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Meeting Notes 1999-02-11 [Part B]

Joint Policy Advisory Committee on Transportation

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Expo Center – 285-7756
Oregon Convention Center – 235-7575
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**Metro Growth Management Services Department**
Information – 797-1839
Growth management hotline – 797-1888
Elaine Wilkerson, director – 797-1738
Mary Weber, community development, 2040 implementation – 797-1735
Mark Turpel, long-range planning, 2040 policy development – 797-1734
Sherry Oeser, public involvement – 797-1721
Dick Bolen, Data Resource Center – 797-1582

**Metro Regional Environmental Management Department**
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Metro Recycling Information – 234-3000
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Jan O’Dell, public affairs – 797-1599
Vicki Kolberg, recycling information – 797-1514
Jim Watkins, engineering and analysis – 797-1699
Terry Petersen, environmental services – 797-1669
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Doug Anderson, waste reduction and planning services – 797-1788

**Metro Regional Parks and Greenspaces Department**
Information, events and registration – 797-1850
Open spaces hotline – 797-1919
Charlie Ciecko, director – 797-1843
Ron Klein, public affairs – 797-1774
Amy Kirschbaum, public affairs (open spaces acquisitions) – 797-1713
Deb Scrivens, environmental education – 797-1852
Julie Weatherby, marketing/events – 797-1846
Lynn Wilson, education/restoration grants – 797-1781
Mel Huie, regional trails and greenways – 797-1731
Jane Hart, parks master planning – 797-1585
Lupine Jones, volunteer services – 797-1733
Blue Lake Regional Park – 665-4995
Glendoveer Golf Course – 253-7507
Howell Territorial Park – 665-6918
Oxbow Regional Park – 663-4708

**Metro Transportation Department**
Information – 797-1755
Transportation hotline – 797-1900
Andy Cotugno, director – 797-1763
Richard Brandman, assistant transportation planning director – 797-1749
Keith Lawton, assistant director, technical services – 797-1764
Vacant, high-capacity transit planning – 797-1752
Mike Hoglund, regional transportation planning – 797-1743
Dick Walker, travel forecasting – 797-1765
Gina Whitehill-Baziuk, public involvement – 797-1746

**Oregon Zoo**
Rates and hours – 226-ROAR (226-1561)
Event hotline – 220-3687
Tony Vecchio, director – 220-2450

To volunteer – 220-5711
Teen volunteers – 220-2790
To book catered events – 220-5729
Classes and camps – 220-2781

Bus and MAX information to Metro facilities – 238-RIDE (238-7433)

For more information about Metro or to schedule a speaker for a community group, call 797-1926.
Welcome to Metro

We are all very fortunate to live in a region that is so blessed. We have wonderful parks and open spaces, a strong economy and first-class tourist sites, just to name a few things.

As we celebrate Metro's 20th anniversary, it is time for us - as well as our local partners - to look back at our accomplishments. Accomplishments such as the purchase of more than 4,000 acres of open space land, a recycling rate that has jumped to 42 percent and school education and grant programs that touch thousands of young people each year. It is also time to look forward at the work yet to be done. There are many challenges before us as a region, and we look forward to working with you to help come up with the best solutions.

Metro provides regional services that guide growth and create livable communities. We want you to get to know us and how you can get involved in helping us create those livable communities. We are working to ensure that people in the region have:

- access to nature
- clean air and water
- the ability to get around the region
- safe and stable neighborhoods
- access to arts and culture
- a strong regional economy
- resources for future generations.

However, much of our success depends on our ability to coordinate with our local partners and to get them to cooperate with one another. What helps to make Metro unique nationally is that we are a forum where people of differing views can come together, can work toward understanding and compromise, and, most important, can find places where they can take action together. It's our way of serving the 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan region.

So you see, we not only want you to be a partner, we need you to be a partner!

In this handbook, you'll find plenty of information about Metro's work with local governments and citizens. It also serves as a guide to finding out more about Metro's specific programs, grants, policies and planning documents - and how to get the information and help that you need. Please look to Metro as a resource for your community and as a partner in building a future that works for all of us.

Thank you for your commitment to this region.

Mike Burton  
Executive Officer

Rod Monroe  
Metro Council  
Presiding Officer

February 1999
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Metro's boundary covers approximately 460 square miles of the urban portions of Clackamas, Multnomah and Washington counties in northwestern Oregon. There are 24 cities in the Metro service area, including Portland, Gresham, Beaverton, Hillsboro, Milwaukie, Lake Oswego and Oregon City.

Metro, the nation's only elected regional government, is responsible for a broad range of services. According to a home-rule charter approved by voters in 1992, Metro has primary responsibility for regional land-use and transportation planning and any other issue of "metropolitan concern." This grant of authority underscores the commitment to maintain and enhance the livability of the region.

This commitment was again demonstrated in May 1995 when 62 percent of the citizens of the region voted to authorize $135.6 million in general obligation bonds to acquire and protect a system of regional open spaces, parks and streams.

History

Metro was formed in 1979, when voters approved the merger of a council of governments (Columbia Region Association of Governments - CRAG) that had land-use and transportation planning responsibilities with the Metropolitan Service District, which had been created to provide regional services that included the solid waste management plan and operation of a metropolitan zoo.

An elected council and an elected executive officer governed the new Metropolitan Service District (MSD), which had the combined authority of the two predecessor agencies and other potential additional powers.

During the years, the state legislature, with the agreement of the jurisdictions within Metro's boundaries, assigned new responsibilities to Metro. In 1980, Metro became responsible for regional solid waste disposal when it took over operation of the one existing publicly owned regional landfill and began construction of a transfer station. In November 1986, voters approved general obligation bond funding for the Oregon Convention Center, built and operated by Metro through the Metropolitan Exposition-Recreation Commission. In January 1990, Metro assumed management responsibility for the Portland Center for the Performing Arts, Portland Civic Stadium and Portland Memorial Coliseum (though management of the coliseum was later returned to the city, which turned it over to the new Oregon Arena Corporation). Finally, in 1994, Multnomah County asked Metro to assume management responsibility for the county parks system and Expo Center. Ownership of these facilities was transferred to Metro on July 1, 1996.

Regional planning functions

Throughout Metro's history, its responsibility for regional planning has grown. Metro has long had an important coordination role in regional transportation planning. Metro is the designated metropolitan planning organization, responsible for the allocation of federal transportation funds to projects in the region. The region's success in attracting federal funding for highway and transit projects is due, in large part, to Metro's role in building and maintaining regional consensus on projects to be funded and ensuring that funding is allocated to high-priority projects.

In connection with its responsibility for transportation planning, Metro has developed a regional Data Resource Center to forecast transportation and land-use needs. Local jurisdictions now rely on and contribute to the center, eliminating duplication between governments and battles about "dueling data." This has allowed jurisdictions in the region to focus on important policy choices rather than arguing about assumptions.

Adoption of a state land-use planning law (Senate Bill 100) required local governments to prepare comprehensive land-use plans. Metro (as CRAG) was the agency responsible for establishing and maintaining an urban growth boundary (UGB) for the Portland region. Through the enforcement of the UGB pursuant to Oregon's land-use laws, the region has
maintained its unique character and is now a national model for urban growth management planning.

Metro's current role in regional land-use planning and growth management is an outgrowth of its role in establishing the urban growth boundary, transportation planning and data management. Recognizing the value of a coordinated approach to land-use and livability issues, local jurisdictions and the region's voters have assigned that responsibility to Metro.

**Charter approval**

The most significant development in Metro's history occurred with the approval by the voters in 1992 of a home-rule charter. Prior to that time, Metro was organized under a grant of authority by the Oregon Legislature and the Oregon Revised Statutes. Metro's powers were limited to those expressly granted by the Legislature, and any extension of those powers had to first be approved by the Legislature.

With the growth in the region, however, and Metro's increasingly important role, the region recognized that the power and authority of the regional government should be controlled directly by the voters of the region and not by the state Legislature. Accordingly, in 1990, the Legislature referred a constitutional amendment to the voters to allow the creation of a home-rule regional government in the Portland metropolitan area. Voters approved that amendment, and a charter committee was formed shortly thereafter. A charter for Metro was approved by voters in 1992.

Metro has the distinction not only of being the nation's only elected regional government (as it had been since 1979), but also the only one organized under a home-rule charter approved by voters.
property tax, sales tax or income tax. In addition, the charter also grants authority to the council to adopt taxes of limited applicability without a vote of the people, but only after review by a tax study committee of citizens. These so-called niche taxes could include a broad list of revenue sources levied on limited activities such as cigarette sales, real estate transfers and hotel/motel occupancy.

Expenditures from non-voter approved revenue sources are limited by charter to no more than $12.5 million per year (in 1992 dollars). Metro's only revenue source that currently falls under this limitation is its excise tax, which totals only half of the limit. The charter also grants Metro authority for levying fees and charges for services it provides on an enterprise basis.
Metro committees

In the Portland metropolitan area, representatives from many governments and agencies play critical roles in urban growth management. Metro’s partners in the region’s 24 cities, three counties and more than 130 special service districts and school districts, the state of Oregon, Tri-Met and the Port of Portland make decisions that affect and respond to regional urban growth. And from a broader regional perspective, the cities of Southwest Washington and Clark County are partners in addressing growth management issues such as air quality, transportation and regional economy. Metro also works with nearby Oregon cities outside its boundary to develop complementary policies.

While the Metro Council makes decisions about policies, more than a dozen advisory committees advise the executive officer, auditor, Metro Council and staff on matters of Metro’s responsibilities. Membership of the committees is varied, based on the purpose of each committee.

Mandated by Metro Charter

Metro Policy Advisory Committee (MPAC) – 21-member committee consisting of representatives of local government and citizens to provide advice and consultation to the Metro Council, approve the authorization of Metro to provide or regulate a local government service, advice to on the adoption of a service or regulation by Metro that is not a local government service. For information, call 797-1940.

Metro Committee for Citizen Involvement (MCCI) – 27-member charter-mandated citizen committee assists in the development, implementation and evaluation of Metro’s citizen involvement activities. For information, call 797-1539.

Administrative Services

Investment Advisory Board – five-member citizen committee advises on investment strategies, banking relationships, legality of investment activities and the establishment of written procedures for the investment operation. For information, call 797-1612.

Office of the Auditor

Metro Auditor Citizen Advisory Committee – approximately 11-member committee comprised of members with varied backgrounds ranging from certified public accountants to citizen activists to business executives that provides feedback to the Metro Auditor on planned and completed audits and suggests areas for investigation. The committee also discusses the role of the Office of the Auditor and annual audit plans. For information, call 797-1891.

Growth Management

Metro Affordable Housing Technical Advisory Committee (H-TAC) – 25-member committee consisting of representatives of local governments, the homebuilder’s industry, the business and financial community, and affordable housing advocates, as well as three nonvoting representatives from the governor’s office, Oregon Housing and Community Services Department and Federal Housing Agency. The committee advises on the policies and strategies related to increasing the production of affordable housing through development and implementation of fair share housing in the region. For more information, call 797-1737.

Metro Technical Advisory Committee (MTAC) – 24-member committee of planning specialists, citizens and business representatives that provide detailed, technical support to MPAC. For information, call 797-1562.

Regional Natural Hazards Technical Advisory Committee – 13-member committee advises the Executive Officer, Council and MPAC on the policies, plans and programs of the Regional Natural Hazard Mitigation Program. Committee addresses significant natural hazards that may impact urban growth, businesses, property and life in the region. For information, call 797-1737.

Water Resources Policy Advisory Committee (WRPAC) – 38-member committee consisting of representatives of water and sewer districts, environmental groups, federal and state natural
resource agencies, fishery and industry interests and citizens. The committee is advisory to the Council on water resource matters as it relates to Region 2040 and the Regional Framework Plan. For information, call 797-1726.

Parks and Open Spaces

Regional Parks and Greenspaces Advisory Committee – 11-member citizen committee serving to advise and comment on the policies, plans, programs, fees and budget of the Metro Regional Parks and Greenspaces Department. For information, call 797-1774.

Greenspaces Technical Advisory Committee and Trails working group – park provider representatives and park professionals serving to coordinate, support and advise on the implementation of the Metropolitan Greenspaces Master Plan and regional trail system. For information, call 797-1731.

Smith and Bybee Lakes Management Committee – nine-voting-member committee representing neighborhood associations, landowners, friends groups, environmental groups and resource agencies to provide guidance for the management of the 2,000-acre wildlife refuge in North Portland. For information, call 797-1515.

Smith and Bybee Lakes Technical Advisory Committee – comprised of people with technical environmental and recreational backgrounds and provides technical advice and support in management activities and projects on the lakes. For information, call 797-1515.

Regional Environmental Management

Rate Review Committee – seven-member committee comprised of haulers, certified public accountants, business owners experienced in rate-setting and citizens that reviews and makes recommendations regarding proposed solid waste disposal rates and charges at facilities owned, operated or under contract to Metro. For information, call 797-1643.

Solid Waste Advisory Committee (SWAC) – 27-member committee comprised of local government and state solid waste representatives, haulers and hauler organizations, recycling industry representatives and citizens that reviews development and implementation of existing solid waste plans, evaluate new policies and make recommendations to the Executive Officer and Council regarding regional solid waste management. For information, call 797-1643.

Regional Environmental Management Enhancement

Forest Grove Enhancement Committee – seven-member committee includes representatives Forest Grove City Council and Metro councilor from District 4 to solicit and select proposals to fund projects for the enhancement of the area impacted by the Forest Grove Transfer Station. For information, call 797-1648.

Metro Central Enhancement Committee – six-member citizen committee chaired by Metro councilor from District 5 to solicit and select proposals to fund projects for the enhancement of the area impacted by the Metro Central Station. For information, call 797-1648.

Metro South Enhancement Committee – includes representatives from the Oregon City Commission, Oregon City Planning Commission, a resident of the Holcomb-Outlook-Park Place community and the Metro councilor from District 2. Committee solicits and selects proposals to fund projects for the enhancement of the area impacted by the Metro South Station. For information, call 797-1648.

Transportation

Joint Policy Advisory Committee on Transportation (JPACT) – 17-member committee provides a forum for elected officials and representatives of agencies involved in transportation needs in the region and makes recommendations to the Council related to transportation policy. For information, call 797-1755.

Transportation Policy Alternatives Committee (TPAC) – 21-member committee providing technical input on transportation planning, priorities and financing alternatives in support of JPACT. For information, call 797-1755.

Traffic Relief Options Study Task Force – 13-member task force of community and business leaders that provides an independent perspective on the study of peak period pricing in this region and will report its recommendations on the advisability of a pilot project to the Metro Council and the Oregon Transportation Commission. Also participating as ex-officio are the Metro Executive Officer and chair of the Oregon Transportation Commission. For information, call 797-1932.
What is Metro?

Metro provides regional services that guide growth and create livable communities.

Metro is working to ensure that people in the region have
- access to nature
- clean air and water
- balanced transportation choices
- safe and stable neighborhoods
- access to arts and culture
- a strong regional economy
- resources for future generations.

Metro is the regional government that serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area.

Metro's primary mission is to manage growth in the region.

What facilities are run by Metro?

Metro owns and operates
- the Oregon Zoo (formerly the Metro Washington Park Zoo)
- regional parks such as Oxbow and Blue Lake and Chinook Landing
- Metro Central and South solid waste transfer stations and hazardous waste facilities in Northwest Portland and Oregon City
- the Oregon Convention Center
- Portland Metropolitan Exposition (Expo) Center

In addition, Metro oversees the operation of:
- Civic Stadium
- Portland Center for the Performing Arts

These facilities and the Oregon Convention Center are managed for Metro by the Metropolitan Exposition-Recreation Commission.

Nearly 4 million people use Metro facilities each year. This includes visitors to the zoo, regional parks and solid waste transfer stations and the 100,000 callers each year to Metro's recycling information hotline.

How did Metro come to exist?

Metro was formed in 1979, when voters of the region approved the transition from an appointed council of governments (Columbia Region Association of Governments – CRAG) to an elected body. In 1992 voters adopted a home-rule charter that established Metro as having primary responsibility for regional land-use and transportation planning. The charter also outlines Metro's other responsibilities such as solid waste disposal; operation of arts and cultural facilities, parks and the zoo; and any other functions assigned to Metro by the voters.

Who are Metro's elected officials?

Metro officials are directly elected by voters within the Metro boundary and are directly accountable to the citizens of the region.

The Executive Officer, Mike Burton, oversees the staff and programs at Metro and prepares an annual budget for Metro Council approval.

The Metro Council sets policy direction, enacts legislation and approves the budget. Council members for 1999 are:

Presiding Officer, Rod Monroe – District 6
Deputy Presiding Officer, Susan McLain – District 4
Rod Park – District 1
Bill Atherton – District 2
Jon Kvistad – District 3
Ed Washington – District 5
David Bragdon – District 7

Auditor Alexis Dow conducts financial and performance audits of Metro departments and programs to ensure efficient management and full accountability to the public.
What is Metro’s budget?

Metro’s operating budget for fiscal year 1998-99 is $316 million. In addition, Metro has approximately $95 million that will be carried over into future budget years to be spent on voter-approved bond measures such as capital construction at the zoo and acquisition of natural areas.

Metro uses both full time and part time staff to carry out its duties. Metro has the equivalent of 675 full time positions. Metro also uses temporary, seasonal or event-related staff.

How is Metro funded?

Each time you buy a hot dog at the zoo or pay an entrance fee at Oxbow Regional Park, you are supporting Metro and its services. The largest portion of Metro’s budget – more than half – comes from user fees, not taxes.

Other examples of activities that earn revenue by providing services for a fee include sales of maps and mapping services, and fees charged for solid waste consolidation, transportation and disposal.

All of the property taxes collected by Metro have been approved by voters within the Metro boundary. These include bond measures such as the 1995 open spaces measure, funding to build the Oregon Convention Center, a 1992 tax base for operation of the zoo and a 1996 measure to provide better homes for animals and new exhibits at the zoo.

The tax rate for homeowners with a $100,000 home in the region is about $28 per year – about 50 cents per week. Only property owners inside the boundary pay Metro property taxes.

What is Metro’s relationship with cities and counties?

Local decisions can have wide ranging effects – especially when it comes to land use and transportation. For these reasons, Metro was given the responsibility of providing long-range regional growth management and transportation planning in the tri-county metropolitan area.

A traffic problem in Beaverton is a traffic problem in Portland; westside light rail will improve eastern Clackamas County’s air quality. More efficient land use in downtown Gresham lessens the pressure to develop farmland in Hillsboro. Roads don’t stop at city boundaries and water quality problems find their way from stream to river. By providing regional coordination and setting regional standards, cities and counties can achieve better coordination with the neighbors – and this benefits all of the region.

Local governments carry out local planning functions such as zoning, permitting, and local street and neighborhood design. Metro’s job is to assure that local planning is coordinated throughout the metropolitan area in order to protect air quality, address traffic congestion and protect farm and forest lands outside the urban growth boundary, as required by state law.

How do citizens get involved at Metro?

Metro is committed to citizen involvement and seeks input from the public on policy issues, programs and management of Metro facilities. Workshops, public meetings, open houses, mailings, flyers, surveys and paid advertising all are used to seek input from citizens.

In addition, Metro has more than a dozen advisory committees. Membership is varied, ranging from staff and elected officials of other jurisdictions, to citizens, special-interest advocates, business people and more. Metro’s Committee for Citizen Involvement can be reached at 797-1539.

Metro also offers many educational programs and volunteer opportunities. For example, last year more than 2,000 people gave 127,000 hours of service at the zoo. And some 900 volunteers gave more than 11,000 hours to Metro’s Regional Parks and Greenspaces Department doing parks maintenance, working at events and providing environmental education.

For more information about ways to get involved, call Metro Public Affairs at 797-1510.
According to the 1992 home-rule charter, Metro's top priority is managing the urban growth that the region is experiencing. The Growth Management Services Department is responsible for working with citizens and local governments to set a clear course for the region's future.

Since 1991, Growth Management staff has implemented an intensive public involvement and rigorous planning effort for the next 50 years, called 2040 Framework. The 2040 Framework is a series of policies and guidelines that will help communities deal with the challenges of growth and enhance livability.

**Long-Range Planning Division**

The charter required that Metro adopt a “regional framework plan” by Dec. 31, 1997. Long-Range Planning Division staff supported the Metro Council, local jurisdictions and the public as they reviewed the document and proceeded through the council adoption process.

In concert with the concerns and issues raised by the Metro Council and with the participation of local elected officials, staff, business leaders, nonprofit representatives and individual citizens, the division provides detailed land-use analysis and policy information.

Issues that the division continues to deal with include the updated Urban Growth Report projecting out to 2017, the urban reserve designation process and master planning process, affordable housing supply in the region, the establishment and tracking of performance measures for the Urban Growth Management Functional Plan, water conservation education and the watershed best management practices and policy alternatives.

Division staff also support a number of key policy advisory groups. The Metro Policy Advisory Committee, made up of local elected officials and citizens from around the region, is charged with advising the Metro Council on growth management issues. The Metro Technical Advisory Committee, made up of staff from local jurisdictions, supports both the Metro Council and MPAC on technical issues. The Water Resources Policy Advisory Committee advises the Metro Council and MPAC on water quality and supply issues; the Affordable Housing Technical Advisory Committee advises on policies and strategies related to increasing affordable housing.

**Community Development Division**

The Community Development Division is responsible for overseeing the implementation of the Urban Growth Management Functional Plan. This division, with the assistance of the public involvement staff, will provide technical assistance and training for local planners and citizen groups. Staff will be available for interpretation and implementation of the regional policy and program decisions to fit within the unique circumstances of the local jurisdictions. The division is also responsible for the general administration of the urban growth boundary.

Metro established a partnership with the state to use the goals and objectives of both the 2040 Growth Concept and the Oregon Transportation Plan to develop quality communities. The programs focus on assisting public and private partners in assessing and developing resources for implementation projects that are both short- and long-term.

**Public Involvement/Administration Division**

The Growth Management Services Department offers public involvement support services in conjunction with the department's programs and assists local jurisdictions in developing public involvement strategies and responding to citizen questions.
The public involvement staff produces newsletters, fact sheets and other written materials and coordinates public events such as open houses and booths at community events. Public involvement staff also coordinates presentations for local jurisdictions, citizen groups, neighborhood associations, business associations and visiting officials on Metro's growth management policies.

A phone comment and information line (797-1888) provides information on Metro's growth management activities and allows the public to make comments on growth management issues. The public can review publications, view maps and leave comments on growth management issues at Metro's website: www.metro-region.org

Data Resource Center

Metro's Data Resource Center maintains an extensive network of information about the Portland metropolitan region's land, population and economy. The Data Resource Center mission is to provide quality and timely information.

The Regional Land Information System (RLIS), a sophisticated geographic information system (GIS), and related socioeconomic information are at the heart of the Data Resource Center. The DRC has been developing RLIS since 1989. RLIS consists of map "layers," with each layer containing a specific type of information. RLIS currently contains more than 100 data layers, including:

- tax lots
- undeveloped land
- comprehensive plans
- soils
- land vegetative cover and use (from satellite imagery)
- tax assessor data
- zoning
- parks and open space
- 100-year flood plain
- topography
- national wetlands

The real strength of RLIS lies in its analytical capabilities. Staff can address complex questions about current or forecasted conditions in a specific area. Each layer can be used by itself or in combination with other layers. This ability allows us to produce new and unique layers and data bases from many combinations. Data and map coverages are seamless across the region, eliminating problems that arise from data gaps and overlaps at city and county boundaries.

The DRC provides a subscription service to local governments that allows a jurisdiction to request mapping and other RLIS services. Subscribers receive free publications, priority response time and become co-owners of Metro's copyrighted GIS data base. The costs of services and products are directed to an account that is billed to the jurisdiction.

Want more information?

For information about any of these programs, call:

Long-Range Planning Division – Mark Turpel, 797-1734

Community Development Division – Mary Weber, 797-1735

Public Involvement/Administration Division – Sherry Oeser, 797-1721

Data Resource Center – Dick Bolen, 797-1582
Metro serves as the lead agency for transportation planning and funding in the region. Metro, in turn, works with residents and local, state and federal partners that own and operate the region's transportation system to develop transportation plans and programs.

The Transportation Department has three sections: Regional Transportation Planning, High-Capacity Transit Planning and Travel Forecasting.

**Regional Transportation Planning**

Regional Transportation Planning develops long-range transportation plans, evaluates funding programs and studies transportation needs in specific areas that cross jurisdictional boundaries. The region's transportation system is defined in the Regional Transportation Plan, which Metro develops in cooperation with local governments. The plan is a 20-year blueprint linking transportation and land use policies. The RTP includes regional goals and guidelines for roadways, transit, light rail, freight, pedestrian access and bicycles.

The RTP also identifies a 20-year list of projects, strategies and actions necessary to meet growth expectations. The plan is designed to implement the region's 2040 Growth Concept. The 2040 Growth Concept provides a framework for managing growth through land-use actions. The plan represents the transportation component of the growth concept.

This section of the Transportation Department also conducts a number of other major regional studies:

- **The Traffic Relief Options Study** is a two-year study evaluating the possibilities of using peak period pricing as an incentive to reduce congestion in the region. An independent task force of business and community leaders is charged with delivering a recommendation to the governing bodies - the Joint Policy Advisory Committee on Transportation, the Metro Council and the Oregon Transportation Commission. The task force will consider whether the concept is appropriate for the Metro region and whether there should be a pilot project. Local governments and agencies are involved through a project management group and technical advisory committee. Both groups review any study findings and provide comments and recommendations to the task force.

- **The Metropolitan Transportation Improvement Program** is a regional funding program for the allocation of federal and state transportation funds. Metro works in cooperation with the Oregon Department of Transportation and local jurisdictions to develop the program, which is updated every two years. The public, the Transportation Policy Alternatives Committee, and JPACT review the plan before forwarding it to the Metro Council for final approval.

- **The South Willamette River Crossing Study** is looking at options for replacing or modifying the Sellwood Bridge. While still safe, the bridge will near the end of its structural life in the next 15 years. A technical advisory committee comprised of technical staff from jurisdictions within the study area work with Metro to develop recommendations that will go to stakeholders, interest groups, TPAC and JPACT and then eventually to the Metro Council.

**High-Capacity Transit Planning**

High-Capacity Transit Planning is responsible for the analysis of alternative transportation modes and the completion of project planning for major fixed guideway transit facilities that have been identified and adopted in the Regional Transportation Plan. This includes systems planning through Major Investment Study processes, the completion of federal environmental processes, preliminary engineering and adoption of regional project financing plans. The program at Metro works closely with staff from Tri-Met, the Oregon Department of Transportation and local jurisdictions participating in high-capacity transit studies.
Travel Forecasting

Travel Forecasting provides assistance to other Metro departments and agencies throughout the region in the form of data analysis and research. The analysis has been used for Metro’s Regional Framework Plan, the Regional Transportation Plan and air quality and high-capacity transit studies. This analysis is based on a comprehensive regionwide household travel/activity survey that determines the travel patterns and needs of residents throughout the region.

Want more information?

For more information about Metro’s Transportation Department, call the transportation hotline, (503) 797-1900 or 797-1755.
The mission of Metro's Regional Environmental Management Department is to contribute to the livability and economic vitality of the region by reducing and managing solid waste. Our goals are:

- to protect the public health, safety and welfare of the region's citizens
- to conserve natural resources
- to protect the environment
- to reduce waste

Under Metro's home-rule charter and state law, Metro has authority over the disposal of solid and liquid wastes. Also under the charter and state law, Metro is the waste shed accountable for state-mandated recycling and recovery goals in the tri-county area, and for annual reports to the Oregon Department of Environmental Quality (DEQ) regarding due diligence and documenting progress toward those goals.

Metro has other responsibilities in addition to these principal mandates. As a requirement of the use of the Columbia Ridge Landfill located in an exclusive farm use zone, Metro is responsible for implementing regional waste reduction programs. Metro is also liable for disposal of household hazardous waste and the environmentally sound closure of St. Johns Landfill under an agreement with DEQ.

**Solid waste management**

Metro manages the region's solid waste disposal. It's a big job and one of the biggest issues that crosses traditional jurisdictional boundaries. The tri-county area generates about 5,500 tons of solid waste per day. Metro owns and operates two transfer stations and arranges for disposal at landfills and other facilities.

Transfer stations – Metro's solid waste facilities include two garbage transfer stations – Metro South Station in Oregon City and Metro Central Station in Northwest Portland. Household hazardous waste collection facilities at Metro Central and Metro South stations accept household quantities of hazardous products to ensure proper disposal or recycling.

St. Johns Landfill – The 238-acre St. Johns Landfill in North Portland served as the metro area's primary garbage disposal site for more than 50 years. In 1980, the city of Portland passed responsibility for operating the landfill to Metro. In 1991 the landfill stopped accepting waste. Metro is now in the process of closing it in an environmentally sound manner. It's not just a matter of closing the gates and walking away; Metro is working to protect the environment and make sure the area surrounding the landfill will be a safe haven for plants and wildlife.

**Regional Solid Waste Management Plan**

The Regional Solid Waste Management Plan was revised in 1995. The plan calls for:

- reliance on coordinated public and private initiatives for managing solid waste
- a reaffirmation of the solid waste management hierarchy (reduce, reuse, recycle, compost, recover-for-energy and dispose) as an effective means to manage the demand for new disposal facilities in the face of regional growth.

The plan gives the region direction for meeting solid waste needs to the year 2005. The plan formally establishes a commitment on the part of Metro and local governments to a waste reduction program for the next 10 years. While local governments, including cities, counties and Metro have solid waste management authority, Metro is specifically responsible for preparing, adopting and enforcing the regional plan.

Every local government within the metro region has an obligation to be actively involved in the implementation of the plan. The plan ensures local government adoption of waste reduction recommendations through an annual review and approval process of local governments' annual waste reduction work plans.
Metro provides funding assistance to local governments for implementing the waste reduction programs outlined in the plan. Cities and counties have responsibility for designing and administering solid waste and recycling collection programs for their jurisdictions. In all jurisdictions, garbage and recycling collection services are provided by private haulers who are permitted or franchised by their respective jurisdictions. Activities must be consistent with all state and Metro legislation and solid waste plans, including the Opportunity to Recycle Act, the Oregon Recycling Act and the Regional Solid Waste Management Plan.

**Waste reduction**

In order to plan and manage an effective, economical and environmentally sound solid waste management system for the region, Metro supports a number of recycling and waste reduction programs, ranging from construction waste recycling to yard debris composting to school education.

Metro shares the credit with the region's cities and counties for pushing the recovery rate to 42 percent — one of the highest in the nation. Recovery level goals are set at 50 percent by the year 2005. Reaching and exceeding recycling and recovery goals will only be possible through partnerships with haulers, local governments, businesses and the public.

**Metro Recycling Information** — The award-winning Metro Recycling Information is the clearinghouse for waste reduction, recycling and solid waste disposal information in the region. Individuals and businesses in the metro region can call one telephone number, six days a week and have their recycling questions answered. Up-to-date information is maintained on more than 450 recycling depots, drop-off sites, collection services, curbside recycling programs, reuse referrals and markets for recyclables. Each year, staff responds to some 100,000 calls. In addition to Monday-Saturday telephone service, staff also answer questions for walk-in customers and operate a lending library of recycling industry books, videos and journals.

**Waste reduction education programs** — The goal of the waste reduction education program is to reduce the amount and type of solid waste in the region by changing consumption and disposal habits of a new generation of consumers. To accomplish this goal, Metro offers interactive classroom programs to metro-area schools, and staff participates in community events and coordinates with other recycling educators in the region.

Educational programs include puppet shows for primary school children and classroom presentations for students in middle through high schools. With the decline in school budgets for basic materials in science, health, social studies and home economics, new methods of reaching the middle and high school population were needed. Metro staff developed a new program with a shift toward teacher training and state-of-the-art, hands-on educational materials. In addition, a workshop for teachers has been offered to provide assistance with setting up classroom visual aids and curriculum resources.

**Want more information?**

For information about any of these programs, call Jan O'Dell, public affairs, 797-1599.
Metro’s Regional Parks and Greenspaces Department offers a variety of programs and services that protect fish and wildlife habitat in the region as well as provide access to nature for learning and recreation. Public outreach and education programs promote awareness, understanding, appreciation and encourage citizen involvement in Metro’s regional parks and greenspaces. The department also works with local governments, businesses and citizens to prepare resource management plans for existing regional park facilities and newly acquired open space.

The Open Spaces Acquisition Program implements the requirements of the open spaces, parks and streams bond measure approved in May 1995. The goal of the program is to acquire about 6,000 acres of natural area in 14 regional target areas and 41 miles of greenway or trail corridor. As of Dec. 31, 1998, 4,008 acres (67 percent of 5,985-acre regional goal) had been acquired. Metro has helped fund 60 local parks projects.

**Parks, Regional Trail Master Planning**

Department staff works with local governments, businesses and citizens to prepare resource management plans for the protection of regionally significant parks and trail corridors held in public trust. The department oversees management planning efforts for Metro-owned natural areas, those it intends to purchase, land received through donation or other co-owned properties. Site-specific management plans balance opportunities to develop a natural area for public access and passive recreation with the need to protect the integrity of the natural resource for its ecological and aesthetic value.

Management plans have been prepared for the following:

- Beggars-tick Wildlife Refuge, Southeast Portland
- Smith and Bybee Lakes Wildlife Area, North Portland
- Whitaker Ponds, Northeast Portland

**Metro Regional Parks and Greenspaces**

- Ancient Forest Preserve; in partnership with The Friends of Forest Park
- Howell Territorial Park; in partnership with the Oregon Historical Society
- Oxbow Regional Park

Management plans are being prepared for the following regionally significant parks and regional trails:

- Interim Use Policies for Newly Acquired Open Space
- Columbia River Management Unit Master Plan
- Blue Lake Regional Park, Fairview

**Regional Framework Plan**

Policies to protect and manage a cooperative regional system of parks, natural areas, greenways and trails for fish, wildlife and people are set in the Regional Framework Plan. Residents and local governments are working together with Metro to assure that our natural environment remains a vital part of our communities from the neighborhood to the region as a whole. At Metro, specific standards have been or will be adopted to:

- improve water quality and reduce flooding
- assure adequate park lands and recreation services
- protect fish and wildlife habitat

Metro parks staff support the growth management planning process by working with other Metro departments, local governments and residents to provide technical advice, written material and participation in public involvement activities.

**Open Spaces Acquisition Program**

On May 16, 1995, voters of the region approved a $135.6 million bond measure to acquire open space within 14 regional greenspace target areas and to fund six regional greenway and trail projects and nearly 100 local government parks projects. Regional target areas (acquisition acreage goals in parentheses) were selected from and support the goals and policies of the Metropolitan Greenspaces Master Plan (1992):
Willamette River Greenway (1,100 acres)
East Buttes/Boring Lava Domes (550 acres)
Newell Creek Canyon (370 acres)
Sandy River Gorge (810 acres)
Cooper Mountain (425 acres)
Forest Park buffer/expansion (320 acres)
Forest Park buffer/expansion (320 acres)
McKay/Dairy creeks (335 acres)
Tonquin Geologic Area (275 acres)
Tualatin River access points (265 acres)
Clear Creek Canyon (345 acres)
Gales Creek (775 acres)
Columbia River shoreline (95 acres)
Rock Creek (300 acres)
Tryon Creek linkages (20 acres)

Regional greenway and trail projects also were selected from and support the goals and policies of the master plan:

- Peninsula Crossing Trail in North Portland (3 miles)
- Fanno Creek Greenway (up to 12 miles)
- Sauvie Island to Hillsboro (Burlington Northern) rails-to-trails (7 miles)
- OMSI to Springwater Corridor (3 miles)
- Clackamas River North Bank Greenway (up to 8 miles)
- Beaver Creek Canyon Greenway (8 miles)

Up to $25 million is available to 26 local government park providers to fund community open space projects. Allocations to each provider (ranging from $5,673 for Rivergrove to $7.4 million for Portland) are based on a formula in the master plan. Metro will fund projects through intergovernmental agreements with the jurisdictions. As of Dec. 31, 1998, $12 million has been invested in local projects.

Most of the property is expected to be purchased between three to five years. As of Dec. 31, 1998, 136 acquisitions totaling 4,008 acres have been completed. The property will be maintained in a stable condition until master plans are developed and funds are identified for capital improvements.

Outreach and Education

A variety of publications, events and activities provide an opportunity for citizens to discover their metropolitan parks, greenspaces and trails and to participate in planning for the future. These programs also help build and maintain needed revenue and volunteer support for the operation and maintenance of Metro park facilities. The department provides:

Metro GreenScene, published four times a year offers a calendar of greenspace tours, hikes, classes and special events conducted by Metro and other cooperators.

The Habitat Restoration and Environmental Education Grants Program provides incentive and opportunity for people to be directly involved with the understanding, restoration and enhancement of their urban natural areas. Supported by funds from the US Fish and Wildlife Service since 1991, Metro has awarded 190 habitat restoration, environmental education and salmon enhancement grants involving thousands of people in stewardship and learning activities throughout the metropolitan region. Because of the interest and local demand for hands-on natural area experiences, the $1.2 million in grant funds have leveraged an additional $4 million in local community support.

The annual Salmon Festival, held in October at Oxbow Regional Park, provides families the opportunity to view the return of the fall chinook salmon to the Sandy River. The festival features entertainment, activities for youngsters, ancient forest walks, environmental exhibits, arts and craft exhibits and demonstrations. About 10,000 people attend each year.

Especially for Kids is a summer series offering entertainment for children on Wednesday afternoons at Blue Lake Regional Park.

Opportunities are available through the Volunteer Services Program for individuals to support and be involved with park and greenspace programs and events. For example, volunteer naturalists are trained to deliver greenspace interpretive programs throughout the region.

Regional open space target areas and trail projects associated with Metro Council districts

District 1 – Rod Park – East Buttes/Boring Lava Domes, Sandy River Gorge, Columbia River Shoreline, Beaver Creek Canyon Trail Corridor

District 2 – Bill Atherton – East Buttes/Boring Lava Domes, Newell Creek Canyon, Clear Creek Canyon, Willamette River Greenway, Tryon Creek Linkages, Clackamas River Greenway (north bank)

District 3 – Jon Kvistad – Cooper Mountain, Tonquin Geologic Area, Tualatin River Access Points, Fanno Creek Greenway
District 4 – Susan McLain – Jackson Bottom
(Dairy/McKay creeks), Tualatin River Access
Points, Rock Creek, Gales Creek, Sauvie Island
to Beaverton/Hillsboro Trail

District 5 – Ed Washington – Willamette River
Greenway, Buffer and Expansion of Forest Park,
Peninsula Crossing Trail, Sauvie Island to
Beaverton/Hillsboro Trail

District 6 – Rod Monroe – East Buttes/Boring
Lava Domes, Columbia River Shoreline

District 7 – David Bragdon – Tryon Creek
Linkages, Willamette River Greenway, Fanno
Creek Greenway

Want more information?

Information, events and reservations – 797-1850
Open spaces hotline – 797-1919
Ron Klein, public affairs – 797-1774
Amy Kirschbaum, public affairs (open spaces
acquisitions) – 797-1713
Deb Scrivens, environmental education program
coordinator – 797-1852
Julie Weatherby, marketing/events coordinator –
797-1846
Lynn Wilson, education/restoration grants
coordinator – 797-1781
Mel Huie, regional trails and greenways –
797-1731
Jane Hart, parks master planning – 797-1585
Lupine Jones, volunteer services – 797-1733
Oregon Zoo

Size
64 acres

Admission
$5.50 adults, $3.50 children and $4 seniors

Train tickets
$2.75 adults, $2 children and seniors

Annual attendance
992,243 in 1998

Animal collection
About 1,318 specimens representing 215 species of mammals, reptiles, birds and amphibians.

The Oregon Zoo is the state's most popular paid attraction, consistently drawing more than 1 million people a year. Half of the visitors live in the metropolitan region, 16 percent are from other Oregon communities and 32 percent are from out of state. They experience a world of contrasts, from the streams and woods of the Northwest Cascades to the savanna and rain forest of Africa.

The zoo is considered a premier recreational site and surveys confirm an overwhelmingly positive visitor experience. In recent years, the zoo has also become an important player in the worldwide conservation effort:

Conservation
"Getting elephants to breed in captivity hasn't been easy. The Portland zoo did it..." The Wall Street Journal, May 2, 1994

• Participate in 20 Species Survival Plans with other zoos in North America. Coordinate breeding records for four species.
• Home to 21 endangered and 36 threatened species.
• Opened the Center for Species Survival, an off-site breeding and research facility focusing on endangered primates and birds.
• Coordinated the first-ever elephant foot-care conference in spring 1998.

Research
"There are lots of furry little ones at Portland's Washington Park Zoo... When babies are born at the zoo, it's generally a sign that a zoo is doing its job right."
Statesman Journal, Salem, Ore., Aug. 16, 1993

• Determining captive environments that will lead to optimal animal well-being and successful reproduction.
• Leader in developing and researching environmental enrichment for captive animals. Held the first-ever international environmental enrichment conference in 1993.
• Training animals to cooperate in husbandry and veterinary procedures.

Education
"... taking part in a Zoo Experience can give you a fresh look at some old favorites."
The Oregonian, Portland, March 10, 1994

• 80,000 students supplement their classroom learning with field trips to the zoo; 70,000 students participate in community outreach programs that include school assemblies and classroom presentations; 250,000 people a year enjoy the Birds of Prey and reptile shows on zoo grounds.

History
The zoo, then named the Washington Park Zoo, celebrated its 100th birthday in 1987. From its humble beginnings in the back of a pharmacy in downtown Portland to its prominence as the leading paid attraction in the state, the zoo has seen a multitude of changes. In 1887, Richard Knight, a local pharmacist who collected animals as a hobby, officially presented his menagerie to the city and the zoo was created. Having previously occupied two other Washington Park locations, the zoo moved to its present site in 1959.

Future
Metro voters passed a $28.8 million bond measure in September 1996 to finance the building of a series of innovative exhibits called "The Great Northwest." Whether visitors are new to the state or have grown up hiking in the
Cascades, this exhibit will delight and inform them. It takes them on a journey from the crest of the Cascade Mountains, westward through the forests, the wetlands, the valley and finally, the Pacific Ocean.

The exhibit’s first phase, Cascade Crest, will open in September 1999, followed by Steller Cove (2000), Bear Crossing (2001), Eagle Canyon (2002) and Wy'east Trail (2003). Main themes of the exhibit are the uniqueness of Northwest ecosystems; how people affect and are affected by nature in the Northwest; and where they may go to enjoy and learn more about these animals and ecosystems.

**Major exhibits**

Alaska Tundra, Africa Rain Forest, Africa Savanna, Penguinarium, Cascade Exhibit, Elephants, Insects, Felines, Primates and Bears

**Programs**

The Center for Species Survival – An off-exhibit breeding and research facility for endangered animals, the center allows zoo conservation researchers the opportunity to study behavioral biology, reproduction and well-being of selected animals.

Conservation Research Program – Zoo researchers are involved in a variety of behavioral research projects that benefit our zoo, as well as other animal care institutions and animals in the wild. Current research includes studying social behavior of primates, molecular basis of chemical communication in elephants and the reproductive biology of black rhinos.

Education Programs – The zoo offers programs for visitors, schools and other institutions, special programs for senior citizens and handicapped persons, and classes for all ages. Volunteers and keepers deliver animal talks, tours and presentations; professional staff presents living history, birds of prey, reptile and other animal shows. Outreach programs seek to educate people about wildlife and habitat issues.

Volunteers – More than 1,500 volunteers contribute more than 125,000 hours per year in conservation research, events, promotions, on and off-grounds education programs and the ZooTeen program. Volunteers add the equivalent of 60 full-time staff members.

**Events**

Yearly events include summer concerts and the month-long ZooLights Festival during the holiday season. Senior Safari and Packy’s Birthday are two of many one-day events.

**Amenities**

Washington Park and Zoo Railway – An authentic steam engine leads one of three trains that take visitors through the zoo and the wooded hills of Washington Park. The 5/8-size replica follows a four-mile course to a depot near Portland’s International Rose Test and Japanese Gardens. It is the last operating railway with an authorized postal cancellation and receives requests from around the world for its series of unique postal cancellations.

Food service, catering and gift shop

The Visitor Services Division operates the zoo’s concessions, which include AfriCafe, the Cascade Grill and Cascade Outfitters gift shop. Group events are hosted indoors in the African Plains banquet room; the Cascade Grill, which seats 500 people; or outdoors in picnic areas that hold up to 6,000 people. Upscale catering is provided by an on-grounds chef.

In addition, the zoo has a new main entrance 200 feet from the new MAX light-rail station. The entry plaza will feature a restaurant with an upgraded menu, a banquet facility that seats 500 and an expanded gift shop with a wide selection of educational materials and gifts.

Oregon Zoo Foundation

The Oregon Zoo Foundation is the nonprofit support organization of the zoo. The foundation coordinates private fund-raising efforts on behalf of the zoo including a membership program offering free admission to the zoo and 125 reciprocal zoos across the country. Other foundation development programs facilitate major gifts, corporate and foundation support, and animal sponsorship.

**Funding**

Income is derived from the Metro property tax levy, zoo admissions, concessions, contributions, special promotions, the Oregon Zoo Foundation and grants. Budgeted amount for fiscal year 98-99 is $16.1 million for operating costs.
Each year, millions of people enjoy performances, trade shows, sporting events and more at Metro's regional trade and spectator facilities — the Oregon Convention Center, the Portland Center for the Performing Arts, the Portland Metropolitan Exposition Center and Portland Civic Stadium.

Metro oversees operation of these four facilities through the Metropolitan Exposition-Recreation Commission, a seven-member public body whose members are appointed by Multnomah County (one), Clackamas County (one), Washington County (one), the city of Portland (two) and Metro (two).

**Oregon Convention Center**

Metro built and operates the Oregon Convention Center, a 500,000-square-foot convention, trade show and multipurpose facility. With its trademark twin glass towers, the convention center has gained national recognition for its beauty, function and superior customer service. More than 5.1 million people have attended events at the convention center since it opened in 1990. More than $2.5 billion in economic benefits has been generated for the region through the end of 1997 thanks to spending by out-of-town visitors to the convention center. The convention center has also generated 5,200 permanent jobs within the metropolitan region.

**Portland Center for the Performing Arts**

The Portland Center for the Performing Arts is the cultural heart of the region. It is a four-theater complex: Portland Civic Auditorium, Arlene Schnitzer Concert Hall, Newmark Theatre (in the New Theatre Building) and Dolores Winningstad Theatre (in the New Theatre Building).

These venues host more than 1,000 performances each year, with attendance in excess of 1 million. The Oregon Symphony, the Portland Opera, Oregon Ballet Theatre, Portland Center Stage and the Oregon Children's Theatre are among the resident companies producing annual performance seasons on the PCPA stages. International celebrities such as Itzhak Perlman, Kathleen Battle, Victor Borge and Yo-Yo Ma have performed there.

"The Phantom of the Opera," "Stomp," "Rent" and "Bring in 'Da Noise, Bring in 'Da Funk" are among the Broadway hits that have been enjoyed at the Portland Center for the Performing Arts. The city of Portland owns the PCPA; Metro manages the PCPA through MERC.

**Portland Metropolitan Exposition Center (Expo)**

The Expo Center, owned by Metro, is the region’s largest consumer and trade show venue of its kind. The 60-acre site includes four interconnected buildings with total exhibit space exceeding 330,000 square feet. It includes parking for 3,000 vehicles. Expo Center recently added a world-class 108,000-square-foot exhibit hall, enabling it to host the celebrated America’s Smithsonian exhibit. This exhibit attracted 424,000 visitors.

Public exhibitions include antiques, autos, boats, collectibles, home and garden, recreation, sports, trade shows and special events.

**Civic Stadium**

Historic Civic Stadium, located in the heart of downtown, serves as the region’s principal outdoor venue for professional and major college sporting events, high school football and baseball, community soccer, entertainment and large special events. Civic Stadium is home to the Rockies single-A baseball team and has become a venue for intermediate soccer.

The city of Portland owns Civic Stadium; Metro operates Civic Stadium through MERC.

**Want more information?**

For more information, call:

- Metropolitan Exposition-Recreation Commission – 731-7800
  - Civic Stadium – 248-4345
  - Expo Center – 285-7756
  - Oregon Convention Center – 235-7575
  - Portland Center for the Performing Arts – 248-4335
Metro 2040 history and timeline

**September 1991**
Regional Urban Growth Goals and Objectives (RUGGOs) adopted by Metro Council

(Required by state law, RUGGOs provide policy direction for Metro's regional planning efforts.)

**November 1992**
Metro home-rule charter approved by voters in the region

(Charter makes planning for the future Metro's primary responsibility.)

**December 1994 (by resolution)**
**December 1995 (by ordinance)**
2040 Growth Concept adopted by the Metro Council

(Sets regional growth management policy and calls for a more compact urban form along major transportation corridors and in areas of new development. Integrated into RUGGOs.)

**June 1995**
Future Vision adopted by Metro Council

(Required by the charter, Future Vision is a long-term, visionary outlook for this region.)

**November 1996**
Urban Growth Management Functional Plan adopted by Metro Council

(Requires local jurisdictions to change their ordinances to address certain issues. The plan creates land-use tools to achieve certain goals including allowing more efficient development of land, reducing parking in future developments, protecting stream corridors, managing future "big box" retail locations, keeping roads accessible and checking the progress of implementation.)

**March 1997**
Urban reserves adopted by the Metro Council

(Required by state law, urban reserves are areas just outside the current urban growth boundary that may be added into the UGB to accommodate future growth.)

**December 1997**
Regional Framework Plan adopted by the Metro Council

(Required by the charter, the Framework Plan is a comprehensive set of policy guidelines to manage the region's future growth and brings together previously adopted regional policies (RUGGOs, 2040 Growth Concept, the Urban Growth Management Functional Plan, the Regional Transportation Plan and the Greenspaces Master Plan) to create an integrated land-use, transportation, parks and open spaces planning framework for the region.)

**June 1998**
Stream and Floodplain Protection Plan adopted by the Metro Council

(Establishes regional performance standards for water quality and flood plain management that local jurisdictions must achieve in their local codes. The adopted policies amend Title 3 of the Urban Growth Management Functional Plan.)

**December 1998**
Metro Council moves (or announces intent to move) the urban growth boundary to include about 5,300 acres of urban reserve land

(State law requires Metro to expand the boundary to accommodate 20 years worth of projected growth.)
The Metro Charter, approved by voters in 1992, calls for the creation of two new planning products: the Future Vision and the Regional Framework Plan. The Future Vision is described in the charter as follows:

(1) Future Vision. (a) Adoption. The council shall adopt a Future Vision for the region between Jan. 15, 1995, and July 1, 1995. The Future Vision is a conceptual statement that indicates population levels and settlement patterns that the region can accommodate within the carrying capacity of the land, water, and air resources of the region, and its educational and economic resources, and that achieves a desired quality of life. The Future Vision is a long-term, visionary outlook for at least a 50-year period. As used in this section, “region” means the Metro area and adjacent areas.

(b) Matters Addressed. The matters addressed by the Future Vision include but are not limited to: (1) use, restoration, and preservation of regional land and natural resources for the benefit of present and future generations, (2) how and where to accommodate the population growth for the region while maintaining a desired quality of life for its residents, and (3) how to develop new communities and additions to the existing urban areas in well-planned ways.

(c) Effect. The Future Vision is not a regulatory document. It is the intent of this charter that the Future Vision have no effect that would allow court or agency review of it.

Metro is also directed to develop a “Regional Framework Plan” consisting of a number of individual plans which address issues of regional significance – the transportation system, the urban growth boundary, water resources, air quality and housing densities, among others. The relationship between the Future Vision and the Regional Framework Plan is explained in the charter as follows:

“The Regional Framework Plan shall: (1) describe its relationship to the Future Vision, (2) comply with applicable statewide planning goals, (3) be subject to compliance acknowledgment by the Land Conservation and Development Commission or its successor, and (4) be the basis for coordination of local comprehensive plans and implementing regulations.”

Your Future Vision Commission has developed this document in response to both the requirements and the spirit of the charter. The following vision statements, in concert with the Future Vision map, provide the “conceptual statement” sought by the framers of the charter and directly addresses charter requirements in the following ways:

The region. Our area of interest is not the “three-county” or “four-county” area, but nine counties (Clackamas, Clark, Columbia, Cowlitz, Marion, Multnomah, Polk, Washington, and Yamhill) that interact now and will interact more completely in the future. We can no longer afford to view ourselves apart from this larger context, itself a part of Cascadia, North America, the Pacific Rim, and the world. We are part of a truly international economy.

Population levels and settlement patterns. Our work has depended on population projections and allocation scenarios developed through existing planning processes in Oregon and Washington. The Future Vision map depicts the relationship between this written document and the geography of the nine-county, bi-state region.

Carrying capacity. This metropolitan area, like all others, exceeded its ability to meet the physical needs of its people long ago. Our style of life depends on the importation of energy, materials, capital and “brain power” from all over the world. We’ve also found that traditional biological models of population carrying capacity are simply too narrowly drawn to be of much use in a metropolitan setting. Determining
the sustainability of even current population levels at our existing quality of life is greatly complicated by uncertainties due to future technological and global economic changes. In addition, there are difficult questions of value which must be addressed first, since values can be the basis for an analysis of carrying capacity but cannot be derived from such a study. For these reasons, it may not be possible to choose a single sustainable population level for the region.

In fact, the question is not so much whether we have or have not exceeded carrying capacity in some absolute sense, but whether our continuing inhabitation of this place is occurring in a manner that will allow us to meet established criteria for protecting human health and the environment while serving our values associated with livability and sustainability. Available information does suggest that increases in population will continue to degrade natural systems, absent significant changes in how we grow. Quite simply, carrying capacity must be viewed and discussed in a cultural and social as well as physical context.

Consequently, we have chosen to approach carrying capacity as an issue requiring ongoing discussion and monitoring. We believe that the relevant question is not “when” carrying capacity will be exceeded, but “how” we will collectively restore, maintain and/or enhance the qualities of the region central to sustaining our health, the quality of the natural environment and the ability of future generations to take action to meet the needs of their time.

Sustainable communities will come about through the skillful blending of factual data, our values and new ideas in a public discussion occupying a place of honor in this region, not through blind adherence to numerical thresholds that cannot be specified, much less met. Hence, carrying capacity is not a one-time issue, a single number, a simple answer, but an ongoing question for us all.

New communities. This vision does not call specifically for the creation of new communities. We choose instead to focus on the restoration and redevelopment of what already has been committed to non-resource use. However, the values, vision statements and map, taken together, describe the nature of our region in 2045, and as such can be used as a template for what any community, new or old, ought to embody.

Other issues. There are a number of issues that, in the future, will challenge some of our assumptions. These issues include:

• New telecommunications and information technologies are upon us but precise effects on quality of life and urban form are not yet known.

• Some aspects of our quality of life are likely to deteriorate with growth, while some will be enhanced.

• There almost certainly will be a change in the ways we use fossil fuels in the next 50 years.

• Our sense of region likely will change as technology and the economy change. After long discussion, we recognize that these issues and more will have profound and largely unknown implications for our vision and this region. Nonetheless, we must move forward with the belief that our region will rise to the challenges as they become apparent.

The vision statements fall logically into three groups:

• Each Individual – the development of each individual as a productive, effective member of this region. We believe that this region must make clear and unambiguous commitments to each individual in order that we all may have a vibrant, healthy place to live. This doesn’t mean that our region must be all things to all people. It can’t be. Rather, we seek the full participation of individuals in the prosperity of this region, accompanied by their own acceptance of responsibility for stewardship of their community and region. Three vision statements of our aspirations for individuals are presented under the headings of children, education, and participation.

• Our Society – the ability to state and act on the collective interest of our communities through civic involvement, a strong economy and vital societal institutions. The ability to work together, in the truest sense, is the hallmark of great communities and flourishing societies. Engaging people with each other and with our economy to solve problems and act on dreams is the cornerstone of our ability to move forward into the future. Six vision statements of our aspirations for our society are presented under the headings of safety, economy, diversity, civic life, vital communities and roots.
• Our Place – the physical landscape of the nine-county, bi-state region, the settlement patterns that have evolved within it and the economy that continues to evolve. We live in a landscape of great variety and beauty, a stage for an enviable range of possibilities. Preserving that vast sense of diversity must be the core of our legacy of inhabitation. Eight vision statements of our aspirations for our place are presented under the headings of rural land, variety in our communities and neighborhoods, a life in nature, walking, linkages, downtowns, equity and growth management.

The vision statements have been developed with the elements of the Regional Framework Plan in mind. Clearly, Metro has a critical role to play as planner, convener, monitor and leader. However, as in the past, the success we achieve in the future will be a collaborative accomplishment. Keep in mind that the usefulness of this or any Future Vision for advising and guiding policy and regulation is entirely dependent on its scope and persuasiveness. Developing and adopting a Future Vision offers an unparalleled opportunity to create a set of broadly shared expectations for what Metro's planning and policy making ought to accomplish.
The Regional Urban Growth Goals and Objectives (RUGGOs) have been developed to:

- guide efforts to maintain and enhance the ecological integrity, economic viability, social equity and overall quality of life of the urban region
- respond to the direction given to Metro by the legislature through ORS Ch 268.380 to develop land-use goals and objectives for the region that would replace those adopted by the Columbia Region Association of Governments
- provide a policy for the development of the elements of Metro's regional framework plan and its implementation of individual functional plans
- provide a process for coordinating planning in the metropolitan area to maintain metropolitan livability.

RUGGOs are not directly applicable to local plans and local land-use decisions. However, they state regional policy as Metro develops plans for the region with all of its partners. Hence, RUGGOs are the building blocks with which the local governments, citizens, the business community and other interests can begin to develop a shared view of the region's future.

RUGGOs are presented through two principal goals, the first dealing with the planning process and the second outlining substantive concerns related to urban form. The "subgoals" (in Goal II) and objectives provide clarification for the goals. The planning activities reflect priority actions that need to be taken to refine and clarify the goals and objectives further.

Metro's regional goals and objectives required by ORS 268.380(1) are in RUGGOs Goals I and II and Objectives 1-23 only. RUGGOs planning activities contain implementation ideas for future study in various stages of development that may or may not lead to RUGGOs amendments, new functional plans, functional plan amendments or regional framework plan elements. The regional framework plan, functional plans and functional plan amendments shall be consistent with Metro's regional goals and objectives and the Growth Concept, not RUGGOs planning activities.

**Background statement**

Planning for and managing the effects of urban growth in this metropolitan region involves 24 cities, three counties and more than 130 special service districts and school districts, as well as Metro. In addition, the state of Oregon, Tri-Met and the Port of Portland all make decisions that affect and respond to regional urban growth. Each of these jurisdictions and agencies has specific duties and powers that apply directly to the tasks of urban growth management. In addition, the cities of Southwest Washington and Clark County, though governed by different state laws, have made significant contributions to the greater metropolitan area and are important to this region. Also, nearby cities within Oregon, but outside the Metro boundary, are important to consider for the impact that Metro policies may have on their jurisdictions.

Accordingly, the issues of metropolitan growth are complex and interrelated. Consequently, the planning and growth management activities of many jurisdictions are both affected by and directly affect the actions of other jurisdictions in the region. In this region, as in others throughout the country, coordination of planning and management activities is a central issue for urban growth management.

The Metro Council authorized the development of goals and objectives. These goals and objectives are the result of substantial discussion and debate throughout the region for more than two years. On a technical and policy basis, jurisdictions in the region, as well as the Metro Council, participated in crafting these statements of regional intent. Specifically, these goals and objectives have been analyzed and discussed by the Metro Technical Advisory Committee, comprised of staff land-use representatives and citizens from throughout the region; the Transportation Policy Advisory Committee, comprised of staff transportation representatives and citizens from the region; the Metro Policy Advisory Committee, comprised of elected
Metro developed the 2040 Growth Concept to help residents of this region plan the kinds of communities they wanted during the next 50 years. The 2040 Growth Concept guides long-term growth management for the region, including a general approach to approximately where and how much the urban growth boundary should be expanded, what types of development are needed to accommodate projected growth within the boundary, what kinds of transportation options should be available and which areas should be protected as open space.

The growth concept is based on Metro's growth projections through the year 2040, and it's designed to accommodate about 720,000 additional citizens and 350,000 additional jobs. The total population served by the growth concept will be about 1.8 million.

The philosophy is to preserve access to nature and build better communities for today and for the future. The growth concept lays out the objectives; the Regional Framework Plan lays out the regional policies that will help achieve objectives in land use, transportation, parks and greenspaces, water and natural hazards.

**Growth concept fundamentals**

Fundamental to the growth concept is a multi-modal transportation system that assures mobility of people and goods throughout the region. By coordinating land use and transportation, the region embraces its existing advantage as a relatively uncongested hub for trade.

The concept also states that it is important to keep a clear distinction between urban and rural lands. Separation of urban and urbanizable land from rural land shall be accomplished by the urban growth boundary, which defines the region's 20-year projected need for urban land. That boundary will be expanded into designated urban reserves only when a need for additional urban land is demonstrated. This assumes cooperative agreements with neighboring cities such as Sandy and Newberg to coordinate planning for the proportion of projected growth in the region expected to locate within their urban growth boundaries and urban reserve areas. The result is intended to be a compact urban form for the region coordinated with nearby cities to retain the region's sense of place.

**Centers**

The 2040 Growth Concept also states mixed-use urban centers inside the UGB are critical to managing future growth. This means favoring growth in higher density centers of employment with housing, good transit service, retail, cultural and recreational activities within a walkable environment. This is intended to provide efficient access to goods and services, enhance multi-modal transportation, and create vital, attractive neighborhoods and communities. There are three types of centers, distinguished by size and accessibility; the central city is downtown Portland and is accessible to millions of people; regional centers such as Beaverton, Gresham and Oregon City are accessible to hundreds of thousands; and town centers such as Forest Grove and Troutdale are accessible to tens of thousands.

**The central city**

Downtown Portland, which serves as our major regional center, provides accessibility to the many businesses that require access to a large market area. It is the center for local, regional, state and federal government; financial institutions; commerce; arts and culture; and tourism. About 20 percent of all employment in the region is in downtown Portland. Under the growth concept, downtown Portland would grow at about the same rate as the rest of the region and keep its employment level at about 20 percent of the regional total. To do this, the central city's 1990 density of 150 people per acre would increase to about 250 people per acre.

**Regional centers**

Regional centers serve large market areas outside the central city and are connected to the central city by high capacity transit and highways. There are eight regional centers in addition to downtown Portland: Hillsboro,
Gresham, Gateway, downtown Beaverton, Washington Square, downtown Oregon City, Clackamas Town Center and Milwaukie. Regional centers would become the focus of compact development, redevelopment, and high-quality transit service. The growth concept estimates that about 3 percent of new household growth and 11 percent of new employment growth would be accommodated in these regional centers. From the current 24 people per acre, the growth concept would allow for about 60 people per acre.

Town centers

Smaller than regional centers and serving populations of tens of thousands of people, town centers would accommodate about 3 percent of the new households and more than 7 percent of new employment. The 1990 density of an average of 23 people per acre would nearly double – to about 40 persons per acre. Town centers would provide local shopping, employment and cultural and recreational opportunities within a local market area. Town centers would vary greatly in character. Some would become traditional town centers while others would change from an auto-oriented development into a more complete community, such as Hillsdale.

Corridors

Not as dense as centers, corridors are located along good-quality transit lines. They provide a place for densities that are somewhat higher than today and feature a pedestrian-friendly environment and convenient access to transit. Densities could average about 25 people per acre.

Station communities

Station communities are nodes of development near light-rail or high-capacity transit stations that feature high-quality pedestrian environments. They would encompass an area approximately one-half mile from a station stop. The densities of new development would average about 45 people per acre.

Main streets and neighborhood centers

Main streets throughout the region are undergoing a revival, and this helps provide an efficient and effective land-use and transportation alternative. They are served by transit and feature strong business and civic investments. The growth concept calls for main streets to grow from 1990 levels of 36 people per acre to about 39 people per acre. They will serve neighborhoods and may develop a regional specialization, such as antiques, fine dining, or entertainment.

Neighborhoods

Residential neighborhoods would remain a key component of the growth concept and would fall into two basic categories: inner neighborhoods and outer neighborhoods.

Inner neighborhoods include such areas as Portland, Beaverton, Milwaukie and Lake Oswego. These would include primarily residential areas that are accessible to employment. Inner neighborhoods would trade smaller lot sizes for better access to jobs and housing. Densities would increase from about 11 people per acre in 1990 to 14 people per acre.

Outer neighborhoods would be farther away from large employment centers and would have larger lot sizes and lower densities. Examples include cities such as Forest Grove, Sherwood and Oregon City. Densities would increase from about 10 people per acre in 1990 to 13 people per acre.

Industrial areas

The region's economy is heavily dependent upon wholesale trade and the flow of commodities to national and international markets. Industrial areas would be set aside primarily for industrial activities. Areas of high economic potential, such as the Sunset Corridor for electronics products and the Northwest industrial sanctuary for metal products, shall be supported with transportation planning and infrastructure development.

Open spaces and trail corridors

Recognition and protection of open spaces both inside the UGB and in rural reserves outside urban reserves are reflected in the growth concept. Open spaces, including important natural features and parks, are important to the capacity of the UGB and the ability of the region to accommodate housing and employment.

Lands designated as regional open space would mean these lands are removed from the inventory of urban land available for development. Rural reserves, already designated for farms, forestry, natural areas or rural-residential use, would remain and be further protected from development pressures.
Regional Framework Plan

The Regional Framework Plan is a comprehensive set of policy guidelines to guide growth and to help create livable communities in the region. It incorporates goals that Metro and our local partners are using to coordinate a number of different regional issues.

Metro’s voter-approved charter required that we pass the Regional Framework Plan by December 1997. We have done that, but there are still areas that are being refined.

There are eight chapters to the plan: land use; transportation; parks, open spaces and recreational facilities; urban water quality and supply; natural hazards; Clark County; management policies and implementation:

Land Use – Chapter 1 focuses on how we design future neighborhoods, how we keep current neighborhoods livable, and how we manage urban development to avoid sprawl. Metro has also committed to monitoring economic indicators such as jobs and wages.

Transportation – Chapter 2 looks at how to encourage all types of transportation from walking and bicycling to using mass transit and driving.

Parks, Open Spaces and Recreational Facilities – Chapter 3 shows how we can protect and link our natural resources throughout the region.

Urban Water Quality and Supply – Chapter 4 helps everyone work together to ensure there is enough clean water for drinking, fish, wildlife and the needs of our economy.

Natural Hazards – Chapter 5 helps the region plan for and reduce damage from floods, earthquakes and landslides.

Clark County – Chapter 6 focuses on how Metro can improve cooperation with Clark County, Wash.

Management Policies – Chapter 7 discusses how Metro will fulfill its responsibilities.

Implementation – Chapter 8 discusses how implementation of the plan applies to Metro, to the cities and to the counties.

What issues still need more work?

The plan includes several new policies that require more work to reach completion. They are:

Affordable housing – a technical advisory committee started work in late 1998. Various jurisdictions, community groups, and Metro’s executive officer appointed members to the group. The committee will look at a number of possible requirements for local jurisdictions. It will then pass those recommendations on to the Metro Council.

Fish and wildlife habitat protection – this plan would establish regional policies that would give local jurisdictions a range of tools they would use to meet state land-use requirements concerning fish and wildlife habitat protection and federal endangered species requirements.

Transportation – Metro, working with local jurisdictions and citizens, is updating the Regional Transportation Plan. The RTP is a 20-year blueprint for the region’s transportation system that addresses how best to move people and goods within and through the region.

Regional assessment of parks – Metro plans to conduct a regional assessment of parks and facilities pending appropriate funding.

Coordinated planning for future school sites – Metro plans to work with local jurisdictions to assess the need and funding sources for future school sites.

What’s the next step?

Functional plans are the next step. We have completed one functional plan: the Urban Growth Management Functional Plan. It provides cities with tools such as housing density targets, and it provides them with planning
requirements. When the work on the fish and wildlife habitat protection issue is completed, those new requirements will be incorporated into this functional plan.

Metro and our local partners need to create or finish work on new functional plans for the other issues (affordable housing, planning for future school sites, the Regional Transportation Plan and parks). Assuming there is sufficient funding, these plans should be developed, refined and adopted by Metro in the next six to 18 months.

**How does the Regional Framework Plan differ from a functional plan?**

The Regional Framework Plan is an umbrella policy document that outlines the direction Metro – in consultation with citizens and local official advisory groups – believes the region should go. No specific mandates are included. Functional plans establish the requirements, targets and performance measures cities and counties will have to meet in the future. Eventually, all functional plans will be added to the plan.

**How will cities and counties be affected?**

The Regional Framework Plan signals the 24 cities and three counties within the Metro boundary about the direction they need to pursue when making policy decisions that will benefit both the region and their local area. It allows for them to anticipate and plan for possible requirements that could be coming from Metro in the form of functional plans.

**How will expansion of the urban growth boundary be affected?**

The Metro Council expanded the urban growth boundary by about 5,300 acres in December 1998. More land will come into the urban growth boundary in 1999. Cities and business people are submitting urban reserve plans for how they want to develop that land in the urban reserves. Metro will evaluate those applications based on the ideas and principles in the plan.

**Working with our partners**

Metro is committed to working with our local partners in the cities and counties in the Metro region. We have worked together to create a policy document that incorporates our visions but also allows for the realities we face.

Cities and counties of this region are represented on the Metro Policy Advisory Committee. The committee has worked with the Metro Council to focus discussion on the key policy issues and to make policy recommendations. As we move into the next phase of implementation, we will continue to work with our local partners to make sure we end up with the livable communities we all want.
Urban Growth Management Functional Plan

Metro was created after a vote of the citizens of the region as an elected regional government responsible for addressing issues of metropolitan concern and is enabled by state law, adopted by the Oregon Legislature in 1977. In addition, the voters of the region adopted a Metro charter in 1992 that describes additional responsibilities for the agency. Metro has an elected seven-member council that determines regionwide policies. In addition, Metro has an elected executive officer to enforce Metro ordinances and execute the policies of the council.

The Metro Policy Advisory Committee (MPAC) is comprised of local government elected officials and appointed citizens from throughout the region and was created to advise the regionally elected Metro Council on matters of metropolitan concern. MPAC recommended specific policies to be included in the functional plan, which was adopted by the Metro Council in November 1996. Early implementation of the 2040 Growth Concept is intended to take advantage of opportunities now and avoid use of land inconsistent with the long-term growth policy.

MPAC, as well as the Joint Policy Advisory Committee on Transportation (JPACT), and the Water Resource Policy Advisory Committee (WRPAC) made recommendations that are the basis for this functional plan. All of the elements considered by MPAC, JPACT and WRPAC were deemed by the Metro Council to be matters of metropolitan concern that have significant impact upon the orderly and responsible development of the metropolitan area. The framework plan establishes regional policies, which apply to all 24 cities and three counties within the Metro region. The legal form of these regional policies is a functional plan. Some requirements in this functional plan will be updated and coordinated with other policies now that the Metro Council has passed the Regional Framework Plan.

Functional plans are a primary regional policy tool that may contain both “recommendations” and “requirements” for changes in local plans. This functional plan relies on further actions, primarily changes to local government comprehensive plans and implementing ordinances, to effectuate the actions described below.

The meaning of regional functional plan adoption

The regional policies articulated in the Urban Growth Management Functional Plan recommend and require changes to city and county comprehensive plans and implementing ordinances. The purpose of the functional plan is to implement regional goals and objectives adopted by the Metro Council as the Regional Urban Growth Goals and Objectives (RUGGO), including the Metro 2040 Growth Concept. The comprehensive plan changes and related actions, including implementing regulations, required by this functional plan, shall be adopted by all cities and counties in the Metro region within 24 months from the effective date of this ordinance (Feb. 19, 1997).

Any city or county determination not to incorporate all required functional plan policies into comprehensive plans shall be subject to the conflict resolution and mediation processes included within the RUGGO, Goal I provisions. Any city or county amendment to a comprehensive plan or implementing ordinance that is inconsistent with requirements of this functional plan, is subject to appeal for violation of the functional plan.

There is flexibility in implementing the functional plan that allows for unique local circumstances. In addition, local governments may request that the Metro Council grant an exemption to requirements of the plan.

Regional policy basis

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

**Structure of requirements**

The Urban Growth Management Functional Plan is a regional functional plan that contains "requirements" that are binding on cities and counties of the region as well as recommendations that are not binding. "Shall" or other directive words are used with requirements. The words "should" or "may" are used with recommendations. In general, the plan is structured so that local jurisdictions may choose either performance standard requirements or prescriptive requirements. The intent of the requirements is to assure that cities and counties have a significant amount of flexibility as to how they meet requirements. Performance standards are included in most titles. If local jurisdictions demonstrate to Metro that they meet the performance standard, they have met that requirement of the title. Standard methods of compliance are also included in the plan to establish one very specific way that jurisdictions may meet a title requirement, but these standard methods are not the only way a city or county may show compliance. In addition, certain mandatory requirements that apply to all cities and counties are established by this functional plan.

**Functional plan goals**

The plan creates land-use tools to achieve the following goals:

**Allowing more efficient development of land** – Efficient development of land will be established by population and job growth targets for each jurisdiction based on vacant land and redevelopment opportunities within its borders. Vacant land near transit corridors such as light-rail lines offers the best opportunity to build compact new communities with housing and retail.

**Reducing parking in future developments** – Increased efficiency of lands used in commercial development and a reduction of the required amount of parking also match Metro's growth management goals. Parking will be reduced primarily in areas where frequent transit service is provided, pedestrian accessibility is good and land-use patterns encourage more walking, biking, transit and other non-auto trips. Metro also is working with business and neighborhood groups to encourage more innovative approaches to meeting parking needs, such as shared parking.

**Protecting stream corridors** – Protecting streams is a priority. Vacant lands immediately adjacent to streams must be protected to reduce flooding hazards to people and property, and allow monitoring of water quality and conservation of fish and wildlife habitat.

**Managing future retail store locations** – By carefully controlling the location of new "big box" retail businesses, retail investment will be encouraged in existing centers, rather than in areas that are set aside for industrial and other employment uses not adequately served by transit or that have strong transportation systems. Retail uses generate three to four times the traffic per employer.

"Big boxes" are retail stores with more than 60,000 square feet of retail space, usually with a very large parking lot. Under the functional plan, big boxes will continue to serve a vital role in the region but likely will be located more conveniently, with other nearby uses.

**Keeping roads accessible** – In keeping with the Regional Transportation Plan, Metro and the local jurisdictions will work to ensure that regional roads continue to serve both freight and auto trips in a way that avoids unacceptable levels of congestion. Street design and traffic performance standards will be put into place to meet the entire range of transportation needs – from industrial freight and high-speed throughways to pedestrian-friendly boulevards and attractive choices for traveling by a means other than a car.

**Creating affordable housing** – To promote housing affordability, Metro will encourage public and private ventures to build an adequate supply of affordable housing and reduce the regulatory barriers for manufactured housing parks.

**Checking the progress of implementation** – To monitor the progress of the region's counties and cities in implementing the functional plan, Metro will establish performance measures. These performance measures will allow Metro and its local partners a chance to examine on a regular basis how well, or how poorly, growth management plans are being implemented and to take corrective action as needed.
Streams, rivers and floodplains define the character of our region. Citizens care about water quality and urban streams, but there are a number of signs that the region has water quality and floodplain management problems:

- Oregon Department of Environmental Quality has identified 213 miles of streams/rivers in the metropolitan region that do not meet water quality standards.
- Erosion and sediment control problems, particularly at new construction sites, have increased the loose dirt and other material in to nearby streams and wetlands, further reducing water quality.
- Damage from the 1996 flood resulted in the inundation of 189 homes built on floodplains since 1992.
- Over time, 390 miles of streams have been piped or filled in the region.

Water quality is one of the keys to the region's continued livability as well as a crucial requirement to the long term economic health of the region. In November, 1996, Metro adopted the Urban Growth Management Functional Plan to begin addressing a number of crucial regional issues, including water quality and floodplain protection. This plan provides specific requirements and tools to local jurisdictions in the region to use in planning for future growth.

One of the sections of the functional plan, water quality and floodplain management, is intended to protect streams, rivers, wetlands and floodplains in the region. It establishes performance standards that jurisdictions must achieve in their local code. These policies make up Metro's Stream and Floodplain Protection Plan, adopted by the Metro Council in June 1998.

Metro's home-rule charter requires water sources and storage to be a major component of Metro's Regional Framework Plan. That plan guides growth for the next 20 years. The Stream and Floodplain Protection Plan will be implemented like the other parts of the Urban Growth Management Functional Plan and incorporated into the Regional Framework Plan.

**What are the performance standards in the Stream and Floodplain Protection Plan?**

By establishing performance standards, Metro's policies provide specific, quantifiable regional standards that local jurisdictions must meet for future development.

Performance standards for water quality:
- protect vegetated corridors along rivers, streams and wetlands for all new development
- prevent soil erosion so that loose soil does not enter nearby streams
- prevent uncontained uses of hazardous materials along rivers and streams.

Performance standards for floodplain management:
- limit development in the floodplains of the region's rivers and streams
- require “balanced cut and fill,” which means that if you add fill or soil to one part of the floodplain you must excavate a corresponding amount to maintain flood storage capacity of the land.

**Where does Metro's Stream and Floodplain Management Plan apply?**

The new policies only apply to new development located in resource areas near rivers, streams and wetlands within the Metro boundary as mapped on the Water Quality and Floodplain Management Plan map. They do not apply to existing homes as they currently stand. Metro has worked with each of the region's city and county staff to identify and map the areas where new development would be affected. These "base maps" are available for public review at city and county planning departments. For more information on specific tax lots or map availability, call 797-1839.
What is the timeline for implementation of the plan?

The Metro Council adopted binding performance standards, a model ordinance and maps of areas that will be addressed in June 1998.

How will the new provisions be implemented?

Local jurisdictions must review their planning requirements and ensure they are consistent with these performance standards by December 1999. If the code does meet these standards, the city or county will “self certify” that it meets them. If the code does not meet Metro’s performance standards, the jurisdiction can adjust its code to meet the requirements or adopt the model ordinance.

How can I get involved or receive more information?

You can:
• Invite a speaker to your group. Speakers will be available to address local organizations on the Stream and Floodplain Protection Plan. To request a speaker or resource materials on Metro’s Stream and Floodplain Protection Plan, call 797-1871.

• Call Metro’s growth management hotline at 797-1888 or visit the Metro website at www.metro-region.org

• Contact your Metro councilor by calling the Metro Council office at 797-1540.

• Call your city or county planning department to find out how it is complying with the plan.
What is an urban growth boundary?

Urban growth boundaries were created as part of the statewide land-use planning program in Oregon in the early 1970s. The boundaries mark the separation between rural and urban land. They are intended to encompass an adequate supply of buildable land that can be efficiently provided with urban services (such as roads, sewers, water lines and street lights) to accommodate the expected growth during a 20-year period. By providing land for urban uses within the boundary, rural lands can be protected from urban sprawl.

Metro manages the regional urban growth boundary for the Portland metropolitan area. Adopted in 1979, the Metro UGB is a 364-square-mile area that includes 24 cities and the urban portions of three counties and contains 233,000 acres.

The objectives are to plan and promote the efficient use of urban land, improve the efficiency of public facilities and services and preserve prime farm and forest lands outside the boundary.

Metro can add land to the boundary if it is needed. Additions to the boundary must be based on a demonstrated need for more urban land. Once a need has been demonstrated, the area selected for the addition must be shown to be superior to other areas.

How did the urban growth boundary originate?

In 1966 the communities of this region joined together to consider the possibilities for future urban growth. The product of that effort was the start of a regional planning program in 1971. Two years later Oregon's statewide planning goals were adopted, mandating the creation of urban growth boundaries around the state.

The Columbia Region Association of Governments (CRAG), Metro's predecessor, engaged in a complete planning process and proposed an urban growth boundary for the region in 1977.

Urban growth boundary and urban reserves

When Metro was created in 1979, it inherited the boundary planning effort. A year later the Land Conservation and Development Commission approved the boundary as consistent with statewide planning goals.

Planning the location of the boundary involved more than simply drawing a line on a map. The plans and growth projections of three counties, 24 cities and more than 60 special service districts had to be accommodated. The boundary was based on a projection of the need for urban land in the year 2000. It also addresses the land development plans of individual property owners.

Who is responsible for the boundary?

Metro has the statutory responsibility for managing the region's urban growth boundary. Several specific land-use planning powers were granted by the state legislature including:

- coordinate between regional and local comprehensive plans and adopt a regional urban growth boundary
- review for and require consistency of local comprehensive plans with statewide and regional planning goals
- plan for activities of metropolitan significance including (but not limited to) transportation, water quality, air quality and solid waste.

What is the current state of the urban growth boundary?

Metro estimates that an additional 465,000 people will live in the region by 2017. About a third of the "newcomers" will be our children and grandchildren. In December 1997, the Metro Council concluded that the region no longer contained a 20-year supply of buildable land to accommodate this projected population increase as required by state law. Metro staff, with input from the Metro Policy Advisory Committee, determined the projected shortfall to be 32,370 housing units, which could be provided by a limited expansion of the urban growth boundary.
On Dec. 17, 1998, the Metro Council decided where to expand the boundary. The expansion areas will add about 5,300 acres inside the UGB, creating enough room to provide approximately 23,000 housing units and 14,000 jobs. The expansion is occurring in areas designated as “urban reserves,” just outside the current UGB. The Metro Council identified urban reserves from land outside the UGB to target areas most appropriate for future urban development.

What's next?

In order to maintain a 20-year land supply for housing, state law requires Metro to bring at least half of the needed acreage in by the end of 1998. The rest must be brought into the UGB by the end of 1999.

Metro Code requires “urban reserve plans” demonstrating how the land added to the UGB can be used efficiently. They must be created before the land can be developed. City officials, property owners and developers are working together to prepare plans demonstrating how they will accommodate future schools, parks, transit, urban services and affordable housing. Metro must approve these plans before development will be permitted. In most cases, cities adjacent to these expansion areas will need to annex the newly selected urban reserve land and change the zoning before development can begin. This means that it could be some time before actual construction begins.

Can the urban growth boundary be changed?

In addition to the major changes in 1998, there have been several dozen small changes to the boundary during the years. It was not intended to be a static boundary. Metro uses four methods to amend the boundary: legislative amendment, major amendment, locational adjustment and roadway realignment-administrative adjustment.

The primary means of long-term changes to the urban growth boundary is by legislative amendment initiated by the Metro Council to comply with state and regional growth management policy. A legislative amendment must meet all the requirements of the statewide planning goals that govern urban growth boundaries and their amendment. In particular, it must show that there is a need for additional urban land because population or employment growth is much different than originally expected, or meeting the employment, housing and livability needs of the urban population requires a change in the land base. Once a demonstration of need has been made, the area selected for the amendment must be shown to be superior to the others. Finally, it must be shown that amending the boundary is the best way to address the needs of the urban population.

A major amendment follows the same criteria as a legislative amendment – showing regional need and compliance with statewide goals – for 20 acres or more. Metro has a quasi-judicial hearings process for major amendments.

Locational adjustment is a minor technical adjustment of 20 acres or less. The urban growth boundary is more than 200 miles long, with an area of 233,000 acres (364 square miles). The locational adjustment process was created to make minor amendments to the boundary so already-planned urban development can happen more efficiently while prime farm and forest lands outside the boundary remain preserved.

A roadway realignment adjustment is a minor adjustment made to accommodate the modification or expansion of a roadway on the UGB line.

What are urban reserves?

Urban reserves are land that Metro has set aside for future expansion of the urban growth boundary. State law requires Metro to identify adjacent rural lands that could be brought into the UGB during the next 50 years. In 1997, the Metro Council choose about 18,000 acres of land for this purpose.

How did Metro choose which rural lands it would designate as urban reserves?

Metro conducted open houses and public hearings around the region, did computer analysis, examined state-required factors and received input from local jurisdictions for all of the possible choices.

What were the criteria for determining urban reserves?

State law says urban reserves should provide:

- orderly and economic provision for public facilities and services
- maximum efficiency of land uses within and on the fringe of the existing urban area
- positive environmental, energy, economic and social consequences
- retention of agricultural land, with Class I being the highest priority for retention and Class VI being the lowest priority
- compatibility of the proposed urban uses with nearby agricultural uses.

In addition, state law requires that exception areas or nonresource land be designated first priority (although it could include resource land that is completely surrounded by exception areas, unless they are high value crop areas or prime or unique agricultural soils). Marginal lands are designated second priority; secondary lands are designated third priority; and agriculture or forestry lands be given fourth priority.

Metro addressed the state requirements by performing the following analyses: the relative cost of urban-level water, sewer and stormwater facilities; forecast of traffic congestion of roads serving potential urban reserve areas; existing and proposed school facilities; local government 2015 housing and employment allocation responses; use of already developed maps and data concerning floodplains, steep slopes and wetlands; and use of already developed analysis of exception land and soil types.

In addition, consideration was given to the balance of jobs and housing in the area, the size of each study area, terrain and proximity to centers.

**How often will the Metro Council review the need for a UGB expansion?**

The Metro Council is committed to reviewing urban growth boundary expansion at least every five years.

**How can I learn more?**

To receive more information on growth management issues, call 797-1562 or send e-mail to 2040@metro.dst.or.us
Old Urban Growth Boundary

Reserve areas added to the UGB by Ordinance

Reserve areas outside the Metro jurisdictional boundary, to be added to the UGB pending expansion of the Metro jurisdictional boundary, as per resolutions of intent, December 17, 1998.
Background
In an effort to deal with the issue of affordable housing, the Metro Council adopted regional policies designed to ensure efficient use of land, adequate land for residential development, and a fair share strategy for meeting the housing needs of this region. These policies are included in the Metro Regional Urban Growth Goals and Objectives and the Regional Framework Plan.

The Metro Council created an 25-member advisory committee from local governments, the homebuilder's industry, the business and financial community and affordable housing advocates, as well as three non-voting representatives from the Governor's Task Force on Aging, Oregon Housing and Community Services Department and U.S. Department of Housing and Urban Development.

Committee goal
Metro's Affordable Housing Technical Advisory Committee is charged with reviewing and advising Metro on affordable housing policies and strategies for the region. Some of the committee products will include recommended fair share affordable housing targets for each jurisdiction and a regional affordable housing strategy plan that will contain goals and objectives, implementation strategies and methods of evaluating implementation.

"Affordable housing" means low and moderate income households pay no more than 30 percent of their income on housing costs. For renters, "housing costs" includes rent and utilities. For homeowners, it includes principle, interest, taxes, property insurance, and mortgage insurance, if applicable.

Median household income of the tri-county region was $41,500 in 1997. The median household size was 2.4 persons in 1997.

• There were approximately 321,136 single-family dwelling units in the region in 1997.
• There were approximately 154,246 multi-family dwelling units in the region in 1997*.

*This number is based on a comprehensive inventory of all apartment complexes with five or more units in the tri-county region conducted for the Metro waste reduction/recycling program.

Committee work plan
• Definition of fair share and regional housing needs
• Development of a fair share allocation formula to provide affordable housing targets for each jurisdiction, and application of the formula with approved data
• Development of implementation strategies to provide jurisdictions with tools to achieve fair share targets
  - Consideration of land-use strategies
  - Consideration of non-land-use strategies
• Development of a regional affordable housing strategy plan
• Adoption of the plan by Metro Council
• Evaluation of the performance of the adopted plan

The committee process includes community outreach to get input from the public and other interested parties.

The decision-making process
Preliminary recommendations will be reviewed by the Metro Policy Advisory Committee and then receive public review before submittal to the Metro Council.

Key tasks, products in the next 14 months
• Currently, the committee is developing a fair share definition and allocation criteria.
• By June 1999, the committee will recommend fair share affordable housing targets for each jurisdiction to the Metro Council and MPAC.
• By December 1999, the committee will recommend a regional affordable housing strategy plan.
Membership of the Housing Technical Advisory Committee
(and alternates)

Multnomah County local government
Commissioner Diane Linn, chair, Multnomah County Commission
Ramsay Weit, Multnomah County, alternate

Land-use professionals
Jeff Condit, vice-chair, Miller Nash et al
Phillip E. Grillo, Miller Nash et al, alternate

Nonprofit affordable housing provider – Clackamas County
Diane Luther, Clackamas County Northwest Housing Alternative
Jon Wood, Clackamas Service Center, alternate

Nonprofit affordable housing provider – Multnomah County
Dee Walsh, REACH Community Development
Ralph Austin, Innovative Housing, alternate

Nonprofit affordable housing provider – Washington County
Sheila Greenlaw-Fink, Community Partners for Affordable Housing
Renita Christie Gerard, Community Partners for Affordable Housing, alternate

For-profit housing provider
David Bell, GSL Properties, Inc.
I.D. (Doug) Draper, Genstar Land Co. NW, alternate

For-profit housing provider
Scott Matthews, Trammel Crow Residential
Alternate (vacant)

For-profit housing provider
Doug Obletz, Shiels Obletz Johnsen LLC
D. Carter MacNichol, Shiels Obletz Johnsen LLC, alternate

Clackamas County Public Housing Authority
Gary DiCenzo, Clackamas County Housing Authority
Tim Nielsen, Clackamas County Housing Authority, alternate

Multnomah County Public Housing Authority
Helen Barney, Housing Authority of Portland
Denny West, Housing Authority of Portland, alternate

Washington County Public Housing Authority
Susan Wilson, Washington County Housing Services
John Rosenberger, Washington County Housing Services, alternate

City of Portland
Commissioner Gretchen Kafoury
Alternate (vacant)

Clackamas County local government
Doug McClain, Clackamas County Planning
R. Scott Pemble, Clackamas County Planning, alternate

Washington County local government
Commissioner Andy Duyck, Forest Grove
Alternate (vacant)

Cities of Clackamas County
Mayor Jill Thorn, West Linn
Mayor Carolyn Tomei, Milwaukie, alternate

Cities of Multnomah County
Mayo Roger Vonderharr, Fairview
Andree Tremoulet, Gresham, alternate

Cities of Washington County
David Lawrence, Hillsboro
Pat Ribellia, Hillsboro, alternate

Metro Policy Advisory Committee
Mayor Rob Drake, Beaverton
Commissioner Doug Neeley, Oregon City, alternate

Financing institution
David Summers, Bank of America
Ed DeWald, Bank of America, alternate

Financing institution
Margaret Nelson, Key Bank
Alternate (vacant)

Residents of affordable housing
Liora Berry, Cascade Aids Project
Lowell Greathouse, Community Action Organization, alternate

Residents of affordable housing
Dana Brown, Community Alliance of Tenants
Steve Weiss, Community Alliance of Tenants, alternate

Residents of affordable housing
Tasha Harmon, Community Development Network
Britt Parrott, Coalition for a Livable Future, alternate

Business community and major employers
Pat Ritz, Oregon Title Insurance Co.
Mindy Sullivan, Oregon Title Insurance Co., alternate

Business community and major employers
(Vacant)

The Governor’s Task Force on Aging (non-voting)
Alice Neely, Governor’s Commission on Senior Services
Jan Tucker-McManus, Clackamas County Social Services (alternate)

Oregon Housing and Community Services Department
(non-voting)
Vince Chiotti, Oregon Housing and Community Services Department
Margaret Van Vliet, Governor’s Community Development Office (alternate)

Federal Housing Administration (non-voting)
Tom Cusack, U.S. Department of Housing and Urban Development
Alternate (vacant)

Metro Council liaison
Councilor Ed Washington

For further information, call Gerry Uba at 797-1737.
email: ubag@metro.dst.or.us
Regional Transportation Plan

The transportation system plays a critical role in the continued economic health and livability of this region. To address these and other issues, Metro is updating the Regional Transportation Plan, a 20-year blueprint for the region's transportation system that addresses how best to move people and goods within and through the region.

The plan establishes transportation policies for all forms of travel – motor vehicle, transit, pedestrian, bicycle and freight – and includes specific objectives, strategies and projects to guide local and regional implementation of each policy.

This fact sheet discusses the relationship between the 2040 Growth Concept, the Regional Framework Plan and the Regional Transportation Plan. It shows how the integrated planning processes are necessary to adequately address the problems and opportunities afforded by growth in this region.

2040 Growth Concept

To meet the challenge of increased population, Metro developed the 2040 Growth Concept. Adopted by the Metro Council in 1994, the 2040 Growth Concept is a plan that establishes a vision for how our region should grow during the next 50 years.

In general, the growth concept envisions compact development throughout the region, concentrating new jobs, services and housing in centers. The following are the land-use components defined in the growth concept:

- Central city
- Regional centers
- Industrial areas
- Station communities
- Town centers
- Main streets
- Corridors
- Employment areas
- Inner neighborhood
- Outer neighborhood

Centers vary in terms of size and types of activities. Town centers, for example, are envisioned to provide housing with shopping and other commercial services within a two to three-mile radius.

Transportation investments that support town centers and the other land-use components defined in the 2040 Growth Concept are a key part of making the concept work. This means spending money on transportation projects that will provide the right mix of road, pedestrian, bus, bicycle and freight improvements to support this more compact urban form.

It is important to note that the 2040 Growth Concept is not the final plan for the region. Rather, it was used to develop the Regional Framework Plan, which specifies ways for the region and local communities to implement the vision outlined in the 2040 Growth Concept.

Regional Framework Plan

The Regional Framework Plan is a comprehensive set of guidelines that integrates land use, transportation, water, parks and open spaces and other important regional issues. The plan is intended to guide Metro's efforts to manage future growth in this region and implement the 2040 Growth Concept. Dealing with these issues together will help us create the kind of region most of us want for future generations.

Chapter 2 of the Regional Framework Plan outlines overall transportation policies for our region during the next 50 years. Details of specific transportation policies, objectives and actions during the next 20 years are included in the Regional Transportation Plan.

Residents, local governments, businesses and other interested groups provided input for the Regional Framework Plan approved by the Metro Council in December 1997.
**Regional Transportation Plan**

The Regional Transportation Plan, first adopted by the Metro Council in 1983, is updated every three years to reflect changes in the region. The current plan update process was started in 1994. A federal Regional Transportation Plan was adopted by the Metro Council in 1995 to address new federal requirements in the Intermodal Surface Transportation Efficiency Act (ISTEA), the Clean Air Act and the Americans with Disabilities Act.

The Regional Transportation Plan is being updated to implement policies identified in the Regional Framework Plan and the 2040 Growth Concept and to address state Transportation Planning Rule requirements. In May 1995, the Metro Council appointed the Regional Transportation Plan Citizen Advisory Committee to help with this update. The 21-member group provided citizen perspectives on transportation issues and advised the Joint Policy Advisory Committee on Transportation, a group of elected officials, and the Metro Council.

The citizen advisory committee recommended transportation policies to guide development of the new Regional Transportation Plan. These policies were approved by JPACT and the Metro Council in July 1996.

The transportation policies recommended by the citizen advisory committee place a new emphasis on transportation alternatives for travel to work, shopping and recreation. While the policies recognize that most travel in the region will continue to be by auto, alternatives to auto travel such as transit, walking and bicycling are also recognized as important. In addition, the policies recognize the importance of the movement of goods and services to our regional economy.

A basic assumption in the policies is that transportation systems do more than meet travel demand; they have a significant effect on the areas they serve. As such, the goal of the Regional Transportation Plan is to tie investments in the region's transportation system to regional and community goals and values in order to maintain the quality of life that area residents presently enjoy. The 2040 Growth Concept provides the land use direction for the Regional Transportation Plan, with planned improvements closely tied to the needs of different areas.

centers such as Gresham and Beaverton will be targeted with a balance of high-quality transit, pedestrian and bicycle projects, to complement needed auto improvements. In contrast, projects in industrial areas and along freeways and highways will be largely oriented toward auto and truck travel. In neighborhoods and along mixed-use corridors, the plan will again reflect a balance of all modes of travel.

The Regional Transportation Plan also provides a vision for new ways to get around, such as commuter rail and vanpools. The plan will include telecommuting, ridesharing and other programs designed to reduce demand on the transportation system.

The Regional Transportation Plan Citizen Advisory Committee completed its work in January 1998 with the presentation of the CAC Idea Kit to JPACT and the Metro Council. The kit provides a comprehensive list of transportation projects and actions for locations throughout the region. These ideas and strategies are based on the Chapter 1 policies approved in July 1996 and reflect input provided by local jurisdictions and citizens at workshops held in the fall 1997. The Idea Kit is intended to serve as a starting point for both defining the region's future transportation needs and initiating a regional funding priority discussion.

The result of this extensive update process will be a new Regional Transportation Plan that balances investments in highways, streets, transit, freight, bikes and pedestrians so that regional funds go to transportation projects that support the land-use components in the 2040 Growth Concept. An updated plan is expected to be available for public review and comment in fall 1999. There will be many additional opportunities for citizen input after release of a draft plan. Final adoption of the updated plan is expected to occur in fall 1999.

After adoption of the 1999 Regional Transportation Plan, local governments must update their plans to reflect these new regional policies.

**For more information?**

For information about meetings, hearings and other opportunities for involvement, call Metro's transportation hotline, (503) 797-1900 or (503) 797-1755. The hearing impaired can call TDD (503) 797-1804.
Metro's role in the region’s solid waste system

Metro is responsible for solid waste functions and issues of regional significance. Metro owns two transfer stations and arranges for disposal at landfills and other facilities. Metro is also responsible for regional solid waste planning in partnership with local governments. As a part of these planning responsibilities, Metro must develop and administer a solid waste management plan for the region.

The arrangement of services for solid waste recycling and collection is a responsibility of cities and counties. These activities must be consistent with applicable state and Metro legislation and solid waste plans. All jurisdictions arrange to have garbage and recycling collections services provided by private haulers who are permitted or franchised by their respective jurisdiction.

Regional Solid Waste Management Plan

The Regional Solid Waste Management Plan is a framework plan that gives the metropolitan region direction for meeting solid waste needs into the future. The plan was developed in cooperation with local governments, private businesses, residents and stakeholders in the solid waste industry.

The primary goal of the plan is, through regional cooperation, to achieve a solid waste system that is regionally balanced, environmentally sound, cost-effective, technologically feasible and acceptable to the public.

Key issues addressed by the plan

How can the region keep pace with population growth?
Population in the metro region is expected to increase by nearly 200,000 people in the next 10 years. Unless we plan for aggressive waste reduction programs now, this growth could mean that the regional solid waste system will have to process more than 500 tons more waste per day in the year 2005.

Should we invest in more facilities or in waste reduction? The plan recommends investing in waste reduction. The three existing regional transfer stations should be able to manage the waste produced for the next 10 years. This also assumes that privately owned dry waste and yard debris processing facilities will continue to handle a significant part of the waste stream. The current system of privately owned landfills will be maintained. Metro will continue to regulate private and publicly owned solid waste facilities to ensure that the public's health, safety and welfare is maintained and that the plan's goals are accomplished.

What level of waste reduction can be achieved? How? The plan acknowledges the waste management hierarchy of “reduce, reuse, recycle, compost, recover and landfill.” It recommends a recycling rate of 50 percent by the year 2005, as well as more emphasis on reducing waste generation. We currently recover 42 percent of our waste. Not counting food waste, about 40 percent of waste currently disposed by the region’s households and businesses is recyclable (e.g., yard debris, paper, metals, glass, plastic). The plan anticipates that the region can achieve that goal by Metro and local government working together to implement or continue the following types of waste management practices:

Waste prevention – Develop new programs designed to achieve less waste generation by households and businesses, promote the purchase of recycled products and continue to encourage home composting.

Reuse – Promote the reuse of building materials and other materials or products.

Recycling – Expand opportunities to recycle commonly disposed materials, and target neighborhoods with low participation and businesses with new programs.

Recovery – Investigate large-scale food waste recovery, first from businesses, and then from households.
In addition, the plan provides practices for managing hazardous waste products and waste generated by major disasters according to the hierarchy of reduce, reuse, recycle, compost and recover.

What is the best way to pay for facilities and programs?

The goal for the solid waste financing system is equity, adequacy and stability. Everyone who benefits from the system should pay his or her share so that no one set of system users bears an unfair share of the cost. As waste is diverted from facilities that pay a fee to help finance the system, the obligation of paying for the region's solid waste activities will increasingly fall on a narrower segment of the ratepayers.

What new trends and technologies are emerging?

As collection technologies evolve, existing solid waste facilities could be used in new ways to increase efficiency and effectiveness and thereby reduce costs for ratepayers. Transfer stations could be used as one-stop facilities for dumping yard debris and refuse, for example. We must be prepared to anticipate ways in which the existing facilities can be modified to be of use in future waste reduction and collection activities.

A complete copy of the plan is available by calling 797-1650.
Areas and activities of metropolitan concern – A program, area or activity, having significant impact upon the orderly and responsible development of the metropolitan area that can benefit from a coordinated multi-jurisdictional response.

Beneficial use standards – Under Oregon law, specific uses of water within a drainage basin deemed to be important to the ecology of that basin as well as to the needs of local communities are designated as “beneficial uses.” Hence, “beneficial use standards” are adopted to preserve water quality or quantity necessary to sustain the identified beneficial uses.

Central city – The downtown and adjacent portions of the city of Portland.

Corridors – While some corridors may be continuous, narrow bands of higher intensity development along arterial roads, others may be more “nodal,” that is, a series of smaller centers at major intersections or other locations along the arterial that have high-quality pedestrian environments, good connections to adjacent neighborhoods and good transit service. As long as the average target densities and uses are allowed and encouraged along the corridor, many different development patterns – nodal or linear – may meet the corridor objective.

Economic opportunities analysis – An “economic opportunities analysis” is a strategic assessment of the likely trends for growth of local economies in the state consistent with OAR 660-09-015. Such an analysis is critical for economic planning and for ensuring that the land supply in an urban area will meet long-term employment growth needs.

Employment areas – Areas of mixed employment that include various types of manufacturing, distribution and warehousing uses, commercial and retail development as well as some residential development. Retail uses should primarily serve the needs of the people working or living in the immediate employment area. Exceptions to this general policy can be made only for certain areas indicated in a functional plan.

Exception – An “exception” is taken for land when either commitments for use, current uses or other reasons make it impossible to meet the requirements of one or a number of the statewide planning goals. Hence, lands “excepted” from statewide planning goals 3 (Agricultural Lands) and 4 (Forest Lands) have been determined to be unable to comply with the strict resource protection requirements of those goals and are thereby able to be used for other than rural resource production purposes. Lands not excepted from statewide planning goals 3 and 4 are to be used for agricultural or forest product purposes, and other, adjacent uses must support their continued resource productivity.

Exclusive farm use – Land zoned primarily for farming and restricting many uses that are incompatible with farming, such as rural housing. Some portions of rural reserves also may be zoned as exclusive farm use.

Fair share – A proportionate amount by local jurisdiction; used in the context of affordable housing in this document. “Fair share” means that each city and county in the region agrees to work with Metro to establish local and regional policies to accommodate affordable housing.

Family wage job – A permanent job with an annual income greater than or equal to the average annual covered wage in the region. The most current average annual covered wage information from the Oregon Employment Division shall be used to determine the family wage job rate for the region or for counties within the region.

Fiscal tax equity – The process by which inter-jurisdictional fiscal disparities can be addressed through a partial redistribution of the revenue gained from economic wealth, particularly the increment gained through economic growth.

Freight mobility – The efficient movement of goods from point of origin to destination.

Functional plan – A limited-purpose multi-jurisdictional plan for an area or activity having significant district-wide impact upon the orderly and responsible development of the metropolitan area that serves as a guideline for local comprehensive plans consistent with ORS 268.390.
Growth concept – A concept for the long-term growth management of our region stating the preferred form of the regional growth and development, including where and how much the urban growth boundary should be expanded, what densities should characterize different areas, and which areas should be protected as open space.

High-capacity transit – Transit routes that may be either a road designated for frequent bus service or for a light-rail line.

Housing affordability – The availability of housing such that no more than 30 percent (an index derived from federal, state and local housing agencies) of the monthly income of the household need be spent on shelter.

Industrial areas – An area set aside for industrial activities. Supporting commercial and related uses may be allowed, provided they are intended to serve the primary industrial users. Residential development shall not be considered a supporting use, nor shall retail users whose market area is substantially larger than the industrial area be considered supporting uses.

Infill – New development on a parcel or parcels of less than one contiguous acre located within the UGB.

Infrastructure – Roads, water systems, sewage systems, systems for storm drainage, telecommunications and energy transmission and distribution systems, bridges, transportation facilities, parks, schools and public facilities developed to support the functioning of the developed portions of the environment. Areas of the undeveloped portions of the environment such as floodplains, riparian and wetland zones, groundwater recharge and discharge areas and greenspaces that provide important functions related to maintaining the region’s air and water quality, reduce the need for infrastructure expenses and contribute to the region’s quality of life.

Inner neighborhoods – Areas in Portland and older cities that are primarily residential, close to employment and shopping areas, and have slightly smaller lot sizes and higher population densities than in outer neighborhoods.

Intermodal – The connection of one type of transportation mode with another.

Intermodal facility – A transportation element that accommodates and interconnects different modes of transportation and serves the state-wide, interstate and international movement of people and goods.

Jobs/housing balance – The relationship between the number, type, mix and wages of existing and anticipated jobs balanced with housing costs and availability so that non-auto trips are optimized in every part of the region.

Key or critical public facilities and services – Basic facilities that are primarily planned for by local government but that also may be provided by private enterprise and are essential to the support of more intensive development, including transportation, water supply, sewage, parks, schools and solid waste disposal.

Local comprehensive plan – A generalized, coordinated land-use map and policy statement of the governing body of a city or county that inter-relates all functional and natural systems and activities related to the use of land, consistent with state law.

Major amendment – A proposal made to the Metro Council for expansion of the UGB of 20 acres or more, consistent with the provisions of the Metro Code.

Metropolitan housing rule – A rule (OAR 660, Division 7) adopted by the Land Conservation and Development Commission to assure opportunity for the provision of adequate numbers of needed housing units and the efficient use of land within the Metro UGB. This rule establishes minimum overall net residential densities for all cities and counties within the UGB, and specifies that 50 percent of the land set aside for new residential development be zoned for multifamily housing.

Main streets – Neighborhood shopping areas along a main street or at an intersection, sometimes having a unique character that draws people from outside the area. Northwest 23rd Avenue and Southeast Hawthorne Boulevard are current examples of main streets.

Neighborhood centers – Retail and service development that surrounds major MAX stations and other major intersections, extending out for one-quarter to one-half mile.

Neighboring cities – Cities such as Sandy, Canby and Newberg that are outside Metro’s jurisdiction but will be affected by growth policies adopted by the Metro Council or other jurisdictions, such as North Plains, Estacada or Scappoose, which may be affected by Metro actions.
Open space – Publicly and privately owned areas of land, including parks, natural areas and areas of very low density development inside the UGB.

Outer neighborhoods – Areas in the outlying cities that are primarily residential, farther from employment and shopping areas, and have larger lot sizes and lower population densities than inner neighborhoods.

Pedestrian scale – An urban development pattern where walking is a safe, convenient and interesting travel mode. It is an area where walking is at least as attractive as any other mode to all destinations within the area. The following elements are not cited as requirements, but illustrate examples of pedestrian scale: continuous, smooth and wide walking surfaces; easily visible from streets and buildings and safe for walking; minimal points where high-speed automobile traffic and pedestrians mix; frequent crossings; storefronts, trees, bollards, on-street parking, awnings, outdoor seating, signs, doorways and lighting designed to serve those on foot; well integrated into the transit system and having uses that cater to people on foot.

Persons per acre – Term expressing the intensity of building development by combining residents per net acre and employees per net acre.

Planning activities – Planning activities cited in the Regional Urban Growth Goals and Objectives are not regulatory but contain implementation ideas for future study in various stages of development that may or may not lead to RUGGO amendments new functional plans, functional plan amendments, or regional framework plan elements. Planning activities for any given year will be subject to Metro Executive Officer budget recommendations and Metro Council budget adoption.

Regional centers – Areas of mixed residential and commercial use that serve hundreds of thousands of people and are easily accessible by different types of transit. Examples include traditional centers such as downtown Gresham and new centers such as Clackamas Town Center.

Rural reserves – Areas that are a combination of public and private lands outside the UGB, used primarily for farms and forestry. They are protected from development by very low-density zoning and serve as buffers between urban areas.

State implementation plan – A plan for ensuring that all parts of Oregon remain in compliance with federal air quality standards.

Stewardship – A planning and management approach that considers environmental impacts and public benefits of actions as well as public and private dollar costs.

Station communities – That area generally within 1/4- to 1/2-mile radius of light-rail stations or other high-capacity transit that is planned as a multi-modal community of mixed uses and substantial pedestrian accessibility improvements.

Subregion – An area of analysis used by Metro centered on each regional center and used for analyzing jobs/housing balance.

Town centers – Areas of mixed residential and commercial use that serve tens of thousands of people. Examples include the downtowns of Forest Grove and Lake Oswego.

Urban form – The net result of efforts to preserve environmental quality, coordinate the development of jobs, housing, and public services and facilities, and interrelate the benefits and consequences of growth in one part of the region with the benefits and consequences of growth in another. Urban form, therefore, describes an overall framework within which regional urban growth management can occur. Clearly stating objectives for urban form and pursuing them comprehensively provides the focal strategy for rising to the challenges posed by the growth trends present in the region today.

Urban growth boundary – A boundary that identifies urban and urbanizable lands needed during the 20-year planning period to be planned and serviced to support urban development densities, and that separates urban and urbanizable lands from rural land.

Urban reserve area – An area adjacent to the present UGB defined to be a priority location for any future UGB amendments when needed. Urban reserves are intended to provide cities, counties, other service providers, and both urban and rural land owners with a greater degree of certainty regarding future regional urban form. Whereas the UGB describes an area needed to accommodate the urban growth forecasted over a 20-year period, the urban reserves plus the area inside the UGB estimate the area capable of accommodating the growth expected for 50 years.
Metro Natural Resources Strategy

Working toward a better environment for fish, wildlife and people

Caring for the world around us is important because we want to keep our communities livable. In the Portland metropolitan region, people have told us that protecting the environment is one of their highest priorities. Natural resources such as parks and open spaces, healthy streams and rivers and clean air and water not only help define the overall character of the region but – just as important – provide direct benefits to fish, wildlife and people.

Residents and local governments are working together with Metro to assure that our natural environment remains a vital part of our communities – not only in our neighborhoods, but for the region as a whole. At Metro, specific standards have been or will be adopted to:

- improve water quality and reduce flooding
- assure adequate park lands and recreation services
- protect fish and wildlife habitat

Protecting the region's natural resources three ways

Metro is working on three projects that will help meet these objectives. First, Metro is working with cities and counties in the region to implement local standards to carry out the Stream and Floodplain Protection Plan. This plan was approved by Metro Council in 1998 to provide regionwide protection measures for water quality and floodplain management.

Second, Metro is working with local park providers, natural resource experts and residents to draft a parks and natural areas protection plan. This plan will identify a cooperative regional system of parks, natural areas, greenways and trails for fish, wildlife and people. The plan will result in an updated inventory of parks and natural areas in the region; identify a regional natural areas system; set protection and management standards for regionally significant natural areas; identify levels of recreational park service; and describe a financial strategy to implement the plan.

Third, Metro began work with local governments and citizens to prepare a Fish and Wildlife Habitat Protection Plan by identifying and assessing regional resources to protect fish and wildlife habitat in the Portland metropolitan area. This project will be done by Metro following guidelines in Oregon's program for land-use planning.

The core of the Oregon program is a set of 19 statewide goals, mandatory standards that apply to all cities and counties in Oregon. The goal that addresses fish and wildlife habitat is Goal 5. Metro will conduct an analysis of Goal 5 regional resources related to fish and wildlife.
Protecting the Region’s Natural Resources

Metro Committee for Citizen Involvement - 27-member citizen committee to advise and recommend actions to Metro on matters pertaining to citizen involvement.

Greenspaces Technical Advisory Committee - Local government park providers and park professionals serving to coordinate, support and advise on natural resource and park matters.

Water Resources Policy Advisory Committee - 38-member committee of water and sewer district representatives, environmental groups, federal and state natural resources agencies, business and residents advising the Metro Council on water resource matters.

Regional Parks and Greenspaces Advisory Committee - 11-member citizen committee serving to advise and comment on the policies, plans and programs of the Metro Regional Parks and Greenspaces Department.

Metro Technical Advisory Committee - 24-member committee of planning specialists, citizens and business representatives that provide detailed, technical support for shaping land-use policies.

Metro Policy Advisory Committee - 21-member committee of elected officials and citizens to advise Metro Council on the Regional Framework Plan and other Metro services.

Figure 1 Protection of the region's air and water resources, parks, natural areas and fish and wildlife habitat depends on planning and a commitment from government, business and residents.
habitats. A parks and natural areas inventory will serve as a basis for this analysis. The Goal 5 regional habitat areas will be mapped and protection measures identified. Metro will work with the cities and counties in the region to coordinate the Goal 5 planning process.

The trillium illustration (Figure 1) shows how these projects make up a comprehensive approach to protecting the region's natural resources. The projects are founded in Oregon land-use goals, Metro's Regional Framework Plan and local government land-use plans. Park providers, planners, policy-makers and residents work on various committees in support of these projects.

**Metro's track record for natural resource protection**

In 1992, voters of the region approved a home-rule charter that identifies Metro's most important service as "... planning and policy making to preserve and enhance the quality of life and the environment ..." The charter recognizes the important connection between sound management of our natural resources and a livable community. The charter also mandated the development and adoption of a Regional Framework Plan. The plan, adopted in 1997, sets policy direction for protection of parks, natural areas, greenways, water quality, water supply and an efficient urban form and transportation system for the metropolitan region.

The policy directives identified in the Regional Framework Plan for the protection and management of metropolitan natural resources are carried out through specific functional plans. A functional plan establishes policies and standards that apply to all 24 cities and three counties within the Metro boundary. It includes recommendations and/or requirements for local governments to meet.

The Metropolitan Greenspaces Master Plan, adopted in 1992, served as a first step toward identifying a regional system of parks, natural areas, greenways and trails for fish, wildlife and people. It was fundamental to the development of a land acquisition strategy approval by Metro area voters in 1995 for protection of 14 of the key nature resource areas the master plan identified.

Voters also approved a number of funding measures to support important acquisition and capital improvement projects. For example, the citizens of the region approved the 1995 open spaces, parks and streams bond measure for $135.6 million. The funds are now being used for natural area and greenway acquisitions around the region and nearly 90 local park improvement projects or land acquisitions. As of October 1998, Metro has acquired nearly 3,800 acres of new natural areas toward its goal of purchasing 6,000 acres.

The Stream and Floodplain Protection Plan, adopted in June 1998, is an example of a functional plan that contains specific requirements to protect vegetated corridors along rivers, streams and wetlands. The plan also addresses ways to control soil erosion and reduce flooding within the 100-year floodplain. Together these provisions help to enhance the region's water resources and manage land use in floodplains.

The Regional Transportation Plan is another functional plan that addresses how Metro will work with cities, counties, Tri-Met, Oregon Department of Transportation and Port of Portland to establish an efficient regional transportation system. Metro's goal is to provide a range of transportation choices that results in a strong economy and improved air quality. For example, the plan calls for a 350-mile regional trail and greenway system that links natural areas and provides access to nature. To date, about 140 miles of trails in the system are complete.

When approved by Metro Council, the parks and natural areas protection plan will address the protection and management of parks, natural areas, local park facilities and services. Local governments throughout the region will work together to establish criteria for park and recreation service standards that will be adopted by local park providers.
Putting plans into action for the region's natural resources

Protecting and enhancing our region's parks, natural areas, greenways and air and water resources are ambitious efforts that will require long-term commitments by local governments, business and residents using a variety of resource protection strategies such as land acquisition, policies and regulations and citizen involvement.

Land acquisition for new parks, expansion of existing parks or providing natural open space for habitat or scenic purposes are important tools for creating livable communities. Voters have approved bond measures to acquire land and build or improve parks and park services in many local communities and at the regional level. Grants, property donations and partnerships also provide opportunities for natural resource protection.

Development and implementation of functional plans such as the Stream and Floodplain Protection Plan and the Parks and Natural Areas Protection Plan will help assure that clean air and water, parks and natural areas are a viable part of the metropolitan region. Metro will work with cities and counties within the Portland metropolitan region to amend their local land-use plans and adopt ordinances to support the provisions of the protection plans.

Citizen involvement is crucial to any successful effort to protect and manage the region's natural resources. People can work to understand how land use choices affect our parks, natural areas, air and water by attending public meetings or a workshop, joining a neighborhood or "friends" group and reading about land-use issues. People also can serve on a watershed council, Metro citizen advisory committee or volunteer in the many habitat enhancement projects throughout the region.

For more information

Metro offers many opportunities to discover and learn about metropolitan natural areas. Metro GreenScene contains park news, volunteer opportunities and dozens of outdoor activities such as hikes, canoe trips, wildlife watching and classes. The best way to understand and appreciate the value of metropolitan natural areas is to experience them.

Metro's Growth Management Services Department also publishes newsletters to update interested readers.

Metro's web site at www.metro-region.org contains an abundance of information about the agency and the work that Metro, local governments and residents are doing to protect and manage our natural resources. For more information or copies of recent newsletters, call the growth management hotline at (503) 797-1888 or Metro's Regional Parks and Greenspaces Department at (503) 797-1850.

About Metro

Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area. Metro provides transportation and land-use planning services and oversees regional garbage disposal, and recycling and waste reduction programs. Metro also manages regional parks and greenspaces, the Oregon Zoo (formerly the Metro Washington Park Zoo), Oregon Convention Center, Civic Stadium, Civic Auditorium, Portland Center for the Performing Arts and the Portland Metropolitan Exposition (Expo) Center.
"The region needs to look at all alternatives to reducing traffic congestion. Peak period pricing should be fully evaluated."

— MIKE SALSGIVER, Government Affairs Manager, Intel

**Traffic RELIEF Options Study**

Peak Period Pricing Gaining Popularity in U.S., Europe and Asia

**Portland area studying concept**

Would drivers be willing to pay a fee to use an express lane to save time during rush hour? Is this one way to help reduce congestion in the Portland region? What effects could this have on other parts of our transportation system? These are some of the issues being considered by a 13-member citizens task force as part of the Traffic Relief Options Study.

The study is being undertaken by Metro, in partnership with the Oregon Department of Transportation (ODOT), to evaluate if peak period pricing — charging a fee to use roads at the busiest times of day— should be applied to highly congested locations in the Portland region.

Though peak period pricing is new to the Portland area, it is being used successfully to manage congestion in San Diego and Orange County, California; Houston, Texas; Lee County, Florida; Toronto, Canada; Lille, France; and Singapore. It also is being studied in several other locations.

The following experiences in other communities may provide some guidance about possible benefits and how peak period pricing may work in this region.

**Some examples in the US**

**State Route 91, Orange County, California**

Drivers can pay to use two new express lanes in each direction in the median of the highway or drive free on the other lanes. Prices vary by time of day; carpools of three or more are free. The road is financed and managed by a private company. Started: 1996.

Since introducing peak period pricing, about 3,000 more people per day use these lanes in San Diego where traffic flows smoothly.

**Interstate 15, San Diego, California**

Solo drivers can pay to use two existing carpool lanes in the median of I-15. Fees vary depending on the congestion level at any given time. Started: 1997.

**Interstate 10 (Katy Freeway), Houston, Texas**

Two-person carpools can pay to use lanes free to three-person carpools. Opened in January, 1998, a limited number of drivers are allowed to buy monthly permits, on a first-come first-served basis. Started: 1997.

**Sanibel Island Causeway and Midpoint and Coral Gables Bridges, Fort Meyers and Cape Coral, Lee County, Florida**

Drivers receive a 50 percent discount if they travel immediately before or after the morning or evening commuting times. Started: 1998.

**Projects in other Countries**

**Highway 407, Toronto, Canada**

This new roadway is being financed with government bonds and repaid by tolls. All lanes are priced, with tolls varying by time of day. The system is fully automated. Drivers establish prepaid accounts and pay monthly. Started: 1997.

**Autoroute A1, Lille, France**

Prices on this toll road vary on Sundays only, when traffic returning to Paris from vacation areas in Northern France is at its peak. Tolls are 25 to 56 percent lower than normal before the peak and 25 to 56 percent higher during the peak. Started: 1992.

**Downtown Singapore**

Roads in and out of the downtown are priced and monitored electronically, with tolls varying by time of day. This system replaces the previous area licensing system where drivers purchased an annual permit to use downtown roads during peak periods. Started: 1977.

The primary benefit of peak period pricing is to reduce congestion at the peak hours. Some drivers who now travel at peak times will choose other routes, times or modes, thereby making more efficient use of existing roads and reducing the need to build new ones.

The study is being conducted by Metro and the Oregon Department of Transportation (ODOT) through a grant from the Federal Highway Administration. In addition, seven agencies have contributed matching funds and will help with the study. These agencies include Clackamas, Multnomah and Washington counties; the city of Portland; the Port of Portland; the Department of Environmental Quality; and Tri-Met.
Studies indicate that peak period pricing benefits all highway users by influencing travel choices. Those with flexible travel schedules can choose to travel at off-peak times. Some may be willing to pay for the convenience of being able to drive on a less crowded road. Others who must drive during peak hours can travel on regular, non-tolled lanes, take an alternative way, join a carpool or use transit.

In San Diego and Houston, peak period pricing helps make more efficient use of carpool lanes. In San Diego, carpool lanes, constructed in 1988 for drivers with two or more occupants, have long been underutilized. Peak period pricing is allowing about 3,000 more people to enjoy smooth traffic flow in the express lanes during the most congested times and the number of carpools who use the road for free has increased by 15 percent.

In Houston, carpool lanes were originally available to two-person carpools but later restricted to those with three or more people due to crowding. With peak period pricing, a limited number of two-person carpools pay to use the lanes.

As in San Diego, the roadway is better utilized, carpooling is encouraged, and traffic flows smoothly. In the initial two month phase of the project, 300 transponders were issued to commuters on a first-come, first-served basis. Due to popular demand, the number of participants has been allowed to double without taxing the road capacity.

Peak period pricing also influences when and how people travel. In Singapore, the original road pricing system helped reduce congestion during the peak hours by 40 percent, with about equal numbers of drivers switching to different times and alternative types of travel such as transit. In the first day of operation of the city’s new electronic monitoring system, traffic further decreased by 17 percent and flowed smoothly; fewer people drove during rush hour and slightly more chose to travel just before the peak. Some drivers also switched to other lesser-used roads.

In Lille, France, peak period pricing has helped reduce congestion significantly on a road where drivers previously were delayed for as long as several hours. In the first year of operation, traffic decreased by nearly 20 percent during the most congested hour of that four-hour peak period.

### Time, Convenience and Safety

#### Important Factors for Drivers

**SR-91, Orange County**
- While time savings can be as much as 20 minutes for a one-way trip in an express lane on this variably priced road, improved driving comfort and safety are even more important to some drivers.
- Congestion on the unpriced lanes has dropped significantly. In the first year of operation, the number of three-person carpools using the freeway on both priced and unpriced lanes rose by nearly 40 percent.
- In surveys, between 60 and 80 percent of those who drive on the road, even those who do not pay to use the express lanes, say they approve of this idea.

**I-15, San Diego**
- Customer satisfaction is high. Nearly 90 percent of those who participated in the first phase of the project volunteered for phase II. More than 95 percent of users rate customer service and traveling conditions as good to excellent; fewer than 2 percent are bothered that prices change as often as every six minutes to manage changing congestion levels.
- Perceived time savings are greater than measured. Though studies show that drivers typically may save ten minutes or less by using the road, many say they save up to 20 minutes.
- The number of carpools who use the road for free has increased by 15 percent.

**Highway 407, Toronto**
- Use is high. Over 120,000 drivers use the road each day, significantly more than original estimates, but still well within the capacity of the highway.

### Electronic Fee System Replaces Toll Booths

Drivers who want to use the express lanes on SR-91 establish a pre-paid account with the private operator. They receive a transponder, a credit card-sized electronic box coded with customer-specific information, attached to their windshields. As each car enters an express lane, overhead monitors electronically read the transponder and automatically deduct the fee from the account. Drivers in San Diego, Houston, Lee County, and Toronto also use the same system.

Stopping at a toll booth is becoming a thing of the past on facilities with peak period pricing and traditional toll roads around the U.S. In New York, the EZ-Pass program allows drivers to establish a pre-paid account to use toll roads, bridges and tunnels throughout the state. As a driver passes through the toll plaza, electronic equipment reads a computerized tag mounted on the windshield, deducts the toll, and indicates how much money is left in the driver’s account. If the driver doesn’t have an EZ-Pass tag, a video camera takes a picture of the car’s license plate and a ticket is issued by mail.
Entering and Leaving Made Easy

Electronic tolling has eliminated the need for drivers to stop at a tollbooth. Here's how it works:

On SR-91 in Orange County, express lanes are in the freeway median. Drivers enter the facility from free lanes that are identified well in advance. Pylons separate the length of the eight-mile stretch of the priced lanes from the rest of the highway.

In San Diego, drivers who pay to use FasTrak share the lanes, in the highway median, with carpoolers and motorcycles. They are reversible and separated from the rest of the road by concrete barriers or a grass strip and chain link fence. FasTrak drivers enter in a third lane, separate from carpools, where electronic equipment reads each car's transponder.

Drivers enter Highway 407 in Toronto from any of 29 exit and entrance ramps and interchanges. At each entrance and exit, electronic equipment automatically scans each car for a transponder, deducting the toll from a prepaid account. Drivers of cars without transponders are identified by equipment that reads their license plates and then billed by mail.

Communities Use Different Monitoring Techniques

On SR-91, overhead cameras monitor drivers, sending information to a command center with closed circuit television where operators check for cars that do not have transponders. Offenders either receive a ticket through the mail or are stopped by a California Highway Patrol (CHP) officer. The private company that operates SR-91 pays for the CHP's services through a cooperative agreement with the state.

In Toronto, overhead cameras and special lights "read" the license plate of each car entering the roadway; then, computers automatically interpret the numbers through a technology called "optical character resolution." Finally, a computerized system automatically bills unauthorized drivers through the mail, using information provided by the Canadian Council of Motor Transportation Administrations. A limited number of people review photographs of license plates that cannot be interpreted by computer.

The California Highway Patrol monitors and patrols I-15 in San Diego through a contract with the San Diego Association of Governments. An automatic enforcement system is considered too expensive for the demonstration phase of the project but may be used in the future. Officials report that few people have tried to use the FasTrak lanes without transponders. Additionally, cheating by non-carpoolers has dropped dramatically from before FasTrak opened.

In Singapore, the system is enforced by police officers stationed at 27 entrances to the downtown.

Options Considered for Drivers Who Cannot Afford to Pay

Surveys show that 25 percent of the people who drive occasionally on the SR-91, express lanes are low-income. Drivers of all income levels use the priced lanes selectively, when getting someplace on time is particularly important to them. All drivers on SR-91, as well as I-15 in San Diego, have the choice of using adjacent free, non-express lanes. They also can use the express lanes for free in a carpool.

In San Diego, revenues have been used to fund a new express bus with 500 riders per day.

In studying equity issues related to higher tolls at rush hours on all lanes of the San Francisco Bay Bridge, discounts for low-income drivers were considered. They would have been available to people or families who were eligible for other assistance such as school lunch or heating oil programs. Equity issues are part of the criteria being considered in the Portland Metropolitan area study.
<table>
<thead>
<tr>
<th>Location</th>
<th>Type of Project</th>
<th>Toll</th>
<th>Collection Method</th>
<th>Enforcement</th>
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<tbody>
<tr>
<td>SR-91 Orange County, CA</td>
<td>In highway median; two new express lanes eight miles in each direction</td>
<td>$0.60 - $2.95</td>
<td>Electronic: transponders and pre-paid account</td>
<td>Video monitors; ticketing by mail or Highway Patrol</td>
</tr>
<tr>
<td>I-15 San Diego, CA</td>
<td>Eight miles in highway median; solo drivers pay to use two existing carpool lanes</td>
<td>Tolls vary by congestion levels from $1.50 to $4</td>
<td>Electronic</td>
<td>Highway Patrol through cooperative agreement with local government</td>
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<tr>
<td>Interstate 10 Katy Freeway Houston, TX</td>
<td>Two-person carpools pay to use free three-person carpool lanes on 13 miles of freeway</td>
<td>$2 per trip</td>
<td>Electronic</td>
<td>Highway patrol stationed at facility entrances and exits</td>
</tr>
<tr>
<td>Sanibel Island Causeway and Midpoint and Coral Gables Bridges Lee County, FL</td>
<td>Existing toll bridges; drivers pay low rates at non-peak hours</td>
<td>50% discount at non-peak hours</td>
<td>Electronic tolling replacing toll booths</td>
<td>No special enforcement; entire facility priced</td>
</tr>
<tr>
<td>Highway 407 Toronto, Canada</td>
<td>23 miles of new highway; all lanes tolled</td>
<td>Varies by distance, time of day and type of vehicle; up to about $6 for 23 miles</td>
<td>Electronic at all entrances, exits and interchanges</td>
<td>Video cameras, license plate readers and automatic billing system</td>
</tr>
<tr>
<td>Autoroute A1 Lille, France</td>
<td>Existing toll road; on Sundays non-peak drivers receive discount while peak drivers pay extra</td>
<td>Varies by distance; 25% - 50% higher than normal at peak; 25% - 50% lower off-peak</td>
<td>Electronic and manual toll booths</td>
<td>No special enforcement; entire facility priced</td>
</tr>
<tr>
<td>Singapore</td>
<td>All roads in downtown area</td>
<td>About $1.20 per entry during peak hours</td>
<td>Annual permit being replaced by electronic tolling</td>
<td>Patrol officers stationed at all entry/exit points</td>
</tr>
</tbody>
</table>

### Examples of Other U.S. Studies to Test Concept

**Tappan Zee Bridge, Westchester County, New York.**
The New York State Thruway Authority is in the first stage of studying peak period pricing on existing lanes of this heavily used toll bridge north of New York City. Currently, trucks using the bridge pay a higher fee during rush hours.

**Los Angeles, California**
A regional task force has recommended further study of an eastern extension of SR-91 and State Route 14 in North Los Angeles County for possible demonstration projects where single-occupant drivers would pay to use carpool lanes.

**Sonoma County, California**
A recent study recommends construction and peak period pricing of one new lane on Highway 101. Results indicate that variable pricing would help reduce congestion more effectively than offering drivers a free carpool lane and produce higher revenues than a single toll rate.

**Boulder, Colorado**
This study resulted in a proposed demonstration project where volunteers would use prepaid accounts to pay for travel anywhere in the region during peak hours. Travel patterns would be monitored to study the effects of peak period pricing.

**Minneapolis-St. Paul, Minnesota**
This study included substantial efforts to inform and involve members of the community, including surveys using videogame style kiosks in local malls, interviews with community leaders and a "citizens jury" process. It resulted in plans to implement a demonstration project as part of a regional pricing strategy on Interstate 394 north of the city.

### Want to Know More or Get Involved?
If you would like more information about Metro's Traffic Relief Options Study, have comments, or would like a presentation to your neighborhood, business or other community group, please call the project hotline at 503/225-5555, ext. 3073. Or visit our website at www.metro.dst.or.us
South Willamette River Crossing Study

Background

The Sellwood Bridge is the only Willamette River crossing between the Ross Island Bridge to the north and the I-205 Bridge to the south. Growth in Clackamas and Multnomah counties has created a demand for river crossings that exceeds the available capacity.

Roads leading to the Sellwood, Ross Island and I-205 bridges are also congested in many locations and conditions are expected to get worse as growth increases – despite the expected increase in transit, pedestrian and bicycle use.

In addition, the condition of the Sellwood Bridge increases the importance of addressing the river crossing deficiencies in the corridor. Built in 1925, the bridge is approaching the end of its expected life-span and is considered functionally obsolete by engineers. Due to its age, the bridge will require increasing levels of maintenance that raise cost-effectiveness issues compared to replacement. As a functionally obsolete bridge, its lanes do not meet current width or weight standards and the pedestrian and bicycle facilities are inadequate. Though not listed on the National or State Historic Register, the bridge was designed by a notable engineer and has historical significance to the community.

South Willamette River Crossing Study project

A South Willamette River Crossing Study project has been created to address river crossing needs for the Willamette River between the Marquam Bridge in Portland and the I-205 Bridge in Oregon City during the next 20 years.

Metro is leading this study with the participation of the Oregon Department of Transportation, Tri-Met, Multnomah and Clackamas counties and the cities of Portland, Milwaukie, Gladstone, Oregon City, West Linn and Lake Oswego. Staff from these jurisdictions and agencies are assisting Metro as members of a Technical Advisory Group and a Project Management Group. Metro’s Transportation Policy Alternatives Committee, Joint Policy Advisory Committee on Transportation and the Metro Council will review and act on study recommendations.

Metro’s role

Metro’s role is to recommend a long-term river crossing strategy for the Regional Transportation Plan. Developing the strategy requires consideration of travel demands, conceptual engineering feasibility and costs, compatibility with adopted policy and plans, and a preliminary environmental review. Metro is also responsible for developing a financial plan if the recommended crossing strategy would require commitment of regional funds.

Options for evaluation

In 1997, JPACT and Metro Council adopted a short list of options for evaluation in the crossing study. The options reflect a range of strategies that could accommodate travel demand and help support the 2040 Growth Concept. Options are:

- Modifications to the west end of the Ross Island Bridge with and without a new bridge parallel to the Ross Island Bridge to add capacity.
- Preservation of the existing Sellwood Bridge: in its current configuration; upgraded to meet seismic, bike and pedestrian; or close to traffic but leave it open as a bicycle and pedestrian-only facility.
- Replacement of the Sellwood Bridge as a two- or four-lane facility.
- A new crossing in Clackamas County in Milwaukie, North Lake Oswego or near Marylhurst College as a two- or four-lane facility.
- Additional transit services and programs that reduce travel demand.
Current issue

On Dec. 10, 1998, JPACT, after seeking public comment, reviewed the South Willamette River Crossing options. JPACT decided:

- Improvements to the Ross Island Bridge and I-205 should be considered further, but not in the context of the Sellwood Bridge.

- Several options should be set aside as they do not address South Willamette River Crossing Needs such as a crossing at Lake Oswego and near Marylhurst, a full rehabilitation of the existing Sellwood bridge, and use of the existing Sellwood bridge or for bicycles and pedestrians only.

- To further discuss the issue of whether to add additional roadway capacity across the river at Sellwood and Milwaukie.

- To be committed to reducing the need for additional capacity by supporting programs such as additional bus service, improved bicycle and pedestrian connections, commuter rail, travel demand management programs, and additional transit pass programs that reduce transit fares for riders.

Timeline

Once JPACT meets to discuss the costs and benefits of further considering adding capacity or not, JPACT will hold a public meeting in 1999 to solicit comments. Following public comments, JPACT will develop a recommendation. Metro Council will then hold a public hearing on the recommendation prior to adoption as well.

- If JPACT recommends that meeting the goals of the 2040 Growth Concept could be best accomplished without adding capacity, then JPACT would forward options for consideration in an environmental impact statement.

- If JPACT's recommendation is to preserve the existing Sellwood Bridge to meet the river crossing needs and support the 2040 Growth Concept, future efforts would focus on financing the needed maintenance and rehabilitation projects.

- If JPACT concludes that, to meet the travel demands associated with the 2040 Growth Concept, additional river crossing capacity is needed, then JPACT could identify which of the options should be considered in an environmental impact statement. Following the completion of the environmental process, JPACT would then decide whether to build the additional capacity.

Getting involved

Attend a public meeting (dates will be announced) where you can hear a presentation of the study findings and share your recommendation.

Notify the elected officials in your city or county about your interest in this study.

Call the Metro transportation hotline number at (503) 797-1700.
Metro, the regional government that serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area, provides regional services that guide growth and help ensure that livable communities are created for the future.

Metro owns and operates two solid waste transfer stations in the region:

**Metro Central Station**
6161 NW 61st St., Portland
Recorded information line – 223-6788

From Northwest St. Helens Road (Hwy. 30) or Yeon Avenue, turn north onto Kittridge and left onto Front. Go one mile to Northwest 61st and turn left. Facility is on the right.

**Metro South Station**
2001 Washington St., Oregon City
Recorded information line – 657-2872

Take I-205 to the Molalla/Park Place exit (exit 10). At the first traffic light, turn right onto Washington. Facility is on the right.

**Transfer station hours**

Spring/summer hours (daylight savings time) – 7 a.m. to 7 p.m. daily
Fall/winter hours (standard time) – 7 a.m. to 6 p.m. daily

Holiday hours – closed Thanksgiving, Christmas and New Year’s days; closed at 2 p.m. Christmas and New Year’s eves.

**Rates**

Rates are $62.50 per ton plus a $5 transaction fee. Minimum charge is $15 for 320 pounds or less. Fees will be rounded to the nearest dollar amount (i.e., $30.49 is rounded to $30; $30.50 is rounded to $31).

Yard debris, clean wood loads – $38 per ton plus a $5 transaction fee. Minimum charge is $10. Must be free of dirt, sod, stumps, rocks, metal, glass, garbage and plastic bags. Wood must be free of all hardware (nails OK).

Litter control surcharge – Uncovered loads cause litter in neighborhoods and on roadways. A $25 surcharge will be assessed for uncovered non-commercial loads ($100 surcharge for uncovered commercial loads). Tarps can be purchased at the scalehouses.

**Tires, appliances, recyclables –**

Tires: ($5 minimum charge)
Car tires $1 off rim; $3 on rim
Truck tires $5 off rim; $10 on rim
Limit 15 tires per day per customer; tires 21 inches or larger not accepted.

Air conditioners, freezers, refrigerators and other units containing coolant:
Residential units $15
Commercial units $20
Other appliances may be free of charge. See “Free recycling” for more information.

(If tires or coolant-containing appliances are brought in with a garbage load, the per-ton rate applies.)

Recyclables: There is no charge to drop off source-separated recyclables. (See “Free recycling” for specifics.)

Other: Railroad ties are accepted in small numbers at Metro Central Station.
Payment
Cash, Visa, MasterCard and checks are accepted. Personal checks must be presented with a check guarantee card (for the account on which the check is written) and a valid driver’s license.

Preparing your load
Sort it, save money – If you have materials that are recyclable, you can save money by separating them from the rest of your load. When loading your vehicle, sort and separate recyclables and you’ll receive a $3 rebate for less than 100 pounds of recyclables, or a $6 rebate for 100 pounds or more. There is a 1/2-cubic-yard minimum to receive the rebate.

You can also save money by covering your load, keeping it dry, taking advantage of curbside pick up for yard debris when feasible and disposing of heavy materials such as rocks and soil before coming to the transfer station.

Make it safe – For the health and safety of employees and customers, certain materials – such as pool and spa chemicals, sharps and hazardous waste – cannot be accepted at the transfer stations and should not be mixed with other garbage. You can take these materials to Metro’s hazardous waste facilities during regular hours of operation.

When you arrive
Be prepared to describe the contents of your load to the scalehouse attendant, who will estimate the weight of your load and ask you for a deposit. If you’ve separated your recyclables, hazardous waste and appliances, you’ll be directed to the area for those materials. After that, you’ll dispose of the remainder of your load inside the transfer station.

Free recycling/recycling rebate
You can recycle the following free of charge:
- newspaper – no strings or paper bags
- cardboard – corrugated; paper grocery bags
- magazines
- plastic milk jugs, bottles with neck or threaded opening – remove lids, rinse, flatten
- glass – (jars and bottles only) rinse and sort by color, recycle caps with tin cans
- aluminum – clean all containers
- tin cans – rinse, remove labels, flatten
- scrap paper – includes junk mail, cereal boxes, etc.
- batteries – automobile (secure leaking batteries in leakproof containers)
- appliances (dishwashers, water heaters, dryers, stoves), copper and ferrous metals
- motor oil and antifreeze (limited to 20 gallons per customer, per day); must be in five-gallon or smaller unbreakable containers with screw-on lids

Metal wire fencing is not accepted for recycling.

Hazardous waste facilities
Metro-area residents only can dispose of household hazardous waste at the hazardous waste facilities at the transfer stations. If you live outside Metro boundaries or if you have business-generated waste, call 234-3000 for options.

Hours – 9 a.m. to 4 p.m. Monday-Saturday
Holiday hours – closed Thanksgiving, Christmas and New Year’s days; closed at 2 p.m. Christmas and New Year’s eves.

Hazardous waste fees – $5 per 35 gallons or less. A $5 credit is given if you bring in hazardous waste with a load of other garbage. Common types of household hazardous waste include paint, solvents, pesticides, fertilizers, poisons and aerosol spray products.

Sharps – Syringes, IV tubing with needles, scalpel blades, etc., from residential users are accepted when disposed of in a red, state-certified sharps container. Sharps must be delivered to one of the hazardous waste facilities. Containers can be purchased at either facility and exchanged for free when full.

Metro Recycling Information
Call Metro Recycling Information, 234-3000, if you have questions about additional recycling locations, hazardous waste disposal or for more information about transfer station rates.

Other questions? Comments?
Call or write:
Metro Regional Environmental Management Department
600 NE Grand Ave.
Portland, OR 97232-2736
797-1650
Comments cards available at scalehouses.

Metro web site: www.metro-region.org

METRO Regional Services
Creating livable communities
The 238-acre St. Johns Landfill in North Portland served as the region's primary garbage disposal site for more than 50 years. In 1980, the city of Portland passed responsibility for operating the landfill to Metro; in 1990, Metro assumed full ownership responsibilities for both the St. Johns Landfill and the surrounding Smith and Bybee lakes wetland. In 1991, the landfill stopped accepting waste.

What's involved in closing a landfill?
Closing a landfill is complicated, costly and involves much more than simply locking the gates and walking away, especially when the landfill is located in a wetlands in region with high amounts of rainfall. Closure is expected to cost about $36 million, all of which has been funded from solid waste disposal charges.

Specific environmental protection features that have been implemented include:

- covering the garbage with a layer of compacted earth, a plastic cap, plastic mesh on the steep slopes, and soil and compost to support vegetation
- sloping the sides of the landfill so rainwater will run off
- building stormwater ponds to trap erosion sediment
- installing a gas collection system to collect, monitor and burn (flare) gases produced by decaying garbage
- researching the nature and movement of groundwater contamination to determine if additional protection measures are necessary
- negotiating a contract with Portland LFG, a joint venture between Palmer Capital Corp. and Ash Grove Cement Co., for the beneficial use of the gas being produced by the landfill. In the spring of 1998, Portland LFG completed a pipeline to carry the gas from the landfill to Ash Grove's plant to burn energy.
What environmental protection measures has Metro implemented? One of the most important closure features is the cap that covers the entire landfill. This cap prevents rainwater from leaching pollutants out of the waste and seeping into ground and surface water.

The cap is made of several layers:

- 1 foot of compacted silt
- a plastic membrane cap equivalent in area to 170 football fields
- plastic mesh on steep slopes
- 1 foot to 18 inches of sand
- 1 foot of soil and compost
- vegetation

A network of wells, trenches and pipelines has been installed across the landfill to carry the gas to a compressor station. From the compressor station, the gas is piped through a 9,400-foot pipeline to the lime company for use in its kilns. Enclosed flares at the compressor station site also burn the excess gas or gas collected during periods when energy needs at Ash Grove are low, such as when the kilns are not operating. Without some means to vent the excess gas, the plastic cap would expand like a balloon.

What environmental monitoring is being done? Metro is committed to monitoring the landfill to prevent any short- or long-term effects it could have on human health and the environment. With researchers at Portland State University, Metro is developing and testing a computer-based model to estimate past, present and future ground water flow and contaminant movement around the landfill.

Metro is also assessing human health and environmental risks in the surrounding Smith and Bybee lakes wetland.
ST. JOHNS LANDFILL GAS PIPELINE

How the gas is collected

The landfill gas is kept from escaping into the atmosphere by creating a vacuum beneath the landfill cover and drawing out the gas through a network of vertical and horizontal (trench) wells. Each of the wells is connected by a web of pipelines to the motor blower/flare facility, which creates the vacuum. Metro began collecting and flaring gas from the landfill in 1993.

The landfill cover includes a plastic cap, which prevents air from infiltrating the landfill as the gas is removed and creating a condition in which underground fires can start. The cap also prevents rainwater from leaching contaminants into groundwater.

Most of the wells are drilled to the bottom of the refuse, while horizontal wells are constructed in the top few feet of the waste. The spacing and location of the wells efficiently removes gas from all areas of the landfill.

Moisture is removed from the landfill gas by collecting “condensate” at low points throughout the landfill and at tanks at the motor blower/flare facility. If the moisture were not removed, it would block the flow of gas.

The blowers move the gas to the compressor station, where the gas is compressed and chilled to remove any remaining moisture before entering the pipeline. A dedicated 9,400-foot pipeline delivers the gas to Ash Grove Cement Co., almost two miles away. Portland LFG contracted and paid for
Gas collection statistics

- Number of vertical wells - 92
- Number of trench wells - 86
- Number of sediment basins - 5
- Lineal feet of pipe carrying gas to compressor station - 84,362 feet (16 miles)
- Lineal feet of ditches and swales - 40,427 (7.6 miles)
- Deepest well depth - 80 feet
- Shallowest well depth - 21 feet
- Average annual gas production - 880,000 million British thermal units or 3,700 cubic feet every minute
- Length of pipeline - 9,400 feet
- Deepest point pipeline is buried - 20 feet below the Columbia Slough
- Total square yards of plastic membrane - 1,087,082 (170 football fields, including end zones)

Economic and environmental benefits

Ash Grove Cement Co. has the potential for using all gas produced at the landfill, equivalent to approximately 880,000 million British thermal units (BTUs) of natural gas per year, or the equivalent to heat 3,700 homes.

Portland LFG will pay Metro about $1.4 million during the next 10-12 years for the gas rights, the collection system and to maintain the landfill gas system.

The project has the potential of reducing carbon dioxide emissions in the Portland airshed by 23,300 metric tons a year because two sources of emissions will be reduced to one. This is the same impact on greenhouse gas emissions as removing 3,300 cars from the road or planting 7,100 acres of trees.

The facts about landfill gas

Landfill gas occurs naturally in municipal solid waste landfills as the waste decomposes.

Landfill gas – primarily methane and carbon dioxide – constitutes a significant source of methane emissions to the atmosphere.

The collection and use of landfill gas is an effective method to reduce greenhouse gas emissions responsible for global warming.

Landfill gas projects are recognized as a key component of President Clinton's Global Climate Change Action Plan.

Landfill gas has been recognized as an important energy source in numerous national reports, including the U.S. Department of Energy’s 1997 Renewable Energy Annual Report.

Currently in the United States there are more than 150 projects in operation that use landfill gas.

The installation of the compressor station and pipeline. Harding Lawson Associates was the contractor for the project.

At Ash Grove, the gas is metered and used in one or more of its lime kilns and agricultural mill, which Ash Grove converted to use the landfill gas along with other fuels. At full production, Ash Grove also installed a blending station that can mix the landfill gas with natural gas as necessary. When Ash Grove cannot take all of the landfill gas, it is automatically diverted to the flare station at the landfill where it is combusted.

The total cost for the compressor station, pipeline and all of the controls at the landfill and at Ash Grove is more than $2.6 million.
Rivergate Industrial District and St. Johns Landfill

Ash Grove Cement Co., where the gas is metered and used in one or more kilns.

More than 15 permits from 10 regulatory agencies were needed to clear the way for the pipeline's route along waterways, roadways, railroad tracks and Port of Portland property.

At its deepest point, the 9,400-foot pipeline is buried 20 feet under the Columbia Slough.

The compressor station sends gas to Ash Grove. Excess gas is combusted by four flares.

Metro's 238-acre St. Johns Landfill is covered with nearly 100 gas wells.
The Ash Grove metering station continuously monitors methane content and flow rate.

Ash Grove Cement Co. has a strong tradition of service, reliability and quality that reaches back more than 100 years. Headquartered in Overland Park, Kan., the company operates cement and lime plants in nine states across the county and is the fourth largest cement manufacturer in the United States, producing more than 4.5 million tons of cement annually.

In the Pacific Northwest, Ash Grove operates five cement plants and one lime plant. The Rivergate lime plant, located in North Portland, produces more than 500,000 tons of lime products annually. The plant serves as an example of Ash Grove's commitment to safety, quality, environmental stewardship and customer satisfaction.

For more information about Ash Grove Cement Co., call (503) 286-1677.

Palmer Capital Corporation

Palmer Capital Corp. is a private investment banking firm involved in the development and financing of tax-oriented energy projects. Founded in 1974, Palmer assists privately held companies with equity financing, equipment leasing, management buyouts, acquisitions, divestitures, reorganizations, and third-party project financing. Palmer has completed approximately $700 million in corporate finance transactions.

Palmer is a leader in the development and financing of landfill gas-to-energy projects. These projects generate significant environmental benefits as well as revenue for landfill owners and investors. Palmer has developed and implemented 16 landfill projects since 1982.

For more information, call Palmer Capital Corp. at (781) 383-3200.

Metro is working to create livable communities by providing regional transportation and land-use planning services and overseeing garbage disposal and recycling and waste reduction programs. Metro serves 1.3 million people who live in Clackamas, Multnomah and Washington counties and the 24 cities in the Portland metropolitan area.

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

For more information, call Metro's Regional Environmental Management Department at (503) 797-1650, or visit Metro's web site: www.metro-region.org
Road Crews — There When You Need Them

Multnomah County's Division of Transportation is always prepared for bad weather — snow, ice, wind and heavy rains. In partnership with cities throughout the county, the County has established a responsive network for emergency weather conditions. From December to March, the division is staffed 16 hours a day, five days a week. During this time, a small crew works from midnight to 8:30 a.m. While you sleep, these skilled employees are handling transportation emergencies, preparing for coming storms and taking care of maintenance needs that can ease the morning commute.

When a storm comes through, the County goes into high gear. Two 12-hour shifts of 20 people offer round-the-clock road clearance and maintenance. And everyone in the crew continues working 12-hour days until the need subsides. After the flooding of 1996, the emergency conditions lasted three full weeks.

Drive Safely This Winter

- Never pass a sanding truck while it is sanding a road. You are likely to get hit by flying rocks. Operators will allow you to pass at the first opportunity.
- Never cut off a truck plowing snow. Snow plows work most efficiently at steady speeds. Slowing down interferes with their effectiveness. And remember, they are heavy pieces of equipment that don’t stop on a dime … for your safety, leave them a lot of room before moving ahead of them in their lane.
- Plan your routes carefully during bad weather. Avoid common trouble spots. Remember that left turn lanes are the last to be cleared in urban areas.
- After a storm, when temperatures are rising let us know about any areas with standing water. The catch basin may be covered with leaves, ice or snow. Call 248-5050, leave a message, and we will clear them as soon as possible.
- If at all possible, stay home during bad weather. It may save you time, headaches — and possibly your life.

Here are answers to some commonly asked questions about our road system:

Q. How do you decide what roads to plow and sand?
A. In both rural and urban areas, we clear the most heavily used streets first, and those near hospitals and fire stations that are critical for emergency services. We also give priority to freeway access routes. Once the highest priority roads have been cleared, we begin clearing lower priority roads to the extent that time and resources allow.

Q. What if you don’t have enough resources to handle a weather emergency?
A. Occasionally, a major storm will max out our personnel and equipment. In that case we hire contractors to assist in responding to the emergency.

Q. Do you do any prevention work before the storm hits?
A. The Transportation Division has obtained a truck that sprays a combination of calcium, magnesium and acetate on targeted areas. This environmentally safe substance prevents icing. Because of the chemical’s expense, we use it only in the most hazardous locations, such as Corbett Hill Road, and at heavily-used intersections. County crews pick up the sand immediately after a storm.

Anti-icing reduces the need for sand — lowering our maintenance costs and reducing windshield and paint damage to vehicles, while creating safer driving conditions. Reducing the use of sand also improves air and stormwater runoff qualities, which is a Best Management Practice goal of our environmental program.
Volunteers Wanted for 242nd Avenue Connector Study

Multnomah County is spearheading a study to develop the connection between 242nd Ave. at Glisan St. and I-84 east of 238th Ave. The first phase is a technical analysis to determine the connector’s impact. During the next phase, which will begin in early spring, a citizens committee will help the County evaluate the analysis.

The new road is intended to replace the Mt. Hood Parkway, which was eliminated because of a moratorium on new state highway construction. However, it will be an arterial, not a freeway. Currently, the Transportation Division is working with a consulting team to review environmental, geological, transportation, land use, and socio-economic issues that might be impacted by a new road.

If you are interested in participating in this project as a member of the Citizen Advisory Committee, please contact Ed Abrahamson at 248-5050.

County Wins Award for Hawthorne Bridge Partnerships

The Multnomah County Transportation Division has received statewide recognition for its far-sighted planning of the Hawthorne Bridge Painting and Deck Replacement Project. The County’s Technical Design Section received the 1998 Oregon Transportation Quality Initiative Achievement Award in the interagency partnering (non-construction) category, for its creative partnerships to make this critical project move smoothly. Cooperative planning helped the County protect the natural environment, reduce traffic disruptions and minimize costs. Combining several projects into one saved more than $5 million in project costs.

Also sharing in the award was the County’s design partner, David Evans and Associates, Inc. The County listed several dozen partners in its award application, including federal, state and local transportation and regulatory agencies, neighborhood, business and advocacy groups, and a variety of regional governments.

The Hawthorne Bridge, which carries about 35,000 vehicles daily, has been closed since April for major repairs. But as early as December, 1996, the County brought together representatives of 14 agencies and eight consulting firms to consider the challenges and design the best way to work together.

In managing the renovation project, the design team had to consider the needs of river traffic, commuters, commercial vehicles, bicyclists, buses and pedestrians, as well as protecting the Willamette River from lead paint being removed from the bridge. The County Bridge Section also had to coordinate with other construction and maintenance projects.

“We thank the many agencies, citizens and businesses who shared their time and expertise with us to make this project work so well,” said Stan Ghezzi, the County’s Bridge Services Manager. “Together we created a model of cooperation. We hope to see it replicated by others to increase efficiency and reduce costs.”

Transportation, Land Use and DES Consolidate in New Building

In December, several sections of the Transportation Division and the Environmental Services’ (DES) administration staff moved into a new home — a building adjacent to the current Yeon Facility located at 1620 SE 190th St. In January, the Land Use Planning Division will join them. Staff predict the move will mean better customer service for the public.

“It makes sense to locate transportation and land use planning together because of their natural linkage,” said Larry Nicholas, director of DES, which includes both divisions. “The new building also has more counter space for customers calling on our Surveyor, Land Use Planning and Right of Way staff.”

The sections were formerly located at 2115 S.E. Morrison Street in a building that was in need of a costly seismic upgrade to meet safety standards.

In December, the Survey-Section moved to the main floor of the Yeon Annex, as the new building is called. Land Use Planning and the Right of Way Section will relocate on Wednesday, January 20. Transportation Engineering and Planning have moved to the annex’ second floor from basement offices at Yeon that had poor ventilation.

The Land Use Planning Division will close on January 15 to prepare for the move. If you have business with any of the sections that are moving, be sure to call 248-3041 (Land Use) or 248-5050 (Transportation) to clarify their current location and hours.
Cheryl Whisler, land use chair of the Kelly Creek Neighborhood Association, recently marked the third year of meetings about traffic conditions at the intersection of Kane Ave., Orient Drive and S.E. 14th Street.

Cheryl and her neighbors are concerned about safety at this busy unsignalized intersection, where two streets cross a 35-mph road. “Sometimes it’s hair-raising watching the school kids try to get across to the convenience store so they can get their Big Gulps,” Cheryl said. The neighbors say this intersection has a high vehicle accident rate.

A County investigation revealed a 50% increase in the accident rate from 1996-97 at the intersection of Kane Road and Orient Drive. The County worked with the City of Gresham to reduce northbound traffic on Kane Road crossing Orient Drive by prohibiting left turns from eastbound Palmquist. The effect of this change will be known when accident statistics for 1998 are compiled.

A pending agreement between Multnomah County, Gresham and Albertson’s Food & Drug Stores could provide up to $5.8 million to give a major facelift to the intersection. But there are other critical projects waiting to be funded. How can the County pay for this project and all the other critical projects necessary to keep up with changes in East County?

The bulk of the funds available for road construction come from state gas taxes. However, the state has not raised the gas tax in the last eight years. Revenues are not keeping up with growth — and a series of stormy winters required the County to divert money to emergency road repairs. The County has identified $170 million worth of road construction and maintenance projects that need to be completed in the next 20 years – a figure far beyond anticipated revenue.

Metro has about $75 million in federal money to distribute throughout the region over the next six years, and the County has asked for funding for a variety of high priority projects. However, local governments have submitted requests worth more than $330 million — making it unlikely that more than a few Multnomah County projects will get funded.

Meanwhile, people and businesses continue to pour into East Multnomah County. The rains still pound away at steep banks and undermine old roadways. The bridges are aging, and County funding remains stagnant. Multnomah County will be looking to the State Legislature this year for new financial support to keep traffic moving smoothly and safely.

### Schedule Update of Construction Projects

<table>
<thead>
<tr>
<th>Project Description and Location</th>
<th>Description of Work</th>
<th>Construction Work Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>207th Avenue from Halsey St. to Glisan St., arterial construction</td>
<td>Construct major arterial</td>
<td>Completed November 1998 (minor work still to be completed)</td>
</tr>
<tr>
<td>Hogan Road from Burnside Rd. to Palmquist Rd., bicycle/pedestrian improvements</td>
<td>Widen roadway for bicyclists and pedestrians, install signal at Hogan Road and 5th Avenue</td>
<td>Completed September 1998 before school reopened</td>
</tr>
<tr>
<td>Cornelius Pass Road at railroad tunnel, flood damage repair</td>
<td>Repair flood damage and stabilize landslide</td>
<td>Completed October 1998</td>
</tr>
<tr>
<td>Newberry Road, flood damage repair</td>
<td>Repair flood damage</td>
<td>Completed October 1998</td>
</tr>
<tr>
<td>Glisan Street from LSI Logic at 223rd to 238th Drive/242nd Avenue, arterial reconstruction</td>
<td>Widen roadway, install signal, install illumination</td>
<td>Completed November 1998</td>
</tr>
<tr>
<td>East County Signal System, coordinate traffic signals</td>
<td>Interconnect signals</td>
<td>Expected to begin February 1999</td>
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<tr>
<td>Kane Avenue at Powell Valley Road, traffic signal installation</td>
<td>Install signal and widen roadway</td>
<td>Expected to begin March 1999</td>
</tr>
<tr>
<td>238th Avenue at Halsey Street, intersection improvement and traffic signal installation</td>
<td>Widen approach roadways</td>
<td>Expected to begin April 1999</td>
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<tr>
<td>49th Avenue from Hidalgo Street to McNary Parkway, bicycle/pedestrian improvements</td>
<td>Widen roadway for bicyclists and pedestrians</td>
<td>Expected to begin April 1999</td>
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<tr>
<td>Cornelius Pass Road, paving overlay</td>
<td>Resurface roadway</td>
<td>Expected to begin May 1999</td>
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<tr>
<td>Stark Street at Troutdale Road, traffic signal installation</td>
<td>Install signal and widen approaches</td>
<td>Expected to begin June 1999</td>
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<tr>
<td>Division Street, Stark Street and Halsey Street, flood damage repair</td>
<td>Repair flood damage</td>
<td>Expected to begin July 1999</td>
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<tr>
<td>Historic Columbia River Highway from Kibling Street to Beaver Creek Bridge, bicycle/pedestrian improvements</td>
<td>Widen roadway for bicyclists and pedestrians</td>
<td>Expected to begin July 1999</td>
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<tr>
<td>Rocky Point Road between US Highway 30 and Skyline Road, flood damage repair</td>
<td>Repair flood damage</td>
<td>Expected to begin July 1999</td>
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<tr>
<td>Gilkinson Road, culvert replacement</td>
<td>Replace deficient culvert</td>
<td>Expected to begin August 1999</td>
</tr>
<tr>
<td>Trolley Road from Chapman Street to Cherry Park Road, bicycle/pedestrian improvements</td>
<td>Widen roadway for bicyclists and pedestrians</td>
<td>Expected to begin October 1999</td>
</tr>
<tr>
<td>Orient Dr./Kane Rd./Palmquist Rd.</td>
<td>Intersection improvement</td>
<td>Expected to begin 1999 (pending agreement)</td>
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</table>
Let's Talk!
If you see a problem on a county road that needs the services of MCTrans — CALL US! Your ability to notice potential hazards can help us prevent big hassles if you let us know quickly.

CALL US TO REPORT:
• Shrubs and brush growing into roadways or sidewalks
• Traffic problems caused by construction
• Erosion on the right-of-way
• Damaged or missing signs
• Broken traffic signals
• Potholes or road settlement
• Illegal dumping of oil or grease in storm sewer drains
• Problems caused by bad weather
• Flooded drainage culverts
• Or any other problems and hazards you see!

Call MCTrans at 248-5050, Monday through Friday between 8:00 a.m. and 4:30 p.m. To report emergency road conditions or traffic signal outages after regular office hours, call 9-1-1. Crews are on call 24 hours a day and will respond immediately to emergencies, even on weekends, evenings and holidays.

For more information, visit the Transportation Division website at www.co.multnomah.or.us/trans/

West of Sandy River Study Begins

Residents of rural Multnomah County have a new opportunity to create a vision for their community. The West of Sandy River Rural Area Plan covers the land bounded by the City of Troutdale to the north, the City of Gresham to the west, the Sandy River to the east and Clackamas County to the south.

This plan marks the first joint land use and transportation plan that the County has conducted. It offers residents the opportunity to discuss a full range of interests and concerns about development, safety, and other issues important to a rural neighborhood.

Through questionnaires sent to property owners and an Open House, residents and stakeholders identified issues concerning growth, transportation, public services/facilities, land use, parks/open spaces and the environment/water quality as the most important topics to be addressed in the plan. A citizens’ group will be appointed to assist the County in developing the plan over the next year.

The Scoping Study with these issues will be presented to the Board of County Commissioners in January for a public hearing and their approval. To obtain a copy of the Scoping Study or to participate in the citizens group, please call April Siebenaler at 248-5050, or Susan Muir at 248-3043.
<table>
<thead>
<tr>
<th>NAME</th>
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<tr>
<td>Ray Rogers</td>
<td>Washington County Metro</td>
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<td>Ed. Washington</td>
<td>C3</td>
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<td>Karl Ronde</td>
<td>CLARK Co.</td>
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<td>Craig Pridemore</td>
<td>WSDOT</td>
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<td>Don Wagner</td>
<td>DYC (All. Sec. &amp; Planner)</td>
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<td>Dean Zastingshil</td>
<td>DEQ</td>
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<td>Greg Gresen</td>
<td>Metro Council</td>
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<td>Rod Monroe</td>
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<td>Sue Kennamer</td>
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<td>DAVE WILLIAMS</td>
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<td>Rebecca Douglas</td>
<td>Coalition for a Livable Future</td>
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<td>Dave Robertson</td>
<td>PGE Gas Transmission (PGE)</td>
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