



4

2004 Regional
Transportation Plan
**Air Quality
Conformity**

October 31, 2003



METRO

PEOPLE PLACES
OPEN SPACES

Metro

People places • open spaces

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. The regional government provides transportation and land-use planning services and oversees regional garbage disposal and recycling and waste reduction programs.

Metro manages regional parks and greenspaces and owns the Oregon Zoo. It also oversees operation of the Oregon Convention Center, the Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center, all managed by the Metropolitan Exposition Recreation Commission.

Your Metro representatives

Metro Council President – David Bragdon

Metro Councilors – Rod Park, District 1; Brian Newman, District 2; Carl Hosticka, District 3; Susan McLain, District 4; Rex Burkholder, District 5; Rod Monroe, District 6.

Auditor – Alexis Dow, CPA

Metro's web site: www.metro-region.org

Metro
600 NE Grand Ave.
Portland, OR 97232-2736
(503) 797-1700
TDD (503) 797-1804

Printed on 100 percent recycled paper,
30 percent post-consumer fiber



2004 Regional Transportation Plan and 2004-07 Metropolitan Transportation Improvement Program

Conformity Determination Report Table of Contents

A. Introduction	1
1. Background	1
2. Reason for Determination	5
B. Overview of 2004 RTP and Major Changes in Network Assumptions	7
1. Unchanged Network Assumptions Carried Over from 2000 RTP	7
2. New 2004 RTP Network Assumptions	8
C. Summary of Relevant Conformity Requirements & Findings of Compliance	9
1. Consistency with the latest planning assumptions (OAR 340-252-0110)	9
2. Latest emissions model (OAR 340-252-0120)	26
3. Consultation (OAR 340-252-0130)	26
4. Timely implementation of TCMs (OAR 340-252-0140)	31
5. Support achievement of NAAQS	31
6. Quantitative analysis (OAR 340-252-0190)	32

Appendices

- Appendix 1: Financially Constrained System Project List (Not included in this draft - See RTP Packet 2 - Project Amendments)
- Appendix 2: 2004 RTP Public Involvement
- Appendix 3: 2004 RTP and 2004-07 Metropolitan Transportation Improvement Program Conformity Analysis Protocol
- Appendix 4: Transportation Analysis Zone (TAZ) Assumptions
- Appendix 5: 2004-07 MTIP Public Involvement
- Appendix 6: Published notice, other notices
- Appendix 7: Evaluation of emissions analysis for transportation activities which cross borders of MPOs
- Appendix 8: Evidence of Compliance with Metro Interim Land Use Measures
- Appendix 9: Interagency Coordination - October 2, 2003 Meeting Summary
- Appendix 10: Portland Area Motor Vehicle Fleet Assumptions



METRO

2004 Regional Transportation Plan and 2004-07 Metropolitan Transportation Improvement Program Conformity Determination

A. Introduction

Background

The federal Clean Air Act provides the main framework for national, state and local efforts to protect air quality. Under the Clean Air Act, the Environmental Protection Agency (EPA) is responsible for setting standards, known as national ambient air quality standards (NAAQS), for pollutants considered harmful to people and the environment. These standards are set at levels that are meant to protect the health of the most sensitive population groups, including the elderly, children and people with respiratory diseases. Air quality planning in this region is focused on meeting the NAAQS and deadlines set by the federal Environmental Protection Agency and state Department of Environmental Quality for meeting the standards. Further, the United States Department of Transportation has established regulations which make failure to meet these standards result in a loss of transportation funding from state and federal sources and increased health risks to the region.

The 2004 Regional Transportation Plan (RTP) and 2004-07 Metropolitan Transportation Improvement Program are subject to an air quality conformity determination under federal regulation (40 CFR Parts 51 and 93) and state rule (OAR 340 Division 252). Metro, as the federally designated Metropolitan Planning Organization (MPO) for the Oregon portion of the Portland-Vancouver air shed, is the lead agency for the conformity determination. In addition, the Transportation Policy Alternatives Committee (TPAC) is called out under the state rule as the standing committee designated for "interagency consultation" as required by the rule. In order to demonstrate that the 2004 Regional Transportation Plan (RTP) and the 2004-07 MTIP meet federal and state air quality planning requirements, Metro must complete a technical analysis that is known as air quality conformity. The need for this analysis came from the integration of requirements in the Clean Air Act Amendments of 1990 and the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. These requirements were also included in the Transportation Equity Act for the 21st Century (TEA21) in 1998. Conformity is a regulation requiring that all transportation plans and programs in air quality non-attainment or maintenance areas conform to the State's air quality plan, known as the State Implementation Plan (SIP). Transportation plans and programs such as the 2004 RTP and the 2004-07 MTIP must not result in air quality violations.

The Portland/Vancouver area has one interconnected airshed. However, given the State boundary along the Columbia River and the differing jurisdictions and state laws, the Federal government approved

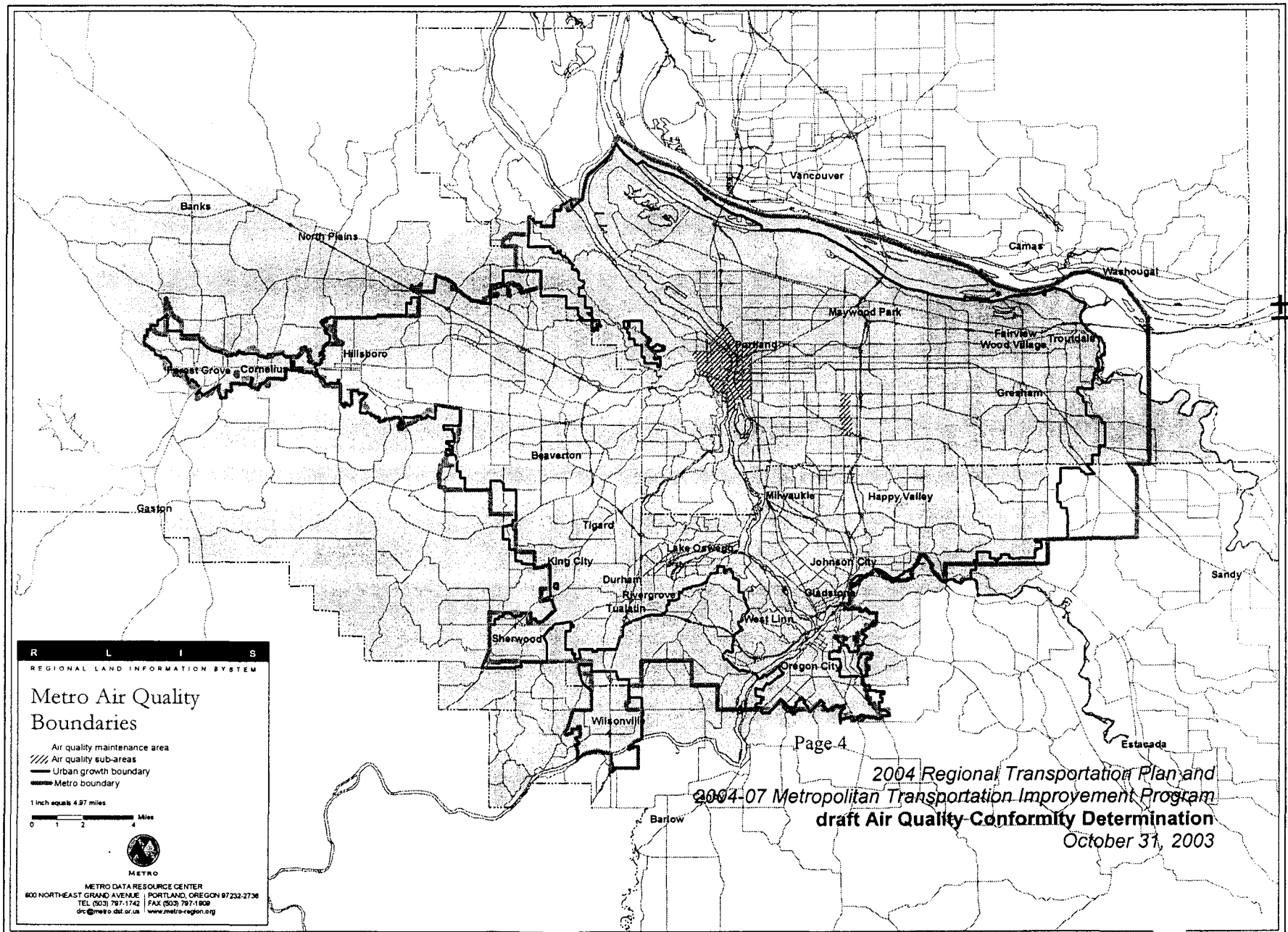
Page 2

each side of the airshed taking responsibility for its area. For the Oregon side a Portland Area Airshed was established. However, as there are several types of pollutants of concern in the Portland Area, several geographic areas were established for differing air pollutants.

For Carbon monoxide, the Metro jurisdictional boundary was established as the geographic extent of concern for which emission budgets (maximum pollutant levels) were created. Within that area, there were sub-areas established with their own emission budgets. These sub-areas were the Portland Central City sub-area and the 82nd Avenue subarea.

For precursors of ozone, commonly called smog, geographic boundaries were set that pertained to the level of hydrocarbons (also known as volatile organic compounds) and nitrogen oxide. The Portland Air Quality Maintenance Area was established for addressing ozone and the emission budgets for this area.

The following map shows these boundaries.



Reason for Determination

Metro is the Portland area's designated Metropolitan Planning Organization (MPO). As the MPO, Metro is the lead agency for development of regional transportation plans and the scheduling of federal transportation funds in the Portland urban area. Regulations of the United States Department of Transportation (USDOT) require the MPO to develop a 20-year Regional Transportation Plan (RTP). The Plan must identify revenue that can be reasonably anticipated over a 20-year period for transportation purposes. It must also state the region's transportation goals and policies and identify the range of multi-modal transportation projects that are needed to implement them. Just as Metro is required to develop an RTP, it is also mandated to develop a Metropolitan Transportation Improvement Program (MTIP) for the Portland urban area. The MTIP "program" process is used to determine which projects included in the Plan will be given funding priority year by year.

The U.S. DOT and the U.S. Environmental Protection Agency (EPA) approved and acknowledged the 2000 RTP air quality conformity determination on January 26, 2001. Under federal regulations, the RTP must be updated every three years to ensure that the plan adequately addresses future travel needs and is consistent with the federal Clean Air Act. As a result, an update to the 2000 RTP began in September 2003.

On June 19, 2003, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council approved Resolution No. 03-3335, approving a regional allocation of federal funds for the years 2006 and 2007, pending an air quality conformity analysis for the 2004-07 MTIP. The 2004-07 Metropolitan Transportation Improvement Program (MTIP) schedules spending of federal transportation funds in coordination with significant state and local funds in the Portland metropolitan region for the federal fiscal years 2004 through 2007. It also demonstrates how these projects relate to federal regulations regarding project eligibility, air quality impacts, environmental justice and public involvement.

On August 11, 2003 the U.S. DOT recommended that the 2004 RTP air quality conformity analysis and determination be completed jointly with the conformity analysis for the 2004-07 Metropolitan Transportation Improvement Program (MTIP).

On December 11, 2003, the Metro Council is scheduled to take action on the 2004 Regional Transportation Plan (RTP), the 2004-07 MTIP and the conformity determination for both plans. In order to ensure that the 2004 RTP is in compliance with air quality requirements, this Conformity Determination has been prepared for the financially constrained system of the 2004 Regional Transportation Plan (RTP) which also includes projects identified in the 2004-07 MTIP.¹ It has been prepared because the RTP and

¹ Defined in Chapter 5 of the 2004 Regional Transportation Plan and in Appendix 1 to this document, the financially constrained system responds to federal planning requirements. This system of projects and programs is limited to current funding sources, and those new sources that can be reasonably expected to be available during the 20-year plan period. As the federally recognized system, the financially constrained system is also the source of transportation projects that may be funded through the Metropolitan Transportation Improvement Program (MTIP). The MTIP allocates federal funds in the region. The 2004 RTP not only provides an updated set of financially constrained projects and programs for future MTIP allocations, but also establishes more formal procedures and

the MTIP must be conformed every three years, as described in OAR Chapter 340, Division 252, section 50. A new plan and MTIP demonstrating conformity with the Clean Air Act must approved and acknowledged by US DOT and US EPA in a formal conformity determination by January 26, 2004, when the current US DOT/US EPA conformity determination for the 2000 RTP expires.

Section B of this conformity determination provides an overview of the 2004 RTP and major changes to road and transit network assumptions. The State Transportation Conformity Rule requires that the air quality conformity determination comply with several subsections of OAR Chapter 340, Division 252, including:

1. OAR 340-252-0110 – Use of the Latest Planning Assumptions
2. OAR 340-252-0120 – Use of Latest Emissions Model
3. OAR 340-252-0130 – Consultation
4. OAR 340-252-0140 – Timely Implementation of Transportation Control Measures (TCMs)
5. OAR 340-252-0190 – Motor Vehicle Emissions Budget

Section C discusses the relevant conformity determination requirements and demonstrates that this Determination complies with each requirement. Metro's technical analysis indicates that regional emissions will remain within established budgets in all analysis and budget years (i.e., 2006, 2007, 2010, 2015, 2020 and 2025). The following analysis demonstrates how the conformity determination for the 2004 Regional Transportation Plan complies with applicable requirements of OAR Chapter 340, Division 252. Inapplicable subsections of Division 252 are not cited in this conformity determination.

This October 31, 2003 draft document contains the assumptions, methodology and budgets (maximum pollutant levels) for determining air quality conformity. However, the calculations to determine whether the proposed financially constrained 2004 RTP and the MTIP meet air quality conformity standards have not yet been completed. Accordingly, reviewers may comment on the assumptions and methodology. Where calculation results are being completed, there is text indicating "Results Pending". Conformity determination results will be made available at a later date for technical and public review. As the financially constrained system of the 2004 RTP is very similar to the 2000 RTP as amended in 2002 and 2003, it is assumed that the 2004 RTP and 2004-07 MTIP will meet conformity standards. Should the calculations result in findings that the 2004 RTP or 2004 MTIP not conform to air quality standards, the technical and public review schedule will be revised to allow for revisions to the RTP and MTIP, revision of air quality calculations and public and technical comment prior to MPO consideration and adoption.

objectives for implementing long-range regional transportation policies through incremental funding decisions. These new MTIP provisions are set forth in Chapter 6 of the 2004 RTP.

Page 6

*2004 Regional Transportation Plan and
2004-07 Metropolitan Transportation Improvement Program
draft Air Quality Conformity Determination
October 31, 2003*

B. OVERVIEW OF THE 2004 RTP AND MAJOR CHANGES IN NETWORK ASSUMPTIONS

The 2004 RTP Update represents a minor update to the 2000 RTP that focuses on meeting state and federal requirements, and incorporated new policy direction set by JPACT and the Metro Council as part of various corridor and special studies conducted since 2000. The update will also incorporate a number of "friendly amendments" proposed as part of local transportation plans being adopted over the past three years. This update builds on the extensive planning work and analysis that was completed for the 2000 RTP. The 2004 RTP continues to implement the 2040 Growth Concept, the region's long-range plan for addressing expected growth while preserving the region's livability. The 2004 RTP represents a nearly 20-year evolution from a mostly road-oriented plan to a more balanced multi-modal plan that is closely tied to land use and the 2040 Growth Concept. The 2004 plan remains relatively unchanged in terms of the mix of projects, and continues to rely on greater emphasis on a multi-modal transportation system that enhances opportunities for walking, bicycling and use of transit, transportation demand management, street connectivity, and a 2040-based level of service policy that tolerates some congestion, particularly during two-hour peak period in select locations based on availability of other modes of travel such as walking, biking and transit.

The total reasonably expected revenue base assumed in the 2004 RTP for the road system is about...

Results Pending

The following section summarizes some of the more important similarities and distinctions between the two networks.

1. Network Assumptions Carried Over the from 2000 RTP:

- ❖ Annual average transit service increase of 1.5 percent through 2006;
- ❖ LRT extended from Milwaukie to Vancouver, Washington by 2020, including a first phase Interstate Avenue LRT alignment from the Rose Quarter to the Expo Center (though the opening day for Interstate MAX has changed from September 2004 to May 2004);
- ❖ LRT extended from Gateway Regional Center to Clackamas Regional Center and LRT extended along the Portland Transit Mall from the Steel Bridge to PSU along 5th and 6th Avenues.
- ❖ Early implementation of an interim "Rapid Bus" system in the 99E corridor on McLoughlin from downtown Portland to Milwaukie.
- ❖ Wilsonville/Beaverton Commuter Rail;
- ❖ Added freeway lanes:
 - I-5 from Greeley to Interstate Bridge;

- US 26 from Highway 217 to Murray Boulevard;
- Highway 217 from Tualatin Valley Highway to 72nd Avenue Interchange.
- ❖ Signal system interconnection on significant regional arterial streets.
- ❖ Implementation of the central city streetcar from NW Portland to the Macadam district in two phases.
- ❖ Improved bus headways and occupancy on numerous priority routes due to implementation of amenities and structural improvements (e.g., "coach-style" buses, dedicated transit lanes, queue jump lanes, signal priority systems, "real-time" on-street bus arrival information displays, etc.)
- ❖ Slightly reduced geographic coverage of bus service to emphasize service on the most productive routes;
- ❖ Phase 1 construction of the Sunrise Highway from I-205 to Rock Creek;
- ❖ Hogan Interchange construction at I-84 to Stark Street.
- ❖ The 2000 RTP plans for construction of 34 additional arterial lane miles and 108 more freeway lane miles than assumed in the 1995 RTP (which froze road construction at 2015 levels).

2. New 2004 RTP Network Assumptions:

- ❖ Base year of 2000.

Results Pending

The 2004 RTP builds on the policy direction established in the 2000 RTP, which was to use transportation investment as a means to implement and reinforce the region's land use goals, and more fully defines the methods and projects that will effect this purpose. Extensive interagency consultation was conducted to develop and refine the current financially constrained system project list. The resultant network continues to rely extensively on auto trip making (Results Pending percent of daily trips are single-occupant auto trips in 2025) and therefore continues to reflect significant investment in maintenance and expansion of the region's freeway and street facilities.

However, a more refined multi-modal approach is also exhibited in the 2004 RTP's specification of precise pedestrian and bike system improvements, and the identification of "boulevard-design" locations where the intent is to retrofit designated streets for walking, biking and transit. The retrofits of major streets include wider sidewalks, safer street crossings, bike lanes and improved bus stops and shelters along streets that serve the central city, regional centers, town centers and other areas. The 2004 RTP congestion level of service standards reflect a policy that the associated impacts of wider, faster streets and freeways needed to achieve the traditional service level are too often accompanied by unacceptable impacts on costs, surrounding neighborhoods and alternative travel modes. Some funds previously dedicated to attempts to meet the traditional level of service standard have been freed up to pursue more balanced system investment that is more reliant on system and demand management, walking, bicycling and transit to meet regional trip demand. And as the comparative data above, and in Section C.1(b), below, suggest, this approach yields meaningful reductions of auto trip dependency.

C. Relevant Conformity Requirements and Findings of Compliance

1. Consistency with the Latest Planning Assumptions (OAR 340-252-0110):

a. **Requirement:** *The State Rule requires that Conformity Determinations be based "on the most recent planning assumptions" derived from Metro's approved "estimates of current and future population, employment, travel and congestion."*

Finding of compliance: The *quantitative* analysis (see Section C.6) employs the transportation system planning assumptions completed for the 2004 RTP, and population, employment and development assumptions that reflect Metro adoption of the Regional Framework Plan and its implementing ordinances. The 2000 base year reflects Metro's official estimates of population and employment calibrated to 2000 Census data. Metro has completed a population/employment projection for 2025. The 2025 population/employment projection is the foundation for all analysis years used in this Conformity Determination.

Travel and congestion forecasts in the analysis years of 2000, 2010 and 2025 are derived from the population/employment data using Metro's regional travel demand model and the EMME/2 transportation planning software. Within subroutines of the regional travel demand model, Metro calculates the transit/bike/walk mode split for calculated travel demand based on a variety of factors, including trip distance, car per worker relationship, transit headways, total employment within one mile, intersection density and a zone-based mixed-use index of the ratio of total employment to total population (see Appendix 4). Both the population and employment estimates and the methodology employed by the EMME/2 model have been the subject of extensive interagency consultation and agreement (discussed further in Section C.3).

The resulting estimates of future year travel and motor vehicle congestion are then used with the outputs of the EPA approved MOBILE 5a-h emissions model to determine regional emissions. In all respects, the model outputs reflect input of the latest approved planning assumptions and estimates of population, employment, travel and congestion.

b. **Requirement:** *The State Rule requires that changes in transit policies and ridership estimates assumed in the previous conformity determination must be discussed.*

Finding of compliance: Changes in transit policies and ridership estimates are discussed below for each type of transit service assumed in the 2004 RTP transit network: light rail, commuter rail, rapid bus, frequent bus, regional bus and community bus.

LRT Extension. The *transit policies* which guide modeled implementation of light rail transit (LRT) service in the South/North corridor are consistent with previous Conformity

modeling of the Westside and Hillsboro LRT service starts. Bus resources providing downtown radial service are replaced with LRT service. Previous short-haul service between former radial trunk routes is reconfigured to support new LRT stations and surrounding neighborhoods. This represents continuation of *existing transit policy* and its extension to the expanded LRT system. The same principles are further extended to implementation of planned commuter rail in South Washington County.

Previous conformity determinations have reflected policy changes that call for the construction of the South Corridor LRT Project in two phases. The first phase to include I-205 LRT from Gateway Regional Center to Clackamas Regional Center and LRT on the downtown Portland Transit Mall by 2008. A second phase is assumed that would include LRT from downtown Portland to Milwaukie town center. A new assumption is more rapid implementation of the Interstate MAX from downtown Portland to the Expo Center to the Expo Center. LRT service extension from Expo Center to Vancouver, Washington continues to be assumed to be part of the Preferred System, but is now not included in the Financially Constrained RTP.

Commuter Rail. A previous Determination has assessed introduction of commuter rail into the regional transit service strategy. The 2004 RTP makes no changes to the assumptions previously modeled. Only one alignment and service parameter is identified: Wilsonville to Beaverton in Washington County during the a.m. and p.m. peak periods with supporting park and ride facilities and a slight increase and realignment of supporting feeder bus service. If other alignments should be determined to be feasible, amendment of the regionally defined system would be needed.

Bus Transit. The 2004 RTP carries forward a hierarchy of regional bus transit service described in the 2000 RTP. From a modeling perspective, one of the most significant factors effecting transit ridership is transit service headways. The 2000 RTP identified four gradations of bus service: Rapid bus, Frequent bus, Regional bus and Community bus which are continued in the 2004 RTP. Rapid bus service would most closely emulate LRT in speed, frequency and comfort serving major transit routes with limited stops. Rapid bus service is characterized by some dedicated rights-of-way, signal preemption capability, 15-minute headways and high quality station and passenger amenities. Passenger amenities are concentrated at transit centers such as schedule information, ticket machines, bicycle parking and covered shelters. The 2004 RTP continues with an approach of deploying a limited number of Rapid bus lines in high demand commuter corridors.

Frequent bus service is characterized by 10-minute headways, wider geographic coverage, utilization of some dedicated right-of-way (e.g., queue jumps, dedicated turn lanes, etc.), signal preemption capabilities, and enhanced passenger amenities that include covered bus shelters, special lighting. Some overlap of Rapid and Frequent bus service is conceivable. However, bus stops (rather than stations) would characterize the frequent bus system and much more frequent stops would occur. The vehicles would be typical transit buses.

Regional bus service would represent the majority of planned regional bus service. Radial trunk service would be provided on major arterials. Stops would be located every two to three blocks, and amenities would be prioritized to high ridership locations. Headways would not be more than 15-minutes during regular operating hours. The 2004 RTP continues the 2000 RTP approach which assumed expansion of the system to provide not only central city radial service but also to interconnect emerging regional and town centers, main streets and corridors with the central city and with one another.

The Community transit network is an innovation of the 2000 RTP that grew from Tri-Met's Transit Choices for Livability program. In addition to local bus service to neighborhoods and employment areas, community bus service includes decentralization of some transit services to a multitude of community-based transit providers dedicated to providing localized, "shuttle-like" service to destinations within a very limited geography. Vehicle types are expected to vary from traditional buses to van-type shuttles and taxi and car-share programs. The service is focused on more accessibility, frequency along the route and coverage to a wide range of land use options rather than on speed between two points. Community bus service generally is designed to serve travel with one trip end occurring within the 2040 Growth Concept town centers, main streets, station communities and corridors.

Transit Ridership. The broadest measure of ridership assumptions is revenue hours. The previous network, used to conform the 2000 RTP, as amended, reflected changes to the South/North alignment and timing. Also, it included introduction of Commuter Rail in Washington County.

The following data points highlight the practical effect of changed system configuration and funding assumed in the 2004 RTP relative to previous assumptions used in the 2000 RTP:

- ❖ Total projected revenue hours projected for the 2004 RTP is ...Results Pending
- ❖ The 2004 RTP projects Average Weekday (AWD) transit trips in 2025 ... Results Pending.
- ❖ The 2004 RTP projects that the percent of regional daily trips that are transit is ...Results Pending)
- ❖ The 2004 RTP projects that, the percent of households and employment within 1/4-mile of transit service in 2025 to be Results Pending
- ❖ AWD originating riders per revenue hour are Results Pending

- c. **Requirement:** *The State Conformity Regulations require that reasonable assumptions be used regarding transit service, and increases in fares and road and bridge tolls over time.*

Finding of compliance: There are no road or bridge tolls in place in the Portland

Page 11

metropolitan area, and none are assumed in the 2004 RTP or proposed in the MTIP. No decision to deploy such a project has been made and this Determination does not model evaluation of such a program. However, in the future some of the projects included in the Financially Constrained System Project List may include value pricing considered during individual project evaluation and alternative selection.

Auto operating costs are factored into the mode choice subroutines of the regional travel model. These costs are held constant to 1985 dollars. Parking costs for the Central City and for Tier 1 regional centers are based on the South/North DEIS parking costs developed from survey data to reflect parking control strategies. Parking factors for the remaining regional centers, station communities, town centers and mainstreets are scaled back by 50 percent from these costs. No parking factors are assumed for corridors, neighborhoods, employment areas, industrial areas, greenspaces and areas outside the urban growth boundary. The three-zone transit fare structure adopted in 1992 is held constant through 2025. User costs (for both automobile and transit) are assumed to keep pace with inflation and are calculated in 1985 dollars. Free transit areas are assumed for the central business and Lloyd districts and Tier 1 regional centers and within Wilsonville town center.

Service assumptions (i.e., transit vehicle headways) also affect trip assignment to transit. The South Corridor LRT Project Locally Preferred Alternative has selected the I-205 LRT segment and the downtown Portland Transit Mall LRT segment as a first phase recommended for completion by 2007 and a downtown Portland to Milwaukie LRT segment as a second phase.

LRT along Interstate Avenue from the Rose Quarter to the Expo Center is ahead of schedule with startup now planned for May 2004. These service assumptions were previously modeled in the FY 02-05 Metropolitan Transportation Improvement Program (MTIP) Conformity Determination, approved January 20, 2000 and as amended August 14, 2003.

The 2000 RTP assumed a 1.5 percent annual service hour increase for regional bus service through 2006. The bulk of the increase was allocated to building a service base along the Interstate Avenue corridor. At 2007, these bus resources were assumed to be reallocated throughout the region and feeder service within the LRT Corridor was reinforced. Service increases were assumed to Results Pending

The 2004 RTP continues these early program assumptions. However, with added regional support in the FY 2002 – 2005 MTIP, earlier attention has been focused on building service in two of four newly identified priority rapid bus corridors: the Barbur/99W and McLoughlin corridors, which link downtown with southeast Washington County and west Clackamas County, respectively. Rather than general reallocation of the Interstate LRT service hours, service in these corridors will be expanded. In addition, the 2004 RTP (as did the 2000 RTP) extends the 1.5 percent increase through 2025. Finally, rapid bus

Page 12

service is extended to the McLoughlin Boulevard/Highway 224 corridor and on Division Street to Gresham regional center in east Multnomah County.

- d. **Requirement:** *The State Conformity Regulations require that the latest existing information be used regarding the effectiveness of TCMs that have already been implemented. It must also be demonstrated that the Plan does not delay or impede the implementation of TCMs*

The the Portland area maintenance plans for ozone and carbon monoxide include TCMS that are identical, except for section 2 of the non-funding based TCMs. Following are the TCM quoted verbatim (shown in italics) from the air quality maintenance plans and unless noted, are the same in each maintenance plan. The maintenance plan TCMs are followed by a description of actions taken by the region to comply:

"Non-funding based Transportation Control Measures

I. Metro 2040 Growth Concept

Metro's 2040 Growth Concept is included because it changes typical growth patterns to be less reliant on motor vehicle travel, thereby reducing motor vehicle emissions. Two elements of the land use plan (the Interim Measures and the Urban Growth Boundary) provide appropriate implementation mechanisms to meet FCAA enforceability requirements for control strategies.

a. **Metro Interim Land Use Measures relating to:**

- *Requirements for Accommodation of Growth;*
- *Regional Parking Policy; and*
- *Retail in Employment and Industrial Areas.*

The text of the interim land-use measures is included in Appendix D1-17 (for Ozone, Appendix D2-10 for CO).

b **Urban Growth Boundary.**

The Urban Growth Boundary (UGB) as currently adopted or amended before EPA approval of the maintenance plan, assuming an amendment does not significantly affect the air quality plan's transportation emission projections.

2. Central City Parking Requirements (Carbon Monoxide)

The Portland City Council adopted the Central City Transportation Management Plan, Plan and Policy, and other supporting documents on December 6, 1995. The Central City Transportation Management Plan (CCTMP) was adopted by Ordinance No. 169535, Resolution 35472. The Ordinance became effective January 8, 1996. A key supporting document was the Zoning Code Amendments, containing the maximum parking ratios for new development, the requirements for providing structured parking to serve older historic buildings and other regulations on parking.

Key elements of the Zoning Code Amendments related to CO air quality projections are incorporated into this document as given below.

The CCTMP replaced the former Downtown Parking and Circulation Policy, first adopted in 1975 and updated in 1980 and 1985. The 1980 update of the parking policy served as a foundation for the 1982 Portland area CO attainment plan. The CCTMP is designed to minimize new vehicle traffic in the Central City and encourage alternative travel modes by extending the downtown maximum parking ratio concept to the entire Central City area. The CCTMP provided for the lifting of the downtown parking lid upon EPA approval of the maintenance plan and the request" for attainment redesignation. However, until EPA approval, the CCTMP retains the parking lid.

The parking offset program (OAR 340-020-0400 through OAR 340-020-0430), designed to allow the city to increase the parking lid by up to a maximum of 1,370 spaces, was also retained until after EPA approval of the maintenance plan. The DEQ's emission projection figures for the CCTMP emissions inventory area include an estimate for the emissions associated with 827 parking spaces, as documented in Appendix D2-4-4. These are the parking spaces yet to be developed, but which were authorized by the parking offset program.

The following is a list of zoning code amendments that were incorporated directly into the Portland Carbon Monoxide Maintenance Plan. The text of critical code provisions (such as maximum parking ratios for new development and parking provisions for existing buildings) is contained in Appendix D2-8. A list of other zoning code amendments used as supporting documents for the maintenance plan is contained in Appendix D2-13 of Volume 3 of the Oregon State Implementation Plan.

Items in Volume 3 of the SIP are federally enforceable. With regard to Volume 3 items, EPA has allowed DEQ to make changes which are merely administrative, without requiring public process. DEQ and EPA make a determination as to whether a proposed change by the City of Portland is merely administrative rather than substantive.

Section 1: *Incorporated Amendments to Chapter 33.510, Central City Plan District*

<u>Code Number</u>	<u>Code Title</u>
33.510.261 - 33.510.261.E (33.510.261.E.1.a(1)-(2),b,E.2.a(1)-(2),b)	Parking Site split by subdistrict or parking sector boundaries
33.510.263 - 33.510.263.A (33.510.263.A.1.a-c(1)-(4),A.2-4.a-b(1)-(3),A.5-7.a-d)	Parking in the Core Area Growth Parking
33.510.263.B - (33.510.263.B.1.a-c(1)-(2),B.2-4.a)	Preservation Parking
33.510.263.E - (33.510.263.E.1.a-b,E.3.a-c)	Residential/Hotel Parking
33.510.263.G -	All Parking

33.510.263.G.4 - (33.510.263. G .4.a. (1)-(2), G .4.d(1)-(3»)	Surface parking lots.
33.510.264	Parking in Lloyd District
33.510.264.A (33.510.264.A.1.a-c(1)-(4),A.2.a,A.4.a)	Growth Parking
33.510.264.B 33.510.264.B.1.a-c(1)-(2),B.2.a-c,B.4.a-c)	Preservation Parking
33.510.264.F	All Parking
33.510.264.F.4 (33.510.264.F .4.e.(1)-(3)	Surface parking lots
33.510.265	Parking in the Goose Hollow Subdistrict and Central Eastside Sectors 2 and 3
33.510.265.A (33.510.265.A.1.a-c,A.2.a,A.4.a)	Growth Parking
33.510.265.B (33.510.265.B.1.a-c(1)-(4),B.2.a,b) (33.510.265.B.4.a-c)	Preservation Parking

Section 2: Incorporated Portion of New Chapter 33.808, Central City Parking Review

<u>Code Number</u>	<u>Code Title</u>
33.808.050	Loss of Central City Parking Review Status
33.808.100	General Approval Criteria for Central City Parking Review
33.808.100.G	
33.808.100.J 33.808.100.J.2.a	If the site is in the Core Area:
33.808.100.M	

Section 3: Incorporated Maps

<u>Map Number</u>	<u>Map Title</u>
510-8	Core and Parking Sectors - EPA

Section 4: Incorporated Portion of CCTMP Administration Section

VI.D.1.a.(1)-(5)

Administration Section:
Preservation Parking

Unless it is a substitution of a Transportation Control Measure producing equivalent emission reduction, any change in the Portland Metro Area CO Maintenance Plan language will require adoption of a formal amendment by the EQC and approval by EP A. The City of Portland may make changes to City policies and regulations which are included in the Portland Metro Area CO Maintenance Plan provided they do not relax the stringency of the air quality control strategies. DEQ will work with the City to notify EPA of such changes. These changes will be incorporated into the Portland Metro Area CO Maintenance Plan at a future convenient time.

Changes to documents supporting the Portland Metro Area CO Maintenance Plan' (zoning code amendments not directly incorporated into the Portland Metro Area CO Maintenance Plan, but listed in Appendix D2-13 of Volume 3 of the Oregon State Implementation Plan) which do not affect the stringency of the air quality control strategies will not require adoption of a formal amendment by the EQC and approval by EP A. DEQ and the City of Portland will review potential changes to the supporting documents to determine whether they affect the stringency of the air quality strategies. If it is determined that stringency will not be affected, DEQ will submit those changes to EPA for concurrence and administrative incorporation into the Portland Metro Area CO Maintenance Plan.

2. DEQ Employee Commute Options Program (ozone)

A 10% trip reduction target is required for employers who employ more than 50 employees at the same work site. See discussion above and Appendix D1-13.

3. DEQ Voluntary Parking Ratio Program (ozone)

Implement a voluntary parking ratio program providing incentives to solicit participation, including exemption from the Employee Commute Options program. See discussion above and Appendix D1-14.

Funding based Transportation Control Measures

1. Increased Transit Service

- a. *Regional increase in transit service hours averaging 1.5% annually.*

This commitment includes an average annual capacity increase in the Central City area equal to the regional capacity increase. The level of transit capacity increase is based on the regional employment growth projections adopted by Metro Council on Dec. 21, 1995. These projections assume that the Central City will maintain its current share of the regional employment. Should less employment growth occur in the Region and/or the Central City, transit service increase may be reduced proportionately.

- b. *Completion of the Westside Light Rail Transit facility.*

- c. *Completion of Light Rail Transit (LRT) in the South/North corridor by the year 2007.*

2. Bicycle and Pedestrian Facilities

- a. *Multimodal facilities.*

Consistent with ORS 366.514², all major roadway expansion or reconstruction projects on an arterial or major collector shall include pedestrian and bicycle improvements where such facilities do not currently exist. Pedestrian improvements are defined as sidewalks on both sides of the street. Bicycle improvements are defined as bikeways within the Metro boundary and shoulders outside the Metro boundary but within the Air Quality Maintenance Area.

- b. *RTP Constrained Bicycle System.*

In addition to the multimodal facilities commitment, the region will add at least a total of 28 miles of bicycle lanes, shoulder bikeways or multi-use trails to the Regional Bicycle System as defined in the Financially Constrained Network of Metro's Interim Federal RTP (adopted July 1995) by the year 2006. Reasonable progress toward implementation means a minimum of five miles of new bike lanes, shoulder bikeways or multi-use trails shall be funded in each two-year Transportation Improvement Program (TIP) funding cycle.

Bike lanes are striped lanes dedicated for bicycle travel on curbed streets, a width of five to six feet is preferred; four feet is acceptable in rare circumstances. Use by autos is prohibited. Shoulder bikeways are five to six foot shoulders for bicycle travel and

² This provides for the following exceptions:

- absence of any need;
- contrary to public safety; and
- excessively disproportionate cost.

emergency parking. Multi-use trails are eight to 12 foot paths separate from the roadway and open to non-motorized users.

c. *Pedestrian facilities.*

In addition to the multimodal facilities commitment, the region will add at least a total of nine miles of major pedestrian upgrades in the following areas, as defined by Metro's Region 2040 Growth Concept: Central City/Regional Centers, Town Centers, Corridors & Station Communities, and Main Streets. Reasonable progress toward implementation means a minimum of one and a half miles of major pedestrian upgrades in these areas shall be funded in each two-year TIP funding cycle."

Finding of compliance: All non funding and funding based TCMs are fully supported by local, regional and State actions as well as the 2004 RTP and MTIP. This includes:

Metro 2040 Growth Concept

Since its adoption in 1995, the Metro Growth Concept has continued to serve as a means of coordinating land use and transportation, emphasizing a compact urban form, mixed uses where high quality transit service is provided or planned, a balanced transportation system that serves the Growth Concept and providing for transportation choices. Both the Metro 2000 RTP and 2004 RTP use the transportation system to implement the 2040 Growth Concept. This includes using a 2040 land use hierarchy to guide transportation plans and MTIP criteria that direct transportation investment decisions with 2040 Growth Concept implementation in mind. The MTIP includes incentives for serving 2040 centers (mixed use areas) and reducing vehicle miles traveled. As a result, during the period 1990 to 2000, while total vehicle miles increased by 35 percent, TriMet ridership increased 49 percent. Further, from the local adoption of the air quality maintenance plan requirements (1996) to the year 2000 (the latest data available), vehicle miles per capita decreased from 21.7 vehicle miles traveled per capita (vmt/c) to 20 vmt/c - an eight percent decrease.

Metro Interim Land Use Measures

In 1996, the Metro Council adopted the Urban Growth Management Functional Plan, which was a set of recommendations and requirements for the twenty-four cities and the urban portions of three counties for implementing the 2040 Growth Concept. These regulations are not interim measures, rather, they provide lasting measures to address land use/transportation coordination. The Functional Plan set targets for cities and counties within the region for new jobs and housing as a means of encouraging land use patterns that are supportive of transit, walking and biking as well as setting standards for street connectivity and reducing the amount of land devoted to surface parking. As of January 2003, the Metro Council concluded (See appendix 8, which includes Metro Resolution No. 03-3299, compliance tables and the Functional Plan recommendations and requirements) that 25 of the 27 jurisdictions complied with the minimum density standards, all jurisdictions complied with land partitioning standards, all but one

Page 18

complied with accessory dwelling unit standards. The total residential capacity demonstrated by the local jurisdictions was 94 percent of the total envisioned by the targets, without counting the capacity of the City of Wilsonville or unincorporated Multnomah County. The regional total for accommodating jobs was 107 percent of the regional targets.

With regard to parking, all but one jurisdiction, as of January 2003, had complied with reviewing parking space sizes and ratios and lowering the total amount of land devoted to surface parking.

Finally, for Title 4, Retail in Employment and Industrial Areas, every city or county with employment or industrially zoned lands complied. In addition, Metro is currently looking at further protection of encroachment on employment and industrial lands with additional regulations now being discussed by the Metro Council.

In addition, Metro adopted a Title 6, which pertained to transportation accessibility and connectivity. While not included as a land use measure in the air quality maintenance plans, these regional requirements for local government implementation encouraged street systems that connected more frequently which, in turn, encourages walking, biking and transit use - all contributing to better air quality. All 27 jurisdictions complied with connectivity standards.

Urban Growth Boundary

As noted above, the 2040 Growth Concept was envisioned to encourage a more compact urban form and to provide for land use patterns that encourage transportation choice. The urban growth boundary was not intended to be static. Since the late 1970s, the boundary has been moved about three dozen times. Most of those moves were small - 20 acres or less. There were two times that Metro authorized more substantial additions:

- in 1998 about 3,500 acres were added to make room for approximately 23,000 housing units and 14,000 jobs. Acreage included areas around the Dammasch state hospital site near Wilsonville, the Pleasant Valley area in east Multnomah, the Sunnyside Road area in Clackamas County, and a parcel of land south of Tualatin.
- in 1999 another 380 acres were added based on the concept of "subregional need." An example of "subregional need" would occur when a community needed land to balance the number of homes with the number of jobs available in that area.

These expansions represented an increase of only about 2 percent, even though the Metro region's population has increased by about 17 percent since 1990.

In early 2002, the voters of the region approved ballot measure 26-29, which prohibits Metro from requiring higher densities within existing neighborhoods. Metro's goal is to locate higher density housing, such as townhouses and apartments, within "centers" such as the downtowns of Portland, Beaverton and Gresham, or along transportation corridors, particularly where there is a light-rail line.

Further, in 2002, the Metro Council completed a two-year process reviewing the region's capacity for housing and jobs by expanding the UGB by an additional 18,638 acres, with 2,851 acres dedicated to employment purposes.

As part of the 2002 UGB decision, the Metro Council adopted new policies that address the protection of existing neighborhoods and additional job land, and the improvement of downtown commercial centers and main streets. Accordingly, transportation and air quality modeling have assumed urban land use consistent with population, housing and job forecasts. In turn, transportation system improvements have also been assumed to serve the area. The air quality conformity determination, once modeling has been completed, will demonstrate the estimated future air quality results.

Central City Parking Requirements

Central City Parking Requirements were enacted as cited in the *Portland Area Carbon Monoxide Maintenance Plan* as a means of addressing concerns about concentrations of this pollutant in the Portland downtown area. A monitoring station located at 4th and Alder Streets in downtown Portland has provided actual measurements of carbon monoxide. The 1-hour and 8 hours averages for the years 1996 through 2001 expressed in parts per million (ppm) are as follows:

Table 1
Central City (4th and Alder) Carbon Monoxide Measurements

Year	1 Hour Oct-April Average	1 Hour Maximum	8 Hour Maximum
1996	1.36	8.6	6.4
1997	1.37	7.8	4.8
1998	1.13	8.4	4.6
1999	1.23	11.6	7.5
2000	1.14	9.3	5.4
2001	1.04	6.3	3.6

The 1 hour standard is 35 ppm and the 8 hour standard is 9 ppm. Because the actual carbon monoxide concentrations were so far below the standards, in 2002, the Oregon Department of Environmental Quality removed the air quality monitoring station.

Accordingly, it is concluded that carbon monoxide pollution in the Central City is no longer a significant problem, in part because of the array of transportation control measures that have been implemented.

DEQ Employee Commute Options Program

The ECO rule (OAR 340-242-0100 through 0290), applies to employers in the Portland area with *more than 50 employees* reporting to a single work site. Affected employers must provide incentives for employee use of alternative commute options. The incentives must have the potential to reduce commute trips to the work site by ten percent within three years. Annual employee surveys measure progress toward this goal.

Page 20

Popular programs include transit subsidies, carpool matching and preferential parking for carpools, compressed work weeks (4/10's for example), telecommuting, and bike/walk programs. Most companies offer a guaranteed ride home for personal emergencies for commuters.

Failure to comply with the ECO rule is a Class II environmental violation and carries penalties that typically range from \$500 - \$2,000 for each day of violation.

Ongoing ECO rule implementation is the basis for concluding that this TCM has been fully implemented.

DEQ Voluntary Parking Ratio Program

The Metro Functional Plan adopted in 1996, provide a more rigorous parking ratio approach. See Metro Interim Land Use Measures, above. Accordingly, in 1999, the DEQ eliminated this program.

Because of the Metro Functional Plan requirements, this TCM has been fully implemented.

Transit Service

Table 2 below displays the total region-wide annual service hours for light rail and bus vehicles by year since the adoption of the region's transportation control measures (1996).

Table 2

Region-wide Annual Transit Service Hours

Fiscal Year	Service Hours			Percent Change	
	Rail	Bus	Total	cumulative from 1996	year-to-year
1996	59,544	1,821,120	1,880,664	0.0%	
1997	59,748	1,819,320	1,879,068	-0.1%	-0.0%
1998	66,708	1,869,324	1,936,032	2.9%	3.0%
1999	130,236	1,938,048	2,068,284	9.9%	6.8%
2000	143,100	2,009,148	2,152,248	14.4%	4.0%
2001	144,672	2,032,944	2,177,616	15.7%	1.1%
2002	183,648	2,048,484	2,232,132	18.6%	2.5%
2003	192,500	2,049,100	2,241,600	19.1%	0.4%
Average					2.6%

TriMet has actually increased transit service by an average of 2.6 percent since adoption of this transportation control measure. This is more than 1 percent greater than the 1.5 percent average transit service increase required annually. Furthermore, a large percentage of the increase in vehicle service hours have been provided on light rail vehicles which have three to six times the passenger carrying capacity of a bus, depending on whether a one or two car train is operating.

This level of transit service increase was made possible by large increases in payroll tax revenues within the TriMet district due to a favorable economic climate. It is unlikely TriMet will be able to sustain this level of growth over a long period of time. Service and financial planners at TriMet have forecast modest growth in service hours through the MTIP years, however, that will easily exceed the commitment to averaging 1.5 percent annual growth. Recently acquired authority from the 2003 State Legislature to increase the payroll tax rate once the recession has ended will further enable TriMet to meet this goal.

The corresponding change in transit service in the Portland Central City also showed that the annual capacity increase in the Central City increased by an average annual rate of 3.9 percent for seated capacity and by 5.7 percent for total capacity during the years 1996 and 2003, each well above the TCM mandate of 1.5 percent average annual increase. This is illustrated in Table 3, below.

Table 3
Transit Service in the Portland Central City

Mode	Seated Capacity			Total Capacity (seated and standing)		
	Fall 1996	Fall 2003	Annual Average % Increase	Fall 1996	Fall 2003	Annual Average % Increase
Bus	1,172,354	1,214,256		1,830,016	1,895,494	
Rail	163,328	486,524		423,632	1,261,922	
Total	1,335,682	1,700,780	3.9%	2,253,648	3,157,346	5.7%

Pedestrian System TCMs

New pedestrian projects awarded funding in the most recent Transportation Priorities process focused on improving the safety of pedestrian crossings at intersections. This includes the Central Eastside bridge heads project (which also includes access from Water Avenue to the Morrison Bridge) and the St. John's town center pedestrian improvements. The length of the improvements across intersections and the new Morrison Bridge access are approximately .4 miles in length. The Forest Grove town center pedestrian improvement project will be providing approximately 1.2 miles of new sidewalks in the 2006-07 biennium. A data base and

map to illustrate these improvements is not currently available. However, Metro should complete such a database and map for future conformity determinations.

Bicycle System TCMs

A data base of constructed bike lanes and related facilities should be completed for future conformity determinations. As a surrogate, a map comparing the bike system in 1999 and 2002 was prepared from the Metro *Bike There!* maps. The below map shows the 103 miles of new bike lanes and multi-purpose paths added during the period 1999 to 2002. That is, from a 1999 total of 519 miles, 103 miles of bikeway were added for a 2002 total of 622 miles. Of the current 622 miles of bikeways, 512 are bike lanes, defined as "striped portions of the roadway designated as a bicycle travel lane". The balance, 110 miles are regional multi-use paths defined as "physically separated from motor vehicle traffic, used by bicyclists, pedestrians, skaters and other non-motorized travelers." Further review is in order and if the analysis is confirmed, the region will have achieved this TCM adopted in 1996 that "...the region will add at least a total of 28 miles of bicycle lanes, shoulder bikeways or multi-use paths to the Regional Bicycle System as defined in the Financially Constrained Network of Metro Interim Federal RTP (adopted July 1995) by the year 2006."

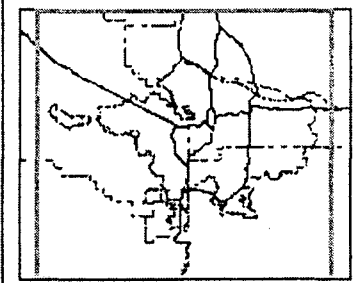
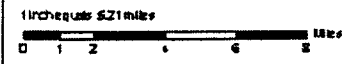
In addition to bike lanes constructed as part of associated road improvements, this Transportation Priorities process allocated funding for approximately 3.8 miles of new off-street multi-use paths for bicycle and pedestrian use in the 2006-07 biennium. Funding for the design of an additional 4.5 miles of multi-use path was also provided as a part of these projects.

Bike Routes

1999-2002
Comparison

- Bike Routes by type**
- Bike lane
 - Regional multi-use path
 - Previous Routes or other types
 - Urban growth boundary

WARNING: This map is a computer-generated representation of existing map data. It is not a substitute for a professional map. It is not to be used for navigation or other purposes where accuracy is critical. The information on this map was derived from a variety of sources, including aerial photography, ground surveys, and other data. The information on this map is not guaranteed to be accurate or complete. The information on this map is for informational purposes only. The information on this map is not to be used for navigation or other purposes where accuracy is critical.



Location Map



RESEARCH CENTER
400 NORTH 5TH STREET, SUITE 200 | PORTLAND, OREGON 97208-2000
TEL: (503) 744-1111 | FAX: (503) 744-1112
WWW.METRO-REGAL.ORG

Other TCMs. Effectiveness of implemented and planned TCMs is also reflected in emission credits approved by DEQ for use in this Determination's calculation of daily regional emissions. Credits were assumed for compact land form called for in the Region 2040 Growth Concept, expansion of the I/M Boundary; implementation of enhanced I/M; and implementation of the Employee Commute Option (ECO) program. Credit for the region's Voluntary Parking Ratio program was eliminated in 1999 because very few businesses chose to participate in the program. All of these programs are founded in enforceable regulations.

In addition, the 2004 MTIP includes \$125,000, which in conjunction with State of Washington contributions, would explore TDM/TSM policies for the I-5 Corridor. Metro has also initiated a Strategic Plan for TDM in the Metro area as a means of establishing a comprehensive approach throughout the Metro region.

2. Latest Emissions Model (OAR 340-252-0120)

- a. **Requirement:** *The State Conformity Regulations require that the conformity determination must be based on the most current emission estimation model available.*

Finding of compliance: Metro employed EPA's recommended Mobile 5a-h emissions estimation model in preparation of this conformity determination. Additionally, Metro uses EPA's recommended EMME/2 transportation planning software to estimate vehicle flows of individual roadway segments. These model elements are fully consistent with the methodologies specified in OAR 340-252-0120.

In addition, Metro has begun running the MOBILE6 model in order to begin familiarization with this new model in anticipation of its use in future conformity determinations.

3. Consultation (OAR 340-252-0130)

- a. **Requirement:** *The State Conformity Regulations require the MPO to consult with the state air quality agency, local transportation agencies, DOT and EPA regarding enumerated items. TPAC is specifically identified as the standing consultative body in OAR 340-225-0060(1)(b).*

Finding of compliance: Specific topics are identified in the Regulations that require consultation. TPAC is identified as the Standing Committee for Interagency Consultation. Most of the agencies defined as eligible to participate during interagency consultation for the Determination were participants in development of the 2004 RTP and the MTIP, (EPA and the Federal Transit Administration, whose closest offices are located in Seattle have not been able to participate at TPAC) including development of the financially constrained system, at both the region's technical and policy committee levels (TPAC and JPACT) during the development of the 2004 RTP. However, a special interagency meeting was

convened with all eligible participants in order to review an early draft of this document and discuss the conformity determination approach, schedule and assumptions (see Appendix 9)

Further, an independent analysis of the air quality conformity process throughout the nation (*Exhausting Options: Assessing SIP-Conformity Interactions*, Resources for the Future, 2003) was completed and which included six case studies, including the Portland area. On page 88 regarding the Portland area, the Report states:

"DEQ has been aggressive in its role in conformity since the rule was first released. For example, it was DEQ that pushed through an interagency consultation agreement. DEQ also devised out-year motor vehicle emission budgets. To avoid the planning horizon mismatch, the MVEBs were allowed to increase in the out-years to allow for growth in vehicle emissions. DEQ has played a very active role in transportation planning in general and conformity in particular. Its staff has a good understanding of the analytical elements of the conformity process and especially how modeling assumptions can affect conformity determinations."

It further states:

"...the air quality authority participates fully in transportation planning, and the interagency consultation process works well."

- i. *Determination of which Minor Arterial and other transportation projects should be deemed "regionally significant."*

Metro models virtually all proposed enhancements of the regional transportation network proposed in the MTIP, the 2004 RTP and by local and state transportation agencies. This level of detail far exceeds the minimum criteria specified in both the State Rule and the Metropolitan Planning Regulations for determination of a regionally significant facility. This detail is provided to ensure the greatest possible accuracy of the region's transportation system predictive capability. The model captures improvements to all principal, major and minor arterial and most major collectors. Left turn pocket and continuous protection projects are also represented. Professional judgment is used to identify and exclude from the model those proposed intersection and signal modifications, and other miscellaneous proposed system modifications, (including bicycle system improvements) whose effects cannot be meaningfully represented in the model. The results of this consultation were used to construct the analysis year networks identified in Appendix 1 of this Determination.

- ii. *Determine which projects have undergone significant changes in design concept and scope since the regional emissions analysis was performed.*

All agencies defined as eligible to participate during interagency consultation for the Determination were participants in development of the 2004 RTP and 2004-07 MTIP and commented extensively on the Plan's preparation, including development of the 2004 RTP financially constrained system, at both the region's technical and policy committee levels (TPAC and JPACT).

iii. Analysis of projects otherwise exempt from regional analysis.

All projects capable of being modeled have been included in the Conformity Analysis quantitative networks, regardless of funding source or "degree of significance".

iv. Advancement of TCMs.

All past and present TCMs have been implemented on schedule. There exist no obstacles to implementation to overcome. See 1(d) in this section., above.

v. PM10 Issues.

The region is in attainment status for PM10 pollutants.

vi. forecasting vehicle miles traveled and any amendments thereto.

The forecast of vehicle miles is the product of the modeled road and transit network defined in the financially constrained system, which was approved during extensive consultation with all concerned agencies including DEQ as part of TPAC and JPACT.

vii. determining whether projects not strictly "included" in the TIP have been included in the regional emission analysis and that their design concept and scope remain unchanged.

All projects capable of being modeled have been included in the Conformity Analysis quantitative networks, regardless of funding source or "degree of significance".

viii. project sponsor satisfaction of CO and PM10 "hot-spot" analyses.

The MPO defers to ODOT staff expertise regarding project-level compliance with localized CO conformity requirements and potential mitigation measures which are considered on a project-by-project basis as a part of the environmental assessment. There exist no known PM₁₀ hot spot locations of concern.

ix. evaluation of events that will trigger new conformity determinations other than those specifically enumerated in the rule.

This section is not applicable to the 2004 RTP or MTIP conformity determination.

- x. *evaluation of emissions analysis for transportation activities which cross borders of MPOs or nonattainment or maintenance areas or basins.*

The Portland-Vancouver Interstate Maintenance Area (ozone) boundaries are geographically isolated from all other MPO and nonattainment and maintenance areas and basins. Emissions assumed to originate within the Portland-area (versus the Washington State) component of the Maintenance Area are independently calculated by Metro. The Clark County Regional Transportation Commission (RTC) is the designated MPO for the Washington State portion of the Maintenance area. Metro and RTC coordinate in development of the population, employment and VMT assumptions prepared by Metro for the entire Maintenance Area. RTC then performs an independent Conformity Determination for projects originating in the Washington State portion of the Maintenance Area.

Conformity of projects occurring outside the Metro boundary but within the Portland-area portion of the Interstate Maintenance Area were assessed by Metro as provided in State regulations. A request was made of each county to forward projects within the Maintenance Area boundary. While several projects were forwarded to Metro from Multnomah County for analysis, none of these projects was considered a regionally significant project. (see Appendix 12) No regionally significant projects outside the urban boundary have been declared to Metro for analysis.

- xi. *disclosure to the MPO of regionally significant projects, or changes to design scope and concept of such projects that are not FHWA/FTA projects.*

In the process of updating the 2000 RTP and the 2004 RTP, local jurisdictions and regional and state agencies made changes to the projects. These changes will be reflected in the air quality modeling and considered in the conformity determination.

- xii. *the design schedule and funding of research and data collection efforts and regional transportation model development by the MPO.*

This consultation occurs in the course of MPO development and adoption of the annual Unified Planning Work Program.

- xiii. *development of the TIP.*

Development of the MTIP included review by TPAC, which is the designated body for interagency consultation.

- xiv. *development of RTPs.*

Development of the 2004 RTP was directly reviewed by TPAC, which is the standing body for interagency consultation.

- xv. *establishing appropriate public participation opportunities for project level conformity determinations.*

In line with other project-level aspects of conformity determinations, it is most appropriate that project management staff of the state and local operating agencies be responsible for any public involvement activities that may be deemed necessary in making project-level conformity determinations.

- b. **Requirement:** *The State Conformity Regulations require a proactive public involvement process that provides opportunity for public review and comment by providing reasonable public access to technical and policy information considered by the agency at the beginning of the public comment period and prior to taking formal action on the conformity determination for all transportation plans.*

Finding: The 2004 RTP and 2004-07 MTIP had public outreach during November 2003, during a 30-day comment period. The 2004 RTP is, by and large, extending plans and approaches that were concluding during development of the 2000 RTP which was crafted during five years (1995-2000). Design of the 2000 RTP was also guided by input from a 21-member citizen advisory committee, local officials and staff from the region's cities and counties, residents, community groups and businesses throughout the region. Numerous opportunities for public comment were provided during the five-year process, which concluded with a 45-day public comment period prior to adoption by ordinance. Appendix 2 contains a timeline that describes key products and opportunities for public comment as part of the 2004 RTP. In addition, development of the MTIP included extensive public review and comment opportunities.

On September 29, 2003 a notice of Metro's intent to update the 2000 RTP and conduct an air quality conformity analysis of the 2004 RTP and 2004-07 MTIP was sent to affected governments and interested residents, businesses and community groups. This notice summarized the public process and a timeline for adoption of the 2004 RTP, the 2004-07 MTIP and a conformity determination for both plans. On October 31, 2003, a 30-day public comment period began on the draft 2004 RTP air quality conformity analysis procedures and methodologies. Metro's website and transportation hotline also supplied information on the plan update and conformity determination process, including opportunities for public comment. Appendix 2 contains copies of the 45-day kickoff notice and Oregonian notice. In addition, a post card was mailed to approximately 2,500 persons who had asked to be placed on either the RTP or MTIP interested persons mailing list. The post cards were also mailed to representatives of neighborhood organizations and community planning organizations. Finally, a email newsletter was also sent out to elected officials and representatives of local, regional and state officials. Table 4 describes the 2004 RTP and 2004-07 MTIP conformity process.

Table 4

2004 Regional Transportation Plan /2004-07 MTIP Conformity Analysis Timeline

September 29, 2003	Notification of 2004 RTP and joint 2004 RTP/2004-07 MTIP air quality conformity process to affected governments, interested citizens, community groups
October 31, 2003	Begin 30-day public comment period on draft 2004 RTP and draft conformity determination document for the 2004 RTP and 2004-07 MTIP
December 4, 2003	Metro Council Public hearing on 2004 RTP, 2004-07 MTIP and draft conformity determination; close of public comment period
December 5, 2003	Review of 2004 RTP and air quality conformity analysis results and tentative action by TPAC
December 11, 2003	Tentative action on 2004 RTP and joint 2004 RTP/2004-07 MTIP air quality conformity findings by JPACT and Metro Council

4. Timely Implementation of TCMs (OAR 340-252-0140).

- a. Requirement: *The State Conformity Regulations require MPO assurance that "the transportation plan, [and] TIP... must provide for the timely implementation of TCMs from the applicable implementation plan."*

Finding: See C.1(d), above.

5. Support Achievement of NAAQS

- a. **Requirement:** The State Implementation Plan (SIP) requires the 2004 RTP and 2004-07 MTIP to support achievement of NAAQS.

Finding: The 2004 RTP and 2004-07 MTIP were prepared by Metro. SIP provisions are integrated into the RTP and MTIP as described below, and by extension into subsequent TIPs, which implement the 2004 RTP. In addition, the 2004-07 MTIP is consistent with the 2004 RTP, and accordingly, both the 2004 RTP and MTIP are consistent with this requirement.

The scope of the 2004 RTP requires that it possess a guiding vision which recognizes the inter-relationship among (a) encouraging and facilitating economic growth through improved accessibility to services and markets; (b) ensuring that the allocation of increasingly limited fiscal resources is driven by both land use and transportation benefits; and (c) protecting the region's natural environment in all aspects of transportation planning process.

Chapter 1 of the 2004 RTP describes this guiding vision:

- balance transportation and land use plans to protect livability in the region
- reduce reliance on any single mode of travel by expanding transportation choices
- sustain economic health by providing access to jobs and industry
- target transportation investments to leverage the 2040 Growth Concept
- maintain access to the natural areas around the region
- protecting the region's natural environment in all aspects of transportation planning process

In addition, several policies and objectives in Section 1.3.4 of the 2004 RTP directly support achievement of National Ambient Air Quality Standards (NAAQS). These objectives are achieved through a variety of measures affecting transportation system design and operation, also described in Chapter 1 of the 2004 RTP. The plan sets forth goals and objectives for road, transit, freight, bicycle, and pedestrian improvements as well as for implementation of system and demand management strategies.

The highway system is functionally classified to ensure a consistent, integrated, regional highway system of principal routes, arterial and collectors. Acceptable level-of-service standards are set for maintaining an efficient flow of traffic. The RTP also identifies regional bicycle and pedestrian systems for accommodation and encouragement of non-vehicular travel. System performance is emphasized in the RTP and priority is established for implementation of transportation system management (TSM) measures.

The transit system is similarly designed in a hierarchical form of regional transitways, radial trunk routes and feeder bus lines. Standards for service accessibility and system performance are set. Park-and-ride lots are emphasized to increase transit use in suburban areas. The RTP also sets forth an aggressive demand management program to reduce the number of automobile and person trips being made during peak travel periods and to help achieve the region's goals of reducing air pollution and conserving energy.

In conclusion, 2004 RTP and the 2004-07 MTIP is in conformance with the SIP in its support for achieving the NAAQS. Moreover, the RTP provides adequate statements of guiding policies and goals with which to determine whether projects not specifically included in the RTP at this time may be found consistent with the RTP in the future. Section 1.3.7 in Chapter 1 of the 2004 RTP identifies key policies that guide the selection of projects and programs to implement the RTP. Conformity of such projects with the SIP would require interagency consultation.

6. Quantitative Analysis (OAR 340-252-0190)

1. Conduct a Quantitative Analysis

Requirement: *OAR 340-252-0190 requires that a quantitative analysis be conducted as part of the 2004 RTP conformity determination. The analysis must demonstrate that emissions resulting from the entire transportation system, including all regionally significant projects expected within the time frame of the plan, must fall within budgets established in the*

Page 32

maintenance plan for criteria pollutants. In the Portland-Vancouver Air Quality Maintenance Area these include ozone precursors (HC and NOx) and carbon monoxide (CO). A specified methodology must be used to calculate travel demand, distribution and consequent emissions as required by OAR 340-20-1010. The Portland metropolitan area has the capability to perform such a quantitative analysis.

Finding: For the Oregon portion of the Portland-Vancouver airshed, emission budgets have been set for various sources of pollutants (mobile, point, area) and are included in the SIP and in the region's Ozone and Carbon Monoxide Maintenance Plans. The 2004 RTP and 2004-07 MTIP must conform to the SIP mandated mobile emission budgets. Mobile emission budgets are set for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NOx), and hydrocarbons (HC).

The region's approved Maintenance Plans identify two sets of analysis years, one set for winter CO and one set for summer ozone precursors (NOx and HC). The CO budget years are 2007, 2010, 2015 and 2020. The ozone analysis years are 2006, 2010, 2015 and 2020. In addition, a plan horizon year must also be evaluated. For the 2004 RTP, the horizon year is 2025. Table 5 shows the budget years and associated emissions budgets. The 2004-07 MTIP is a subset of the financially constrained system described in the 2004 RTP.

Table 5
2004 RTP/2004-07 MTIP Mobile Emissions Budgets¹

	Winter CO	Summer HC	Summer NOx
	(thousand pounds/day)	(tons/day)	(tons/day)
2006	n/a	41	51
2007	775	n/a	n/a
2010	760	40	52
2015	788	40	55
2020	842	40	59
2025	842	40	59

¹ Budgets are from the Maintenance Plan adopted in 1996 except as noted. Year 2025 budget based on Ozone Maintenance Plan emission budget "for years 2020 and beyond".

Source: Metro

The network that was analyzed is summarized in Appendix 1. The protocol for definition of the Determination's analysis and budget years is summarized in Appendix 3, including discussion of why each analysis year was selected. Appendix 4 contains a summary of the principle model assumptions, including a discussion of assumed transit costs, parking factors, and intersection density and the impact of these factors on travel mode selection by 2040 design type (e.g., central city, regional centers, town centers, station communities, mainstreets, employment areas, corridors, etc.). A detailed description of the network assumptions coded into Metro's regional model is contained in a 2004 RTP Financially Constrained System Atlas, available for review at Metro located at 600 NE Grand Avenue, Portland, OR 97232. The Atlas

includes information about system and individual link capacities in the 2000 base year and capacities assumed after planned improvements as well as the year of expected operation of each planned improvement. The results of the quantitative analysis are shown in Table 3 and Figures 1, 2 and 3. In summary, Metro's analysis indicates that, with regard to the established budgets in all budget years (i.e., 2006, 2007, 2010, 2015, 2020 and 2025), that regional emissions will.... **Results Pending.**

2. Determine Analysis Years.

- a. **Requirement:** *The State Conformity Regulations) require the first analysis year to be no later than 10 years from the base year used to validate the transportation demand planning model (340-252-0070), that subsequent analysis years be no greater than 10 years apart and that the last year of the 2004 RTP must be an analysis year (340-252-0070).*

Finding: See Appendix 3 regarding selection of analysis and budget years, including discussion of why each analysis year was selected.

3. Perform the Emissions Impact Analysis.

- a. **Requirement:** *The State Conformity Regulations) require Metro to conduct the emissions impact analysis.*

Finding: Calculations were prepared, pursuant to the methods specified at OAR 340-20-1010, of CO and Ozone precursor pollutant emissions assuming travel in each analysis year on networks that have been previously described. A technical summary of the regional travel demand model, the EMME/2 planning software and the Mobile 5a-h methodologies is available from Metro upon request. The methodologies were reviewed by TPAC.

4. Determine Conformity.

- a. **Requirement:** *Emissions in each analysis year must be consistent with (i.e., must not exceed) the budgets established in the maintenance plan for the appropriate criteria pollutants (OAR 340-252-0190).*

Finding: Metro's analysis indicates that regional emissions will remain within established budgets in all budget years (i.e., 2006, 2007, 2010, 2015, 2020 and 2025). Table 6 provides a summary of these emissions and shows that the 2004 RTP and 2004-07 MTIP, conform with the SIP.

Table 6
2004 RTP/2004-07 MTIP Conformity Results¹

	Winter CO		Summer HC		Summer NOx	
	(thousand pounds/day)		(tons/day)		(tons/day)	
	<i>Budget</i>	<i>Model Result</i>	<i>Budget</i>	<i>Model Result</i>	<i>Budget</i>	<i>Model Result</i>
2006	<i>n/a</i>	<i>Results Pending</i>	41	<i>Results Pending</i>	51	<i>Results Pending</i>
2007	775	<i>Results Pending</i>	<i>n/a</i>	<i>Results Pending</i>	<i>n/a</i>	<i>Results Pending</i>
2010	760	<i>Results Pending</i>	40	<i>Results Pending</i>	52	<i>Results Pending</i>
2015	788	<i>Results Pending</i>	40	<i>Results Pending</i>	55	<i>Results Pending</i>
2020	842	<i>Results Pending</i>	40	<i>Results Pending</i>	59	<i>Results Pending</i>
2025	842	<i>Results Pending</i>	40	<i>Results Pending</i>	59	<i>Results Pending</i>

¹ Budgets are from the Maintenance Plan adopted in 1996. Year 2025 budget should be adjusted based on emission budget input factors.

Source: Metro

Figures 1, 2 and 3 show graphs of the conformity results that compare the emissions budgets with the modeled results for each analysis year for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NOx), and hydrocarbons (HC) respectively. Figures 4 and 5 show graphs of the conformity results that compare the emissions budgets with the modeled results for each analysis year for winter carbon monoxide (CO) in the Portland central city subarea and 82nd Avenue subarea.

Figure 1 - Add forecast emissions including 2025 numbers

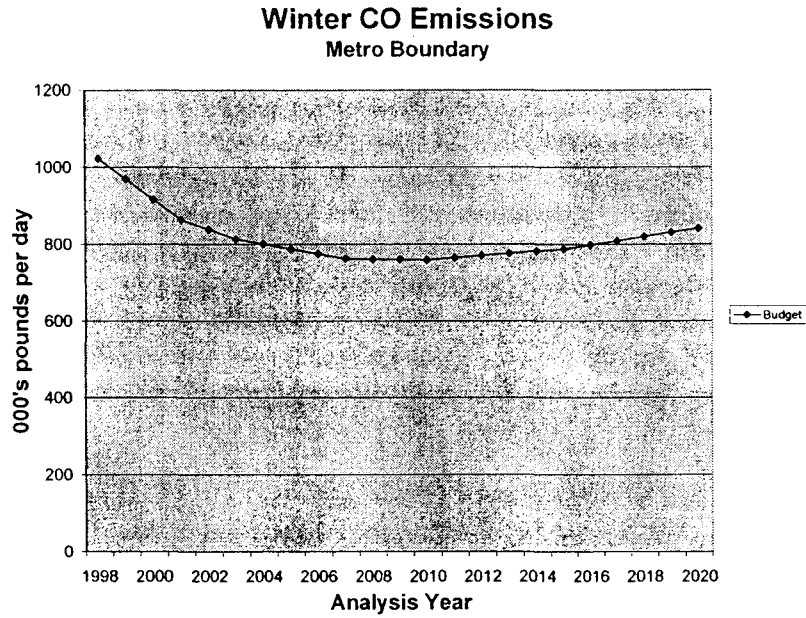


Figure 2 - Add forecast emissions including 2025 numbers

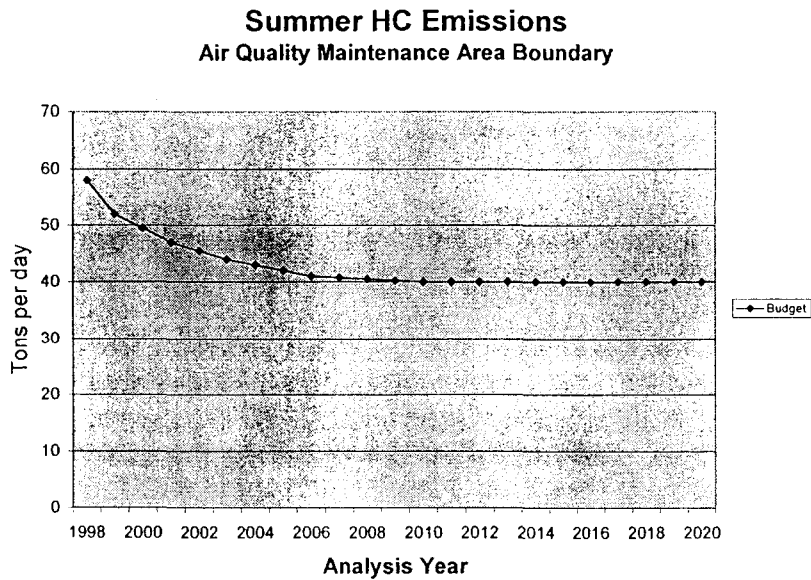
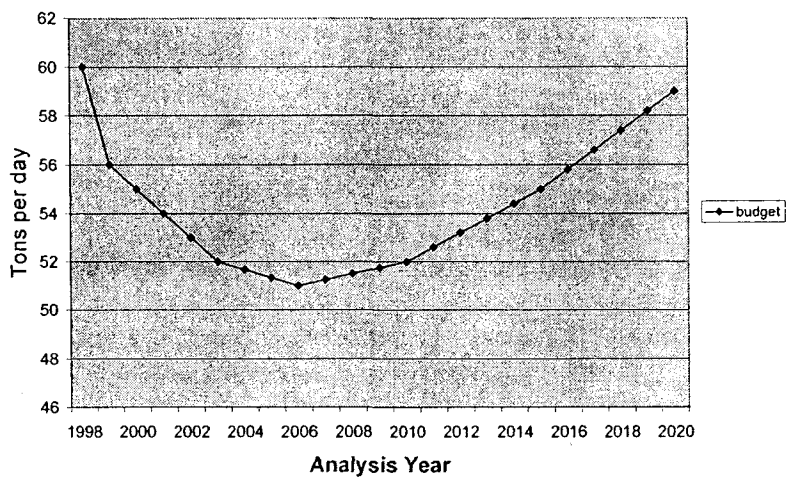


Figure 3 - Add forecast emissions including 2025 numbers

Summer NOx Emissions Air Quality Maintenance Boundary



Source: Metro

Figure 4 - Add forecast emissions including 2025 numbers

Based on RTP Financially Constrained System and 2004-07 MTIP.

Source: Metro

Winter CO Emissions Portland Central City Subarea

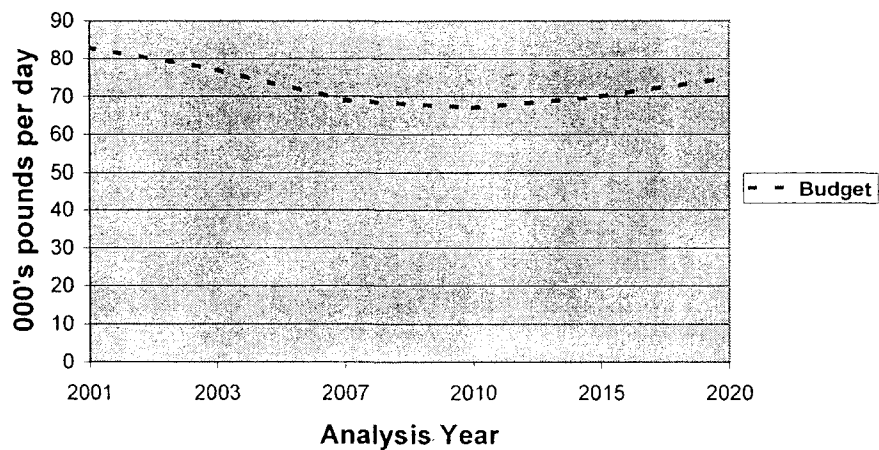
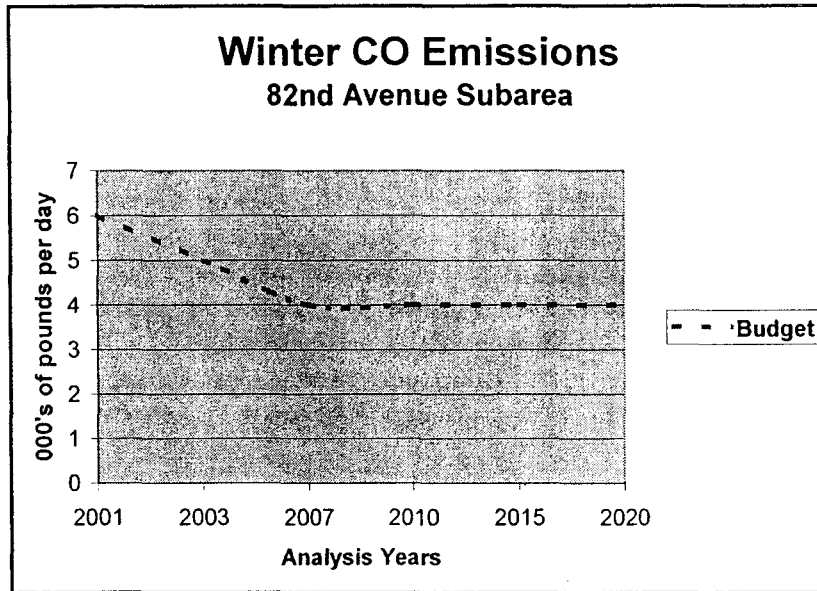


Figure 5 - Add forecast emissions including 2025 numbers



Based on RTP Financially Constrained System and 2004-07 MTIP.
Source: Metro



Appendix 1

METRO

**2004 Regional Transportation Plan and
2004-07 Metropolitan Transportation Improvement Program**

Financially Constrained System Project List

(Note: because RTP Packet 2 - Project Amendments contains the identical information and is being distributed with this draft conformity determination, please see RTP Packet 2. The final conformity determination will include this list.)



METRO

2004 RTP UPDATE

Calendar of Activities

September 5	TPAC review and discussion on RTP Work Program
September 9	Metro meeting with TriMet on RTP finance and project assumptions
September 16	Council Work Session review of RTP Work Program
September 18	JPACT review of RTP Work Program
September 18	Metro meeting with City of Portland and Port of Portland on RTP finance and project assumptions
September 23	Metro meeting with Clackamas County Coordinating Committee TAC on RTP finance and project assumptions
September 24	Metro meeting with East Multnomah County Transportation Committee on RTP finance and project assumptions
September 25	Metro meeting with Washington County Coordinating Committee TAC on RTP finance and project assumptions
September 25	Metro meeting ODOT and other MPOS on State finance assumptions
September 26	TPAC discussion on defining the preferred system and financial constraint analysis
October 2	FTA/FHWA/DEQ/EPA and TPAC interagency consultation on air quality conformity
Early October	Preferred system analysis begins
October 7	TPAC Workshop – Finalize Preferred RTP System and continue discussion on Financially Constrained RTP System
October 14	TPAC Workshop – Finalize Financially Constrained RTP System 9:30-noon, Cooper Mountain Room (Rm 370 A)
Mid-October	Financially constrained system analysis begins
October 22	TPAC Workshop – General amendments to the RTP 9:30-noon, Cooper Mountain Room (Rm 370 A)

Updated October 8, 2003

October 28	Metro Council work session on draft 2004 RTP
October 31	Staff recommendation on "technical" draft 2004 RTP released at TPAC to kick-off public comment period; draft RTP and conformity determination (not including emissions results) documents submitted to FHWA and FTA to begin review
November 3	Air quality conformity analysis begins
November 5	MTAC discussion on draft 2004 RTP
November 12	MPAC discussion on draft 2004 RTP
November 13	JPACT discussion on draft 2004 RTP
November 13	First Metro Council reading of Ordinance on draft 2004 RTP
November 19	MTAC comments on draft 2004 RTP (<i>tentative</i>)
November 26	TPAC discussion on draft 2004 RTP; review and discussion of air quality conformity analysis
December 4	Public hearing on draft 2004 RTP and air quality conformity procedures; public comment period ends at 5 p.m.
December 5	TPAC Special Meeting - comments on draft 2004 RTP
December 10	MPAC consideration of 2004 RTP
December 11	JPACT consideration of 2004 RTP
December 11	Second Council reading of Ordinance and Resolution, and consideration of adoption of 2004 RTP
December 12	RTP and final conformity determination submitted to FHWA and FTA for Federal review, pending approval by Metro Council
January 26	2000 RTP expires; deadline for federal conformity finding on 2004 RTP and conformity analysis to prevent lapse of RTP



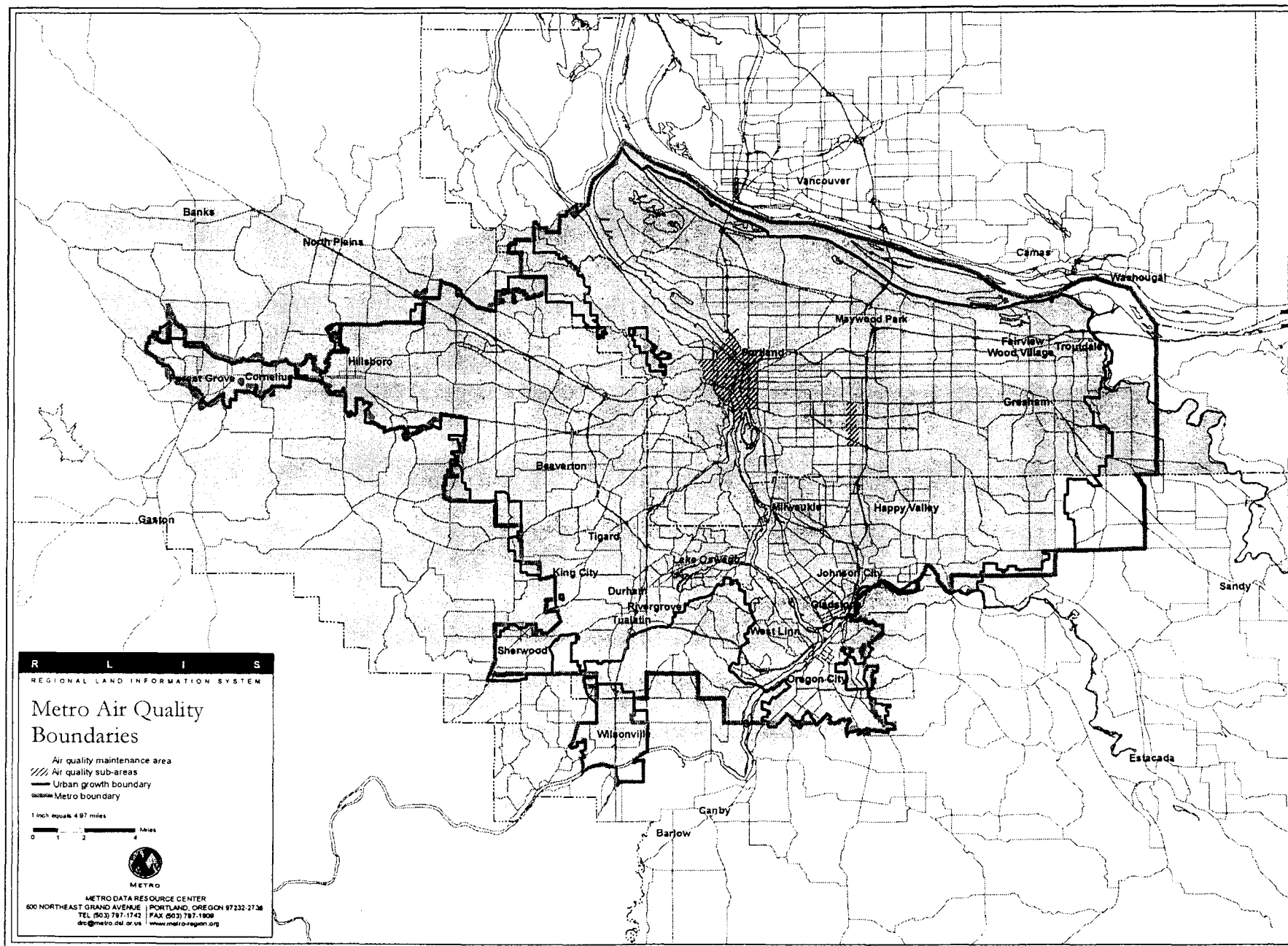
METRO

Appendix 3

2004 Regional Transportation Plan and 2004-07 Metropolitan Transportation Improvement Program Air Quality Conformity Analysis Protocols

Transportation Emissions Budget Years

For the Oregon portion of the Portland-Vancouver airshed, emission budgets (maximum air pollutant levels) have been set for various sources of pollutants (mobile, point, and area) and are included in the State Implementation Plan (SIP) and in the region's Ozone and Carbon Monoxide Maintenance Plans. The 2004 Regional Transportation Plan (RTP) and 2004-07 Metropolitan Transportation Improvement Program (MTIP) must conform to the SIP mandated transportation emissions budgets. Transportation emissions budgets are set for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NO_x), and hydrocarbons (HC). The geographic extent of the carbon monoxide transportation emission budget is the Metro jurisdictional boundary. For the carbon monoxide transportation emission budget, the geographic extent is the Air Quality Maintenance Area (AQMA). However, emission budgets for carbon monoxide have also been established for the Central City Transportation Management Plan area (the central city of Portland) as well as an area along SE 82nd Avenue area from SE Division Street to SE Woodstock Avenue in southeast Portland. These areas are shown in the following map.



The region's approved Maintenance Plans identify two sets of budget years, one set for winter CO and one set for summer ozone precursors (NO_x and HC). The CO budget years are 2007, 2010, 2015 and 2020.

The ozone budget years are 2006, 2010, 2015 and 2020. In addition, a plan horizon year must also be evaluated. For the 2004 RTP, the horizon year is 2025. Table 1 shows the budget years and associated emissions budgets.

Table 1
2004 RTP Transportation Emissions Budgets¹

	Winter CO (thousand pounds/day)			Summer HC (tons/day)	Summer NO _x (tons/day)
	Region (Metro boundary)	PDX Central City Sub-area	82nd Ave Sub-area	Region (AQMA)	Region (AQMA)
2006	n/a	n/a	n/a	41	51
2007	775	70	4	n/a	n/a
2010	772	68	4	40	52
2015	801	71	4	40	55
2020	856	76	4	40	59
2025	856	76	4	40	59

Relationship of Budget Years to Analysis Years

On October 2, 2003, Metro, DEQ, EPA, FHWA and FTA staff met and reviewed the conformity requirements. The process is technically complex, requires extensive staff and computer time and is, therefore, expensive. Metro fully models as few analysis years as possible to the degree the rules allow. As permitted by the conformity rule, Metro identifies and models key analysis years and interpolates between them to establish that regional mobile emissions meet all established emissions budgets. As noted in the table below, full transportation model runs, include forecasts of trip characteristics such as trip origin and destinations, time, length and duration. These full transportation model runs are completed for years 2000, 2010 and 2025. These transportation models are based on assumptions about future transportation improvements, the location and amount of future population and job growth and transportation facility characteristics (propensity to drive, use transit, etc). Future air quality conditions using air quality software (MOBILES5a-h) are then estimated using the output of the transportation model results. For the year 2015, a partial transportation model run is used. This approach uses the trip tables from the 2010 and 2020 full model runs and assesses the results of these trips on a transportation network with improvements assumed to be made by 2015. Then the air quality model is run to estimate the air quality conditions in the year 2015.

This approach is acceptable under the federal rule and is called out in its preamble as follows: "A full regional emissions analysis must be performed for each pollutant and precursor for the last year of the transportation plan's forecast period (i.e., 2025)..." as well as for intervening years, not to exceed 10 years between analyses. For the other years for which the *budget test* is required to be demonstrated, the

¹ Budgets are from the Maintenance Plan adopted in 1996. The maintenance plans include no specific year emission budget after year 2020, but other transportation planning requirements mandate that the planning forecast year also be conformed. The planning forecast year is 2025. The year 2025 budget uses the same budget as year 2020, as both the ozone and carbon monoxide maintenance plans call for the same budget "For Years 2020 and Beyond".

estimate of regional emissions does not necessarily need to be based on a full regional emissions analysis performed for the specific year; the estimate of regional emissions may be based on an interpolation between the years for which the full regional emissions analysis was performed.

Table 2 identifies the years for which a full conformity analysis was performed and the years for which interpolation was performed for both summer ozone precursors and winter carbon monoxide. Sub-area analyses are derived from the regional results.

Table 2
2004 Regional Transportation Plan Conformity Analysis Years

			Winter CO	Ozone (HC and NOx)
Year	Budget Established	Modeling	Emission Calculation	Emission Calculation
2006	Ozone		None - not required	Emission Interpolation*
2007	Winter CO		Emission Interpolation*	None - not required
2010	Both	Full Model run	MOBILE5a-h	MOBILE5a-h
2015	Both	Trip Assignment (Partial Model run)	MOBILE5a-h	MOBILE5a-h
2020	Both		Emission Interpolation	Emission Interpolation
2025	All years after 2020 to use 2020 budget	Full Model run	MOBILE5a-h	MOBILE5a-h

* A full model run was performed for year 2000. Emissions for 2006 and 2007 were interpolated using the 2000 and 2010 model runs.

Regional Travel Demand Model Inputs, Assumptions and Methodology

For a full analysis, air quality conformity requires demand model outputs such as vehicle miles traveled, trip ends, and network speeds. Emissions calculations are performed on a link-by-link and matrix basis for stabilized emissions and trip end emissions, respectively. Metro's model requires the following inputs to be assembled or created, if not already available (for a given year):

- Population and employment forecasts
- Transit fare and parking cost data
- Transit network assumptions (PM peak, Midday; including bus routes and park & ride sheds)
- Highway network definitions (PM peak, Midday)
- Vehicle emission factors

The model run consists of the following steps:

- Trip generation (e.g., how many total trips are expected in the region)
- Destination choice (e.g., determination of where each of the approximately 5 million daily trips are coming from and going to)
- Mode choice
- Time of day identifications (AM peak, PM peak, midday, rest of the day)

- Assignment of trips to the network (path choice)

In addition, air quality conformity model runs require stratification of the trips by inspection maintenance area (Oregon I/M, Washington State I/M, and Non-inspected). Once the data are assembled and the demand model steps are completed, the results are used for the calculation of emissions. Ozone and CO gases are computed, and then reported in various geographies depending on the project requirements.

To summarize, a full model analysis was performed for year 2000, 2010 and the 2004 RTP horizon year of 2025. New trip assignments were prepared for 2015. Data for all other budget years were interpolated between these four analysis years. The interpolated results were then compared to actual emission budgets to establish that the 2004 Regional Transportation Plan and 2004-07 Metropolitan Transportation Improvement Program conform to the emissions budgets in all years for which they are established in the region's CO and Ozone maintenance plans.

MOBILE5a-h Air Quality Model Assumptions

The MOBILE5a-h air quality computer model is used to estimate the future air quality conditions for the Portland area should the 2004 RTP and 2004-2007 MTIP be implemented. More specifically, on-road motor vehicle emissions of carbon monoxide and precursors of ozone and will be determined using EPA's Mobile5a_h Emissions Factor Model and the following parameters:

Fleet Data: Vehicle registration distribution and vehicle age distribution for Light Duty Gas Vehicles (LDGV) and Light Duty Diesel Vehicles (LDDV) will be derived from Oregon Dept. of Motor Vehicles registration records for Clackamas, Multnomah and Washington Counties 2002. Vehicle type and age distributions for other vehicle groups will be determined by national averages. Vehicles originating in Clark County, Washington will be characterized the same way if possible. If 2002 registration data are not available, national averages will be used to describe that portion of the fleet.

I/M Program: Vehicles registered in the Portland Metropolitan area are subject to Oregon DEQ's Inspection/Maintenance (Emissions Testing) Program. Details of the I/M program reflected in the Mobile5a_h model are:

OBD Test: 1996 and newer vehicles are subject to On Board Diagnostics testing.

Enhanced Test: 1981 through 1995 model year vehicles are subject to BAR 31 "enhanced" emissions testing (modeled as EPA's I/M 240 enhanced test).

Basic Test: 1975 through 1980 model year vehicles are subject to the 2500 two speed idle emissions test.

Exemption: Most vehicles are not subject to emissions testing until they become four years old.

Waiver Rate: There is no repair cost threshold at which a vehicle does not have to meet the emissions test requirement.

I/M Program Start Year: 1975

Program Type: Centralized

Compliance Rate: 90%

Inspection Frequency: Biennial

Tampering Rates: Mobile5 rates.

Speed: One average speed used for all vehicle types.

Basic Emission Rates: derived from Mobile5 Basic Emission Rates.

Refueling Emissions: None calculated. (Accounted for under "Area Sources")

Summer Temperatures: Min: 61 deg. F; Max: 98 deg. F

Winter Temperature: Ambient = 39.8 deg. F

Summer Reid Vapor Pressure: 7.8 psi

Winter Reid Vapor Pressure: 13.6 psi

Winter Fuel Type: 2.7% Oxygen



Appendix 4

2004 Regional Transportation Plan Transportation Analysis Zone Assumptions

2040 Grouping	2040 Group Characteristics	2025 Intersection Density (connections per mile)	2025 Parking Factors (indexed to CBD in '94 dollars)	2025 Transit Pass Factor (% of Full Fare)	2025 Fareless Areas (for internal trips)
		FC	FC	FC	FC
Central City 1 Downtown Business District	Highest planned employment and housing density in the region, with highest level of access by all modes. LRT exists and current land uses reflect planned mix and densities.	20	6.08	60%	X
Central City 2 Lloyd District	Highest planned employment and housing density in the region, with highest level of access by all modes. LRT exists and current land uses reflect planned mix and densities.	20	3.94	60%	X
Central City 3 River District and Northwest	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses approach planned mix and densities.	20	3.94	65%	
Central City 4 Central Eastside Industrial District	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses do not reflect planned mix and densities.	20	2.96	65%	
Central City 5 South Waterfront District	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses do not reflect planned mix and densities.	18	3.04	65%	
Regional Centers - Tier 1 Gresham Gateway Beaverton Hillsboro Clackamas	Planned high employment and housing density, with highest level of access by all modes. LRT exists and current land uses approach planned mix and densities.	>14	0.80	80%	X
Regional Centers - Tier 2 Washington Square Oregon City	Planned high employment and housing density, with highest level of access by all modes; planned LRT. Current land uses do not reflect planned mix and densities.	>10	0.60	95%	

(FC) 2025 Financially Constrained System

2040 Grouping	Group Characteristics	2025 Intersection Density (connections per mile)	2025 Parking Factors (indexed to CBD in '94 dollars)	2025 Transit Pass Factor (% of Full Fare)	2025 Fareless Areas (for internal trips)
		FC	FC	FC	FC
Station Communities Tier 1 Banfield Corridor Westside Corridor	High housing density mixed with commercial services; highest level of access for transit, bike and walk; existing LRT.	>12	0.80	80%	
Station Communities Tier 2 South/North Corridor	Planned high housing density mixed with commercial services, with high level of transit, bike and walk; planned LRT. Current land uses do not reflect planned mix and densities.	>10	0.60	95%	
Town Centers - Tier 1 St. Johns Hollywood Lents Fairview/Wood Village Troutdale Rockwood Lake Oswego Tualatin Forest Grove Milwaukie Sherwood Wilsonville	Moderate housing and employment density planned, with high level of access by all modes. Currently has good mix of uses, well connected street system and good transit.	>16	0.45	85%	
Town Centers - Tier 2 West Portland Raleigh Hills Hillsdale Gladstone West Linn Sunset Cornelius Orengo	Moderate housing and employment density planned, with high level of access by all modes. Currently has some mix of uses, moderately connected street system and some transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>10	0.36	100%	
Town Centers - Tier 3 Happy Valley Lake Grove Cedar Mill Tannasbourne	Moderate housing and employment density planned, with high level of access by all modes. Currently has modest mix of uses, poorly connected street system and poor transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>8	0.28	100%	
Town Centers - Tier 4 Pleasant Valley Damascus Bethany Murrayhill	Moderate housing and employment density planned, with high level of access by all modes. Currently undeveloped or developing urban uses, with skeletal street system and poor transit. Existing topography or physical barriers may limit bike and pedestrian travel.	>8	0.18	100%	
Mainstreets - Tier 1 Eastside Portland to 60th	Moderate housing and employment density planned, with high level of access by all modes. Currently has good mix of uses, well connected street system and good transit.	>14	0.45	100%	

2040 Grouping	Group Characteristics	2025 Intersection Density (connections per mile)	2025 Parking Factors (indexed to CBD in '94 dollars)	2025 Transit Pass Factor (% of Full Fare)	2025 Fareless Areas (for internal trips)
		FC	FC	FC	FC
Mainstreets - Tier 2 Remaining Region	Moderate housing and employment density planned, with high level of access by all modes. Currently has some mix of uses, moderate connectivity and some transit.	>8	0.36	100%	
Corridors Full Region	Moderate housing and employment density planned, with high level of access by all modes. Currently has modest mix of uses, moderate connectivity and some transit.	>10	None	100%	
Inner Neighborhoods Full Region	Low density housing planned, with moderate level of access by all modes. Currently has moderate connectivity and some transit.	>10	None	100%	
Outer Neighborhoods - Tier 1 Current Urban Areas	Low density housing planned, with moderate level of access by all modes. Currently has poorly connected street system and little transit.	>8	None	100%	
Outer Neighborhoods - Tier 2 Urban Reserve Areas	Low density housing planned, with moderate level of access by all modes. Currently has skeletal street system and no transit.	>6	None	100%	
Employment Areas Full Region	Low density employment planned, with moderate level of access by all modes. Currently has poorly connected street system and limited transit.	>8	None	100%	
Industrial Areas - Tier 1 Rivergate Swan Island Airport	Low density employment planned, with high level of access by rail and truck freight, and moderate access by other modes. Currently has somewhat connected street system and some transit.	>10	None	100%	
Industrial Areas - Tier 2 South Shore Clackamas Tualatin Beaverton Sunset	Low density employment planned, with high level of access by rail and truck freight, and moderate access by other modes. Currently has developing street system and poor transit.	>8	None	100%	
Greenspaces Same as Tier 2 Outer Neighborhoods.	Recreational uses are planned, with moderate level of access by all modes	>6	None	100%	
Rural Reserves Same as Tier 2 Outer Neighborhoods.	Urban uses are not planned in the foreseeable future. Currently has skeletal street system and no transit.	>6	None	100%	
Special Area 1 Portland International Airport		*	6.14	60%	

Special Area 2 Oregon Health Sciences University	<i>These places are relatively small geographic areas with special characteristics.</i>	•	1.86	60%	
Special Area 3 Oregon Zoo		•	1.86	100%	
Special Area 4 SMART (Wilsonville)		•	•	•	X

* Use parent zone values.
10/29/03



METRO

Appendix 5

2004-07 Metropolitan Transportation Improvement Program (MTIP) Calendar of Activities

June 19	Council action on final Transportation Priorities program, pending air quality analysis.
September 26	TPAC review of draft MTIP report.
October 2	MTIP/RTP Air Quality interagency consultation meeting. 10-11:30a.m., Cooper Mountain Room (Rm 370 A)
October 9	JPACT Review of draft MTIP report.
October	Draft RTP financially constrained system defined and analyzed.
October 31	Draft conformity determination (not including emissions results) submitted to FHWA/FTA to begin review. Public comment period begins on 2004-07 MTIP and draft conformity determination.
November 3	Joint RTP/MTIP air quality conformity analysis begins.
November 14	Public comment period on draft conformity determination (RTP and MTIP) begins
November 26	TPAC review and discussion of air quality conformity analysis.
December 4	Public hearing on 2004 RTP and 2004-07 MTIP air quality conformity determination at Metro Council. Public comment period closes at 5:00 pm.
December 11	Final JPACT action on 2004-07 MTIP and air quality conformity
December 11	Metro Council action on 2004-07 MTIP and air quality conformity determination (by Resolution).
December 12	2004 RTP and 2004-07 MTIP final conformity determinations submitted to FHWA and FTA for Federal review, pending approval by Metro Council.
January 26	Anticipated federal approval of 2003 RTP and 2004-07 MTIP air quality conformity determinations.



METRO
2004 Regional Transportation Plan and
2004-07 Metropolitan Transportation Improvement Program

Published Notice

Oregonian Metro Section 9-29-03

WESTSIDE
503-97-PERGO
(977-37461)
8948 SW Barbur Blvd.
Portland, OR

DIETZ



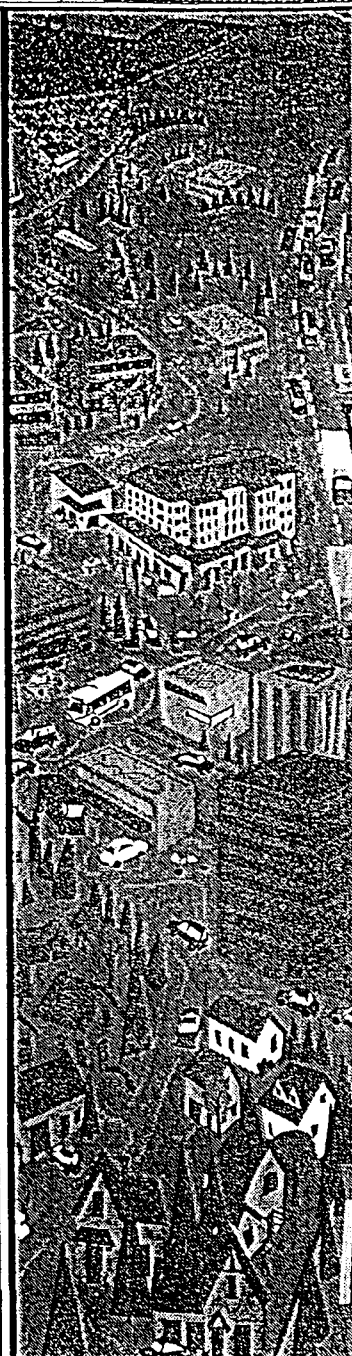
Seminars

on your house.
edits, reduce the
water heating
have 20-year
actors.

vantage of this
spects and
n's energy with

at rail stop


yTrust
of Oregon, Inc.



Transportation plan update begins

Metro is starting a periodic update of the Regional Transportation Plan (RTP) in order to maintain continued compliance with the Federal Clear Air Act and state guidelines. The update will include both 2004 RTP and 2004-07 Metropolitan Transportation Improvement Program air quality analyses.

The plan, updated every three years to ensure that it addresses future travel needs, will focus on projects for roads and freight movement, bicycling, transit and walking. These projects already have been adopted in local and regional plans and corridor studies through a public process.

Public comment will be taken Oct. 31 to Dec. 4. The staff recommendation on the technical draft of the plan will be available for public review on Oct. 31.

Comments will be taken Dec. 4

A public hearing will be held during the Thursday, Dec. 4, Metro Council meeting. The meeting begins at 2 p.m. at Metro Regional Center, 600 NE Grand Ave., Portland. The council will take action on the update on Dec. 11 (tentative). For more information, visit www.metro-region.org or call (503) 797-1839.

Other ways to comment

Phone (503) 797-1900 option 2
Fax (503) 797-1911
E-mail trans@metro.dst.or.us
Mail Kim Ellis, Metro
600 NE Grand Ave.
Portland, OR 97232



METRO
PEOPLE PLACES
OPEN SPACES

Copy of Post Card sent via US Mail to about 2,500 people (RTP & MTIP Interested Persons mailing list and neighborhood and community planning organizations within the region)



Transportation plan update begins

Public comment will be taken Oct. 31 to Dec. 4

Metro is starting a periodic update of the Regional Transportation Plan (RTP) in order to maintain continued compliance with the Federal Clear Air Act and state guidelines. The update will include an air quality analysis of the 2004 RTP and 2004-07 Metropolitan Transportation Improvement Program.

The plan, updated every three years to ensure that it addresses future travel needs, will focus on projects for roads and freight movement, bicycling, transit and walking. These projects already have been adopted in local and regional plans and corridor studies through a public process.

Public comment will be taken Oct. 31 through Dec. 4. The staff recommendation on the technical draft of the plan will be available for public review on Oct. 31.

Public hearing will be held Dec. 4

A public hearing will be held during the Thursday, Dec. 4, Metro Council meeting. The meeting begins at 2 p.m. at Metro Regional Center, 600 NE Grand Ave., Portland.

The council will take action on the update on Dec. 11 (tentative). For more information, visit **www.metro-region.org** or call (503) 797-1839.

Other ways to comment

Phone (503) 797-1900 option 2

Fax (503) 797-1911

E-mail trans@metro.dst.or.us

Mail Kim Ellis, Metro
600 NE Grand Ave.
Portland, OR 97232

October 2003

METRO'S REGIONAL PLANNING E-NEWSLETTER

Welcome to Metro's Regional Planning e-newsletter. It is e-mailed periodically to interested persons. Check the end of the newsletter for "subscription" information.

FEATURED IN THIS ISSUE:

- Periodic update of Regional Transportation Plan
- Downtown Mall revitalization comments solicited
- Powell/Foster Corridor Study recommendation due
- TGM grant received for Centers and Corridors Study
- Fish and wildlife habitat protection events

UPDATE BEGINS ON REGIONAL TRANSPORTATION PLAN

Metro is starting a periodic update of the Regional Transportation Plan (RTP), in order to maintain continued compliance with the Federal Clean Air Act and state guidelines. The update will include both a 2004 RTP and 2004-07 Metropolitan Transportation Improvement Program (MTIP) air quality analysis.

The RTP is updated every three years to ensure the plan addresses future travel needs. For this update, the plan will focus on projects for roads and freight movement, bicycling, transit and walking that have already been adopted in local and regional plans and corridor studies through a public process.

Public comment will be taken Oct. 31 through Dec. 4, 2003. The staff recommendation on the technical draft of the plan and the air quality analysis will be available for public review on Friday, Oct. 31.

Comments will be taken at a public meeting at 2 p.m. Thursday, Dec. 4 at Metro, 600 NE Grand Avenue in Portland.

The Metro Council is scheduled to take action on the RTP update on Thursday, Dec. 11 (tentative). For more information, visit www.metro-region.org or call (503) 797-1839.

PUBLIC COMMENT SOLICITED ON THE DOWNTOWN MALL REVITALIZATION PROJECT

Metro, TriMet and the City of Portland are considering adding light rail to the Portland Mall as part of an effort to revitalize Fifth and Sixth avenues.



Appendix 7

METRO 2004 Regional Transportation Plan and 2004-07 Metropolitan Transportation Improvement Program

Evaluation of emissions analysis for transportation activities which cross borders of MPOs or nonattainment or maintenance areas or basins

The following maps and data were forwarded from Multnomah County. They constitute all projects within Multnomah County and inside the Air Quality Maintenance Area and outside the Metro boundary.

These projects were not considered regionally significant as they do not appear to add to the road capacity and therefore should have no air quality impact.

Fish Passage Culvert Project - Field Form

Culvert ID No. Road Name, Culvert #, Mile Point, Size Easting Northing Stream Name Stream Milepoint Priority Owner USGS Quad MapName

493-06 282ND Av, SE - # 2 - MP: 2.046 84 x 40 IRIS: 493
549250 5034300 Johnson Creek

3.5 High Multnomah County Sandy

Preliminary Assessment

☒ Retrofit ☐ Replace

IRIS Stats Material Type: CP Inlet Treatment: BH Offset Distance: 16 Slope: 0 Rise Height: 84 Drainage Adequacy: A
Coating Type: C Outlet Treatment: BH Cover Depth: 2 Skew: 45 Span Width: 84 Condition: G Road MP 2.046

Coho Salmon: Verified Cutthroat Trout: Verified Steelhead: None Winter Steelhead: Verified Rainbow Trout: None

Oregon Dept. Fish and Wildlife Data Slope: 0.0 Habitat Quality: Unknown

Biologist's Note: High velocity. Just north of Clackamas Co line. Eleven plus upstream obstructions as well as agricultural channelization and culverting. At least 4 downstream obstructions.

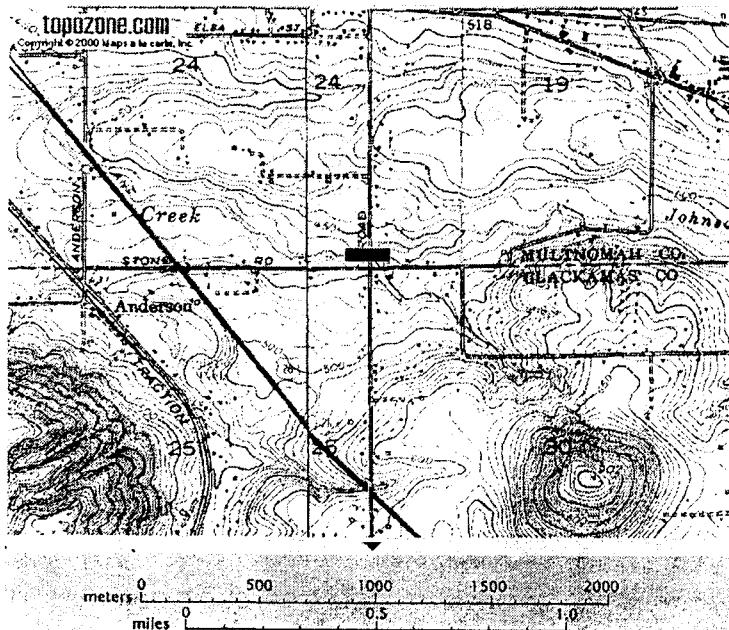
\\dsdcd-yeon\fishpassageimages\FPCM493-06.jpg

Notes: _____

Measurements - Outfall Drop: _____ Depth of Pool: _____

Date: _____ Signature: _____

☐ Land Use Planning ☐ Engineering ☐ Road Maintenance ☐ Consultant



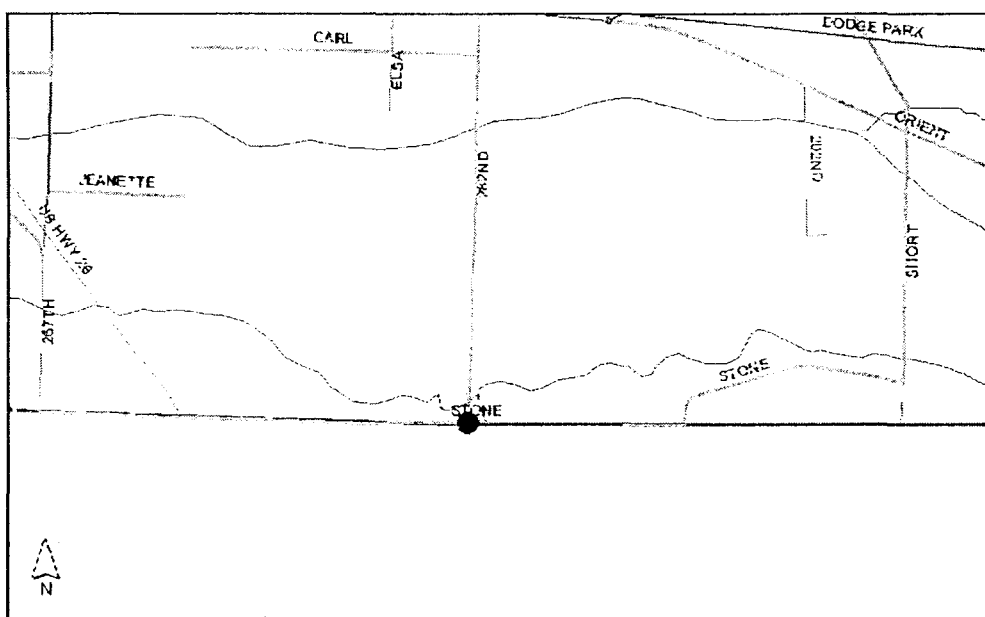
Road Fund Capital Projects

Project Nam 282nd Ave/Stone Rd

Project #: 705 Category: Signal/Intersection Functional Class: Rural Arterial

Project Description: Widen 282nd Ave to create left turn pockets to Stone Rd. Widen Stone Rd to reduce offset of east and west legs.

RTP No:	IRIS # 493	Mile Point: 2.09	ROW Cost:	\$20,000
TIF	<input type="checkbox"/>		Construction Cost:	\$150,000
Score:	5		Total Cost:	\$170,000



Map not to Scale

	Existing	New
Travel Lanes:	2	3
Sidewalks:	No	No
Bike Lanes:	No	
Drainage:	Ditch	Ditch
Illumination:	No	No
Turn Lanes:	No	Yes
Intersection:	No	Yes

Road Fund Capital Projects

Project Nam Beaver Creek Bridge on Historic Columbia River Hwy

Project #: 724

Category: Bridge

Functional Class: Major Collector

Project Replace Bridge
Description:

RTP No:

IRIS # 490

ROW Cost:

\$60,000

TIF



Construction Cost:

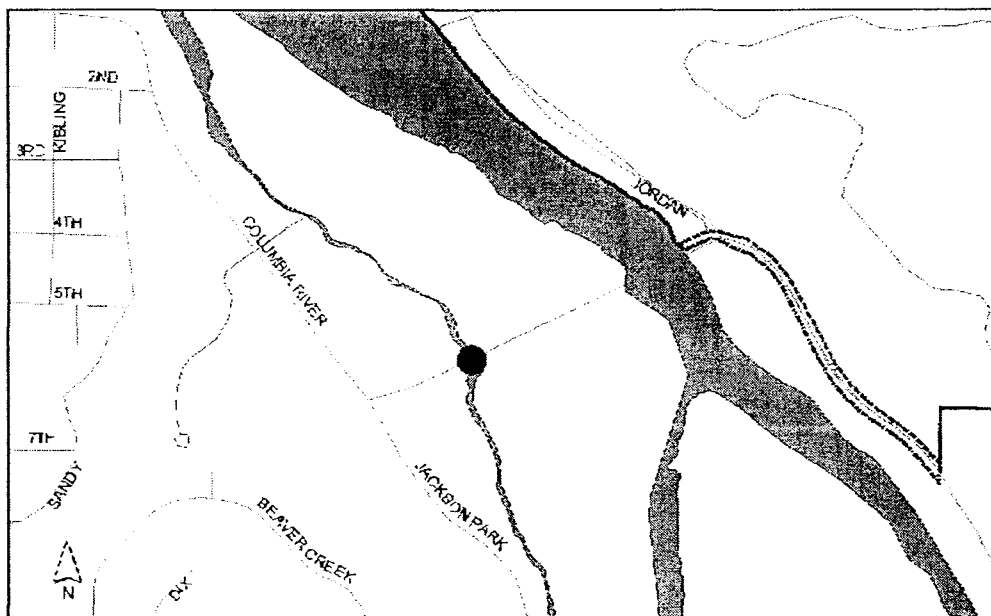
\$987,000

Score:

30

Total Cost:

\$1,047,000



Map not to Scale

	Existing	New
Travel Lanes:	2	2
Sidewalks:		Yes
Bike Lanes:	No	Yes
Drainage:	Storm	Storm
Illumination:	No	No
Turn Lanes:	No	No
Intersection:	Yes	No

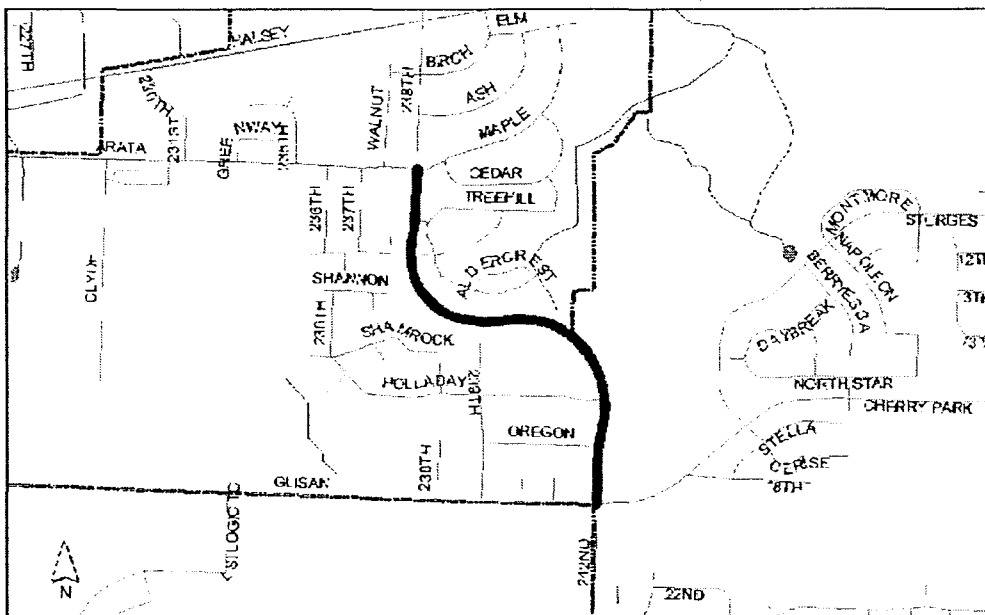
Road Fund Capital Projects

Project Nam 238th Dr: Glisan St--Arata Rd Safety Improvements

Project #: 722 Category: Arterial Functional Class: Minor Arterial

Project Description: Widen existing pavement near entrance to Tree Hill Condominiums, and install signal ahead sign with beacons.

RTP No:		IRIS # 403	ROW Cost:	\$0
TIF	<input type="checkbox"/>	From Mile Point: 0.000	Construction Cost:	\$125,000
Score:	20	To Mile Point: 0.641	Total Cost:	\$125,000



Map not to Scale

	Existing	New
Travel Lanes:	3	3
Sidewalks:		No
Bike Lanes:	No	No
Drainage:	Storm	Storm
Illumination:	Yes	Yes
Turn Lanes:	Yes	Yes
Intersection:	Yes	Yes

Road Fund Capital Projects

Project Nam Stark St Viaduct

Project #: 736

Category: Bridge

Functional Class: Rural Arterial

Project Description: Reconstruct Stark St Viaduct

RTP No:

IRIS # 404

Mile Point: 2.64

ROW Cost:

\$0

TIF

☐

Construction Cost:

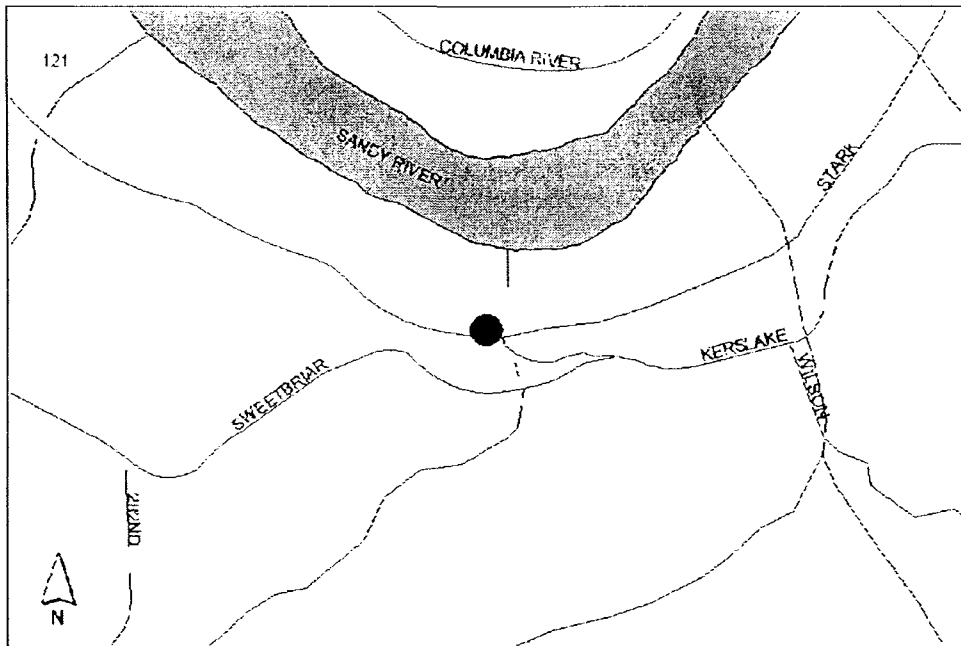
\$679,000

Score:

10

Total Cost:

\$679,000



Map not to Scale

	Existing	New
Travel Lanes:	2	
Sidewalks:		
Bike Lanes:	No	No
Drainage:	Ditch	Ditch
Illumination:	No	No
Turn Lanes:	No	No
Intersection:	No	No

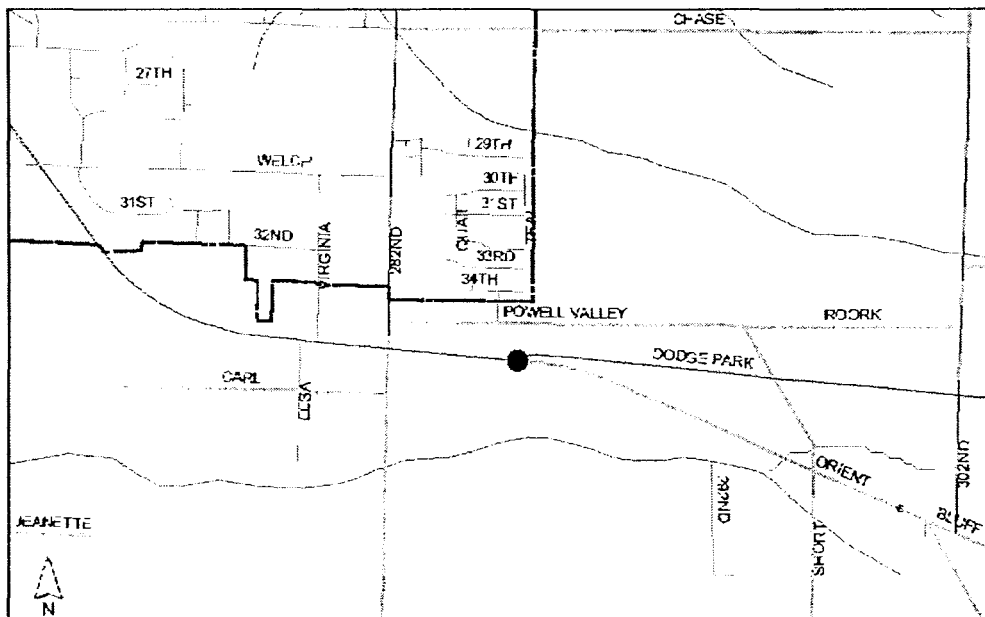
Road Fund Capital Projects

Project Nam Orient Dr/Dodge Park Blvd

Project #: 703 Category: Signal/Intersection Functional Class: Rural Arterial

Project Description: Widen Orient Dr to create eastbound left turn lane.

RTP No:	IRIS # 434	Mile Point: 2.06	ROW Cost:	\$10,000
TIF	<input type="checkbox"/>		Construction Cost:	\$90,000
Score:	5		Total Cost:	\$100,000



Map not to Scale

	Existing	New
Travel Lanes:	2	3
Sidewalks:	No	No
Bike Lanes:	No	No
Drainage:	Ditch	Ditch
Illumination:	No	No
Turn Lanes:	No	Yes
Intersection:	No	Yes



METRO

**2004 Regional Transportation Plan and
2004-07 Metropolitan Transportation Improvement Program**

Evidence of Compliance with Metro Interim Land Use Measures

Attached is Metro Resolution No. 03-3299, which documents the results of the Metro Urban Growth Management Functional Plan. The air quality maintenance plans for the Portland area call for "Metro Interim Land Use Measures relating to: Requirements for Accommodation of Growth; Regional Parking Policy; and Retail in Employment and Industrial Areas."

The relevant portions of the The Urban Growth Management Functional Plan (titles 1, 2 and 4) are also attached to document the recommendations and requirements of the Functional Plan and how they concern the cities and counties of the region.

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ENTERING AN) RESOLUTION NO. 03-3299
ORDER RELATING TO COMPLIANCE)
WITH THE URBAN GROWTH) Introduced by Councilor Rod Park
MANAGEMENT FUNCTIONAL PLAN)

WHEREAS, Title 8 of the Urban Growth Management Functional Plan ("UGMFP") requires the Metro staff to submit to the Metro Council a report on the status of compliance of each local government with each requirement of the UGMFP, and to provide public notice of the report; and

WHEREAS, the Executive Officer submitted two reports jointly entitled "2002 Urban Growth Management Functional Plan Compliance Reports", one part on the status of compliance with UGMFP Titles 1 through 6 and a second part on the status of compliance with Title 7, to the Council on December 2, 2002, and provided public notice of the reports; and

WHEREAS, Title 8 requires the Council to hold a public hearing for the purpose of taking testimony on the question whether cities and counties have complied with the UGMFP; and

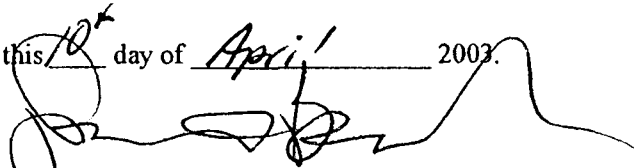
WHEREAS, the Council held a hearing for that purpose on January 30, 2003, and heard testimony from interested persons, and from the staff on actions to comply with the UGMFP taken by local governments after the December 2, 2002, reports; and

WHEREAS, Title 8 requires the Council to enter an order that determines the status of each city's and county's compliance with the requirements of the UGMFP, and to send a copy of the order to all cities and counties and all persons who participated at the hearing; now, therefore,


BE IT RESOLVED:

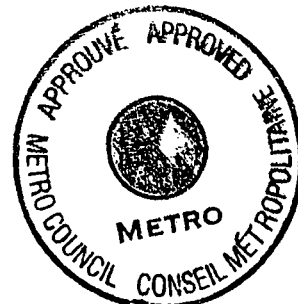
1. That the Council adopt Order No. 03-001, with its attachments, as the Council's determination of the status of city and county compliance with the UGMFP, pursuant to subsection 3.07.880C.
2. That the Council direct the Metro staff to send a copy of Order No. 03-001 to all cities and counties and all persons who participated at the hearing, pursuant to subsection 3.07.880C.

ADOPTED by the Metro Council this 12th day of April, 2003.


David Bragdon, Council President

Approved as to Form:


Daniel B. Cooper, Metro Attorney



RELATING TO COMPLIANCE WITH THE
URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN

IT IS ORDERED THAT:

1. The Council accepts the December 2, 2002, combined reports from the Executive Officer entitled "2002 Urban Growth Management Functional Plan Compliance Reports" and the January 24, 2003, hearing report presented by staff at the January 30, 2003, public hearing as fulfilling the requirement of Urban Growth Management Functional Plan (UGMFP) Title 8, section 3.07.880A. The reports are attached and incorporated into this order as Exhibits A and B, respectively.

2. Based upon the staff reports described in section 1 of this order and testimony received at the public hearing, the Council adopts Exhibit C, entitled "Status of Compliance by Jurisdiction - 2002", attached and incorporated into this order, as its determination of the status of city and county compliance with UGMFP requirements of Titles 1 through 7, as required by Title 8, section 3.07.880C.

3. Based upon the determinations in Exhibit C, the Council concludes that the cities of Beaverton, Durham, Johnson City, King City, Lake Oswego, Maywood Park, Milwaukie, Troutdale and Wilsonville and Clackamas and Washington Counties have not achieved the target housing capacities required by Title 1 (Requirements for Housing and Employment Accommodation). The Council further concludes that the cities of Beaverton, Happy Valley, Johnson City, Maywood Park, Milwaukie, Oregon City, Rivergrove and Wilsonville and Clackamas County have not achieved the target employment capacities required by Title 1. However, in 1998 and 1999, the Council expanded the urban growth boundary (UGB) to add housing and employment capacity, in part because it was not possible for some cities to achieve their targets. As a result of UGB expansion and actions taken by local governments after the expansion, the region as a whole has achieved and exceeded the housing and employment targets set in Title 1. Given this achievement, on December 5, 2002, the Council adopted Ordinance No. 02-969B, amending Title 1 to replace the housing and employment targets of Table 3.07-1 with zoned capacity. Revised Table 3.07-1 displays actual zoned capacities for housing and employment achieved by city and county actions taken to comply with Title 1. Revised Title 1 accepts these capacities and prohibits net reductions. Having considered these past actions by the Council, the Council concludes that no further action need be taken by cities or counties or the Council to achieve the housing or employment targets specified in the now-repealed version of Table 3.07-1.

4. The staff reports do not indicate whether cities and counties have complied with the requirement in Title 1, section 3.07.140A, to report on density of residential development between 1990 and 1995, and to take action if actual density fell below 80 percent of maximum zoned density. The Council assumes, therefore, that cities and counties have not complied with the reporting requirement. However, all cities and counties except the cities of Durham and Oregon City have now adopted minimum densities that prevent development below 80 percent of maximum zoned density (both Durham and Oregon City reported to Metro that residential development in their cities is taking place at least at 80 percent of maximum zoned densities).

These minimum densities are the basis for the zoned capacity for each city and county displayed on Table 3.07-1. Accordingly, Ordinance No. 02-969B amended Title 1 to revise the requirements of section 3.07.140A. Hence, the Council concludes that no further action need be taken by cities or counties or the Council to achieve compliance with the reporting requirement of section 3.07.140 as it read prior to revision by Ordinance No. 02-969B.

5. The staff reports do not indicate whether cities and counties reported on actions to achieve the target housing or employment capacities in mixed-use areas, or whether they achieved the target capacities, as required by Title 1, section 3.07.160B. The Council assumes, therefore, that cities and counties have not complied with the reporting requirement. The Council notes, however, that the target capacities for mixed-use areas are subsumed by each city's and county's overall targets for housing and employment. Ordinance No. 02-969B amended Title 1 to replace the housing and employment targets of Table 3.07-1 with zoned capacity and to remove from that table separate targets or capacities for mixed-use areas. In place of targets or capacities for mixed-use areas, the Council adopted a new Title 6 for Centers (Central City, Regional and Town Centers, Station Communities) and a program to facilitate increased housing and employment capacities in Centers. For these reasons, the Council concludes that no further action need be taken by cities or counties or the Council to achieve compliance with the requirements of section 3.07.160B as it read prior to revision by Ordinance No. 02-969B.

6. The staff reports ask the Council to interpret language in subsection 3.07.730B of Title 7 that requires cities and counties to consider amendment of their comprehensive plans to adopt affordable housing strategies. The Council interprets the subsection to mean that the governing body of the city or county must consider each strategy listed in the subsection and either amend its land use regulations to adopt the strategy or explain why it has decided not to adopt the strategy.

ENTERED this 10th day of April, 2003.


David Bragdon, Council President

Approved as to Form:


Daniel B. Cooper, Metro Attorney



Status of Compliance by Jurisdiction - January 2003

Title 1: Housing and Employment Accommodation					
	2.A minimum density	2.B partitioning standards	2.C accessory dwelling units	3.A map of design types	5.A capacity analysis
Beaverton	in compliance	in compliance	in compliance	in compliance	housing, employment low
Cornelius	in compliance	in compliance	in compliance	in compliance	in compliance
Durham	exception requested	in compliance	in compliance	in compliance	housing low
Fairview	in compliance	in compliance	in compliance	in compliance	in compliance
Forest Grove	in compliance	in compliance	in compliance	in compliance	in compliance
Gladstone	in compliance	in compliance	in compliance	in compliance	in compliance
Gresham	in compliance	in compliance	in compliance	in compliance	in compliance
Happy Valley	in compliance	in compliance	in compliance	in compliance	employment low
Hillsboro	in compliance	in compliance	in compliance	in compliance	in compliance
Johnson City	in compliance	in compliance	in compliance	in compliance	housing low employment low
King City	in compliance	in compliance	in compliance	in compliance	housing low
Lake Oswego	in compliance	in compliance	in compliance	in compliance	in compliance
Maywood Park	in compliance	in compliance	in compliance	in compliance	housing low, employment low
Milwaukie	in compliance	in compliance	in compliance	in compliance	housing low, employment low
Oregon City	extension to 12/02	in compliance	extension to 12/02	in compliance	employment low
Portland	in compliance	in compliance	in compliance	in compliance	in compliance
Rivergrove	in compliance	in compliance	in compliance	in compliance	employment low
Sherwood	in compliance	in compliance	in compliance	in compliance	in compliance
Tigard	in compliance	in compliance	in compliance	in compliance	in compliance
Troutdale	in compliance	in compliance	in compliance	in compliance	housing low
Tualatin	in compliance	in compliance	in compliance	in compliance	in compliance
West Linn	in compliance	in compliance	in compliance	in compliance	in compliance
Wilsonville	in compliance	in compliance	in compliance	extension to 09/02	extension to 09/02
Wood Village	in compliance	in compliance	in compliance	in compliance	in compliance
Clackamas C.	in compliance	in compliance	in compliance	in compliance	housing low, employment low
Multnomah C.	in compliance	in compliance	in compliance	in compliance	targets to Portland Gresham, Troutdale
Washington C.	in compliance	in compliance	in compliance	in compliance	housing low

	Title 2: Regional Parking Policy		
	2.A.1&2 Minimum/Maximum standards	2.A.3 Variance Process	2.B Blended Ratios
Beaverton	in compliance	in compliance	in compliance
Cornelius	in compliance	in compliance	in compliance
Durham	scheduled for February 2003 adoption	scheduled for February 2003 adoption	scheduled for February 2003 adoption
Fairview	in compliance	in compliance	in compliance
Forest Grove	in compliance	in compliance	in compliance
Gladstone	in compliance	in compliance	in compliance
Gresham	in compliance	in compliance	in compliance
Happy Valley	in compliance	in compliance	in compliance
Hillsboro	in compliance	in compliance	in compliance
Johnson City	in compliance	in compliance	in compliance
King City	in compliance	in compliance	in compliance
Lake Oswego	in compliance	in compliance	in compliance
Maywood Park	in compliance	in compliance	in compliance
Milwaukie	in compliance	in compliance	in compliance
Oregon City	in compliance	in compliance	in compliance
Portland	in compliance	in compliance	in compliance
Rivergrove	in compliance	in compliance	in compliance
Sherwood	in compliance	in compliance	in compliance
Tigard	in compliance	in compliance	in compliance
Troutdale	in compliance	in compliance	in compliance
Tualatin	in compliance	in compliance	in compliance
West Linn	in compliance	in compliance	in compliance
Wilsonville	in compliance	in compliance	in compliance
Wood Village	in compliance	in compliance	in compliance
Clackamas County	in compliance	in compliance	in compliance
Multnomah County	in compliance	in compliance	in compliance
Washington County	in compliance	in compliance	in compliance

	Title 3: Water Quality, Flood Mgmt and Fish and Wildlife Conservation		
	4.A Flood Mgmt Performance Standards	4.B Water Quality Performance	4.C Erosion and Sediment Control
Beaverton	in compliance	in compliance	in compliance
Cornellus	in compliance	in compliance	in compliance
Durham	in compliance	in compliance	in compliance
Fairview	in compliance	in compliance	in compliance
Forest Grove	in compliance	in compliance	in compliance
Gladstone	in compliance	in compliance	in compliance
Gresham	in compliance	in compliance	in compliance
Happy Valley	in compliance	in compliance	in compliance
Hillsboro	in compliance	in compliance	in compliance
Johnson City	in compliance	in compliance	in compliance
King City	in compliance	in compliance	in compliance
Lake Oswego	in compliance	extension to 12/02	in compliance
Maywood Park	N/A	N/A	in compliance
Milwaukie	in compliance	in compliance	in compliance
Oregon City	in compliance	in compliance	in compliance
Portland	in compliance	in compliance	in compliance
Rivergrove	in compliance	in compliance	in compliance
Sherwood	in compliance	in compliance	in compliance
Tigard	in compliance	in compliance	in compliance
Troutdale	in compliance	in compliance	in compliance
Tualatin	in compliance	in compliance	in compliance
West Linn	in compliance	extension to 12/02	in compliance
Wilsonville	in compliance	in compliance	in compliance
Wood Village	N/A	in compliance	in compliance
Clackamas County	in compliance	extension to 12/02	in compliance
Multnomah County	in compliance	in compliance	in compliance
Washington County	in compliance	in compliance	in compliance

	Title 4: Retail in Employment and Industrial Areas		Title 5: Neighbor Cities and Rural Reserves	
	2.A Retail Restrictions - Industrial Areas	2.B Retail Restrictions - Employment Areas	2. Rural Reserves	2. Green Corridors
Beaverton	in compliance	in compliance	N/A	N/A
Cornelius	in compliance	in compliance	N/A	N/A
Durham	in compliance	in compliance	N/A	N/A
Fairview	in compliance	in compliance	N/A	N/A
Forest Grove	in compliance	in compliance	N/A	N/A
Gladstone	N/A	in compliance	N/A	N/A
Gresham	in compliance	in compliance	N/A	in compliance
Happy Valley	N/A	N/A	N/A	N/A
Hillsboro	in compliance	in compliance	N/A	in compliance
Johnson City	N/A	N/A	N/A	N/A
King City	N/A	N/A	N/A	N/A
Lake Oswego	in compliance	in compliance	N/A	N/A
Maywood Park	N/A	N/A	N/A	N/A
Milwaukie	in compliance	in compliance	N/A	N/A
Oregon City	in compliance	in compliance	N/A	extension to 12/02
Portland	in compliance	in compliance	N/A	N/A
Rivergrove	N/A	N/A	N/A	N/A
Sherwood	in compliance	in compliance	N/A	in compliance
Tigard	in compliance	in compliance	N/A	N/A
Troutdale	in compliance	in compliance	N/A	N/A
Tualatin	in compliance	in compliance	N/A	in compliance
West Linn	N/A	in compliance	N/A	in compliance
Wilsonville	in compliance	in compliance	N/A	in compliance
Wood Village	in compliance	in compliance	N/A	N/A
Clackamas County	in compliance	in compliance	in compliance	in compliance
Multnomah County	in compliance	in compliance	N/A	in compliance
Washington County	in compliance	in compliance	in compliance	in compliance

	Title 6: Regional Accessibility	
	2. Regional Street Designs	3. Design Standards for Connectivity
Beaverton	in compliance	in compliance
Cornelius	in compliance	in compliance
Durham	in compliance	in compliance
Fairview	in compliance	in compliance
Forest Grove	in compliance	in compliance
Gladstone	in compliance	in compliance
Gresham	in compliance	in compliance
Happy Valley	in compliance	in compliance
Hillsboro	in compliance	in compliance
Johnson City	in compliance	in compliance
King City	in compliance	in compliance
Lake Oswego	in compliance	in compliance
Maywood Park	in compliance	in compliance
Milwaukie	in compliance	in compliance
Oregon City	in compliance	in compliance
Portland	in compliance	in compliance
Rivergrove	in compliance	in compliance
Sherwood	in compliance	in compliance
Tigard	in compliance	in compliance
Troutdale	in compliance	in compliance
Tualatin	in compliance	in compliance
West Linn	in compliance	in compliance
Wilsonville	extension to 09/02	in compliance
Wood Village	in compliance	in compliance
Clackamas County	in compliance	in compliance
Multnomah County	in compliance	in compliance
Washington County	in compliance	in compliance

Title 7: Affordable Housing										
Jurisdiction	Progress Reports	Voluntary Goals	Comprehensive Plan and Implementing Ordinances						Other strategies	
			Diversity Strategy	Maintain Supply and Increase Dispersion	Supply for All Income Levels	Land Use Strategies (Seven)				
	(Title 7: 3.07.740)	(Title 7: 3.07.720)	(Title 7: 3.07.730.A.1)	(Title 7: 3.07.730.A.2)	(Title 7: 3.07.730.A.3)	(Title 7: 3.07.730.B)			(Title 7: 3.07.760)	
						Existing	Discussed	Considered	Metro list (five)	Local initiative
Beaverton	Yes	Discussed	NAR	NAR	NAR	NAR	NAR	NAR	2	1
Cornelius										
Durham	Yes	NAR	NAR	NAR	NAR	NAR	NAR	NAR	NAR	NAR
Fairview										
Forest Grove										
Gladstone										
Gresham	Yes	Discussed	NAR	NAR	NAR	2	7	6	2	NAR
Happy Valley										
Hillsboro	Yes	NAR	NAR	NAR	NAR	1	NAR	NAR	1	NAR
Johnson City										
King City	Yes									
Lake Oswego										
Maywood Park										
Milwaukie	Requested Extension									
Oregon City										
Portland	Yes	NAR	NAR	NAR	NAR	6	7	NAR	5	16
Rivergrove										
Sherwood										
Tigard	Yes	Discussed	NAR	NAR	NAR	2	2	1	2	5
Troutdale										
Tualatin	Yes	NAR	NAR	NAR	NAR	2	NAR	NAR	NAR	
West Linn										
Wilsonville										
Wood Village	Yes	NAR	NAR	NAR	NAR	NAR	NAR	NAR	NAR	1
Clackamas County	Yes	Consider in 2003	NAR	NAR	NAR	5	NAR	NAR	3	3
Multnomah County										
Washington County	Yes		NAR	NAR	NAR	2	0	NAR	1	NAR

Definitions:
Discussed = Discussed after January 2001
Existing = Adopted prior to January 2001.
Considered = Discussed at a local elected officials public meeting after January 2001, and adoption of an ordinance which amends the comprehensive plan and implementing ordinances to include new tools and strategies or tools and strategies which were considered but not adopted and the revision(s) not adopted.
NAR = No action reported

Title 1, Table 1 Compliance –May 29, 2002 - Dwelling Unit Capacity

	Table 1 Target		Capacity Analysis	Difference	% of Jurisdiction Target	% Short of Total Region Target	Notes
Beaverton	15,021		13,635	(1,386)	91%	0.6%	
Cornelius	1,019		1,285	266	126%		
Durham	262		243	(19)	93%	0.008%	
Fairview	2,921		2,929	8	100%		
Forest Grove	2,873		3,054	181	106%		
Gladstone	600		880	280	146%		
Gresham	16,817		16,920	103	101%		
Happy Valley	2,030		2,558	528	126%		does not include newly annexed areas
Hillsboro	14,812		14,896	84	101%		
Johnson City	168		38	(130)	23%	0.05%	allocation process did not account for existing mobile homes
King City	182		100	(82)	55%	0.03%	
Lake Oswego	3,353	4,212 ¹	4,049	(163)	96%	0.07%	859 units from Clackamas County
Maywood Park	27		12	(15)	44%	0.006%	
Milwaukie	3,514		3,188	(326)	90%	0.1%	
Oregon City	6,157	10,630 ¹	7,994	(2,836)	75%	1.2%	City's preliminary estimate – will submit a revised capacity analysis – 4,473 units from the County
Portland	70,704		71,036	332	100%		mid point between zoned capacity of 66,994 and comp. plan capacity of 75,078.
Rivergrove	(15)		20	35	233%		
Sherwood	5,010		5,216	206	104%		
Tigard	6,073		6,308	235	104%		
Troutdale	3,789		3,260	(529)	86%	0.2%	
Tualatin	3,635		4,009	374	110%		
West Linn	2,577	3,226 ¹	3,732	506	116%		649 units from Clackamas County
Wilsonville	4,425		N/A	(4,425)	N/A	1.8%	capacity analysis not available
Wood Village	423		458	35	108%		
Clackamas C.	19,530	13,549 ¹	12,540	(1,007)	93%	0.4%	5,983 to be included in LO OC and WL
Multnomah C.	3,089		N/A	(3,089)	N/A	1.3%	need to coordinate with cities
Washington C.	54,999		51,649	(3,350)	94%	1.4%	
Regional Total	243,995		230,009	(13,986)	94%	6.0%	Wilsonville, Multnomah to report; Oregon City to submit revised capacity analysis

¹Clackamas County allocated a portion of its targets for the areas where Lake Oswego, Oregon City and West Linn have planning jurisdiction over unincorporated areas.

Title 1, Table 1 Compliance –May 29, 2002 - Employment Capacity

	Table 1 Target		Capacity Analysis	Difference	% of Jurisdiction Target	% Short of Total Region Target	Notes
Beaverton	25,122		21,368	(3,754)	85%	0.8%	
Cornelius	2,812		3054	242	109%		
Durham	498		522	24	105%		
Fairview	5,689		7,063	1,374	124%		
Forest Grove	5,488		5,943	455	108%		
Gladstone	1,530		1,569	39	103%		
Gresham	23,753		24,579	826	103%		
Happy Valley	1,767		510	(1,257)	29%	0.3%	includes 304 jobs from newly annexed areas
Hillsboro	58,247		59,082	835	101%		
Johnson City	180		82	(98)	45%	0.02%	allocation process did not account for existing mobile homes
King City	241		350	109	145%		
Lake Oswego	8,179	10,587 ¹	13,268	2,681	125%		2,408 jobs from County
Maywood Park	5		5	0	100%		
Milwaukie	7,478		3,650	(3,828)	49%	0.8%	
Oregon City	8,185	11,172 ¹	7,665	(3,507)	68%	0.8%%	City's preliminary estimate – will submit a revised capacity analysis – 2,987 jobs from County
Portland	158,503		208,115	49,612	131%		mid point between zoned capacity of 191,913 and comp. plan capacity of 224,318.
Rivergrove	41		0	(41)	0%	0.009%	
Sherwood	8,156		9,518	1,362	117%		
Tigard	14,901		17,801	2,900	119%		
Troutdale	5,570		7,222	1,652	130%		
Tualatin	9,794		12,286	2,492	125%		
West Linn	2,114	2459 ¹	2,935	476	119%		345 jobs from County
Wilsonville	15,030		N/A	(15,030)	N/A	3.3%	
Wood Village	736		1,074	338	145%		
Clackamas C.	42,685	36,945 ¹	31,101	(5,844)	84%	1.2%	5,670 jobs to LO, OC and WL
Multnomah C.	2,381		N/A	(2,381)	N/A	0.5%	
Washington C.	52,578		55,921	3,343	106%		
Regional Total	461,663		494,683	33,020	107%		Wilsonville, Multnomah to report; Oregon City to submit revised capacity analysis

¹ Clackamas County allocated a portion of its targets for the areas where Lake Oswego, Oregon City and West Linn have planning jurisdiction over unincorporated areas.

I:\gm\community_development\projects\COMPLIANCE\Compliance Status\Table 1 summary of compliance .doc

CHAPTER 3.07

URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN

SECTIONS TITLE

3.07.010 Purpose
3.07.020 Regional Policy Basis
3.07.030 Structure of Requirements

TITLE 1: REQUIREMENTS FOR HOUSING AND EMPLOYMENT ACCOMMODATION

3.07.110 Purpose and Intent
3.07.130 Design Type Boundaries Requirement
3.07.160 Local Plan Accommodation of Expected Growth Capacity
for Housing and Employment-Performance Standard
3.07.170 Design Type Density Recommendations

TITLE 2: REGIONAL PARKING POLICY

3.07.210 Intent
3.07.220 Performance Standard

Table 3.07-2 - Regional Parking Ratios

TITLE 3: WATER QUALITY, FLOOD MANAGEMENT AND FISH AND WILDLIFE CONSERVATION

3.07.310 Intent
3.07.320 Applicability
3.07.330 Implementation Alternatives for Cities and Counties
3.07.340 Performance Standards
3.07.350 Fish and Wildlife Habitat Conservation Area
3.07.360 Metro Model Ordinance Required
3.07.370 Variances

Table 3.07-3 - Protected Water Features

TITLE 4: INDUSTRIAL AND OTHER EMPLOYMENT AREAS

3.07.410 Purpose and Intent
3.07.420 Protection of Regionally Significant Industrial Areas
3.07.430 Protection of Industrial Areas
3.07.440 Protection of Employment Areas

Table 3.07-4

TITLE 5: NEIGHBOR CITIES AND RURAL RESERVES

3.07.510 Intent
3.07.520 Rural Reserves and Green Corridors
3.07.530 Invitations for Intergovernmental Agreements
3.07.540 Metro Intent with Regard to Green Corridors

TITLE 6: CENTRAL CITY, REGIONAL CENTERS, TOWN CENTERS AND STATION COMMUNITIES

3.07.610 Purpose and Intent
3.07.620 Local Strategy to Improve Centers

- 3.07.630 Special Transportation Areas
- 3.07.640 Government Offices
- 3.07.650 Reporting on Center Progress

TITLE 7: AFFORDABLE HOUSING

- 3.07.710 Intent
- 3.07.720 Voluntary Affordable Housing Production Goals
- 3.07.730 Requirements for Comprehensive Plan and Implementing Ordinance Changes
- 3.07.740 Requirements for Progress Report
- 3.07.750 Metro Assessment of Progress
- 3.07.760 Recommendations to Implement Other Affordable Housing Strategies

Table 3.07-7

Five-Year Voluntary Affordable Housing Production Goals

TITLE 8: COMPLIANCE PROCEDURES

- 3.07.810 Compliance With the Functional Plan
- 3.07.820 Compliance Review by the Chief Operating Officer
- 3.07.830 Review of Compliance by Metropolitan Policy Advisory Committee
- 3.07.840 Review by Metro Council
- 3.07.850 Extension of Compliance Deadline
- 3.07.860 Exception from Compliance
- 3.07.870 Enforcement of Functional Plan
- 3.07.880 Compliance Report and Order
- 3.07.890 Citizen Involvement in Compliance Review

TITLE 9: PERFORMANCE MEASURES

- 3.07.910 Intent
- 3.07.920 Performance Measures Adoption

TITLE 10: FUNCTIONAL PLAN DEFINITIONS

- 3.07.1010 Definitions

TITLE 11: PLANNING FOR NEW URBAN AREAS

- 3.07.1105 Purpose and Intent
- 3.07.1110 Interim Protection of Areas Brought into the Urban Growth Boundary
- 3.07.1120 Urban Growth Boundary Amendment Urban Reserve Plan Requirements
- 3.07.1130 Implementation of Urban Growth Boundary Amendment Urban Reserve Plan Requirements
- 3.07.1140 Effective Date and Notification Requirements

TITLE 12: PROTECTION OF RESIDENTIAL NEIGHBORHOODS

- 3.07.1210 Purpose and Intent
- 3.07.1220 Residential Density
- 3.07.1230 Access to Commercial Services
- 3.07.1240 Access to Parks and Schools

NOTE: The Urban Growth Management Functional Plan was adopted by the Metro Council by Ordinance No. 96-647C, and amended by Ordinance No. 97-691C, prior to being codified as Metro Code Chapter 3.07 by Ordinance No. 97-715B.

3.07.010 Purpose

The regional policies which are adopted by this Urban Growth Management Functional Plan recommend and require changes to city and county comprehensive plans and implementing ordinances. The purpose of this functional plan is to implement regional goals and objectives adopted by the Metro Council as the Regional Urban Growth Goals and Objectives (RUGGO), including the Metro 2040 Growth Concept and the Regional Framework Plan. The comprehensive plan changes and related actions, including implementing regulations, required by this functional plan as a component of the Regional Framework Plan, shall be complied with by cities and counties as required by Section 5(e)(2) of the Metro Charter.

Any city or county determination not to incorporate all required functional plan policies into comprehensive plans shall be subject to the conflict resolution and mediation processes included within the RUGGO, Goal I provisions, prior to the final adoption of inconsistent policies or actions.

(Ordinance No. 97-715B, Sec. 1.)

3.07.020 Regional Policy Basis

The regional policies adopted in this Urban Growth Management Functional Plan are formulated from, and are consistent with, the RUGGOs, including the Metro 2040 Growth Concept. The overall principles of the Greenspaces Master Plan are also incorporated within this functional plan. In addition, the updated Regional Transportation Plan (RTP)¹, when adopted, will serve as the primary transportation policy implementation of the 2040 Growth Concept. However, early implementation land use policies in this functional plan are integrated with early implementation transportation policies derived from preparation of the 1996 Regional Transportation Plan, and consistent with the Metro 2040 Growth Concept.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 02-972A, Sec. 1.)

3.07.030 Structure of Requirements

The Urban Growth Management Functional Plan is a regional functional plan which contains "requirements" that are binding on cities and counties of the region as well as recommendations that are not binding. "Shall" or other directive words are used with requirements. The words "should" or "may" are used with recom-

¹ Metro has an adopted Regional Transportation Plan. However, because of changing local and regional conditions, as well as state and federal requirements, the RTP is scheduled to be amended in 1997.

mendations. In general, the plan is structured so that local jurisdictions may choose either performance standard requirements or prescriptive requirements. The intent of the requirements is to assure that cities and counties have a significant amount of flexibility as to how they meet requirements. Performance standards are included in most titles. If local jurisdictions demonstrate to Metro that they meet the performance standard, they have met that requirement of the title. Standard methods of compliance are also included in the plan to establish one very specific way that jurisdictions may meet a title requirement, but these standard methods are not the only way a city or county may show compliance. In addition, certain mandatory requirements that apply to all cities and counties are established by this functional plan.

(Ordinance No. 97-715B, Sec. 1.)

REGIONAL FUNCTIONAL PLAN REQUIREMENTS

TITLE 1: REQUIREMENTS FOR HOUSING AND EMPLOYMENT ACCOMMODATION

3.07.110 Purpose and Intent

One goal of the Framework Plan is the efficient use of land. Title 1 intends to use land within the UGB efficiently by increasing its capacity to accommodate housing and employment. Title 1 directs each city and county in the region to consider actions to increase its capacity and to take action if necessary to accommodate its share of regional growth as specified in this title.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance 02-969B, Sec. 1.)

3.07.120 Housing and Employment Capacity

- A. Each city and county shall determine its capacity for housing and employment in order to ensure that it provides and continues to provide at least the capacity for the city or county specified in Table 3.01-7. Local governments shall use data provided by Metro unless the Metro Council or the Chief Operating Officer determines that data preferred by a city or county is more accurate.
- B. A city or county shall determine its capacity for dwelling units by cumulating the minimum number of dwelling units authorized in each zoning district in which dwelling units are authorized. A city or county may use a higher number of dwellings than the minimum density for a zoning district if development in the five years prior to the determination has actually occurred at the higher number.
- C. If a city annexes county territory, the city shall ensure that there is no net loss in regional housing or employment capacity, as shown on Table 3.07-1, as a result of amendments of comprehensive plan or land use regulations that apply to the annexed territory.
- D. After completion of its initial determination of capacity, each city or county shall report changes in its capacity by April 15 of the first calendar year following completion of its initial determination and by April 15 of every following year.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 02-972A, Sec. 1; Ordinance No. 02-969B, Sec. 1.)

3.07.130 Design Type Boundaries Requirement

For each of the following 2040 Growth Concept design types, city and county comprehensive plans shall be amended to include the boundaries of each area, determined by the city or county consistent with the general locations shown on the 2040 Growth Concept Map:

Central City--Downtown Portland is the Central City which serves as the major regional center, an employment and cultural center for the metropolitan area.

Regional Centers--Seven regional centers will become the focus of compact development, redevelopment and high-quality transit service and multimodal street networks.

Station Communities--Nodes of development centered approximately one-half mile around a light rail or high capacity transit station that feature a high-quality pedestrian environment.

Town Centers--Local retail and services will be provided in town centers with compact development and transit service.

Main Streets--Neighborhoods will be served by main streets with retail and service developments served by transit.

Corridors--Along good quality transit lines, corridors feature a high-quality pedestrian environment, convenient access to transit, and somewhat higher than current densities.

Employment Areas--Various types of employment and some residential development are encouraged in employment areas with limited commercial uses.

Industrial Areas--Industrial areas are set aside primarily for industrial activities with limited supporting uses.

Regionally Significant Industrial Areas--Industrial areas with site characteristics that are relatively rare in the region that render them especially suitable for industrial use.

Inner Neighborhoods--Residential areas accessible to jobs and neighborhood businesses with smaller lot sizes are inner neighborhoods.

Outer Neighborhoods--Residential neighborhoods farther away from large employment centers with larger lot sizes and lower densities are outer neighborhoods.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 02-969B, Sec. 1.)

3.07.140 Measures to Increase Development Capacity

- A. Each city and county shall adopt a minimum dwelling unit density, as prescribed in this subsection, for each zoning district in which dwelling units are authorized inside the UGB:
1. Any city or county minimum density standard deemed to comply with the Urban Growth Management Functional Plan pursuant to Section 3.07.810 prior to January 1, 2003, shall be deemed to comply with this subsection.
 2. A city or county shall not approve a subdivision or development application that will result in a density below the minimum density for the zoning district.
 3. A city or county may change the dwelling unit density of any zoning district so long as the zoning district continues to comply with this subsection and so long as the city or county continues to provide at least the overall capacity for housing for the city or county specified in Table 3.07-1.
- B. A city or county shall not prohibit the partition or subdivision of a lot or parcel that is at least twice the size of the minimum size for new lots or parcels in any zoning district in which dwelling units are authorized.
- C. A city or county shall authorize the establishment of at least one accessory dwelling unit for each detached single-family dwelling unit in a zoning district and for each detached or attached single-family dwelling unit in a Regional Center or Station Community. The authorization may be subject to reasonable regulation for siting and design purposes.
- D. In order to assist Metro to evaluate the effectiveness of Title 1 in aid of accomplishment of the 2040 Growth Concept, and to comply with state progress reporting requirements in ORS 197.301, by April 15 of each even-numbered year beginning 2004, each city and county shall report to Metro the actual density of new residential development per net developed acre authorized in those zoning districts that allow residential development in the preceding 24 months.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 02-969B, Sec. 1.)

3.07.150 Transfer of Capacity

- A. A city or county may amend its comprehensive plan and land use regulations to transfer capacity for housing or employment shown on Table 3.07-1 to another city or county inside the UGB upon a demonstration that:
1. The transfer complies with the policies of the Regional Framework Plan;
 2. The transfer will not reduce the capacity of the region for housing or employment specified on Table 3.07-1;
 3. The housing or employment capacity to be transferred is reasonably likely to occur at the receiving site within the 20-year planning period of Metro's last UGB capacity review under ORS 197.299; and
 4. The transfer does not move capacity from a designated Center to an Inner or Outer Neighborhood, or from a Regional Center to a Town Center.
- B. A city or county may seek a transfer of capacity as authorized in subsection A by filing an application on a form provided for that purpose by Metro. After receipt of a complete application, Metro shall set the matter for a public hearing before the Metro Council and shall notify MPAC and those persons who request notification of requests for transfers of capacity.
- C. The Metro Council shall hold a public hearing to consider the request for a transfer of capacity. Any person may participate in the hearing. The Metro Council may set terms and conditions upon approval of a transfer so long as they relate to the criteria in subsection A and are incorporated into the Metro Council's order.
- D. The Metro Council shall issue an order with its conclusions and analysis and send a copy to the local governments involved in the transfer and any person who participated in the hearing before the Metro Council. Any person who participated in the hearing may seek review of the Metro Council's order as a land use decision under ORS 197.015(10) (a) (A).

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 01-925E, Sec. 4; Ordinance No. 02-972A, Sec. 1; Ordinance No. 02-969B, Sec. 1.)

3.07.160 Local Plan Accommodation of Expected Growth Capacity
for Housing and Employment-Performance Standard

All cities and counties within Metro shall demonstrate that:

- A. The provisions required in Section 3.07.140 of this title have been included in comprehensive plans and implementing ordinances; and
- B. Using the computation method in Section 3.07.120, calculated capacities will achieve the target capacities for dwelling units and full-time and part-time jobs contained in Table 3.07-1; and
- C. Effective measures have been taken to reasonably assure that the calculated capacities will be built for dwelling units and jobs; and
- D. Expected development has been permitted at locations and densities likely to be achieved during the 20-year planning period by the private market or assisted housing programs, once all new regulations are in effect.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 02-969B, Sec. 1.)

3.07.170 Design Type Density Recommendations

- A. For the area of each of the 2040 Growth Concept design types, the following average densities for housing and employment are recommended to cities and counties:

- Central City - 250 persons per acre
- Regional Centers - 60 persons per acre
- Station Communities - 45 persons per acre
- Town Centers - 40 persons per acre
- Main Streets - 39 persons per acre
- Corridor - 25 persons per acre
- Employment Areas - 20 persons per acre
- Industrial Areas - 9 employees per acre
- Regionally Significant Industrial Area - 9 employees per acre
- Inner Neighborhoods - 14 persons per acre
- Outer Neighborhoods - 13 persons per acre

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 02-969B, Sec. 1.)

Table 3.07-1
Zoned Capacity for Housing and Employment Units – Year 1994 to 2017

Section 3.07.120(A)(1)(b)

City or County	Dwelling Unit Capacity	Job Capacity
Beaverton	13,635	21,368
Cornelius	1,285	3,054
Durham	243	522
Fairview	2,929	7,063
Forest Grove	3,054	5,943
Gladstone	880	1,569
Gresham ³	20,020	27,679
Happy Valley ⁴	5,705	1,418
Hillsboro ⁵	16,106	59,566
Johnson City	38	82
King City ⁶	461	470
Lake Oswego	4,049	13,268
Maywood Park	12	5
Milwaukie	3,188	3,650
Oregon City	9,750	8,298
Portland ³	72,136	209,215
Rivergrove	20	0
Sherwood	5,216	9,518
Tigard	6,308	17,801
Troutdale	3,260	7,222
Tualatin ⁷	4,054	12,301
West Linn	3,732	1,935
Wilsonville ²	4,425	15,030
Wood Village	458	1,074
Clackamas County ^{1,3}	13,340	31,901
Multnomah County ⁸	0	0
Washington County ¹	51,649	55,921
Regional Total	246,053	516,873

¹Standards apply to the urban unincorporated portion of the county only.

² Wilsonville has not completed its capacity analysis (as of October 2002), 1996 Title 1 data used.

³Includes capacity for Pleasant Valley Concept Plan, former Urban Reserve Nos. 4 and 5.

⁴Includes capacity for former Urban Reserve Nos. 14 and 15.

⁵Includes capacity for former Urban Reserve No. 55.

⁶Includes capacity for former Urban Reserve No. 47.

⁷Includes capacity for former Urban Reserve No. 43.

⁸Capacity for unincorporated Multnomah County is included in the capacities of the Cities of Gresham, Portland and Troutdale.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 02-969B, Sec. 1.)

TITLE 2: REGIONAL PARKING POLICY

3.07.210 Intent

The State's Transportation Planning Rule calls for reductions in vehicle miles traveled per capita and restrictions on construction of new parking spaces as a means of responding to transportation and land use impacts of growth. The Metro 2040 Growth Concept calls for more compact development as a means to encourage more efficient use of land, promote non-auto trips and protect air quality. In addition, the federally mandated air quality plan adopted by the state relies on the 2040 Growth Concept fully achieving its transportation objectives. Notably, the air quality plan relies upon reducing vehicle trips per capita and related parking spaces through minimum and maximum parking ratios. This title addresses these state and federal requirements and preserves the quality of life of the region.

A compact urban form requires that each use of land is carefully considered and that more efficient forms are favored over less efficient ones. Parking, especially that provided in new developments, can result in a less efficient land usage and lower floor to area ratios. Parking also has implications for transportation. In areas where transit is provided or other non-auto modes (walking, biking) are convenient, less parking can be provided and still allow accessibility and mobility for all modes, including autos. Reductions in auto trips when substituted by non-auto modes can reduce congestion and increase air quality.

(Ordinance No. 97-715B, Sec. 1.)

3.07.220 Performance Standard

- A. Cities and counties are hereby required to amend their comprehensive plans and implementing regulations, if necessary, to meet or exceed the following minimum standards:
 - 1. Cities and counties shall require no more parking than the minimum as shown on Table 3.07-2, Regional Parking Ratios, attached hereto; and
 - 2. Cities and counties shall establish parking maximums at ratios no greater than those listed in the Regional Parking Ratios Table and as illustrated in the Parking Maximum Map. The designation of A and B zones on the Parking Maximum Map should be reviewed after the completion of the Regional Transportation Plan and every three years thereafter. If 20-minute peak hour transit service has become available to an area within a

one-quarter mile walking distance for bus transit or one-half mile walking distance for light rail transit, that area shall be added to Zone A. If 20-minute peak hour transit service is no longer available to an area within a one-quarter mile walking distance for bus transit or one-half mile walking distance for light rail transit, that area shall be removed from Zone A. Cities and counties should designate Zone A parking ratios in areas with good pedestrian access to commercial or employment areas (within 1/3 mile walk) from adjacent residential areas.

3. Cities and counties shall establish an administrative or public hearing process for considering ratios for individual or joint developments to allow a variance for parking when a development application is received which may result in approval of construction of parking spaces either in excess of the maximum parking ratios; or less than the minimum parking ratios.

Cities and counties may grant a variance from any maximum parking ratios through a variance process.

- B. Free surface parking spaces shall be subject to the regional parking maximums provided for Zone A and Zone B. Parking spaces in parking structures, fleet parking, parking for vehicles that are for sale, lease, or rent, employee car pool parking spaces, dedicated valet parking spaces, spaces that are user paid, market rate parking or other high-efficiency parking management alternatives may be exempted from maximum parking standards by cities and counties. Sites that are proposed for redevelopment may be allowed to phase in reductions as a local option. Where mixed land uses are proposed, cities and counties shall provide for blended parking rates. It is recommended that cities and counties count adjacent on-street parking spaces, nearby public parking and shared parking toward required parking minimum standards.
- C. Cities and counties may use categories or measurement standards other than those in the Regional Parking Ratios Table, but must provide findings that the effect of the local regulations will be substantially the same as the application of the Regional Parking Ratios.
- D. Cities and counties shall monitor and provide the following data to Metro on an annual basis:
 1. The number and location of newly developed parking spaces; and

2. Demonstration of compliance with the minimum and maximum parking standards, including the application of any variances to the regional standards in this title. Coordination with Metro collection of other building data should be encouraged.

(Ordinance No. 97-715B, Sec. 1.)

Table 3.07-2 - Regional Parking Ratios (Section 3.07.220(A)(1)) (parking ratios are based on spaces per 1,000 sq. ft of gross leasable area unless otherwise stated)			
Land Use	Minimum Parking Requirements (See Central City Transportation Management Plan for downtown Portland stds)	Maximum Permitted Parking - Zone A:	Maximum Permitted Parking Ratios - Zone B:
	Requirements May Not Exceed	Transit and Pedestrian Accessible Areas ¹	Rest of Region
General Office (includes Office Park, "Flex-Space", Government Office & misc. Services) (gsf)	2.7	3.4	4.1
Light Industrial Industrial Park Manufacturing (gsf)	1.6	None	None
Warehouse (gross square feet; parking ratios apply to warehouses 150,000 gsf or greater)	0.3	0.4	0.5
Schools: College/ University & High School (spaces/# of students and staff)	0.2	0.3	0.3
Tennis Racquetball Court	1.0	1.3	1.5
Sports Club/Recreation Facilities	4.3	5.4	6.5
Retail/Commercial, including shopping centers	4.1	5.1	6.2
Bank with Drive-In	4.3	5.4	6.5
Movie Theater (spaces/number of seats)	0.3	0.4	0.5
Fast Food with Drive Thru	9.9	12.4	14.9
Other Restaurants	15.3	19.1	23
Place of Worship (spaces/seats)	0.5	0.6	0.8
Medical/Dental Clinic	3.9	4.9	5.9
Residential Uses			
Hotel/Motel	1	none	none
Single Family Detached	1	none	none
Residential unit, less than 500 square feet per unit, one bedroom	1	none	none
Multi-family, townhouse, one bedroom	1.25	none	none
Multi-family, townhouse, two bedroom	1.5	none	none
Multi-family, townhouse, three bedroom	1.75	none	none

¹ Ratios for uses not included in this table would be determined by cities and counties. In the event that a local government proposes a different measure, for example, spaces per seating area for a restaurant instead of gross leasable area, Metro may grant approval upon a demonstration by the local government that the parking space requirement is substantially similar to the regional standard.

(Ordinance No. 97-715B, Sec. 1.)

TITLE 4: INDUSTRIAL AND OTHER EMPLOYMENT AREAS

3.07.410 Purpose and Intent

The Regional Framework Plan calls for a strong economic climate. To improve the region's economic climate, the plan seeks to protect the supply of sites for employment by limiting incompatible uses within Industrial and Employment Areas. To protect the capacity and efficiency of the region's transportation system for movement of goods and services and to promote the creation of jobs in centers, the plan encourages efficient patterns and mixes of uses within designated Centers and discourages certain kinds of commercial retail development outside Centers. It is the purpose of Title 4 to achieve these policies. Metro will consider amendments to this title in order to make the title consistent with new policies on economic development adopted as part of periodic review.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance 02-969B, Sec. 5.)

3.07.420 Protection of Regionally Significant Industrial Areas

- A. Regionally Significant Industrial Areas are those areas that offer the best opportunities for family-wage industrial jobs. Each city and county with land use planning authority over areas shown on the Generalized Map of Regionally Significant Industrial Areas adopted in Ordinance No. 02-969 shall derive specific plan designation and zoning district boundaries of the areas from the Map, taking into account the location of existing uses that would not conform to the limitations on non-industrial uses in subsections C, D and E of this section and the need of individual cities and counties to achieve a mix of types of employment uses.
- B. Each city and county with land use planning authority over an area designated by Metro on the 2040 Growth Concept Map, as amended by Ordinance No. 02-969, as a Regional Significant Industrial Area shall, as part of compliance with Section 3.07.1120 of the Urban Growth Management Functional Plan, derive plan designation and zoning district boundaries of the areas from the Growth Concept Map.
- C. After determining boundaries of Regionally Significant Industrial Areas pursuant to subsections A and B, the city or county shall adopt implementing ordinances that limit development in the areas to industrial uses, uses accessory to industrial uses, offices for industrial research and development and large corporate headquarters in compliance with subsection E of this section, utilities, and those

non-industrial uses necessary to serve the needs of businesses and employees of the areas. Ordinances shall not allow financial, insurance, real estate or other professional office uses unless they are accessory to an industrial or other permitted use.

D. Notwithstanding subsection C, a city or county shall not approve:

1. A commercial retail use with more than 20,000 square feet of retail sales area in a single building or in multiple buildings that are part of the same development project; or
2. Commercial retail uses that would occupy more than five percent of the net developable portion of all contiguous Regionally Significant Industrial Areas.

E. As provided in subsection C of this section, a city or county may approve an office for industrial research and development or a large corporate headquarters if:

1. The office is served by public or private transit; and
2. If the office is for a corporate headquarters, it will accommodate for the initial occupant at least 1,000 employees.

F. A city or county may allow division of lots or parcels into smaller lots or parcels as follows:

1. Lots or parcels less than 50 acres may be divided into any number of smaller lots or parcels;
2. Lots or parcels 50 acres or larger may be divided into smaller lots and parcels so long as the resulting division yields the maximum number of lots or parcels of at least 50 acres;
3. Notwithstanding paragraphs 2, 3 and of this subsection, any lot or parcel may be divided into smaller lots or parcels or made subject to rights-of-way for the following purposes:
 - a. To provide public facilities and services;
 - b. To separate a portion of a lot or parcel in order to protect a natural resource, to provide a public amenity, or to implement a remediation plan for a

site identified by the Oregon Department of Environmental Quality pursuant to ORS 465.225;

- c. To separate a portion of a lot or parcel containing a nonconforming use from the remainder of the lot or parcel in order to render the remainder more practical for a permitted use;
 - d. To reconfigure the pattern of lots and parcels pursuant to subsection G of this section; or
 - e. To allow the creation of a lot for financing purposes when the created lot is part of a master planned development.
- G. A city or county may allow reconfiguration of lots or parcels less than 50 acres in area if the reconfiguration would be more conducive to a permitted use and would result in no net increase in the total number of lots and parcels. Lots or parcels 50 acres or greater in area may also be reconfigured so long as the resulting area of any such lot or parcel would not be less than 50 acres.
- H. Notwithstanding subsections C and D of this section, a city or county may allow the lawful use of any building, structure or land at the time of enactment of an ordinance adopted pursuant to this section to continue and to expand to add up to 20 percent more floor area and 10 percent more land area. Notwithstanding subsection F of this section, a city or county may allow division of lots or parcels pursuant to a master plan approved by the city or county prior to December 31, 2003.
- I. By December 31, 2003, Metro shall, following consultation with cities and counties, adopt a map of Regionally Significant Industrial Areas with specific boundaries derived from the Generalized Map of Regionally Significant Industrial Areas adopted in Ordinance No. 02-969, taking into account the location of existing uses that would not conform to the limitations of non-industrial uses in subsections C, D and E of this section and the need of individual cities and counties to achieve a mix of types of employment uses. Each city and county with land use planning authority over the area shall use the map in the application of the provisions of this section until the city or county adopts plan designations and zoning district boundaries of the area as provided by subsection A of this section.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 02-969B, Sec. 5.)

3.07.430 Protection of Industrial Areas

- A. In Industrial Areas mapped pursuant to Metro Code section 3.07.130 that are not Regionally Significant Industrial Areas, cities and counties shall limit new and expanded retail commercial uses to those appropriate in type and size to serve the needs of businesses, employees and residents of the Industrial Areas.
- B. In an Industrial Area, a city or county shall not approve:
 - 1. A commercial retail use with more than 20,000 square feet of retail sales area in a single building or in multiple buildings that are part of the same development project; or
 - 2. Commercial retail uses that would occupy more than ten percent of the net developable portion of the area or any adjacent Industrial Area.
- C. Notwithstanding subsection B of this section, a city or county may allow the lawful use of any building, structure or land at the time of enactment of an ordinance adopted pursuant to this section to continue and to expand to add up to 20 percent more floorspace and 10 percent more land area.

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No. 02-969B, Sec. 5.)

3.07.440 Protection of Employment Areas

- A. Except as provided in subsections C, D and E, in Employment Areas mapped pursuant to Metro Code Section 3.07.130, cities and counties shall limit new and expanded commercial retail uses to those appropriate in type and size to serve the needs of businesses, employees and residents of the Employment Areas.
- B. Except as provided in subsections C, D and E, a city or county shall not approve a commercial retail use in an Employment Area with more than 60,000 square feet of gross leasable area in a single building, or commercial retail uses with a total of more than 60,000 square feet of retail sales area on a single lot or parcel, or on contiguous lots or parcels, including those separated only by transportation right-of-way.

- C. A city or county whose zoning ordinance applies to an Employment Area and is listed on Table 3.07-4 may continue to authorize commercial retail uses with more than 60,000 square feet of gross leasable area in that zone if the ordinance authorized those uses on January 1, 2003.
- D. A city or county whose zoning ordinance applies to an Employment Area and is not listed on Table 3.07-4 may continue to authorize commercial retail uses with more than 60,000 square feet of gross leasable area in that zone if:
 - 1. The ordinance authorized those uses on January 1, 2003;
 - 2. Transportation facilities adequate to serve the commercial retail uses will be in place at the time the uses begin operation; and
 - 3. The comprehensive plan provides for transportation facilities adequate to serve other uses planned for the Employment Area over the planning period.
- E. A city or county may authorize new commercial retail uses with more than 60,000 square feet of gross leasable area in Employment Areas if the uses:
 - 1. Generate no more than a 25 percent increase in site-generated vehicle trips above permitted non-industrial uses; and
 - 2. Meet the Maximum Permitted Parking - Zone A requirements set forth in Table 3.07-2 of Title 2 of the Urban Growth Management Functional Plan.

Table 3.07-4
(Section 3.07.420(B))

Clackamas County unincorporated
Commercial
Commercial Industrial

Lake Oswego
General Commercial
Highway Commercial

Troutdale
General Commercial

Hillsboro
General Commercial

Sherwood
General Commercial

Tigard
General Commercial
Commercial Professional

Tualatin
Commercial General

Wilsonville
Planned Development Commercial

(Ordinance No. 97-715B, Sec. 1. Amended by Ordinance No.
02-969B, Sec. 5.)



METRO
2004 Regional Transportation Plan and
2004-07 Metropolitan Transportation Improvement Program

Interagency Coordination - October 2, 2003 Meeting Summary

Meeting Summary
Interagency Consultation Meeting
Air Quality Conformity &
the 2004 RTP/2004-2007 MTIP
October 2, 2003

Subcommittee Participation. The meeting commenced at approximately 10:08am and began with completing teleconferencing connections with Wayne Elson, US Environmental Protection Agency, and Rebecca Reyes-Alicea and Jennifer Bowman, Federal Transit Administration. Those in attendance in room 370 A at Metro included: Fred Patron and Michelle Eraut, Federal Highways Administration; Dave Nordberg and Marianne Fitzgerald, Oregon Department of Environmental Quality; Chris Smith, TPAC citizen member; Robin McArthur, Vince Carrow and Thomas Picco, Oregon Department of Transportation; Phil Sellinger, TriMet; and Andy Cotugno, Tom Kloster, Dick Walker, Kim Ellis, Ted Leybold, Jean Alleman, John Mermin and Mark Turpel, Metro. These individuals representing their respective agencies constituted the Interagency Consultation subcommittee (Subcommittee).

Reference Documents. Several documents were discussed and made available at the meeting including: *Interagency Consultation Draft Air Quality Conformity Determination*, (Determination) dated September 25, 2003, *Interagency Consultation Agenda* dated October 2, 2003, *Interagency Consultation Meeting Summary of Responses to Agenda Items* dated October 2, 2003 (Summary), and a one-page excerpt from page 2, Appendix 3 of the *Interagency Consultation Draft Air Quality Conformity Determination* (Excerpt).

Agenda. Discussion began with a query as to whether there were other items that should be discussed beyond the 13 items included in the Summary. The status of the Vancouver, Washington airshed and technical comments on the Determination were added.

Air Quality Model to be Used. Discussion of the Summary commenced with no disagreement on the responses in the Summary for item 1, MOBILE (air quality software) model to be used. However, Wayne Elson noted that MOBILE5b could also be used in addition to the MOBILE5a-h Metro has been using.

Subcommittee Conclusions:

- MOBILE5a-h is suitable for use in the air quality conformity determination for the 2004 RTP/2004-07 MTIP, MOBILE5b could also be used;
- Metro staff have begun testing MOBILE6 in order to transition to its use in the future.

Analysis Years. The second agenda item, analysis years, was discussed and the subcommittee agreed that changes were need for both the Determination and Excerpt documents. The Subcommittee discussed Table 2 of Appendix 3 in detail.

Subcommittee Conclusions:

- the year 2000 should be clarified that there is no CO or Ozone Budget established for this year;
- the type of budget (CO or Ozone) should be specified;
- no analysis would be completed for CO for the year 2006 as there is no emission budget for this pollutant for that year;
- an explanation about the difference between a full analysis and an analysis based on trip assignments was suggested;

These changes are reflected in a revised Table 2 below, and which also will be reflected in other tables and references in the Determination.

Table 2
2004 Regional Transportation Plan Conformity Analysis Years

			Winter CO	Ozone (HC and NOx)
Year	Budget Established	Modeling	Emission Calculation	Emission Calculation
2006	Ozone		None - not required	Emission Interpolation*
2007	Winter CO		Emission Interpolation*	None - not required
2010	Both	Full Model run	MOBILE5a-h	MOBILE5a-h
2015	Both	Trip Assignment (Partial Model run)	MOBILE5a-h	MOBILE5a-h
2020	Both		Emission Interpolation	Emission Interpolation
2025	All years after 2020 to use 2020 budget	Full Model run	MOBILE5a-h	MOBILE5a-h

* A full model run was performed for year 2000. Emissions for 2006 and 2007 were interpolated using the 2000 and 2010 model runs.

Motor Vehicle Emission Budgets Agenda item 3 addresses the State Implementation Plan (SIP) and MVEB (motor vehicle emission budget). There was no disagreement with the statements in the Summary. However, there was discussion of the subregional budget included in the Winter CO Maintenance Plan.

Subcommittee Conclusions:

- the Determination should clearly state the source of the emission budgets;
- sub- area CO budgets should not be ignored, rather, some response was needed;
- CO pollution levels in the Portland Central City area and 82nd Avenue areas (the sub-areas specifically included in the CO Maintenance Plan with their own emission budgets) have not been a problem. In fact, for the Central City area, actual Winter CO rates were only about ½ the allowed maximum and DEQ has removed the monitoring station because of the relatively low levels of actual CO.
- Marianne Fitzgerald, DEQ, agreed to investigate the SIP and Federal regulations to see whether separate sub-area budget analyses were absolutely required;
- Metro would likely prepare, unless the DEQ investigation showed no sub-area analysis was needed, an analysis of the sub-areas that addressed sub-area budgets, but the sub-area analysis may be less rigorous than the region-wide analysis based on subcommittee review.

Geographic Area Analysis The subcommittee discussed the statements in the Summary.

Subcommittee Conclusions:

- The statements about the geographic analysis area in the Summary are correct;
- Maps of these areas and sub-areas should be provided and included in the Determination.

Transportation Control Measures Agenda item 5, listed transportation control measures in EPA approved State Implementation Plans and their status was discussed.

Subcommittee Conclusions:

- This section of the Determination should be substantially improved by quoting each maintenance plan's TCMs and then documenting what has been done, noting those TCMs that may have been completed and future planned actions to implement those that have not yet been completed.
- Phil Sellinger, TriMet, noted that Table 1, page 11 of the Determination did not include street car service and that he would provide this data. He further noted that the Ozone Maintenance Plan included a TCM for transit service levels in the Portland Central City and that he would also provide this data.
- The first bullet on page 10 under the heading of "increased transit" should be revised to note that the annual service increase is on average and the last phrase beginning with question marks referring to a time period after the year 2020 should be deleted.
- It was noted that the first sentence below Table 1 on page 11 should be revised to clarify that the TCM is for transit service to increase by an average of 1.5 percent

per year, that TriMet had increased it by 2.6 percent per year, the result being actual transit service levels 1 percent more than the required TCM.

Latest Planning Assumptions This item, number 6 on the Agenda, was briefly discussed by the Subcommittee.

Subcommittee Conclusions:

- The Subcommittee concurred with the responses in the Summary.

Motor Vehicle Fleet Information. The Subcommittee discussed this item.

Subcommittee Conclusions:

- The Subcommittee concluded that specific fleet assumptions, especially the date of the data, must be included in Determination.

Public Comment Period. There was very substantial discussion of this item by the Subcommittee. FHWA and FTA representatives expressed concern about the schedule and the fact that while the October 31 Draft Determination would have descriptions of assumptions and methodology, it would not have the resulting air quality modeling output. Specifically the data that would show whether the region would meet emission budgets would not be available during most of the public comment period. Metro staff noted that the schedule was designed, in part, to be responsive to a letter from FHWA and FTA asking that the conformity information be provided 60 days or more before the lapse date, January 26, 2004. In addition, Metro recognized USDOT concerns expressed in the letter about the risks involved with a conformity lapse. Metro further stated that the schedule would only be implemented if the modeling, based on the stated assumptions and methodology available for public review and comment, met emission budgets. If the emission budgets were not met, then Metro would have to make revisions to the RTP and MTIP, rerun the analysis and revise the schedule accordingly. Discussion of preparation of an interim RTP, showing those projects that could proceed in the event of an air quality conformity lapse was suggested by FHWA representatives.

Subcommittee Conclusions:

- A draft interim RTP project list by analysis year assumptions should be prepared to illustrate the consequences of a conformity lapse and meet Federal reporting requirements. This task will be completed in a coordinated effort among Metro, ODOT and USDOT representatives. Ideally, this list should be circulated to the Subcommittee prior to its inclusion in the October 31 revised Determination.
- the *2004 RTP Update Calendar of Activities*, dated September 26, 2003 which includes public outreach and comment period, will not be changed at this time.
- Should emission modeling show that the 2004 RTP and/or 2004-07 MTIP do not meet emission budgets, the Calendar will be revised after consideration of possible RTP/MTIP revision issues, modeling time, interagency consultation and other relevant factors. This explanation should be added to the Determination.

Emission Reduction Credits. The responses included in the Summary were discussed, with emphasis on describing which credits were applied after running the emissions model.

Subcommittee Conclusion:

- The emission credits cited in the Summary (item 9) should be added to the Determination with an explanation of how they have been applied.

Exempt Projects. This item was discussed at the same time as items 11, list of projects by analysis year. (The criteria for projects which are eligible for exemption are located at 40CFR Part 93.126 which may be found at:

http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr93_00.html

Generally, projects eligible for exemption include roadway safety projects; transit projects which involve service changes, but not new construction; air quality improvement programs like vanpooling, bicycle projects; and other activities that do not directly lead to construction.)

Subcommittee Conclusion:

- As noted under the Public Comment item, above, a draft interim RTP project list by analysis year, transit service levels and level of service assumptions should be prepared to illustrate the consequences of a conformity lapse and meet Federal reporting requirements.

Project list by Analysis Year. See conclusions under Exempt Projects, above.

Transit System and Level of Service Assumptions. The Subcommittee discussed this item, recognizing that these assumptions had not yet been completed.

Subcommittee Conclusion:

- When Metro has a draft of transit system and level of service assumptions, these should be circulated to the Subcommittee, ideally prior to publication of a revised Determination on October 31.

Contingency Measures in Case of Violation. The Subcommittee concluded that the conformity determination should discuss what happens in the event of a contingency lapse, not NAAQS violations.

Subcommittee Conclusion:

- The Subcommittee agreed that should the air quality analysis not demonstrate conformity, then Metro would make revisions to the RRTP and /or MTIP, or take other actions that would bring the region into conformity. An explanation of this approach should be included in the revised Determination.

Affect of Possible Metro Area Conformity Lapse on Clark County. This question was raised to clarify the impact on Clark County should a lapse occur in the Metro area.

Subcommittee Conclusion.

- The Subcommittee deferred to the EPA representative, who stated that a conformity lapse in the Metro area would not adversely impact Clark County Washington air quality conformity.

Determination Document Comments. FHWA representatives included several comments including:

- A reference to assessment of environmental justice on page 2, third paragraph of the Determination was questioned. Metro staff responded that included in the MTIP was an environmental justice assessment and that the statement in the Determination was accurate. Accordingly, no revision to the Determination on this point is planned.
- The Determination should be revised on page 13, to note that TPAC and JPACT do not include all relevant agencies (ie, FTA and EPA) that should be included in the development of the RTP and MTIP. Further, the revised Determination should reference the fact that the Subcommittee has met, reviewed the Determination and commented. The revised Determination should note that the Subcommittee meeting and coordination, along with TPAC and JPACT meetings, does result in a full review and coordination with all necessary and relevant agencies.
- The Determination should be revised in the last paragraph on page 15 under item x. and the response to item xi, to reflect changes. Specifically, the MOU cited under section x has been superseded by an amendment to the OAR. The OAR should be referenced, explained and the region's response should be described as a replacement to the existing paragraph. For the section under xi, the process that Metro is completing should replace the existing language.
- The RTP Work Plan, page 5, should be revised to clarify what changes are going to be made to the timeline and to reflect the need to update the planning boundary. Metro staff agreed to revising the work plan and completing the tasks.
- The MTIP is required to include estimates of the air quality benefits of each CMAQ project. While some of the projects are carried over from previous years and do not require new estimates, newer CMAQ projects do.

The Subcommittee, having no further comments or recommendations, adjourned at approximately 12:05.



METRO

**2004 Regional Transportation Plan and
2004-07 Metropolitan Transportation Improvement Program**

Portland Area Motor Vehicle Fleet Assumptions

On-road motor vehicle emissions of carbon monoxide and precursors of ozone and will be determined using EPA's Mobile5a_h Emissions Factor Model. The inputs for these computer analyses will reflect the following parameters:

Fleet Data: Vehicle registration distribution and vehicle age distribution for Light Duty Gas Vehicles (LDGV) and Light Duty Diesel Vehicles (LDDV) will be derived from Oregon Dept. of Motor Vehicles registration records for Clackamas, Multnomah and Washington Counties 2002. Vehicle type and age distributions for other vehicle groups will be determined by national averages.

Vehicles originating in Clark County, Washington will be characterized the same way if possible. If 2002 registration data are not available, national averages will be used to describe that portion of the fleet.

I/M Program: Vehicles registered in the Portland Metropolitan area are subject to Oregon DEQ's Inspection/Maintenance (Emissions Testing) Program. Details of the I/M program reflected in the Mobile5a_h model are:

OBD Test: 1996 and newer vehicles are subject to On Board Diagnostics testing.

Enhanced Test: 1981 through 1995 model year vehicles are subject to BAR 31 "enhanced" emissions testing (modeled as EPA's I/M 240 enhanced test).

Basic Test: 1975 through 1980 model year vehicles are subject to the 2500 two speed idle emissions test.

Exemption: Most vehicles are not subject to emissions testing until they become four years old.

Waiver Rate: There is no repair cost threshold at which a vehicle does not have to meet the emissions test requirement.

I/M Program Start Year: 1975

Program Type: Centralized

Compliance Rate: 90%

Inspection Frequency: Biennial

Tampering Rates: Mobile5 rates.

Speed: One average speed used for all vehicle types.

BERs: Mobile5 Basic Emission Rates.

Refueling Emissions: None calculated. (Accounted for under "Area Sources")

Summer Temperatures: Min: 61 deg. F; Max: 98 deg. F

Winter Temperature: Ambient = 39.8 deg. F

Summer Reid Vapor Pressure: 7.8 psi

Winter Reid Vapor Pressure: 13.6 psi

Winter Fuel Type: 2.7% Oxygen

How to Comment on the update to the 2004 Regional Transportation Plan

The public comment period for the 2004 Regional Transportation Plan (RTP) begins on October 31, 2003 and concludes with a public hearing on December 4, 2003. You may submit comments online at Metro's website:

www.metro-region.org/rtp

Comments and questions may also be mailed using the form below, or left on Metro's Transportation hotline at (503) 797-1900, Option 2.

Comments:

<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Submitted by:

<hr/>	
<i>Name</i>	
<hr/>	
<hr/>	<hr/>
<i>Street Address</i>	<i>City/Zip</i>
<hr/>	
<hr/>	<hr/>
<i>Phone</i>	<i>E-Mail</i>
<hr/>	
Send me more info:	
<input type="checkbox"/>	<i>2000 RTP Document CD</i>
<i>Other RTP Info:</i> <hr/>	
<input type="checkbox"/>	<i>Please add me to the RTP interested citizens mailing/e-mail lists</i>

Regional Transportation Plan Update Calendar

October 31	Public comment period begins; staff recommendation on draft 2004 RTP released for 30-day public comment period; draft RTP and conformity determination submitted to FHWA and FTA to begin review
November 3	Air quality conformity analysis begins
November 5	MTAC comments on draft 2004 RTP
November 12	MPAC comments on draft 2004 RTP
November 13	JPACT tentative action on draft 2004 RTP
November 13	Metro Council first reading of Ordinance on draft 2004 RTP
November 26	TPAC review and discussion of draft 2004 RTP and air quality conformity analysis
December 4	Public hearing on draft 2004 RTP; public comment period ends at 5 p.m.
December 5	TPAC special meeting to comment on draft 2004 RTP
December 10	Tentative final MPAC action on 2004 RTP
December 11	Tentative final JPACT action on 2004 RTP
December 11	Metro Council second reading of Ordinance and consideration of adoption of 2004 Regional Transportation Plan

FOLD HERE



METRO

Place first
class
postage
here.

Metro
600 NE Grand Avenue
Portland, Oregon 97232
Attention: Marilyn Matteson