

REGION
2040
Decisions for Tomorrow

Metro 2040 Growth Concept

December 8, 1994



METRO

Table of Contents

About Metro

Letter to Citizens from the Metro Council

2040 Growth Implementation Process

Resolution 2040-c

Exhibit A Growth Concept and Map

Exhibit B Proposed Regional Urban Growth Goals and Objectives (RUGGOs)

Exhibit C Analysis and Appendices

Publications List

Metro Council Meetings

Summary of Public Involvement Activities

Acknowledgements

About Metro

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Metro

Metro is the directly elected regional government that serves the 1.1 million residents in the urban and suburban portions of Clackamas, Multnomah and Washington counties, as well as those in the 24 cities of the region including: Beaverton, Cornelius, Durham, Fairview, Forest Grove, Gladstone, Gresham, Happy Valley, Hillsboro, Johnson City, King City, Lake Oswego, Maywood Park, Milwaukie, Oregon City, Portland, Rivergrove, Sherwood, Tigard, Troutdale, Tualatin, West Linn, Wilsonville and Wood Village.

Metro is responsible for the regional aspects of transportation and land use planning; regional parks and greenspaces; solid waste management; operation of the Metro Washington Park Zoo; and technical services to local governments of the region. Through the Metropolitan Exposition-Recreation Commission, Metro manages the Oregon Convention Center, Civic Stadium, the Portland Center for the Performing Arts and the Expo Center.

Metro is authorized by Chapter 268 of the Oregon Revised Statutes and the Metro Charter adopted by the citizens of the region in November 1992. Metro is currently governed by a 13-member council and an executive officer. Councilors are elected from districts and the executive officer is elected regionwide.



METRO

December 8, 1994

To the Citizens of the Portland Metropolitan Region:

After having spent the last three years in discussion with you, we are pleased to present the Region 2040 Growth Concept and accompanying map. These establish the proposed form for growth and land development for our region over the next 50 years. The adopted Resolution 94-2040C, including the proposed Region 2040 Growth Concept and map, provides the strong policy statement we need to guide how the region intends to manage its projected long-term growth and begins to address the many issues associated with that growth.

The regional policy direction and growth management philosophy couched in the concept proposal have as their primary objective the one pre-eminent value we've heard over and over from you: We must preserve our access to nature while we work to build better communities. That value is central to the 2040 Growth Concept and its implementation over time.

This work outlines a general approach to three important issues related to growth: the ranges of density that could accommodate projected growth within our urban growth boundary; the areas that should be protected as open space within and outside that boundary; and the description of where and how much that boundary may need to be expanded. This important regional decision to establish the 2040 Growth Concept proposal will not, however, decide whether or by how much to expand the urban growth boundary. Rather, it locates urban reserve study areas that will be examined over the next six months and evaluated in conjunction with other refinements to the growth concept.

The concept proposal does not delineate the specifics of exactly when, how, or where growth may occur in our region and the areas surrounding it. That planning work will occur later, as the growth concept is first refined over the next six months and then is implemented through a Regional Framework Plan and the comprehensive plans of cities and counties.

In July of 1995, urban reserve areas will be designated as needed to implement the 2040 Growth Concept incorporated into RUGGO based on the refined land use designations and growth allocation for areas currently within the urban growth boundary. Land for urban reserve areas will, at that time, be set aside for long-term urbanization needs as our region grows. Also by July of 1995, Metro will adopt a Future Vision. This vision statement will guide future planning by adding further consideration of the needs of children, housing choices, education, the economy, the natural and built environments, arts and culture, civic life, rural lands and urban communities. It will also acknowledge our place in the larger developing region of the Willamette Valley and north into the State of Washington.

The 2040 Growth Concept will continue the policy groundwork laid out in the Regional Urban Growth Goals and Objectives that were developed in collaboration with the cities and counties of the region and adopted by the Metro Council in 1991. Building on those goals and objectives, the extensive technical analysis and public involvement undertaken as part of the Region 2040 planning process led to the concept proposal established in Resolution 94-2040C. We are committed to continuing to work closely with you and with the leaders of the cities and counties of our region, as well as with the State of Oregon, to refine and implement this growth concept. We are also committed to working with our neighbor cities of Canby, Sandy, Newberg, and North Plains to plan a future in which the changes we will all certainly experience with growth are managed for the benefit of those cities and our own metropolitan area.

The prevailing theme in what we have heard from citizens and our regional partners in this Region 2040 planning process is a broad consensus as to how we can enhance our region's livability and provide a framework for change and healthy growth. We believe that consensus was reached because of our commitment to public involvement and to working with our partner cities and counties.

The established Region 2040 Growth Concept proposal is another of the landmark steps this region has taken in order to help guide the future of the Metro area. It will serve as the foundation for developing a Regional Framework Plan, an updated Regional Transportation Plan, and for eventual changes to local comprehensive plans. This work represents the best expression of today's desired urban form for the year 2040, yet it is not designed to be a stagnant or inflexible concept for growth management. Instead, it is the

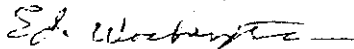
prototype for integrating land use and transportation to guide the more specific decisions that will be made in future implementing activities.

As we work together over the next two years to implement the Region 2040 Growth Concept, the assumptions underlying this growth concept proposal will continue to be refined. We will measure and test the established concept against the several policy considerations we set forth in Resolution 94-2040C. We believe the Region 2040 Growth Concept, when complemented by the Future Vision and implemented in the Regional Framework Plan, will help us create the highly desirable future we all want for our region.

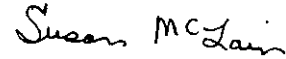
Sincerely,
Metro Council



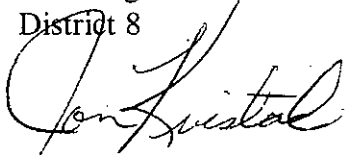
Judy Wyers
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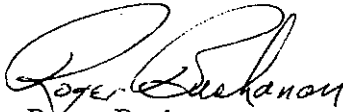
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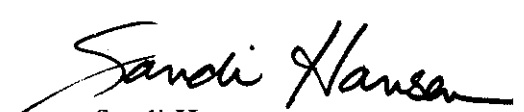
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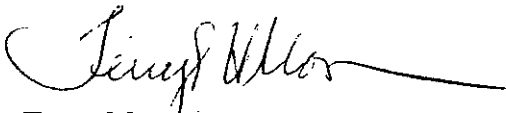
Rod Monroe
District 9



Roger Buchanan
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Sandi Hansen
District 12



Terry Moore
District 13

2040 GROWTH CONCEPT IMPLEMENTATION PROCESS

Adoption: Resolution 94-2040 - December 8, 1994

- Growth Concept and Concept Map in proposed RUGGO amendment language
- Describe Growth Concept refinement process
- Sets Urban Reserve Study Areas
- Emphasizes policy considerations for Growth Concept refinement
- Initiates coordination with LCDC

Refinement: December 1994 - June 1995

- Adopt Future Vision
- Consider additional local government and public comments and suggestions
- Test the Growth Concept with further analysis
- Develop improved transit, bike, pedestrian forecasts
- Review redevelopment and infill projections
- Determine urban reserves needs
- Urban Reserve Rule interpretation from LCDC
- Select urban reserves for designation from Urban Reserve Study Areas

Implementation: July 1995 - December 1996

- Adopt urban reserve area designations
- Incorporate refined Growth Concept into RUGGO
- Adopt updated Regional Transportation Plan (amend functional plan)
- Adopt Rural Reserves protection inside Metro jurisdictional boundary (new functional plan)
- Regional Framework Plan draft
- (additional work program products)

Resolution

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING A) RESOLUTION NO. 94-2040-C
2040 GROWTH MANAGEMENT STRATEGY)
) Introduced by Metro Council
) Planning Committee, Chairman
) Jon Kvistad

WHEREAS, Metro adopted land use regional goals and objectives called Regional Urban Growth Goals and Objectives (RUGGO) in September 1991 which are required by state law; and

WHEREAS, During the development of RUGGO, there was widespread interest in a long-range, 50-year view of how to accommodate regional growth which led to Metro's Region 2040 planning program; and

WHEREAS, State law requires several significant 20-year regional land use decisions in 1995 that will be affected by identifying the region's long-term planning direction; and

WHEREAS, On April 28, 1994, the Metro Council adopted Resolution No. 94-1930B describing its intent concerning the process and products of the Region 2040 planning program; and

WHEREAS, The Region 2040 planning process included analysis of the Base Case and Concepts A, B, and C by Metro staff together with local government staff and public representatives; and

WHEREAS, The Metro Council has received the considered advice of its Metro Policy Advisory Committee, Joint Policy Advisory Committee on Transportation, and the Future Vision Commission, and all the concepts have been the subject of extensive public review; and

WHEREAS, This Resolution accepts the work products of the Region 2040 process for Metro's continued planning, establishes the 2040 Growth Concept scheduled to be added to RUGGO by July 1995 and states the process for refinement and implementation of the 2040 Growth Concept; now, therefore,

BE IT RESOLVED,

1. That the description of the Growth Concept, proposed as an addition to RUGGO text, and the 2040 Growth Concept Map attached and incorporated herein as Exhibit "A" are hereby established as the 2040 Growth Concept proposal which shall be

scheduled for adoption and implementation at the first regular Metro Council meeting in July 1995. Any proposed refinements developed by the process herein shall be considered concurrent with the adoption and implementation of this 2040 Growth Concept proposal in July 1995.

2. That a refinement process of additional technical analysis and public review shall be carried out between December 1994 and June 1995 to determine the required policies necessary to assure that the Growth Concept proposal will be achievable. This refinement shall be guided by the following policy considerations:

a. A focus on centers and corridors to seek greater land use efficiencies in development and redevelopment.

b. Relatively few additions to the urban land supply such as the 14,500 acres or fewer estimated to be needed under the example 2040 Concept Analysis.

c. Development of a true multimodal transportation system which serves land use patterns, densities and community designs that allow for and enhance transit, bike, pedestrian travel and freight movement.

d. An improved transportation modal share for transit, bike and pedestrian travel.

e. Creation of a jobs-housing balance at the regional, central city, centers and community levels.

f. Preservation of both local and regional green spaces within and near the Metro boundary.

g. Enhanced redevelopment and reinvestment opportunities in areas of substandard incomes and housing.

3. That the refinement process of additional technical analysis and public review to be carried out between December 1994 and June 1995 will also provide the opportunity for the following:

a. Further local government analysis and discussion of the 2040 Growth Concept with its constituents as requested by Metro's local government partners.

b. Analysis of the study areas identified in the public process leading to this 2040 Growth Concept.

c. Consideration of Concept Map revisions based on the policy considerations, local comment and analysis.

- d. Development of 2015 population and employment forecasts.
- e. Identification of site specific urban reserve areas for designation by July 1995.
- f. Receipt of the Future Vision Commission recommendation and adoption of a 50-year Future Vision by July 1, 1995, as required by the 1992 Metro Charter.
- g. Development of an interim Regional Transportation Plan Update.
- h. Consideration of amendments to RUGGO Goal II, Urban Form, consistent with the refined 2040 Growth Concept.
- i. Formulation and adoption of a Work Plan for the Regional Framework Plan required by the 1992 Metro Charter.
- j. Periodic review of the Urban Growth Boundary.
- k. Development of an improved modal share forecast for achievable levels of transit, bike, and pedestrian travel.
- l. Continued examination and analysis of industrial lands and access to them.
- m. Further analysis of achievable infill and development.

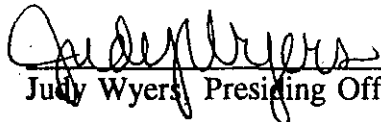
4. That the proposals to the Metro Council for amendments to RUGGO Goal II approved by MPAC and the Metro Council are attached as Exhibit "B." Further amendments to Goal II that go beyond the scope of MPAC's review of the Recommended Alternative Concept attached as Exhibit "E," are hereby referred to MPAC as proposed refinements.

5. That all additional proposed refinements to the 2040 Growth Concept and Concept Map, adopted on December 8, 1994, such as, urban reserve designations, concept definitions, density targets, and jobs-housing balance policies will be referred to MPAC for review and recommendation prior to adoption by the Metro Council.

6. That MPAC should consider the established 2040 Concept and the referred amendments received by the Metro Council along with other refinements and make a recommendation back to Council by April 15, 1995.

7. That implementation of the 2040 Growth Concept shall include:
- a. Adoption of 2040 Growth Concept RUGGO text and 2040 Concept Map with designated urban reserve areas in July 1995.
 - b. Adoption amendments to RUGGO Goal II, Urban Form consistent with the refined 2040 Growth Concept in July 1995.
 - c. Define and adopt rural reserves protection inside Metro jurisdictional boundaries as part of the Regional Framework Plan by June 1996.
 - d. Adopt intergovernmental agreements with cooperative neighbor cities, counties and state agencies to protect "green" transportation corridors and rural reserves outside Metro jurisdictional boundaries by June 1996.
 - e. Adoption of transportation, green spaces, water quantity and quality, urban design, urban growth boundary and urban reserve components of the regional framework plan by December 1996.
8. That the urban reserve study areas indicated on the 2040 Growth Concept Map shall be the lands analyzed for designation as urban reserve areas by the first Metro Council meeting in July 1995.
9. That the 2040 Growth Concept, including urban reserve study areas, shall be submitted to the Land Conservation and Development Commission for technical review and coordination of adopted RUGGO 15.3 on Urban Reserves and LCDC's Urban Reserve Rule prior to designation of urban reserves.
10. That the Region 2040 Recommended Alternative Analysis, the Technical Analysis, the Appendix, and the Analysis Map attached as Exhibit "C" are hereby accepted as an example of one possible implementation of the 2040 Growth Concept.
11. That the 1995 Work Plan components directed by the Metro Council for staff submission by January 15, 1995, are attached as Exhibit "D."

ADOPTED by the Metro Council this 8th day of December, 1994.


Judy Wyers, Presiding Officer

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1903b

*Exhibit A:
Growth Concept and Map*

Metro 2040 Growth Concept
As adopted by the Metro Council on December 8, 1994

II.4 Growth Concept

This Growth Concept states the preferred form of regional growth and development adopted in the Region 2040 planning process including the 2040 Growth Concept Map. This Concept is adopted for the long term growth management of the region including a general approach to approximately where and how much the urban growth boundary should be ultimately expanded, what ranges of density are estimated to accommodate projected growth within the boundary, and which areas should be protected as open space.

This Growth Concept is designed to accommodate 720,000 additional residents and 350,000 additional jobs. The total population served within this plan is 1.8 million residents within the Metro boundary.

The basic philosophy of the Growth Concept is: preserve our access to nature and build better communities. It combines the goals of RUGGO with the analysis of the Region 2040 project to guide growth for the next 50 years.

The conceptual description of the preferred urban form of region in 2040 is in the Concept Map and this text. This Growth Concept sets the direction for development of implementing policies in Metro's existing functional plans and the Charter-required regional framework plan. This direction will be refined, as well as implemented, in subsequent functional plan amendments and framework plan components. Additional planning will be done to test the Growth Concept and to determine implementation actions. Amendments to the Growth Concept and some RUGGO Objectives may be needed to reflect the results of additional planning to maintain the consistency of implementation actions with RUGGO.

Fundamental to the Growth Concept is a multi-modal transportation system which assures mobility of people and goods throughout the region. By coordinating land uses and this transportation system, the region embraces its existing locational advantage as a relatively uncongested hub for trade.

The basic principles of the Growth Concept apply Growth Management Goals and Objectives in RUGGO. An urban to rural transition to reduce sprawl, keep a clear distinction between urban and rural lands and balance re-development is needed. For its long term urban land supply, the Growth Concept estimates that about 14,500 acres will be needed to accommodate projected growth. These lands will be selected from about 22,000 acres of Urban Reserve Study Area shown on the Concept Map. This assumes cooperative agreements with neighboring cities to coordinate planning for the proportion of projected growth in the Metro region expected to locate within their urban growth boundaries and urban reserve areas.

The Metro UGB would only expand into urban reserves when need for additional urban land is demonstrated. Rural reserves are intended to assure that Metro and neighboring cities remain separate. 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.

Mixed use urban centers inside the urban growth boundary are one key to the Growth Concept. Creating higher density centers of employment and housing and transit service with compact development in a walkable environment is intended to provide efficient access to goods and services and enhances multi modal transportation. The Growth Concept uses interrelated types of centers. The Central City is the largest market area, the region's employment and cultural hub. Regional Centers serve large market areas outside the central city, connected to it by high capacity transit and highways. Connected to each Regional Center, by road and transit, are smaller Town Centers with local shopping and employment opportunities within a local market area. Planning for all of these centers will seek a balance between jobs and housing so that more transportation trips are likely to remain local and become more multi modal.

In keeping with the jobs housing balance in centers, a jobs housing balance by regional sub-areas can and should also be a goal. This would account for the housing and employment outside centers, and direct policy to adjust for better jobs housing ratios around the region.

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 urban growth boundary and the ability of the region to accommodate housing and employment. Green areas on the Concept Map may be designated as regional open space. That would remove these lands 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.

The Concept Map shows some transportation facilities to illustrate new concepts, like "green corridors," and how land use areas, such as centers, may be served. Neither the current regional system nor final alignment choices for future facilities are intended to be represented on the Concept Map.

The percentages and density targets used in the Growth Concept to describe the relationship between centers and areas are estimates based on modeling analysis of one possible configuration of the Growth Concept. Implementation actions that vary from these estimates indicate a need to balance other parts of the Growth Concept to retain the compact urban form contained in the Growth Concept. Land use definitions and numerical targets as mapped, are intended as targets and will be refined in the Regional Framework Plan. Each jurisdiction will certainly adopt a unique mix of characteristics consistent with each locality and the overall Growth Concept.

Neighbor Cities

The Growth Concept recognizes that neighboring cities surrounding the region's metropolitan area are likely to grow rapidly. Communities such as Sandy, Canby, and Newberg will be affected by the Metro Council's decisions about managing the region's growth. A significant number of people would be accommodated in these neighboring cities, and cooperation between Metro and these communities is necessary to address common transportation and land-use issues.

There are three key concepts for cooperative agreements with neighbor cities:

- 1) There shall be a separation of rural land between each neighboring city and the metropolitan area. If the region grows together, the transportation system would suffer and the cities would lose their sense of community identity.

2) There shall be a strong balance between jobs and housing in the neighbor cities. The more a city retains a balance of jobs and households, the more trips will remain local.

3) The "green corridor," transportation facility through a rural reserve that serves as a link between the metropolitan area and a neighbor city without access to the farms and forests of the rural reserve. This would keep accessibility high, which encourages employment growth but limits the adverse affect on the surrounding rural areas. Metro will seek limitations in access to these facilities and will seek intergovernmental agreements with ODOT, the appropriate counties and neighbor cities to establish mutually acceptable growth management strategies. Metro will link transportation improvements to neighbor cities to successful implementation of these intergovernmental agreements.

Green Corridors

These transportation corridors connect the region's UGB to the neighboring cities' UGB's. Facilities should be designed to reduce urban influence and to avoid increasing access to the farms and forests of the rural reserves they pass through. The intent is to keep urban to urban accessibility high to encourage employment growth, but limit any adverse effect on the surrounding rural areas. Cooperative agreements among Metro, neighbor cities, affected counties and state agencies will be needed.

Rural Reserves

These are rural areas that keep adjacent urban areas separate. These rural lands are not needed or planned for development but are more likely to experience development pressures than are areas farther away.

These lands will not be developed in the foreseeable future, an idea that requires agreement among local, regional and state agencies. They are areas outside the present urban growth boundary and along highways that connect the region to neighboring cities.

New rural commercial or industrial development would be restricted. Some areas would receive priority status as potential areas for park and open space

acquisition. Road improvements would specifically exclude interchanges or other highway access to the rural road system, as would any nearby extensions of urban services. Zoning would be for resource protection on farm and forestry land, and very low density residential (less than one unit for five acres) for exception land.

These rural reserves would support and protect farm and forestry operations. The reserves also would include some purchase of natural areas adjacent to rivers, streams and lakes to make sure the water quality is protected and wildlife habitat enhanced. Large natural features, such as hills and buttes, also would be included as rural reserves because they buffer developed areas and are poor candidates for compact urban development.

Rural reserves are designated in areas that are most threatened by new development, that separate communities, or exist as special resource areas.

Rural reserves also would be retained to separate cities within the Metro boundary. Cornelius, Hillsboro, Tualatin, Sherwood and Wilsonville all have existing areas of rural land that provide a break in urban patterns. New areas of urban reserves, that are indicated on the Concept Map are also separated by rural reserves, such as the Damascus-Pleasant Valley areas from Happy Valley.

The primary means of achieving rural reserves would be through the regional framework plan for areas within the Metro boundary, and voluntary agreements among Metro, the counties, neighboring cities, and the state for those areas outside the Metro boundary. These agreements would prohibit extending urban growth into the rural reserves and require that state agency actions are consistent with the rural reserve designation.

Open Spaces and Trail Corridors

The areas designated open space on the Concept map are parks, stream and trail corridors, wetlands and floodplains, largely undeveloped upland areas, and areas of compatible very low density residential development. Many of these natural features already have significant land set aside as open space. The Tualatin Mountains, for example, contain major parks such as Forest Park and Tryon Creek State Park and numerous smaller parks such as Gabriel Park in Portland and Wilderness Park in West Linn. Other areas are oriented toward

wetlands and streams, with Fanno Creek in Washington County having one of the best systems of parks and open space in the region.

Local jurisdictions are encouraged to establish acres of open space per capita goals based on rates at least as great as current rates, in order to keep up with current conditions.

Designating these areas as open spaces would have several effects. First, it would remove these land from the category of urban land that is available for development. The capacity of the urban growth boundary would have to be calculated without these, and plans to accommodate housing and employment would have to be made without them. Secondly, these natural areas, along with key rural reserve areas, would receive a high priority for purchase as parks and open space, such as Metro's Greenspaces program. Finally, regulations could be developed to protect these critical natural areas that would not conflict with housing and economic goals, thereby having the benefit of regulatory protection of critical creek areas, compatible low-density development, and transfer of development rights to other lands better suited for development.

About 35,000 acres of land and water inside today's urban growth boundary are included as open spaces in the Growth Concept Map. Preservation of these Open Spaces could be achieved by a combination of ways. Some areas could be purchased by public entities, such as Metro's Greenspaces program or local park departments. Others may be donated by private citizens or by developers of adjacent properties to reduce the impact of development. Some could be protected by environmental zoning which allows very low-density residential development through the clustering of housing on portions of the land while leaving important features as common open space.

Centers

Creating higher density centers of employment and housing is advantageous for several reasons. These centers provide access to a variety of goods and services in a relatively small geographic area, creating an intense business climate. Having centers also makes sense from a transportation perspective, since most centers have an accessibility level that is conducive to transit, bicycling and walking. Centers also act as social gathering places and community centers, where people would find the "small town atmosphere" they cherish.

The major benefits of centers in the marketplace are accessibility and the ability to concentrate goods and services in a relatively small area. The problem in developing centers, however, is that most of the existing centers are already developed and any increase in the density must be made through redeveloping existing land and buildings. Emphasizing redevelopment in centers over development of new areas of undeveloped land is a key strategy in the Growth Concept. Areas of high unemployment and low property values should be specially considered to encourage reinvestment and redevelopment. Incentives and tools to facilitate redevelopment in centers should be identified.

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" are accessible to hundreds of thousands of people, and "town centers" are accessible to tens of thousands.

The Central City

Downtown Portland serves as our major regional center and functions quite well as an employment and cultural hub for the metropolitan area. It provides accessibility to the many businesses that require access to a large market area and also serves as the location for cultural and social functions that draw the region together. It is the center for local, regional, state, and federal governments, financial institutions, commerce, the center for arts and culture, and for visitors to the region.

In addition, downtown Portland has a high percentage of travel other than by car -- three times higher than the next most successful area. Jobs and housing are readily available there, without the need for a car. Maintaining and improving upon the strengths of our regional downtown shall remain a high priority.

Today, about 20 percent of all employment in the region is in downtown Portland. Under the Growth Concept, downtown Portland would grow at the same rate as the rest of the region, and would remain the location of 20 percent of regional employment. To do this, downtown Portland's 1990 density of 150 people per acre would increase to 250 people per acre. Improvements to the transit system network, development of a multi-modal street system and

maintenance of regional through routes (the highway system) would provide additional mobility to and from the city center.

Regional centers

There are nine regional centers, serving four market areas (outside of the Central City market area). Hillsboro serves that western portion of the region, and Gresham the eastern. The Central city and Gateway serve most of the Portland area as a regional center. Downtown Beaverton and Washington Square serve the Washington County area, and downtown Oregon City, Clackamas Town Center and Milwaukie together serve Clackamas County and portions of outer south east Portland.

These Regional Centers would become the focus of compact development, redevelopment, and high-quality transit service, multi-modal street networks and act as major nodes along regional through routes . The Growth Concept accommodates three percent of new household growth and 11 percent of new employment growth in these regional centers. From the current 24 people per acre, the Growth Concept would allow up to 60 people per acre.

Transit improvements would include light-rail connecting all regional centers to the Central City. A dense network of multi-modal arterial and collector streets would tie regional centers to surrounding neighborhoods and other centers. Regional through-routes would be designed to serve connect regional centers and ensure that these centers are attractive places to conduct business. The relatively small number of centers reflects not only the limited market for new development at this density but also the limited transportation funding for the high-quality transit and roadway improvements envisioned in these areas. As such the nine regional centers should be considered candidates and ultimately the number should be reduced or policies established to phase-in certain regional centers earlier than others.

Town centers

Smaller than regional centers and serving populations of tens of thousands of people, town centers are the third type of center with compact development and transit service. Town centers would accommodate about 3 percent of 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, the current densities of development along Hawthorne Boulevard and in downtown Hillsboro.

Town centers would provide local shopping and employment opportunities within a local market area. They are designed to provide local retail and services, at a minimum. They also would vary greatly in character. Some would become traditional town centers, such as Lake Oswego, Oregon City, and Forest Grove, while others would change from an auto-oriented development into a more complete community, such as Hillsdale. Many would also have regional specialties, such as office centers envisioned for the Ceder Mill town center. Several new town centers are designated, such as in Happy Valley and Damascus, to accommodate the retail and service needs of a growing population while reducing auto travel. Others would combine a town center within a regional center, offering the amenities and advantages of each type of center.

Corridors

Corridors are not as dense as centers but also are located along good quality transit lines. They provide a place for densities that are somewhat higher than today and feature a high-quality pedestrian environment and convenient access to transit. Typical new developments would include rowhouses, duplexes, and one to three story office and retail buildings, and average 25 persons per acre.

Station Communities

Station communities are nodes of development centered around a light rail or high capacity transit station which feature a high-quality pedestrian environment. They provide for the highest density outside centers. The station communities would encompass an area approximately one half mile from a station stop. The densities of new development would average 45 persons per acre. Zoning ordinances now set minimum densities for most Eastside and Westside MAX station communities. An extensive station community planning program is now under way for each of the Westside station communities, and similar work is envisioned for the proposed South/North line. It is expected that the station community planning process will result in specific strategies and plan changes to implement the station communities concept.

Because the Growth Concept calls for many corridors and station communities throughout the region, they would together accommodate 27 percent of the new households of the region and nearly 15 percent of new employment.

Main Streets and Neighborhood Centers

During the early decades of this century, main streets served by transit and characterized by a strong business and civic community were a major land-use pattern throughout the region. Examples remain in Hillsboro, Milwaukie, Oregon City and Gresham, as well as the Westmoreland neighborhood and Hawthorne Boulevard. Today, these areas are undergoing a revival and provide an efficient and effective land-use and transportation alternative. The Growth Concept calls for main streets to grow from 1990 levels of 36 people per acre to 39 per acre. Main streets would accommodate nearly two percent of housing growth.

Main streets typically will serve neighborhoods and may develop a regional specialization -- such as antiques, fine dining, entertainment, or specialty clothing -- that draws people from other parts of the region. Main Streets form neighborhood centers as areas that provide the retail and service development at other intersections at the focus of a neighborhood areas and around MAX light rail stations. When several main streets occur within a few blocks of one another, they may also serve as a dispersed town center, such as the main street areas of Belmont, Hawthorne, and Division that form a town center for inner southeast Portland.

Neighborhoods

Residential neighborhoods would remain a key component of the Growth Concept and would fall into two basic categories. Inner neighborhoods are Portland and the older suburbs of Beaverton, Milwaukie and Lake Oswego, and would include primarily residential areas that are accessible to employment. Lot sizes would be smaller to accommodate densities increasing from 1990 levels of about 11 people per acre to about 14 per acre. Inner neighborhoods would trade smaller lot sizes for better access to jobs and shopping. They would accommodate 28 percent of new households and 15 percent of new employment (some of the employment would be home occupations and the balance would be

neighborhood- based employment such as schools, daycare and some neighborhood businesses).

Outer neighborhoods would be farther away from large employment centers and would have larger lot sizes and lower densities. Examples include outer suburbs such as Forest Grove, Sherwood, and Oregon City, and any additions to the urban growth boundary. From 1990 levels of nearly 10 people per acre, outer neighborhoods would increase to 13 per acre. These areas would accommodate 28 percent of new households and 10 percent of new employment.

One of the most significant problems in some newer neighborhoods is the lack of street connections, a recent phenomenon that has occurred in the last 25 years. It is one of the primary causes of increased congestion in new suburbs. Traditional neighborhoods contained a grid pattern with up to 20 through streets per mile. But in new areas, one to two through streets per mile is the norm. Combined with large scale single-use zoning and low densities, it is the major cause of increasing auto dependency in neighborhoods. To improve local connectivity throughout the region, all areas shall develop master street plans that include from 8 to 20 local streets connections per mile, which would improve access for all modes of travel.

Employment areas

The Portland metropolitan area economy is heavily dependant upon wholesale trade and the flow of commodities to national and international markets. The high quality of our freight transportation system, and in particular our intermodal freight facilities are essential to continued growth in trade. The intermodal facilities (air and marine terminals, freight rail yards and common carrier truck terminals) are an area of regional concern, and the regional framework plan will identify and protect lands needed to meet their current and projected space requirements.

Industrial areas would be set aside primarily for industrial activities. Other supporting uses, including some retail uses, may be allowed if limited to sizes and locations intended to serve the primary industrial uses. They include land-intensive employers, such as those around the Portland International Airport, the Hillsboro Airport and some areas along Highway 212/224.

Industrial areas are expected to accommodate ten percent of regional employment and no households. Retail uses whose market area is substantially larger than the employment area shall not be considered supporting uses.

Other employment centers would be designated as mixed-use employment areas, mixing various types of employment and including some residential development as well. These mixed-use employment areas would provide for about five percent of new households and 14 percent of new employment within the region. Densities would rise substantially from 1990 levels of about 11 people per acre to 20 people per acre.

The siting and development of new industrial areas would consider the proximity of housing for all income ranges provided by employment in the projected industrial center, as well as accessibility to convenient and inexpensive non-auto transportation. The continued development of existing industrial areas would include attention to these two issues as well.

Urban Reserves

One important feature of the Growth Concept is that it would accommodate all 50 years of forecasted growth through a relatively small amount of urban reserves. Urban reserves consist of land set aside outside the present urban growth boundary for future growth. The Growth Concept contains approximately 22,000 acres of Urban Reserve Study Areas shown on the Concept Map. Less than 15,000 of these are needed for growth if the other density goals of the Growth Concept are met. Over 75 percent of these lands are currently zoned for rural housing and the remainder are zoned for farm or forestry uses. These areas shall be refined to the 14,500 acres required by the Growth Concept for designation of urban reserves areas under the LCDC Urban Reserve Rule and inclusion in the regional framework plan.

Transportation Facilities

In undertaking the Region 2040 process, the region has shown a strong commitment to developing a regional plan that is based on greater land use efficiencies and a truly multi-modal transportation system. However, the transportation system defined in the Growth Concept Analysis serves as a theoretical definition (construct) of the transportation system needed to serve the

land uses in the Growth Concept (Recommended Alternative urban form). The modeled system reflects only one of many possible configurations that might be used to serve future needs, consistent with the policy direction called for in the Growth Concept (amendment to RUGGO).

As such, the Growth Concept (Recommended Alternative) transportation map provides only general direction for development of an updated Regional Transportation Plan (RTP) and does not prescribe or limit what the RTP will ultimately include in the regional system. Instead, the RTP will build upon the broader land use and transportation directions that are defined in the Growth Concept (Recommended Alternative).

The transportation elements needed to create a successful growth management policy are those that support the Growth Concept. Traditionally, streets have been defined by their traffic-carrying potential, and transit service according to its ability to draw commuters. Other travel modes have not been viewed as important elements of the transportation system. The Growth Concept establishes a new framework for planning in the region by linking urban form to transportation. In this new relationship, transportation is viewed as a range of travel modes and options that reinforce the region's growth management goals.

Within the framework of the Growth Concept is a network of multi-modal corridors and regional through-routes that connect major urban centers and destinations. Through-routes provide for high-volume auto and transit travel at a regional scale, and ensure efficient movement of freight. Within multi-modal corridors, the transportation system will provide a broader range of travel mode options, including auto, transit, bicycle and pedestrian networks, that allow choices of how to travel in the region. These travel options will encourage the use of alternative modes to the auto, a shift that has clear benefits for the environment and the quality of neighborhoods and urban centers and address the needs of those without access to automobiles.

In addition to the traditional emphasis on road and transit facilities, the development of networks for freight travel and intermodal facilities, for bicycle and pedestrian travel and the efficient use of capacity on all streets through access management and congestion management and/or pricing will be part of a successful transportation system.

While the Concept Map shows only major transit facilities and corridors, all areas within the UGB have transit access. Transit service in the Growth Concept included both fixed-route and demand responsive systems. The RTP shall further define the type and extent of transit service available throughout the region.

Intermodal Facilities

The region's continued strength as a national and international distribution center is dependent upon adequate intermodal facilities and access to them. Intermodal facilities include marine terminals, railroad intermodal points, such as the Union Pacific's Albina Yard, the airports and the Union Station/inter-city bus station area. The Regional Transportation Plan will identify these areas and their transportation requirements and will identify programs to provide adequate freight capacity.

Regional through-routes

These are the routes that move people and goods through and around the region, connect regional centers to each other and to the Central City, and connect the region to the statewide and interstate transportation system. They include freeways, limited access highways, and heavily traveled arterials, and usually function as through-routes. As such, they are important not only because of the movement of people, but as one of the region's major freight systems. Since much of our regional economy depends on the movement of goods and services, it is essential to keep congestion on these roads at manageable levels. These major routes frequently serve as transit corridors but are seldom conducive to bicycles or pedestrians because of the volume of auto and freight traffic that they carry.

With their heavy traffic, and high visibility, these routes are attractive to business. However, when they serve as a location for auto-oriented businesses, the primary function of these routes, to move regional and statewide traffic, can be eroded. While they serve as an appropriate location for auto-oriented businesses, they are poor locations for businesses that are designed to serve neighborhoods or sub-regions. These are better located on multi-modal arterials. They need the highest levels of access control. In addition, it is

important that they not become barriers to movements across them by other forms of travel, auto, pedestrian, transit, or bicycle. They shall focus on providing access to centers and neighbor cities, rather than access to the lands that front them.

Multi-modal arterials

These represent most of the region's arterials. They include a variety of design styles and speeds, and are the backbone for a system of multi-modal travel options. Older sections of the region are better designed for multi-modal travel than new areas. Although these streets often smaller than suburban arterials, they carry a great deal of traffic (up to 30,000 vehicles a day), experience heavy bus ridership along their routes and are constructed in dense networks that encourage bicycle and pedestrian travel. The Regional Transportation Plan (RTP) shall identify these multi-modal streets and develop a plan to further encourage alternative travel modes within these corridors.

Many new streets, however, are designed to accommodate heavy auto and freight traffic at the expense of other travel modes. Multiple, wide lanes, dedicated turning lanes, narrow sidewalks exposed to moving traffic, and widely-spaced intersections and street crossings create an environment that is difficult and dangerous to negotiate without a car. The RTP shall identify these potential multi-modal corridors and establish design standards that encourage other modes of travel along these routes.

Some multi-modal arterials also carry significant volumes of freight. The RTP will ensure that freight mobility on these routes is adequately protected by considering freight needs when identifying multi-modal routes, and in establishing design standards intended to encourage alternative modes of passenger travel.

Collectors and local streets

These streets become a regional priority when a lack of adequate connections forces neighborhood traffic onto arterials. New suburban development increasingly depends on arterial streets to carry trips to local destinations, since most new local streets systems a specifically designed with curves and cul-de-sacs to discourage local through travel by any mode. The RTP should

consider a standard of eight to 20 through streets per mile, applied to both developed and developing to reduce local travel on arterials. There should also be established standard bicycle and pedestrian through-routes (via easements, greenways, fire lanes, etc.) in existing neighborhoods where changes to the street system are not a reasonable alternative.

Light rail

Light rail transit (LRT) daily travel capacity measures in tens of thousands of riders, and provides a critical travel option to major destinations. The primary function of light rail in the Growth Concept is to link regional centers and the Central City, where concentrations of housing and employment reach a level that can justify the cost of developing a fixed transit system. In addition to their role in developing regional centers, LRT lines can also support significant concentrations of housing and employment at individual station areas along their routes.

In addition, neighbor cities of sufficient size should also include a transit connection to the metropolitan area to provide a full range of transportation alternatives.

"Planned and Existing Light Rail Lines" on the Concept Map represent some locations shown on the current Regional Transportation Plan (RTP) which were selected for initial analysis. "Proposed Light Rail Alignments" show some appropriate new light rail locations consistent with serving the Growth Concept. "Potential HCT lines" highlight locations for some concentrated form of transit, possibly including light rail. These facilities demonstrate the general direction for development of an updated RTP which will be based on further study. The Concept Map transportation facilities do not prescribe or limit the existing of updated RTP.

Bicycle and Pedestrian Networks

Bicycling and walking should play an important part in the regional transportation system especially within neighborhoods and centers and for other shorter trips. They are also essential to the success of an effective transit system. In addition to the arrangement of land uses and site design, route continuity and the design of rights-of-way in a manner friendly to bicyclists and

pedestrians are necessary. The Regional Transportation Plan will establish targets which substantially increase the share on these modes.

Demand Management/Pricing

The land uses and facilities in the Growth Concept cannot, by themselves, meet the region's transportation objectives. Demand Management (carpooling, parking management and pricing strategies) and system management will be necessary to achieve the transportation system operation described in the Growth Concept. Additional actions will be need to resolve the significant remaining areas of congestion and the high VMT/capita which it causes. The Regional Transportation Plan will identify explicit targets for these programs in various areas of the region.