BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING THE PORTLAND AREA AIR QUALITY CONFORMITY DETERMINATION FOR THE 2004 REGIONAL TRANSPORTATION PLAN AND 2004-07 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM	)	RESOLUTION NO. 03-3382 Introduced by: COUNCILOR PARK

WHEREAS, the Metro Council adopted Resolution No. 00-2999, demonstrating that the 2000 Regional Transportation Plan (RTP) met state and Federal air quality regulations and authorizing submittal of the air quality conformity determination to the United States Department of Transportation (USDOT); and,

WHEREAS, on January 26, 2001, the USDOT, represented by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), after consultation with the United States Environmental Protection Agency (EPA), approved Metro's air quality conformity for the 2000 RTP; and

WHEREAS, state and Federal regulations require that the region update its transportation plans every three years; and,

WHEREAS, state and Federal regulations also require that the region demonstrate that its updated transportation plans conform with air quality standards; and,

WHEREAS, the region is approaching three years from its last full air quality conformity determination; and

WHEREAS, discussions with local, state and Federal agencies concerning how best to update the RTP and Metropolitan Transportation Improvement Program were held, including meetings on September 18, 23, 24, 25, 26, and October 7, 8, 14, 15 and 22, 2003; and,

WHEREAS, Metro has prepared, in partnership with local, state and Federal entities, a 2004 RTP, including a financially constrained system and a 2004-07 Metropolitan Transportation Improvement Plan (MTIP); and,

WHEREAS, Metro staff coordinated interagency consultation with the Transportation Policy Advisory Committee, FHWA, FTA, EPA, Oregon Department of Environmental Quality, Oregon Department of Transportation and TriMet on October 2, 2003, concerning the data, assumptions, methodology and technical and public review processes of a new air quality conformity determination for the financially constrained system of the 2004 RTP and the 2004-07 MTIP; and,

WHEREAS, a new air quality conformity determination for the 2004 RTP financially constrained system of projects and the 2004-07 MTIP has been prepared and is attached as Exhibit "A" to this resolution; and,

WHEREAS, notice of the availability of the air quality conformity determination for the 2004 RTP and 2004-07 MTIP was published in the *Oregonian* newspaper on September 29, 2003, stating that public comments concerning the 2004 RTP, 2004-07 MTIP and air quality conformity determination would be taken from October 31, 2003 to December 4, 2003; and,

WHEREAS, notice of an extension of the public comment period to January 13, 2004 was published on Metro's website on December 5, 2003; and

WHEREAS, notice of an extension of the public comment period to January 21, 2004 was published on Metro's website on January 9, 2004; and

WHEREAS, all comments provided during the period of review have been presented to the Metro Council in a public hearing prior to consideration of this resolution; and

WHEREAS, all recommendations from the Joint Policy Advisory Committee (JPACT), have been presented to the Metro Council prior to consideration of this resolution; and

WHEREAS, Federal requirements to update the RTP and MTIP are not complete or final without an updated air quality conformity determination; now therefore,

BE IT RESOLVED,

1. The Metro Council approves the Air Quality Conformity Determination for the 2004 RTP and 2004-07 MTIP, attached as Exhibit A to this Resolution, as a determination that the 2004 Regional Transportation Plan, adopted by the Council by Resolution No. 03-3380A on December 11, 2003, and the 2004-2007 Metropolitan Transportation Improvement Program are in conformity with all State and Federal air quality requirements.

2. The Council adopts the "Findings of Compliance with TEA-21," attached as Exhibit B to this Resolution, as its explanation of compliance of this Air Quality Conformity Determination with federal law at 23 USC Section 134.

3. The Metro Council directs the Chief Operating Officer to request concurrence with this air quality conformity determination from the USDOT, in consultation with the EPA, in order to confirm that the financially constrained system of the 2004 RTP and the 2004-07 MTIP conforms to the State Implementation Plan for attainment and maintenance of National Ambient Air Quality Standards in the Portland area Carbon Monoxide and Ozone Maintenance Plans.

ADOPTED by the Metro Council this __ day of January, 2004.

David Bragdon, Council President

Attest:

Approved as to Form:

Christina Billington, Recording Secretary

Daniel B. Cooper, Metro Attorney

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 03-3382, FOR THE PURPOSE OF ADOPTING THE PORTLAND AREA AIR QUALITY CONFORMITY DETERMINATION FOR THE 2004 REGIONAL TRANSPORTATION PLAN AND 2004-07 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM

Date: October 30, 2003 Prepared by: Mark Turpel

BACKGROUND

Federal regulations require that Metro's financially constrained system of the Regional Transportation Plan (RTP) and its Transportation Improvement Program (MTIP), which is drawn from the financially constrained RTP, be updated every three years. Federal approval of the updates can't be made until the region demonstrates that the updates meet Clean Air Act (CAA) requirements (a conformity determination).

The last full analysis conformity determination was approved January 26, 2001. Accordingly, in order to avoid a conformity lapse, a new conformity determination must be made by the USDOT, in consultation with the US Environmental Protection Agency by January 26, 2004. A conformity lapse is to be avoided as it could result in delay of most new transportation construction projects in the region.

The three air pollutants of concern within the region directly related to transportation and included in the air quality maintenance plans' motor vehicle emission budgets (maximum pollutant levels for the Portland area) are: Carbon Monoxide (CO), volatile organic compounds (VOC) (VOC are also called hydrocarbons - HC) and oxides of Nitrogen (NOx). NOx and VOC are precursors to ground level ozone, or smog.

Federal and state regulations further require that air quality conformity be demonstrated not only for the present year, but also in future years when planned additional transportation investments included in the MTIP or financially constrained RTP could increase air pollution. Air quality maintenance plans have established motor vehicle emission budgets that must not be exceeded in order to demonstrate conformity. Budget years for which analyses must be completed include 2006 (VOC and NOx only) , 2007 (CO only), 2010, 2015, 2020 and 2025. Accordingly, an air quality conformity determination of the financially constrained 2004 RTP and the 2004-07 MTIP has been completed for public and technical review and comment and Metro Council consideration.

All of the required local tasks have been completed and the Metro Council is being asked to approve this work and direct that a request be made for US Department of Transportation Conformity Determination of the 2004 RTP and 2004-07 MTIP.

ANALYSIS/INFORMATION

1. Known Opposition

None known. The region is and has been in compliance with the Clean Air Act since 1996. The proposed transportation investments included in the 2004 RTP and the 2004-07 MTIP when added to the present transportation systems, are estimated to result in air quality conditions which continue to meet the Clean Air Act.

2. Legal Antecedents

There are a wide variety of past Federal, State and regional legal actions that apply to this action.

Federal regulations include:

- the Clean Air Act, as amended [42 U.S. C. 7401, especially section 176(c)]; and
- Federal statutes concerning air quality conformity [23 U.S.C. 109(j)];
- US EPA transportation conformity rules (40 CFR, parts 51 and 93)
- USDOT rules that require Metro to update RTPs on a three-year cycle [23 CFR 450.322(a)].

State regulations include:

- Oregon Administrative Rules for Transportation Conformity, (OAR Chapter 340, Division 252);
- Portland Area Carbon Monoxide Maintenance Plan and Portland Area Ozone Maintenance Plan each prepared in 1996 and which received Federal approvals on September 2, 1997 and May 19, 1997 respectively.

Previous related Metro Council actions include:

- Metro Resolution No. 00-2999, adopting the air quality conformity for the 2000 RTP;
- Metro Resolution No. 02-3186A, amending the 2000 RTP and 2002 MTIP to incorporate OTIA bond projects (using a estimate of additional air quality impacts from the projects added to the RTP and MTIP);
- Metro Resolution 03-3351, amending the 2000 RTP and MTIP to incorporate the South Corridor LRT Project (again, using a less than full analysis method to assess air quality impacts from the project when added to the RTP and MTIP).

3. Anticipated Effects

Approval of this Resolution will allow submittal of the air quality conformity determination as set forth in Part 4 (Air Quality Conformity) of Exhibit A to the US Department of Transportation, Federal Highway Administration and Federal Transit Administration as well as the US Environmental Protection Agency for their review and hopefully, approval. This approval will allow Metro and local, regional and state agencies to proceed with transportation investments within the region.

4. Budget Impacts

None. The subject transportation investments are allocations of Federal and State transportation funds.

RECOMMENDED ACTION

Adopt Resolution 03-3382.

EXHIBIT "B" to Res. No. 03-3382

Findings of Compliance with TEA-21

TITLE 23 - UNITED STATES CODE
SECTION 134 - METROPOLITAN PLANNING

The following findings are intended to explain how the 2004 Federal Update to the Regional Transportation Plan ("RTP") complies with applicable requirements of Section 134 in general. These findings are a roadmap to the decision record for this update effort. Inapplicable subsections of Section 134 are not cited in these findings.

134(d)(2)(A-B) Interstate Compacts

> *"The consent of Congress is granted to any 2 or more States to enter into agreements or compacts, not in conflict with any law of the United States, for cooperative efforts and mutual assistance in support of activities authorized under this section as the activities pertain to inter-state areas and localities within the States and to establish such agencies, joint or otherwise, as the States may determine desirable for making the agreements and compacts effective."*

Metro has entered into an intergovernmental agreement with the Regional Transportation Commission ("RTC"), the MPO for Clark County, Washington. The RTC is represented on Metro's Transportation Policy Alternatives Committee ("TPAC") and Joint Policy Advisory Committee on Transportation ("JPACT"). Likewise, Metro is represented on RTC technical and policy advisory committees. The function of Metro's interagency coordinating committees is described in Section 1.3.1 of the 2000 Regional Transportation Plan ("RTP"), which remains unchanged and continues to apply under the 2004 Federal Update.

134(e)(2) Project Located in Multiple MPOs

> *"If a project is located within the boundaries of more than 1 metropolitan planning organization, the metropolitan planning organizations shall coordinate plans regarding the project."*

Based on a recommendation from the I-5 Partnership Governors Task Force, the Bi-State Transportation Committee became the Bi-State Coordination Committee in early 2003. This joint committee advises the region, state and local jurisdictions on transportation and land use issues of bi-state significance. The intergovernmental agreement between the RTC and Metro states that JPACT and the RTC Board "shall take no action on an issue of bi-state significance without first referring the issue to the Bi-State Coordination Committee for their consideration and recommendation."

Several projects in the I-205 and I-5 highway corridors, including transit improvement, are near the Metropolitan Planning Organization (MPO) boundary, or span the Metro and RTC MPOs. These projects are listed in Project Amendments section of the 2004 Federal Update to the RTP. Metro has coordinated these projects with the RTC through the membership of TPAC and JPACT.

134(f)(1) Metropolitan Planning Factors

This section requires that the metropolitan transportation planning process for a metropolitan area under this section shall provide for consideration of projects and strategies that will satisfy the planning factors (A) through (G), below.

134(f)(1)(A) Plan Supports Economic Viability

> *"Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency."*

The policy component of the RTP is structured around the implementation of the Region 2040 Growth Concept through strategic transportation improvements. As the economic engines of the region's economy, the Portland central city, six regional centers, the region's industrial areas and intermodal facilities are identified as the primary areas for transportation investments (2000 RTP Section 1.2.1). All of these policies continue to apply under the 2004 Federal Update to the RTP.

In addition, the 2004 Federal Update included amendments to 2000 RTP Section 1.2.1 to provide clear, immediate prioritization of Regionally Significant Industrial Areas (RSIAs) for transportation planning and funding decisions. The amendment will help support efforts to focus future transportation investments to those parts of the region that are most critical to the region's economy and successful implementation of the 2040 Growth Concept. These changes are identified in the Policy Amendments section of the 2004 Federal Update document.

Transportation improvements in these primary components of the 2040 Growth Concept are also guided by a set of functional maps that establish a series of efficient, high-quality motor vehicle, freight, transit, bicycle and pedestrian systems that are similarly designed to reinforce the growth concept (2000 RTP Section 1.3.5). The 2004 Federal Update included Section 1.3.5 amendments to update the system maps to reflect classifications changes recommended through transportation plans adopted by local cities and counties since the last RTP update in August 2000. These changes are identified in the Policy Amendments section of the 2004 Federal Update document.

The 2004 Federal Update included an updated population and employment forecast that was extended from 2020 to 2025. The new forecast was used to define the scale, location and timing of individual projects needed to implement the 2040 Growth Concept during the 20-year plan period of the updated plan. In addition, nearly all city and county transportation plans in the Metro region have been updated since the last RTP update to be consistent with the 2000 RTP. In the process of completing this update, many local plans identified new transportation projects of regional significance that have been included in the 2004 Federal Update as amendments. Several corridor studies have also been completed since 2000, such as the I-5 Trade Partnership Study, and project recommendations have been included in the 2004 Federal Update to address the movement of freight in the region. Among the projects aimed at maintaining a robust economy are a number of highway corridor improvements, freight and passenger terminal access improvements, bridge improvements, rail crossing upgrades and channel deepening of the Columbia River. These projects are listed in Project Amendments section of the 2004 Federal Update to the RTP.

134(f)(1)(B) Plan Increases Safety

> *"Increase the safety and security of the transportation system for motorized and non-motorized users."*

The policy component of the RTP calls for a three-pronged implementation strategy that focuses on system preservation, 2040 implementation and safety projects as the most pressing needs for improving the regional transportation system (2000 RTP Section 1.3.7). This policy remains unchanged and continues to apply under the 2004 Federal Update to the RTP. The safety policy resulted in a number of safety improvements in the recommended projects and programs in the updated plan. The projects are listed in Project Amendments section of the 2004 Federal Update to the RTP. This emphasis on safety is also mirrored in Metro's MTIP funding process, where safety improvements are given a priority.

134(f)(1)(C) Plan Increases Accessibility and Mobility

> *"Increase the accessibility and mobility options available to people and for freight."*

The transportation vision that guides the RTP (2000 RTP Section 1.1) is based on the premise that the system must become more multi-modal in design and function in order to fully implement the 2040 Growth Concept, and reduce dependency on the automobile as a sole mode of travel. The vision is translated into motor vehicle, transit, freight, bicycle and pedestrian policies that emphasis mobility and access to 2040 centers (2000 RTP Section 1.3.5). These policies remain unchanged and continue to apply under the 2004 Federal Update to the RTP. The policies resulted in a multi-modal set of recommended projects and programs to increase access and mobility options to people and for freight. The projects are listed in Project Amendments section of the 2004 Federal Update to the RTP.

134(f)(1)(D) Plan Protects Environment

> *"Protect and enhance the environment, promote energy conservation, and improve quality of life."*

The policy component of the RTP seeks to protect sensitive environmental areas and resources from the potentially negative effects of transportation improvements (2000 RTP Section 1.3.4). The transit, bicycle and pedestrian systems envisioned in the plan (2000 RTP Section 1.3.5) and corresponding projects that implement these systems, promote energy conservation and enhance air quality by reducing the use of motor vehicles. The region's parking policies (Title 2 of the Urban Growth Management Functional Plan) are also designed to encourage the use of alternative modes, and reduce reliance on the automobile, thus promoting energy conservation and reducing air quality impacts. All of these policies remain unchanged and continue to apply under the 2004 Federal Update to the RTP.

134(f)(1)(E) Plan is Multi-modal

> *"Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight."*

The regional street design classifications (2000 RTP Section 1.3.5) link transportation and 2040 land use considerations for all portions of the regional transportation system. The design classifications

establish a modal-orientation on detailed segments of the major street system, reflecting future travel demand that is expected for individual 2040 land use components. In compact, mixed-use areas, the street design classifications emphasize transit, bicycle and pedestrian elements, as well as calmed motor vehicle travel speeds and on-street parking that supports storefront development. In industrial and employment areas, the street design classifications emphasize motor vehicle travel, including freight, with an emphasis on motor-vehicle mobility.

However, all of these classifications are multi-modal in design, and embrace the principle that all streets should serve all modes of travel in some manner. The exception to this strategy are limited-access freeway and highway facilities, that are not intended to include pedestrian and bicycle access, due to safety concerns.

The 2004 Federal Update included amendments to update the regional street design classification map to reflect classifications changes recommended through transportation plans adopted by local cities and counties since the last RTP update in August, 2000. These changes are identified in the Policy Amendments section of the 2004 Federal Update document.

134(f)(1)(F) Plan Promotes System Management

"Promote efficient system management and operation."

The policy component of the 2000 RTP includes specific provisions for efficient system management and operation (2000 RTP Section 1.3.6), with an emphasis on TSM, ATMS and the use of non-auto modal targets intended to discourage overbuilding of roadway improvements. The regional congestion management system also requires local jurisdictions to explore system management solutions before adding roadway capacity to the regional system (2000 RTP Section 6.6.3).

All of these policies remain unchanged and continue to apply under the 2004 Federal Update to the RTP. These provisions are implemented through a number of projects and programs recommended in the updated plan. These projects are listed in Project Amendments section of the 2004 Federal Update to the RTP.

134(f)(1)(G) Plan Emphasizes System Preservation

"Emphasize the preservation of the existing transportation system."

The implementation policies of the RTP call for a three-pronged approach that focuses on system preservation, 2040 implementation and safety projects as the most pressing needs for improving the regional transportation system (2000 RTP Section 1.3.7). All of these policies remain unchanged and continue to apply under the 2004 Federal Update to the RTP. The system preservation policy resulted in a number of major reconstruction and preservation improvements in the recommended projects and programs in the plan. These projects are listed in Project Amendments section of the 2004 Federal Update to the RTP.

In addition, Metro's MTIP process provides funding for reconstruction and preservation improvements that are included in the RTP financially constrained system.

134(g)(1) Long Range Plan Required

"Each metropolitan planning organization shall prepare, and update periodically, according to a schedule that the Secretary determines to be appropriate, a long-range transportation plan for its metropolitan area in accordance with the requirements of this subsection."

The 2000 RTP and the 2004 Federal Update to the RTP serve as the long-range transportation plan for the purposes of this section.

134(g)(2) Long Range Plan Required

> *"A long-range transportation plan under this section shall be in a form that the Secretary determines to be appropriate and shall contain, at a minimum, (A) through (D), below."*

134(g)(2)(A) Identify Integrated System

> *"An identification of transportation facilities (including but not necessarily limited to major roadways, transit, and multi-modal and intermodal facilities) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions. In formulating the long-range transportation plan, the metropolitan planning organization shall consider factors described in subsection (f) as such factors relate to a 20-year forecast period"*

The RTP establishes integrated modal systems for motor vehicles, transit, freight, bicycles and pedestrians through a series of functional classification maps and accompanying narrative (2000 RTP Section 1.3.5). The street design classifications (2000 RTP Section 1.3.5) serve as the policy tool for integrating these modal systems, and linking them to the 2040 land use components. These modal systems and design classifications emphasize regional travel, as they apply only to the regional transportation system, which includes regional, statewide and interstate travel routes.

The previously established findings of compliance with the seven planning factors in subsection (f) were based on a 20-year planning period, and were considered during the formulation of the 2004 Federal Update to the RTP policies, projects and implementation measures.

134(g)(2)(B) Develop a Financial Plan

> *"A financial plan that demonstrates how the adopted long-range transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs. The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted long-range transportation plan if reasonable additional re-sources beyond those identified in the financial plan were available. For the purpose of developing the long-range transportation plan, the metropolitan planning organization and State shall cooperatively*

develop estimates of funds that will be available to support plan implementation."

The financially constrained system described in the Project Amendments section of the 2004 Federal Update to the RTP was specifically developed to comply with TEA-21 planning requirements. The system was developed based on a forecast of expected revenues that was formulated in partnership with the Oregon Department of Transportation. The projects and programs recommended in the financially constrained system were developed cooperatively with local jurisdictions and through workshops sponsored by TPAC. The financially constrained system is intended as the "federal" system for purposes of demonstrating air quality conformity, and allocating federal funds through the MTIP process (2000 RTP Sections 6.1 and 6.5). Development of the financially constrained system followed the basic principles of (a) maintaining the Region 2040 Plan policy emphasis of the 2000 RTP by focusing improvements in areas that serve as the economic engines for the region, including centers, ports and industrial areas, and (b) maintaining a similar project balance among travel modes, including road, transit, bikeways, pedestrian improvements and other project categories.

The total reasonably expected revenue base assumed in the 2004 RTP for the road system is approximately $ 4.3 billion, with $2.16 billion for freeways, highways and roads, $1.67 billion for transit and the balance for planning, bike, pedestrian, transportation demand management, system management and other similar programs.

In addition to the financially constrained system, the 2004 Federal Update to the RTP identifies a larger set of projects and programs for the "Illustrative System," which is nearly double the scale and cost of the financially constrained system. The illustrative system represents the region's objective for implementing the Region 2040 Plan.

134(g)(2)(C) Plan for System Preservation

"Assess capital investment and other measures necessary to —

(i) ensure the preservation of the existing metropolitan transportation system, including requirements for operational improvements, resurfacing, restoration, and rehabilitation of existing and future major road-ways, as well as operations, maintenance, modernization, and rehabilitation of existing and future transit facilities; and

(ii) make the most efficient use of existing transportation facilities to relieve vehicular congestion and maximize the mobility of people and goods."

The 2000 RTP revenue forecast and financial analysis for operations and maintenance was based on a thorough evaluation of city and county, ODOT and TriMet cost projections (2000 RTP Sections 4.1 through 4.3). The 2004 Federal Update to the RTP revenue forecast and financial analysis relied on a continuation of the 2000 RTP assumptions for estimate of operation and maintenance costs without change.

The system management policies in the RTP (2000 RTP Section 1.3.6) and resulting projects and programs are intended to maximize the use of existing facilities. The regional congestion management system also requires local jurisdictions to explore system management solutions before adding roadway capacity to the regional system (2000 RTP 6.6.3). These policies remain unchanged and continue to apply

under the 2004 Federal Update to the RTP. These provisions are implemented through a number of projects and programs recommended in the updated plan, and are listed in Project Amendments section of the 2004 Federal Update to the RTP.

134(g)(2)(D) Transportation Enhancement Activities

> *"Indicate as appropriate proposed transportation enhancement activities."*

Transportation enhancement activities have been conducted within the MTIP process. As a funding issue these activities are addressed in the MTIP, not in the 2000 RTP or the 2004 Federal Update to the RTP.

134(g)(3) Clean Air Act Coordination

> *"In metropolitan areas which are in non-attainment for ozone or carbon monoxide under the Clean Air Act, the metropolitan planning organization shall coordinate the development of a long-range transportation plan with the process for development of the transportation control measures of the State implementation plan required by the Clean Air Act."*

The Portland Area Carbon Monoxide Maintenance Plan and Portland Area Ozone Maintenance Plan were prepared in 1996 and received Federal approvals on September 2, 1997 and May 19, 1997 (including corrections made April 17, 1996 which included slightly revised CO budgets) respectively based on attainment with Clean Air Act standards for ozone and CO emissions. The CO maintenance plan is scheduled to be updated in 2004.

134(g)(4) Plan Participation

> *"Before approving a long-range transportation plan, each metropolitan planning organization shall provide citizens, affected public agencies, representatives of transportation agency employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transit, and other interested parties with a reasonable opportunity to comment on the long-range transportation plan, in a manner that the Secretary deems appropriate."*

The 2004 Federal Update to the RTP provided several public comment opportunities for the community, affected public agencies, representatives of transportation agency employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transit, and other interested persons. Public involvement opportunities and key decision points were published in the Oregonian, posted on Metro's web site, e-mailed via the Planning Department E-News to more than 5,000 individuals, mailed via postcard to the RTP interested parties mailing list and advertised through Metro's transportation hotline, where citizens could leave comments as well as receive information. All plan documents were simultaneously published (and regularly updated) on the Metro web site, including draft plan amendments, the update schedule, other explanatory materials and summaries of public comments received.

In October, 2003, Metro staff worked with members of the Transportation Policy Alternatives Committee (TPAC), representatives of transportation agency employees, including the Oregon Department of Transportation (ODOT), TriMet, South Metro Area Rapid Transit (SMART), the Port of Portland and other interested parties to develop a comprehensive inventory of regional transportation projects identified in local plans and special studies adopted since the 2000 RTP was completed. This inventory includes:

- new projects or studies that are not currently in the 2000 Regional Transportation Plan, but that have been adopted in local transportation system plans (TSPs) and regional corridor studies through a public process

- updates to existing 2000 RTP projects or studies to reflect changes in project location, description, cost and recommended timing

In a series of four half-day workshops, this effort focused on incorporating all "housekeeping" amendments generated by local plans that have been adopted since the RTP was approved in August 2000. Since Metro commented separately on all of these local plans during their respective adoption activities, friendly amendments that were consistent with RTP policies had already been identified for most projects.

Proposed amendments to the 2000 RTP were organized into four discussion packets: policy amendments, project amendments, technical amendments and the air quality conformity determination. The proposed amendments were posted on Metro's website and available upon request during the public comment period that began on October 31, 2003 and ended on December 10, 2003. The Metro Council held a public hearing on December 4 on the proposed amendments, and extended the public comment period in response to testimony provided at the hearing. The Regional Freight Advisory Committee was also provided with copies of the proposed amendments for review and comment. A summary of the public comments received on the 2004 RTP discussion packets and the Metro Council and Joint Policy Advisory Committee on Transportation (JPACT) recommendations related to those comments was posted on Metro's website on December 5 and updated on December 10. The summary includes all written comments received between October 3, 2003 and December 10, 2003 and public testimony provided at the December 4 public hearing.

Approval of the 2004 Federal Update to the RTP, Resolution No. 03-3380A, followed JPACT and Metro Council consideration of more than 130 comments received during the public comment period.

The comment period for the Air Quality Conformity Determination packet, to be approved by a separate Resolution No. 03-3382, was extended to 5 p.m. on January 13, 2004 to allow public review and comment of the air quality conformity results, which were posted on Metro's website.

134(g)(5) Plan Publication

> *"Each long-range transportation plan prepared by a metropolitan planning organization shall be:*
>
> *(i) published or otherwise made readily available for public review; and*
>
> *(ii) submitted for information purposes to the Governor at such times and in such manner as the Secretary shall establish"*

Proposed amendments to the 2000 RTP were organized into four discussion packets: policy amendments, project amendments, technical amendments and the air quality conformity determination. The proposed amendments were posted on Metro's website and available upon request during the public comment period. The 2000 RTP and the 2004 Federal Update to the RTP are available on Metro's website and available upon request.

The 2004 Federal Update to the RTP and Air Quality Conformity Determination for the RTP and the 2004-07 Metropolitan Transportation Improvement Program will be submitted to the Governor for approval.

134(g)(6) Selection of Projects

> *"Not-withstanding paragraph (2)(B), a State or metropolitan planning organization shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (2)(B)."*

The implementation provisions of the RTP require the MTIP to select projects for federal funding exclusively from the federally-recognized financially constrained system (2000 RTP Section 6.5.1). The 2004 Federal Update to the RTP provides an updated set of financially constrained projects and programs for future MTIP funding allocations.

134(i)(1)(A) Designation of Transportation Management Areas

> *"The Secretary shall designate as a transportation management area each urbanized area with a population of over 200,000 individuals."*

The Portland region exceeds this population threshold, and is designated as a Transportation Management Area.

134(i)(2) Transportation Plans in Management Areas

> *"Within a transportation management area, transportation plans and programs shall be based on a continuing and comprehensive transportation planning process carried out by the metropolitan planning organization in cooperation with the State and transit operators."*

Metro is the designated metropolitan planning organization for the Portland region, and prepares the regional transportation plan in cooperation with the Oregon departments of Transportation, Environmental Quality and Land Conservation and Development, TriMet, SMART and other transit operators in the region, the Port of Portland, three counties and 24 cities.

134(i)(3) Congestion Management System

> *"Within a transportation management area, the transportation planning process under this section shall include a congestion management system that provides for effective management of new and existing transportation facilities eligible for funding under this title and chapter 53 of title 49 through the use of travel demand reduction and operational management strategies. The Secretary shall*

establish an appropriate phase-in schedule for compliance with the requirements of this section."

The RTP includes a congestion management system (2000 RTP Sections 6.4.7 and 6.6.3) that was developed in response the federal ISTEA, and certified as part of Title 6 of the Urban Growth Management Functional Plan in 1996. This section of the RTP remains unchanged and continues to apply under the 2004 Federal Update to the RTP.

134(i)(4)(A) Selection of Projects

"All federally funded projects carried out within the boundaries of a transportation management area under this title (excluding projects carried out on the National Highway System and projects carried out under the bridge program or the Interstate maintenance pro-gram) or under chapter 53 of title 49 shall be selected for implementation from the approved transportation improvement program by the metropolitan planning organization designated for the area in consultation with the State and any affected public transit operator."

All federal funds allocated through Metro are granted through the MTIP, the approved transportation improvement program for the Portland area MPO, and recognized as such by the State and TriMet (2000 RTP Section 6.5). Projects and programs funded with federal revenue through the MTIP process must be identified as part of the financially constrained system in the RTP. The 2004 Federal Update to the RTP provides an updated set of financially constrained projects and programs for future MTIP funding allocations.

134(i)(4)(B) National Highway System Projects

"Projects carried out within the boundaries of a transportation management area on the National Highway System and projects carried out within such boundaries under the bridge program or the Interstate maintenance program shall be selected for implementation from the approved transportation improvement program by the State in co-operation with the metropolitan planning organization designated for the area."

The MTIP funding decisions are developed in coordination with the Oregon Department of Transportation. Projects funded in the MTIP are incorporated into the State Transportation Improvement Program, to ensure consistency between regional and state improvement programs.

134(i)(5)(A) Certification Required

"The Secretary shall:

(i) ensure that the metropolitan planning process in each transportation management area is being carried out in accordance with applicable provisions of Federal law; and

(ii) subject to subparagraph (B), certify, not less often than once every 3 years, that the requirements of this paragraph are met with respect to the transportation management area."

Metro's planning process is certified annually based on the adoption of the Unified Work Program ("UWP"), through the federal self-certification process. Metro last completed the self-certification process on March 20, 2003 through Resolution 03-3289. The next scheduled certification review will occur in October 2004.

134(i)(5)(B) Certification Requirements

"The Secretary may make the certification under subparagraph (A) if:

(i) the transportation planning process complies with the requirements of this section and other applicable requirements of Federal law; and

(ii) there is a transportation improvement program for the area that has been approved by the metropolitan planning organization and the Governor."

The 2001 Unified Work Program self-certification process confirmed that the 2000 RTP complied with the requirements of this section, and other applicable requirements of federal law, and that Metro's MTIP had been approved by JPACT, the Metro Council and the Oregon Transportation Commission (OTC), on behalf of the Governor.

In Fall 2004, the 2004 Federal Update to the RTP and the 2004-07 MTIP will be reviewed for compliance with the requirements of this section as part of the next scheduled certification review.

Errata

Air Quality Conformity

January 14, 2004

1. Page 8 - Adds Single Occupancy Vehicle Trips as a percent of Total Trips in 2025.

2. Page 12 - Adds Transit statistics.

3. Page 39 - Clarifies that the public comment period ended January 13, consistent with Metro web site.

4. Page 44 - Completes chart - adds model results

5. Page 45 - Adds model results to bar charts

6. Page 46 - " " " " " "

7. Page 47 - " " " " " "

8. Page 8, Appendix 3 - Clarifies that seasonal adjustment occurs to both summer and winter forecasts

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:

The 2004 RTP Network Assumptions for roads and transit may be found in Table 1 of the 2004 Federal Update to the Regional Transportation Plan.

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 61.3 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

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 6,639.
- The 2004 RTP projects Average Weekday (AWD) transit trips in 2025 is 520,248.
- The 2004 RTP projects that the percent of regional daily trips that are transit is 6.28 percent
- The 2004 RTP projects that, the percent of households and employment within 1/4-mile of transit service in 2025 to be 70.99 and 83.15 percent respectively
- AWD originating riders per revenue hour are 76.94.

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 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

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
January 9, 2004	2025 Air quality conformity results completed and announced on web site.
January 13, 2004	Close of public comment period.
January 15, 2004	Air quality conformity findings by JPACT (tentative)
January 16, 2004	Remaining air quality conformity results completed and announced on web site (tentative)
January 22, 2004	Air quality conformity findings by Metro Council (tentative)

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

Table 6
2004 RTP/2004-07 MTIP Conformity Results[1]

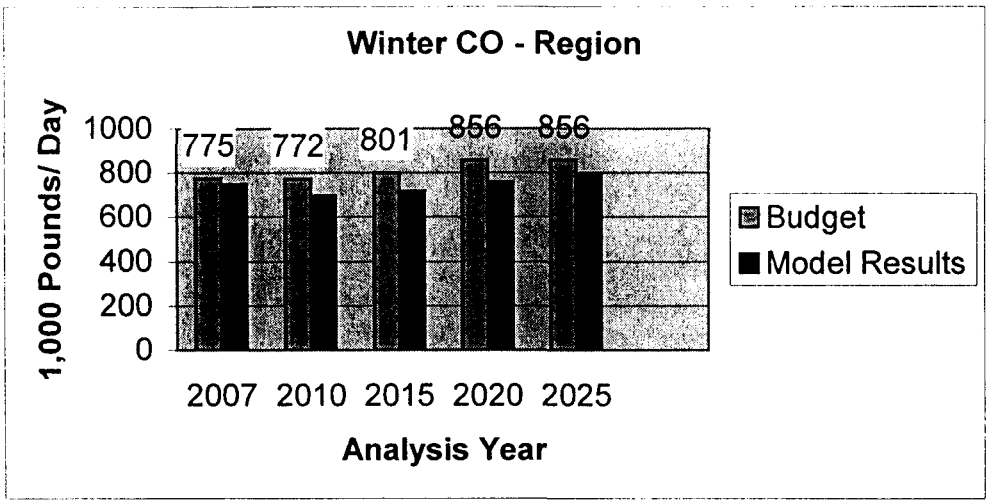
	Winter CO (thousand pounds/day)		Summer HC (tons/day)		Summer NOx (tons/day)	
	Budget	*Model Result*	*Budget*	*Model Result*	*Budget*	*Model Result*
2006	*n/a*	*n/a*	41	*40.4*	51	*47.6*
2007	775	*747.9*	*n/a*	*n/a*	*n/a*	*n/a*
2010	772*	*698.4*	40	*37.1*	52	*44.5*
2015	801*	*717.8*	40	*35.1*	55	*39.5*
2020	856*	*758.3*	40	*36.6*	59	*41.4*
2025	856	*798.8*	40	*38.0*	59	*43.2*

[1] Budgets are from the Maintenance Plan adopted in 1996. Year 2025 budget should be adjusted based on emission budget input factors.
*Previous air quality conformity determinations have used Carbon Monoxide budgets based on a draft, July 12, 1996 copy of the Maintenance Plan. However, the correct budgets are those in the approved State Implementation Plan published in the September 2, 1997 Federal Register (FR), as cited in the FR in Section 52.1970 (c) (122)(i)(B), which revises the 2010, 2020 and years thereafter as listed in Table 6, above.

Source: Metro

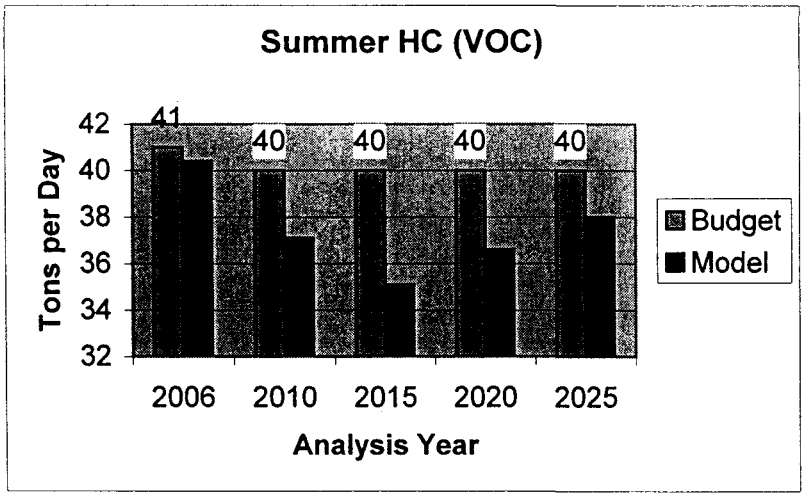
Figures 1, 2 and 3 show graphs of the conformity results that compare the emissions budgets with the modeled results for each analysis year for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NOx), and hydrocarbons (HC) respectively. Figures 4 and 5 show graphs of the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



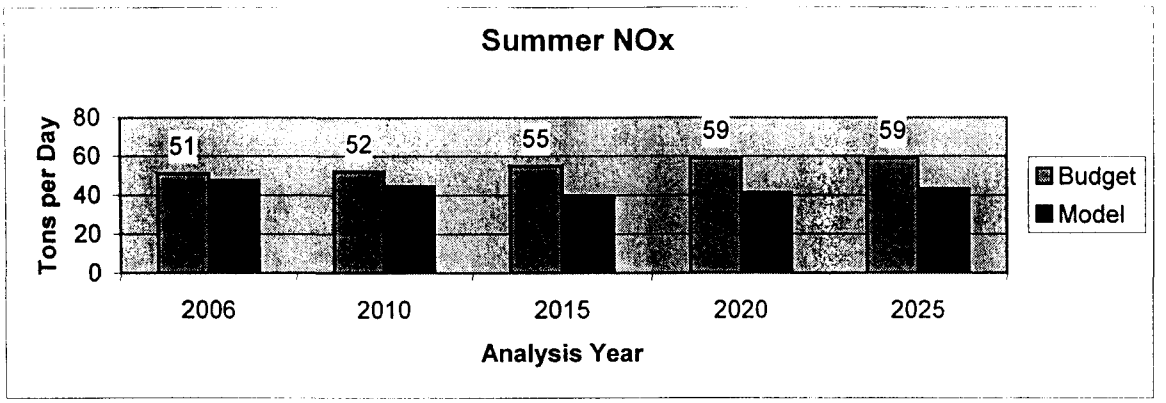
Based on RTP Financially Constrained System.and 2004-07 MTIP
Source: Metro

Figure 2



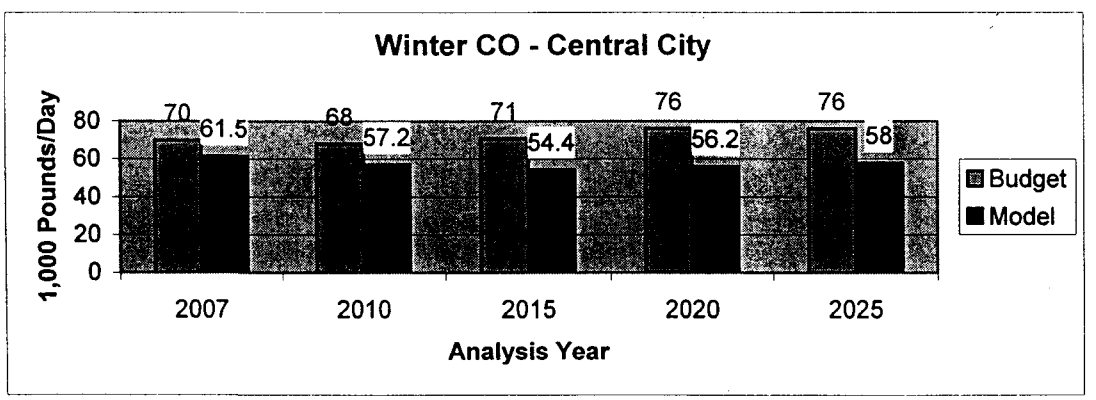
Based on RTP Financially Constrained System.and 2004-07 MTIP
Source: Metro

Figure 3



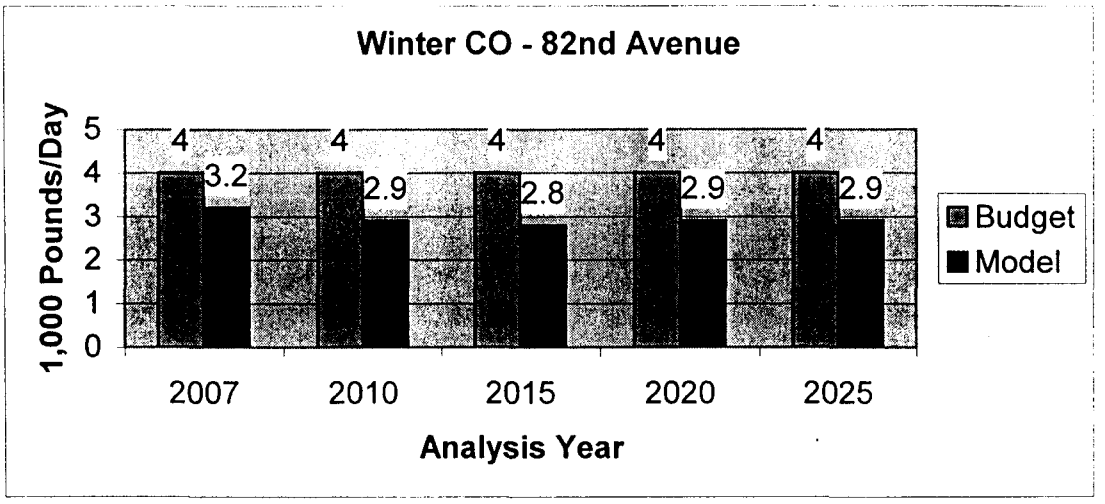
Based on RTP Financially Constrained System.and 2004-07 MTIP
Source: Metro

Figure 4



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

Figure 5



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

Source: Metro

The I-5 credit assumes:

-VMT reduction for trips using I-5 south external: 5%

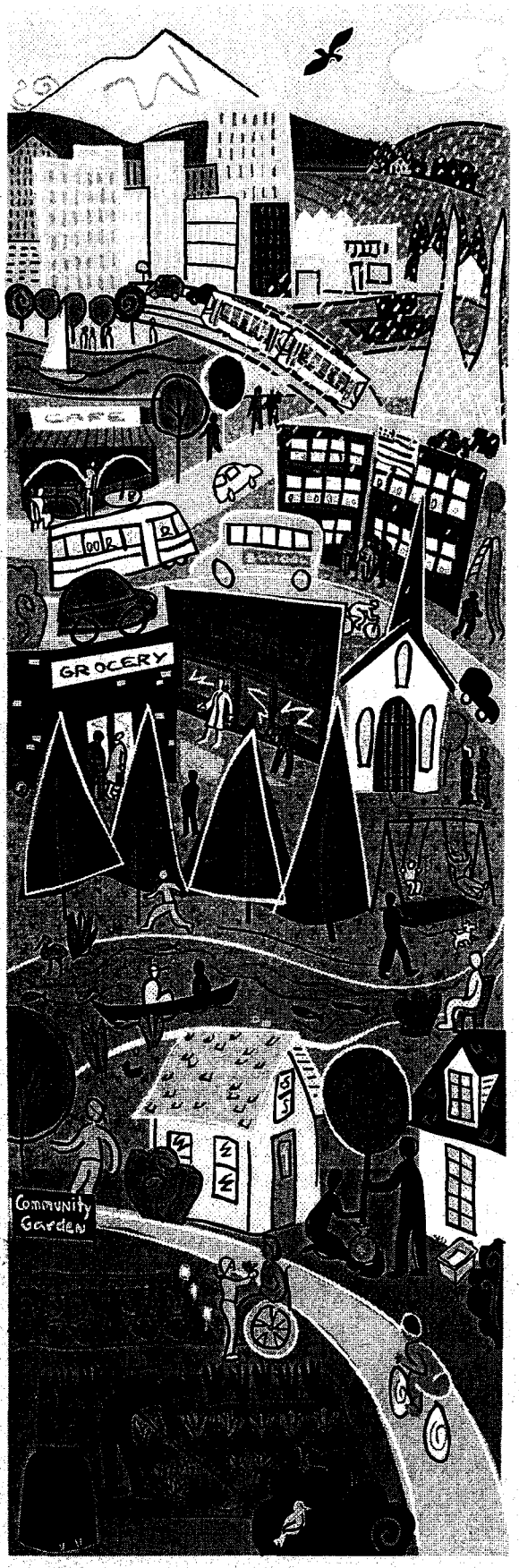
-Average regional speed: 31 mp

The I-5 credit has been taken and is taken now to account for transit trips to Salem for which the Metro transportation model does not account and which other transportation models outside the region also do not account.

The ECO rule credit has been revised to reflect the findings of the *2002 Regional Transportation Demand Management Program Evaluation Report, Metro, April 2003)* which calculates the air quality benefits of the ECO rule (see page 17 of the report). These air quality benefits were directly credited against the forecasts of air quality emissions of the air quality model.

In addition, the current conformity analysis includes seasonal vmt adjustments for both summer and winter traffic. Metro has adjusted the summer emissions to reflect an increase in vmt as follows: six percent increase on freeways, four percent on arterials and other facilities. Similarly, winter emissions are adjusted for a fifteen percent decrease in travel in the winter season, as documented in ODOT data.

Exhibit "A" to
Resolution No. 03-3382



2004 Federal Update to the Regional Transportation Plan/ 2004-07 Metropolitan Transportation Improvement Program

Air Quality Conformity Determination

Updated Jan. 9, 2004

METRO

PEOPLE PLACES
OPEN SPACES

METRO

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

Conformity Determination Report

Table of Contents

Appendices

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~~conform with these standards result in a loss of transportation funding from state and federal sources ~~and increased health risks to the region~~.

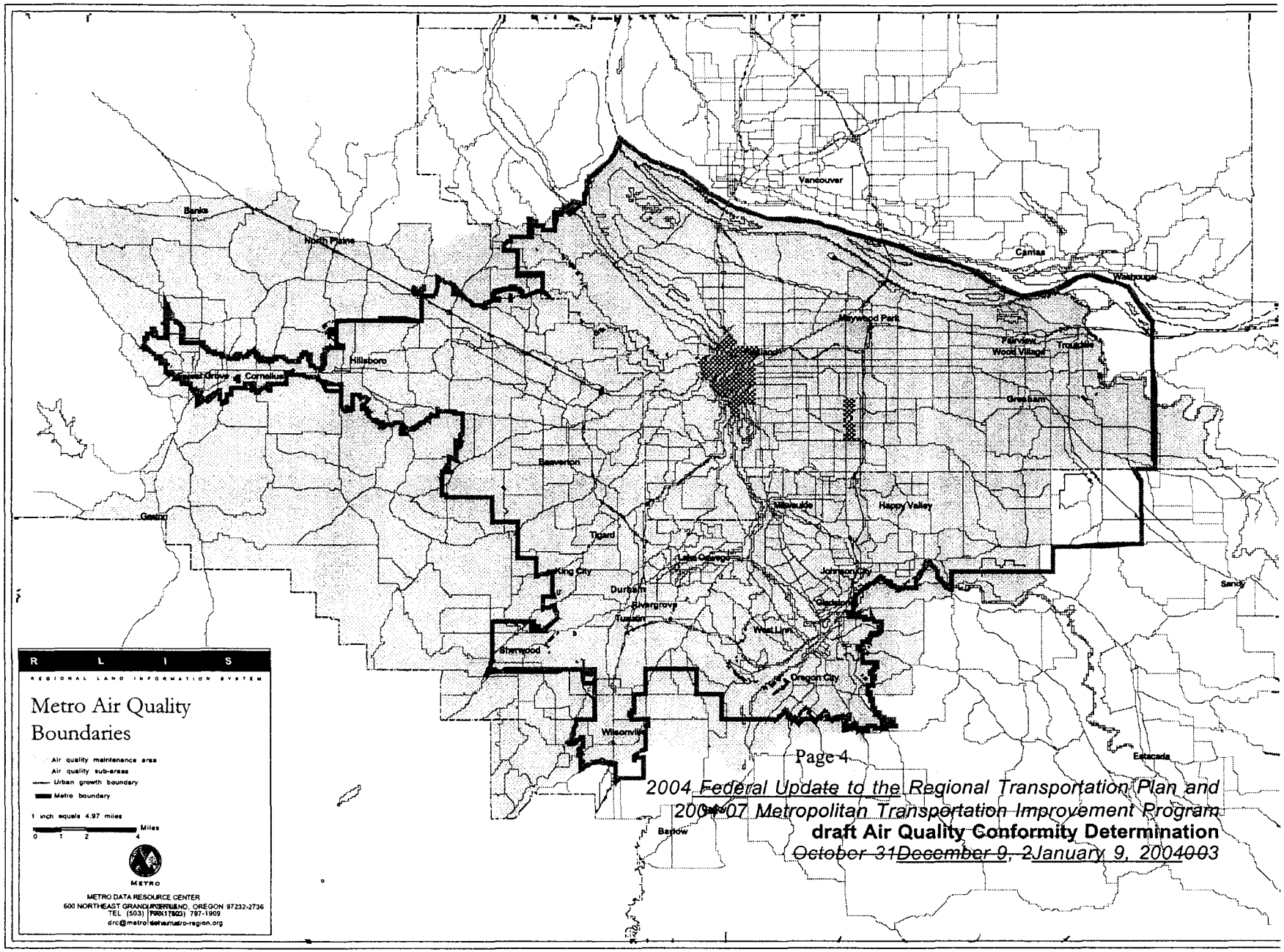
The 2004 Regional Transportation Plan (RTP) and 2004-07 Metropolitan Transportation Improvement Program are subject to an air quality conformity determination under federal regulation (40 CFR Parts 51 and 93) and state rule (OAR 340 Division 252). Metro, as the federally designated Metropolitan Planning 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, consult with relevant agencies and provide for public comment that, in total, 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 be found consistent with the SIP ~~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 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, theire 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 precusors 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.



Plot time: Oct 28, 2003 J:\holsted\03283_Mark_Turpel_AQ_bdy\metro_air_quality_boundaries.mxd

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

[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

prepared because the RTP 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 motor vehicle emission budgets~~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.

---

of financially constrained projects and programs for future MTIP allocations, but also establishes more formal procedures and 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.

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 $ 4.3 Billion~~...~~ ~~with~~ with about 2.16 Billion for freeways, highways and roads, 1.67 for transit and the balance for planning, bike, pedestrian, TDM and other similar programs.

~~**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~~ along 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:

~~vBase year of 2000.~~ The 2004 RTP Network Assumptions for roads and transit may be found in Table 1 of the 2004 Federal Update to the Regional Transportation Plan.

~~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, along with the 2000 base year using 2000 Census data ~~is~~are 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 and is therefore not included in this conformity analysis although it was included in previous conformity determinations.

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 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 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 as otherwise noted 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. Each section of t~~T~~he maintenance plan TCMs ~~are~~is followed by a description of actions taken by the region to comply:

"*Non-funding based Transportation Control Measures*

1. 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."

Compliance Actions - 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.

"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)."

Compliance Actions - 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 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 107percent 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 additonal regulations now being discussed by the Metro Council.

In addition, Metro adopted a Title 6, which pertained to transportation accessibility and connectively. 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.

"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."

Compliance Actions - 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.

"2. ***Central City Parking Requirements*** *(Carbon Monoxide only)*

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

Code Number	*Code Title*
33.510.261 -	*Parking*
33.510.261.E	*Site split by subdistrict or parking sector boundaries*
(33.510.261.E.1.a(1)-(2),b,E.2.a(1)-(2),b)	
33.510.263 -	*Parking in the Core Area*
33.510.263.A	*Growth Parking*
(33.510.263.A.1.a-c(1)-(4),A.2-4.a-b(1)-(3),A.5-7.a-d)	
33.510.263.B -	*Preservation Parking*
(33.510.263.B.1.a-c(1)-(2),B.2-4.a)	
33.510.263.E -	*Residential/Hotel Parking*
(33.510.263.E.1.a-b,E.3.a-c)	
33.510.263.G -	*All Parking*
33.510.263.G.4 -	*Surface parking lots.*
(33.510.263. G .4.a. (1)-(2), G .4.d(1)-(3»)	
33.510.264	*Parking in Lloyd District*
33.510.264.A	*Growth Parking*
(33.510.264.A.1.a-c(1)-(4),A.2.a,A.4.a)	
33.510.264.B	*Preservation Parking*
33.510.264.B.1.a-c(I)-(2),B.2.a-c,B.4.a-c)	
33.510.264.F	*All Parking*
33.510.264.F.4	*Surface parking lots*
(33.510.264.F .4.e.(1)-(3)	

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

Code Number	*Code Title*
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	*If the site is in the Core Area:*
33.808.100.J.2.a	
33.808.100.M	

Section 3: Incorporated Maps

Map Number	*Map Title*
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."

Compliance Actions - Central City Parking Requirements

As noted in the State Conformity Regulations, these regulations were adopted by the City of Portland in 1995 and became effective January 8, 1996. These parking regulations are still in force and remain a part of City regulations pertaining to the Central City.

2 *"**DEQ Employee Commute Options Program** (ozone only)*

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."

Compliance Actions - 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.

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.

According to the 2002 ECO Rule Information Clearinghouse, the following ECO Rule facts were found:
Total number of ECO-affected employers in the Portland metro region = 1142
Total number of ECO-affected employers with baseline surveys = 936
Total number of ECO-affected employers with Trip Reduction Plans ~ 400
Total number ECO-affected employers performing Annual Follow-up Surveys ~ 704
Total number of ECO-affected employers who have met the 10 percent trip reduction target or other compliance option = 585
ECO is getting 86 percent of its trip reduction from its 319 largest employers (those with more than 150 employees).
Total annual VMT reduction: 49,542,360
Annual VMT reduction from employers with more than 200 employees: 42,548,613

According to the *2002 Regional Transportation Demand Management Program Evaluation Report*, the auto-trip reduction number translates to a reduction of 852,014 vehicle-miles traveled per workweek, which, in turn, leads to reduction in the following air pollutants:

Hydrocarbons 6,276 lbs.

Nitrogen oxides 3,233 lbs.

Carbon monoxide 48,496 lbs.

Carbon dioxide 852,014 lbs.

The above documentation of results shows that 51 percent of all ECO-affected employers in the Portland Metro region in the year 2002 have complied with a 10 percent trip reduction target. According, this TCM has been partially implemented.

3. *"DEQ Voluntary Parking Ratio Program (ozone only)*

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

Compliance Actions - DEQ Voluntary Parking Ratio Program

In 1999, the DEQ eliminated this program. (In 1996, Metro adopted mandatory parking requirements, see Appendix 8)

"Funding based Transportation Control Measures

1. ***Increased Transit Service***

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

Compliance Actions - Regional 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

	Service Hours	Percent Change

Fiscal Year	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.

> *"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."*

Compliance Action - Central City Transit Service

The following table illustrates the transit service increase for those transit services that serve the downtown.

Table 3

Central City Annual Transit Hours

1996			2003			
Bus	LRT	Total	Bus	LRT	Total	Average Annual

1,340,508	59,544	1,400,052	1,424,592	192,516	1,608,220	
						2%

Note:Service hours are totals for all bus and light rail lines that serve the downtown Portland Central City area. The Portland Streetcar is not included.

Based on these data, it is concluded that the region has complied with the Central City transit service TCM.

b. Completion of the Westside Light Rail Transit facility.

Compliance Action - Westside Light Rail Transit

Westside Light Rail was opened on September 12, 1998. Since the Westside MAX Blue Line opened five years ago, 43.4 million rides have been taken along the 18-mile segment. Ridership on Westside MAX now averages 28,400 weekday boardings. In 2000, ridership on the line had already exceeded 2008 projections.

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

Compliance Actions - South/North LRT

Interstate MAX, the 5.8 mile northern segment of this project is under construction and is scheduled to be in operation May 1, 2004. The southern portion of this project is planned in two phases - Phase 1 is an extension from Gateway regional center to the Clackamas regional Center, Phase 2 an extension from downtown Portland to Milwaukie. Phase 1 is tentatively scheduled for completion by 2008. Phase 2 would follow thereafter.

2. Bicycle and Pedestrian Facilities

a. Multimodal facilities.

Consistent with ORS 366.514 [2], 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.

Compliance Actions - Multi-Modal Facilities

[2] This provides for the following exceptions:
- absence of any need;
- contrary to public safety; and
- excessively disproportionate cost.

As noted in the TCM, it is State law that 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. Accordingly, agencies seeking funding of transportation projects have designed and built projects to comply with this requirement.

b. *RTP Constrained Bicycle System.*

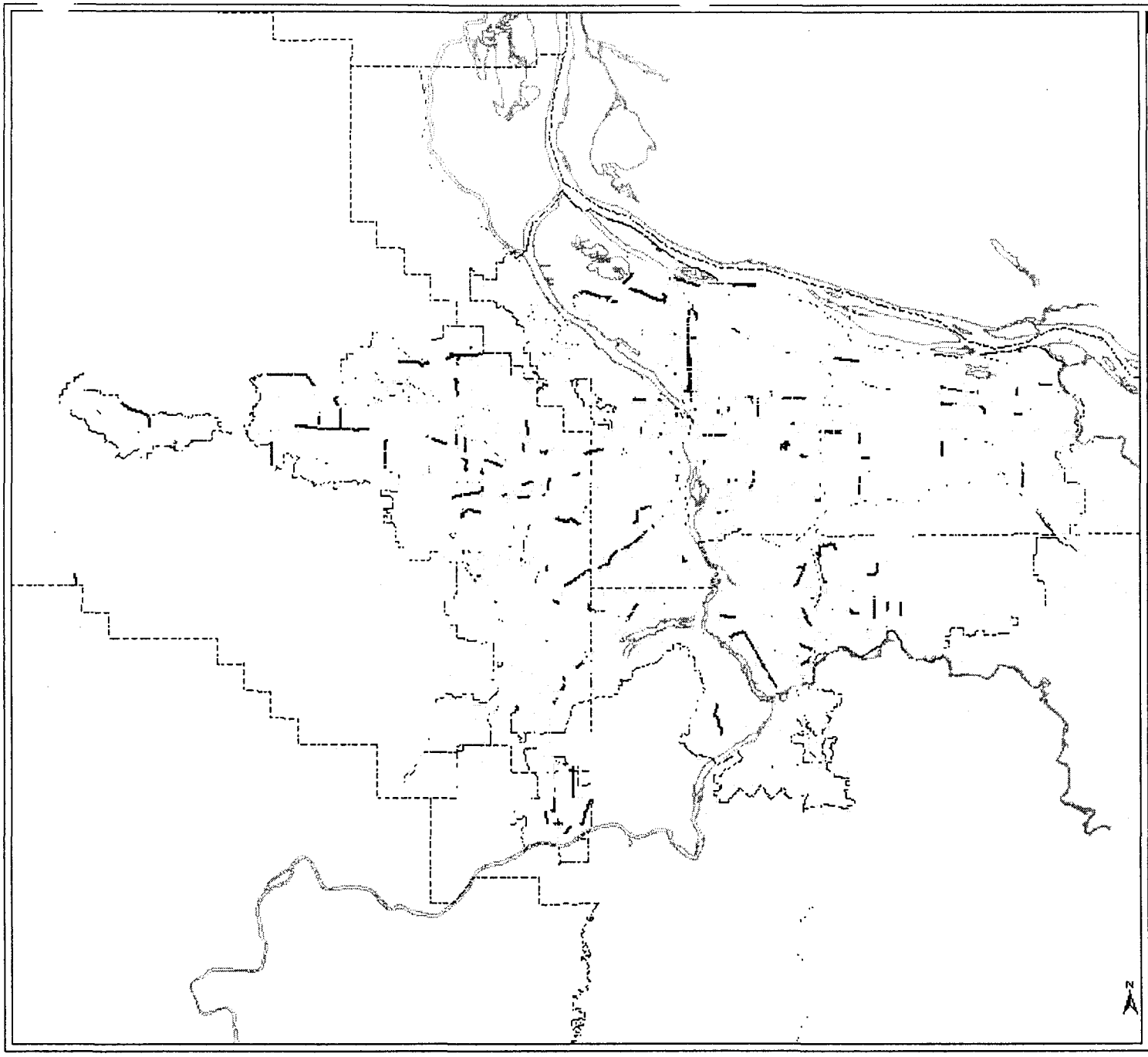
In addition to the multimodal facilities commitment, the region will add at least a total of 28 miles of bicycle lanes, shoulder bikeways or multi-use trails to the Regional Bicycle System as defined in the Financially Constrained Network of Metro's Interim Federal RTP (adopted July 1995) by the year 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 emergency parking. Multi-use trails are eight to 12 foot paths separate from the roadway and open to non-motorized users.

Compliance Actions - Bicycle System

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." Accordingly, the region has 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. Therefore, the total of bike lanes and multi-use trails in the 2006-2007 MTIP is 8.3 miles, exceeding the five-mile minimum by 66 percent.



R L I S
REGIONAL LAND INFORMATION SYSTEM

Bike Routes

1999-2002
Comparison

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

Warning: some maps combine multiple layers of differing map accuracies, e.g. these plans are built on tax lots. When this occurs, the maps parcels are correctly drawn only at their tax lot level.

The information on this map was derived from digital databases on Metro's GIS. Care was taken in the creation of this map. Metro cannot accept any responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied, including the warranty of merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.

1 inch equals 521 miles

0 1 2 4 6 8 Miles

Location Map

METRO GIS RESOURCE CENTER
600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232-2736
TEL (503) 797-1742 | FAX (503) 797-1909
gis@metro.dst.or.us | www.metro-region.org

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."

Compliance Finding - Pedestrian Facilities

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. This totals 1.6 miles, or about 7 percent over the 1.5 mile target for new pedestrian improvements. In addition, in the past over 9 miles of pedestrian facilities have been constructed. Accordingly, it is concluded that this TCM has been met.

~~**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 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 107percent 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 additonal regulations now being discussed by the Metro Council.

In addition, Metro adopted a Title 6, which pertained to transportation accessibility and connectively. 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.~~

~~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

	Service Hours			Percent Change	
Fiscal Year	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.

~~**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 on October 2, 2003, with all ~~eligible participants~~affected agencies, including EPA, FTA and FHWA as well as representatives of DEQ, TriMet and Metro participating in order to review an early draft of this document and discuss the conformity determination approach, schedule and assumptions prior to TPAC review. ~~(see Appendix 9).~~

~~Further, an independent analysis of the air quality conformity process throughout the nation (*Exhausting Options: Assessing SIP Conformity Interations*, 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", as reviewed by TPAC.

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., on pages 13-27, 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 PM_{10} 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~~is the lead agency for ~~c~~Conformity d~~D~~eterminations for plans and 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 ~~1~~27) 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. Appendix 9 (to be completed) will include comments received and responses.

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~~6 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~~
January ~~8~~9, 2004	2025 Air quality conformity results completed and announced on web site.
January ~~13~~21, 2004	Close of public comment period.
January 15, 2004	Air quality conformity findings by JPACT ~~and Metro Council~~ (tentative)
January 16, 2004	Remaining air quality conformity results completed and announced on web site (tentative)
January 22, 2004	Air quality conformity findings by Metro Council (tentative)

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, s~~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 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 Budgets[1]

	Winter CO (thousand pounds/day)	Summer HC (tons/day)	Summer NOx (tons/day)
2006	*n/a*	41	51
2007	775	*n/a*	*n/a*
2010	~~760~~772*	40	52
2015	~~788~~801*	40	55
2020	~~842~~856*	40	59
2025	~~842~~856*	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".
*Previous air quality conformity determinations have used Carbon Monoxide budgets based on a draft, July 12, 1996 copy of the Maintenance Plan. However, the correct budgets are those in the approved State Implementation Plan published in the September 2, 1997 Federal Register (FR), as cited in the FR in Section 52.1970 (c) (122)(i)(B), which revises the 2010, 2020 and years thereafter as listed in Table 5, above.
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~~

- Carbon Monoxide - 2007, 2010, 2015, 2020 and 2025
- Ozone - 2006, 2010,2015, 2020 and 2025
- Nitrogen Oxides - 2006, 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 Results[1]

	Winter CO (thousand pounds/day)		Summer HC (tons/day)		Summer NOx (tons/day)	
	Budget	*Model Result*	*Budget*	*Model Result*	*Budget*	*Model Result*
2006	*n/a*	*Results Pending*	41	*Results Pending*	51	*Results Pending*
2007	775	*Results Pending*	*n/a*	*Results Pending*	*n/a*	*Results Pending*
2010	~~760~~772*	*Results Pending*	40	*Results Pending*	52	*Results Pending*
2015	~~788~~801*	*Results Pending*	40	*Results Pending*	55	*Results Pending*
2020	~~842~~856*	*Results Pending*	40	*Results Pending*	59	*Results Pending*
2025	~~842~~856	~~*Results Pending*~~798.8	40	~~*Results Pending*~~38.0	59	~~*Results Pending*~~43.2

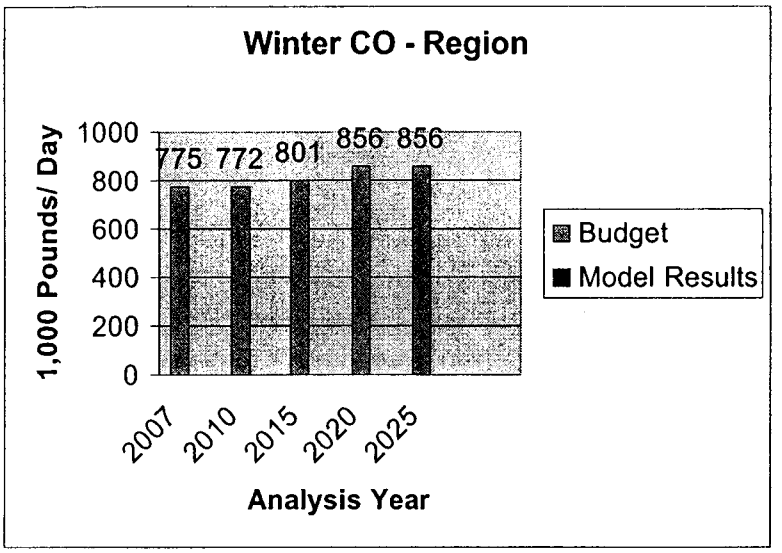
[1] Budgets are from the Maintenance Plan adopted in 1996. Year 2025 budget should be adjusted based on emission budget input factors.

*Previous air quality conformity determinations have used Carbon Monoxide budgets based on a draft, July 12, 1996 copy of the Maintenance Plan. However, the correct budgets are those in the approved State Implementation Plan published in the September 2, 1997 Federal Register (FR), as cited in the FR in Section 52.1970 (c) (122)(i)(B), which revises the 2010, 2020 and years thereafter as listed in Table 6, above.

Source: Metro

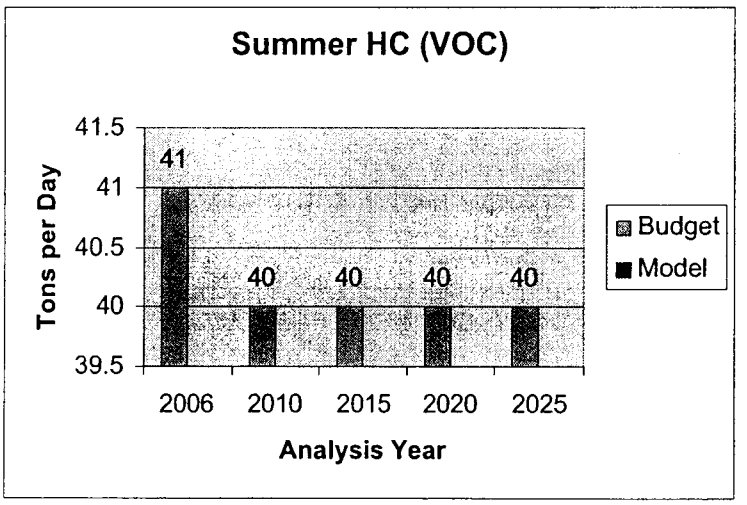
Figures 1, 2 and 3 show graphs of the conformity results that compare the emissions budgets with the modeled results for each analysis year for winter carbon monoxide (CO) and for two summer ozone precursors: nitrogen oxides (NOx), and hydrocarbons (HC) respectively. Figures 4 and 5 show graphs of the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



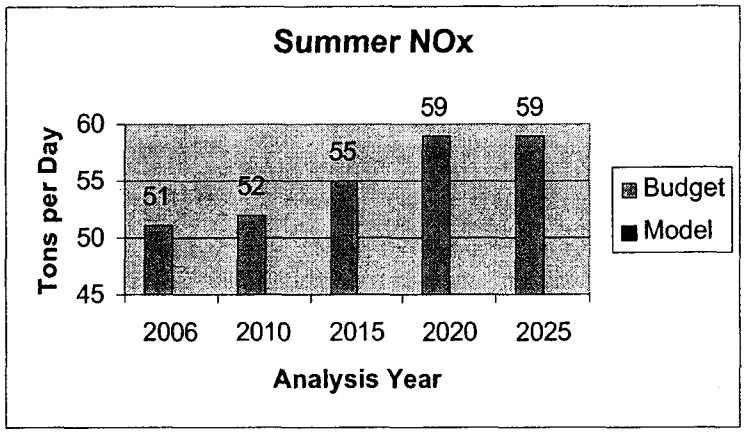
Based on RTP Financially Constrained System.and 2004-07 MTIP
Source: Metro

Figure 2 - Add forecast emissions including 2025 numbers



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

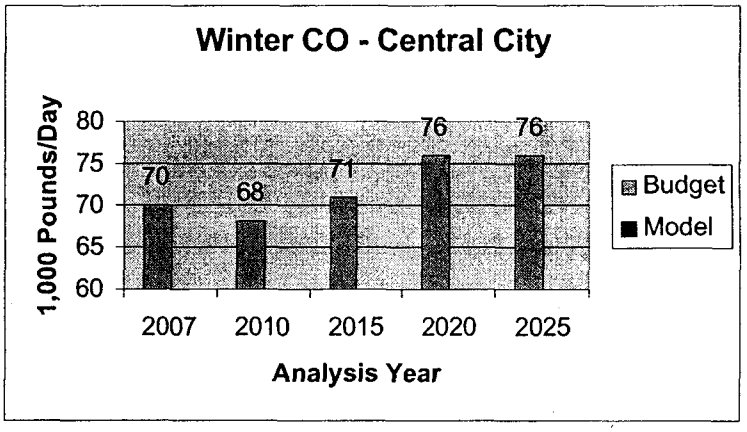
Figure 3 - Add forecast emissions including 2025 numbers



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

Source: Metro

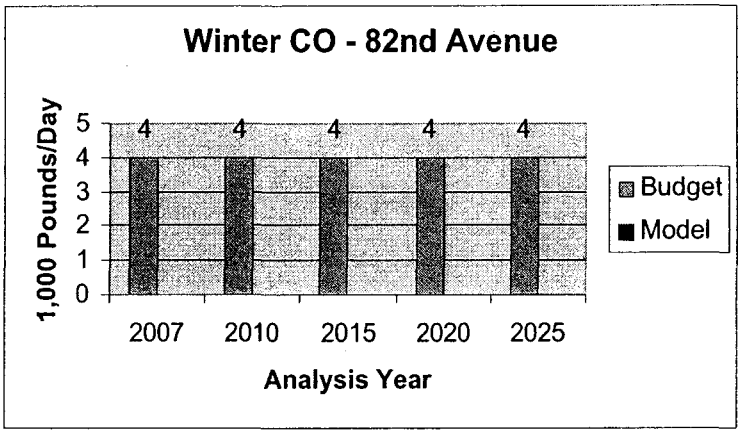
Figure 4 - Add forecast emissions including 2025 numbers



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

Source: Metro

Figure 5 - Add forecast emissions including 2025 numbers



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

Source: Metro