoring and pavement management systems used. Based on estimates and calculations for the 2035 MVRTP, reasonably anticipated revenues will be insufficient to maintain the current level of system condition or the desired level. Additional attention is being focused on this topic as part of the development of the 2040 Plan as outlined in the UPWP.

For the upcoming 2040 Plan process, as outlined in the UPWP, the DRCOG will be working with the CDOT to determine the LOS and ratings of facility condition. The LOS and ratings of facility condition expected for a given funding level are communicated to the public for the CDOT roadway system, and for all bridges.

Although specific regional asset management goals have not been adopted in the planning process, asset management principles and techniques will be evaluated and defined for the new 2040 MVRTP, transit asset management efforts are discussed with the DRCOG and its partners during the updating of and creation of new RTPs. The DRCOG staff monitors annual programs of the RTD and smaller transit service providers. Data was summarized in the Transit Element of the 2035 MVRTP. Asset management principles and techniques are considered in defining TIP priorities, where the state of the system is considered as project type funding targets are established in the Policy on TIP Preparation (for 2012-2017 TIP) through the MPO planning process.

### Commendation #3: Sustainability and Livability

The DRCOG has been thinking forward in adopting planning goals and objectives which are consistent with local and statewide planning. Program implementation procedures now incorporate livability and sustainability concepts, including economic competitiveness, increased accessibility, mobility and connectivity, leveraging of resources, and environmental considerations.

Sustainable and livable community traits were a primary focus of the 2035 MVRTP and TIP updates. Extensive effort was put into developing a Regional Sustainability webpage and a

Transit Oriented Development (TOD) webpage, both of which contain many resources for local governments and partnering agencies. The DRCOG applied for and received a significant HUD Sustainable Communities Regional Planning Grant for work to be conducted with planning partners over the next 3 years which will inform the development of the 2040 planning documents.

Local plans are considered in the Metro Vision Plan for growth, development, environment, and land use components that are then integrated into the MVRTP. The current plans consider, but do not delve into housing goals and employment plans. Work has started on the development of the new Metro Vision 2040 Plan and 2040 MVRTP. Part of that work will evaluate the linkage of transportation to housing and employment. The recently awarded HUD Sustainable Communities Regional Planning Grant (SCRPG) contains many activities that will aid this work.

The DRCOG has integrated many sustainability and livability principles that the USDOT has encouraged MPOs and DOTs to adopt, including developing measurable goals. The CDOT has lead development, with participation from the DRCOG, of Sustainability Principles and Energy Smart Transportation Initiative that produced a diverse set of implementable policies.

The DRCOG has a long-standing, non-enforced, but mutually agreed upon Urban Growth Boundary (UGB) in place and it is applied flexibly and reasonably. The DRCOG's members have developed a regional growth boundary that alerts developments and growth outside as to allow for a discussion of impacts before a decision is reached. It offers a deterrent to outliers without restricting them and doesn't notably increase regional housing costs for people. This undertaking exemplifies the working relationship of the 56 member jurisdictions who work in a clam, tactful, and respectful manner.

The U.S. DOT has encouraged MPOs and state DOTs to integrate sustainability and livability principles into their planning processes. The FHWA/FTA requests that the DRCOG continue to expand these principles to cover all aspects of its planning process. The U.S. DOT has developed six livability principles, including a principle of supporting existing communities. The DRCOG is encouraged to continue developing strategies to achieve the U.S. DOT livability goals.

The FHWA/FTA commends the DRCOG Board members on carrying out the transportation planning process and decision-making responsibilities for a major metropolitan area in an amicable and positive manner.

#### Commendation #4: Transportation Modeling

The DRCOG and its planning partners, including the CDOT and the RTD, have assumed a futurist and exciting approach to transportation modeling. They integrate an activity-based modeling approach with growth and travel-demand forecasting. This allows for better evaluations of growth scenarios, accessibility and mobility management procedures, safety, and system preservation, environmental justice, and socio-economic features. The DRCOG and its partners have coordinated to collect data for utilization in transportation modeling to ensure consistency among the regional jurisdictions and the state and federal agencies. As such, the transportation modeling conducted by the DRCOG provides links to environmental mitigation and NEPA. The DRCOG provides an advanced level of modeling knowledge and

the DRCOG are to be highly commended for advancing the model practice into the future and into sophisticated solutions.

The DRCOG coordinated with the Colorado Department of Transportation (CDOT), the FHWA, and the Regional Transportation District for a contract with NuStats to conduct the Front Range Travel Counts (FRTC). The field work consists of household diaries, GPS tracking, and cordon surveys. Extensive monitoring and adjustment of sample and survey approaches was continuously morphed throughout the project to ensure a representative sample across all dimensions (geographic, demographic, etc.) This primarily consisted of establishing target shares of various populations based on the American Community Survey/Census, followed by monitoring/controlling sample so as to match them within acceptable limits.

The DRCOG has adopted Focus, a new activity-based travel demand model, for use in all of its major planning projects and activities as identified in their UPWP. The DRCOG is commencing an extensive scenario planning exercise with stakeholders as a kickoff to their update of Metro Vision (Metro Vision 2040). The outreach activities included an expert panel event sponsored by the FHWA/Volpe Center, which culminated in a public event in June 2012, which will effectively kick off an expected 18 month scenario planning exercise.

This model has been widely touted as being very detailed in capturing the daily movements of society at many levels, including modal choice and infrastructure, within the Denver metro area. The DRCOG pursued three major model updates as fast as developments in the field would permit: updates of the household travel model, the land use model, and the commercial vehicle model. At present, the initial version of the new travel model is now complete, and the DRCOG is actively developing a new land use model (based on the UrbanSim platform), as well as working on survey development and model design research for a new commercial vehicle model. In addition to these objectives, with FHWA input and financial support, the DRCOG is actively building a dynamic traffic assignment (DTA) model, based on the DynuST platform.

The RTD's support in development of the new Focus model was crucial in several respects. Their most important contribution was in providing local matching funds to the federal funds used to fund the new model. The RTD also took the leading role in updating and maintaining the old trip-based model (called Compass) during the construction of the Focus model, allowing the DRCOG staff to concentrate its resources on the new model project. The RTD also provided advice and consultation throughout the project, particularly with the mode split aspects of the model, including supplying data and providing mode split design advice.

The DRCOG is working on options for making the Focus model available for use by consultants. The modeling classes were a step in that direction; providing knowledge about the theory and practice of activity-based modeling to local modelers. Consultants, local governments, and regional planning partners attended the classes, along with people from other parts of the country. The classes were given as a webinar and/or an in-person workshop.

#### Commendation #5: Public Participation and Public Involvement Procedures

The DRCOG has successfully implemented Public Participation and Public Involvement Procedures. They have recently undertaken pro-active process evaluation and improvement to enhance and improve the user experience of the Public Participation and Public Involvement Procedures. The DRCOG has partnered with the HUD to conduct a study of the DRCOG

outreach techniques to evaluate and monitor the impact on the transportation planning process and transportation planning areas of emphasis such as environmental justice and housing. This is also another area in which the DRCOG has sought to enhance and improve the delivery of planning and project services by leveraging resources and partnering with outside agencies.

The FHWA/FTA encourages the DRCOG to continue to strengthen its public involvement techniques in its upcoming 2040 MVRTP process and beyond.

Work has started on the development of the new 2040 MVRTP. Part of that work will evaluate the linkage of transportation to housing and employment. The recently awarded HUD Sustainable Communities Regional Planning Grant (SCRPG) contains many activities that will aid this work. Several sustainability goals were considered and established in the 2035 Plans, even though the current plans do not delve into housing goals and employment plans. Of course, local plans are considered in the Metro Vision Plan for growth, development, environmental, and land use components that are then integrated into the MVRTP.

The FHWA/FTA commends the DRCOG on seeking and being awarded a HUD grant in conjunction with the development of its 2040 Regional Transportation Plan that will require extensive public outreach efforts.

The document, *Public Involvement in Regional Transportation Planning*, was adopted in April 2010. It was developed in cooperation with partner agencies through the ACT and TAC committees (CDOT, RTD, local governments, special interest representatives). The DRCOG Board provided final input along with comments received from the public. The DRCOG has kept the public outreach and involvement component of the planning process in the spotlight over the long development periods. They have preserved the importance of public communication and have established it as a priority in all planning procedures.

## Recommendations

The review has included an array of recommendations for improvement. These recommendations are classified into two types: 'Required Recommendations' for which the FHWA and FTA felt must be done first and need to be given the highest priority; and, 'Recommendations' that will further help to improve the planning process. The latter list of recommendations is in no particular order of importance. There are **no Corrective Actions** under this 2012 FHWA/FTA Planning Certification Review.

Required Recommendations are made in the following areas:

- Agreements
- Civil Rights
- 2012 – 2017 TIP Policy Guide

Other Recommendations are made in these additional areas:

- Safety
- Operations and Maintenance (O&M)
- Project and Program Delivery
- Performance Management
- Freight Coordination

### Required Recommendations

#### ***Agreements***

Timely Updates of Agreements: The DRCOG has not updated its Memorandum of Understanding (MOU) with the Air Quality Control Commission (AQCC) since 1998.

Compliance Issue: FHWA/FTA requires that the metropolitan transportation planning process to be continuing, cooperative, and comprehensive. An update to the AQCC/DRCOG MOU would fulfill this 3C requirement by ensuring that the MOU reflects the most current laws, regulations, and relationships.

***Agreements Recommendation #1***: The FHWA/FTA requires that the DRCOG update its Memorandum of Understanding with the AQCC to be in line with current laws and regulations.

***Agreements Recommendation #2***: Additionally, the FHWA/FTA requires that the DRCOG and its planning partners review all other dated or lapsing agreements, or any agreements which may require re-visiting. e.g. DRCOG – CDOT – RTD (2001) MOA, updated periodically; the CDPHE – CDOT (2002) MOA for Plan and TIP conformity determinations and SIP; DRCOG - CDOT "Memorandum of Understanding" addressing continued coordination, planning and revenue allocation for transportation, lapses June, 2013.

Resolution: To be completed by the DROCG and its planning partners before the next Certification Review in 2016.



## **Civil Rights**

Documentation of Civil Rights Procedures and Policies: Although the Executive Director of DRCOG signs a statement addressing the requirements under self-certification, DRCOG does not have processes, procedures, or guidelines documented that address Title VI, ADA, or DBE.

The MPO planning process has not adopted or identified any Title VI, ADA, or DBE goals, approaches or measurement. DRCOG does note that they actively monitor whether lawsuits or complaints alleging discrimination are filed in association with the planning process or the implementation of federally funded projects. Further, no such lawsuits or complaints have been filed in the recent past.

Documentation is provided along with the self-certification material. The materials are provided to CDOT and CDOT co-signs the self-certification. The self-certification is now conducted in conjunction with the adoption of a new TIP rather than annually. In addition, Title VI assurances are signed and provided with each new UPWP when it is adopted.

Compliance Issue: For Title VI, the DRCOG would need to provide information on general requirements for FTA recipients and sub recipients, namely LEP, EJ, guidance on promoting inclusive public participation, Title VI complaints procedures, and requirement to notify beneficiaries of protection under Title VI. The DRCOG, as the MPO agency, has a program with specific requirements they would need to provide to the FTA as outlined in FTA Title VI circular.

**Civil Rights Recommendation #1:** The DRCOG needs to document processes by which individuals formally submit complaints under Title VI of the Act. The DRCOG needs to develop documented procedures for their Title VI programs before FTA can agree their programs are satisfactory and in compliance.

Formal Limited English Proficiency Plan: DRCOG does not have a formal Limited English Proficiency (LEP) plan that conforms to civil rights regulations.

The Public Participation Plan (PPP) includes a specific and separate strategy for engaging low-income and minority populations and incorporates them into the PPP strategies. During the planning process, the MPO developed a demographic profile of the metropolitan planning area that includes identification of the locations of low-income and minority populations. Extensive work has been conducted to define concentrated areas of low-income, minority, zero-auto, and elderly persons throughout the region.

The PPP does not include specific strategies of engaging LEP populations; it contains only trace reference to the laws and regulations handling LEP responsibilities. DRCOG has not performed a detailed analysis specific to defining groups that qualify as LEP. 2000 Census data was evaluated and showed that the Spanish language represented over 70% of the non-English speaking population of the region. The next closest language was Vietnamese which represented just 3% (=0.75% of total population). Preliminary 2010 Census data indicates comparable results. Spanish language materials have been produced on occasion or are linked to on the DRCOG webpage (e.g., Metro Vision transportation questionnaire, English to Spanish Glossary of Transportation Terms, links to Hispanic FHWA safety websites, and RideArrangers web page).

Compliance Issue: *Executive Order (EO) 13166 (August 11, 2000) and USDOT Federal Register Notice (Vol. 70, No. 239, Dec. 14, 2005) Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficiency (LEP) Persons* sets forth the compliance standards that recipients of USDOT Federal financial assistance must follow to ensure that their programs and activities, normally provided in English, are accessible to LEP persons and thus do not discriminate on the basis of national origin in violation of Title VI's prohibition against national origin discrimination.

**Civil Rights Recommendation #2:** The DRCOG must develop a LEP plan to specifically identify LEP populations and document strategies and activities to engage these communities.

Technical Guidance and Assistance: There is a lack of technical guidance and direction from the CDOT about the Civil Rights requirements to be carried out by its sub recipients, including the DRCOG.

**Civil Rights Recommendation #3:** The CDOT must provide a better technical guidance to their sub recipient, the DRCOG. The CDOT should provide orientation on civil rights requirements to its sub recipients as soon as they are eligible to receive federal (DOT) funds and the CDOT should have an on-going monitoring/technical assistance to sub recipients until their sub recipients have fulfilled their civil rights programs compliance requirements from the U.S. DOT (FTA/FHWA).

Compliance Issue: For Title VI, the DRCOG would need to provide information on general requirements for FTA recipients and sub recipients, namely LEP, EJ, guidance on promoting inclusive public participation, Title VI complaints procedures, and requirement to notify beneficiaries of protection under Title VI. The DRCOG, as the MPO agency, has a program with specific requirements they would need to provide to the FTA as outlined in FTA Title VI circular.

Compliance Issue: *Executive Order (EO) 13166 (August 11, 2000) and USDOT Federal Register Notice (Vol. 70, No. 239, Dec. 14, 2005) Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficiency (LEP) Persons* sets forth the compliance standards that recipients of USDOT Federal financial assistance must follow to ensure that their programs and activities, normally provided in English, are accessible to LEP persons and thus do not discriminate on the basis of national origin in violation of Title VI's prohibition against national origin discrimination.

Resolution: To be completed by the DRCOG and the CDOT before the next Certification Review in 2016.

### **TIP Policy Guide**

TIP Policy Guide NEPA Language: In 2010, DRCOG published *Policy of Transportation Improvement Program (TIP) Development*. On Page 16 of the guide, it states, "For eligible projects that require an EA or an EIS, a request for ROW or construction funding cannot be submitted for the 2012-2017 TIP unless the NEPA disclosure document has been signed by the relevant federal agency prior to the TIP submittal deadline." Written this way, the Policy Guide could be misunderstood by project sponsors and entities submitting applications for funding.

**TIP Policy Guide Recommendation #1:** The FHWA/FTA requires the DRCOG to revise the “Major Projects” section of the TIP Development Policy Guide. Specifically to address the concern that this policy statement could lead to the misunderstanding of the Federal Environmental laws and regulations, in which the NEPA document requires the inclusion of project activity and financial commitment in the MVRTP and the TIP. The DRCOG TIP Policy Guide should clearly reflect the NEPA process, perhaps by adding such language as, ‘the project must be underway and the Environmental Assessment or the Draft Environmental Impact Statement signed or reasonably expected to be signed within the TIP project selection cycle timeframe.’

Resolution: To be completed by the DRCOG when the TIP Policy Guide is updated next.

### Other Recommendations

#### **Safety**

**Safety Relationships and Communications:** During the development of the last Strategic Highway Safety Plan (SHSP) in August 2007, the CDOT did not actively engage the DRCOG, as well as other regional and local jurisdictions. The CDOT provided some notice, yet the continuing, coordinated and cooperative planning process was not present throughout the entire process. Because of this, there was very little integration of the Safety Emphasis Areas, as well as the goals and objectives of the MVRTP.

The DRCOG staff expected the CDOT Safety and Traffic Engineering Branch staff to provide frequent communication regarding SHSP process, but that was not always a routine practice. The DRCOG safety procedures are believed to be generally consistent with the CDOT’s SHSP process (as CDOT, TAC, and ACT members have identified no issues). The 2035 MVRTP contains a safety policy statement, action strategies, and two specific goals that are derivations from the SPIRS. The raw data for both agencies (number of crashes, fatalities, etc.) are consistent as the source data is the same.

***Safety Recommendation #1:*** The CDOT should act early and often, in a pro-active manner, to reach out to the DRCOG (as well as other regional and local partners within the State) to identify safety goals and objectives during the development of the next SPIRS. This will allow the MPOs to utilize the outcomes for their benefit while being able to provide regional perspective and information to better inform the final SPIRS and its Emphasis Areas.

**Vehicle Crash Data:** In recent years, problems with the Department of Revenue’s (DOR) mainframe operating system, VIPER, and the exchange of data with the CDOT have delayed the creation of timely distribution of motor vehicle crash data. In coordination with the DOR, and the Statewide Traffic Records Advisory Committee (STRAC), data collection and transfer to CDOT has been improved. Over the last two years, CDOT has dedicated resources to reducing the backlog of data resulting from these issues. Currently, on-highway system crash data is processed and made available for use to local agencies through 2011 and 2012 data is within a few months of being received by the DOR. The DRCOG and its planning partners currently (2012) have detailed total system crash data available only through 2008. Through the mid-2000s, data on individual crashes was made available to the DRCOG about 18 months after the end of a year. Off-system data for County Roads and City Streets from 2008

to 2011 has not yet been prepared and reconciled for detailed data analysis. Through process improvements and dedicated resources, the CDOT is working to make the 2009 – 2011 crash data available to the DRCOG and all local agencies. Also, all of 2012 crashes, including off-system, are being processed soon after they are received by the CDOT. This will prevent creating any future backlog. The DRCOG and the CDOT staff have worked closely together in the past several months to improve and speed up the process to obtain data.

Crash record data is obtained from the CDOT (2002-2007) for approximately 75,000 crashes per year. The DRCOG completes the geocoding of crash locations and prepares the database to be available to its planning partners. The planning process uses the site location crash data for evaluating RTP roadway projects. Data is used for the MVRTP Corridor Vision reports and is used in the congestion management process as one of the surrogate measures for reliability of travel times.

**Safety Recommendation #2:** The CDOT should continue to work with the Department of Revenue to ensure the timely delivery of data to the DRCOG, other MPOs, and their planning partners necessary to provide measurable and meaningful planning and project selection.

**Safety of All Modes of Transportation:** Although the DRCOG and its planning partners have established measurable goals for overall roadway crashes, the DRCOG has not developed measurable safety goals and objectives to cover all modes of transportation including transit, bicyclists, pedestrian, and freight.

The 2035 RTP provides considerable direction to improve the safety for pedestrians and bicyclists. The Regional ITS Strategic Plan identifies technologies that will result in safety and security benefits for travelers. DRCOG recently completed the Report on Traffic Safety in the Denver Region and is currently working on a Pedestrian and Bicycling Safety Report. Based on output from the new and upcoming safety reports, and in consideration of statewide goals in the SPIRS, the 2040 MVRTP will establish specific goals in some (or all) of these modal areas. RTD collects data and has goals and targets that are adopted annually. The cooperative sharing of information and goals will become more important as MAP-21 is implemented.

**Safety Recommendation #3:** The DRCOG and its partners should jointly and cooperatively coordinate the development of safety goals and objectives to cover all modes of transportation (transit, bicyclists, pedestrian, freight).

**Safety Emphasis Areas:** The DRCOG does not identify and establish safety emphasis areas for the TMA. Moreover, the MVRTP does not identify implementation steps for the safety component, other than noting types of safety improvements that should be considered for any applicable projects.

Yet, one of the key policy goals of the Metro Vision 2035 Plan and 2035 MVRTP is to “develop and maintain a safe transportation system for all of its users.” Safety related improvements, due to their relatively small size, are not specifically listed or mapped in the MVRTP. Safety is given consideration in the TIP project selection criteria and the MVRTP improvement evaluation criteria. Safety measures are important criteria for the evaluation of TIP projects seeking federal funds. Safety is also strongly considered in the project development and design stages for all construction projects. The DRCOG staff works with the CDOT traffic safety engineers to monitor high crash locations that are candidates for crash reduction

measures, and to comment on and relate to the state's "Strategic Plan for Improving Roadway Safety" (SPIRS).

**Safety Recommendation #4:** The DRCOG and its planning partners should identify and establish safety emphasis areas for the TMA, using the SPIRS as a guidance document. The DRCOG should include the findings and emphasis areas derived from the SHSP in their regional long range plan.

Announcement of Available Safety Funds: The CDOT selects the projects for the HSIP funding through its Hazard Elimination Program. The CDOT requests sponsors to apply for funding on a 3-year cycle. Sponsors within the DRCOG area are "advised" to send a copy of their application to DRCOG. CDOT conducts a technical analysis of the crash reduction potential and the benefit/cost ratio to prioritize and select the projects, which are then added to the TIP.

**Safety Recommendation #5:** When CDOT announces the availability of safety monies, they should inform the DRCOG and the local governments and work with as many communities as possible to educate and inform upon the process of obtaining these funds. DRCOG needs to be further engaged by the CDOT in efforts to capture safety money for safety improvements throughout the region.

### ***Operations and Maintenance (O&M)***

Operations and Maintenance Comprehensive Regional Assessment (O&M): Although the RTD and the CDOT individually assess transportation investment decisions, the DRCOG has not conducted a comprehensive assessment for the entire regional system.

Colorado is an FHWA designated Operations Opportunity State. As Operations has received recent attention, especially with respect to performance and asset management, the CDOT, the DRCOG, and the RTD are encouraged to continue developing operations and management strategies.

DRCOG and its planning partners determine an "adequate" level of O&M, a desired level of service (LOS), and asset condition by using CDOT's robust pavement management system process that considers desired level of condition. The CDOT Bridge management system covers all bridges. Calculations for local roads are more simplified. Based on estimates and calculations for the 2035 MVRTP, reasonably anticipated revenues will be insufficient to maintain the current level of system condition or the desired level. Additional attention is being focused on this topic as part of the development of the 2040 Plan as outlined in the UPWP.

**O&M Recommendation #1:** DRCOG and its planning partners are encouraged to continue developing operations and management strategies that both encourage interagency collaboration and opportunities to leverage resources. DRCOG and its planning partners should conduct a comprehensive and collaborative assessment of the DRCOG metropolitan planning area, develop consistent goals and objectives for use in planning documents, and formalize processes and/or agreements for the partitioning of costs for use by DRCOG in the planning process for the federally supported system in the region.

### ***Project and Program Delivery***

**Project and Program Delivery:** Although DRCOG staff requests a list of obligations from CDOT, RTD, and the FTA, there is no formal cooperative procedures set forth in the MPO Agreement among the State, the MPO, and transit operators to submit the fund-obligation information (e.g. FTA-funded projects which have been obligated, or, conversely, which are not obligated in the year anticipated in the TIP) necessary for the report of obligated projects (or, conversely, unobligated projects).

***Project and Program Delivery Recommendation #1:*** The DRCOG and its planning partners (specifically, CDOT) are strongly encouraged to develop and formalize official cooperative procedures to reconcile projects required to be listed in the TIP/STIP. The DRCOG and its planning partners are strongly encouraged to develop and implement a performance management approach to reconcile projects required to be listed in the TIP/STIP, in conjunction with annual listing of inactive, obligated projects, completed projects (with notation regarding conformity baseline projects). In doing so, the DRCOG and the CDOT should develop a process for increased communication between themselves, and local jurisdictions.

***Project and Program Delivery Recommendation #2:*** The FHWA/FTA encourages the DRCOG and the CDOT to emphasize delivering projects quickly, minimizing delay, actively managing the project programming process and completing the project close-out process in a timely fashion.

***Project and Program Delivery Recommendation #3:*** The DRCOG and its planning partners (specifically, CDOT) should coordinate TIP/STIP roll-over projects so that a new TIP/STIP will not drop carryover projects from an old TIP/STIP. A similar recommendation was made in the 2011 State Planning Finding concerning rollover transit projects in the state's TPRs and small urban areas. It is incumbent on the CDOT to work collaboratively with the DRCOG on rollover projects.

***Project and Program Delivery Recommendation #4:*** The DRCOG is encouraged to update their TIP Policy Guide to incorporate new planning requirements such as the CDOT Annual STIP development and MAP-21 considerations.

### ***Performance Management***

**Performance Management:** The U.S. DOT has encouraged, along with the soon to be implemented requirements of MAP-21, transportation agencies to adopt performance metrics, and the FHWA/FTA requests that DRCOG, in close cooperation with the CDOT, continue to expand and update their metrics to cover all aspects of its planning process.

DRCOG notes that the TIP is reasonably successful in serving as a management tool for implementing the MVRTP, as the TIP successfully reflects the policies, investment choices, and priorities identified in the MVRTP. This is primarily due to the close link between the 2012-2017 TIP criteria was closely linked to transportation and land use policies contained in both the Metro Vision 2035 Plan and the 2035 MVRTP. Each of the MAP-21 (8) eight planning factors have been incorporated into the criteria for project evaluation, selection and prioritization process.

Although DRCOG lists projects that were rolled over from the previous TIP, or projects that had funds obligated but were not yet completed, the TIP does not include a list of all projects found to conform in a previous TIP that are now part of the air-quality-planning base case. DRCOG and its planning partners, as well as the public, would benefit by denoting annually-obligated projects that have been added to the air-quality-planning base case.

There is no mechanism that draws information and performance measures from the actions in the TIP across other planning documents such as the MVRTP and the UPWP thereby tracking the accomplishments of the MPO in terms of positive benefits for the public. Nor are there any performance measures that synchronize with the CDOT Plans to recognize the achievement of statewide goals.

***Performance Management Recommendation #1:*** The DRCOG and the CDOT should develop metrics to evaluate the effectiveness of planning efforts and goal achievement using similar indices across all the major planning documents. This will be a requirement during the implementation of MAP-21.

***Performance Management Recommendation #2:*** The DRCOG, and its planning partners, should identify and develop performance metrics and techniques to determine progress towards achieving the (8) eight planning factors into the project evaluation, prioritization and selection processes.

### ***Freight***

***Freight:*** The DRCOG currently discusses freight in the DRCOG Region through a short section in their MVRTP. They focus on tonnage carried by mode and point out general areas of improvement. They provide a few maps that highlight the railroad tracks and air terminals. An opportunity to further the public's understanding of freight and to display it in public friendly ways is to deepen the discussion of truck traffic at the metro level.

Trucks are the largest freight provider in the Denver metro area. A robust discussion about should entail maps showing the routes with the highest truck volumes and an economic discussion about the value the freight network brings to the region.

The DRCOG states that they think it best that freight planning is primarily handled at the State DOT level. Due to the unbounded nature of freight, this is a good idea, but further consideration should be taken with regard to inclusion of components of CDOT's freight plans into the DRCOG MVRTP. The DRCOG can summarize any findings or actions in terms of benefits or impacts on the Denver metro area.

MAP-21 will bring many new freight activities to the planning process. There will be a designated National Freight Network that will highlight critical freight routes, the continuation of consideration for freight projects through the planning factors, and new funding matches for identified freight projects in a State Freight Plan. These activities will be undertaken by most of the regional planning partners with the CDOT leading many of the programs.

***Freight Recommendation #1:*** The FHWA/FTA recommend that DRCOG continue to integrate the freight efforts and actions of CDOT (State Rail Plan and Freight Roadmap) into the MPOs own planning products. DRCOG is also encouraged to make sure their planning

partners and member governments are aware of ongoing freight activities in which they participate and that have relevance in the metro area.

**Freight Recommendation #2:** The DRCOG should continue to evolve their MVRTP Freight section, such as providing relevant data and maps that allow the public to get a better idea of the impacts and benefits of the entire freight network.



## **Conclusion**

The Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires a continuing, comprehensive and cooperative metropolitan transportation planning process. Although this review was conducted under the regulations of SAFETEA-LU, the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) was on the horizon. We make some brief references to the changes MAP-21 has brought forth, but they are for informational purposes and to begin thinking about the future. We did not use MAP-21 as a tool during this review. This includes provisions to ensure that Federal laws and regulations are being incorporated in the metropolitan transportation planning process, and requires a joint Federal Highway Administration (FHWA) Federal Transit Administration (FTA) Planning Certification Review in each area over 200,000 in population, or Transportation Management Area (TMA).

In recent, and in the near future, program and project delivery appears strapped by limited uncertain funding, and growing expectations surrounding emerging performance measures and performance-based planning; with ever-changing planning emphasis areas requiring planning for sustainability, livability, state of good repair with indirect control of principle factors and decision-making activity.

As the FHWA/FTA continue to monitor and evaluate the transportation process in the Denver-Aurora Metropolitan Area, and DRCOG and its planning partners, we will identify noteworthy practices that can be shared, and extend every an opportunity for continued progress in expanding the art and science of transportation planning.

The FHWA and FTA provide an array of recommendations for improvement, including

Required Recommendations are made in the following areas:

- Agreements
- Civil Rights
- 2012 – 2017 TIP Policy Guide

Other Recommendations are made these additional areas:

- Safety
- Operations and Maintenance (O&M)
- Project and Program Delivery
- Performance Management
- Freight Coordination

## **Action Plan**

Required Recommendations are made in the following areas:

- Agreements
- Civil Rights
- 2012 – 2017 TIP Policy Guide

Other Recommendations are made these additional areas:

- Safety
- Operations and Maintenance (O&M)
- Project and Program Delivery
- Performance Management
- Freight Coordination

Training and Technical Assistance – FHWA/FTA continue to offer training and technical assistance to DRCOG, CDOT and RTD as requested. Topical areas that have been requested are: performance measurement, performance-based planning, financial planning and fiscal constraint, modeling, scenario planning and operations and management



## Notice of Public Meeting

Federal Planning Certification Review  
Denver–Aurora Area

The **Federal Highway Administration (FHWA)** and **Federal Transit Administration (FTA)**, will hold a public meeting in conjunction with the quadrennial federal transportation planning certification review of the Denver- Aurora area.

**Date:** Wednesday April 4<sup>th</sup>, 2012  
**Time:** 6:00 PM  
**Location:** Denver Regional Council of Governments  
1290 Broadway  
Denver, CO  
80203  
Board Room,  
1<sup>st</sup> Floor

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires that a Planning Certification Review be performed for all metropolitan areas with populations of 200,000 or more once every four years. FHWA and FTA will jointly conduct the review in accordance with the joint planning regulations contained in 23 CFR 450 Subpart C – Metropolitan Transportation Planning and Programming. A public meeting will be held to provide the public the opportunity to express their thoughts and comments on the transportation planning process and how the process is meeting the needs of the Denver-Aurora metropolitan area.

The major elements of the review include: the organization and management of the planning process, planning agreements and the cooperative process, plan development and project programming, the eight SAFETEA-LU planning factors, public involvement, congestion management process, project selection/project monitoring, financial constraint, environmental justice, Title VI and Environmental Justice integration within the planning process, freight, air quality, safety considerations, travel demand modeling and forecasting, and intelligent transportation systems (ITS).

Comments may be presented to the federal agencies at the meeting or submitted in writing to either FTA or FHWA. Please submit your written comments via mail or e-mail by April 9<sup>th</sup>, 2012 to:

Aaron Bustow  
Federal Highway Administration  
12300 West Dakota Ave., Suite 180  
Lakewood, CO 80228-2583  
E-mail: [Aaron.Bustow@dot.gov](mailto:Aaron.Bustow@dot.gov)  
Phone: (720) 963-3022

Dave Beckhouse  
Federal Transit Administration  
12300 West Dakota Ave., Suite 310  
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Phone: (720) 963-3306

Individuals with disabilities requiring auxiliary aids for services should contact the Denver Regional Council of Governments at (303) 480-6701 or email at [cgarcia@drcog.org](mailto:cgarcia@drcog.org).

For more information, contact FHWA or FTA at the addresses listed above

## Public Meeting Attendees

Transportation Certification Review Sign In Sheet  
**April 4, 2012**

Name	Organization/City	Email Address
Romare Truely	FHWA	romare.truely@dot.gov
Jack Hilbert	Douglas	jhilbert@douglas.co.us
Paul Lorenzen	DRCOG	
Denny McCloskey	CITY/COUNTY OF BRADFORES	mick4warda@aol.com
Majorie Sloan	Golden	msloan@cityofgolden.net
Rachel Zenzinger	Arvada	rzenzinger@arvada.org
John Taylor	Littleton	jtaylor@comcast.net
Phil Cervonec	City of Littleton	pjcernonec@aol.com
Steve Cook	DRCOG Staff	scook@drcog.org
Paul Yuhube	Sustainable Energy Efficiency Project	pyuhube@seenergy.org
Janice Finch	City + Co of Denver	janice.finch@denvergov.org

2012 Denver - Aurora Metropolitan Area  
 Transportation Certification Review Sign In Sheet  
**April 4, 2012**

Name	Organization/City	Email Address
DARIN STAVISH	CDOT REGION 1	DARIN.STAVISH@DOT.STATE.CO.US
Gene Putman	City of Thornton	Gene.Putman@cityofthornton.co
Jeanne Shreve	Adams County	jshreve@adco.gov.org
Steve Erickson	DRCOG	serickson@drcog.org
Jeff Salmer	CDOT DTB	Jeffrey.Salmer@dot.state.co.us
Dan Herrmann	CDOT RB	danny.herrmann@dot.state.co.us
Todd Cottrell	DRCOG	tcottrell@drcog.org
MARK NORTHAM	DRCOG	mnortham@idrcog.org
Tom Clayton	Colorado Asphalt Pavement Assn.	TomClayton@CO-Asphalt.com
Jim McCoy	Color Contractors Assn	JMCOOYE@ccainfo.org
Paul Sandel	Deco	fsandel@fray.org
Eric Sebina	DRCOG	esabina@drcog.org

## Comments from the Public

*Gene Putnam*- Congress needs to act on reauthorization; Project delay- 7 months for a contract approval on the CDOT's end.

*Bob Yunke*- involvement in the planning process, identify criteria for MPO for (something) RTP or new RTP; 134a- optimizing cars; 134c- direct accomplishments for the above goals; SWEEP has developed fuel consumption analysis but DRCOG did not do this, provided analysis for Jeffco Parkway; not able to use the DRCOG model for analysis; thinks the DRCOG will start to do this analysis in the 2040 plan, but wants to have review call this out; MPO can support implementation for the electric vehicles with resources; energy independence

*Dennis McCloskey*- Concern about MAP-21; only a 2 year funding bill; gas tax insufficient to pay, MAP-21 good to reduce regulatory burden working on projects; regulations, rules, and what are transportation needs

*Bob Yunke*- SWEEP works for 6 states; DRCOG is cutting edge with planning tools; impressed with new travel model (Focus), allows for scenario planning to test policy options; excited about SP process to start in April, 2012

*Jim Taylor*- the DRCOG spends a lot of time on planning, then something changes and the process has to repeat all over again; need long term funding certainty for the DRCOG to do long term planning

*Dennis McCloskey*- present size and make-up of the MPO works well with big and small member jurisdictions; able to do unified planning instead of fractional

*Phil Cernenec*- sustainability, what is it, quantitative measurements; what are the implications of; number of vehicles per households that are alternatively fueled; air quality; quality of life; transportation jargon- difficult for the public to understand; outsiders wonder how 56 members can come together in DRCOG; reflection on the community; most residents from outside Colorado

*Rachel Zenzinger*- thanks to FTA for Full Funding Grant Agreement on the Gold Line (Fastracks rail project)

*Ron Rakowsky*- worked all over US; public officials in Denver are remarkable; cooperative; history of Denver, needs to see Denver as the center (regionalism); intergovernmental relations; staff

*Jim Taylor*- in last 4 years more discussion on sustainable greenhouse gases and air quality; those topics brought up often as issues/topics and the Board of Directors addressed in whatever; another that will be important, aging, will impact transportation; less gas tax collected; electric golf carts for the aging population; Littleton, CO is to adopt an ordinance

*Dennis McCloskey*- need for each jurisdiction submitting projects that meet needs, important; got results, feedback

*Jim Moody*- to exact follow DRCOG planning process; feel good balance across modes; greatest needs, conditions of roads

*Dennis McCloskey*- biggest issue for region is revenue and demographics (aging); need to change model for addressing infrastructure needs

*Jennifer Schaufele*- aging is issue, demographic shift across nation; affordable housing; taxes collected; in 20 years a larger population of over 65; no leadership in Washington on aging issue; things have changed, need new ideas and leadership and processes; DRCOG Aging Director talking about same issue for 20 years, only the last 5 years is it getting local attention; Federal Partnership for Sustainable Communities, leveraging resources; streamlining important, to get project done, need streamlining

*Phil Cernanec*- big concern of infrastructure in the short term (wear and tear); devolution by the CDOT giving streets to locals

**Glossary of Acronyms**

Agency Coordination Team.....	<b>ACT</b>
Air Quality Control Commission.....	<b>AQCC</b>
American Community Survey.....	<b>ACS</b>
Americans with Disabilities Act of 1990.....	<b>ADA</b>
Air Pollution Control Division.....	<b>APCD</b>
Board of Directors.....	<b>BOD</b>
Bus Rapid Transit.....	<b>BRT</b>
Carbon Monoxide.....	<b>CO</b>
Civil Rights Act of 1964.....	<b>Title VI</b>
Clean Air Act Amendments.....	<b>CAAA</b>
Code of Federal Regulations.....	<b>CFR</b>
Colorado Department of Transportation.....	<b>CDOT</b>
Colorado Department of Public Health and Environment.....	<b>CDPHE</b>
Congestion Management Process (post-SAFETEA-LU).....	<b>CMP</b>
Congestion Management System (pre-SAFETEA-LU).....	<b>CMS</b>
Council of Governments.....	<b>COG</b>
Denver Regional Council of Governments.....	<b>DRCOG</b>
Department of Transportation.....	<b>DOT</b>
Draft Environmental Impact Statement.....	<b>DEIS</b>
Environmental Assessment.....	<b>EA</b>
Environmental Impact Statement.....	<b>EIS</b>
Environmental Justice.....	<b>EJ</b>
Federal Highway Administration.....	<b>FHWA</b>
Federal Transit Administration.....	<b>FTA</b>
Front Range Travel Counts.....	<b>FRTC</b>
Full Time Employee.....	<b>FTE</b>
Greenhouse Gases.....	<b>GHG</b>
Housing and Urban Development.....	<b>HUD</b>
Intelligent Transportation System.....	<b>ITS</b>
Level of Service.....	<b>LOS</b>
Limited English Proficiency.....	<b>LEP</b>



Long Range Transportation Plan.....	<b>L RTP</b>
Management and Operations.....	<b>M&amp;O</b>
Memorandum of Agreement.....	<b>MOA</b>
Memorandum of Understanding.....	<b>MOU</b>
Metro Vision Plan.....	<b>MVP</b>
Metro Vision Regional Transportation Plan.....	<b>MVRTP</b>
Metropolitan Planning Organization.....	<b>MPO</b>
Moving Ahead for Progress in the 21 <sup>st</sup> Century.....	<b>MAP-21</b>
National Environmental Protection Act.....	<b>NEPA</b>
Operations and Maintenance.....	<b>O&amp;M</b>
Particulate Matter less than 10 microns.....	<b>PM10</b>
Public Involvement Plan.....	<b>PIP</b>
Regional Transit District.....	<b>RTD</b>
Regional Transportation Plan.....	<b>RTP</b>
Regional Air Quality Council.....	<b>RAQC</b>
Regional Concept for Transportation Operations.....	<b>RCTO</b>
Regional Transportation Committee.....	<b>RTC</b>
Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users	<b>SAFETEA-LU</b>
Strategic Highway Safety Plan.....	<b>SHSP</b>
State Implementation Plan.....	<b>SIP</b>
State Transportation Improvement Program.....	<b>STIP</b>
Strategic Plan to Improve Roadway Safety.....	<b>SPIRS</b>
Sustainable Communities Regional Planning Grant.....	<b>SCRPG</b>
Technical Advisory Committee.....	<b>TAC</b>
Transportation Infrastructure Finance and Innovation Act.....	<b>TIFIA</b>
Transportation Investments Generating Economic Recovery.....	<b>TIGER</b>
Transit Investments for Greenhouse Gas and Energy Reduction.....	<b>TIGGER</b>
Transportation Improvement Program.....	<b>TIP</b>
Transportation Management Area.....	<b>TMA</b>

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Transportation Oriented Development.....	<b>TOD</b>
Transportation Regional Improvement Projects and Survey.....	<b>TRIPS</b>
Unified Planning Work Program.....	<b>UPWP</b>
United States Code.....	<b>USC</b>
United States Department of Transportation.....	<b>USDOT</b>
(United States) Environmental Protection Agency.....	<b>EPA</b>
Urban Growth Boundary.....	<b>UGB</b>
Vehicle Miles Travelled.....	<b>VMT</b>



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