Air Quality
Conformity Determination

Central Lane MPO
FFY10-13 Metropolitan Transportation Improvement Program
And
2007-2031 Regional Transportation Plan

October, 2010
Air Quality Conformity Determination for Central Lane MPO

FFY10-13 Metropolitan Transportation Improvement Program And 2007-2031 Regional Transportation Plan

14 October, 2010

This report was financed in part by the Oregon Department of Transportation, the Federal Highway Administration, and the Federal Transit Administration.
Synopsis

An air quality conformity determination (AQCD) for a plan or program is, in effect, a finding that air quality standards will continue to be met. The report is required in areas that have previously been determined to have violated standards for at least one of six pollutants identified by USEPA. In this area, that pollutant is carbon monoxide.

Why are we producing this document?

An AQCD is required whenever the Regional Transportation Plan (RTP) or Metropolitan Transportation Improvement Program (MTIP) is updated, or, every 4 years, whichever comes first. Thus, a conformity determination must be adopted as part of the approval process for the pending FFY10-13 MTIP. US Department of Transportation (USDOT) must approve the conformity determination before the plans can become operative.

In 1994, the Eugene-Springfield area was redesignated by US Environmental Protection Agency (USEPA) as a maintenance area for carbon monoxide (CO). This meant that previously poor air quality had improved to the point where it now met the Clean Air Act National Ambient Air Quality Standards for CO. A 20-year monitoring period then began which ensures that no backsliding occurs and that the CO standard continues to be met. EPA had determined in 1994 that vehicle emissions were a primary source of CO levels along with home wood heating. Because of this finding, federal transportation plans and projects must be shown to not cause a violation of the CO air quality standard.

Who takes action?

The Metropolitan Policy Committee, as the policy board for the Federally-designated Metropolitan Planning Organization (MPO) in the Central Lane area, must formally adopt the findings described in this report. USDOT must then confer with USEPA and if the analysis is acceptable, they will issue a positive ruling. Once the ruling is made, the plan and program become effective.

What is the basis of the analysis?

The analysis uses computer models to project the amount of carbon monoxide expected to be produced by vehicles within the MPO planning area over the period of the plan or program.

Using the regional transportation model (developed and maintained by the MPO), and a USEPA emissions model, the amount of CO emitted by vehicles within the Eugene/Springfield urban area is computed at specific time intervals out to the end of the plan horizon (2031). The analysis takes into account land use patterns, population and employment numbers and distribution, trips taken by other modes of transport, vehicle age and type, congested speeds, environmental conditions, etc., as well as the existing transportation network and the transportation projects that are contained within the plans under consideration.

What are the results of the Air Quality Conformity Determination?

The air quality conformity determination shows that with the implementation of the FFY10-13 MTIP current federal air quality standards for carbon monoxide will continue to be met.

The results of the analysis favorably compare with the CO “budget” that was established by USEPA, showing that projected CO emissions out through 2031 are such that the health standard will not be compromised by the transportation projects included in the adopted 2031 RTP and the FFY10-13 MTIP. Measured CO levels in this area back up this analysis: they have been steadily decreasing and, in 2009, reached a level that is only 1/6 of the USEPA standard – a trend that is attributed to improvements in
both car and wood stove technologies, as well the implementation of this area's home wood heating advisory programs.

Other requirements of an air quality conformity, including interagency consultation and use of the latest planning assumptions, have also been met as described in this document. Opportunity must be provided for public comment on the AQCD. The public participation plan guides this effort, and was followed, as described within this document.
RESOLUTION 2010-07
ADOPTING THE AIR QUALITY CONFORMITY DETERMINATION
FOR THE FFY2010-2013 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP)
and the 2031 REGIONAL TRANSPORTATION PLAN

WHEREAS, the Lane Council of Governments Board has been designated by the State of Oregon as the official Metropolitan Planning Organization (MPO) for the Central Lane region; and

WHEREAS, the LCOG Board has delegated responsibility for MPO policy functions to the Metropolitan Policy Committee (MPC), a committee of officials from Eugene, Springfield, Coburg, Lane County, Lane Transit District, and ODOT; and

WHEREAS, the Eugene/Springfield area is currently designated as a maintenance area for carbon monoxide under the Clean Air Act; and

WHEREAS, the 2031 RTP and the FFY2010-2013 Metropolitan TIP must demonstrate air quality conformity according to the requirements of 40 CFR 93.100 et. seq.; and

WHEREAS, the Air Quality Conformity Determination is required to secure funding for transportation projects in the area; and

WHEREAS, the FFY2010-2013 Metropolitan TIP was approved under Resolution 2010-06 in expectation of the determination of air quality conformity,

NOW THEREFORE BE IT RESOLVED BY THE METROPOLITAN POLICY COMMITTEE OF THE CENTRAL LANE MPO:

THAT, the Air Quality Conformity Determination for the 2031 RTP and the FFY2010-2013 Metropolitan TIP has been prepared according to state and federal regulations and undertaken through interagency consultation with local, state and federal agencies;

THAT, the Air Quality Conformity Determination for the 2031 RTP and the FFY2010-2013 Metropolitan TIP has gone through a public and agency review period in accord with the requirements of the MPO’s Public Participation Plan and OAR-340-252-0060, and that the comments received have been adequately addressed;

THAT, the 2031 RTP and the FFY2010-2013 Metropolitan TIP has been determined to conform to the requirements related to regional air quality emissions contained in 40 CFR 93 (Determining Conformity of Federal Actions to State or Federal Implementation Plans);

THAT, the Metropolitan Policy Committee hereby adopts the Air Quality Conformity Determination for the 2031 RTP and the FFY2010-2013 MTIP, as set forth in Exhibits A and B, attached to and incorporated by reference to this resolution; and

THAT, the FFY2010-2013 Metropolitan Transportation Improvement Program is to be put into effect no later than the effective date of the FFY2010-2013 State Transportation Improvement Program.

ADOPTED BY THE METROPOLITAN POLICY COMMITTEE ON THIS 13th DAY OF JANUARY, 2011.

ATTEST:

[Signatures]

Hillary Wylie, Chair
Metropolitan Policy Committee

George Kloeppe1
Executive Director
Lane Council of Governments
November 17, 2010

In Reply Refer To:
90.230
724.421
724.422

Ms. Andrea G. Riner
Transportation Program Manager
Central Lane Metropolitan Planning Organization
859 Willamette Street, Suite 500
Eugene, OR 97401 - 2910

RE: USDOT Air Quality Conformity Determination
2010-2013 Metropolitan Transportation Improvement Program (MTIP)

Dear Ms. Riner:

Thank you for your continued quality work in cooperation with state and local government partners and other stakeholders in the Central Lane Metropolitan Planning Area in developing transportation plans and programs that meet community needs and improve quality of life to make the area a desired place to live, work and raise families.

The Eugene-Springfield urbanized area is currently designated maintenance for carbon monoxide (CO) and non-attainment for particulate matter of less than 10 microns (PM$_{10}$), however, the U.S. Environmental Protection Agency (EPA) in their letter October 3, 1994 concurred with the Lane Regional Air Pollution Authority (LRAPA) that the conformity determination is not required to satisfy the PM$_{10}$ criteria for regional emissions analysis. The U.S. Environmental Protection Agency (EPA) also published a Federal Register Notice approving the CO maintenance plan for Eugene-Springfield, effective February 4, 1994.

The Clean Air Act of 1990, as amended, requires that transportation plans, programs and projects cannot create new National Ambient Air Quality Standards (NAAQS) violations, increase the frequency of severity of existing NAAQS violations, or delay the attainment of NAAQS. The Metropolitan Planning Organization (MPO), the U.S. Department of Transportation (Federal Highway Administration (FHWA) and Federal Transit Administration (FTA)) are required to make a transportation conformity determination in non-attainment and maintenance areas as outlined in 40 CFR Part 93.104. Frequency of Conformity Determinations is outline in 23 CFR 450, the FHWA and FTA Metropolitan Planning Rule, as well as Oregon Administrative Rule (OAR) 340-252-0050. Transportation conformity ensures that federal funding and approval are
given for those transportation activities that are consistent with air quality goals, and do not worsen air quality or interfere with the purpose of the State Implementation Plan (SIP).

FHWA and FTA have completed review of the Central Lane Metropolitan Planning Organization (CLMPO) conformity determination for the 2010-2013 MTIP. Our USDOT determination is based upon the CLMPO conformity determination analysis and documentation submitted to our offices by CLMPO in their September 16, 2010 letter and attachments, and interagency consultation.

The CLMPO Policy Board adopted the 2010-2013 MTIP and associated air quality conformity determination on August 12, 2010 and October 14, 2010, through Resolutions 2010-06 and 2010-07. The conformity analysis provided by CLMPO indicates that air quality conformity requirements have been met. Based on our review we find that the 2010-2013 MTIP conforms the SIP in accordance with the Transportation Conformity Rule and the Oregon Conformity SIP. The federal conformity determination was made after consultation with EPA Region 10, pursuant to the Transportation Conformity Rule.

This letter constitutes the joint FHWA and FTA air quality conformity determination for the CLMPO 2010-2013 MTIP. If you have any questions regarding this conformity determination, please contact Satvinder Sandhu, FHWA, at (503) 587-4723 or Ned Conroy, FTA at (206) 220-4318.

Sincerely,

Phillip A. Ditzler
FHWA Division Administrator

R. F. Krochalis
FTA Regional Administrator

cc:
EPA (Wayne Elson)
Claudia Vaupel
FTA (Ned Conroy)
ODOT (Jane Lee, Region 2 Manager)
Lisa Nell, Region 2 interim Planning Manager
Steve Leep, Program and Funding Services Manager
Marino Orlando, Environmental Services
LRAPA (Ralph Johnston)
ODEQ (Dave Nordberg, Transportation Planning Coordinator)
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1.0 Overview

This document is prepared by the Central Lane Metropolitan Planning Organization (MPO) to demonstrate conformity of the FFY10-13 Metropolitan Transportation Improvement Program with the Clean Air Act as required by federal and state requirements 40 CFR 93.100 and OAR 340-252-0010.

Federal air quality conformity requirements are described in 40 CFR Part 93. Oregon’s Conformity SIP, adopted by the Oregon Environmental Quality Commission under OAR 340-200-0040 and approved by EPA, establishes rules and standards for determining air quality conformity of transportation plans, programs and projects within Oregon (specifically, OAR 340 Division 252). This conformity determination meets all Federal and State conformity regulations.

1.1 Organizational Structure

Lane Council of Governments (LCOG) serves as the MPO for central Lane County, Oregon, an area that includes the Eugene-Springfield metropolitan area. The Governor of Oregon designated LCOG as the MPO for this area in 1974.

As MPO, LCOG must ensure that the transportation planning process is conducted in accordance with federal transportation planning regulations (23 CFR 450). In addition, transportation planning must be consistent with the Statewide Transportation Planning Rule (TPR, OAR 660 Division 12), the Oregon Transportation Plan, and the Lane County, Eugene-Springfield and Coburg Transportation System Plans. Further, LCOG is responsible for preparation of the regional long range transportation plan (RTP) (23 CFR 450.322) and the metropolitan transportation improvement program (MTIP) (23 CFR 450.324), and for making corresponding conformity determinations. LCOG provides technical modeling of the transportation system, prepares financial analyses and project programming, provides opportunities for public involvement, and manages the analysis and process for ensuring compliance of the RTP and MTIP with the federal (40 CFR 93) and state (OAR 340-252) requirements of the Clean Air Act.

The decision-making body of the Central Lane MPO is the Metropolitan Policy Committee (MPC) which was created by Eugene, Springfield and Lane County for ensuring cooperation on issues of metro-wide importance. When considering transportation issues, MPC is currently comprised of elected officials from Lane County and the cities of Springfield, Eugene, and Coburg. Lane Transit District (LTD) and the Oregon Department of Transportation (ODOT) are also represented.

The Transportation Planning Committee (TPC) is comprised primarily of technical staff from the public works and planning departments of local agencies. TPC advises MPC on technical transportation issues, reviews all of the transportation documents produced by LCOG, and recommends plans and actions to MPC for review and adoption. TPC is specifically designated by OAR 340-252-0060(2)(b)(A)(i) as the standing committee for purposes of consultation required under the Oregon transportation conformity rules for air quality planning.
Interagency consultation must be conducted by the MPO with Federal Highways Administration (FHWA), Federal Transit Agency (FTA), US Environmental Protection Agency (EPA), Lane Regional Air Protection Agency (LRAPA), and Oregon Department of Transportation (ODOT).

1.2 Status of Air Pollutants

USEPA has established health-based National Ambient Air Quality Standards (NAAQS) for six air pollutants (carbon monoxide (CO), particulate matter (PM\textsubscript{10} and PM\textsubscript{2.5}), ozone (O\textsubscript{3}), sulfur dioxide (SO\textsubscript{2}), nitrogen dioxide (NO\textsubscript{2}) and lead (Pb)). Areas that fail to meet the standards are designated “non-attainment” and are required to develop plans to come into compliance with the standards. Once compliance is achieved, a maintenance plan is developed to ensure that air quality will not be compromised in the future. These plans are codified in the State Implementation Plan (SIP). The Eugene/Springfield area is currently classified as maintenance for CO and as non-attainment for particulate matter of less than 10 microns (PM\textsubscript{10}). USEPA has determined that transportation is a significant source for CO but not for PM\textsubscript{10}. Air quality for all other criteria pollutants meets the NAAQS and demonstration of conformity for these pollutants is not required. Thus, CO is the only criteria pollutant which must be addressed for regional transportation air quality conformity determinations.

LCOG, as the area’s MPO, was designated by the Governor in 1978 as the lead agency for air quality planning for transportation pollutants, and thus has responsibilities for CO air quality planning. Lane Regional Air Pollution Authority (LRAPA) is the lead agency for air quality planning for all other pollutants, and in particular, for PM\textsubscript{10}.

**Status of CO**

On February 4, 1994, the Eugene-Springfield region was officially redesignated by EPA as being in attainment of the NAAQS for CO. The region’s maintenance plan was approved by EPA as part of the same action that approved the region’s redesignation request (see the Federal Register Notice, 58 FR 64161 in Appendix F).

There has not been a violation of the CO NAAQS in the maintenance area since 1980. In 2006, USEPA approved the removal of one of the two CO monitoring sites within the AQMA – the remaining monitor is located in downtown Eugene at 11\textsuperscript{th} and Willamette Streets (Lane Community College Downtown Center). While monitored air quality data (Figure 1) show that CO levels are in compliance with the NAAQS and are steadily declining, demonstration of conformity relies upon compliance with the regulations in 40 CFR Part 93 and OAR Chapter 340 Division 252, to which this document responds.
Figure 1. Trends in carbon monoxide levels from 1976 through 2009 (all sources). The last violation of the National Ambient Air Quality Standards for 8-hour average CO concentration was in 1980. The last exceedence of the standard was in 1985.

**Status of PM$_{10}$**

On August 7, 1987, the Eugene-Springfield area was formally designated by USEPA as a non-attainment area for PM$_{10}$. Since 1987, the area has not recorded an exceedance of the 24-hour PM$_{10}$ standard. LRAPA has prepared a draft document that is currently under review by LRAPA and USEPA for a formal redesignation to attainment status for PM$_{10}$. It is anticipated that the LRAPA Board of Directions will take action on the application by July 2011 with subsequent action by the Oregon Environmental Quality Commission and USEPA. Redesignation by USEPA would then place the region into maintenance status for PM$_{10}$.

The Eugene-Springfield PM$_{10}$ State Implementation Program (SIP), approved by USEPA in 1994, established that emissions from motor vehicles are not a significant contributing factor to overall PM$_{10}$ emissions and concluded that control of emissions from motor vehicles is not necessary to demonstrate attainment of the PM$_{10}$ standards. As indicated by USEPA’s letter of October 3, 1994 (see Appendix A), the Agency concurred that transportation conformity determinations for PM$_{10}$ are not required. Therefore, **no additional analysis of PM$_{10}$ is presented here.**

Note that project level conformity for PM$_{10}$ is required for projects within the Eugene-Springfield urban growth boundary, per USEPA’s October 3, 1994 letter (Appendix A).
1.3 Status of Transportation Plans

The Central Lane MPO 2031 RTP was adopted on November 8, 2007, and was conformed on January 16, 2008 (see approval letter in Appendix A). It covers the time period 2007-2031. Since the initial adoption, one amendment has been approved: the addition of the Franklin Boulevard Multiway Boulevard Project to the Illustrative Projects list. The need for a new air quality conformity determination was not triggered by this action since it did not change the fiscally constrained project list. The planning horizon of the 2031 RTP remains in excess of the required 20 year planning period.

The Central Lane MPO FFY08-11 MTIP was adopted on August 9, 2007, and was conformed on January 16, 2008 (see approval letter in Appendix A). It has undergone a large number of amendments since adoption, none of which has triggered the need for a new air quality conformity determination.

Currently, all three local cities within the MPO area are updating their comprehensive land use plans and their local transportation system plans. As a first step in a multi-year work plan, the population forecasts were updated in the Eugene/Springfield Metro area land use plan (the “Metro Plan”) in December 2009. However, the land use designations, the urban growth boundaries and the land capacity are unchanged and are currently as used in the 2031 RTP model. The local transportation system plans (TSPs) also remain unchanged and consistent with the assumptions in the 2031 RTP model. The newly revised population forecast for 2031 is approximately 20,000 persons less than the forecast made in 2007 when the 2031 RTP was prepared. Despite this reduction, recent advisory buildable lands studies by the cities show a deficit of residential and commercial/industrial land in each of Springfield and Eugene by 2030 even assuming somewhat higher than historic residential density trends. Significant effort is being spent by the cities in visioning, public involvement and analyses to determine the way forward. New land use and transportation system plans are underway and are expected to be finalized within the next 2 years.

For this conformity determination, a decision was made to use the land use growth allocation of the 2031 RTP regional travel model. This model is based on the current land use plan designations, the current urban growth boundaries, and the higher population under which the current Eugene-Springfield Metro Plan and transportation system plan were originally prepared and adopted. This decision was based on the state of flux of the local plans, and the uncertainty as to how the boundaries and the plan designations of all three cities might change within this next year. This is judged to be a very conservative approach which will result in the calculation of a higher number of trips, vehicle miles traveled and more congestion than would be forecast if the lower population numbers were used with the currently adopted plans. That is, the worst case is being modeled and the emissions calculated from this analysis will be higher than would otherwise be computed. Demonstration that the air quality standards are not compromised under these more stringent conditions will assure that the TIP is in conformity.
1.4 Purpose of this Determination

The purpose of the update of the FFY10-13 MTIP is to align the MTIP with the cycle for the update of the FFY10-13 Oregon Statewide Transportation Improvement Program (STIP), to comply with SAFETEA-LU requirements, and to ensure that the MTIP covers at least four years.

Conformity must be demonstrated for the FFY10-13 MTIP before it can become the operative document for the MPO area. This conformity determination is being carried out in order to meet this requirement.
2.0 Demonstration of Conformity for CO

The December 6, 1993, Federal Register notice of Approval and Promulgation of Redesignation (58 FR 64161, Appendix F) recognizes the nature of the CO emissions problem in the Eugene-Springfield region to be within the Central Area Transportation Study (CATS) boundary. It reads:

“...Due to the nature of Eugene’s CO violation, (i.e., hot spots only) LRAPA’s emission inventory contains only on-road mobile and home wood heating emissions within the Central Area Transportation Study boundary. All point sources within the Eugene AQMA are located at a sufficient distance away as to not contribute significantly to the violations...”

In a letter dated October 3, 1994, attached in Appendix A, EPA approved and concurred that, for the purposes of conformity, regional emissions tests for CO apply only to projects within the CATS boundary of downtown Eugene (Maps 1 and 2). However, should the area not be able to demonstrate conformity, projects within the entire AQMA could be affected. Projects outside the CATS area but within the CO Air Quality Maintenance Area (Map 1) are subject to project-level hot spot analysis for CO.

This conformity determination utilizes the regional land use/transportation model that was prepared and calibrated for the 2031 RTP. This model utilizes the adopted comprehensive plans of Eugene/Springfield, Coburg and Lane County, the coordinated populations adopted February 2005 by the coordinating body, employment trends (issued October 2003 by Oregon Employment Department), travel and congestion estimates, as required by EPA conformity guidance. The base year of the model is 2004. The roadway network, transit service and costs are updated to reflect the current condition and the programmed projects within the MTIP period and the RTP horizon.

The CATS area was evaluated for CO emissions. The forecasts were reviewed by TPC, acting as the region’s Standing Committee on Air Quality, and also by air quality specialists from USDOT, USEPA, and ODOT, consistent with requirements for interagency consultation.

Map 3 shows the location of Central Lane MPO projects programmed in the FFY10-13 MTIP (see Appendix B for detailed project list). Maps 4, 5 and 6 show the financially constrained projects of the 2031 RTP (see Appendix C for the project lists).

2.1 General Requirements

40 CFR 93.104: Frequency of Conformity Determinations

This conformity determination conforms the Central Lane MPO FFY10-13 MTIP.

In accordance with 23 CFR 450.324(a), the FFY10-13 MTIP covers 4 years and is being developed on a timeline parallel with the scheduled approval of the FFY10-13 STIP in late 2010.
Map 2. Central Area Transportation Study (CATS) Area

as specified in the Carbon Monoxide State Implementation Plan (CO SIP) for Eugene-Springfield.

(Note: See Map 1 for the context of this area in relation to the entire MPO area)
### MTIP Projects on Map

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<th>MODE</th>
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<td>BIKE TRAVEL</td>
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<td>29th &amp; Willamette Intrsction Mod &amp; Pavement Pres</td>
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<td>PEDESTRIAN</td>
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<td>Franklin Blvd: I-5 bridge to McVay Springfield</td>
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<td>&quot;A&quot; Street Preservation and Pedestrian Enhancement</td>
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<td>Irving Rd at NW Expressway &amp; UP Railroad Crossing</td>
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<td>BIKE TRAVEL</td>
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<td>Fern Ridge Path - Chambers to Arthur Streets</td>
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<tr>
<td>66</td>
<td>Region 2 Illumination Replacements</td>
<td>ODOT</td>
<td>OPERATIONS</td>
</tr>
<tr>
<td>68</td>
<td>OR99: Enid Rd - Washington/Jefferson Eugene</td>
<td>ODOT</td>
<td>PRESERVATION</td>
</tr>
<tr>
<td>69</td>
<td>I-5@Beltline Interchange-Unit3Eugene/Springfield</td>
<td>ODOT</td>
<td>CAPACITY/MODERNIZATION</td>
</tr>
<tr>
<td>70</td>
<td>I-5: Willamette River - Martin Creek</td>
<td>ODOT</td>
<td>PRESERVATION</td>
</tr>
<tr>
<td>71</td>
<td>Enid Rd Rail Xng RX1386 Safety Project Eugene</td>
<td>ODOT</td>
<td>SAFETY</td>
</tr>
<tr>
<td>73</td>
<td>South Bank Path Extension: Spfld Viaduct Spfld</td>
<td>ODOT</td>
<td>BIKE TRAVEL</td>
</tr>
<tr>
<td>74</td>
<td>I-5@Beltline Interchange-Unit4Eugene/Springfield</td>
<td>ODOT</td>
<td>CAPACITY/MODERNIZATION</td>
</tr>
<tr>
<td>75</td>
<td>OR569: RIVER RD - COBURG RD DEVELOPMENT</td>
<td>ODOT</td>
<td>CAPACITY/MODERNIZATION</td>
</tr>
<tr>
<td>76</td>
<td>OR225: MCVAY HWY @ 30TH AVE EUGENE</td>
<td>ODOT</td>
<td>OPERATIONS</td>
</tr>
<tr>
<td>77</td>
<td>OR126: BELTLINE HWY @ GREENHILL RD EUGENE</td>
<td>ODOT</td>
<td>OPERATIONS</td>
</tr>
<tr>
<td>78</td>
<td>I-5: EUGENE - COTTAGE GROVE CABLE BARRIER</td>
<td>ODOT</td>
<td>SAFETY</td>
</tr>
<tr>
<td>81</td>
<td>I-5: Willamette River Bridge - Bundle 220</td>
<td>ODOT</td>
<td>BRIDGE</td>
</tr>
<tr>
<td>82</td>
<td>River Road Area, 23rd ST &amp; Coburg Area Overlays</td>
<td>Lane County</td>
<td>PRESERVATION</td>
</tr>
<tr>
<td>83</td>
<td>Univ of Oregon Transit Station Area Improvements</td>
<td>LTD</td>
<td>TRANSIT</td>
</tr>
<tr>
<td>84</td>
<td>OR99: Roosevelt - Garfield (Eugene)</td>
<td>ODOT</td>
<td>PRESERVATION</td>
</tr>
<tr>
<td>85</td>
<td>Gateway Park &amp; Ride</td>
<td>LTD</td>
<td>TRANSIT</td>
</tr>
</tbody>
</table>
Map 3. FFY10-13 MTIP - Programmed Capital Investment Actions

<insert Map 3>.

<insert Map 4>
Map 5. 2031 RTP Financially Constrained Bike/Pedestrian Projects.

<insert Map 5>
Map 6. 2031 RTP Financially Constrained Transit Projects.

<insert Map 6>
USDOT and the MPO must make a conformity determination on the MTIP no less frequently than every four years. The FFY08-11 MTIP and the 2031 RTP were conformed by USDOT on January 16, 2008 (see letters in Appendix A). Federal action to approve this conformity determination will begin the four year cycle required conformity update of the MTIP.

**OAR 340-252-0060 and 40 CFR 93.105 : Consultation**

Federal, State, and local interagency consultation are required before making conformity determinations. MPO public involvement procedures must also be followed, as specified in 40 CFR 93.105, 40 CFR 93.112, and 23 CFR Part 450.

The Central Lane MPO is the lead agency responsible for making the conformity determination for the MTIP, performing transportation modeling, regional emissions analyses, and preparing and distributing the draft and final documents.

TPC is designated under this regulation as the Standing Committee for the purposes of consultation on air quality. Members include representatives of the local jurisdictions of Eugene, Springfield, and Lane County; Lane Transit District; Lane Regional Air Pollution Authority; Oregon Department of Transportation; and FHWA. This committee currently meets monthly. The meetings are open to the public and are advertised by emails to interested parties, web postings, and media notice. A 30-day comment period is required for review of the draft conformity determination by TPC (OAR 340-252-0600(2)(b)(G)).

The MPO must also consult with FHWA, FTA, USEPA, LRAPA and ODOT during development of the conformity determination. Further, the MPO’s public participation plan requires that the public be provided with approximately 30 days in which to comment on the air quality conformity determination; a public hearing is also required. Notice must also be sent to a maintained list of interested parties by email and a web announcement posted.

A summary of the relevant public involvement and interagency consultation dates associated with this conformity determination is provided in Table 1.

No comments were received during the public comment period and there was no testimony provided at the hearing concerning this conformity.
Table 1. Summary Schedule of Public Outreach and Consultation

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 12, 2010</td>
<td>MPC approves FFY10-13 MTIP contingent upon demonstration of conformity.</td>
</tr>
<tr>
<td>August 26, 2010</td>
<td>TPC reviews regional significance of projects for analysis</td>
</tr>
<tr>
<td>September 1, 2010</td>
<td>Interagency consultation initiated with USEPA, USDOT, LRAPA, ODOT</td>
</tr>
<tr>
<td>September 3, 2010</td>
<td>Draft conformity determination provided to MPC members, TPC, staff and</td>
</tr>
<tr>
<td></td>
<td>interested parties by mail and web packet</td>
</tr>
<tr>
<td>September 3, 2010</td>
<td>Draft conformity determination document posted to MPO website for</td>
</tr>
<tr>
<td></td>
<td>public access (<a href="http://www.TheMPO.org">http://www.TheMPO.org</a>); notice of draft document</td>
</tr>
<tr>
<td></td>
<td>availability sent to list of interested parties by email</td>
</tr>
<tr>
<td>September 9, 2010</td>
<td>MPC holds public hearing on conformity determination</td>
</tr>
<tr>
<td>September 14, 2010</td>
<td>Interagency consultation with USEPA, USDOT, LRAPA, ODOT concerning</td>
</tr>
<tr>
<td></td>
<td>results of analysis and update on public involvement.</td>
</tr>
<tr>
<td>September 23, 2010</td>
<td>TPC reviews conformity determination and public input</td>
</tr>
<tr>
<td>October 4, 2010</td>
<td>Public comment period closes</td>
</tr>
<tr>
<td>October 14, 2010</td>
<td>MPC adopts conformity determination</td>
</tr>
<tr>
<td>Approximately</td>
<td>USDOT approves conformity determination of MTIP</td>
</tr>
<tr>
<td>November 15, 2010</td>
<td></td>
</tr>
</tbody>
</table>

As part of the ongoing development of the MTIP, the MPO, USDOT and TPC evaluate proposed amendments to the MTIP to determine whether a new conformity determination would be triggered by adoption of the amendment. The public and interested parties are notified through routine postings of these materials to the web as part of the packet materials for the TPC (http://www.thempo.org/committees/tpc.cfm) and policy board meetings (http://www.lcog.org/mpc.cfm).

**40 CFR 93.106: Content of Transportation Plans**

The Eugene-Springfield area was classified as in attainment of CO air quality standards in 1994. In accord with 40 CFR 93.106(c), the MPO has elected to continue its prior practice of not specifying intermediate horizon years: the 2031 RTP contains a single horizon year of 2031, the end of the forecast period of the RTP. This conformity determination is made through 2031, the last year of the RTP’s forecast period.

Policies and planning and program actions are described within the 2031 RTP as are future highway, transit and bike/pedestrian projects. These project lists are included in this conformity determination in Appendix C. The demographic and employment factors influencing expected transportation demand, including land use forecasts and transit operating policies are quantified in this document’s response to 40 CFR 93.110, below. The highway and transit systems are described so that intersections with existing regionally significant facilities are included in the transportation model. Project scope and location and operating conditions are sufficient to model route options, congested travel times, and transit ridership.
Projects are either identified in the RTP or are consistent with the RTP policies, goals and objectives. In particular, the FFY10-13 MTIP is consistent with the 2031 RTP.

40 CFR 93.108: Fiscal Constraint for Transportation Plans and TIPs

Table 2 provides a summary of the FFY10-13 MTIP financial analyses and demonstrates financial constraint. Appendices B and C provide tabular listings of all projects included in the FFY10-13 MTIP. The 2031 RTP is fiscally constrained through FFY2031, the horizon year. See Chapter 3, Page 64 of the 2031 RTP for the fiscal constraint table (http://www.thempo.org/prog_proj/rtp.cfm)

Table 2: Financial Constraint Assessment
(Dollars shown are in year of expenditure)

<table>
<thead>
<tr>
<th>Description</th>
<th>FFY10-13 MTIP ($)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFY10</td>
<td>$95,496,297</td>
<td>$264,293,117</td>
</tr>
<tr>
<td>FFY11</td>
<td>$57,130,291</td>
<td>$264,293,117</td>
</tr>
<tr>
<td>FFY12</td>
<td>$85,879,671</td>
<td>$264,293,117</td>
</tr>
<tr>
<td>FFY13</td>
<td>$25,786,858</td>
<td>$264,293,117</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difference Between Revenues &amp; Expenditures</th>
<th>FFY10-13 MTIP ($)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Statement of Financial Constraint: Each project programmed in the FFY10-13 MTIP has an identified funding source or combination of sources reasonably expected to be available over the planning period. Funds for FFY10 and FFY11 projects are available or committed.

2.2 Criteria and Procedures for Determining Conformity

40 CFR 93.109: General

In order to demonstrate conformity of a MTIP, specific criteria listed 40 CFR 93.110 through 93.119 must be addressed. These criteria include using the latest planning assumptions (40 CFR 93.110) and the latest emissions model (40 CFR 93.111), and undertaking interagency consultation and public involvement (40 CFR 93.112). Responses to the criteria are listed below. Since the Eugene-Springfield area has been designated by USEPA as a CO maintenance area and the CO SIP was approved by USEPA in 1994, the conformity test applied is that of the motor vehicle budget test, 40 CFR 93.118.

Hot spot analyses for CO and PM10 are required of project sponsors as described in 40 CFR 93.116(a).
40 CFR 93.110: Latest Planning Assumptions

The conformity determination must be based upon the most recent planning assumptions in force at the time the conformity determination is made by the MPO and USDOT.

Key assumptions are based on current and forecasted population and employment for the 666 transportation analysis zones (TAZs) over which the transportation network is defined (Map 1). The TAZs cover the area within the urban growth boundaries of Eugene, Springfield and Coburg, and a small portion of rural Lane County. Table 3 summarizes the population and employment for the calibrated base year of the model, 2004, and the horizon year of 2031, the period over which the land use model was used to allocate growth. Also shown are the estimated vehicle miles traveled (VMT) for these years.

Table 3: Population and Covered Employment within TMA Transportation Analysis Zones.
Estimates Vehicle Miles Traveled (VMT) for the TMA and the CATS area are also shown.

<table>
<thead>
<tr>
<th>Analysis Year</th>
<th>Population¹</th>
<th>Employment</th>
<th>Daily Vehicle Miles Traveled²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>TMA</td>
</tr>
<tr>
<td>2004</td>
<td>238,600</td>
<td>118,200</td>
<td>4,830,100</td>
</tr>
<tr>
<td>2031</td>
<td>330,300</td>
<td>173,200</td>
<td>7,220,200</td>
</tr>
</tbody>
</table>

¹ Includes group quarters; ² All trips including commercial vehicles, through trips, external to internal, internal to external, and internal to internal trips.

Population
This conformity analysis is consistent with the coordinated population projection for the areas within the urban growth boundaries of Eugene/Springfield and Coburg as of the completion of the 2031 RTP model. These projections were adopted on 24 February 2005 by the coordinating body, and were unchanged as of October 2007 when the 2031 RTP model was completed. They were prepared using the 2030 county population projection received in May 2004 from the State Office of Economic Analysis, the 2004 county population estimated by the Population Research Center at Portland State University, and for each city, Census 2000 data, historic population trends, comprehensive plans and transportation system plans. The estimated 2031 urban population was obtained by linearly extrapolating one year beyond the 2030 coordinated projections within the urban growth boundaries of Eugene/Springfield and Coburg.

The projections of the population in the rural portions of the TAZs outside the urban growth boundaries were based on the existing dwelling units and the small number of vacant buildable parcels under current Lane County rural development policies, present in 2004 within the model TAZ area. The growth analysis did not take into account the possibility of the development of large rural subdivisions due to Measure 37, an Oregon
property rights ballot measure, nor the reduced impact of Measure 49 which was passed in November 2007. Growth in these rural areas is a minor part of the MPO population.

Employment
The 2004 employment numbers in the base year model are based on data received from the Oregon Employment Department in February 2005. These data were geocoded to a location and sorted from very specific NAICs codes into the broader categories used in the model. Employment projections were based on 2004-2014 county-level, employment sector forecasts received from the Oregon Employment Department in July 2005, and the 1980 to 2004 trend of employment in the Eugene/Springfield market area as a proportion of the Lane County covered employment. The employment growth assumptions from the Coburg Urbanization Study of April 2004 were used for the Coburg UGB. Employment by sector in the rural areas of the TAZs was assumed to be unchanged.

Population and employment allocations were made to transportation analysis zones using the land use allocation model for 2031. Allocations reflect existing local development, the availability of vacant, buildable land by current plan designation, redevelopment and infill plans for mixed-use nodes, and known projects currently in the planning process.

Land Use
The adopted 2015 Eugene-Springfield Metropolitan Area General Plan was used to describe future land use within the Eugene-Springfield urban growth boundary. Metropolitan housing and employment growth was restricted to within the current Eugene-Springfield urban growth boundary. Although the densities for the new modeled residential development are higher than current averages, they are still within allowable Metro Plan densities specific to each type of residential use, and thus no expansion of the Eugene-Springfield UGB was assumed. The Coburg Urbanization Study, approved by the Coburg City Council in April 2004, was used to guide growth in the vicinity of Coburg. Land use designations in both these plans were assumed to be static through 2031.

Eugene and Springfield staff reviewed planned nodal development areas within each city during the development of the 2031 RTP and indicated the subset which are expected to be fully functional by 2031. Mixed use centers 7B, 7C, 8A and 9C have since been adopted. The RTP policies mirror those of the local Eugene-Springfield TSP (“TransPlan”) for which the State Transportation Planning Rule (OAR 660-012-0060(5)(a)) permits the reduction of vehicle trips by 10% in mixed use nodal areas when estimating VMT. However, this assumption was NOT made in the analysis for this conformity determination. Thus, VMT estimated here and the corresponding CO emissions are higher than those numbers that would be expected if all nodes were fully developed by 2031. Map 7 shows existing and planned nodal areas.

Transit
Non-auto travel is estimated by use of a mode choice model. This model, which includes transit assumptions and policies, was recalibrated for ridership in 2009 following an intensive on-board survey of BRT riders coupled with analysis of Automated Passenger Count data. As part of this recalibration a Bus Rapid Transit ‘premium’ mode specific bias constant was developed.
Transit operating policies are assumed to remain unchanged from the policies described in the 2031 RTP. Transit operations in 2008 were those defined in the 2008 published schedule. For the 2018 and 2028 scenarios, the 2010 schedule that will be implemented in Spring 2011 was assumed. Thus, service hours are not assumed to expand except as needed to overcome slower speeds due to future congestion. This reflects the operational difficulties that transit agencies are facing in maintaining service without new operating resources. For 2031, BRT and BusPlus (also known as Progressive Corridor or BRT-Lite) projects are assumed to be implemented with new feeder and circulator bus routes. See Map 6 for the BRT and BusPlus route details.

Full build out of the BRT system is assumed by 2031. The Franklin BRT (Eugene CBD-Springfield CBD along the Franklin Blvd corridor) and Gateway BRT (Pioneer Parkway corridor) are included in the model according to construction details with separate guideways and intersection/signal priority. Unique travel time functions, derived from LTD studies are used for these conditions. Speeds are dependent on the road segment: fixed guideway provides free flow speeds; mixed traffic travel encounters congested speeds. Routes are modeled with specific station locations, shorter dwell time of 0.3 minutes/stop, and service running at 10 minute frequencies. No special transfer conditions are assumed for BRT: the average wait time is half the combined headway services, as for local bus. The premium mode specific constant is used in the mode choice nest.

The remaining BRT corridors are assumed to provide premium service in 2031: Main St, W.11th, Highway 99 and River Road. These are modeled in a way that reflects intersection priority treatments similar to the implemented BRT routes but the routes are assumed to operate in mixed traffic. Dwell time is assumed to be 0.6 mins/mile (in lieu of asserting the station locations at this time), and headways are 10 minutes.

The introduction of the progressive enhancement of transit services (“Bus Plus”) is expected but the timing of the service is unknown. Hence, the five routes assumed in the 2031 RTP are only included in the 2031 network. These routes are: W. 18th, Pearl St/Lane Community College, Coburg Rd/Chad Drive, Coburg Road/Harlow, and Centennial Blvd (see Map 6). This service is assumed to have signal priority; dwell time of 0.75 mins/mile; and headways that range from 10 to 20 minutes. The mode specific bias constant for these routes is the same as for local bus.

Local buses are assumed to continue to operate in mixed traffic. Dwell time is assumed to be 1 min/mile; headways for most routes are more than 10 minutes and are based on the published schedules. Average wait time is half the combined headway services.
Map 7. Nodal Development Areas within the TMA.
Nodes are identified as to whether they are assumed fully functional by 2031
Basic fares are assumed to remain constant with inflation over the period 2004 to 2031. The initial “free-fare” policy on Franklin EmX expired in 2009.

In general, the LTD employer group pass program has experienced dramatic growth over recent years but has seen a dip during the current recession. In 2007, the program covered about 12% of all employees. It is assumed to regain enrollment and cover about 24% of all employees in 2031 with all major employers (those with more than 150 current employees) assumed to provide group passes to their workers, resulting in a slight reduction in the average fare in travel zones containing their workplaces. While the current free pass program for students in grades 6-12 continued in FY2009-10 and is fundable on an annual basis as part of the Oregon Department of Energy’s Business Energy Tax Credit program, it was not assumed in the future forecasts for this conformity determination. This program adds an additional 27,000 students to the group pass program.

In other zones, fares are assumed to remain constant with inflation. LTD monthly pass prices increased in 2010; cash fare prices last increased from $1.25 (set in 2002) to $1.50 in 2008. Perceived parking costs (actual costs adjusted by employer payments) in downtown Eugene are assumed to continue to outstrip inflation based on the observed increase from 1995 to 2004 of 50% above inflation. Parking costs (which vary by TAZ based on the proportion of free spaces to paid spaces) are assumed to undergo an additional 60% increase between 2002 and 2031. The paid-parking area of the downtown/university district is assumed to expand into the adjoining courthouse district.

For this conformity determination, automobile operating costs are assumed to remain constant with inflation at 12.5 cents per mile (in 1995 $). Inflation-adjusted data from AAA for 2002 through 2009 show that this cost has varied from a low of 10.0 cents/mile to a high of 12.5 cents/mile (1995 $). (Note that for a fleet fuel economy of 35 mpg in 2031 and an inflation rate of 3.1% per annum from 2009 to 2031, a cost of 12.5 cents/mile in 1995 $ equates to $8.56 per gallon in 2031 $.) If, in fact, fuel prices rise at a rate that is not offset by increases in fuel economy, and transit costs do not increase at the same rate, it is expected that auto travel will be reduced and transit ridership will increase. Thus, in this case, the auto emissions calculated for this conformity will be too high.

Transit linked trips are forecast to increase from 32,200 per average weekday (school-in-session) in 2008 to 46,900/day in 2031, an average growth rate of 1.7% per year. Average weekday (school-in-session) boardings for 2008 were about 39,150. The service boundary was adjusted in 2008, removing service along one rural route. An evaluation of bus service to the City of Florence (outside the MPO area) has been discussed and may lead to the addition of a new area within the LTD boundary at some unknown time in the future.

LTD reports that, between 2004 and 2008, revenue hours increased by 14% with an increase in boardings of 38% due to EmX initiation, the introduction of the school group pass program, and higher gas prices. Bus operations are primarily funded by a payroll...
tax within the LTD district, and the current downturn has forced a service reduction that is expected to persist through the next couple of years. As happened following the prior economic downtown of 2001-2004, it is expected that a stabilizing of the economy will also stabilize service. For this conformity determination, only a minor increase in service hours was assumed to compensate for more congested travel. This is considered to be a very conservative assumption based on the expressed priorities of the region to reduce auto VMT.

Tolls
There are no road and bridge tolls in the Eugene-Springfield Metro Area and none are expected in the future.

Transportation Control Measures
No transportation control measures (TCMs) are required by the Eugene-Springfield CO SIP.

40 CFR 93.111: Latest Emissions Model

The latest emission estimation model available was used in the computation of CO emission factors. Table 4 shows the parameter values that were used in the emissions modeling.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Model Version</td>
<td>MOBILE 6.2.03</td>
<td>USEPA</td>
</tr>
<tr>
<td>Pollutants Reported</td>
<td>CO</td>
<td>Oregon SIP</td>
</tr>
<tr>
<td>Analysis Years</td>
<td>2008, 2018, 2028, 2031</td>
<td>USEPA regulations</td>
</tr>
<tr>
<td>Emission Month</td>
<td>January</td>
<td>LRAPA</td>
</tr>
<tr>
<td>Time Period</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Vehicle Class</td>
<td>2008 Lane County registration data</td>
<td>Oregon Dept. of Environmental Quality</td>
</tr>
<tr>
<td>Speeds – freeways, arterials</td>
<td>1 to 65 mph</td>
<td></td>
</tr>
<tr>
<td>Speeds – local roads, ramps</td>
<td>Not applicable</td>
<td>MOBILE 6 assigns single speed</td>
</tr>
<tr>
<td>Min/Max temperatures</td>
<td>33.6/46.2 dgF</td>
<td>LRAPA</td>
</tr>
<tr>
<td>Fuel Reid Vapor Pressure</td>
<td>15 psi</td>
<td>LRAPA</td>
</tr>
<tr>
<td>Absolute humidity</td>
<td>26.9 grains/lb</td>
<td>LRAPA</td>
</tr>
</tbody>
</table>

In April 2010, all gasoline sold in Lane County was mandated to be 10% ethanol, and an RVP waiver was obtained. This rule is still in force. However, oxygenated fuels were not modeled in MOBILE6. Thus, it is expected that the emission rates are in fact higher than would be computed with this fuel type, leading to an overestimate of auto emissions. LCOG staff used the above local values to run MOBILE 6 to compute air quality emissions per VMT by speed range and by facility type. These CO emission factors are
listed in Appendix D-1 with sample input and output files shown in Appendices D-2 and D-3, respectively.

40 CFR 93.112: Consultation

See responses to 40 CFR 93.105.

40 CFR 93.113: Timely Implementation of TCMs

There are no TCM requirements in the CO SIP.

40 CFR 93.114: Currently conforming transportation plan and TIP

The current 2031 RTP was conformed on 16 January 2008 (see USDOT letter included in Appendix A). The current FFY08-11 MTIP was conformed on the same day (see Appendix A). Approval of this conformity determination will establish the FFY10-13 MTIP as the currently conforming TIP. All continuing capital projects from the FFY08-11 MTIP which have not yet begun construction are included in the FFY10-13 MTIP.

40 CFR 93.115: Projects from a Plan and TIP

The projects in the FFY10-13 MTIP are either included in the 2031 RTP, or are consistent with the policies and purpose of the plan and will not interfere with other projects specifically within the plan. Appendix B identifies, for each project in the MTIP, the project ID from the RTP or the consistent policy. Typically, MTIP projects that are not explicitly listed in the RTP are pavement rehabilitation/resurfacing projects, safety projects, or exempt planning projects.

As projects of design concept and scope suitable for inclusion in the regional transportation model are amended into the RTP and/or MTIP, they are also included in the emissions modeling. The amendment approval process in place in the MPO ensures consultation between USDOT and the MPO and is suitable for identifying whether a new or altered project can be considered to be conformed or not.
40 CFR 93.118: Motor Vehicle Emissions Budget

Since the Eugene-Springfield area has an approved CO SIP and is currently a maintenance area for CO, the motor vehicle budget test must be satisfied to demonstrate conformity. On May 5, 2004, EPA verbally and by email (see Appendix A) confirmed that the only motor vehicle budget specified in the CO SIP is that of 6,021 tons/yr for 1990. No specific budget was established in the SIP for the last year of the maintenance plan.

Consistency with the emissions budget must be demonstrated for the last year of the transportation plan’s forecast period and for any intermediate years as necessary so that the demonstrations of consistency are no more than 10 years apart. Four analysis years were chosen for the conformity determination:

- 2008, 2018 and 2028 (intermediate years to ensure analyses are at least as frequent as 10 years),
- 2031 (the last year of the transportation plan’s forecast period)

The entire travel network was analyzed, and emissions computed for travel within the CATS area. All regionally significant projects contained in the RTP and MTIP and all other known regionally significant highway and transit projects expected in the maintenance are included in the analysis based on the current description of their scope.

The regional emissions analysis meets the requirements of 40 CFR 93.122, as described below in Section 2.3.

To demonstrate conformity, emissions must be less than or equal to the emissions budget established for the last year of the maintenance plan (no such budget exists in the Eugene-Springfield SIP), and for the years in which a motor vehicle emissions budget is established (1990). Thus, emissions for all analysis years in this conformity determination must be less than or equal to the maintenance plan’s budget of 6,021 tons/yr for the CATS area.
Table 5 presents the results of the regional emissions analysis. Projected emissions are shown to be less than 6,021 tons/yr, and thus the FFY10-13 MTIP is shown to be consistent with the motor vehicle budget in the CO SIP and to meet the budget test.

**Table 5: Carbon Monoxide Emissions Analysis within the CATS boundary**

<table>
<thead>
<tr>
<th>Analysis Year</th>
<th>Tons/Year of Carbon Monoxide</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SIP motor vehicle budget</td>
</tr>
<tr>
<td></td>
<td>All facilities</td>
</tr>
<tr>
<td>1990</td>
<td>6,021*</td>
</tr>
<tr>
<td>2004**</td>
<td>2,198</td>
</tr>
<tr>
<td>2008</td>
<td>1,634</td>
</tr>
<tr>
<td>2018</td>
<td>1,160</td>
</tr>
<tr>
<td>2028</td>
<td>1,056</td>
</tr>
<tr>
<td>2031</td>
<td>1,059</td>
</tr>
</tbody>
</table>

** Base year; provided for reference only.

**2.3 Regional Emissions Analysis & Methodology**

**40 CFR 93.122: Procedures for Determining Regional Transportation-Related Emissions**

VMT estimates  
The transportation model is a four-step model of trip generation, trip distribution, mode choice and vehicle assignment. The traffic forecasting software package, EMME/2 (Version 9.6), was used to determine traffic estimates and forecasts for the entire TMA region consistent with the estimated trips within the TAZs for each analysis year. Specific data obtained from the model included speed, volumes and vehicle miles traveled as well as facility types. A link-by-link analysis was carried out. Since roadway capacity and speed are included in the model, the effects of congestion are also included.

The model base year is 2004, the year for which land use data, population and employment data, and traffic counts at the extended cordon stations were all available. See also previous section 40 CFR 93.110.
Transportation Networks
All regionally significant projects expected in the maintenance area were included in the regional analysis as required by the conformity test. These included all FHWA and FTA-funded capital projects proposed in the fiscally constrained transportation plan and the MTIP. The tables in Appendices B and C list the fiscally constrained projects considered in this conformity determination. Maps 3-6 show their location within the region. Criteria for projects required to be included in the regional emissions analysis were derived from 40 CFR 93.126 and 40 CFR 93.127 (Appendix E).

As a usual and continuing practice, all new facilities and all road projects that affect the capacity or speed of existing facilities are included for the appropriate year in the transportation networks developed and maintained at LCOG. Regionally significant projects outside the CATS area are thus included in this analysis. The 2008 network was comprised of the 2004 network plus road improvements completed through mid-2008. The 2018 network was the 2008 network with projects either completed or currently underway with completion dates no later than 2018, and all projects from the FFY10-13 MTIP which are expected to be in operation by 2018. The 2028 network is identical to the 2018 network as no intermediate horizon year is specified for the RTP and all projects within the MTIP are expected to be complete by 2018. All roadway and transit projects from the RTP that affected capacity or speed of travel were included in the fiscally constrained 2031 network.

LTD supplied LCOG with future year transit networks for 2031 which included BRT as well as other conventional transit routes. It is assumed that by 2031, two BRT corridors will be fully developed with separate guideways and priority treatment at intersections. The remaining four BRT corridors are likely to have separate guideways but at this time the design is not known and so these routes are implemented in the model with intersection priority treatment, but no guideways. Total dwell time in BRT corridors will be less than non-BRT routes due to automated fare collection, boarding through multiple doors, and limited stops. These effects influence travel demand, and are thus included through the mode choice component of the transportation system model.

Off-network roadways within the TMA consist of local roads that are not explicitly included in the transportation network as links. Interzonal travel is included by computation of VMT on centroid connectors. Intrazonal distances used in VMT calculations are assumed to be 7/10ths of the distance to the nearest neighboring zone. All centroid connector and intrazonal travel is assumed to take place on local streets, and thus MOBILE 6 emissions factors for local streets are used in computing the emissions effects of travel on these streets. Through trips and trips having an origin or destination outside the TMA are represented within the model based on a cordon origin and destination survey and a modeled growth rate. Thus, all local and through trips that traverse the CATS area are included in the VMT and emissions summaries.

For each analysis year, travel demand was estimated and trips were distributed across the road network based on land use and transportation changes. The link speeds within the
transportation network model reflect travel under congested conditions and are a function of both travel and capacity limitations of the road system for each analysis year.

**Total Emissions**
In order to compute CO emissions per link MOBILE 6 emissions factors were applied to the estimates of vehicle miles traveled (VMT) by facility type by speed for each analysis year. In addition to local roads explicitly included in the travel network, travel on local roads that are not represented by links in the network was also included through the application of emission factors to interzonal VMT (through centroid connectors), and intrazonal VMT (see “Transportation networks” above). CO emissions on the facilities within the CATS area were then totaled to estimate the CATS area-wide CO emissions in tons/year for each analysis year. The results are listed in Table 5.

Note that since emission factors pertaining to “winter” (January) conditions are applied to VMT over the entire year and the lower emission factors of the summer season are not used, the computed yearly CO load is a conservative estimate.

**Credits**
No emissions reduction credits are included in the analysis.

**Ambient temperatures**
The ambient temperatures used for the regional emissions analysis are consistent with those used to establish the emissions budget in the CO SIP.

**40 CFR 93.126: Exempt Projects**

Certain air quality projects within the financially constrained plan are exempt from the requirement that a conformity determination be made (see 40 CFR 93.126 Tables 2 and 3, Appendix E). These projects are defined by EPA as projects which will not affect the outcome of any area-wide air quality analysis. Although these projects are exempt from emissions analysis, the Central Lane MPO system-wide traffic-forecasting model reflects all capital investment projects, including those designated as exempt, to the extent possible (e.g. in approach capacities and link speeds) in the assignment of traffic and calculation of VMT.

Projects designated as exempt from the requirement to determine conformity included planning and technical studies including bike facilities; pedestrian facilities, construction of passenger shelters, purchase of operating equipment, and planning projects which do not lead directly to construction. Interagency consultation clarified that urban standards projects are also exempt based on the implementation of safety improvements, widening narrow pavements (no additional travel lanes), pavement rehabilitation, and landscaping.

The lists of projects in Appendices B and C were reviewed during interagency consultation. Exempt projects are annotated as to the reason for this classification.
**40 CFR 93.127: Projects Exempt from Regional Emissions Analyses**

While certain highway and transit projects are exempt from regional emissions analysis requirements (Appendix E), it is LCOG-practice that the system-wide traffic-forecasting model reflect these projects to the extent possible (e.g. in approach capacities and link speeds) in the assignment of traffic and calculation of VMT.

The lists of projects in Appendices B and C were reviewed during interagency consultation. Exempt projects are annotated as to the reason for this classification.

**40 CFR 93.128: Traffic Signal Synchronization Projects**

The status of all completed projects has been included in the emissions analysis: signal progressions have been taken into consideration by developing intersection approach capacities on the links. Regionally significant signal synchronization projects operating on a 24 hr basis are located on:

- 6th Avenue/7th Avenue couplet
- Oak St (between 19th and 7th Avenues)
- Main/South A St couplet
3.0 Summary

As shown above in response to 40 CFR 93.118, the FFY10-13 MTIP is shown to be consistent with the motor vehicle budget in the CO SIP and to meet the budget test.

As shown in Figure 1, CO levels in the maintenance area have continued to decline since 1990. In 2009, the CO design value for the AQMA fell to 1.7 ppm. The observed trends in the data and the modeled results thus engender confidence that the policies and projects in the RTP and MTIP will not endanger the achievement of the NAAQS for CO in the Eugene-Springfield maintenance area.

All requirements for making an air quality conformity determination have been successfully met, as documented within this report.