



CENTRAL LANE METROPOLITAN PLANNING ORGANIZATION

AIR QUALITY CONFORMITY DETERMINATION

*for the Regional Transportation Plan
and the Metropolitan Transportation
Improvement Program FY 2004-2006*

JUNE 2004

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**Adopted by
METROPOLITAN POLICY COMMITTEE
June 10, 2004**



CENTRAL LANE METROPOLITAN PLANNING ORGANIZATION

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1.0 Overview

This document is prepared in response to federal and state requirements to demonstrate conformity of the Eugene-Springfield amended Regional Transportation Plan and the amended FY04-06 Metropolitan Transportation Improvement Program with the Clean Air Act.

Federal air quality conformity requirements are described in 40 CFR Part 93. On March 3, 1995 the Oregon Environmental Quality Commission (EQC) adopted new rules regarding the air quality conformity of transportation plans, programs and projects to Federal and State implementation plans (OAR 340 Division 252). These rules establish criteria and procedures for determining conformity. By meeting the EPA-approved Oregon Conformity SIP standards for purposes of demonstrating air quality conformity, the federal standards are also met.

1.1 Organizational Structure

Lane Council of Governments (LCOG) serves as the Metropolitan Planning Organization (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 comply with the Statewide Transportation Planning Rule (TPR, OAR 660 Division 12), the Oregon Transportation Plan, and the Eugene-Springfield Metropolitan Area General Plan. As MPO, 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. In particular, 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 comprised of elected officials from Springfield, Eugene, Lane County, Coburg, Lane Transit District (LTD) and the Oregon Department of Transportation (ODOT).

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.

1.2 Status of Air Pollutants

The Environmental Protection Agency (EPA) has established health-based National Ambient Air Quality Standards (NAAQS) for six air pollutants (carbon monoxide (CO), particulate matter (PM₁₀ and PM_{2.5}), ozone (O₃), sulphur dioxide (SO₂), nitrogen dioxide (NO₂) 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 Central Lane MPO area is currently classified as maintenance for CO and as non-attainment for particulate matter of less than 10 microns (PM₁₀). Air quality for all other criteria pollutants meets the NAAQS and demonstration of conformity for these pollutants is not required.

Status of CO

On February 4, 1994, the Eugene-Springfield region reached a significant milestone in its transportation planning efforts. Effective on that date, the area 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 H). As the MPO for the region, LCOG has air quality responsibilities for transportation conformity of CO.

There has not been a violation of the CO NAAQS in the maintenance area since 1980 (Figure 1).

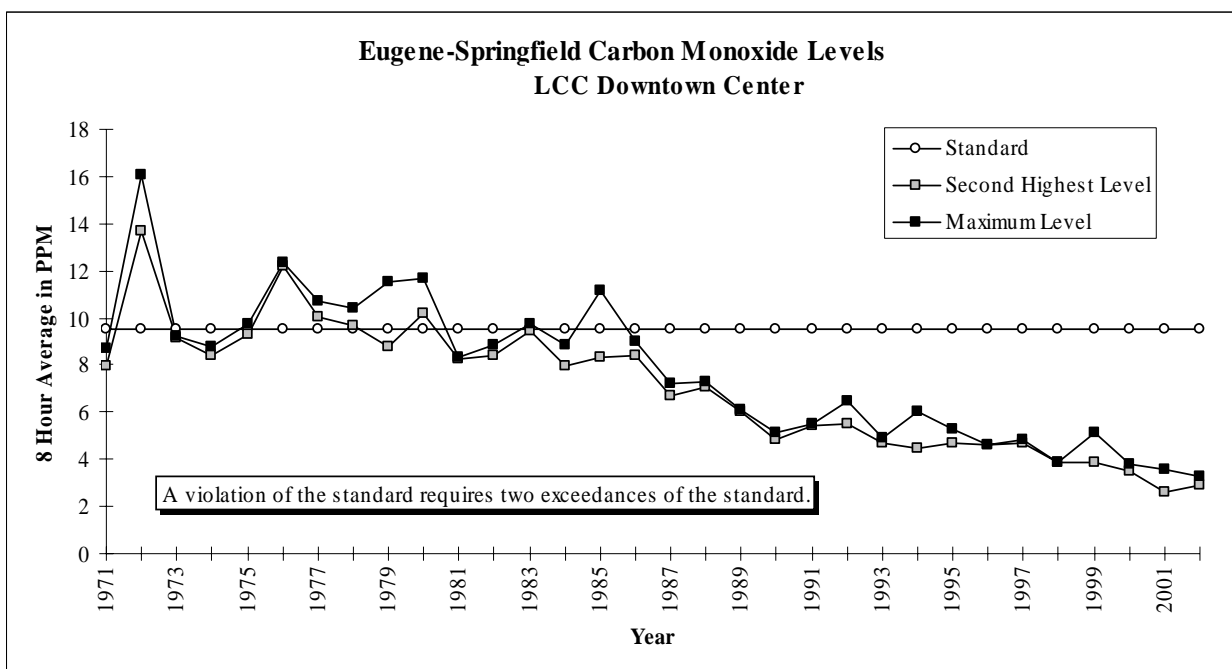


Figure 1. Trends in carbon monoxide levels from 1971 through 2002. The last violation of the National Ambient Air Quality Standards for 8-hour average CO concentration was in 1980. The last exceedence of the standard was in 1985.

While these data 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 equivalently, OAR Chapter 340 Division 252, to which this document responds.

Status of PM₁₀

On August 7, 1987, the Eugene-Springfield region was designated as a non-attainment area for PM₁₀. The Lane Regional Air Pollution Authority (LRAPA) has the responsibility for air quality planning within the region, and is in the process of applying to the federal Environmental Protection Agency for a redesignation to attainment status for PM₁₀. The formal application to Oregon Department of Environmental Quality, the Oregon Environmental Quality Commission, and, finally, to EPA, is expected to be made in March, 2005. Redesignation by EPA would then place the region into a maintenance period for PM₁₀.

The Eugene-Springfield PM₁₀ State Implementation Program (SIP), approved by EPA in 1994, established that emissions from motor vehicles are not a significant contributing factor to overall PM₁₀ emissions and concluded that control of emissions from motor vehicles is not necessary to demonstrate attainment with the PM₁₀ standards. As indicated by EPA's letter of October 3, 1994 (see Appendix A), the Agency concurred that transportation conformity determinations for PM₁₀ are not required. Therefore, **no additional analysis of PM₁₀ is presented here.**

1.3 Purpose of this Determination

As required by federal regulations (40 CFR 93 Subpart A), new plans or changes to an RTP or TIP must be shown to demonstrate conformity with Clean Air Act. At the MPC meeting on April 8, 2004, a proposal to amend the Eugene Courthouse District transportation improvements into the Central Lane MPO Regional Transportation Plan (RTP) was considered and released for public review. At the MPC meeting on May 13, 2004, a proposal to amend the FY04-06 MTIP by inclusion of a State-funded EIS project to study replacement of the Willamette River bridge at McKenzie Highway was considered and released for public review. The FY04-06 MTIP fulfills the requirement under 23 CFR 450.324(b) to update the MTIP at least as frequently as every two years. Both amendments are scheduled for adoption by MPC on June 10, 2004. Conformity determination is required for both the RTP and the MTIP.

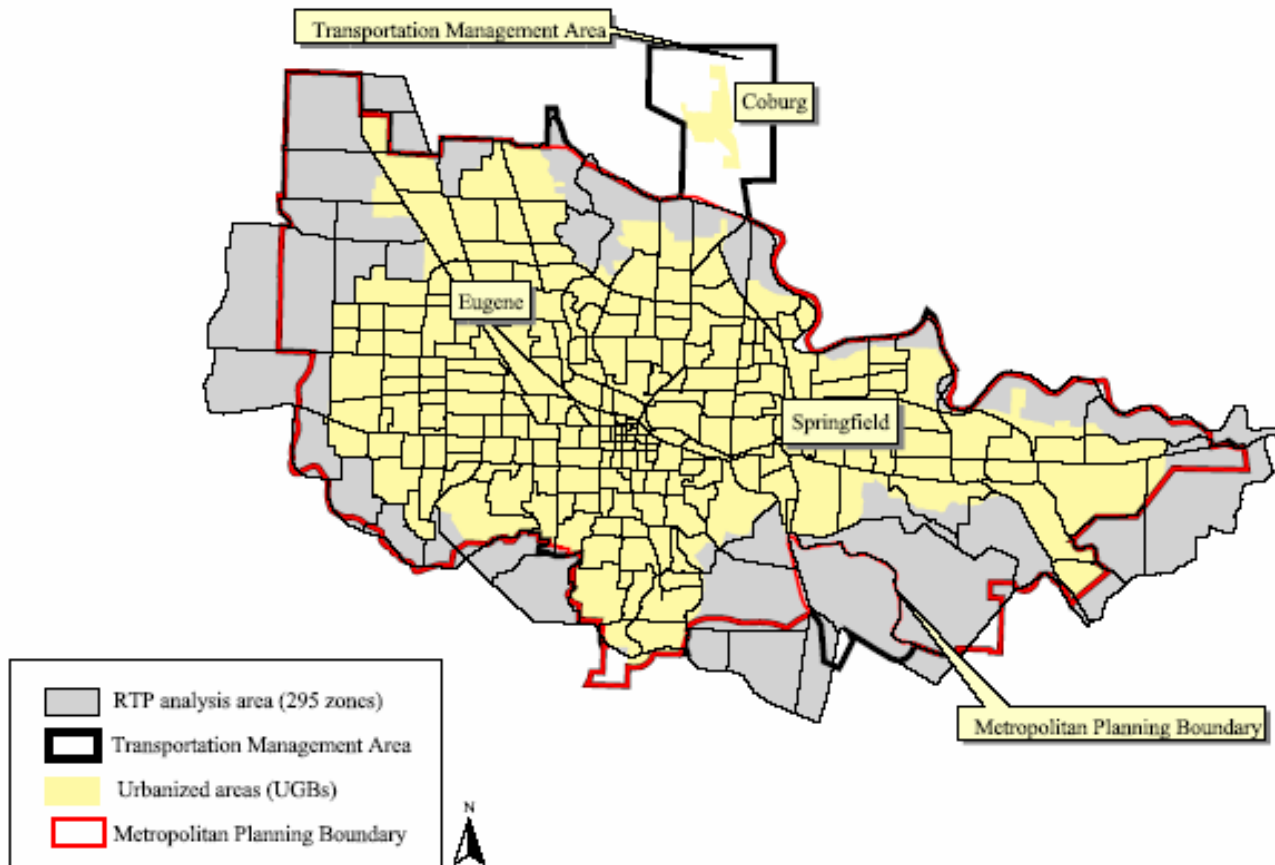
The RTP (also known as TransPlan) was first adopted in December 2001. USDOT confirmed in a letter dated September 7, 2001 (Appendix A) that conformity had been demonstrated for the plan. TransPlan serves both as the federally required long range transportation plan for this area, and also as the Transportation Functional Plan for the Eugene-Springfield Metropolitan Area General Plan (Metro Plan). Its geographic area covers the Eugene-Springfield urbanized area as described by the 1990 Census and approximates the Metro Plan boundary (Map 1). Participating agencies include the cities of Eugene and Springfield, Lane County, LTD, ODOT, and LCOG.

On July 8, 2002, USDOT designated the Central Lane metropolitan area as a Transportation Management Area (TMA). This action required expansion of the transportation planning boundary to include the contiguous geographic area likely to become urbanized within the

20 year forecast period. The TMA boundary, which includes the City of Coburg (Map 1), was approved by the USDOT in a certification review on May 8, 2003, and was subsequently adopted by MPC on August 7, 2003. As required by the certification review, the RTP must be updated to incorporate the TMA by December 13, 2004. Work is proceeding to accomplish this objective. In particular, the regional transportation model is being updated from 295 to 306 TAZs in order to include the Coburg area. The Coburg transportation network will be added to the model, and cordon points on the northeast side of Eugene-Springfield will be moved to appropriate locations near Coburg.

In the interim, this conformity determination focuses on the amendment to the current RTP to include the Eugene Courthouse District improvements, and on the amended FY04-06 MTIP. The analysis covers the Eugene-Springfield Metro area and does not include the geographic changes that will occur with the pending TMA update.

Map 1. Planning Boundaries



2.0 Demonstration of Conformity for CO

The December 6, 1993, Federal Register notice of Approval and Promulgation of Redesignation (58 FR 64161, Appendix H) recognizes the nature of the CO emissions problem in the Eugene-Springfield region to be within the Central Area Transportation Study (CATS) boundary. It specifically 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 regional emissions tests for CO apply only to projects within the CATS boundary (downtown Eugene, Map 2) for purposes of conformity.

All regionally significant projects in the RTP, MTIP and STIP were modeled using the most recent population, employment, travel and congestion estimates, as required by EPA conformity guidance. 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, EPA, and ODOT, consistent with requirements for interagency consultation.

Map 3 indicates the location of Central Lane MPO projects programmed through FY07 from the FY04-06 MTIP (see Appendix B for project list) and the FY04-07 Statewide Transportation Improvement Program (STIP) (see Appendix C). Map 4 shows the financially constrained projects in the RTP (see Appendix D for project list).

2.1 General Requirements

OAR 340-252-0050: Frequency of Conformity Determinations

This conformity determination addresses the revised RTP and FY04-06 MTIP.

All transportation plan revisions that consist of other than exempt projects must be found to conform before the plan revisions are approved by an MPO or accepted by USDOT. This conformity determination and the plan amendment are scheduled for adoption on June 10, 2004. As required, the analysis described in this document was performed on the entirety of the transportation plan including the revision adding the Eugene Courthouse District transportation improvements.

The RTP must be conformed no less frequently than every three years. This conformity determination will occur within three years of that demonstrated for the RTP as shown in the letter from USDOT dated September 7, 2001 (Appendix A).

A new TIP must be demonstrated to conform before the TIP is accepted by USDOT. The FY04-06 MTIP was previously approved by the MPO in October 2003 but the conformity analysis was found to be inadequate by USDOT. Subsequently, an amendment to the MTIP was scheduled for approval by MPC on June 10, 2004; this document seeks to conform this latest version of the FY04-06 MTIP.

The TIP must be conformed no less frequently than every three years. This conformity determination will occur within three years of that demonstrated for the FY00-03 MTIP as shown in the letter from USDOT dated September 7, 2001 (Appendix A).

A TIP must be conformed within six months from the date of conformity for a revised transportation plan. This determination simultaneously conforms both the amended RTP and the FY04-06 MTIP.

OAR 340-252-0060: Consultation

Federal, State, and local interagency consultation are required before making conformity determinations. See the response to OAR 340-252-0130 below for details of the consultation.

The Central Lane MPO is the lead agency responsible for making the conformity determination for the RTP and TIP, performing transportation modeling, regional emissions analyses, and preparing and distributing the draft and final documents. The MPO is the agency responsible for assuring the adequacy of the interagency consultation.

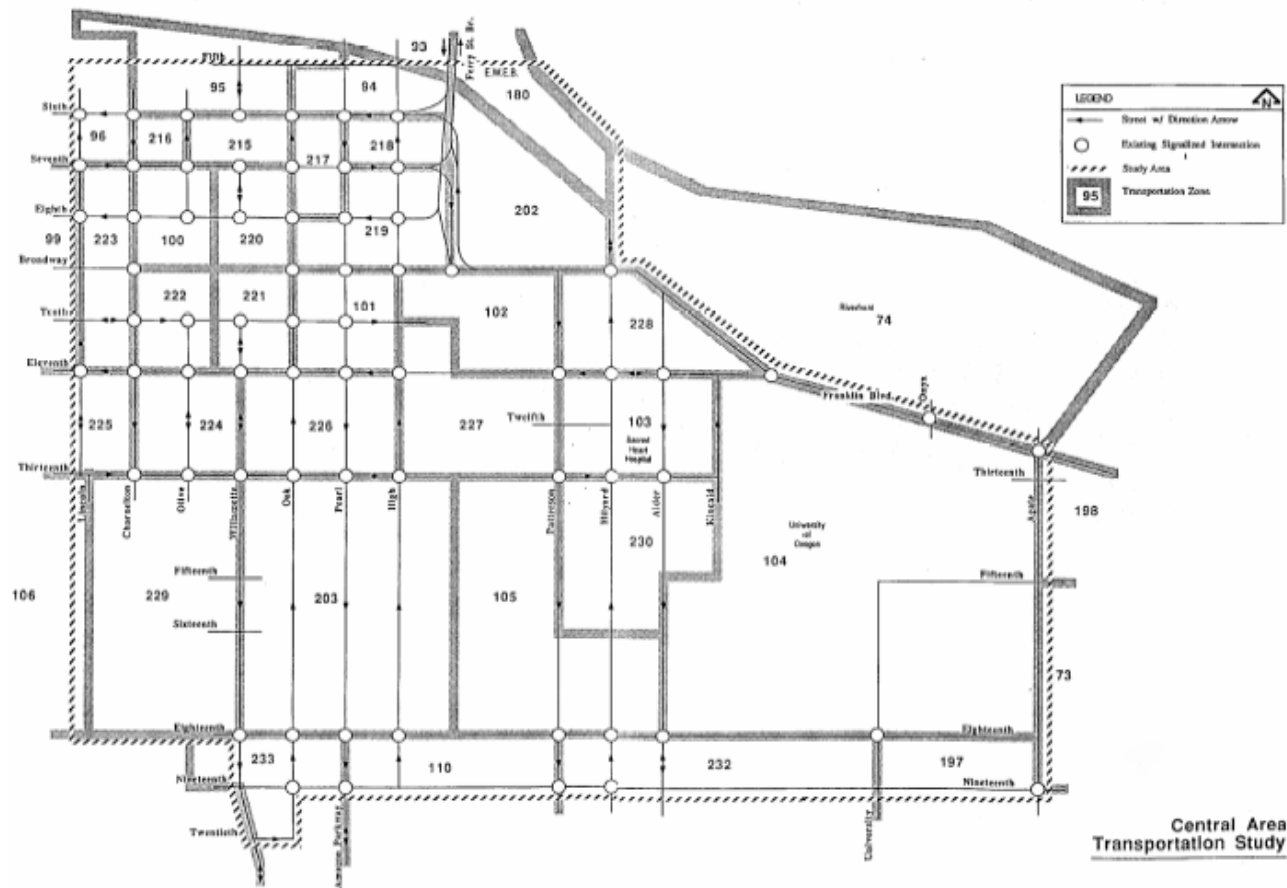
TPC is designated under this regulation as the Standing Committee for the purposes of consultation on Air Quality. Members include representatives of the local jurisdictions of Eugene, Springfield and Lane County; Lane Transit District; Lane Regional Air Pollution Authority; Oregon Department of Transportation; and FHWA. This committee currently meets monthly. The meetings are open to the public and are advertised by both emails to interested parties and media notice.

As described in the response to OAR 340-252-0130 below, the MPO conferred with TPC and consulted other agencies. Opportunities for public review and comment were provided.

Map 2. CATS area

as specified in the Carbon Monoxide State Implementation Plan (CO SIP) of the Eugene-Springfield/Central Lane Metropolitan Planning Organization

(Note: this area is also shown in Map 3 which covers the entire Eugene-Springfield Metro Area.)



Map 3. Central Lane MPO FY04-07 Programmed Projects

MAP KEY		
Jurisdiction	Map Key Number	Project Name
Eugene	1	Fern Ridge Path Resurfacing
Eugene	2	Courthouse District Transportation Improvements
Eugene	3	3rd-4th Connector
Eugene	4	Judkins Point Interchange/Glenwood Blvd Intersection Improvements
Eugene	5	Legacy Extension, Avalon to Royal
Eugene	6	Chad Drive Extension
Eugene	7	Monroe Street/Friendly Street Bikeway
Eugene	8	North Bank Trail Resurfacing
Eugene	9	Roosevelt Extension, Terry to Royal
Eugene	10	Garden Way Path Resurfacing
Springfield	11	21st Street Preservation and Reconstruction
Springfield	12	126 at 42nd Street Ramp Signal
Springfield	13	Pioneer Parkway Pavement Preservation
Springfield	14	MLK Parkway
Springfield	15	42nd Street Upgrade to Urban Standards
Springfield	16	69th Street Upgrade to Urban Standards
Lane County	17	Jasper Road Extension, 58th to Jasper
Lane County	18	Jasper Road Extension, Main Street to 58th
Lane County	19	Delta/Beltline Interchange
Lane County	20	Game Farm North, Eugene City Limit to Coburg Road
Lane County	21	McVay Highway Realignment, Bloomberg to 30th Avenue
Lane County	22	Delta Highway
Lane County	23	Irving Road Overpass
Lane County	24	Royal Avenue, Terry Street to Greenhill Road
Coburg	25	Diamond Street Overlay
Coburg	26	Locust Street Improvements
LTD	27	River Road Transit Station Improvements
LTD	28	RideSource Maintenance and Operations Facility
LTD	29	Bus Rapid Transit, Pioneer Parkway
ODOT	30	I-105: Willamette River-Pacific Highway
ODOT	31	Operational ITS Improvements-Vehicle Management System
ODOT	32	OR-126/Franklin Blvd.
ODOT	33	OR222 Safety Project
ODOT	34	I-5 @ Beltline right-of-way purchase
ODOT	34	I-5 @ Beltline Flyover, construction
ODOT	35	Beltline Hwy @ Coburg Road Interchange
ODOT	36	OR-126 (West Eugene Parkway)
ODOT	37, 38	Hwy 99, Barger to Washington/Jefferson, Preliminary Engineering for Preservation Project
ODOT	40, 41	Hwy 99, Barger to Washington/Jefferson, Overlay

Central Lane Metropolitan Planning Organization

FY 2004 to FY 2007 Projects Map

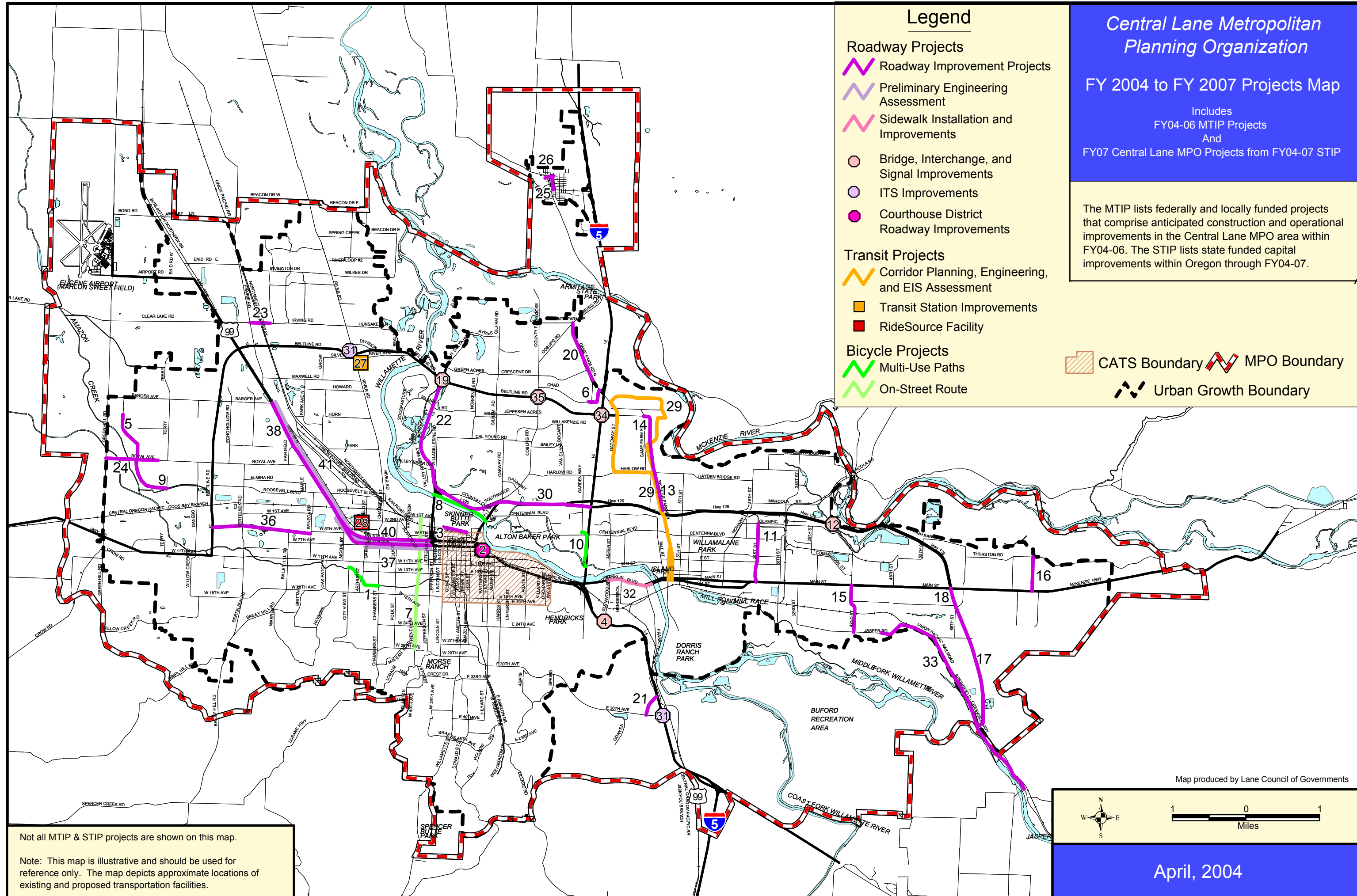
Includes
FY04-06 MTIP Projects
And
FY07 Central Lane MPO Projects from FY04-07 STIP

The MTIP lists federally and locally funded projects that comprise anticipated construction and operational improvements in the Central Lane MPO area within FY04-06. The STIP lists state funded capital improvements within Oregon through FY04-07.

Legend

- Roadway Projects**
- Roadway Improvement Projects
 - Preliminary Engineering Assessment
 - Sidewalk Installation and Improvements
 - Bridge, Interchange, and Signal Improvements
 - ITS Improvements
 - Courthouse District Roadway Improvements
- Transit Projects**
- Corridor Planning, Engineering, and EIS Assessment
 - Transit Station Improvements
 - RideSource Facility
- Bicycle Projects**
- Multi-Use Paths
 - On-Street Route

- CATS Boundary
- MPO Boundary
- Urban Growth Boundary



Not all MTIP & STIP projects are shown on this map.

Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed transportation facilities.

Map produced by Lane Council of Governments

April, 2004

Financially-Constrained Roadway Projects

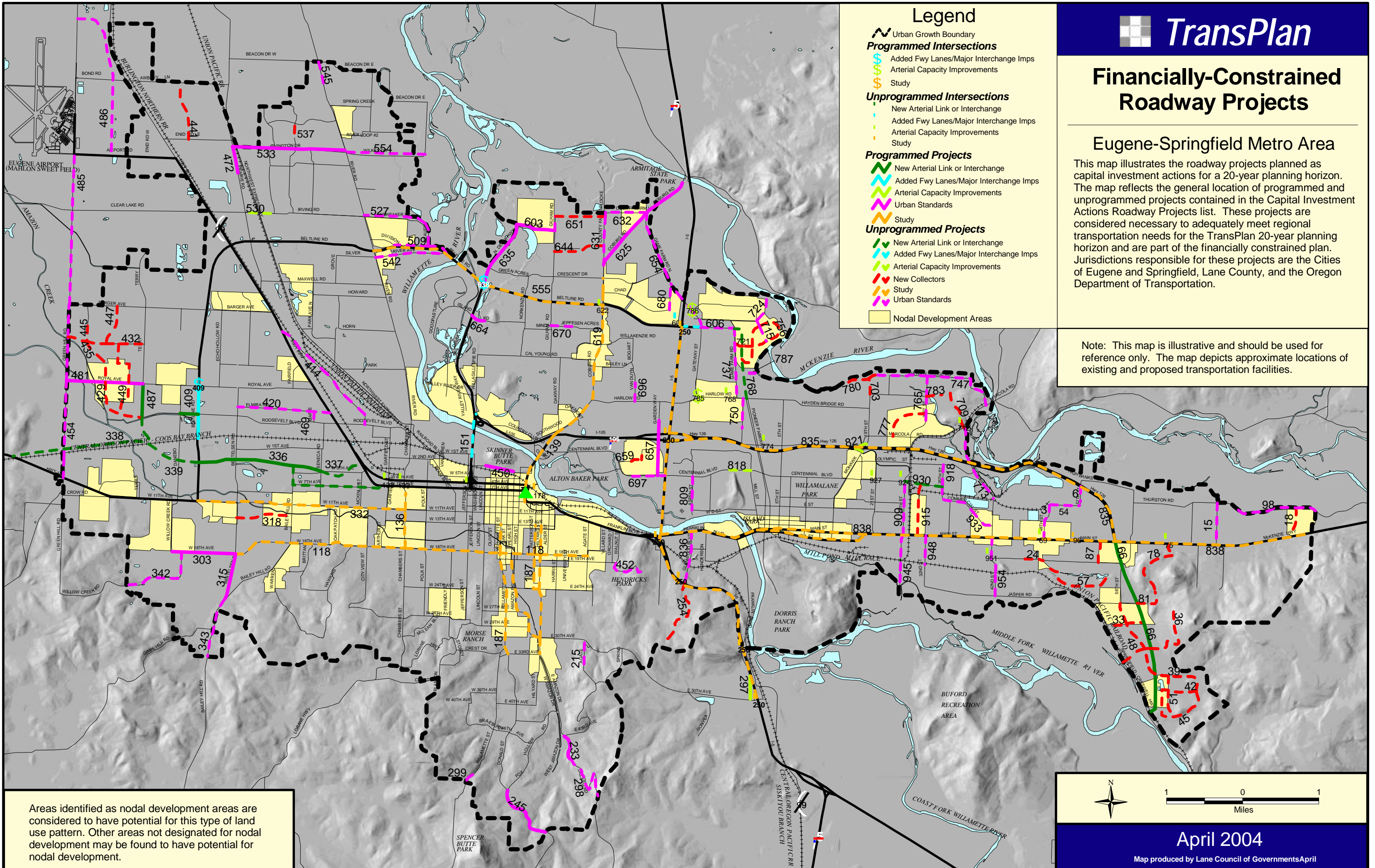
Eugene-Springfield Metro Area

This map illustrates the roadway projects planned as capital investment actions for a 20-year planning horizon. The map reflects the general location of programmed and unprogrammed projects contained in the Capital Investment Actions Roadway Projects list. These projects are considered necessary to adequately meet regional transportation needs for the TransPlan 20-year planning horizon and are part of the financially constrained plan. Jurisdictions responsible for these projects are the Cities of Eugene and Springfield, Lane County, and the Oregon Department of Transportation.

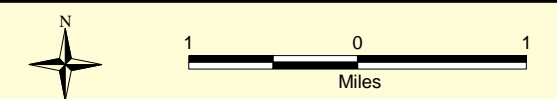
Note: This map is illustrative and should be used for reference only. The map depicts approximate locations of existing and proposed transportation facilities.

Legend

- Urban Growth Boundary
- Programmed Intersections**
 - Added Fwy Lanes/Major Interchange Imps
 - Arterial Capacity Improvements
 - Study
- Unprogrammed Intersections**
 - New Arterial Link or Interchange
 - Added Fwy Lanes/Major Interchange Imps
 - Arterial Capacity Improvements
 - Study
- Programmed Projects**
 - New Arterial Link or Interchange
 - Added Fwy Lanes/Major Interchange Imps
 - Arterial Capacity Improvements
 - Urban Standards
 - Study
- Unprogrammed Projects**
 - New Arterial Link or Interchange
 - Added Fwy Lanes/Major Interchange Imps
 - Arterial Capacity Improvements
 - New Collectors
 - Study
 - Urban Standards
- Nodal Development Areas



Areas identified as nodal development areas are considered to have potential for this type of land use pattern. Other areas not designated for nodal development may be found to have potential for nodal development.



April 2004

Map produced by Lane Council of Governments/April

OAR 340-252-0070: Content of Transportation Plans

Since 1994, the Eugene-Springfield area has been classified as in attainment of CO air quality standards. The RTP was adopted in December 2001. It has not been the previous practice of the MPO to prepare plans which meet the requirements of section (1)(a). However, key planning measures were documented for 1995, the year in which the transportation demand model was calibrated [contact LCOG for more details], and for 2015, the planning horizon of the Metropolitan Area General Plan (Metro Plan) for which the RTP serves as the Transportation Functional Plan. The end of the forecast period of the RTP is 2021.

The highway and transit system described within the plan consisted of projects programmed within 0-5 years; other projects were unprogrammed but fiscally constrained. Each project has been defined and included in the regional transportation model to adequately model travel times under various traffic volumes. The current transportation network describes the existing system; the modeled future networks include the appropriate additions and modifications based on the MTIP and STIP.

OAR 340-252-0090: Fiscal Constraints for Transportation Plans and TIPs

Table 1 provides a summary of the RTP and MTIP financial analyses and demonstrates financial constraint. Appendices B and D provide tabular listings of all projects included in the FY04-06 MTIP and RTP, respectively. All revenue sources listed in the MTIP tables are current sources. Revenues in the first two years of the MTIP are committed as programmed in the capital improvement programs (CIPs) of the local and state jurisdictions.

Fiscal constraint is discussed in more detail in Appendix E.

Table 1: Financial Constraint Assessment

	RTP	FY04-06 MTIP			
					Total
Description	FY01-21	FY04	FY05	FY06	FY04 - FY06
Total Revenue	\$1,725,600,000	\$64,935,734	\$83,656,170	\$38,188,170	\$186,780,074
Total Expenditures	\$1,725,600,000	\$64,935,734	\$83,656,170	\$38,188,170	\$186,780,074
Difference Between Revenues & Expenditures	\$0	\$0	\$0	\$0	\$0
Statement of Financial Constraint: Each project included in the Central Lane MPO RTP and programmed in the FY04-06 MTIP has an identified funding source or combination of sources reasonably expected to be available over the planning period.					

2.2 Criteria and Procedures for Determining Conformity

OAR 340-252-0100: Criteria and Procedures for Determining Conformity of Transportation Plans, Programs and Projects: General.

In order to demonstrate conformity of a transportation plan and MTIP, specific criteria listed in OAR 340-252-0110 through 340-252-0190 (40 CFR 93.110 through 93.118) must be addressed. These criteria include using the latest planning assumptions and the latest emissions model, and undertaking interagency consultation and public involvement. Responses to the criteria are listed below. Since the Eugene-Springfield area has been designated by EPA as a CO maintenance area and the CO SIP has been found to be adequate, the conformity test applied is that of the motor vehicle budget test, OAR 340-252-0190 (equivalently 40 CFR 93.118).

OAR 340-252-0110: Latest Planning Assumptions

The conformity determination must be based upon the most recent planning assumptions in force at the time of the determination.

Key assumptions are based on population and employment forecasts for the 295 transportation analysis zones (TAZs) over which the transportation network of the current RTP is defined (Map 1). This conformity analysis uses the most current projections of 2025 population and employment as prepared by LCOG, the agency designated by the State for coordinating population estimates across Lane County. To date, there has been no process for the MPO policy board or the LCOG Board to formally adopt population forecasts. The population projections within this document were prepared based on preliminary county level forecasts first received in February 2003 from the State Office of Economic Analysis and analyzed in September 2003. (Note that these projections were finalized by OEA in May 2004 after the conformity modeling for this analysis was complete and show numbers that are slightly lower than those used in this analysis). The employment projections were based on 2002-2012 county-level forecasts received from the Oregon Employment Department in October 2003. The results, shown in Table 2, differ from the estimates in the prior conformity analysis, reflecting the economic recession and sluggish recovery in the region.

**Table 2: Population and Covered Employment
within RTP Transportation Analysis Zones**

<i>Analysis Year</i>	<i>Population</i>	<i>Employment</i>
2002	232,230	114,744
2006	244,615	120,471
2007	247,933	122,443
2015	277,370	139,424
2021	300,171	153,688
2025	316,000	164,000

Population excludes group quarters

For each analysis year, travel demand was estimated and trips were distributed across the road network based on land use and transportation changes. The base year for this analysis was 2002, the year for which land use data, population and employment data, and traffic counts at the extended cordon stations were all available. 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.

TransPlan contains a policy of reducing vehicle trips by 10% in mixed use nodal development areas based on the State Transportation Planning Rule (OAR 660-012-0060 (5)(a)). For this analysis, however, this reduction was not taken due to uncertainty in the projected efficacy of this policy. This results in higher VMT and thus higher emissions estimates than if the TPR rule had been invoked.

With the following two exceptions, transit operating policies are assumed to remain the same as in 2001, the date of the last comprehensive transit review by LTD. First, Bus Rapid Transit (BRT) phase 1 is assumed to be operational by 2006, with the entire BRT system in place by 2021. Second, all major employers with more than 250 employees at the end of 2021 are assumed to provide group passes to their workers, resulting in a slight reduction in the average fare in travel zones with large employers. (Note that in 2002, employers with a minimum of 10 employees became eligible for enrollment in the LTD Commuter Solutions group pass program). In other zones, fares are assumed to remain constant with inflation. (Cash fare prices are in fact unchanged since July 2001 at an adult fare of \$1.25; fare discounts on 3 month passes and some wholesale discount changes become effective July 1, 2004).

Transit ridership is forecast to increase from 24,000/average weekday in 2002 to 43,000/day in 2025, an average rate of 2.57% per year. Service boundaries are assumed to remain constant and have, in fact, not changed since 2001.

LTD reports that, since July 2001, ridership has decreased by 6.2%, although it is down by only 1% in FY2003-2004. Ridership is expected to increase in the future. Service hours have been reduced by 8% since June 2001 with potentially another 4% reduction in September 2004. However, since LTD operations are funded in part by a payroll tax, LTD expects service hours to increase with economic recovery.

Under LTD's proposed FY04-05 budget, total revenues are expected to increase by 8.8% over that of FY01-02. Fare revenue growth is expected to level out at 4% per year following implementation of BRT phase 1.

These transit policy assumptions are considered reasonable by LTD staff.

There are no road and bridge tolls in the Eugene-Springfield Metro Area.

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

OAR 340-252-0120: Latest Emissions Model

The conformity determination must be based on the latest emission estimation model available. This requirement is satisfied if the conformity analysis uses the most current version of the motor vehicle emissions model specified by EPA. This model is MOBILE 6 (Version 6.2.03).

The emissions calculations for this conformity determination were performed using factors derived from MOBILE 6.2.03. For more details, see section 2.3 below.

OAR 340-252-0130: Consultation

The Central Lane MPO must make conformity determinations according to the interagency consultation procedures in OAR 340-252-0060, and according to the public involvement procedures established in OAR 340-252-0060 and 23 CFR Part 450.

On April 22, 2004, the Transportation Planning Committee (TPC) met with the MPO to discuss the conformity determination. A 30-day comment period is required for review of the draft conformity determination by the standing committee under OAR 340-252-0060(2)(b)(G). In accordance with this requirement a draft document was provided to TPC on April 27, 2004, with the comment period extending to May 26, 2004. On May 27, 2004, TPC recommended that MPC adopt the proposed conformity determination at their meeting on June 10, 2004. One comment was received from TPC – see Appendix J.

In addition to distribution to TPC, copies of the draft document were provided to air quality specialists at FHWA, FTA, EPA, ODOT and LRAPA, in compliance with requirements for interagency consultation. On May 5, 2004, representatives from FHWA, FTA, EPA, ODOT, LRAPA and Central Lane MPO reviewed the draft conformity determination. Comments were received and incorporated into the conformity document. See Appendix J for these comments and the responses.

Common practice of the MPO is to provide the public with at least 30 days for comment. (More formal requirements of the MPO are awaiting completion of the Public Involvement Plan). The draft conformity determination was made available to the public 45 days prior to the final decision. On April 27, 2004, the Central Lane MPO placed a

legal advertisement in the Eugene Register-Guard noting the availability of the draft document and opening a 30 day comment period (see Appendix I). Additionally, the draft conformity determination was made available on LCOG's transportation conformity website (<http://www.lcog.org/aqc>) along with information describing the RTP amendment, the amended FY04-06 MTIP, and FY04-07 STIP projects within the Central Lane MPO planning area. No comments were received from the public.

A summary of the relevant public involvement and interagency consultation dates associated with this conformity determination is provided in the Table 3.

Table 3. Summary Schedule for RTP and FY04-06 MTIP Conformity Determination

<i>Date</i>	<i>Action</i>
October 9, 2003	MPC adopts FY04-06 MTIP.
April 8, 2004	Public comment period for RTP amendment opens.
April 22, 2004	TPC recommends MTIP amendment to MPC.
April 27, 2004	Draft conformity determination for MTIP and for amended RTP distributed for review to TPC, and others at FHWA, FTA, EPA, ODOT and LRAPA.
April 27, 2004	Draft conformity determination posted to LCOG website and advertised as available for public review; legal advertisement for public comment period published.
May 5, 2004	Interagency consultation.
May 13, 2004	Comment period opens for MTIP amendment.
May 24, 2004	USDOT consultation re MTIP amendment
May 26, 2004	Comment Period closes for conformity determination
May 27, 2004	TPC takes action on draft conformity determination
June 10, 2004	MPC takes action to adopt conformity determination, RTP and MTIP amendments.
June 14, 2004	Adopting resolution and final conformity document, amended MTIP, and RTP amendment distributed to TPC, FHWA, FTA, EPA, ODOT, and LRAPA.

OAR 340-252-0140: Timely Implementation of TCMs

There are no TCM requirements in the CO SIP.

OAR 340-252-0160: Projects from a Plan and TIP

All projects in the RTP and MTIP are either identified within the RTP and remain consistent in their design and scope, or are consistent with the policies and purpose of the plan, and will not interfere with other projects specifically within the plan. As projects are developed, the related emissions modeling fully accounts for their scope.

OAR 340-252-0190: 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. Five analysis years were chosen for the conformity determination

- 2006 (the MTIP horizon),
- 2007 (the latest year for which RTP projects are currently programmed),
- 2015 (an intermediate date to ensure analyses are at least as frequent as 10 years),
- 2021
- 2025 (more than twenty years from the date of this conformity determination)

These years were determined by interagency consultation to meet the requirements of this regulation.

Emissions from the entire transportation system were included in the analysis. All regionally significant projects contained in the RTP and MTIP were included as were all regionally significant projects in the maintenance area.

The regional emissions analysis meets the requirements of OAR 340-252-0230 (equivalently 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 (2004), 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 6,012 tons/yr.

As shown in Section 3.0, emissions for all analysis years are estimated to be less than the motor vehicle budgets in the CO SIP, and the budget test is thus met.

2.3 Regional Emissions Analysis & Methodology

Emissions Factors

As required by OAR 340-252-0120 (equivalently, 40 CFR 93.111), the EPA-approved MOBILE 6.2.03 model was used to estimate emission factors. Environmental and program parameter values were provided to LCOG by LRAPA, the air pollution authority for Lane County. These included winter minimum and maximum temperatures, absolute humidity, and fuel Reid vapor pressure. There are no programs for mandated fuel mixes or vehicle inspection/maintenance in this area. ODOT and LCOG staff used these local values to run the emissions model MOBILE 6.2.03 to compute air quality emissions per VMT by speed range and by facility type. (ODOT has in the past provided LCOG with emissions factors for conformity determinations). These CO emission factors are listed in Appendix F-1 with a sample input and output file shown in Appendices F-2 and F-3, respectively.

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 9.5), was used to determine traffic estimates and forecasts for the entire Eugene-Springfield 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.

Total Emissions

MOBILE 6 emissions factors were applied to the estimates of vehicle miles traveled (VMT) for each analysis year in order to compute CO emissions per link. Travel on local roads was included through the application of emission factors to interzonal (centroid connectors), and intrazonal (computed by a “nearest neighbor node” algorithm) VMT. 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 4, Section 3.0, below.

Transportation Networks

The tables in Appendices B, C and D list the fiscally constrained projects considered in this conformity determination. Maps 3 and 4 show their location within the region. Criteria for projects required to be included in the regional emissions analysis were derived from OAR 340-252-0270 and OAR 340-252-0280 (equivalently, 40 CFR 93.126 and 40 CFR 93.127) (Appendix G).

OAR 340-252-0230: Procedures for Determining Regional Transportation-Related Emissions

All regionally significant projects in the maintenance area (the CATS 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 transportation plan and the MTIP.

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. All road improvements from the fiscally constrained MTIP were included in the 2006 network. The ODOT Beltline/I5 interchange project in the FY04-07 STIP was included in the 2007 transportation network. All other roadway projects from the RTP that affected capacity or speed of travel were included in the fiscally constrained 2021 network. The 2025 network was identical to that of 2021.

LTD supplied LCOG with future year transit networks for 2015 and 2025 which included BRT as well as other conventional transit routes. BRT was modeled differently from the current bus system based on assumptions that BRT will operate in separate guideways and with priority treatment at signalized intersections. Total dwell time will be reduced 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 Eugene-Springfield planning area 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 Eugene-Springfield region are represented within the model based on a cordon origin and destination survey and a modeled growth rate. All through trips that traverse the CATS area are included in the VMT and emissions summaries.

No emissions reduction credits are included in the analysis.

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

OAR 340-252-0270: Exempt Projects

Air quality neutral projects within the financially constrained plan are exempt from the requirement that a conformity determination be made (see Appendix G). 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 system-wide traffic-forecasting model reflects all 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 preparation of environmental impact statements, pavement resurfacing, lighting improvements, pedestrian facilities, construction of passenger shelters, and purchase of operating equipment.

The lists of projects in Appendices B, C and D were reviewed during interagency consultation.

OAR 340-252-0280: Projects Exempt from Regional Emissions Analyses

While certain highway and transit projects are exempt from regional emissions analysis requirements (Appendix G), 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, C and D were reviewed during interagency consultation.

OAR 340-252-0290: Traffic Signal Synchronization Projects

The status of all completed projects has been included in the emissions analysis.

3.0 Results of Emissions Modeling

As described above in response to OAR 340-252-0190, estimated emissions for all analysis years must be no greater than the 1990 motor vehicle budget of 6,021 tons/yr.

Table 4 presents the results of the regional emissions analysis. **Projected emissions are shown to be less than 6.021 tons/yr, and thus the RTP and the FY04-06 MTIP are shown to be consistent with the motor vehicle budget in the CO SIP and to meet the budget test.**

**Table 4: Carbon Monoxide Emissions Analysis
within the CATS boundary**

Analysis Year	Tons/Year of Carbon Monoxide	
	SIP motor vehicle budget	Projected Emissions
		All facilities
1990	6,021*	
2006		1,537
2007		1,470
2015		1,117
2021		1,041
2025		1,040

* Federal Register, Vol. 58, No. 232, Page 64163, December 6, 1993.

Analysis for the prior MTIP conformity, submitted in November 2003, estimated emissions for 2006 at 2,245 tons/yr. Three significant changes, each of which would lower emissions estimates, occurred between the November analysis and this current one. First, MOBILE 5B emission factors used in November were replaced by MOBILE 6 factors. Second, the population and employment figures were revised downward by 3% and by 1%, respectively, based on current estimates for the Eugene-Springfield region. Third, the CATS area used in the November estimate erroneously included roads within the eastern extension of the CATS 2003 Update area instead of using the 1987 definition used in the CO SIP and in this current analysis. This error added 0.43 miles of Franklin Blvd, carrying a total of about 68,000 vehicles/day. In a test to clarify the source of the observed differences in the emissions estimates, MOBILE 5B factors were substituted for the MOBILE 6 factors in the current analysis. This process yielded an emissions estimate of 2,075 tons/yr for 2006. It was thus concluded that use of MOBILE6 emissions factors resulted in most (92.5%) of the observed difference between the 2006 emissions estimate made in November and that of the current analysis.

As shown in Figure 1, Section 1.0, the 1990 budget of 6,021 tons/yr corresponds to a year in which the maximum measured CO average 8-hour concentration was 5.1 ppm, well below the NAAQS of 9 ppm. Also, as shown in Figure 1, the CO levels in the maintenance area have continued to decline since 1990. In 2003, the second highest CO level recorded was 3.3 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 NAAQS for CO in the Eugene-Springfield maintenance area.

APPENDICES A-J

Appendices are posted on the web at

<http://www.lcog.org/meetings/mpc.html>

June 10, 2004

MPC 4c – Appendices: Air Quality Conformity Determination

