STAFF REPORT

IN CONSIDERATION OF ORDINANCE NO. 02-946, FOR THE PURPOSE OF ADOPTING THE POST-ACKNOWLEDGEMENT AMENDMENTS TO THE 2000 REGIONAL TRANSPORTATION PLAN (RTP).

Date: May 8, 2002 Prepared by: Tom Kloster

BACKGROUND

On June 15, 2001 the Oregon Land Conservation and Development Commission (LCDC) acknowledged most of the 2000 Regional Transportation Plan (RTP), with the condition that Metro adopt a series of technical amendments necessary for full compliance with the state Transportation Planning Rule (TPR). These technical amendments are the first component of the proposed post-acknowledgement RTP amendments included in **Exhibit 'A'** of this packet. JPACT and the Council were briefed on the technical amendments in Spring 2001 as part of an update on the acknowledgement process that included a detailed discussion of the proposed changes. This exhibit is divided into three parts, with respective amendments to the Chapter 6 of the RTP, the Glossary and the Appendix.

The LCDC also moved to continue final action on select items that will be addressed through separate planning studies and other follow-up activities, including goal exceptions for the Sunrise Corridor and I-5 to 99W Connector improvements in the RTP, and performance measures that are being completed as part of the 2040 Indicators project. These items are still in development at this time, but may require future RTP amendments following LCDC review and action.

The RTP adoption on August 10, 2000 also identified active planning efforts that should be incorporated into the RTP as soon as possible, upon completion of the planning studies. These included the *Tri-County Elderly and Disabled Transportation Plan,* the *Corridor Initiatives Project* and the *Green Streets Project.* All three studies were completed in 2001, and included recommendations for amendments to the RTP. The following is an overview of the changes proposed from these projects as part of the post-acknowledgement amendments to the RTP:

Exhibit 'B' - Elderly and Disabled Transportation Amendments

Mobility is an important quality-of-life issue for seniors and individuals with disabilities. Transportation increases independence, provides connection with the community, and ensures access to life sustaining activities. Since April 2000, a 25-member steering committee has been coordinating the development of the *Tri-County Elderly and Disabled Transportation Plan* (EDTP). The EDTP is the region's first coordinated effort to address service delivery, service coordination, customer satisfaction, resource allocation, and land use policy issues in comprehensive way. The EDTP recommends that the RTP be amended to implement portions of the EDTP within the Metro region (amendments proposed in Exhibit 'B'), though the EDTP covers the larger, three-county area served by Tri-Met. The EDTP will continue to evolve over time through periodic updates, and serve to guide regional elderly and disabled transportation funding decisions and will inform local transportation system plans.

The elderly and persons with disabilities in the tri-county area currently represent about 17% of the total population. By the year 2010, this number is expected to increase to 20%. Of the approximately 228,000 elderly and disabled individuals living within the tri-county area today, about 42% currently use transit services for some or all of their transportation needs. In 1999,the four public and 30 community-based transportation operators provided over 9,100,000 rides to the elderly and disabled population for all trips including basic medical, nutritional and social interaction needs.

Despite the significant number of elderly and disabled in the tri-county area who are currently accessing transportation services, it is estimated that approximately 16,500 elderly and disabled people do not have access to transportation for some or all of their trips. These elderly and disabled individuals may be unaware of the services available to them, may not be able to effectively utilize available services, or may live outside a transit or transportation district.

Current service levels would not decrease as a result of the EDTP recommendations, though existing funding constraints would make it difficult to expand the quality of existing service, and instead would simply provide current service options to a growing population. Approximately $43 million of operating funds will be spent to maintain the existing transportation network for seniors and the disabled in 2002. The current system provides approximately 10 million rides per year. Without any significant increase in services, the operating cost of the existing elderly and disabled transportation system is expected to increase to $68 million by the year 2010.

The EDTP clearly recognizes that the provision of transportation is only one tool to meet the larger objectives of providing mobility to the elderly and disabled. Increased transit services alone will not address the needs of the growing elderly and disabled community. To be successful, the EDTP must be integrated with the land use and transportation plans. To this end, the policies and service delivery strategies outlined in the EDTP are proposed as amendments to the RTP and the local counties and jurisdictions within the tri-county area are also asked to include them in local transportation system plans (TSPs), comprehensive plans and their strategic plans for social service providers. The following EDTP elements are emphasized for adoption into local and regional plans:

- Identification and support for pedestrian facilities near elderly and disabled developments that support access to transit, retail and other community needs and the siting of such facilities near existing transit, retail and other community needs;
- Integration of elderly and disabled housing into mixed use developments that includes public facilities or services which support trip mitigation or avoidance;
- Local support and mandates for the inclusion of pedestrian friendly support activities;
- State, regional and local support for the coordination and financing of transportation services and facilities that encourage transit use; and
- Expanded support for elderly and disabled transportation within the local communities to provide for increased mobility options and access.

These elements will be essential in complementing expanded elderly and disabled transportation services needed to meet the expected mobility needs of the growing target population. Exhibit 'B' includes amendments to the Chapter 1 policies and Chapter 6 implementation requirements of the RTP, as recommended in the EDTP.

Exhibit 'C' - Amendments from the Corridor Initiatives Project

During the technical analysis phase of the 2000 RTP, it became evident that forecasted growth in the region would ultimately push most highways in the region to capacity during peak periods. Most of these state-owned facilities were constructed between 1960 and 1985 and during that time had excess capacity compared to the relative size of the region. However, dramatic growth during the 1980s and 90s was both fueled by this highway capacity, and eventually consumed the capacity during peak periods. Several major commute routes, like the Sunset Highway, Interstate-5 and the Banfield Freeway, have become especially congested during peak periods.

In some cases, major investments in transit already provide an alternative to driving these routes during the rush hour, and in other cases, a dense network of parallel routes provide local driving options. But even with existing and planned transit and supporting street network improvements factored in, more work was needed to identify a long-term plan for managing or improving travel in these corridors. Because the RTP process is too broad to

consider such improvements in detail, the state Transportation Planning Rule (TPR) allows Metro to defer such studies into corridor refinement plans, to be completed at a future date. As a result, the 2000 RTP contains a number of refinement corridors, where a more detailed study is called for to identify the mix of transportation projects or programs needed to manage these urban corridors. When the RTP was adopted in August 2000, the *Corridor Initiatives Project* was kicked off to evaluate and prioritize the refinement corridors called out in the plan.

The *Corridor Initiatives Project* included participation by city, county, ODOT, Port of Portland and Tri-Met staff in technical and project management committees. These committees guided the process and formulated recommendations for ranking the corridor refinement plans. Each corridor was evaluated on several criteria and a number of measures related to relative travel needs and connection to implementing the 2040 Growth Concept. In addition to the technical analysis, the committees considered non-technical factors such as relation to other planning efforts, community interest and potential resources for completing each refinement plan. Consultation meetings were held with groups of elected officials from around the region to review these findings, and gather additional input from policymakers.

In July 2001, the results of the Corridor Initiatives Project were presented to JPACT and the Council, with recommendations for staging the refinement studies over the next 20 years. The proposed timing of these studies was based on extensive technical analysis and a comprehensive set of evaluation criteria. *The Corridor Initiatives Project* recommended breaking some refinement corridors into smaller increments, which resulted in a total of 18 refinement studies. The work program for completing these studies is included in Exhibit "C", and spans the 20-year RTP planning period. This work will also be monitored and updated periodically as part of Metro's annual Unified Work Program process. Exhibit 'C' is divided into three parts, with respective amendments to Chapter 6 of the RTP and two amendments to the Appendix.

Exhibit 'D' - Amendments from the Green Streets Project

The *Green Streets Project* was well under way when the RTP was adopted in August 2000, and a several potential plan amendments were already anticipated at that time. The *Green Streets Project* has a number of elements that address the growing conflict between good transportation design, planned urbanization in emerging areas and the need to protect streams and wildlife corridors from urban impacts. Key elements of the project include:

- Expanding the regional database to include an inventory of culverts that channel stormwater from streets to the stream system;
- The "Green Streets: Environmental Designs for Transportation" handbook that establishes acceptable design solutions for conflicts between major street or connectivity needs and stream protection; and
- New regional street connectivity provisions that address the tradeoffs between stream protection and an efficient, connected street system;
- Testing the proposed designs and connectivity guidelines as part of the Pleasant Valley community planning.

The project was guided by an 18-member TAC that included a diverse mix of planners, engineers, architects, biologists and environmental advocates. The technical phase of the project culminated with the *Green Streets Summit*, held at Metro in May 2001, and highlighted with a keynote speech from Dr. Patrick Condon, a noted expert on the subject of urban stormwater management. Nearly 150 practitioners and advocates attended the summit, and Dr. Condon later met with JPACT, MPAC and Council members at a lunch presentation on the results of the *Green Streets Project.*

Feedback from the summit and policymaker's lunch were reviewed by the TAC as the final stage of the project. Most of the technical work on the Green Streets project was concluded in June 2001, and staff has since worked to package the resulting recommendations from the project in a series of two handbooks:

- *Green Streets: Innovative Solutions for Stormwater and Street Crossings*: this handbook establishes a set of "best practices" for reducing the amount of stormwater runoff from the public right-of-way. The handbook builds on the designs originally developed for the Creating Livable Streets handbook, published in 1997, but modifies them to incorporate the "best practices" details. Guidelines for achieving local street connectivity while protecting streams are also included in the handbook. In November 2001, the National Marine Fisheries Service (NMFS) completed their review of the final draft of the Green Streets handbook, and have endorsed it as a series of "safe harbor" practices that are consistent with NMFS goals for fish habitat protection. This represents a major step for NMFS, and greatly elevates the importance and utility of the *Green Streets handbook.*

- *Trees for Green Streets: an Illustrated Guide*: this handbook provides a detailed overview of the best trees for use along Metro-region streets, with specifics on site requirements, size and compatibility with various environmental constraints. It was developed in tandem with the *Green Streets Project* through a special grant from the University of Oregon, and in consultation with a group of area arborists, scientists and horticulturists.

Following the model established by the *Creating Livable Streets* handbook (first published by Metro in 1997), the Green Streets publications will be distributed at no charge within the Metro region, but sold outside the region for a modest price that is expected to cover printing costs. The *Green Streets* guidelines have already generated a high level of interest, and were fully incorporated into the *Pleasant Valley Community Plan.* The City of Sandy is also in the process of adopting some of the guidelines for local streets, and many other jurisdictions have contacted Metro to learn about the Green Streets project.

The *Green Streets* design guidelines will serve as the implementation focus of Metro's Green Streets program, and are part of the proposed amendments to the project development requirements of the RTP contained in Exhibit 'D'. The proposed *Green Streets* amendments also include guidelines for design and frequency of stream crossings. Exhibit 'D' is divided into three parts, and includes amendments to the Chapter 1 policies, Chapter 6 implementation requirements and the Glossary of the RTP.

ANALYSIS/INFORMATION

1. **Known Opposition** Metro has received comments from TPAC members regarding the application of green street guidelines. Those comments will be the focus of MPAC, JPACT and Metro Council discussion on this item. Otherwise, there is no known opposition to the other components of this ordinance.

2. **Legal Antecedents** The 2000 Regional Transportation Plan (RTP) was adopted on August 10, 2000, with the intent to adopt subsequent amendments from specific outstanding studies and changes required as part of the Land Conservation and Development Commission (LCDC) acknowledgement process. This ordinance completes those intentions by amending the RTP with changes recommended from the Tri-County Elderly and Disabled Transportation Plan, the Corridor Initiatives project, the Green Streets project and changes from the LCDC acknowledgement process. These plan amendments are necessary for Metro to comply with federal planning regulations (as described in the Transportation Efficiency Act for the 21st Century) and state planning regulations (as described by the Oregon Transportation Planning Rule). Cities and counties within the Metro boundary will use and demonstrate consistency with the RTP in completing their local transportation systems plans. The Green Street amendments provide regional transportation policy response to managing the public right of way in a manner that responds to the listing of salmon and steelhead as endangered species through the federal Endangered Species Act.

3. **Anticipated Effects** Adoption of this ordinance provides policy direction to the region on the provision of transportation services to the elderly and disabled population, the intent to complete detailed transportation corridor studies in the region, and regional guidance on implementation of "green" streets as one means of addressing the listing of salmon and steelhead as endangered species. These policies will guide the development of city and county transportation plans in the region and the subsequent development of transportation projects.

The adoption of the amendments from the LCDC acknowledgement process will bring the Regional Transportation Plan into compliance with state laws and regulations.

4. **Budget Impacts** There are no direct costs associated with implementing this ordinance. The ordinance does recognize a need to complete corridor studies throughout the region. Metro staff will need to lead or participate in these studies. The definition of budget impacts of this work will be defined and adopted by Metro Council in the Unified Work Program.

RECOMMENDED ACTION

Council adoption of the proposed RTP amendments contained in Exhibits 'A' through 'D'.

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June 12, 2002

Mr. Andy Cotugno, Director
Planning Department
600 NE Grand Avenue
Portland, OR 97208

Dear Andy:

In our review of the RTP Post Acknowledgement Amendments to be considered for approval by JPACT on June 13th we found proposed amendments that we respectfully request be replaced with substitute language. Specifically our request concerns certain potential transportation actions listed for Northeast Portland Highway as part of Exhibit C, Corridor Initiatives Amendments – Part 1.

Our request is to replace the final two new bullet statements in the Northeast Portland Highway section with a single bullet statement, as follows:

"Implement the St. Johns Truck Strategy recommendations in order to direct truck traffic onto the designated freight system, as shown in Figure 1.17, and protect the Lombard main street and St. Johns town center from truck traffic impacts."

Our substitute language accurately responds to the recommendations of the truck strategy, in one bullet statement, whereas the proposed amendment language for the last bullet statement would be in conflict with these recommendations. We have conferred with Metro RTP staff about this request and have received their agreement that the substitute language meets the intent of the proposed amendments.

Because we will likely not have a JPACT representative at the June 13th meeting we are also requesting that Metro staff introduce this proposal on our behalf. I will be in attendance to respond to any questions.

Thank you for your consideration and assistance on this matter.

Sincerely,

Laurel Wentworth, Chief Transportation Planner
City of Portland – Office of Transportation

M E M O R A N D U M

METRO

June 4, 2002

To: Joint Policy Advisory Committee on Transportation

From: Mike Hoglund, Regional Planning Director

Re: 2002 Periodic Review of the Urban Growth Boundary

The enclosed attachments are products that have been prepared to complete Metro's periodic review work program approved by the Division of State Lands for review of the Urban Growth Boundary. These products address the methodology for calculating the need for dwelling units and jobs and a study of lands located outside of the UGB to assess the feasibility and productivity for possible urban expansion.

Attachments

Attachment A: Methodology for the Alternatives Analysis and Map
Attachment B: Goal 14 Hierarchy of Lands Chart
Attachment C: 2002 Urban Growth Report Dwelling Unit Calculations
Attachment D: Draft Employment Demand
Attachment E: Jobs Subcommittee Report and Recommendation

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M E M O R A N D U M

METRO

Date: April 30, 2002

To: Rod Park, Chair
Community Planning Committee

From: Tim O'Brien, Associate Regional Planner

Re: ***Methodology for the Alternative Analysis Study***

Introduction

Metro's Alternative Analysis Study will incorporate the results from five individual studies to satisfy locational factors 3, 4, 5 and 7 of Statewide Planning Goal 14. Metro's consultant, Parametrix, will complete three of the studies: (1) Public Services and (2) Transportation Serviceability Assessments address Factor 3: Orderly and economic provision of public facilities and services, and (3) Land Productivity Estimates addresses Factor 4: Maximum efficiency of land uses. Metro staff will complete the remaining two studies, the Environmental, Energy, Social and Economic (EESE) Analysis which addresses Factor 5: Environmental, Energy, Social and Economic consequences, and an Agricultural Analysis which addresses Factor 7: Compatibility with nearby agricultural activities. Factor 6: Retention of agricultural land, with Class I being the highest priority for retention is built into the tiers of study areas (1-4) that the Council adopted in December 2001.

Metro Code Section 3.01.020 *Legislative Amendment Criteria* states that factors 3 through 7 must be balanced when determining which sites are the most appropriate for inclusion in the UGB. Thus, the overall recommendation for each study area will be the product of a weighing of results from the above-mentioned studies. Each study area will then be compared to determine the best alternative sites to recommend for inclusion in the UGB.

The methodology for the individual studies, outlined below, differs slightly from the methodology utilized in the 2000 Alternative Site Study. Generally the differences are related to minor changes in factors or numbers used in calculating components such as redevelopment potential or lane capacity.

Methodology for Public Services Feasibility – Sanitary Sewer, Water & Storm Sewer (Factor 3-Parametrix)

- Identify service providers for each study area
- Determine service area boundaries and compare to study areas

- Use build-out estimates to estimate peak water demand and peak sanitary sewer flow. Estimate potential for any industries that might have a high-use water demand or high load for treatment
- Review geotechnical data to assess presence of hard rock
- Review natural resource data to determine extent of wetlands
- Contact DEQ to review potential of a new water intake or point of treated effluent discharge from study areas
- Collect following information from service providers:
    1) Confirm service area boundaries
    2) Intent to expand service area through 2025
    3) Current water production capacity and wastewater treatment capacity
    4) Build-out water production capacity and wastewater treatment capacity
    5) Willingness to provide projected water demand or accept projected wastewater load from study areas
    6) Any stormwater policies or regulations that may limit expansion
- Use evaluation criteria for assessing serviceability:
    1) Study area size is directly related to amount of water needed, wastewater to be treated and stormwater to be managed
    2) Distance from nearest service connection to branch point to distribute water or collect wastewater
    3) Elevation difference between new area and service connection
    4) Physical obstacles such as geology and natural resources and man-made obstacles
    5) Ability or willingness of service providers to expand their facilities
- Develop a scoring system with an importance factor, a raw score and a weighted assessment for each criterion
- Prepare a matrix to rate each area for each type of service using the scoring system
- Summarize scores for each type of service for each study area and comparatively give ratings of "easy", "moderate" or "difficult" to serve

Methodology for Transportation Serviceability Assessments (Factor 3 – Parametrix)

- Calculate future two-hour peak period travel demand based on the horizon year housing supply
- Estimate the arterial lane capacity needed to serve each zone's travel demand
- Rank potential off-site trip generation based on the calculated trip generation totals
- Assess potential off-site impacts on the existing system
- Review proximity of each study area to higher-level transportation facilities included in the Metro Regional Transportation Plan
- Assess other potential environmental factors affecting future transportation connections based on slopes and Title 3 areas
- Summarize results using a weighting factor for each of the four evaluation measures

Change in Methodology

For this study, a planning level capacity of 900 vehicles per hour per lane was used to estimate arterial lane capacity needed to serve each area's travel demand, whereas a 750 vehicles per hour per lane figure was used in the 2000 Alternative Site Study. The 900 vehicle per hour figure is more consistent with the Regional Transportation Plan.

Methodology for Land Productivity Estimates (Factor 4 – Parametrix)

Geographic Information System (GIS) Processing

The determination of land productivity utilizes a number of GIS data layers that were created by the Metro Data Resource Center (DRC) and provided to Parametrix for this study.

- Overlay data received from DRC to the Alternative Analysis Study Areas
- Remove tax-exempt lands from the GIS data layer of buildable lands
- Remove parcels that have some vacant land with a building value of $200,000 or ~~less~~ more
- Remove Title 3 regulatory areas and areas outside of Title 3 with slopes over 25%
- Separate areas in designated 2040 mixed use areas and corridors to assess mixed-use build out assumptions
- Separate non-residential land areas from the date layer
- Prepare inventory for redevelopment estimates

Change in Methodology

The building value threshold for removing partially vacant parcels from the vacant land inventory is changed from $350,000 to $200,000. Eco Northwest felt this was a more reasonable breakpoint based on the distribution of land values.

Data Analysis and Build-out Estimates

Once the GIS data layers have been processed the following spreadsheet operations are calculated to determine the total dwelling unit productivity figures:

- Estimate build out capacity in vacant, buildable residential areas:
    1) From gross vacant buildable land, remove an estimate of land needed for future streets, schools and public facilities
    2) Apply residential densities based on 2040 Growth Concept as follows:
        a) Inner Neighborhood: 9.6 dwelling units per net acre
        b) Outer Neighborhood: 7.3 dwelling units per net acre
        c) Corridors: 30% residential –14.1 dwelling units per net residential acre
        d) Town Centers: 30% residential – 25.9 dwelling units per net residential acre
    3) Apply an underbuild factor of 20%
    4) Estimate development potential for additional dwelling units in environmentally sensitive areas
    5) Add back redevelopment potential for residential areas
- Complete build-out assessments for non-residential areas
    1) Classify non-residential into parcel size categories
    2) Estimate build-out density to be indicated by floor area ratios likely for these study areas

Change in Methodology

An estimated development potential of 1 dwelling unit for lots wholly located in a environmentally sensitive area and the underlying zoning for lots partially impacted by environmentally sensitive areas was used. This better reflects the ability to cluster or utilize density transfers to make up for diminished capacity than the previous 1.7 dwelling units per acre of environmentally sensitive land figure. The estimate for redevelopment potential is based on an assessment of both building values and parcel sizes of developed land, not just building value. Eco Northwest feels this is a refinement, as the two factors are inherently related to estimating redevelopment potential.

Methodology for Environmental Energy Social Economic Analysis (Factor 5 – Metro)

- Review each study area utilizing Geographic Information System (GIS) data layers developed by the Metro Data Resource Center
- Data layers include tax lots, steep slopes, contours, streams, natural resource features, floodplains, utility easements, parks, open spaces, community facilities and schools
- Determine general character of the area (forested, open, residential, level of agricultural activity) and the identification of any significant facilities within or adjacent to the study areas utilizing GIS aerial photography
- Evaluate each of the four factors (Environmental, Energy, Social, Economic) to determine any long-term consequences resulting form urbanization of the study area based on analysis of GIS data layers

Methodology for Agricultural Analysis (Factor 7 – Metro)

- Review each study area utilizing Geographic Information System (GIS) data layers developed by the Metro Data Resource Center
- Data layers include tax lots, current zoning, steep slopes, contours, streams, natural resource features, exception land, and resource land
- Determine agricultural activity including crop type utilizing GIS aerial photography
- Aerial photographs taken in the years2001, 2000 and 1998 will be used depending on the extent the study areas extended beyond the current UGB
- Group crops into general categories of nursery stock, orchards, row crops (corn, vineyards, cane berries, etc.), vegetables and field crops (grasses and grains)
- Determine the compatibility of urban development with existing agricultural activities based on the following:
    1) Urbanization may affect land values and encourage speculation and land banking that inhibits the ability of farmers to acquire parcels of land needed for agricultural production
    2) Increased traffic resulting from urbanization may impede the movement of farm equipment and hinder the transport of agricultural goods
    3) Urbanization may result in the isolation of certain agricultural areas from the greater farming community. This may hinder normal practices of sharing equipment, labor and knowledge among farmers
    4) Safety and liability issues associated with increased residential populations in close proximity to active farming (i.e., vandalism and accidental injury on and around farm equipment)
    5) Conflicts due to dust, noise, odor and chemical spray resulting from urban development being located in close proximity to active farming
    6) An increase in impervious surface generates additional stormwater run-off that can impact the water quality of streams, prevent ground water infiltration and re-charge, and scour streambeds that nearby agricultural activities are dependent upon
    7) The presence of buffers in the form of natural and man-made features such as rivers, steep slopes, highways and golf courses that may serve to limit impacts of urbanization on agricultural practices were identified

The agricultural practices used in the production of the identified crop categories vary somewhat in the levels of pesticide use, noise produced, etc., and noise which may conflict with urban development in close proximity. Therefore, the intensity of the agricultural uses occurring within

the surrounding areas and the degree to which active farming of these crops may be hindered by nearby urban development is not ranked. Staff will note when the potential for such conflicts existed. The base assumption is that areas that support intensive and uninterrupted agricultural uses would be most impacted by the proximity of new urban development.

Change in Methodology

The number of acres of high-value farmland in each study area is not included in this study as the high-value farmland component is reflected in the determination of the priority of lands to be studied as directed by Oregon Revised Statute (ORS) 197.298. A high-value farmland figure for each study area was used in the 2000 Alternative Site Study.

Next Steps

Once staff has a developed a preliminary recommendation of the study areas to be brought into the UGB, a further analysis of whether or how much high-value farmland is included in and adjacent to the recommended areas will be completed. This is to ensure that the requirements of Factor 6: Retention of agricultural land and Factor 7: Compatibility with nearby agricultural activities have been equally balanced with the other factors of Goal 14 for determining the most appropriate locations for expansion of the UGB.

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R L I S
REGIONAL LAND INFORMATION SYSTEM

Alternatives Analysis Study Areas

TIER

- 1
- 2
- 3
- 4
- 1A
- Urban Growth Boundary

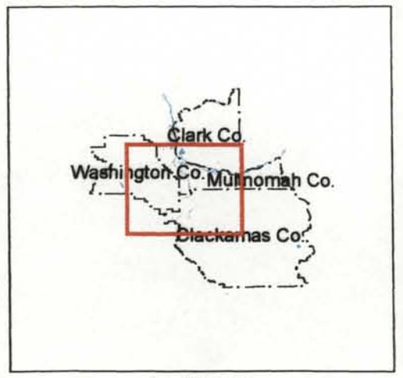
SOURCES:

TAX LOT MAP
County Assessment and Taxation offices, 2001. Data collection scale is 1"=100' in urban areas and 1"=200' or 1"=400' in rural areas. Horizontal accuracy is plus or minus five feet or better in Beaverton, Milwaukie, Oregon City, Tigard and Multnomah County. Other areas are plus or minus ten feet.

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 3.78 miles

0 1 2 4 Miles



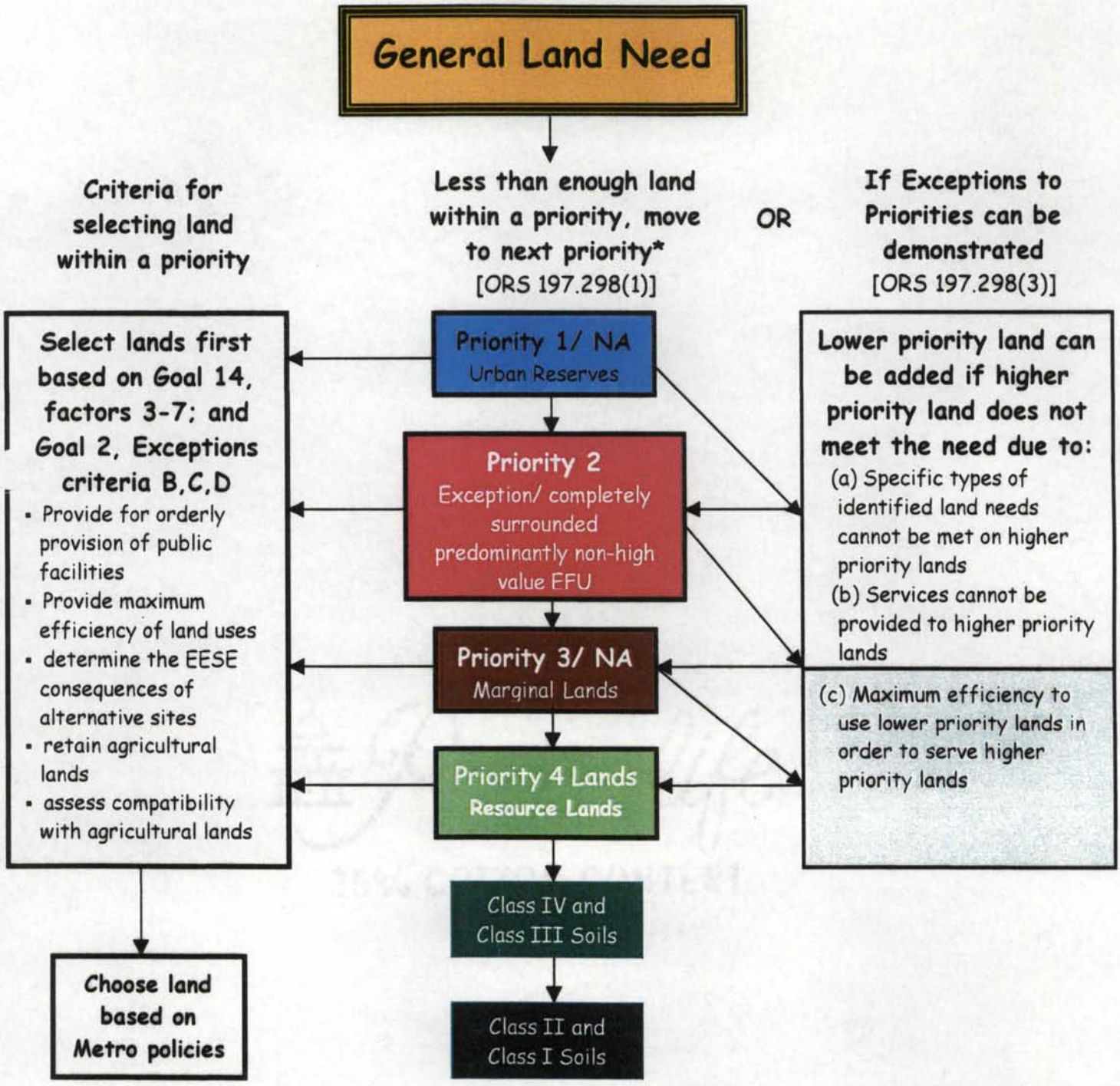
Location Map

METRO

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

June 5, 2001 Job No. 01282

Goal 14: Where to Satisfy the Region's 20-Year Urban Land Needs Through UGB Expansion



* To select land within a priority follow Goal 14.

October 16, 2001

*ORS 215.710 provides definition of high value farmland

M E M O R A N D U M

METRO

May 21, 2002

To: Andy Cotugno, Planning Director
Mike Hoglund, Regional Planning Director

From: Lydia M. Neill, Principal Regional Planner

Re: 2002 Urban Growth Report Dwelling Unit Calculations

Background
The Dwelling Unit Estimate Summary tables contained as attachments to this memo are divided into five sections: 1) residential demand estimates, 2) adjustments to land demand, 3) reductions from gross vacant land to convert estimates to net vacant buildable acres, 4) dwelling unit capacity at current zoning, and to arrive at 5) net need for residential dwelling units. Each factor in the attached UGR Dwelling Unit Summary Table is coded by number, which corresponds to an explanation contained in the UGR Primer memorandum dated May 21, 2002 (Attachment A). Employment land demand and supply is not discussed in this memorandum and will be provided at a future date.

Capture Rate Scenarios
Several different scenarios are presented based on varying the capture rates. The capture rate directly relates to the required size of the UGB and number of dwelling units that is needed for the next 20 years.

"Excerpted from the UGR Primer Memorandum, 5-21-02, page 2"
2/ Capture Rate. The capture rate approximates the percent of the region's growth that locates within the Metro UGB as opposed to the four county area (Multnomah, Clackamas, Washington and Clark County). Neighboring communities and Clark County absorbs the remaining growth that is not captured within the UGB. The basis for the capture rate is derived from historical data from 1980 through 1998 and from the MetroScope model case studies. Historical data indicate a capture rate of 54-77% while rates from MetroScope case studies ranged from 54% to 79% depending upon the amount of land added to the UGB in the case study and the amount of capacity made available within the UGB. The capture rate that was assumed in the 1997 Urban Growth Report Update was 70%. As shown in the capture rate diagram "Households- Share of Growth" and in preliminary MetroScope case study results the rate can vary based on a number of different factors.

Three different scenarios are presented for discussion:
- Scenario A: assumes a capture rate of 65%
- Scenario B: assumes a capture rate of 70%
- Scenario C: assumes a capture rate of 75%

CAPTURE RATES	65%	70%	75%
4-County Population Forecast within the Metro UGB	202,800	218,400	234,000
4-County with 5% Vacancy Rate	212,900	229,300	245,700

Changes in the capture rate result in an increase in the need of approximately 16,400 dwelling units per 5% increase in the rate (3,200 per 1%). Assuming a lower capture rate than previously is not without consequences to neighboring communities. If the capture rate in the Metro UGB is pushed downward, together with limits on the Clark County UGA, the demand for dwelling units is shifted to neighboring communities like Banks, Scappose and Canby etc. Selection of the capture rate should take into consideration impacts on surrounding communities. Capture rate data is shown in Attachment B.

Attachments
Attachment A: UGR Primer Memo

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M E M O R A N D U M

METRO

May 21, 2002

To: Andy Cotugno, Planning Director
Mike Hoglund, Regional Planning Director

From: Lydia M. Neill, Principal Regional Planner

Re: 2002 Urban Growth Report Methodology

Background

The 2002 Urban Growth Report (UGR) is a technical and policy document that outlines the methodology for estimating the current capacity of the urban growth boundary (UGB), and compares this capacity with the forecast growth for the next twenty years. Identifying and addressing the need for housing and jobs is part of Metro's 2002–2022 Periodic Review of the UGB work program. The report uses the best available information about urban growth boundaries, capacity on land inside of the UGB and economic growth to estimate regional job and housing need (demand). The supply or inventory estimates in this report are to the maximum extent possible grounded in technical research and up-to-date geographic information system (GIS) data.[1] Where data are inconclusive, Metro Council will provide policy direction based on regional goals and objectives.

The 2002 UGR is a land accounting analyses that provide the technical background to defend changes to the framework plan or amendments to the UGB. This is a regionalized analysis and is not meant to imply that individual parcels of land are being evaluated for suitability for development. ORS 197.296 requires that the estimation of future need be based on the development trends within the last five years. ORS197.299 requires Metro to implement necessary UGB amendments within two years of identifying a residential land need.

If it is determined that there is a shortfall in capacity within the UGB, the Metro Council has several options to rectify the situation. Three options are available: 1) expand the UGB by the number of acres necessary to meet job or housing needs, 2) create additional capacity inside the UGB by adopting additional regulations or measures, 3) combine expansion of the UGB and policy changes to meet a shortfall. Policy changes could take the form of upzoning, minimum floor area ratio (FAR) requirements or other regulations that optimize development of land. The Department of Land Conservation and Development (DLCD) has stated that Metro can only take credit for increases in capacity if regional regulations or measures are adopted that ensures the additional capacity.

The information contained in this memo is divided into five sections: 1) residential demand estimates, 2) adjustments to land demand, 3) reductions from gross vacant land to convert estimates to net vacant buildable acres, 4) dwelling unit capacity at current zoning, and to

[1] Land Market Monitoring for Smart Growth, edited by Gerrit Knaap, contributions by Carol Hall and Wilber (Sonny) Condor.

arrive at 5) net need for residential dwelling units. Each factor in the attached UGR Dwelling Unit Summary Table is coded by number, which corresponds to an explanation in this memorandum. Employment land demand and supply is not discussed in this memorandum and will be provided at a future date.

Residential Demand

1a- 1b/ **Residential Demand.** The demand estimate is taken directly from the Regional Economic and Population forecast[2]. The forecast informs both the residential and employment discussion. A four county population and household forecast from July 2000 to December 2022 which equals 22.5 years provides the basis for the demand estimate. The July 2000 vacant land inventory is being used as basis for estimating supply to insure a 20-year supply for the December 2002 adoption. In past years, Metro continued to update the supply inventory as the decision date was delayed. This proved to be technically unwieldy and confusing to the public.

Adjustments to the Land Demand

2/ Capture Rate. The capture rate approximates the percent of the region's growth that locates within the Metro UGB as opposed to the four county area (Multnomah, Clackamas, Washington and Clark County). Neighboring communities and Clark County absorbs the remaining growth that is not captured within the UGB. The basis for the capture rate is derived from historical data from 1980 through 1998 and from the MetroScope model case studies. Historical data indicate a capture rate of 54-77% while rates from MetroScope case studies ranged from 54% to 79% depending upon the amount of land added to the UGB in the case study and the amount of capacity made available within the UGB. The capture rate that was assumed in the 1997 Urban Growth Report Update was 70%. As shown in the capture rate diagram "Households- Share of Growth" and in preliminary MetroScope case study results the rate can vary based on a number of different factors.

Three different scenarios are presented for discussion:

- Scenario A: assumes a capture rate of 65%
- Scenario B: assumes a capture rate of 70%
- Scenario C: assumes a capture rate of 75%

CAPTURE RATES	65%	70%	75%
4-County Population Forecast within the Metro UGB	202,800	218,400	234,000
4-County with 5% Vacancy Rate	212,900	229,300	245,700

Changes in the capture rate result in an increase in the need of approximately 16,400 dwelling units per 5% increase in the rate (3,200 per 1%). Assuming a lower capture rate than previously is not without consequences to neighboring communities. If the capture rate in the Metro UGB is pushed downward, together with limits on the Clark County UGA, the demand for dwelling units is shifted to neighboring communities like Banks, Scappose and Canby etc.

[2] Economic Report to Council 2000-2030 Regional Forecast, preliminary draft March 2002

Selection of the capture rate should take into consideration impacts on surrounding communities. Capture rate data is shown in Attachment B.

3/ **Residential Vacancy Rate**. A vacancy rate needs to be assumed in the 2002-2022 UGR. Past UGR analyses have used a 5% vacancy rate but it was not specifically called out in the report. DLCD staff has indicated that a rate of 2.5% has been used in similar studies conducted around the State. The vacancy rate is part of the calculation of residential dwelling unit demand and is based on several data sources available for the Metro area. The vacancy rate represents a frictional rate that is necessary to allow people to move into and out of the region and permit locational changes within the region. The four data sources are the PGE Meter Reporting, American Housing Survey 1970-1995, and Census data from 1990 and 2000. The PGE data source does not include abandoned buildings in the data. Historical rates from these sources range between 4% and 6%. Based on available data, as a preliminary estimate of 5% has been assumed.

4/ **Dwelling Unit Demand.** Dwelling unit demand is calculated by applying vacancy rate and the capture rate to the population forecast. This number represents the total number of dwelling units required to meet the demand from the period from 2000 through 2022.

Gross to Net Reductions

5/ **2000 Vacant Land Inventory.** The vacant land inventory is produced through a process used by the Data Resource Center (DRC) that applies aerial photography and the GIS tax lot base layers to identify undeveloped and partially developed tax lots. The methodology is discussed in detail in a memorandum dated March 20, 2002 titled Map Atlas Release. Gross vacant land totals 43,900 acres.

6/ **Title 3, deduction for environmental resources.** A total of 7,600 vacant acres of Title 3 land is removed (GVBA). Source RLIS 2000 data. Using GIS, Title 3 environmentally constrained areas are removed from vacant lands to arrive at gross vacant buildable acres. These lands include water quality and flood management areas as defined in Title 3 of the Functional Plan. The RLIS data layer consists of streams and rivers, wetlands, a variable riparian buffer for water quality purposes, 1996 Flood inundation area and the 100-year flood plain. The riparian protection area is 15' adjacent to intermittent streams and varies from 50' to 200' adjacent to perennial streams.

7/ ***Gross Vacant Buildable Acres.*** Calculated as the difference in gross vacant land less the Title 3 resource area.

8/ **Federal, State, Municipal Exempt Land**. A total of 1,500 acres of Federal, State, County and City owned land have been removed from gross vacant buildable acres (GVBA). Source RLIS 2000 data. The data was identified from tax assessor codes for exempt uses. No dwelling unit capacity is assumed on these lands because they are assumed to address public facility needs for cities, counties and federal agencies. This method is consistent with that used in the 1997 UGR and subsequent updates.

9/ **Platted Single Family Lots.** A total of 2,000 acres of platted single family lots are removed from GVBA. All single family zoned parcels less than 3/8 of an acre (16,355 square feet) are temporarily set aside from the inventory of GVBA. These parcels do not receive reductions for future streets, parks, schools and places of worship/fraternal organizations,

because they are assumed to have sufficient right of way already dedicated to serve them because of their small size.

In single family zones, capacity on these platted lots are assigned one dwelling unit per parcel rather than underlying zoning classification. The dwelling capacity (1 per lot) on this subset of vacant land is later added back to the final supply estimates when the residential portion of net vacant buildable land is converted into a dwelling unit capacity estimate.

Lots less than 3/8 of an acre but zoned for non-residential or multi-family purposes are also not reduced in capacity by the gross-to-net reduction calculation for similar reasons as stated above. However, these individual parcels are included back into net vacant buildable acres to compute dwelling unit capacity for multi-family development and employment land supply respectively based upon the zoning classification assigned to that parcel. This is consistent with the method used in the 1997 UGR, and subsequent updates.

10/ **Places of Worship and Fraternal Organizations.** The total deduction for places of worship is 800 acres. Source: RLIS 2000 data. The land need for future places of worship and fraternal organizations are based upon a ratio of 1.4 acres per 1,000 persons which reflects existing conditions that was calculated in 1994 for the 1997 UGR. An estimate of the ratio applied to population projections and the amount of land for future need for places of worship and fraternal organizations are calculated and then the current vacant land holdings of these organizations are deducted from the future need. Approximately 85% of the need for these uses are estimated to occur in residential areas, with the remaining 15% in commercial areas (based on historic land holding patterns). The same assumption was used in the 1997 UGR and subsequent updates.

Re-use and redevelopment of church lands

Council pointed out that there are a number of religious organizations that have developed affordable and senior housing on church owned lands that were previously committed for religious purposes. It appears that although this is a very interesting phenomenon it is difficult to accurately measure how many of these instances have taken place. Staff has queried Housing program staff and some local governments to get a sense of where these changes have taken place and the frequency of the occurrence.

Anecdotal evidence has indicated that churches are frequently broadening their mission and providing more social services, daycare and education. Although this has obvious benefits to the community, this may raise compatibility issues in residential neighborhoods where most churches are located. Most zoning codes currently permit church uses to occur in residential and commercial zones. In addition to providing some of the services mentioned above, there have been some instances where church sites are redeveloped for housing use.

Redevelopment of church sites may be most applicable in areas found in older neighborhoods that are losing membership as their membership ages. Although St. Anthony's in southeast Portland has been developed as a model for the Arch Dioceses of Portland that they hope can be replicated in other parts of the country the decision to undertake this type of development is up to the individual parish. Individual parishes within the Catholic Church are responsible for buying, selling and developing their land and there is no overall stated mission by the church to require or encourage this type of activity.

The Housing Technical Advisory Committee (HTAC) examined the St Anthony's model and tried to assess the probability of replicating this elsewhere in the region. An initial search of

church properties in RLIS as well as contacts with church groups proved difficult and the idea was abandoned.

Because of the lack of evidence of a trend that these lands are fulfilling some of the housing demand it is recommended that redevelopment activity on these types of lands be monitored in the future to ascertain whether redevelopment of these sites is occurring by developing parking lots, excess land or converting church buildings to housing uses. In the meantime, selection of an appropriate refill rate (see line 23) could include a judgement of the rate of this redevelopment activity.

11/ **Major Utility Easements.** The total amount of land currently used for easements for natural gas and electrical transmission lines, and petroleum utilities is 600 acres. Source RLIS 2000 data. Easements for major utilities consist of linear corridors of land based on specific width requirements for public safety. This includes a 75-foot easement requirement for Bonneville Power Administration lines and natural gas lines, and a federal 50-foot standard for petroleum pipelines. Easements typically allow very limited uses and do not allow the construction of buildings in these areas and are therefore removed from the buildable land inventory. This deduction is a new factor that has been included to more fully approximate available buildable land.

12/ **Acres for New Streets.** The total deduction for streets is 4,900 acres. Gross to net reductions for future streets are applied first. As noted above no reduction for future streets is applied to parcels less than or equal to 3/8 of an acre in size. A 10 % reduction is applied to parcels between 3/8 of an acre and one-acre. An 18.5 % reduction is applied to parcels larger than one acre. The 18.5 % rate applies to all street classifications. These percentages were extracted from a 1994 study conducted by DRC staff on residential subdivision plats greater than one acre. Expansion of freeway and arterial streets suggested in the Regional Transportation Plan (RTP) will partially occur within existing rights of way or adjacent to already developed parcels. The RTP estimates that approximately 1,600 acres are required for these future expansions. The 18.5 % assumption for all vacant land deducts sufficient land to address the regional system needs. These rates were used in the 1997 UGR and subsequent updates.

The 18.5 % reduction is based on a study of subdivision development during 1997 and 1998 on all parent parcels larger than one acre. A total of 170 platted subdivisions were reviewed from each of the three counties. Of these subdivisions, the average amount of land used for streets was 18.5 %. Although this rate is applied globally to all vacant land, it was derived from measuring only single family lots.

Review of the street right of way widths

Council has asked staff to review the local street allowance above based on the implementation of the Transportation Planning Rule (TPR) to allow use of narrower streets. Most of the local governments have completed this work and allow a variety of street designs to be used in new subdivisions depending upon topography, functional classification, anticipated traffic volumes and adjoining uses. The recommended pavement width for narrow streets (curb to curb) is between 20 to 28 feet although right of way is needed to accommodate more than just curb to curb pavement width. Additional right of way is required to accommodate street trees in planter strips, sidewalks, and driveway aprons that meet ADA standards. With additional storm water run-off concerns right of way widths are not likely to get much smaller although pavement widths may be reduced.

To evaluate whether the narrow street widths were being applied an additional analysis of newly dedicated right of way (Year 2001) was conducted by DRC staff. A sample was collected of 395 right of way segments in Washington, Clackamas and Multnomah Counties within UGB. Most right of way segments ranged from 30-65 feet in width with the most common being 50 feet. The second most frequent width was 35 feet. The average length was between 268 to 276 feet. Portland had the greatest number of new dedications. From this data was it difficult to discern whether the dedication was only for a portion of the width of the street (i.e. 35 feet of a 70 right of way). To examine whether the percentage of street right of way dedicated is adequate for different size parcels an additional study would need to be undertaken to examine subdivision plats. This information is not available from the RLIS database and would involve obtaining copies of the plats from each of the counties. Until additional direction is provided to staff on whether to pursue this research project the existing 0-10-18.5% deductions will be used. This assumption produces a total of 4,900 acres for new streets.

13/ **Acres for New Schools.** Future school land need has been estimated using a ratio of students per acre by school type. In past UGRs this pencils out to 70 students per acre for an elementary school, 60 students per acre for a middle school and 55 per acre for a high school.

There are three ways to approach estimating the amount of land necessary for future schools.
1. What the school district desires for school construction (Ideal Site Size).
2. What size the school district can obtain under constrained land conditions.
3. Current on the ground conditions.

Each of these options represents a different set of assumptions for how much land per student is required as follows:

Method 1: "Ideal" Site Size Requirements

	Students Per Acre Ratio	Site Size	Enrollment Size
High School	55	40 acres	2,200 students
Middle School	60	20	1,200
Elementary School	70	10	700

Method 2: "Constrained" Site Size Requirements- 20% Denser than Ideal

	Students Per Acre Ratio	Site Size	Enrollment Size
High School	65	32 acres	2,200 students
Middle School	70	16	1,200
Elementary School	85	8	700

Method 3: Actual Student Land Need Ratio on the Ground, 2001

	Students Per Acre Ratio
High School	50
Middle School	40
Elementary School	52

Based on Method 2 Constrained Site Size Requirements a total of 800 acres are needed for new schools. Any land brought into the UGB for a specific identified school need (such as now under consideration by the Beaverton School District) will be reconciled with the regionalized school need estimate. This would reduce the overall acreage needed.

14/ **Acres for New Parks.** In past UGR's the amount of land needed for development of future parks was computed based upon a park ratio of 20.9 acres of park land per 1,000 residents. The 1997 Update to the UGR was based on a 1998 survey rate of 20.9 acres per 1,000 residents. The ratio was updated from 14.4 ac/1,000 in the 1997 UGR. This ratio was based on an inventory of parks and open spaces completed in 1997 (Metro's Greenspaces Department). The park ratio included neighborhood parks, wildlife refuges and preserves, Metro and municipal open spaces, and regional parks. From this need, acquisitions through the Greenspaces bond measure were subtracted producing a net set aside for parks. The 20.9 ratio resulted in a need of 8,598 acres which was reduced by 4,900 acres of parks and open space acquisitions (past and future) both inside and outside of the UGB. The total deduction for parks was 3,678 acres (3700 rounded).[3]

Following this similar methodology, to calculate a new parks number based on the current number of acres of parks divided by the current population (20.6 ratio).using the projected population from Line 1a and using the 20.6 acres per 1,000 persons the total need for parks would be 10,860 acres [558,200 population / 1,000 X 20.6].[4] This number would need to be reduced by the Parks and Open space acquisitions of 4,900 acres for a total of 5,960 acres.

Alternative methods for calculating park land needs

Alternatively, the set aside for parks could be limited to active parks only, recognizing that the Goal 5 program will result in reductions of the buildable land inventory for openspace (fish and wildlife habitat). A maximum amount could be equivalent to the existing level at a ratio of 4.1 acres per 1000 population. This rate is based on existing acreage dedicated to active parks including, soccer fields, play fields, basketball courts etc. As a note- the majority of the active parks are provided closer to the center of the region. There appears to be several areas that are lacking the concentration of parks than are currently present in the City of Portland. Assuming provision for active park uses at the current rate of 4.1 acres per 1000 a total of 2,290 acres would be needed.

A second alternative could be tied to the minimum amount of park land that would be obtainable given the amount fundable through existing park system development charges (SDC's). This estimate has been calculated by anticipating the number of units that would be built in each jurisdiction by the SDC charge per unit in that jurisdiction. The total funds available are then divided by an average acre price of $75,000 to $150,000 per acre. The total need for park land based on this approach is approximately 1,180 to 3,035 acres. However, this is highly dependent on the use of SDC's for capital improvements vs. land acquisitions and the cost of land.

At this time, 1,200 acres is assumed, subject to further review by the MPAC Parks Subcommittee.

15/ **Net Vacant Buildable Acres (NVBA)** NVBA is broken out by residential and employment uses according to the underlying zoning of each parcel and totals between 21,700 to 25,000 acres.

16/ ***Net Vacant Buildable Acres- employment.*** NVBA for employment totals between 8,100 to 9,000 acres.

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[3] Source: Technical Appendix to Dwelling Unit Capacity Estimates for the 1999 UGR, December 1999.
[4] See methodology in the attached Parks Memo.

17/ ***Net Vacant Buildable Acres- residential.*** NVBA available to be converted to dwelling unit capacity totals 13,600 acres.

18/ **Land Adjustments.** This line item is reserved for adjustments to the buildable land supply so that the most accurate information is available for the 2002 UGR. The vacant and buildable land supply is based on 2000 aerial photography that was flown in July. There may be instances where local governments have adopted area plans, such as the Washington Square Regional Center, that increase the residential or jobs capacity of lands that was not reflected in the 2000 land supply and 2000 zoning. In addition, federal, state or local governments may have sold vacant public properties that are now available for development, such as the Damasch Hospital site in Clackamas County. There also may be instances where the Standard Regional Zoning information has been incorrectly identified. A proposed set of decision rules are outlined below that will help guide which lands are considered for adjustments to the 2002-2022 UGR and which lands will be reconciled during the next legislative process. A table of all changes will be included as an appendix to the UGR. These changes are anticipated to be ongoing.

Proposed decision rules for buildable land supply changes

All changes to the buildable land supply are proposed to have taken place by December 31, 2001. *Any subsequent changes effective after this date would be picked up in a subsequent UGB analysis.* A minimum of 20-acres is required because this analysis is conducted on a regional level.

Changes would be made to the buildable land supply based on:

- Only those areas will be considered where formal land use action has taken place.
- Errors in a Standardized Regional Zone (SRZ) assignment.
- Mapping error: either an incorrect assignment to vacant or developed categories
- Change in the categorization of land from public to private ownership, (minimum of 20 acres in size).

Name of Site	Acres	New SRZ Designation	Comments
Damasch Hospital site	172	MUC2	Currently General Commercial, amend to MUC2
West Hayden Island	794	Heavy Industrial	Annexed to UGB only for deep water marine terminal use, currently has agri/forestry zoning
Marylhurst Convent	122	MUC1	Currently Office Commercial, amend to MUC1
Rosemont School	8	same	Currently MFR1, this is correct
Camp Withicomb	235	Public Facilities- PF	Used for military purposes and acquired for 212 ROW, currently Heavy industrial
Washington Square RC	986	See comments	Amend to MUC2, MUC3, SFR7, SFR3
Downtown Lake Oswego	73	MUC2	Currently Central Commercial change to MUC2
Rock Creek Area- Happy Valley			Currently investigating
Coffee Creek Prison			" "
Alpenrose Dairy	52	SFR3	Currently in industrial use, zoned low density residential. SFR3 would be most appropriate
Durham Quarry	28	MUC2	Currently Mixed Use Industrial and General Commercial. Has a mixed use overlay
Pleasant Valley Area	1,500	Concept Plan	Use new concept plan zoning

19/ ***Net Vacant Buildable Acres Adjusted.***

Conversion of NVBA to Dwelling Units

20/ **Dwelling Unit Capacity at Current Local Zoning.** Net vacant buildable acres are converted to dwelling unit capacity by aggregating local zoning classifications to Metro's Standard Regionalized zones (SRZ's). RLIS is the source for current local zoning (through December 2001). SRZ's normalize 746 different zoning categories across 24 cities and 3 counties. SRZ's assume the average density in each zone (see attached table) when the assignments are made to the regionalized category. This density applied to the specific location of net buildable acre yields dwelling unit capacity.

21/ **Residential Capacity in Mixed Use Areas.** Dwelling unit capacity is adjusted to account for additional units generated by residential development on vacant land in mixed-use zones. Mixed-use redevelopment capacity is accounted for in Line 21. Note: this component is only a portion of mixed use development on vacant developable land. Mixed-use development land is accounted for in the refill rate.

22/ **Underbuild.** Underbuild accounts for site conditions that result in less than average densities likely to be developed on any given site. Historical rates of underbuild have been document at 28% accounting for such factors as steep slopes, access issues, odd lot sizes and many other specific site conditions. In recent years, this underbuild factor has been mitigated by market pressure (the need to maximize site utilization) and adoption of minimum density requirements by local governments.

23/ **Residential Refill.** Residential refill is defined as development of new residential units on any lot defined in the Metro data base as "developed". Since "vacant" land includes any tax lot or any part of a tax lot larger than ½ acre, this includes development on an existing developed lot or partially developed lots smaller than ½ acre. Observed residential refill rates were obtained from a Metro Redevelopment Study conducted in 1998 with a reported range from 24.5% to 26.5%. The MetroScope model produces refill rates as an output of the model. Rates from the model may be helpful in choosing a rate that best reflects the Metro Council's policy choice. The MetroScope model rates range from 26.6% to 40%. In the last UGR the Metro Council choose an aspirational rate of 28.5%. Staff recommends deleting a separate line item to account for accessory dwelling units due to the difficulty in counting and tracking this kind of development. These units are assumed to be captured in the refill rate.

At this time, existing experience and adopted policy support a rate of 26.6%. After the dwelling unit shortfall is determined, actions to increase the refill rate should be considered.

24/ **Minimum Development on Title 3 Lands.** A minimum development on Title 3 lands is applied to all parcels that are located wholly within Title 3 areas. Regardless of zoning these areas are assumed to develop a 1 unit per tax lot to avoid a takings issue.

25/ **Units from Platted Lots.** Platted lots (removed from the supply at line 9) are assumed to develop at 1 unit per lot because these lots (under 3/8 of an acre- we do not track subdivisions, Year 2000 data) and approved by local jurisdictions that have already exacted all necessary right of way requirements.

26/ **Subtotal: Dwelling Unit Capacity.** The total of all factors above produces the amount of dwelling unit capacity within the UGB according to current adopted policies.

Net Need in Residential Dwelling Units

27/ **Net Need in Residential Dwelling Units.** Subtracting the 20-year demand from the existing UGB supply yields the net need for additional dwelling unit capacity. This can be produced through actions to increase the capacity of the existing UGB, expanding the UGB or both. A separate analysis will determine the capacity of candidate UGB expansion areas.

What is New in the UGR this Year?
Several methodological changes are proposed to the 2002-2022 edition of the UGR. These changes are in response to implementation of the Functional Plan requirements and a review of our technical practices. Most jurisdictions have adopted minimum density standards (80% of the underlying zoning) and are in compliance with Table 1 targets. Achieving compliance with Table 1 targets is an indication that local jurisdictions have changed zoning to increase capacity and therefore the upzone and ramp-up factors are no longer necessary. Ramp-up had been included in prior UGRs as a discount to the anticipated upzone by local governments to meet Functional Plan requirements. The 80% minimum requirement contributes towards an underbuild of 20%.

Staff conducted a review of accessory dwelling units as a separate factor. In review, we believe that to call out accessory dwelling units a separate factor double counts both the refill rate and the density assumptions for vacant land. Efforts to track the construction of these units have proved difficult.

A deduction is also being made for major utility easements in order to comply with State law and to more fully account for all non-buildable lands. The type of easements and the land area removed from buildable land is detailed above.

We have also included an allowance for adjustments for circumstances that do not fit the typical parameters in the UGR model.

Attachments
Attachment A: 2002 Dwelling Unit Summary Tables
Attachment B: Capture Rate Tables
Attachment C: Capture Rate Graph
Attachment D: Vacancy Rate Tables
Attachment E: Parks Memo

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Attachment A-1

DRAFT 5/20/02

2000-2022 Urban Growth Report
Dwelling Unit Capacity Estimate & Need
2002-2022 Regional Forecast
Baseline Pro-forma Estimate of Residential Land Need
March 2002

Line No.		SUPPLY	DEMAND
	Residential Demand Estimates (in Dwelling Units)		
1a/	4-County Population Forecast (July 2000 to Dec. 2022) - 22 1/2 years		744,200
1b/	4-County Household Forecast (July 2000 to Dec. 2022) - 22 1/2 years		312,100
2/	**Capture 65% of 4-County Forecast in Metro UGB**		**202,800**
3/	plus: 5% vacancy rate		10,100
4/	**Dwelling Unit Demand in the Metro UGB:**		**212,900**
	July 2000 Vacant Land Inventory (all zones):	**Metro UGB**	
5/	**Gross Vacant Land (excludes Bethany & Stafford)**	**43,900**	
6a/	less: Title 3 (Water Quality Protection)	7,600	
7/	**Gross Vacant Buildable Acres (GVBA) - rounding**	**36,400**	
8/	less: Fed., State, Municipal exempt land (actual count)	1,700	
9/	less: Acres of Platted Single Family Lots (actual count)	2,000	**A**
10/	less: Acres for Places of Worship and Social Org. (per capita basis)	700	**C**
11/	less: Major Easements (Natural Gas, Electric & Petroleum) (actual count)	600	**R**
12/	less: Acres for New Streets (0%, 10%, 18.5%)	4,900	**E**
13/	less: Acres for New Schools (H=65, M=70, E=85)	600	**S**
14/	less: Acres for New Parks (based on low SDC)	1,200	
15/	**Net Vacant Buildable Acres (NVBA)**	**24,600**	
	NVBA by Type:	**Metro UGB**	
16/	Net Vacant Buildable Acres - Employment	8,800	
17/	Net Vacant Buildable Acres - Residential	15,700	
	Net Vacant Buildable Acres (NVBA)	**24,500**	
17a/	Land Adjustments	?????	
17b/	**Net Vacant Buildable Acres-Adjusted (NVBA)**	**?????**	
		Metro UGB	
18/	**Dwelling Unit Capacity at Current Local Zoning (as of Jan. 2001)**		
19/	add: Res. Development in vac. Mixed Use Areas (MUC)		
20/	less: Units Lost to Underbuild @ 20%		
21/	add: Units from Residential Refill @		
22/	add: Minimum Development Capacity on Title 3 land (actual count)		
23/	add: Units from Platted Single Family Lots (actual count)		
24/	**Subtotal: Dwelling Unit Capacity**		
25/	**Net Need in Residential Dwelling Units (DEFICIT):**		

Attachment A-2

DRAFT 5/20/02

2000-2022 Urban Growth Report
Dwelling Unit Capacity Estimate & Need
2002-2022 Regional Forecast
Baseline Pro-forma Estimate
of Residential Land Need
March 2002

Line No.		SUPPLY	DEMAND
	Residential Demand Estimates (in Dwelling Units)		
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1b/	4-County Household Forecast (July 2000 to Dec. 2022) - 22 1/2 years		312,100
2/	**Capture 70% of 4-County Forecast in Metro UGB**		**218,400**
3/	plus: 5% vacancy rate		10,900
4/	**Dwelling Unit Demand in the Metro UGB:**		**229,300**
	July 2000 Vacant Land Inventory (all zones):	**Metro UGB**	
5/	**Gross Vacant Land (excludes Bethany & Stafford)**	**43,900**	
6a/	less: Title 3 (Water Quality Protection)	7,600	
7/	**Gross Vacant Buildable Acres (GVBA) - rounding**	**36,400**	
8/	less: Fed., State, Municipal exempt land (actual count)	1,700	
9/	less: Acres of Platted Single Family Lots (actual count)	2,000	A
10/	less: Acres for Places of Worship and Social Org. (per capita basis)	700	C
11/	less: Major Easements (Natural Gas, Electric & Petroleum) (actual count)	600	R
12/	less: Acres for New Streets (0%, 10%, 18.5%)	4,900	E
13/	less: Acres for New Schools (H=65, M=70, E=85)	700	S
14/	less: Acres for New Parks (based on low SDC)	1,200	
15/	**Net Vacant Buildable Acres (NVBA)**	**24,400**	
	NVBA by Type:	**Metro UGB**	
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17/	Net Vacant Buildable Acres - Residential	15,600	
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17a/	Land Adjustments	?????	
17b/	**Net Vacant Buildable Acres-Adjusted (NVBA)**	**?????**	
		Metro UGB	
18/	**Dwelling Unit Capacity at Current Local Zoning (as of Jan. 2001)**		
19/	add: Res. Development in vac. Mixed Use Areas (MUC)		
20/	less: Units Lost to Underbuild @ 20%		
21/	add: Units from Residential Refill @		
22/	add: Minimum Development Capacity on Title 3 land (actual count)		
23/	add: Units from Platted Single Family Lots (actual count)		
24/	**Subtotal: Dwelling Unit Capacity**		
25/	**Net Need in Residential Dwelling Units (DEFICIT):**		

Attachment A-3

DRAFT 5/20/02

2000-2022 Urban Growth Report
Dwelling Unit Capacity Estimate & Need
2002-2022 Regional Forecast
Baseline Pro-forma Estimate of Residential Land Need
March 2002

Line No.		SUPPLY	DEMAND	
	Residential Demand Estimates (in Dwelling Units)			
1a/	4-County Population Forecast (July 2000 to Dec. 2022) - 22 1/2 years		744,200	
1b/	4-County Household Forecast (July 2000 to Dec. 2022) - 22 1/2 years		312,100	
2/	**Capture 75% of 4-County Forecast in Metro UGB**		**234,000**	
3/	plus: 5% vacancy rate		11,700	
4/	**Dwelling Unit Demand in the Metro UGB:**		**245,700**	
	July 2000 Vacant Land Inventory (all zones):	**Metro UGB**		
5/	**Gross Vacant Land (excludes Bethany & Stafford)**	**43,900**		
6a/	less: Title 3 (Water Quality Protection)	7,600		
7/	**Gross Vacant Buildable Acres (GVBA) - rounding**	**36,400**		
8/	less: Fed., State, Municipal exempt land (actual count)	1,700		
9/	less: Acres of Platted Single Family Lots (actual count)	2,000		**A**
10/	less: Acres for Places of Worship and Social Org. (per capita basis)	800		**C**
11/	less: Major Easements (Natural Gas, Electric & Petroleum) (actual count)	600		**R**
12/	less: Acres for New Streets (0%, 10%, 18.5%)	4,900		**E**
13/	less: Acres for New Schools (H=65, M=70, E=85)	800		**S**
14/	less: Acres for New Parks (based on low SDC)	1,200		
15/	**Net Vacant Buildable Acres (NVBA)**	**24,300**		
	NVBA by Type:	**Metro UGB**		
16/	Net Vacant Buildable Acres - Employment	8,800		
17/	Net Vacant Buildable Acres - Residential	15,500		
	Net Vacant Buildable Acres (NVBA)	**24,300**		
17a/	Land Adjustments	?????		
17b/	**Net Vacant Buildable Acres-Adjusted (NVBA)**	**?????**		
		Metro UGB		
18/	**Dwelling Unit Capacity at Current Local Zoning (as of Jan. 2001)**			
19/	add: Res. Development in vac. Mixed Use Areas (MUC)			
20/	less: Units Lost to Underbuild @ 20%			
21/	add: Units from Residential Refill @			
22/	add: Minimum Development Capacity on Title 3 land (actual count)			
23/	add: Units from Platted Single Family Lots (actual count)			
24/	**Subtotal: Dwelling Unit Capacity**			
25/	**Net Need in Residential Dwelling Units (DEFICIT):**			

Data subject to change without notice
Preliminary Draft

Attachment B

DRAFT 4/22/02

Metro Urban Growth Boundary Capture Rates: 1980-2000

Population Statistics for Multnomah, Clackamas, Washington and Clark County

	1980	1985	1990	1995	2000
Population	1,242,594	1,284,744	1,412,344	1,605,211	1,789,457
Households	477,638	506,200	553,107	627,936	696,669
Avg. Household Size	2.60	2.54	2.55	2.56	2.57
sources:	(Census)	(DRC)	(Census)	(DRC)	(Census)

Clark County:

	1980	1985	1990	1995	2000
Population	192,227	206,744	238,053	290,111	345,238
Households	68,875	75,300	88,440	107,183	127,208
Avg. Household Size	2.79	2.75	2.69	2.71	2.71
sources:	(Census)	(DRC)	(Census)	(DRC)	(Census)

Portland Area Tri-counties (Multnomah, Clackamas, Washington)

	1980	1985	1990	1995	2000
Population	1,050,367	1,078,000	1,174,291	1,315,100	1,444,219
Households	408,763	430,900	464,667	530,800	569,461
Avg. Household Size	2.57	2.50	2.53	2.48	2.54

Tri-county Capture Rates:		**1980-85**	**1985-90**	**1990-95**	**1995-00**	**1980-00**
Population		65.6%	75.5%	73.0%	70.1%	72.0%
Households		77.5%	72.0%	88.4%	56.2%	73.4%
sources:	(Census)	(PSU & DRC)	(Census)	(PSU & DRC)	(Census)	

Population Statistics for the Metro Boundary

	1980	1985	1990	1995	2000
Population	940,600	962,800	1,046,200	1,181,800	1,305,574
Households	371,900	390,600	415,800	473,100	520,395
Avg. Household Size	2.53	2.46	2.52	2.50	2.51
	(DRC)	(DRC)	(DRC)	(DRC)	(Census)

source: U.S. Census 2000 and Metro DRC estimates

Metro Capture Rates - 5 years:	**1980-85**	**1985-90**	**1990-95**	**1995-00**
Population	52.7%	65.4%	70.3%	67.2%
Households	65.5%	53.7%	76.6%	68.8%

Metro Capture Rates - 10 years:	**1980-90**	**1990-00**
Population	62.2%	68.8%
Households	58.2%	72.9%

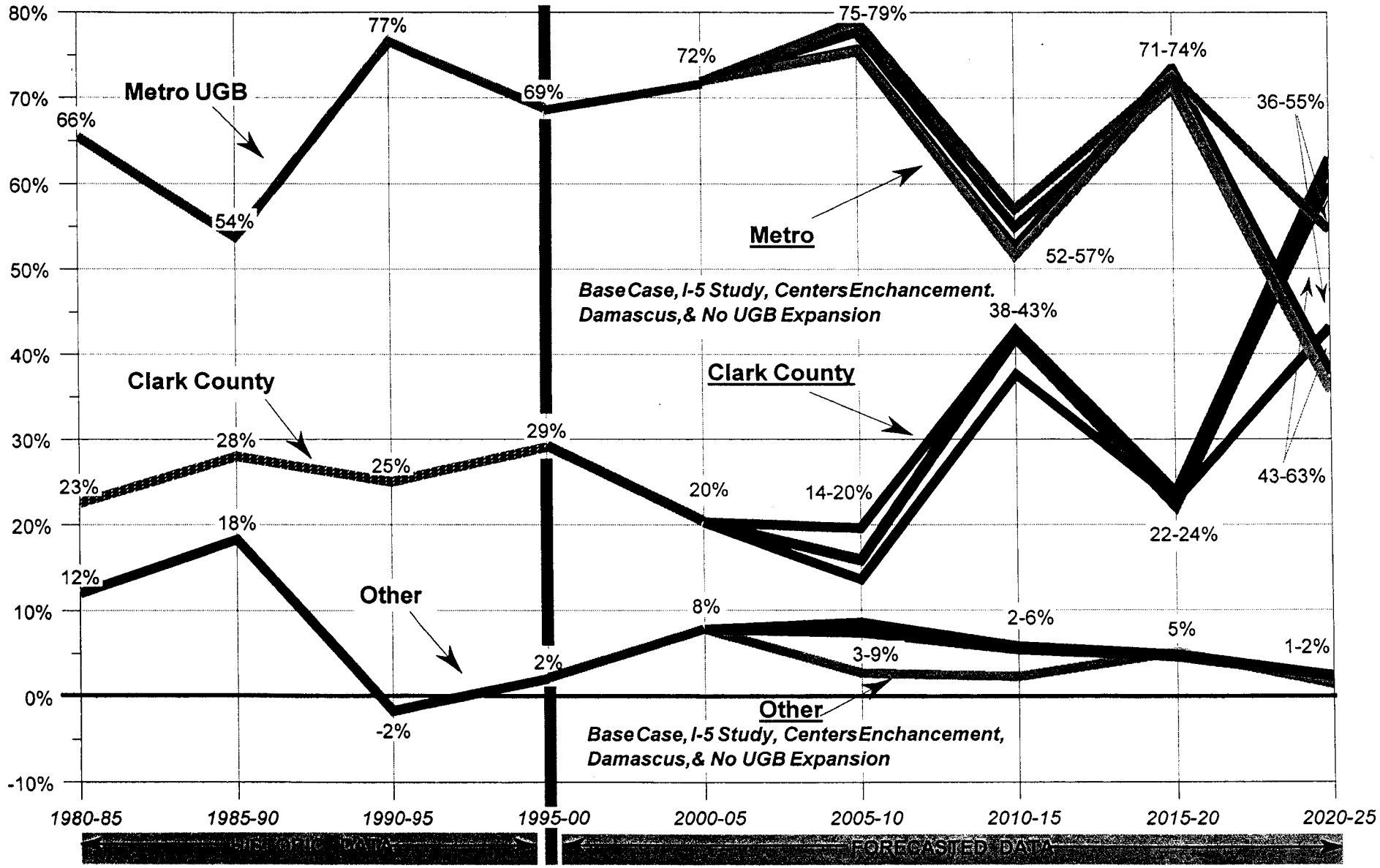
Metro Capture Rates - 20 years:	**1980-00**
Population	66.7%
Households	67.8%

%Metro / 3 county	**1980**	**1985**	**1990**	**1995**	**2000**
Population	89.5%	89.3%	89.1%	89.9%	90.4%
Households	91.0%	90.6%	89.5%	89.1%	91.4%

The capture rate is calculated as the ratio of the difference in population or household change between 2 periods for a given geography, and the rate is always denominated by the statistic for the 4 counties.

Attachment C

HOUSEHOLDS - SHARE OF GROWTH*, 1980-2025
Clackamas, Multnomah, & Washington Counties In Oregon; & Clark County In WA



*Growth measured in terms of capture rate: 1) Metro UGB/ 4 County Data; 2) Clark County/ 4 County Data; & 3) Other, 100% minus Metro & Clark (Revised 5/21/02)

Attachment D-1

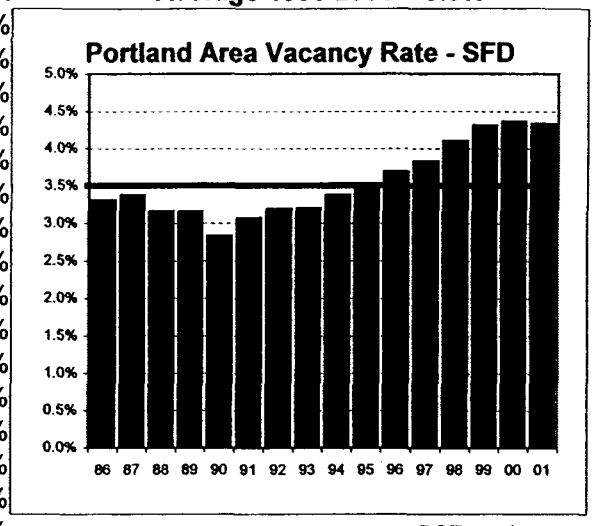
DRAFT 4/24/02

Portland Area Vacancy Rates (source: PGE data as reported by Real Estate Report of Metropolitan Portland)

Single Family Dwelling Units (SFD)

Year/month	Total SF	SF vacant	under constr.	Vacant %
1986 Mar	324,443	9,356	1,377	3.3%
1987 Mar	328,039	9,371	1,699	3.4%
1988 Mar	332,034	8,597	1,891	3.2%
1989 April	336,651	8,375	2,244	3.2%
1990 April	341,982	7,162	2,515	2.8%
1991 April	348,451	7,348	3,335	3.1%
1992 Mar	351,102	7,612	3,586	3.2%
1993 Mar	356,803	7,732	3,682	3.2%
1994 Mar	363,615	8,228	4,032	3.4%
1995 Mar	370,495	8,504	4,537	3.5%
1996 Mar	376,344	9,109	4,776	3.7%
1997 Mar	383,951	9,717	4,990	3.8%
1998 Mar	391,866	10,654	5,429	4.1%
1999 Mar	399,386	11,432	5,776	4.3%
2000 Mar	406,321	11,857	5,871	4.4%
2001 Mar	409,110	11,661	6,056	4.3%

Average 1986-2001 = 3.5%

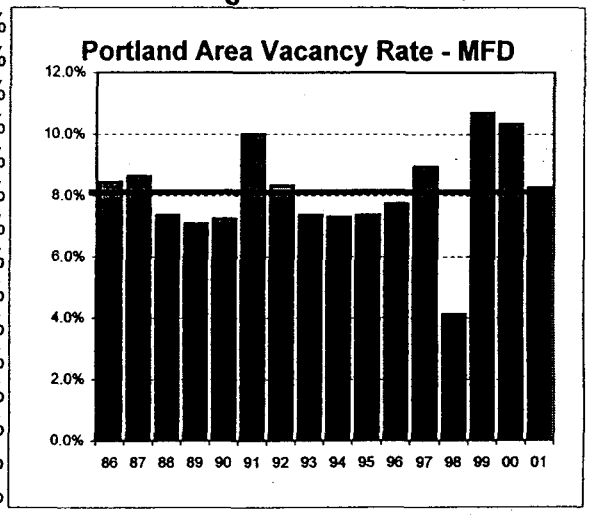


PGE service area

Multi Family Dwelling Units (MFD)

Year/month	Total MF	MF vacant	under constr.	Vacant %
1986 Mar	122,209	8,821	1,505	8.4%
1987 Mar	125,693	9,761	1,097	8.6%
1988 Mar	128,150	8,967	469	7.4%
1989 April	132,191	8,401	967	7.1%
1990 April	132,425	8,600	999	7.2%
1991 April	147,733	11,029	3,735	10.0%
1992 Mar	151,660	11,256	1,372	8.3%
1993 Mar	153,719	10,364	962	7.4%
1994 Mar	155,976	10,635	757	7.3%
1995 Mar	159,221	10,559	1,163	7.4%
1996 Mar	164,632	10,650	2,088	7.7%
1997 Mar	170,784	13,513	1,767	8.9%
1998 Mar	391,866	10,654	5,429	4.1%
1999 Mar	186,768	16,733	3,216	10.7%
2000 Mar	192,354	16,765	3,085	10.3%
2001 Mar	193,885	14,269	1,757	8.3%

Average 1986-2001 = 8.1%

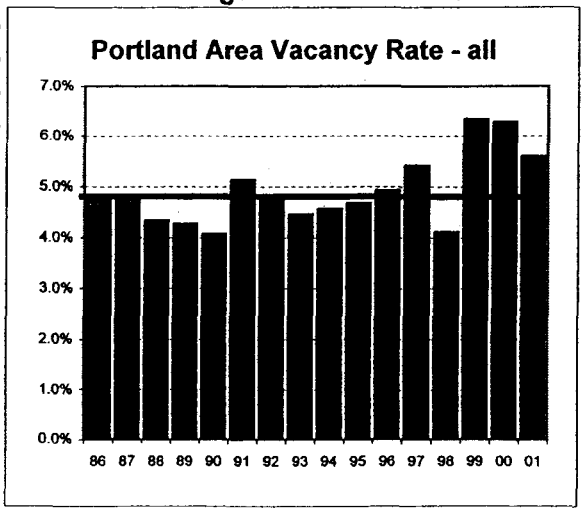


PGE service area

All Dwelling Units

Year/month	All units	All vacant	under constr.	Vacant %
1986 Mar	446,652	18,177	2,882	4.7%
1987 Mar	453,732	19,132	2,796	4.8%
1988 Mar	460,184	17,564	2,360	4.3%
1989 April	468,842	16,776	3,211	4.3%
1990 April	474,407	15,762	3,514	4.1%
1991 April	496,184	18,377	7,070	5.1%
1992 Mar	502,762	18,868	4,958	4.7%
1993 Mar	510,522	18,096	4,644	4.5%
1994 Mar	519,591	18,863	4,789	4.6%
1995 Mar	529,716	19,063	5,700	4.7%
1996 Mar	540,976	19,759	6,864	4.9%
1997 Mar	554,735	23,230	6,757	5.4%
1998 Mar	783,732	21,308	10,858	4.1%
1999 Mar	586,154	28,165	8,992	6.3%
2000 Mar	598,675	28,622	8,956	6.3%
2001 Mar	602,995	25,930	7,813	5.6%

Average 1986-2001 = 4.9%



PGE service area

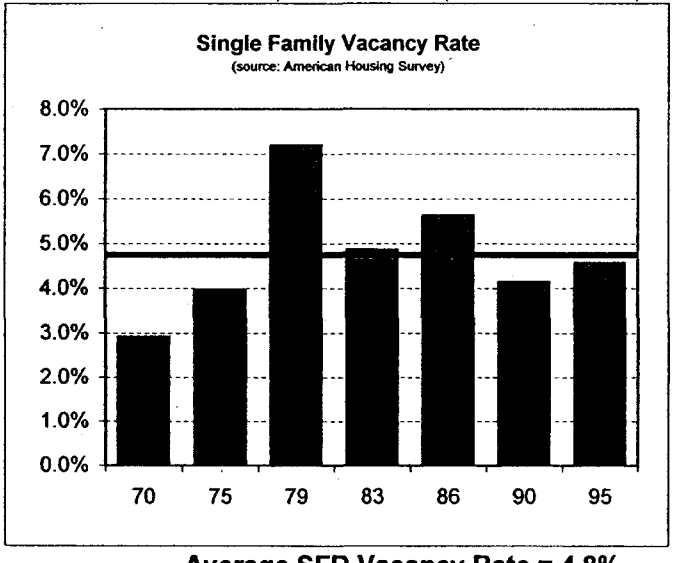
Attachment. D-2.

DRAFT 4/24/02

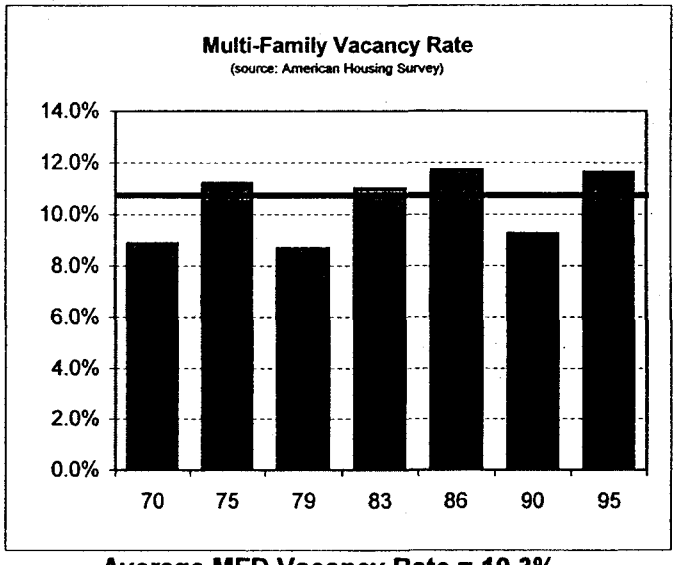
Portland Area Vacancy Rates (source: Census & American Housing Survey)

	Single Family Units				Multi Family Units			
year/source	1 Unit total	1 Unit Occupied	1 Unit Vacant	1 Unit Vacant %	2 Or more Total	2 Or More Occupied	2 Or more Vacant	2 Unit Vacant %
1970 AHS	265,000	257,300	7,700	2.9%	92,400	84,200	8,200	8.9%
1975 AHS	294,600	282,900	11,700	4.0%	126,500	112,300	14,200	11.2%
1979 AHS	352,100	326,800	25,300	7.2%	155,600	142,100	13,500	8.7%
1983 AHS	356,100	338,800	17,300	4.9%	170,800	152,000	18,800	11.0%
1986 AHS	403,500	380,800	22,700	5.6%	187,700	165,700	22,000	11.7%
1990 AHS	405,600	388,800	16,800	4.1%	210,000	190,600	19,400	9.2%
1995 AHS	492,900	470,400	22,500	4.6%	208,900	184,600	24,300	11.6%

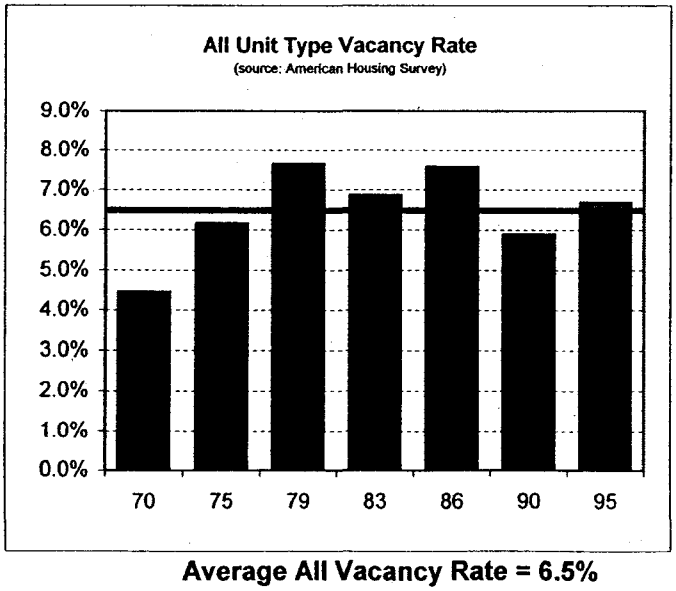
	All Unit Types	Occupied	Vacant	All Vacant %
1970 AHS	357,400	341,500	15,900	4.4%
1975 AHS	421,100	395,200	25,900	6.2%
1979 AHS	507,700	468,900	38,800	7.6%
1983 AHS	526,900	490,800	36,100	6.9%
1986 AHS	591,200	546,500	44,700	7.6%
1990 AHS	615,600	579,400	36,200	5.9%
1995 AHS	701,800	655,000	46,800	6.7%



Average SFD Vacancy Rate = 4.8%



Average MFD Vacancy Rate = 10.3%



Average All Vacancy Rate = 6.5%

Attachment E

METRO

A Background Report for Estimating Future Parks and Capacity Implications within the Metro Region

April, 2002

Problem Statement

Metro has the responsibility for managing the urban growth boundary (UGB) around the metropolitan area. By state law, Metro must review and compare the remaining capacity for accommodating jobs and housing within the UGB with the forecast of new jobs and housing for the next twenty years. If there is not sufficient capacity, adjustments to the capacity with the current UGB or expansions of the UGB must be made. To calculate the capacity within the current UGB, the estimated affects from adding additional new parks and open space are being calculated.

Three Approaches

The MPAC Parks Subcommittee has indicated its interest in pursuing three possible methods of estimating future parks and their likely impact on the housing and job capacity calculations within the Metro urban growth boundary. The MPAC Parks Subcommittee recommendation, after review of these alternative methods, would be forwarded to MPAC, the Community Planning Committee and the Metro Council for consideration.

A quick description of the three approaches is:

1) **Existing Ratio**. This is an estimate based on the existing ratio of acres of parks to people and forecasting new parks from the forecast of new people in the region. (Using this method, future parks could consume as many as 10,860 acres.)

2) **Active Parks Ratio**. This is an estimate based on calculations for active parks - the active parks being lands like playgrounds and ball fields, the passive parks being features like steep slopes, streams, etc.; (This method yields an estimate of about 2,290 acres for new active parks.)

3) **Fiscal Resource**. This is an estimate based on the fiscal resources available to purchase new lands. This is estimated in large part based on estimates of existing system development charges as well as any dedicated local bond measures also available to purchase open space. (This method yields an estimate of about 1,180 acres)

Existing Ratio Approach

This method is based on an aspirational approach. It assumes that the current ratio of open space to people should and will remain the same. (This method doesn't necessarily account for areas within the region which may be park deficient now and which could continue to be park deficient in the future.) The existing ratio approach uses the existing population and the most current data on open space - each of these data for the area within the current urban growth boundary. A ratio of acres per 1,000 population is then calculated from these numbers to obtain an existing open space/population ratio. In this future park estimation method, Metro's population forecast for the next twenty years is used to approximate additional population and a calculation is made to estimate the additional open space that should be created in order to keep the open space/population ratio the same.

Metro's open space data base includes eleven different types of open space including:

1) parks,
2) open spaces
3) common areas of a subdivision or condominium complex;
4) cemeteries;
5) golf courses;
6) pools;
7) tennis courts;
8) fairgrounds/stadium uses;
9) community centers;
10) trail/paths and
11) community gardens

The latest data for open space within the Metro urban growth boundary is that there are 26,380[1] acres of land in public and private open space use. (see Table 1 for open space acres by type). Based on a population of 1,281,470[2], this would yield a current ratio of 20.6 acres per 1,000 people for the area within the current urban growth boundary [acres of parks and open spaces (26,380) / population (1,281,470) = 20.6 acres per 1,000 population]. If the current ratio of acres of park per 1,000 persons were maintained, during the years 2000 to 2022[3], this would mean that an additional 10,846 acres of park land would be needed. [current park per 1,000 population ratio (20.6 acres per 1,000 people) x projected population increase 2000 - 2022 (558,200[4]) = 10,856 acres. Rounded to the nearest 10 acres - 10,860 acres].

Some assumptions need to be made about open space. First, it is assumed that existing public lands will remain in public ownership and not change use. For private lands, a

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[1] See Table 1 Open Space By Type within the Metro UGB

[2] The latest figure for the population of the Metro urban growth boundary is the U.S. Census Bureau enumeration of the population within the Metro UGB as of April 1, 2000.

[3] Metro's Periodic Review of the Urban Growth Boundary, is designed to be consistent with the State requirement for a 20 year period capacity. Given that the latest population figure is for the year 2000, the analysis is being done for the years 2000 through 2022.

[4] This number uses the 2022 population figure for the four county area and then applies a 75% capture rate less the 2000 UGB population to estimate the future additional population within the urban growth boundary. A 70% capture rate would yield a figure of 521,000 additional people.

decision will need to be made as to whether to assume that private open spaces (such as private golf courses, etc.) will remain in open space use and not be converted to other urban uses.

In addition, assumptions will need to be made concerning whether the demand for all types of open spaces will remain the same to drive acquisition and reservation of open spaces. For example, will demand for golf courses decrease, increase or stay the same over the next twenty years? The existing ratio approach assumes that despite changing demographics (age, income, household size, ethnicity, etc.) that demand for open space, overall, will remain the same. (Evidence from 1977 indicates that there were about 14,926[5] acres of open space within what would become the first urban growth boundary area for the metropolitan area. The closest estimate of population for the UGB at that time was the 1980 estimate of 977,891 people[6]. Accordingly, the ratio of acres of open space per 1,000 people in 1977 of 15.3 acres per 1,000 population was significantly less than the present, year 2000/2002 ratio 20.6.)

In past estimates using this approach, a portion of the need for new open space was assumed to be satisfied through new open spaces acquired outside the region's urban growth boundary. This assumption was made when Metro had substantial bond measure funds to support these acquisitions. At the present time, these regional funds have been largely expended in the acquisition of greenspaces. Metro is considering what the next open space priorities are, including providing access and maintenance for newly acquired and existing open space lands and/or to secure funds for additional open space acquisitions. In addition, the time horizon for this newest capacity analysis has changed from 1997-2017 to 2000 to 2022. Accordingly, a decision will need to be made about whether any portion of the newest twenty year need can reasonably be satisfied by acquisitions outside the urban growth boundary.

Unless existing policies and funding sources are greatly changed, this estimate is likely to greatly overestimate the actual number of acres of open space provided (in contrast to what may be needed) in the next twenty years. It would provide a benchmark for what it takes to simply maintain the current ratio of people and open space within the region.

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[5] Source: *Urban Growth Boundary Findings*, Metropolitan Service District, November, 1979, pages 9 and 10 with 1977 acres cited for "Parks and Open Spaces".

[6] Source: *Metro Regional Data Book*, Metro, November, 1999, page 16 figure for "Inside Metro" used. While this population estimate is slightly larger than the area within the urban growth boundary, it is likely quite close to the number of people within the UGB at that time. More recent population figures cited in the table for the UGB and Metro jurisdictional boundary for later years show this close relationship.

Table 1
Open Space By Type within the Metro UGB

as of January 2002

Ownership	Open Space Type	Acres
private	Park	130
public	Park	16,321
private	Open space	188
public	Open space	3,310
private	Common area of a subdivision or condominium complex.	1,323
public	Common area of a subdivision or condominium complex.	67
private	Cemetery	904
public	Cemetery	510
private	Golf course	1,394
public	Golf course	1,669
public	Pool	18
private	Tennis Courts	6
public	Tennis Courts	9
private	Fairgrounds/stadium use	21
public	Fairgrounds/stadium use	89
private	Community center	11
public	Community center	336
private	Trail/Path	4
public	Trail/Path	57
public	Community Garden	12
Total		**26,380**

Source: Metro
DRC J.O.
Price 2/11/02

Active and Passive Parks Estimate Approach

As noted above, this approach is intended to separate out active parks from passive parks. Active parks like playgrounds and ball fields require relatively flat lands that if in private ownership, would likely be very suitable for urban development including urban residential and probably urban commercial or industrial uses. These lands are sites or portions of sites without wetlands, streams or other features that would preclude active use. These sites are also generally very flat with perhaps no more than 2 percent slopes. This approach also suggests that additions of large natural tracts of land such as Forest Park and Tryon Creek State Park are not likely to be added to the parks inventory within the current urban growth boundary.

This approach analyzes the existing open space inventory within the Metro urban growth boundary to determine what percent of these open spaces met the definition of active open space. This analysis would then provide the basis for a ratio of acres of active open space per 1,000 population. Like the Existing Ratio approach, this existing ratio would be extrapolated for the next twenty years. The estimate of passive open space will be provided at a later date when the regional fish and wildlife habitat program estimate is prepared.

One approach to estimating active parks was to select active types of parks and open spaces from the total inventory of parks and open spaces from Table 1. That is, the categories of: park, open space, pool, tennis courts, fairground / stadium, community centers and community gardens were selected (leaving out common areas, cemeteries, golf courses and trail/paths). This yields a total of 20,160 acres of these types of parks and open spaces. From these lands wetlands, steep slopes adjacent to streams regulated by Metro's Title 3 were deleted and the riparian corridor draft inventory from Metro's Fish and Wildlife Habitat Protection Plan (Goal 5) was deleted, leaving 5,254 acres of "active "park and open space lands." Using this acreage and establishing a ratio of existing "active" parks to population, an estimate of 2,290 acres is derived. (The existing ratio is derived by the following: 5,254 acres/1,281,470 people = 4.1 acres per 1,000 population. Then for additional future active parks, 4.1 acres per 1,000 population x 558,200 = 2,288 acres, rounded to the nearest 10 acres, this is 2,290 acres).

Metro staff also looked at the parks within the urban growth boundary and characterized them as either active or passive. Using the ratio method also, an estimate of an additional 2,400 acres of active parks was derived. Each method has its drawbacks, with the first method discounting areas like Delta Park, which is a floodplain but has baseball, soccer and other playgrounds. The second method overlooks pockets of flat areas within larger open spaces like Tryon Creek State Park which are used for active uses.

The Active Parks approach is likely to more closely approximate actual new open space acres added to the existing inventory as compared with the Existing Ratio method. However, it too assumes that sufficient funding to establish new active open space is available.

The other part of the approach is to look at passive or greenspace parks. This approach is dependent on the Greenspaces Regional System Plan that has yet to be adopted.

Purchases based on this could be forecast if additional funding is available. From a more site specific standpoint, the Metro Fish and Wildlife Habitat Protection Plan (Goal 5) again, yet to be developed, will provide detailed locations that can be estimated for their job and housing capacity implications. When the Fish and Wildlife Habitat Protection Plan is completed, the extent of regulations will be known and capacity calculations made. These calculations are not a part of this effort because this program is not yet completed.

Fiscal Resource Approach

The fiscal resource approach uses estimates of public funds available for acquisition of open space of all types. It is based on a survey of local governments - cities, counties and special districts - that have the authority to exact system development charges for parks. Table 2 illustrates the current SDC's charged by local governments within the region and a possible range of acres of parks that could be added. This approach is based on the current fiscal capabilities of local governments to actually acquire parks. This is in contrast to the first two methods that illustrate future park needs, but are not grounded in the ability to produce new parks.

Another source of funds is bond measures. Metro's open spaces, parks and streams bond measure was approved by voters in May 1995. The bond measure's primary goal is to purchase natural areas, trails and greenways to be held for future use as parks, trails and fish and wildlife habitat. Most of the monies have been expended and the acquisitions accounted for in Table 1 above. However, there is a remainder that Metro Parks and Greenspaces staff have indicated are parcels under contract or essential sites pending sale. With the current Urban Growth Boundary, these sites amount to about 101 acres.

Accordingly, using the fiscal method and including the remaining regional bond measure funds as well as local government system development charges, a range of between 1,177 acres and 3,035 acres are estimated (101 + 1,076 = 1,177acres, 101 + 2,934 = 3,035 acres).

The range in this estimate is based on several factors. First, the cost of land can vary greatly within the urban growth boundary. From a cost appraisal standpoint, if a property is steeply sloped, has wetlands or a stream, that portion may not be as developable (it has greater development costs) than a site that is flat and free of such development impediments. The flatter, more developable sites, if used for parks, are likely to have higher development costs. That is, the costs of playground and fields, grading, irrigation systems, parking, etc. are higher than for sites to be left in a natural state.

A flatter site is also more likely to be conducive to more intensive uses and is more valuable - it has a greater capacity to accommodate jobs or housing. The sites that are lower cost have less development potential and acquisition dollars can buy more land. The sites with higher costs have much more development potential and much greater capacity to accommodate new jobs or housing. Accordingly, the lower estimate (1,177 acres) is likely to better reflect the housing and job capacity loss than the higher estimate that would likely involve much less developable lands.

METRO

Table 2. Estimate of Acres of Additional Future Parks based on Park System Development Charges

Jurisdiction	Functional Plan - Total Residential Capacity d	Functional Plan Mixed Use e	Units Permitted 1997 - 2001 Single Family	Multi-Family	Remaining Capacity Single Family	Multi Family	Park SDC SF	Park SDC MF Other	Total $	Acreage @ $75,000/acre	Acreage @ $150,000/acre
Beaverton a	13,635	9,019	751	566	3,865	8,453	$2,271	$1,746	$ 23,536,353	235	86
Cornelius	1,285	48	172	32	1,065	16	1,202	1,202	$ 1,299,362	13	5
Durham	243	-			243	-	1,320	1,320	$ 320,760	3	1
Fairview	2,929	635	509	196	1,785	439	1,031	1,031	$ 2,292,944	23	8
Forest Grove	3,054	67	551	106	2,436	(39)	1,295	1,295	$ 3,104,115	31	11
Gladstone	880	20	54	24	806	(4)	-	-	$ -	-	-
Gresham	16,920	3,146	1,710	1,576	12,064	1,570	1,038	1,038	$ 14,152,092	142	52
Happy Valley	2,558	52	456	2	2,050	50	1,500	1,500	$ 3,150,000	32	12
Hillsboro	14,896	9,758	2,413	2,188	2,725	7,570	1,748	1,748	$ 17,995,660	180	66
Johnson City	38	-			38	-	-	-	$ -	-	-
King City	100	55	1	-	44	55	-	-	$ -	-	-
Lake Oswego	4,049	446	435	48	3,168	398	1,985	1,350	$ 6,825,780	68	25
Maywood Park	12	-	5	2	7	(2)	-	-	$ -	-	-
Milwaukie	3,188	2,571	101	36	516	2,535	950	620	$ 2,061,900	21	8
Oregon City	7,994	341	1,373	231	6,280	110	2,148	1,913	$ 13,699,870	137	50
Portland	71,036	26,960	4,109	6,067	39,967	20,893	1,563	1,007	$ 83,507,672	835	306
Rivergrove	20	-		-	20	-	-	-	$ -	-	-
Sherwood	5,216	1,108	1,052	6	3,056	1,102	3,988	3,115	$ 15,620,058	156	57
Tigard b	6,308	981	910	210	4,417	771	1,679	870	$ 8,086,913	81	30
Troutdale	3,260	107	256	202	2,897	(95)	790	790	$ 2,213,580	22	8
Tualatin	4,009	1,248	328	3	2,433	1,245	1,400	1,400	$ 5,149,200	51	19
West Linn	3,732	-	640	31	3,092	(31)	8,400	5,939	$ 25,788,691	258	95
Wilsonville h	4,425	743	390		3,292	743	2,142	1,628	$ 8,261,068	83	30
Wood Village	458	68	10	431	380	(363)	-	-	$ -	-	-
Clackamas Co. c, g	12,540	1,661	1,773	264	9,106	1,397	950	620	$ 9,516,840	95	35
Multnomah Co.	n/a	-	148	80	n/a	(80)			$ -	-	-
Washington Co. a,g	51,649	13,273	6,506	1,059	31,870	12,214	2,271	1,746	$ 46,851,207	469	172
Total	**234,434**	**72,307**	**24,653**	**13,360**	**137,622**	**58,947**			**$293,434,065**	**2,934**	**1,076**

a - Tualatin Hills Parks & Recreation District
b - $1,679/ SF detached, $1,054/SF attached
c - North Clackamas Parks and Recreation District

For $75,000/acre land, assumes 75 % of collected SDC's used for land acquisition, balance for improvements.
For $150,000/acre land, assumes 50 % of collected SDC's used for land acquisition, balance for improvements

d - total dwelling unit capacity from Metro compliance data for Table 1, Title 1 as of March 20, 2002.
e - from Metro Functional Plan, Table 1, Title 1, Mixed Use area dwelling units - Assumes complete compliance with Title 1 targets for mixed use.
g - A portion of unincorporated Washington County is within the Tualatin Hills Park and Recreation District. 50 % is assumed to be covered by THPRD
h - No compliance report numbers available. Metro Functional Plan Table 1, Title 1 targets used.

Parcel Size Demand Analysis for Employment Need

Year 2000 employment by industry classification

JOBS BY INDUSTRY

SIC	JOBS	Description
01-17	65,590	Construction & Mining
20	7,277	Food Processing
22,23	2,323	Textile & Apparel
24	5,206	Lumber
25,32,39	7,530	Misc. other dur. mfg.
26	3,047	Paper
27	9,919	Printing & Publishing
28-31	6,394	Misc. other nondur. mfg.
33,34	17,665	Metals
35	13,497	Machinery Equipment
36,38	34,650	Electronics & Instruments
37	12,461	Transport. Equipment
40(A)	35,917	Transport & Distribution
40(B)	18,428	Communications. & Utilities
50,51	61,756	Wholesale Trade
52-59	136,859	Retail Trade
60-67	57,142	Fin., Insur., Real Estate
737	17,874	Software services
75,76	11,440	Repair services
80,83	76,036	Medical services
70-89(X)	163,142	Other services
90-99	32,721	Government
	796,874	

Tabulate industry employment by building type & by firm size

DISTRIBUTION OF EMPLOYMENT BY FIRM SIZE & BUILDING TYPE

jobs by employment size per SIC	WD	GI	T/F	Office	Retail	Med/ Gov	total
less than 10	22,757	25,281	5,020	49,376	20,824	14,367	137,625
10 to 49	27,854	33,179	8,182	51,930	50,293	18,004	189,442
50 to 99	17,262	20,064	5,154	36,284	24,147	11,948	114,859
100 to 149	8,892	10,125	3,825	18,458	11,773	7,452	60,525
150 to 199	4,220	7,593	1,007	12,362	6,755	5,500	37,437
200 to 499	10,667	22,996	12,395	28,640	16,566	17,059	108,323
500 to 999	7,356	8,552	8,085	16,866	3,787	10,786	55,432
1,000 to 1,999	7,554	7,092	11,000	9,517	2,714	9,984	47,861
2,000 to 2,999	2,551	2,530	8,144	2,412	0	7,386	23,023
3,000 or more	0	0	3,209	12,867	0	6,271	22,347
	109,113	137,412	66,021	238,712	136,859	108,757	**796,874**

Tabulate number of firms by building size

DISTRIBUTION OF FIRMS BY SIZE & BY BUILDING TYPE

firms by employment size per SIC	WD	GI	T/F	Office	Retail	Med/ Gov	total
less than 10	6,058	7,165	1,410	13,905	4,944	3,682	37,164
10 to 49	1,338	1,554	367	2,426	2,373	855	8,913
50 to 99	243	288	72	522	351	171	1,647
100 to 149	73	83	31	153	98	62	500
150 to 199	25	44	6	72	40	31	218
200 to 499	36	76	45	102	60	54	373
500 to 999	11	13	12	26	6	17	85
1,000 to 1,999	5	5	9	7	2	6	34
2,000 to 2,999	1	1	3	1	0	3	9
3,000 or more	0	0	1	2	0	2	5
	7,790	9,229	1,956	17,216	7,874	4,883	**48,948**

Employment Forecast

EMPLOYMENT BY REAL ESTATE TYPE: 2000-25 Regional Forecast

	2000	2005	2010	2015	2020	2025	2000-25
WD	103,861	111,891	124,470	134,094	144,087	155,067	**51,206**
GI	152,433	159,358	172,662	178,464	185,334	192,864	**40,431**
TF	77,124	89,041	101,039	108,073	115,964	125,024	**47,899**
office	251,182	279,978	319,275	358,900	401,616	449,505	**198,323**
retail	168,110	184,760	207,030	225,610	245,260	266,320	**98,210**
med/gov	205,310	218,462	244,204	267,979	295,439	326,720	**121,410**
total	**958,020**	**1,043,490**	**1,168,680**	**1,273,120**	**1,387,700**	**1,515,500**	**557,480**

Compute percentage of firms by firm size

DISTRIBUTION OF PAST EMPLOYMENT BY FIRM SIZE

	WD	GI	TF	office	retail	med/gov
Firm size by jobs						
less than 10	21%	18%	8%	21%	15%	13%
10 to 49	26%	24%	12%	22%	37%	17%
50 to 99	16%	15%	8%	15%	18%	11%
100 to 149	8%	7%	6%	8%	9%	7%
150 to 199	4%	6%	2%	5%	5%	5%
200 to 499	10%	17%	19%	12%	12%	16%
500 to 999	7%	6%	12%	7%	3%	10%
1,000 to 1,999	7%	5%	17%	4%	2%	9%
2,000 to 2,999	2%	2%	12%	1%	0%	7%
3,000 or more	0%	0%	5%	5%	0%	6%
	100%	**100%**	**100%**	**100%**	**100%**	**100%**

Forecast of Number of Firm by Size

FORECAST OF THE NUMBER OF FIRMS BY FIRM SIZE

Firm size by jobs	WD	GI	TF	office	retail	med/gov
less than 10	2136	1488	728	8204	2988	3208
10 to 49	436	325	198	1438	1203	670
50 to 99	108	79	50	402	231	178
100 to 149	33	24	22	123	68	67
150 to 199	11	13	4	59	28	35
200 to 499	14	19	26	68	34	54
500 to 999	5	3	8	19	4	16
1,000 to 1,999	2	1	5	5	1	7
2,000 to 2,999	0	0	2	1	0	3
3,000 or more	0	0	1	3	0	2

(BASED ON PRESENT EMPLOYMENT PATTERN)

Forecast of Lot Size Need

NUMBER OF LOTS NEEDED BY PARCEL SIZE & BUILDING TYPE - 2000-2025

	WD	GI	TF	office	retail	med/gov	LOT SIZE DEMAND IND	COM
under 1	1,139	1,678	807	9,793	4,217	3,677	3,624	17,686
1 to 5	1,215	242	183	464	312	473	1,639	1,249
5 to 10	240	18	18	44	23	40	275	107
10 to 25	119	13	23	16	5	36	155	57
25 to 50	16	2	7	3	-	9	25	11
50 to 100	10	-	5	3	-	5	16	8
100 plus	6	-	1	-	-	-	7	-

WD :: Warehouse & Distribution
GI :: General Industrial
TF :: Tech / Flex Space

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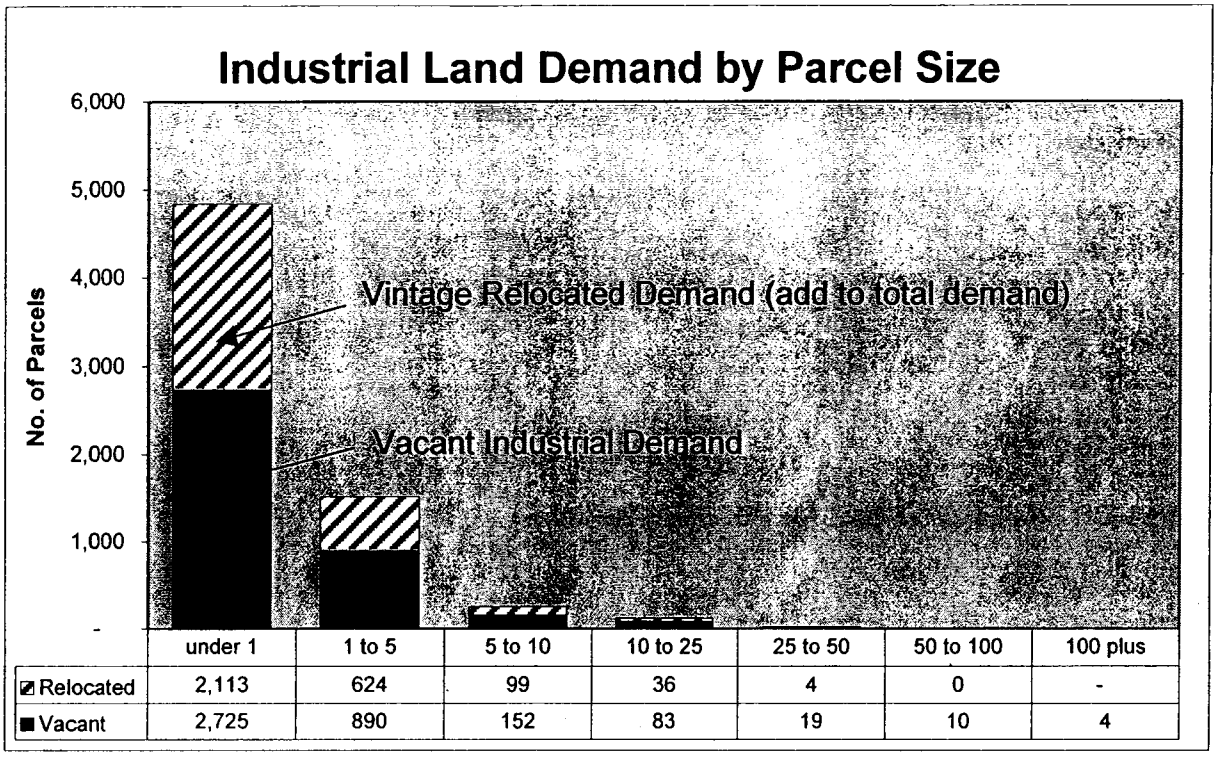
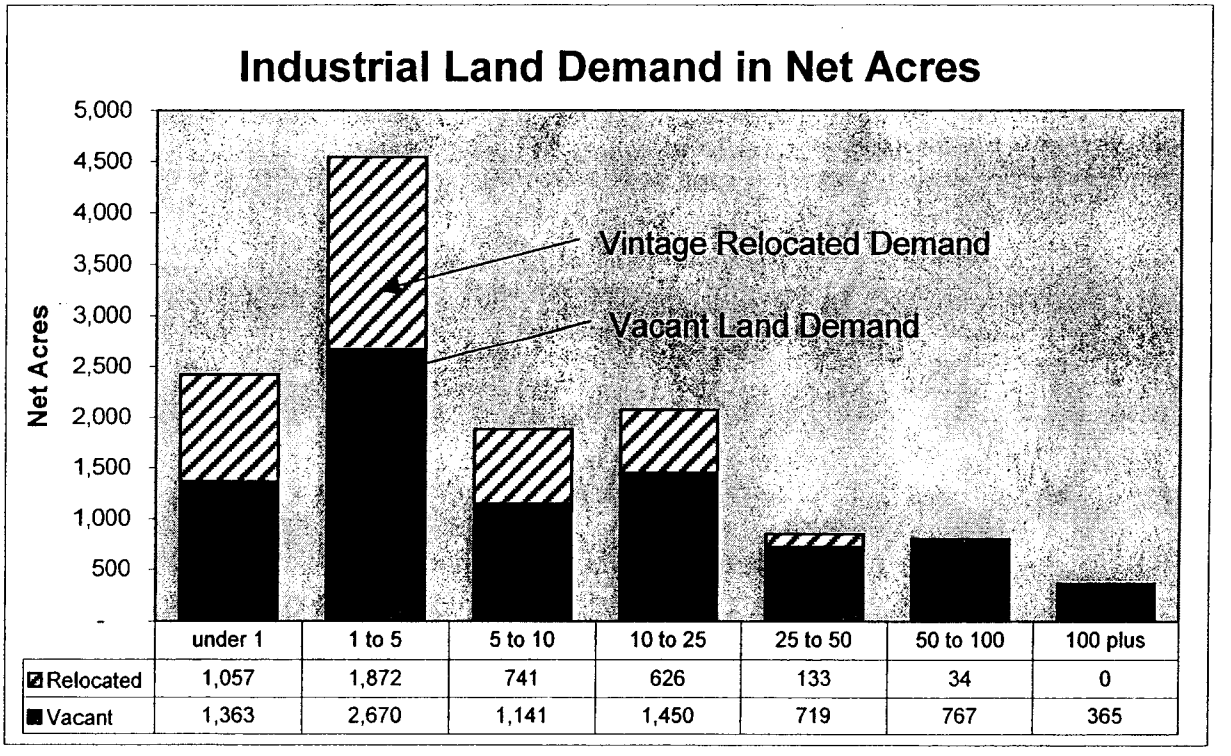


	under 1	1 to 5	5 to 10	10 to 25	25 to 50	50 to 100	100 plus
Relocated	2,113	624	99	36	4	0	-
Vacant	2,725	890	152	83	19	10	4

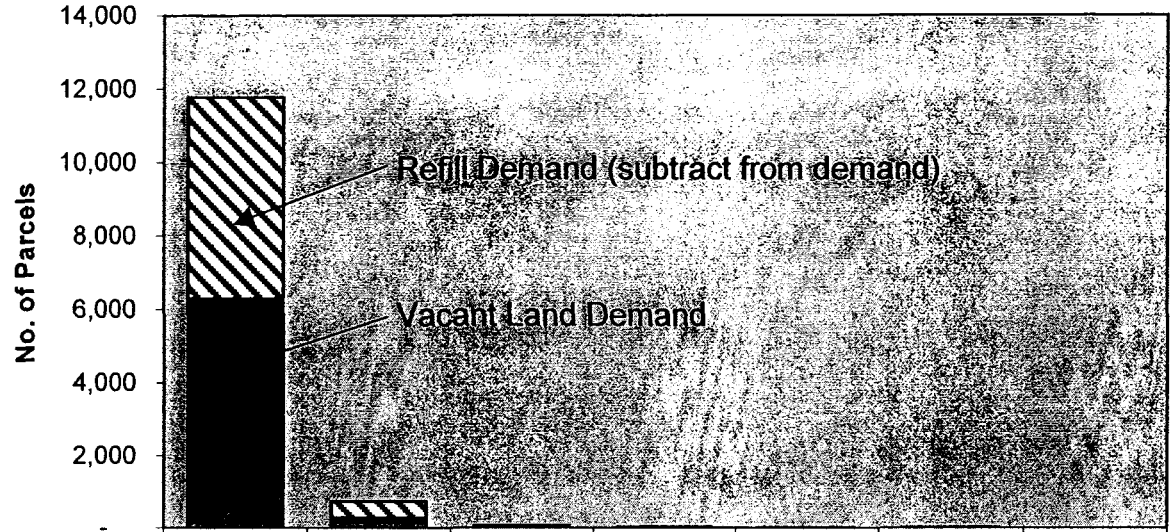


	under 1	1 to 5	5 to 10	10 to 25	25 to 50	50 to 100	100 plus
Relocated	1,057	1,872	741	626	133	34	0
Vacant	1,363	2,670	1,141	1,450	719	767	365

Acre demand estimates are not as precise as Metroscope's parcel level land accounting system versus this aggregate calculation method to estimate the range of lot size need.

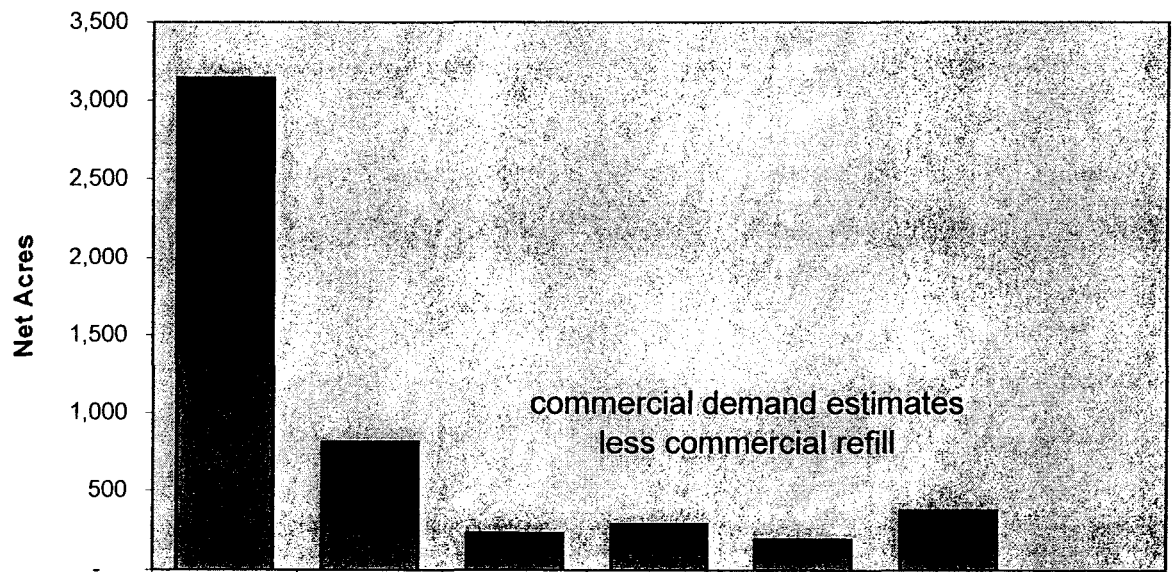
DRAFT

Commercial Land Demand by Parcel Size



	under 1	1 to 5	5 to 10	10 to 25	25 to 50	50 to 100	100 plus
Comm. Refill	5,499	450	33	11	1	-	-
Vacant	6,286	271	31	16	5	5	-

Commercial Land Demand in Net Acres



	under 1	1 to 5	5 to 10	10 to 25	25 to 50	50 to 100	100 plus
Commerical	3,143	813	230	289	192	375	-

Acre demand estimates are not as precise as Metroscope's parcel level land accounting system versus this aggregate calculation method to estimate the range of lot size need.

June 26, 2002

DRAFT (05/16/2002)

To: MPAC

From: Dave Lohman, Chair, MPAC Jobs Subcommittee

Chapter 1 Subject: Subcommittee Report and Recommendations

The MPAC chair established the jobs subcommittee to address the following issues:

- Recommend whether or not Metro should expand the UGB for industrial uses (especially large lot) and where.
- Review and comment on Metro proposals for increasing jobs in centers.
- Recommend possible changes/additions to the Regional Framework Plan and/or functional plan.
- Recommend whether there is a need for UGB expansion for non-industrial purposes.

In turn, the Jobs Subcommittee established the following guidelines to direct its work and to better define its recommendations:

a) The recommendations should attempt to ensure a healthy economy for all parts of the region, including Clark County. This includes, to the degree possible, ensuring land supply and policies that enable all 24 cities and the three counties to benefit from a healthy regional economy.
b) The recommendations should attempt to ensure success within the 2040 Growth Concept priority land use types: the Central City, Regional Centers, Industrial Areas, and Inter-modal Facilities. Opportunities within Town Centers, Light Rail Stations and Main Streets should also be afforded.
c) The recommendations should recognize and build on key industries and their unique locations while enabling new opportunities elsewhere.
d) The recommendations should recognize the role of the Regional Centers, not as competitors to the Central City but as complementary. Regional Centers should provide for governmental, cultural, service and retail opportunities.
e) The recommendations should recognize the need to coordinate growth management efforts with existing and emerging economic goals.
f) The recommendations should recognize that decisions are best guesses based on current information and, as it is difficult to predict the future there needs to be flexibility in the process to allow for evolving industrial needs. Metro needs to give itself the flexibility and the State needs to allow Metro to respond to rapid changes in land supply.

Therefore, given its charge and following its own guidelines, the subcommittee is forwarding the following recommendations for MPAC consideration. The recommendations will establish the basis for developing a recommended alternative for the UGB, under Metro's Periodic Review program, for employment land and jobs.

This memo contains 9 recommendations for MPAC to consider. Under each recommendation there is a description of the issues the recommendation is addressing as well as a series of supporting statements. Attached to the memo is a table outlining

tools for implementing the recommendations. These are tools for Metro as well as for Metro's partners including the local jurisdictions, Tri-Met, State agencies, the Port and others.

Recommendation 1: Metro should develop strategies to maximize, to the degree possible, the employment capture rate for the combined Portland-Vancouver Urban Growth Boundary/Urban Growth areas.

Issue:
Recommendation 1 is consistent with subcommittee guidelines and establishes a basis for addressing the committee's charge. The subcommittee believes the higher capture rate will ensure economic prosperity for the region and its citizens, better enable local governments to meet infrastructure and service responsibilities, and create a better balance of jobs, shopping, and housing throughout the region. Therefore, the subcommittee recommends establishing a policy, economic and technical framework that will maximize the capture rate rather than setting an aspirational capture rate to be achieved. In these efforts it is important to work in coordination with the neighboring cities.
Supporting Statements:
1. Develop strategies to minimize the variation in employment capture rate.
2. Work in coordination with neighboring Cities toward mutual employment benefits.
3. Develop mitigation strategies to address any unintended consequences resulting from a high employment capture rate; adjust as appropriate.
4. Develop strategies to support jobs in Centers and Industrial Areas.

Recommendation 2: Metro should support diverse and distributed job growth, throughout the region, within the framework of 2040.

Issue:
Metro has an interest in supporting strong communities. A healthy regional economy that is diverse and where employment opportunities are distributed throughout region is a significant element in this support. Efforts should be placed on building on key industries and their unique locations while enabling new opportunities elsewhere.

Supporting Statements:
1. Provide opportunities to coordinate and monitor regional economic activity in support of Policy 1.
2. Develop strategies to support jobs in Centers and Industrial Areas.
3. Develop strategies to ensure a healthy economy for all parts of the region, including Clark County.
4. Develop mechanisms for the various economic development agencies to work together for the mutual benefit of all.

Recommendation 3: Metro should provide adequate lands for a balance of jobs throughout the region to create complete communities, pursuant to the 2040 Plan.

Issues:
Complete communities, as the term is used in this recommendation, means ensuring fiscal balance and a sufficient tax base and providing opportunities for citizens to live closer to their workplaces. Communities need sufficient non-residential land to ensure there is an adequate tax base to provide basic services to their citizens. In addition,

there is a need to address the imbalance in commuting practices across the region. Such commuting patterns result in morning peak flows towards jobs-rich areas, and afternoon peak flows towards jobs-poor areas. Adequate, appropriately located land supply may not be sufficient by itself to off-set these trends, but it is a tool that can help moderate the problem. Metro should support regional economic development activities and land supply should accommodate opportunity for new and expanding clusters.

Supporting Statements:
1. Develop strategies to ensure fiscal sustainability is achieved by all jurisdictions.
2. Develop a definition of complete communities as described by this recommendation.
3. Assist local governments to meet their goals for becoming complete communities within their vision for implementing 2040.
4. Recognizing that complete communities may transcend jurisdictional boundaries, assist in developing a coordination mechanism for jurisdictions on these issues.
5. Develop an understanding of the regional commute flows and patterns.
6. Support existing and emerging regional economic development strategies.
7. Develop strategies to ensure a healthy economy for all parts of the region.

Recommendation 4: Metro should ensure a sufficient supply of large sites in the region to maintain and attract industry.

Issues:
Large parcels are important to economic development. The forecasted 20-year demand for 15 large parcels (over 50 acres in net land area) accounts for only one percent of the total parcels, but is forecasted to accommodate approximately 13,500 industrial workers or 14% of the future industrial job growth. The location, configuration and availability of parcels are also important development considerations. As the available land supply tightens, the ability for the region to fully address market requirements, particularly from large industrial land users may be lost.

Despite the recent slow down in national and regional economic activity, industrial job growth is expected to increase. Not all industrial designated land is used by industrial sectors. Uses such as restaurants, retail athletic clubs, churches, training/education and public facilities currently occupy about 20 percent of the industrial land base. Most local zoning ordinances allow some level of ancillary retail and commercial uses within industrial zones. On the other hand, not all jobs in industrial sectors require vacant industrial designated land. It is estimated that 15 percent of new industrial jobs can be accommodated within commercial buildings or through redevelopment. The distribution of industrial jobs as a percentage of all jobs tends to vary widely by location and land use designation.

Supporting Statements
1. Develop strategies that consider all types of industrial uses.
2. Determine the infrastructure needed in order to attract industrial users to existing and new industrial areas.
3. Develop strategies for ensuring necessary infrastructure is in place in existing areas and areas targeted for future industrial development.
4. Recognize that there is a finite amount of particular categories of industrial land due to unique location needs; some uses have particular location requirements that cannot be accommodated by simply adding more acreage to the UGB at arbitrary spots.

5. Develop strategies to improve Tier C sites to Tier B sites and Tier B sites to Tier A sites.
6. Identify sufficient large industrial parcels (over 50 acres in net land area) that can be developed over the next 10 years consistent with the findings of the RILS Study.
7. Recognize the importance of existing industrial clusters and the potential for new industrial clusters when identifying appropriate large lot locations.

Recommendation 5: Land zoned industrial should be used for industrial development and exceptions should only be allowed where some other use collaterally supports industrial development.

Issues:
The current scarcity of suitable industrially zoned sites in the region is becoming critical, and remedies generally take eight to ten years to effect. Nevertheless, it must be recognized that some Industrial Areas may need to include some limited retail commercial uses to serve primarily the needs of people working or living in the immediate surroundings, not larger market areas outside of the employment or industrial areas. It also must be recognized that some areas currently zoned "industrial" are financially marginal and may require some commercial activity to bring the redevelopment cost/benefit ratio within the realm of financial feasibility.

Supporting Statements:
1. Recognize the historical tendency for non-industrial uses to develop on land needed for industrial purposes, eroding the industrial land supply.
2. Develop new provisions that monitor the rate of conversion of industrial land, compare the changing supply to forecasted need and compensate as needed. Such a policy or strategy may compel periodic expansion of the Metro UGB to off-set changing industrial zoning to commercial or mixed use zoning. In considering need for additional sites, look at lost capacity as well as acreage.
3. Land brought into the UGB for industrial purposes should be designated as Industrial Areas on the 2040 Growth Concept and Title 4 maps. Any proposals to change the designation of the site would need to come before the Metro Council. The Metro Code needs to be amended to include clear standards that would need to be met before a change in the designation is permitted.
4. Existing 2040 Industrial Area designation cannot be removed without a demonstration that the site is no longer suitable for industrial purpose and demand for industrial areas can be accommodated within the UGB. The Metro Code needs to be amended to include clear standards that would need to be met before a change in the designation is permitted.
5. Define employment and industrial uses more clearly in Title 4 of the Functional Plan and consider broadening the language to restrictions on more than just large-scale retail uses.
6. Recognize that some industrial areas will only redevelop as commercial so that other industrial lands may need to be identified to meet demand. However, such commercial redevelopment should reduce demand for new vacant commercial land.
7. Recognize that some non-industrial uses are appropriate and necessary to support the primary industrial uses but others are not. The types of non-industrial uses that would be appropriate or inappropriate in an industrial area should be specified. This analysis and prescription should include an examination of the patterns and appropriateness of community services or institutional uses in industrial areas.

8. New non-industrial uses should be strictly prohibited in already-developed, active industrial sites.

Recommendation 6: Metro should identify, monitor and ensure a sufficient amount of land available for existing and new distribution and inter-modal facilities adjacent to regional freight corridors.

Issues:
The Metro-area economy is based, in part, on traded sector jobs that rely on warehousing, distribution and inter-modal facilities to move goods in and out of the region. While, warehousing and distribution traditionally have tended to be lower density and often were not the first choice for jobs and tax base within any particular jurisdiction, warehouses today are more than a big box for storage. Modern warehousing practices add value to the product on site through activities such as customizing and packaging. There are more employees and more equipment which means there is more investment in warehousing today than previously.

Warehousing is tied to "just in time" delivery schedules that require a high level of transportation access. Warehousing has specific location needs and the identification and monitoring of suitable sites is key.

Supporting Statements:
1. Develop strategies to ensure appropriate locations of these land uses (warehousing, distribution, and inter-modal facilities) that best utilize existing and planned transportation infrastructure.
2. Develop strategies to ensure jurisdictions are working together to accommodate these industries in appropriate locations within the region.
3. Identify and track availability of suitable warehouse, distribution, and inter-modal facility sites in the region, including their capacity.
4. Pursue partnerships with neighbor cities including those in Clark County for accommodating these uses.
5. Identify research needs in area of data collection on freight movement and its relationship to land supply and location.

Recommendation 7: Ensure an adequate inventory of a variety of parcel sizes of sites for industrial use are available.

Issues:
Differing supporting industries for a major industrial use need differing site sizes and a variety of parcel sizes will allow for clustering. The variety of parcel sizes will assist in building in flexibility for an evolving industrial environment. In addition, smaller sites will allow for appropriate commercial uses to serve employees and businesses in industrial areas. The provision of a variety of parcel sizes is consistent with RILS findings

Supporting Statements:
1. Develop strategies that provides for UGB expansions, if needed, to ensure that there is a variety of parcel sizes for industrial use.
2. Ensure that the parcels are geographically dispersed.

Recommendation 8 has not been addressed by the Subcommittee. Staff has developed a list of preliminary issues to assist in the discussion of this recommendation.

Recommendation 8: Metro should encourage incentives for job-producing development in centers.

Issue:

- centers are key to achieving the 2040 growth concept goals to utilize land and infrastructure efficiently
- areas of compact, mixed use developments providing a community focus are integral to creating complete communities

Supporting Statements:

Recommendation 9 has been drafted based on discussions at the May 7, 2002 Jobs Subcommittee meeting.

Recommendation 9: Metro should develop transportation strategies to enhance the economy, particularly for the movement of freight and goods and to leverage uses in areas designated on the 2040 Growth Concept Map as Industrial, Employment and Centers.

Issues:

The transportation system, access and infrastructure, is a key component of economic vitality. To the degree possible, the region's transportation dollars, or some portion, should be allocated to projects that enhance the economy consistent with the 2040 Growth Concept.

Supporting Statements:

1. Include criteria in the MTIP process that give higher priority to projects that provide access to or circulation within centers and industrial areas. Consider ongoing centers and industrial land studies to identify key centers or industrial areas to ensure the potential effectiveness of the transportation investment.
2. Include criteria in the MTIP process that gives higher priority to projects that provide improved transportation access to existing and potential warehousing, distribution, and inter-modal facility sites.
3. State, regional and local funding sources should be directed towards enhancing economic development opportunities.
4. Work with the consortium to identify RTP projects that support economic development.
5. Using the Regional Transportation Plan, develop a 5 to 10 year transportation action plan for economic development and movement of goods.

Findings for Periodic Review

- recommendations/issues/supporting statements that potentially have an impact on the Executive Officer's recommendation to the Metro Council

Conclusions

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE 2000 REGIONAL TRANSPORTATION PLAN FINANACIAL CONSTRAINED SYSTEM; AMENDING ORDINANCE NO. 00-869A AND RESOLUTION NO. 00-2969B TO REFLECT RESOLUTION 02-3186	)))))	ORDINANCE NO. 02-945 Introduced by Councilor Rod Monroe

WHEREAS, Metro's 2000 Regional Transportation Plan ("RTP") is the regional "metropolitan transportation plan" required by federal law as the basis for coordinating federal transportation expenditures; and

WHEREAS, the Oregon Transportation Commission, on February 13, 2002, approved bonded financing of approximately $105 million of road, bridge and freeway expansion and preservation projects in ODOT – Region 1, pursuant to the Oregon Transportation Investment Act (OTIA) (see Exhibit "A"); and

WHEREAS, included in the bonding are funds which allows the U.S. 26/Jackson School Road interchange project to advance to project development and construction; and

WHEREAS, Washington County seeks to advance project development for widening of US 26 from Murray Boulevard to 185th Avenue, (see Exhibit "A"); and

WHEREAS, neither the interchange nor widening projects are in the 2000 RTP financially constrained system; and

WHEREAS, state and federal regulation require that no transportation project may be added to the RTP except that a Conformity Determination is prepared for such amendments showing that the newly included project shall not interfere with attainment or maintenance of air quality standards; and

WHEREAS, during Metro's preparation of an air quality Conformity Determination for the interchange and widening projects, local jurisdictions declared approved revisions they have made to the timing, scope or concept of projects currently included in the 2000 RTP financially constrained system, (see Exhibit A); and

WHEREAS, the 2000 RTP financial constrained system list was revised during performance of quantitative analysis of the interchange and widening projects to reflect the locally approved system revisions; and

WHEREAS, Resolution No. 02-3186 approves companion amendments to the 2002 Metropolitan Transportation Improvement Program (MTIP) and adopts the air quality conformity determination for those amendments and for the RTP amendments approved by this Ordinance that are summarized in Exhibit "A"; and

WHEREAS, Exhibit "B" of this ordinance contains the precise 2000 RTP amendments adopted by this Ordinance; now therefore

THE METRO COUNCIL ORDAINS AS FOLLOWS:

1. The revisions to the financial constrained system of the 2000 Regional Transportation Plan shown in Exhibit "B" are approved.

ADOPTED by the Metro Council this _____ day of _____, 2002.

_____
Carl Hosticka, Presiding Officer

Attest:

_____
Christina Billington, Recording Secretary

Approved as to Form:

_____
Daniel B. Cooper, General Counsel

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1. **Projects not currently included in 2000 Regional Transportation Plan financially constrained system:**

   - **Jackson School Road Interchange.** In February, 2002, pursuant to the Oregon Transportation Investment Act of 2001 (OTIA), the Oregon Transportation Commission (OTC) approved bond financing of this road project.

   - **US 26 (Murray Boulevard to 185th Avenue).** In the summer 2001, Washington County indicated its intention to design a project to widen U.S. 26 to three lanes in each direction from the Murray Boulevard Interchange to the 185th Avenue Interchange. Actual allocation the 04-05 MTIP funds to the PE project was made contingent on approval of a conformity determination supporting amendment of the 2000 RTP to include the project in the financially constrained system (Resolution No. 02-3186).

2. **Locally Declared Changes of Scope, Concept or Timing of projects in the 2000 RTP financially constrained system:**

Locally Declared Amendments to Financially Constrained RTP Network:

242nd Avenue Connector project (#2001): The project was split. The portion of 242nd between Glisan and Stark is currently 4 lanes, sidewalk on one side, no bike lanes or center turn lane. Multnomah County carries a project in its Capital Improvement Program to add a center (5th) turn lane, bike lanes and sidewalks on each side by 2005. **The 2005 network was modified to show 242nd: Glisan/Stark as a 5 lane section. The 242 Avenue: Glisan to I-84 section was delayed to the 2020 network.**

Network Change	RTP ID No.	Juris-diction	Facility	Termini	Project Features	RTP Year of Operation
2005 network	2026	Portland	NE/SE 99th Avenue Phase I/NE Pacific Avenue	NE 99th from NE Weidler to Glisan Street and NE Pacific Avenue from 97th to 102nd Avenue	Reconstruct primary local main street in Gateway regional center. **Model south leg of Glisan/99th intersection improvement (RTP #1266) as part of RTP #2026 and advance #2026 to 2005 network year.**	2006-10
2010 network	4022	Portland / Port	East End Connector	Columbia/US 30 Bypass: NE 82nd Avenue to I-205	Provide free-flow connection from Columbia Boulevard/82nd Avenue to US 30 Bypass/I-205 interchange;	2000-05

					widen SB I-205 on-ramp at Columbia Boulevard	
Model as 2-lanes, not 4	4065	Port/ Portland	South Rivergate Entry Overpass	South Rivergate	Construct overpass from Columbia/Lombard intersection to South Rivergate	2006-10
2005 network	7008	Clackamas Co.	147th Avenue Improvements	Sunnyside Road to 142nd Avenue	Realign 147th Avenue to 142nd Avenue	2006-10
2005 network	6128	Clackamas Co.	Carmen Drive Intersection Improvements	Carmen Drive/Meadows Road intersection	Add traffic signal, turn lanes, realign intersection	2006-10
2005 network	5204	Clackamas Co.	Stafford Road	Stafford Road/Rosemont intersection	Realign intersection, add signal and right turn lanes	2006-10
2005 network	5108	Clackamas Co.	Jennifer Street/135th Avenue Extension	130th Avenue to Highway 212	Two-lane extension to 135th Avenue and widen 135th Avenue	**Confirm current year of operation**
2005 network	3171	Cornelius/Wash Co.	Hwy 8/4th Ave Intersection	Intersection of 4th Avenue and couplet	Intersection improvement with signal	2006-10
Operational in 1998	2111	Multnomah Co.	207th Connector	Halsey Street to Glisan Street	Complete reconstruction of 207th Avenue	2000-05
Wallula to Birdsdale	2047	Gresham	Division Street Improvements	NE Wallula Street to Hogan Road	Complete boulevard design improvements	2000-05
Model as 2-lane not 4.	1037	Portland	Bybee Boulevard Overcrossing	Bybee Blvd/McLoughlin Blvd	Replace substandard 2-lane bridge with 4-lane bridge	2006-10
Glencoe to 268th/ Sewall	3130	WashCo/ Hillsboro	Evergreen Road Improvements	Glencoe Road to 15th Avenue	Widen to three lanes to include bikeways and sidewalks	2000-05

Chapter 5 2000 RTP Amendments

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4022 East End Connector
Construct an at-grade intersection connection from Columbia Boulevard at 82nd Avenue to US 30 Bypass/I-205 interchange and widen I-205 southbound on-ramp at Columbia Boulevard. This project is intended to better distribute traffic between Columbia Boulevard and Lombard Street. *(~~2000-2005~~2006-2010)*

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4065 South Rivergate Entry Overpass
Construct ~~an~~ two-lane overpass from the intersection at Columbia Boulevard and Lombard Street to South Rivergate entrance to separate rail and vehicular traffic. *(2000-2005)*

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1037 Bybee Boulevard Over-crossing
Replace existing bridge with a ~~4-lane~~ 2-lane bridge with standard clearance. *(2006-2010)*

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2001 Hogan Corridor Improvements
Construct a new interchange at I-84 and extend new interchange connection south to Glisan~~Stark~~ Street. *(~~2000-2005~~2010-2020)*

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2026 99th Avenue/Pacific Avenue Reconstruction - Phase 1
Reconstruct primary local main streets in Gateway Regional Center. *(~~2006-2010~~ 2000-2005)*

2047 Division Street Improvements
Boulevard retrofit of street from Wallula Street to ~~Hogan Road~~ Birdsdale Avenueincluding bike lanes, wider sidewalks, curb extensions and safer street crossings. *(2000-2005)*

Page 5-57

5021 Highway 224 Extension
Construct a new four-lane highway from I-205 to Highway 212/122nd Avenue. This project includes reconstruction of Highway 212/122nd Avenue interchange. *(2006-2010)*

7008 147th Avenue Improvements
Realign 147th Avenue to 142nd Avenue at Sunnyside Road to provide additional access into town center. *(2000-2005 ~~2006-2010~~)*

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5003 Sunrise Corridor
Construct a new four-lane highway from ~~I-205~~ 122nd to Rock Creek/152nd Avenue as an extension of the Highway 224 project (5021). Project includes construction of interchanges at

~~122nd Avenue,~~ 135th Avenue and the Rock Creek Junction~~, and modification of I-205 interchange~~. *(~~2000-2005~~2006-2010).*

Note, specific project development activities related to phasing, scope, land use planning and project financing of a full Sunrise Corridor project that serves anticipated growth in the Damascus and Pleasant Valley areas and provides a regional connection to US 26 are under discussion between FHWA, ODOT, Clackamas County, and Metro. Therefore, the scope, timing, and phasing of this project and the Financially Constrained System fo the RTP will be amended, as necessary, to reflect the results of those discussions.

(Note the project will be listed in the priroirty and preferred RTP networks.)

5024 Sunrise Corridor T[redacted]EIS
Corridor analysis from I-205 to US 26 to develop phasing recommendations adequate to support future right of way acquisition. (2000-2005)

(Note this project has been added to the Financially Constrained system and the Preferred and Priority systems. The project cost is $2 million)

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5108 Jennifer Street/135th Avenue Extension
Extend Jennifer Street to 135th Avenue and widen to three lanes. This project includes sidewalks and bike lanes. *(~~2006-2010~~ 2000-2005)*

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5204 Stafford Road
Realign the intersection and construct turn lanes at Rosemont Road. This project will include construction of a traffic signal. *(~~2006-2010~~ 2000-2005)*

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6128 Carmen Drive Intersection Improvements
Realign the intersection at Meadows Road, including a new traffic signal and turn lanes. *(~~2006-2010~~ 2000-2005)*

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3009 US 26
Widen US 26 to six lanes from Murray Boulevard to 185th Avenue. *(2011-2020)*

Page 5-75

3101 Jackson School Road
Construct interchange at US 26/Jackson School Road. *(2000-05)*

3130 Evergreen Road Improvements
Widen the street to three lanes from Glencoe Road to ~~15~~ 268th/Sewall Avenue. This project also will include sidewalks and bike lanes to improve safety. *(2000-2005)*

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3171 Highway 8/4th Avenue Improvement
Install a traffic signal. *(~~2006-2010~~ 2000-2005)*

STAFF REPORT

IN CONSIDERATION OF ORDINANCE NO. 02-945 FOR THE PURPOSE OF AMENDING THE 2000 REGIONAL TRANSPORTATION PLAN FINANCIAL CONSTRAINED SYSTEM; AMENDING ORDINANCE NO. 00-869A AND RESOLUTION NO. 00-2969B TO REFLECT RESOLUTION 02-3186

Date: May 7, 2002

Prepared by: Terry Whisler
Planning Department

This Ordinance amends the Regional Transportation Plan (RTP) financially constrained system to include the U.S. 26/Jackson School Road Interchange and widening of U.S. 26 to three lanes in both directions from Murray Boulevard to 185th Avenue. The RTP is also amended to reflect revisions to the scope, timing and/or concept of system projects that have been approved by local governments since adoption of the RTP in fall of 2000.

These actions will enable amendment of the Metropolitan Transportation Improvement Program (MTIP) to approve allocation of about $100 million of state bond funds, which derive from the 2001 Oregon Transportation Investment Act (OTIA), to 17 projects. Also, $359,000 of reserve STP funds will be freed for design of the widening project. Resolution No. 02-3186, pending, implements this programming and is shown in Attachment 1 of this staff report. The Resolution also approves a Conformity Determination prepared by Metro, which shows that the RTP actions and the related MTIP amendments will conform with the State Implementation Plan for maintenance of the region's air quality. The Executive Summary of this finding is included in Attachment 1.

BACKGROUND

Jackson School Road Interchange. The 2001 Legislature approved the OTIA bond program to address road, bridge and freeway capacity expansion and preservation needs throughout the state. ODOT - Region 1 received about $105 million of these funds, which were assigned to specific projects by the Oregon Transportation Commission on February 13, 2002 (see Exhibit 1 of the Resolution). One of these projects is the U.S. 26/Jackson School Road interchange. The interchange is actually located outside Metro's boundary but lies within the Portland air quality maintenance area (AQMA). Under agreements between Metro, ODOT and Oregon Department of Environmental Quality (DEQ), Metro is responsible for documenting that the newly authorized interchange will not adversely effect the region's air quality.

The 2000 RTP financially constrained system was shown to be consistent with air quality plans in a Conformity Determination approved by the U.S. Department of Transportation in January 2001. However, the RTP does not authorize a full interchange at Jackson School Road. Ordinance 02-945 is amending the RTP to include the project. This Resolution is amending the MTIP to program design and construction dollars for the project. This Resolution also approves a new Conformity Determination (see Exhibit 2 of the Resolution) showing that construction of the new interchange "conforms" with the State Implementation Plan's (SIP) provisions for assuring that automotive emissions will not cause deterioration of the region's air quality.

U.S. 26 Widening. In the summer of 2001, Washington County stated its intention to begin design of a project to widen U.S. 26 to three lanes in each direction between the Murray Boulevard and 185th Avenue interchanges. During the Priorities 2002 Update last fall, Metro assigned $359,000 of regional STP funds to a reserve account intended to help pay for a portion of the design work. However, as with the Jackson

School Road interchange, the widening project is not included in the conforming financially constrained system of the 2000 RTP. Design work cannot begin until the RTP is amended to include the project. This is accomplished by Ordinance 02-945. This Resolution amends the MTIP to assign the reserve dollars to preliminary engineering for the widening project and also approves the Conformity Determination that shows that both the RTP and the MTIP, as amended, will continue to conform with the SIP.

Miscellaneous Conformity Issues. During preparation of the Conformity Determination, Metro requested that local jurisdictions declare any modifications they may have approved to the timing, scope or concept of projects included in the 2000 RTP financially constrained system after its adoption. Approximately eight changes were declared to Metro and these are described in Ordinance 02-945. These changes were incorporated into Metro's regional model and are reflected in the quantitative portion of the Conformity Determination performed by Metro that calculates future anticipated regional automotive emissions. Two of the most obviously significant changes include:

- **East End Connector (82nd Avenue @ Columbia Boulevard): delay** of assumed operation from the 2005 to the 2010 analysis year. (This recognizes a schedule whereas the project will open after the 2005 summer ozone season. 2010 represents the next analysis year to capture project emissions.
- **I-84 to 242 Avenue Connector:** delay of assumed operation from the 2010 to the 2020 analysis year.

Sunrise Corridor. The status of the Sunrise Corridor arose during interagency consultation. During the 2002 MTIP Update, Metro allocated $2.0 million of planning money for refinement of corridor land use and transportation issues. Metro staff suggested that it would be appropriate to clarify distinctions in the RTP between projects approved for construction in the corridor and policies that address future planning and project concepts appropriate to the corridor.

Seventy three million dollars is reserved in the 2000 RTP financial analysis to improve the I-205/224 interchange and to provide a new four-lane connection to Hwy 212 at 122nd Avenue for truck volumes otherwise destined for the overburdened I-205/Hwy 212 Interchange. Elements of this project were reflected in a broader $180 million first phase concept of the Sunrise Highway (RTP #5003).

The RTP Preferred System endorses a broad set of improvements to the Sunrise Corridor, costing over $520 million and which encompass construction of a new four-lane highway from I-205 all the way to U.S. 26 in rural Clackamas County. The cost of such improvements goes beyond the region's reasonably anticipated revenues for the next 20-years. Additionally, significant land use issues concerning urbanization of the Damascus area is anticipated and should be addressed in conjunction with an overall Sunrise Corridor project.

In light of confusion between the RTP's presentation of immediate financially constrained project authority and its treatment of longer-term, unconstrained policies concerning the Sunrise Corridor, Metro staff made two revisions to the financially constrained system. First, a distinct "Hwy. 224 Extension" project from I-205 to the Highway 212/I22nd Avenue interchange was identified as project #5021 of the financially constrained system, costing $73 million. Second, a "Sunrise Corridor Tier 1 EIS: I-205 to U.S. 26" project was added as RTP #5024 for approximately $2.0 million. Project #5003 is retained in the Preferred system of the RTP.

The EIS project (#5024) includes $1.0 million of the funds allocated by Metro in the 2002 MTIP and anticipated ODOT and/or Clackamas County contributions toward the study. ODOT requested inclusion of the project in the system list to assure that the very broad termini of the study go beyond the concept of projects specifically endorsed by the RTP. Simultaneous with the EIS, Metro, in cooperation with

Clackamas County, anticipates using the second $1.0 million, approximately, to conduct Damascus-area land use analyses to help inform the EIS ~~Tier 1~~ alternatives analysis. Damascus area planning would occur only if significant land were brought into the UGB as a result of Metro's periodic review of the UGB.

TPAC Action. Clackamas County expressed concern that these actions might preclude the County's plans to obtain financing for the extension from 122nd to a Rock Creek terminus. More immediately, they are concerned that by defining the project termini as 122nd, a further terminus to 135th, which is presently under consideration, will be rendered infeasible. Metro staff agree that insufficient basis exists at this time to stipulate either a 122nd or a 135th interchange terminus. However, the 2000 RTP modeled a 122nd Avenue terminus for conformity purposes and that is the basis for the current conformity determination quantitative analyses. If, upon conclusion of the planning and environmental work currently in process a 135th Avenue, or other terminus is endorsed, Metro staff agrees that it would be appropriate to amend the project description and model characteristics at that time.

ANALYSIS/INFORMATION

1. **Known Opposition.** There is no known opposition to approval of these RTP amendments. As described above, Clackamas County has expressed concern with language regarding Sunrise Corridor.

2. **Legal Antecedents.** These actions are mandated by state and federal transportation and air quality regulations, including the Clean Air Act of 1991 and OAR Chapter 340, Division 252, Section 0010 et. seq.

3. **Anticipated Effects.** The Ordinance will amend the RTP financially constrained system to approve a full US 26/Jackson School Road Interchange and widening of U.S. 26 to three lanes in each direction between the Murray Boulevard and 185th Avenue interchanges. These amendments will clear the way for the MTIP to schedule about $100 million of state bond funds allocated by the Oregon Transportation Commission (OTC) to 17 projects in and around the Portland urban area. The funds derive from the OTIA bond program. Also, $359,000 of reserve STP funds for design of the widening project will be approved.

4. **Budget Impacts.** There would be no effects on Metro's budget from adoption of this Ordinance.

RECOMMENDED ACTION

The Council approve Ordinance 02-945.

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ORDINANCE 02-945
STAFF REPORT

ATTACHMENT 1

Consisting of:

-- Draft Resolution No. 02-3186
-- Draft Exhibit A of Res. No. 02-3186
-- Draft Partial Exhibit B of Res. No. 02-3186 (which is the Executive Summary of Conformity Determination)

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO INCLUDE STATE BOND FUNDS; PROGRAMMING PRELIMINARY ENGINEERING FUNDS FOR US 26 WIDENING, AND APPROVING A CONFORMITY DETERMINATION FOR THESE ACTIONS AND THOSE OF ORDINANCE NO. 02-945 THAT AMENDS AMENDS THE REGIONAL TRANSPORTATION PLAN.	)	RESOLUTION NO. 02-3186 Introduced by Councilor Rod Monroe

WHEREAS, the Oregon Transportation Commission approved allocation of approximately $105 million of bond funds to road, bridge and freeway modernization and preservation projects in Oregon Department of Transportation (ODOT) – Region 1 (see Exhibit A), including design and construction of the U.S. 26/Jackson School Road interchange; and

WHEREAS, Washington County has stated its intention to design a project to widen U.S. 26 to three lanes in each direction from Murray Boulevard to 185th Avenue; and

WHEREAS, Metro allocated $359,000 of regional surface transportation program (STP) funds to a reserve account to assist with this design project (see Exhibit A); and

WHEREAS, state and federal regulations mandate that Metro list significant transportation projects in it's jurisdiction, or within the Portland-area Air Quality Maintenance Area that extends beyond Metro's jurisdiction, in the financially constrained system of the 2000 Regional Transportation Plan (RTP); and

WHEREAS, state and federal regulations mandate that Metro show funding for significant transportation projects approved within it's jurisdiction in the 2002 Metropolitan Transportation Improvement Program (MTIP); and

WHEREAS, no significant transportation projects may be approved, including their design, unless they come from a transportation program and/or plan that has been shown to conform with State Implementation Plan (SIP) provisions that assure maintenance of regional air quality; and

WHEREAS, Ordinance 92-945 amends the 2000 RTP financially constrained system to include both the Jackson School Road and U.S. 26 widening projects; and

WHEREAS, Metro has prepared an air quality Conformity Determination supporting these RTP amendments (see Exhibit B); and

WHEREAS, local jurisdictions declared a number of approved revisions of the timing, scope or concept of projects included in the 2000 RTP financially constrained system during the course of preparing the Conformity Determination; and

WHEREAS, these locally declared RTP system revisions are incorporated into the RTP by Ordinance 02-945 and are reflected in the quantitative analysis portion of the Conformity Determination; and

WHEREAS, the Conformity Determination was the subject of interagency consultation and a proactive public involvement process; now, therefore;

BE IT RESOLVED that the Metro Council;

1. Amends the 2002 MTIP to include the schedule of funds shown in Exhibit A of this Resolution, including all Portland urban-area bond projects.

2. Allocates $359,000 of STP reserve funds (ODOT Key #12452) shown in Exhibit A, for support of preliminary engineering of a project to widen U.S. 26 from Murray Boulevard to 185th Avenue.

3. Declares that use of STP funds for the design of the US 26: Murray to 185th widening project is contingent on the project receiving at least ½ its construction funding from Washington County sources.

4. Declares that use of STP funds for right of way acquisition or construction for the US 26: Murray to 185th project is not authorized.

5. Approves the Conformity Determination shown in Exhibit B with respect to MTIP amendments shown in Exhibit A of this Resolution and companion amendments of the 2000 RTP financially constrained system approved in Ordinance 02-945.

ADOPTED by the Metro Council this _____ day of _____, 2002.

_____
Carl Hosticka, Presiding Officer

Approved as to Form:

_____
Daniel B. Cooper, General Counsel

MTIP AMENDMENTS AUTHORIZED BY METRO RESOLUTION NO. 02-3186

ODOT KEY NUMBER	PROJECT NAME	WORK PHASE	02	03	04	05	TOTAL
	EXISTING PROGRAMMING						
12452	**US 26: Murray/Cornell PE Reserve**	RESERVE	0.359				$ 0.359
ODOT	Reserve of funds anticipated for use to design widening of US 26 from Murray to Cornell Blvd.	ROW					
		CON					
		TOT	$ 0.359				$ 0.359
	NEW APPROVED PROGRAMMING						
12452	**US 26: Murray/185th Ave. PE**	*PE*	0.359				$ 0.359
ODOT	***Funds to design widening of US 26 from Murray to 185th Avenue.***	ROW					
		CON					
		TOT	$ 0.359				$ 0.359
	NEWLY INCLUDED ODOT – REGION 1 OTIA BOND PROJECTS (Urban Area)						
8838	**East Columbia Blvd. - Lombard St. Connector**	PE					
ODOT/ COP	Construct new wider underpass and at grade intersection further from existing 92nd Ave connection. Widen Col. Blvd approach to I-205; additional left turn lane. ***$12.123 million construction phase in 2007.***	ROW				7.642	$ 7.642
		CON					
MOD*		TOT				$ 7.642	$ 7.642
12394	**US 26: Hwy 217/Camelot Interchange**	PE	1.255				$ 1.255
ODOT	Build new eastbound general purpose travel lane to match west bound widening; sound walls, bike lane ramp meters	ROW	0.465				$ 0.465
		CON		18.879			$ 18.879
MOD		TOT	$ 1.720	$ 18.879			$ 20.599
12393	**U.S. 26 @ Jackson School Rd Interchange**	PE	0.794				$ 0.794
ODOT	New rural diamond interchange to replace existing, unsafe at-grade interchange	ROW			1.550		$ 1.550
		CON				13.790	$ 13.790
MOD		TOT	$ 0.794		$ 1.550	$ 13.790	$ 16.134
11435	**I-5/Nyberg Interchange Widening Project**	PE					
ODOT/ Tualatin	Add two new eastbound lanes on Nyberg Overcrossing of I-5 w/ bike and ped amenities. Construction partially funded w/ regional dollars.	ROW					
		CON			1.172		$ 1.172
MOD		TOT			$ 1.172		$ 1.172
12400	**Boeckman Rd. - Tooze Rd. Connection**	PE	1.490				$ 1.490
ODOT/ Wilsonville	Extend Boeckman Rd. west to Dammasch Hospital site	ROW		0.487			$ 0.487
		CON					
MOD		TOT	$ 1.490	$ 0.487			$ 1.977
12399	**Sunnyside Rd. Widening (Ph. 2): 122nd/152nd**	PE					
ODOT/ Clack Co.	Widen to five lanes with bike/ped amenities. PE funded with regional dollars.	ROW		8.000			$ 8.000
		CON				0.443	$ 0.443
MOD		TOT		$ 8.000		$ 0.443	$ 8.443

MTIP AMENDMENTS AUTHORIZED BY METRO RESOLUTION NO. 02-3186

ODOT KEY NUMBER	PROJECT NAME	WORK PHASE	02	03	04	05	TOTAL
12392	**Farmington Rd. Preservation: Hwy219/SW 209th**	PE	0.075				$ 0.075
ODOT/ Wash Co.	Overlay and improved shoulders; add bike/ped amenities. Part of agreement for Wash Co. to assume facility ownership from ODOT.	ROW					
PRES**		CON		2.241			$ 2.241
		TOT	**$ 0.075**	**$ 2.241**			**$ 2.316**
8850	**Farmington Rd. Preservation: SW 209TH/SW 198th**	PE	0.636				$ 0.636
ODOT/ Wash Co.	Overlay and improved shoulders; add bike/ped amenities; new signals at 198th & 209th SPIS-ranked intersections. Leads to Wash Co. taking facility ownership from ODOT.	ROW		0.250			$ 0.250
PRES		CON			1.547		$ 1.547
		TOT	**$ 0.636**	**$ 0.250**	**$ 1.547**		**$ 2.433**
12390	**Sandy Blvd. Boulevard Retrofit: NE 13th/NE 47th**	PE	0.720				$ 0.720
ODOT/ COP	Restore pavement; reduce auto/bike/ped/tranist conflicts w/ circulation and access improvements in Hollywood Dist.; effect transfer of road to COP jurisdiction.	ROW					
PRES		CON				7.182	$ 7.182
		TOT	**$ 0.720**			**$ 7.182**	**$ 7.902**
12388	**Boones Ferry Preservation: Tualatin Rv Brdg/Norwood**	PE	0.231				$ 0.231
ODOT/ Wash Co.	2.6 mi of grind/overlay; two new signals, ped improvements; Norwood Crk culvert replacement.	ROW	0.255				$ 0.255
PRES		CON		2.095			$ 2.095
		TOT	**$ 0.486**	**$ 2.095**			**$ 2.581**
5651	**McLoughlin Blvd. "Boulevard" Retrofit: Harrison St/ Kellogg Lake Bridge**	PE					
ODOT/ Milw.	Overlay/reconstruct 1.25 mi thru downtown Milw.; add bike/ped/transit amenities; redesign signal systems.	ROW					
PRES		CON				2.000	$ 2.000
		TOT				**$ 2.000**	**$ 2.000**
11136	**Broadway Bridge Rehabilitation (Phase 7) (Br# 06757)**	PE					
ODOT/ Mult Co.	Repaint entire steel sturcture above deck. Remove and replace conduit, wiring and controls. Combine with Ph. 4, 5 & 6 contracts to reduce closure time and cost.	ROW					
BRIDGE***		CON		7.000			$ 7.000
		TOT		**$ 7.000**			**$ 7.000**
12448	**NE 33rd Ave. O'Xing: Lombard St. & UPRR (Br# 02484)**	PE			0.373		$ 0.373
ODOT/ COP	Strengthen steel girders through post tensioning, place bonded deck overlay on entire structure.	ROW				0.020	$ 0.020
BRIDGE		CON				3.113	$ 3.113
		TOT			**$ 0.373**	**$ 3.133**	**$ 3.506**
12445	**NE 33rd Ave. Over Columbia Slough Replacement (Br# 25T12)**	PE			0.239		$ 0.239
ODOT/ COP	Replace bridge structure.	ROW				0.025	$ 0.025
BRIDGE		CON				1.190	$ 1.190
		TOT			**$ 0.239**	**$ 1.215**	**$ 1.454**
12431	**SW Champlain St. Semi Viaduct Replacement(Br# 25B34)**	PE			0.082		$ 0.082
ODOT/ COP	Remove bridge and replace w/ retaining wall and geo-foam fill.	ROW			0.020		$ 0.020
BRIDGE		CON			0.181		$ 0.181
		TOT			**$ 0.282**		**$ 0.282**

MTIP AMENDMENTS AUTHORIZED BY METRO RESOLUTION NO. 02-3186

ODOT KEY NUMBER	PROJECT NAME	WORK PHASE	02	03	04	05	TOTAL
12449	**Tualatin River Overflow Bridge (Br# 671234.)**	PE					
ODOT/ Wash Co.		ROW					
	Replace bridge with wider structure.	CON		0.854			**$ 0.854**
BRIDGE		**TOT**		**$ 0.854**			**$ 0.854**
12441	**Beaver Creek Bridge (Br# 04522)**	PE			0.120		**$ 0.120**
ODOT/ Mult Co.	Replace bridge with longer, wider structure, including bike/ped amenties and improved in-stream characteristics. ***$1.308 Construction phase in 2006.***	ROW			0.060		**$ 0.060**
		CON					
BRIDGE		**TOT**			**$ 0.180**		**$ 0.180**

* MOD – "Modernization," means adding new travel lanes, adding capacity to existing roadways and/or reconstruction of highway interchanges or bridges that add automobile capacity.

** PRES – "Preservation," means reconstruction of existing road features, or surface treatments to preserve existing road surfaces that do not add automobile capacity.

*** BRIDGE – means replacement, reconstruction or rehabilitation of bridge facilities without increasing automobile capacity.

METRO

Conformity Determination

Supporting Amendments to the 2000 Regional Transportation Plan
and 2002 Metropolitan Transportation Improvement Program
to incorporate OTIA bond projects

EXECUTIVE SUMMARY

Conformity Finding

Metro has prepared a Conformity Determination addressing amendment of the 2000 Regional Transportation Plan (RTP) and the 2002 Metropolitan Transportation Improvement Program (MTIP). The specific amendments are discussed below. Metro has determined that regional emissions generated by the proposed amendments to the region's financially constrained system of planned improvements remain within budgets established in the State Implementation Plan (SIP) for attainment and maintenance of national ambient air quality standards. Key amendments to the financially constrained system include:

- U.S. 26/Jackson School Road interchange;
- U.S. 26 widening from Murray Boulevard to 185th Avenue; and
- other minor system revisions declared to Metro by local governments,

Significant Actions That Triggered This Conformity Determination

In February 2002, pursuant to the Oregon Transportation Investment Act of 2001 (OTIA), the Oregon Transportation Commission (OTC) approved bond financing of 17 road, bridge and freeway capacity expansion and preservation projects in and around the Portland urban area. These are shown in Table S-1, below. The Clean Air Act states that no transportation project bearing a significant potential effect on the region's air quality may be approved or advanced unless it is shown to conform with the SIP.

- **U.S. 26/Jackson School Road Interchange.** The Jackson School Road interchange is one of the OTIA projects and is not included in the currently conforming Financially Constrained system of the 2000 Regional Transportation Plan (RTP). Before ODOT may begin work designing the interchange, Metro must amend the RTP to include it in the financially constrained system. As part of this amendment, Metro must prepare a quantitative and qualitative analysis showing that automobile emissions associated with the project won't cause deterioration of regional air quality (i.e., show that the total of regional mobile source emissions *with* the project constructed will fall within emissions budgets established in the SIP).

  The Metropolitan Transportation Improvement Program (MTIP), which schedules transportation expenditures in the Portland urban area over a four-year period, must also be amended to reflect bond funding of the project. Neither the RTP nor the MTIP can be amended until the U.S. Department of Transportation approves this required Conformity Determination.

- **U.S. 26: Murray/185th Widening.** In the summer of 2001, Washington County indicated its intention to design a project to widen U.S. 26 to three lanes in each direction from the Murray Boulevard Interchange to the 185th Avenue Interchange. In Autumn, 2001, Metro allocated $359,000 to a reserve account to support this work. Actual allocation the MTIP funds to the PE project was made contingent on approval of a conformity determination supporting amendment of the RTP to include the project in the financially constrained system.

TABLE S-1: OTIA BOND PROJECTS IN ODOT – REGION 1

ODOT KEY NUMBER	PROJECT NAME	PROJECT TYPE	OTIA $$
12392	Farmington Rd. Preservation Project (SW 198th to Hwy 219)	PRES **	$ 2,496,000
11136	Broadway Bridge Rehabilitation (Phase 7) (Br# 06757)	BRIDGE***	$ 7,000,000
12449	Tualatin River Overflow Bridge (Br# 671234.)	BRIDGE	$ 853,506
12393	Jackson School Rd Interchange	MOD	$ 16,133,900
12394	US 26 (Sunset Hwy): Hwy 217 to Camelot Interchange	MOD	$ 20,599,000
12388	Boones Ferry Preservation Project	PRES	$ 2,581,065
05651	McLoughlin Blvd. (Harrison Street to Kellogg Lake Bridge	PRES	$ 2,000,000
08850	Farmington Rd. Preservation Project (SW 198th to Hwy 219)	PRES	$ 2,433,000
12399	Sunnyside Rd. (Phase 2) 122nd to 142nd Widening	MOD	$ 8,443,375
11435	I-5/Nyberg Interchange Widening Proejct	MOD	$ 1,172,000
12431	SW Champlain St. Semi Viaduct Replacement (Br# 25B34)	BRIDGE	$ 282,269
12400	Boeckman Rd. - Tooze Rd. Connection	MOD	$ 1,976,625
12390	Sandy Blvd. (NE 13th to NE 47th)	PRES	$ 7,901,742
12445	NE 33rd Ave. Over Columbia Slough Replacement (Br# 25T12)	BRIDGE	$ 1,453,570
12441	Beaver Creek Bridge (Br# 04522)	BRIDGE	$ 1,488,284
12448	NE 33rd Ave. Over Lombard St. & UPRR (Br# 02484)	BRIDGE	$ 3,505,510
08838	East Columbia Blvd. - Lombard St. Connector	MOD	$ 19,765,250

* MOD – "Modernization," including adding new travel lanes, adding capacity to existing roadways and/or reconstruction of highway interchanges or bridges that add automobile capacity.

** PRES – "Preservation," reconstruction of existing road features, or surface treatments to preserve existing road surfaces that do not add automobile capacity.

*** BRIDGE – replacement, reconstruction or rehabilitation of bridge facilities that do not increase automobile capacity.

- **Locally Declared Changes of Scope, Concept or Timing.** During preparation of the Conformity Determination, Metro asked agencies in the region that operate regional transportation facilities to review the 2000 RTP financially constrained system. They were asked to advise Metro of any changes they may have approved to project scope, concept and/or timing assumptions used in the RTP conformity analysis approved in January 2001. The revisions noted during this review are shown in Table S-2, below, and have been incorporated into modeling of the financially constrained system. ("**Bold**" text indicates the adopted changes.)

Reasonably Anticipated 20-Year Revenue

The OTIA bond funds were not accounted for in the revenue analysis that underpins the RTP financially constrained system. The bond revenue represents new financial capacity because the projects to which the bond funds are being applied were previously assumed to absorb other types of revenue. These other revenues are therefore freed by the bond program and are potentially available to finance new project additions to the financially constrained system.

This new funding is part of the basis for including the U.S. 26 widening project at this time. Washington County has indicated that some of its MSTIP property tax funds will be dedicated to the project. However, the bulk of revenue that might enable construction of the project by 2010 comes from injection of $105 million of bond funds into the region's transportation system financial capacity resulting from the OTIA program.

The region has not yet fully assessed implications of the bond program on the RTP financial analysis. During the next scheduled RTP Update in 2003, the complete financial analysis will be revisited. The 2003 RTP update will assess the bond program and other new sources of financing, e.g., Local Improvement Districts (LID's) and System Development Charges (SDC's) that have recently been approved by various jurisdictions in the region. Project cost estimates and other factors will also be updated and any new system financial capacity that might result will be formally allocated to new projects at that time. For now, no changes to the system, other than those noted above, have been authorized since the previous determination was approved in January 2001.

Planning, Transit, Modeling and TCM Assumptions

In this analysis Metro has not changed the methodology used in the previous conformity analysis.

- There have been no changes in the population and employment projections that underlie Metro's travel demand calculations.
- There has been no change to the protocol (MOBILE 5a-h model) for calculating daily emissions of model-generated travel estimates.
- There has been no change of analysis years, budget years, or of interpolation of data between years.
- The region's transit fare structure has not changed since the last analysis (though some changes to park and ride plans and transit routes have been captured).
- No evidence has arisen to change Metro's assumed effectiveness of approved bike, pedestrian or transit-related Transportation Control Measures (TCMs).

Table S-2:
Locally Declared Amendments to RTP Financially Constrained System

242nd Avenue Connector project (#2001): The project was split. The portion of 242nd between Glisan and Stark is currently 4 lanes, sidewalk on one side, no bike lanes or center turn lane. Multnomah County carries a project in its Capital Improvement Program to add a center (5th) turn lane, bike lanes and sidewalks on each side by 2005. **The 2005 network was modified to show 242nd: Glisan/Stark as a 5 lane section. The 242 Avenue: Glisan to I-84 section was delayed to the 2020 network.**

Network Change	RTP ID No.	Juris-diction	Facility	Termini	Project Features	RTP Year of Operation
2005 network	2026	Portland	NE/SE 99th Avenue Phase I/NE Pacific Avenue	NE 99th from NE Weidler to Glisan Street and NE Pacific Avenue from 97th to 102nd Avenue	Reconstruct primary local main street in Gateway regional center. **Model south leg of Glisan/99th intersection improvement (RTP #1266) as part of RTP #2026 and advance #2026 to 2005 network year.**	2006-10
2010 network	4022	Portland/ Port	East End Connector	Columbia/US 30 Bypass: NE 82nd Avenue to I-205	Provide free-flow connection from Columbia Boulevard/82nd Avenue to US 30 Bypass/I-205 interchange; widen SB I-205 on-ramp at Columbia Boulevard	2000-05
Model as 2-lanes, not 4	4065	Port/ Portland	South Rivergate Entry Overpass	South Rivergate	Construct overpass from Columbia/Lombard intersection to South Rivergate	2006-10
2005 network	7008	Clackamas Co.	147th Avenue Improvements	Sunnyside Road to 142nd Avenue	Realign 147th Avenue to 142nd Avenue	2006-10
2005 network	6128	Clackamas Co.	Carmen Drive Intersection Improvements	Carmen Drive/Meadows Road intersection	Add traffic signal, turn lanes, realign intersection	2006-10
2005 network	5204	Clackamas Co.	Stafford Road	Stafford Road/Rosemont intersection	Realign intersection, add signal and right turn lanes	2006-10
2005 network	5108	Clackamas Co.	Jennifer Street/135th Avenue Extension	130th Avenue to Highway 212	Two-lane extension to 135th Avenue and widen 135th Avenue	**No year currently specified**
2005 network	3171	Cornelius/ Wash Co.	Hwy 8/4th Ave Intersection	Intersection of 4th Avenue and couplet	Intersection improvement with signal	2006-10
Operational in 1998	2111	Multnomah Co.	207th Connector	Halsey Street to Glisan Street	Complete reconstruction of 207th Avenue	2000-05
Wallula to Birdsdale	2047	Gresham	Division Street Improvements	NE Wallula Street to Hogan Road	Complete boulevard design improvements	2000-05
Model as 2-lane not 4.	1037	Portland	Bybee Boulevard Overcrossing	Bybee Blvd/McLoughlin Blvd	Replace substandard 2-lane bridge with 4-lane bridge	2006-10
Glencoe to 268th/ Sewall	3130	WashCo/ Hillsboro	Evergreen Road Improvements	Glencoe Road to 15th Avenue	Widen to three lanes to include bikeways and sidewalks	2000-05