Portland State University PDXScholar

Metro Collection

Oregon Sustainable Community Digital Library

6-1-1993

Region 2040: Final Report, Phase 1

ECO Northwest, Ltd.

Let us know how access to this document benefits you.

Follow this and additional works at: http://pdxscholar.library.pdx.edu/oscdl_metro



Part of the <u>Urban Studies Commons</u>, and the <u>Urban Studies and Planning Commons</u>

Recommended Citation

ECO Northwest, Ltd., "Region 2040: Final Report, Phase 1" (1993). Metro Collection. Paper 4. http://pdxscholar.library.pdx.edu/oscdl_metro/4

This Report is brought to you for free and open access. It has been accepted for inclusion in Metro Collection by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

Institute of Portland Metropolitan Studies
Portland State University

Region 2040: Final Report, Phase 1



Prepared for: Metro Portland, Oregon

Prepared by: ECO Northwest



Region 2040: Final Report, Phase I

Prepared for:

Metro Portland, Oregon

Prepared by:

ECO NORTHWEST

99 W. Tenth, Suite 400 Eugene, OR 97401 (503) 687-0051

June 1993

		ţ
	•	

Table of Contents

Preface	iii
Summary	v
Section 1	What Is Region 2040?1-1
~	2040 asks citizens and their representatives to help Metro a direction for the long-run growth of the Portland
metro	politan region1-1
	2040 addresses people's concerns about growth1-3
Pe	ople in the region value its livability, but believe that vability to be threatened already1-3
	ere will be more growth and, thus, more threats to livability1-3
	etro must investigate whether current development patterns nd policies are optimal1-4
	gional problems require regional solutions1-5
	2040 focuses in Phase I on the physical form of development;
tne tec	chniques for achieving that form will follow in Phase II1-5
Section 2	Where Does This Report Fit In The
	Region 2040 Project?2-1
	ompleted in Phase I led to a regional consensus about the of concepts that should be evaluated in Phase II (1993)2-1
P ₁₁	blic involvement (Round 1): What are the issues?2-1
	eliminary technical analysis2-1
	blic involvement (Round 2): Do the concepts cover the range? 2-2
	nal technical analysis for Phase I2-2 port concludes Phase I by summarizing from a dozen technical
	s prepared during 19922-2
Section 3	What Factors Influenced Metro's Definition
occuon o	Of Growth Problems And The Policies For
	Addressing Those Problems? 3-1
	int 1: The preferences of residents3-1
	int 2: The policies that allow or require government actions 3-3
Constra	int 3: The forces that encourage and shape growth3-6
Constra	int 4: The natural and built environment3-7
Section 4	What Are The Options For Future Urban Form
	(The Concepts)?4-1
	2040 focused on regional concepts4-1
	cepts were shaped by the criteria discussed in Section 3
	report4-1
_	tional level, the concepts for urban form focus on where
growth	n will be accommodated and at what density4-4

				į .	•
	• •				
			·		

Section 5 Why Do The More Detailed Views Of The Concepts	
Look The Way They Do?	
There are many possible variations for any concept	5-1
All concepts attempt to meet some general criteria	5-1
Sensitive to natural areas	5-1
Generally consistent with local land-use plans	5-2
Sensitive to transportation corridors and employment centers	5-2
Build on existing infrastructure to reduce cost	5-2
Logically link intensity of land use and transportation systems	5-3
Accommodate all the forecasted growth	5-3
Respond to public comments	5-4
Section 6 How Will These Concepts Help Make Regional	
Decisions About Growth	6-1
Appendix A Metro Council Resolution	A-1

				ı	r
		•			

Preface

Metro is the regional government for the metropolitan area of Portland, Oregon. As part of its responsibilities for managing regional transportation and urban growth, Metro is conducting **Region 2040**, an evaluation of how the region could grow, and of the policies available to guide its growth in the ways its citizens choose.

This report is one of several technical reports prepared as part of Phase I of *Region 2040*. **Phase I** aims at describing several concepts for future growth that roughly cover the broad range of ideas articulated by citizens, technicians, and policy makers during the several opportunities for public comment provided in 1992. **Phase II**, occurring 1993, will evaluate the benefits and costs of these concepts. Based on that evaluation, Metro expects to make decisions in 1994 about whether new policies are needed to achieve the kind of growth the citizens of the region desire.

This report is the final report for Phase I. It draws on data and analyses described in a dozen technical reports prepared for Phase I during 1992. The technical analyses summarized in this report were the basis for a resolution adopted in December 1992 in which the Metro Council described the concepts, and variations on those concepts, that will be evaluated in Phase II. Terry Moore of ECO Northwest wrote this report. The research it summarizes was conducted by ECO Northwest, Cogan Sharpe Cogan, Cambridge Systematics, Ernest Munch, Walker and Macy, Salauddin Khan, Parsons Brinckerhoff, Decision Sciences, Pacific Rim Resources, and Metro (see the individual reports for details).

This report has gone through several reviews to reduce the chances of errors in the data reported. ECO Northwest is especially grateful for the contributions of Metro staff, the committee of planners chosen to review the quality of the document, and ECO's subcontractors responsible for the research this report summarizes. Despite this assistance, ECO remains responsible not only for the accuracy of the data reported, but also for any comments that go beyond the data into interpretation or prescription. The views contained in this report are those of ECO Northwest and do not necessarily reflect those of Metro.

	•
·	

Summary

WHAT IS REGION 2040?

As part of its responsibilities for managing regional transportation and urban growth, Metro is conducting *Region 2040*, an evaluation of how the region could grow and of the policies available to guide growth in the ways its citizens choose. The results of that evaluation will be used to guide Metro in the management of the regional urban growth boundary, to inform future amendments to the Regional Transportation plan, and to facilitate regional coordination of planning for transportation and land use.

In September 1991 the Metro Council adopted the *Regional Urban Growth Goals and Objectives (RUGGOs)* which describe goals for the natural and built environments of the region, and for growth management (described in more detail below). The goals and objectives of the *RUGGOs*, however, are general: they point in a direction, but not the details of the means by which to arrive at a destination. *Region 2040* is a step toward those details.

Metro designed Region 2040 to occur in several phases over several years. This report concludes and summarizes Phase I, whose purpose was to describe a range of alternatives for accommodating expected future growth. The benefits and costs of these concepts will be evaluated in Phase II, scheduled for 1993. Based on that evaluation, Metro expects to make decisions about whether new policies are needed to achieve the kind of growth the citizens of the region desire.

Metro's new charter, adopted by voters in November 1992, contained provisions that required some adjustment of the proposed tasks of Region 2040, though its purposes are incorporated into new charter provisions. The charter emphasizes Metro's responsibility for regional growth management and requires that Metro develop two documents. Future Vision will describe regional values and the characteristics of the natural, built, and social environment compatible with those values. It will expand the work done in Phase I of Region 2040 on these topics. It must be adopted by mid-1995. The Regional Framework Plan is similar to what has been referred to in Region 2040 as a functional plan for regional development: a set of specific regional policies about things like the urban growth boundary, urban design, open space, and transportation that will provide a legally binding framework for more detailed plans developed by local governments. It must be adopted by the end of 1997.

•

Metro's purpose for Phase I was not to select a preferred concept. Rather, the purpose of Phase I was to describe a range of concepts that roughly covers the wide variety of ideas suggested by citizens, technicians, and policy makers during the several opportunities for public comment provided in 1992. The challenge for Region 2040 is to develop concepts that balance the legitimate but conflicting needs for policies that are at once practical and visionary. The study's planning horizon, and the time required to have a significant impact on the regional problems it hopes to help remediate, is decades. But many people will evaluate the value of any proposed solutions against market criteria that are clearly short run. Region 2040 must find a middle ground, developing long-run visions for land-use patterns and transportation systems for the Portland metropolitan region, and a framework and criteria for evaluating those growth concepts that address the practical question, "How do we get there from here?"

HOW WERE THE CONCEPTS FOR REGIONAL GROWTH DEVELOPED?

The concepts for regional land use developed in Phase I of Region 2040 were shaped by research related to the preferences of residents of the region, current and potential public policies that allow or require growth management, the forces (particularly economic and demographic ones) that encourage and shape growth, and the constraints and opportunities posed by the natural and built environments. Chapter 3 of this report describes these factors in more detail. In summary, the principal conclusions of that shaped the development of concepts were:

- The majority of comments from public and decisionmakers during the two rounds of public involvement about livability and urban forms conducive to it are reflected in Metro's Regional Urban Growth Goals and Objectives (RUGGOs) and the related principles for urban design developed during Phase I. Clearly, there is not unanimity: some people want no growth, others no government policy at all; some people believe more density and transit is important to sustaining the region's quality of life; others want to preserve suburban and rural lifestyles. those differences will always exist. The majority of the comments in Phase I, however, were consistent with the points that follow.
- The RUGGOs are the adopted regional framework for land use and, hence, for the concepts Phase I develops. The RUGGOs are much more in favor of changes in land-use policy to increase density than they are of the low-density development patterns that have been the predominant form of residential growth in the region.
- In all growth scenarios examined, the Portland region grows substantially in the next 50 years. The range for population growth in the Oregon portion of the urban area of the Portland region is about

Region 2040: Final Report, Phase I

- 600,000 to 1,400,000 *additional* people; Metro's mid-range estimate is about 1,100,000.
- All concepts for growth must respect natural features (especially water, flood plains, steep slopes, natural areas, and prime soils) and the constraints of existing urban form (especially established urban centers and the transportation network).
- There are and will continue to be many different workable designs for different land uses. For example, there is no preferred type or design of residential development. Household (family) type, age of household members, income, income, and individual preference all influence the type of housing people want and will pay for. Type of housing, topography, and neighborhood all influence what a given square footage of housing will cost. People's satisfaction with their housing will be greatest when they have a variety of choices about how to make tradeoffs among the multiple characteristics of housing.
- The problems many people associate with high density are often the problems of poor design or cheap development.
- The region should strive to ensure choice, not to dictate a small subset of past or future land-use patterns
- More opportunities will be needed for people to choose higher-density environments. We come to this conclusion for three principal reasons. First, many of the problems of growth are the problems of dispersion. Dispersion requires auto trips, since transit cannot function efficiently in low-density areas. Dispersion often increases the per unit costs of extending public facilities. Single-family (dispersed) housing costs more to build per unit (and usually per square foot) than multi-family (concentrated) housing. In short, not only planners but also a high percentage of the citizens who responded during public involvement believe that allowing some increases in density is essential to managing the problems of growth. Second, Metro's demographic analysis shows an aging population; as parents become empty-nesters, as people age and spouses die, housing preferences change toward smaller units with less yard and better access. Third, upper-income families will always have choice among a variety of housing types. For lower-income families, however, there is no choice without affordability. Higher densities allow equivalent structures and amenities at a lower cost (at the obvious sacrifice of private space around the housing unit).

WHAT ARE THE GROWTH CONCEPTS THAT THE METRO COUNCIL ADOPTED FOR EVALUATION IN PHASE II OF REGION 2040?

At the regional level, our research led to the conclusion that there are only a few distinct ways to describe growth patterns, though there are certainly a large number of those patterns could develop at the subregional level. In summary, the concepts differ in where they accom-

June 1993

modate growth: will growth expand the region at its urban edge, increase the density of development in its existing urbanized area, or shift to new cities outside the urban area?

- Expansion (Concept A). Emphasize growth in the suburbs, the urban fringe, and adjacent to the urban fringe. Those are the areas where the bulk of the growth in the 1980s occurred, and where the most vacant land for development is available. If development occurs at densities similar to the ones now observed in the market, land inside the existing UGB will be insufficient to accommodate all the growth expected by 2040. Thus, regional urban growth will require expansion at the urban fringe.
- Concentration (Concept B). Emphasize growth in the existing urbanized area. The description of this concept that most people understand is "freeze the UGB." With a fixed supply of land growth can only occur by using land inside the UGB more intensively (for example, by increasing densities of new developments, in-fill development, and redevelopment).
- Concentration of the expansion (Concept C). Relieves some pressure inside the UGB by allowing concentrated development in limited areas outside the UGB. This concept is referred to as growth in cities outside the UGB (or satellite cities). Development inside the UGB would probably occur at densities between those of Concepts A and B.
- Deflection (No concept developed). Emphasize growth outside the region, either proactively or reactively. An example of proactive policies to achieve this end is joint planning with outlying areas like Woodburn, Newberg, and Vancouver: the hope would be that those cities would become larger as policies in metropolitan Portland forced growth elsewhere. An example of reactive policies to achieve the same end might be a variation of Concept B: by limiting land supply and imposing other constraints on development the forecasted growth just does not occur. (Metro chose not to carry the concept of deflection forward as a distinct concept, but rather to evaluate the ideas it embodies as part of Phase II.)

These concepts were developed in more detail and refined through review by the *Region 2040* project team: consultants, Metro staff, the *Region 2040* Management Committee (planners from cities, counties, and public agencies in the region) during July and August 1992. The refined concepts were described and illustrated in the tabloid published in September 1992. The 20,000 copies of the tabloid were distributed by mail, and at about 65 public workshops and open houses held in October and November 1992. Based on its review of these comments, and those received from Metro's standing policy and technical committees (the Joint Policy Advisory Committee for Transportation, the Transportation Technical Advisory Committee, the Regional Policy Advisory Committee, and the Regional Technical Advisory Committee) the project team made

Region 2040: Final Report, Phase I

some adjustments to their definitions and to the general scope of the evaluation proposed for Phase II. The concepts, as adjusted, were considered by the Metro Council and approved at its meeting on 22 December 1992. The key points of that resolution are summarized in Chapter 4 of this report; the full resolution adopted by the Metro Council can be found in Appendix A of this report.

HOW WILL THESE CONCEPTS HELP MAKE REGIONAL DECISIONS ABOUT GROWTH?

When it began developing the *RUGGOs*, Metro was fully aware that it was embarking a multi-year project for gaining consensus about the direction and form of regional growth. The *RUGGOs* provided a general framework of goals for growth and development. *Region 2040* is intended to move toward specific policies that regional or local governments can adopt to encourage the kind and form of urban growth that the citizens they represent want.

Metro does not believe that such policy decisions can be made quickly. Phase I of *Region 2040* has made no attempt to adopt policies. It has not even evaluated specific policies. Rather, it has concentrated exclusively on (1) learning what the public values about the region, what it dislikes, and what kind of future it wants, and (2) defining concepts for growth that cover a range of technically plausible and publicly acceptable futures. Metro will evaluate those concepts, with their many variations, in Phase II of *Region 2040*.

The concepts described in this report define the futures that Metro and the citizens of the Portland metropolitan region must evaluate. On the one hand, since Phase I has only defined general concepts it is not incorrect to say nothing has been decided. All policies are still open for debate: that debate will be informed by the evaluation that will occur in Phase II. On the other hand, Phase I has established a framework for that debate, and provided an opportunity to modify that framework. Moreover, Phase I has brought the issue of regional growth—an issue fundamental to the future quality of life of the region's residents—to public's attention. The results of the public involvement suggest that people understand that growth is a mixture of opportunities and problems, and that the problems will probably get worse if public policies do not change. Region 2040 offers the hope of using technical tools to inform a process of public decision making that will provide real direction for regional growth

What is the *Region* 2040 Project?

REGION 2040 ASKS CITIZENS AND THEIR REPRESENTATIVES TO HELP METRO DEFINE A DIRECTION FOR THE LONG-RUN GROWTH OF THE PORTLAND METROPOLITAN REGION

As part of its responsibilities for managing regional transportation and urban growth, Metro is conducting *Region 2040*, an evaluation of how the region could grow and of the policies available to guide growth in the ways its citizens choose. The results of that evaluation will be used to guide Metro in the management of the regional urban growth boundary, to inform future amendments to the Regional Transportation plan, and to facilitate regional coordination of planning for transportation and land use.

Region 2040 is new in name only. The concern of citizens, local governments, and Metro about the impacts of growth has been evident since Oregon, led by the Portland region, climbed out of the recession that stunted its growth in the first half of the 1980s. As the economy recovered, jobs were created and people moved to Oregon. Demand increased for space for living, working, shopping, and recreation. As facilities were built to satisfy that demand, the inevitable choices about the form of growth reemerged.

Since its creation in 1979, Metro has been responsible for coordinating regional transportation planning. Throughout the 1980s Metro's efforts on land use had centered on defining and amending the regional urban growth boundary (UGB). In 1989 Metro established policy and technical advisory committees to help develop an Urban Growth Management Plan, initiating a process that it hoped would lead to a regional consensus regarding how the region should grow. In September 1991 the Metro Council adopted the Regional Urban Growth Goals and Objectives (RUGGOs) which describe goals for the natural and built environments of the region, and for growth management (described in more detail below).

The goals and objectives of the *RUGGOs*, however, are general. Page 2 of the *RUGGOs* says that the elements of the *RUGGOs* "... can be arranged in a variety of ways, depending on the policy objectives of the region, and therefore suggest, but do not specify, alternative regional development patterns." The *RUGGOs* point a general direction, but not

the details of the means by which to arrive at a destination. Region 2040 is a step toward those details.

Metro designed Region 2040 to occur in several phases over several years. This report concludes and summarizes Phase I, whose purpose was to describe a range of alternatives referred to in Phase I publications as concepts for accommodating expected future growth. The benefits and costs of these concepts will be evaluated in Phase II, occurring 1993. Based on that evaluation, Metro expects to make decisions about whether new policies are needed to achieve the kind of growth the citizens of the region desire.

Metro's purpose for Phase I was not to select a preferred concept. Phase I did not try to predict which concept was most likely, nor to decide which was most desirable. A preferred concept could not be defined or selected until after an evaluation of the general concepts, which will not happen until Phase II. Rather, the purpose of Phase I was to describe a range of concepts that roughly covers the wide variety of ideas suggested by citizens, technicians, and policy makers during the several opportunities for public comment provided in 1992. The concepts were selected with the intention of maximizing the information that their evaluation (in Phase II) would yield. To that end, Metro emphasized getting a diversity of concepts rather than variations of a single concept that might appear most feasible, either technically or politically. The information from the evaluation should help citizens and their representatives make decisions in 1993-94 about preferred growth patterns and growth management policies.

The work program for Region 2040 has objectives for both technical analysis and public involvement. Technically, Region 2040 must address questions like: What land-use arrangements optimize transportation and infrastructure investments? How can transportation and land-use planning be linked to develop an integrated and complete regional system? How can jurisdictions work regionally to solve problems that require regional solutions (like air pollution and intercity transportation) while allowing local choices about lifestyles?

Region 2040, must also, however, help the residents of the region understand how the region has worked, works now, and might work in the future. Regional problems cannot be addressed until the public perceives a benefit to thinking and acting regionally. Thus, Phase I provided the public with several opportunities to develop and express preferences about the alternative futures and the criteria for evaluating them.

The challenge for *Region 2040* is to develop concepts that balance the legitimate but conflicting needs for policies that are at once practical and visionary. The study's planning horizon, and the time required to have a

significant impact on the regional problems it hopes to help remediate, is decades. But many people will evaluate the value of any proposed solutions against market criteria that are clearly short run. *Region 2040* must find a middle ground, developing long-run visions for land-use patterns and transportation systems for the Portland metropolitan region, and a framework and criteria for evaluating those growth concepts that address the practical question, "How do we get there from here?"

REGION 2040 ADDRESSES PEOPLE'S CONCERNS ABOUT GROWTH

PEOPLE IN THE REGION VALUE ITS LIVABILITY, BUT BELIEVE THAT LIVABILITY TO BE THREATENED ALREADY

A characteristic of memory is that it works better on pleasant experiences than poor ones. Thus, when long-time residents of the region talk about how things used to be, they tend to discount the limitations of a small urban economy (e.g., low wages; a limited choice of jobs, consumer goods, cultural activities) and focus on its past advantages they now see diminishing (e.g., a clean environment, access to the outdoors, lack of traffic). Growth means change, and change almost always means that some good things must be left behind.

The current concern with regional growth, however, results from more than selective memory. People are increasingly dissatisfied with the changes that are occurring. In the past, some of the problems that accompanied economic change were made less troublesome by increases in income. In the 1980s, however, real incomes for a majority of Americans did not increase. Even those whose consumption rose began to question whether the things they could buy were adequate substitutes for the things they had sacrificed: time, community, security.

Our surveys and interviews at the beginning of *Region 2040* found the region's residents to have concerns about growth similar to those of other metropolitan areas: traffic, pollution, crime, education. We describe them in more detail later in this report.

THERE WILL BE MORE GROWTH AND, THUS, MORE THREATS TO LIVABILITY

The recession that clouded the early 1980s in Oregon had its silver lining: it gave Oregonians time to evaluate the effects growth had on the Puget Sound and the Bay Area before having to deal with that growth themselves. As part of our research in Phase I we found general agreement among citizens, decision-makers, and forecasters that Oregon will not continue to be bypassed by that growth. The Portland

metropolitan region, Oregon's economic center, will grow (perhaps rapidly) well into the next century.

The important question is, How much? To answer that question Metro took a long-run look at economic and demographic trends in the region. After examining different growth scenarios, Metro settled on "most-likely" forecasts somewhere in the middle. For the Oregon portion of the Portland metropolitan area inside the urban growth boundary Metro expects an additional 756,000 people over the next 50 years: an increase of about 70%. For employment, expected growth is 463,000 jobs: an increase of about 75%.

METRO MUST INVESTIGATE WHETHER CURRENT DEVELOPMENT PATTERNS AND POLICIES ARE OPTIMAL

Region 2040 hopes to answer fundamental questions about the development of land and supporting infrastructure in the region: What is possible? What is valuable? What do citizens want in the future? Can the region get where it wants with current policies, or are changes required? Are the changes worth the cost?

Though some measures of livability are likely to decrease with growth, others are likely to increase. In general, larger urban areas offer more economic opportunity and economic security to a larger part of the population, and more social and cultural amenities. The obvious purpose of growth management is to increase the benefits of growth and decrease its costs.

It may be that the mix of public policies and market decisions that now guide growth in the region is optimal, and that it may be optimal in the future. But Metro would fail in its responsibilities to its constituents if it simply assumed optimality; if it failed to take prudent actions to protect livability. Metro must investigate whether other patterns or policies exist that have a higher probability of preserving livability in the face of growth.

Moreover, Metro is bound by law, not just common sense, to examine the region's policies toward growth. Metro is required to find ways to meet state and federal guidelines relating to air and water quality, transportation, and urban containment. In response to these requirements, Metro has already adopted policies and begun projects that will influence the form of growth in the region. For example, Metro adopted Regional Urban Growth Goals and Objectives, the result of two years of

Region 2040: Final Report, Phase I

¹These are Metro's mid-range estimates. Other assumptions used by Metro in developing its forecasts led to estimates as much as 45% lower or 30% higher.

work with representatives of local governments, interest groups, and citizens at large

Metro is asking these questions at a critical and opportune time. It does not have to introduce these questions as part of a new political agenda. They underlie many of the planning efforts that have recently begun and continue in the metropolitan area.² Region 2040 has the potential of assembling all these efforts into a long-run vision and short-run implementation plan that Metro, as the regional government, can adopt with the political support of state and local governments, interest groups, and citizens.

REGIONAL PROBLEMS REQUIRE REGIONAL SOLUTIONS

Because many of the problems most citizens associate with growth are larger than the boundaries of any city or county in the metropolitan area, their solution requires the cooperation of all municipalities in the region. One cannot expect one municipality to take strong and painful measures to reduce air pollution or traffic congestion if its neighbors refuse to help, but meanwhile enjoy the benefits of that municipality's policies and continue to contribute to the problem.

The region's municipalities must work cooperatively to seek efficient and fair solutions to these and other types of problems that go beyond their boundaries. Metro, as a regional agency with responsibility and authority for regional land-use and transportation planning, is the logical choice for a lead agency to coordinate a regional solution.

REGION 2040 FOCUSES IN PHASE I ON THE PHYSICAL FORM OF DEVELOPMENT; THE TECHNIQUES FOR ACHIEVING THAT FORM WILL FOLLOW IN PHASE II.

The concepts for future growth developed in Phase I focus on the location and intensity of land and transportation development that expected population growth will require.

Region 2040: Final Report, Phase I

²To name but a few: (1) the Department of Land Conservation and Development is in the process of adopting stronger growth management policies for inside and outside urban growth boundaries, and has adopted an administrative rule for Goal 12 that introduces many new requirements for transportation planning (especially, for planning to reduce the growth of automobile trips), (2) the formation of the State Agency Council for Growth Management in the Portland Area to coordinate state policy in the region; (3) the LUTRAQ project, which is looking for new land-use patterns to reduced transportation problems; (4) a series of studies and plans by Tri-Met of the relationship of land use and transportation systems, light rail, and planning for transit; (5) local visioning projects like the ones in Gresham, Portland, West Linn, Forest Grove, and Clark County.

The focus on the physical form of growth is logical for several reasons. First, the most obvious manifestation of regional growth is physical: the construction of offices, houses, highways. Many of the problems people associate with growth (congestion, pollution) stem from how private and public land uses are organized. Second, land-use planning has traditionally been at the center of any efforts by local governments to deal with the problems of growth. Oregon law reinforces this historical association, for it makes local land-use plans the focal point of public debate about balancing the goals of conservation and development to achieve livable communities. Third, Metro's responsibilities as a regional government are for regional land-use and transportation policy.

Finally, it is physical form more than policies—pictures more than words—that creates a vision of a better future. Maps of the future arrangement of land uses in the region are a logical format for talking about growth. A discussion of land use (urban form) is the right place to begin a process that will ultimately have to lead to policies for achieving a vision of regional future, even though many of the implementing policies may deal only indirectly with urban form (for example, policies about the pricing of public facilities).

Figure 2 in Section 3 of this report provides an overview of the region's form today. Section 4 introduces the concepts for the future form that the region could take.

Phase I only describes possible urban forms; Phase II evaluates them. Thus, Phase I does not identify or evaluate the kinds of policies that regional agency, special districts, and local governments would have to adopt to increase the possibility of achieving the proposed concepts for urban form (e.g., urban growth boundaries increased pricing for public services). Clearly, the costs of those policies (in terms of economic development, and individual income and freedom) may be substantial: those costs must be assessed against the expected benefits of planned growth. That assessment will occur in Phase II.

Where Does This Report Fit in the Region 2040 Project?

WORK COMPLETED IN PHASE I LED TO A RANGE OF CONCEPTS THAT SHOULD BE EVALUATED IN PHASE II (1993)

The concepts developed in Phase I derived from the stated preferences of the general public, interest groups, planners, and local decision makers about future urban patterns and characteristics of urban environments. In summary, the steps of Phase I were:

PUBLIC INVOLVEMENT (ROUND 1): WHAT ARE THE ISSUES?

Describe public preferences. Metro conducted interviews with key stakeholders, a random public survey, presentations to and surveys of local governments, regional public meetings, and a regional conference on growth. This task resulted in five reports describing what planners, policy makers, and the general public (1) like and dislike about the region and their neighborhoods, (2) believe are the most important problems created by growth, and (3) suggest as ways that development might occur to accommodate that growth. (February-May, 1992. See the Summary and five technical reports on Public Involvement, Round 1, for details.)

PRELIMINARY TECHNICAL ANALYSIS

Describe existing conditions of the natural and built environment in the metropolitan area, likely future growth, and constraints on or opportunities for new growth patterns. This task resulted in three reports and some working papers that provided baseline technical information for the development of growth concepts. (February-July, 1992. See the technical reports on Existing Conditions, and on Mixed-Use Urban Centers for details.)

Review other efforts like Region 2040 that are occurring in other North American cities. This review provided information about issues, evaluation criteria, and potential development concepts. (April-June, 1992. Documented in memoranda from ECO to Metro on a framework for defining concepts, and broad criteria for evaluating them.)

Develop preliminary concepts. Metro staff, its consultants, and planners from the several municipalities and agencies in the Portland region developed the concepts using the technical information and public opinions gathered in previous steps. Each concept describes a general theme for the location of future development (e.g., at the urban fringe;

concentrated inside the urban growth boundary; in new satellite cities), and a rough representation of the amount of high, medium, and low-intensity development that might be required to accommodate growth given that theme. The purpose was not to select a preferred concept, nor even to evaluate a subset of concepts. Rather, it was to develop concepts that covered a broad range of possible futures for future evaluation. Thus, the criteria for developing concepts emphasized diversity. The draft concepts were reviewed by the planners from local jurisdictions on the *Region 2040* Management Committee, and by other Metro committees. The results of this task were summarized in a tabloid for public review published in September. (June-September, 1992. See the Tabloid and internal memoranda from ECO to Metro for details.)

PUBLIC INVOLVEMENT (ROUND 2): DO THE CONCEPTS COVER THE RANGE?

Present the concepts for public review. Metro distributed over 20,000 copies of a twelve-page tabloid explaining the concepts and how they fit in the larger Region 2040 process. That tabloid served as a basis for presentations to about 65 interest groups, neighborhood/community groups, local governments, and agencies, where people told Metro what they liked about the concepts, how the concepts should be changed, and what other concepts should be considered. (September-November, 1992. See Summary of Round 2 Public Involvement for details.)

FINAL TECHNICAL ANALYSIS FOR PHASE I

Revise, describe, and document the concepts. This task used the information received during public review to revise as necessary the concepts in the tabloid. A technical report describes a preliminary assessment of the densities necessary for the concepts to accommodate expected growth. The final products for Phase I are the report you are now reading, and a resolution of the Metro Council identifying the concepts that will be evaluated in Phase II. (November-February, 1993. See the technical report on land capacity and density for details.)

THIS REPORT CONCLUDES PHASE I BY SUMMARIZING FROM A DOZEN TECHNICAL REPORTS PREPARED DURING 1992

Figure 1 shows the flow of work for Phase I, and the products that resulted from each stage. Those wanting more detail than provided in this report should refer to the reports and memoranda described in the previous section, listed in Figure 1, and repeated in Table 1.

September -November, 1992 June -August, 1992 (ECO Memorandum) Process for Developing and Selecting Alternatives Framework (ECO Memorandum) Criteria Random Stakeholder Growth Local Public Survey Interviews Conference Government Workshops of (CSC Proceedings Meetings (CSC Citizens Report) (Metro (CSC Report) Report) - This Report Public References (Round 1) (ECO Report) ← Summary of Findings and Recommendations Summary (ECO Report) Concepts Recommended for Evaluation in Phase II Summary of Comments From Focus Groups, Workshops, Local Meetings, and Stakeholder Interviews Explanation of Concepts and Prototypes Public References (Round 2) Draff Concepts (Metro/ECO/CSC/DG Tabloid) (CSC Report) (DS Report) (Metro Council Resolution) Council Decisions Mixed-Use Urban Centers (CS Report) Design Principles Urban Form (ECO/DG Working Notes) Sociocconomics/ Land Base: Natural and Demographics: Regional Built Population and Land Environment Employment Information Record Projections System Report and (Mero Working (Mero Boards) Metro = Staff
ECO = ECO Northwest
ECO = ECO Northwest
CSC = Cogan Sharpe Cogan
CS = Cambridge Systematics
DG = Design Group (Emic Musch
Walter & Maxy, Associated Architects)
DS = Decision Sciences Existing Conditions and Forecasts Key to Primary Authors of Reports

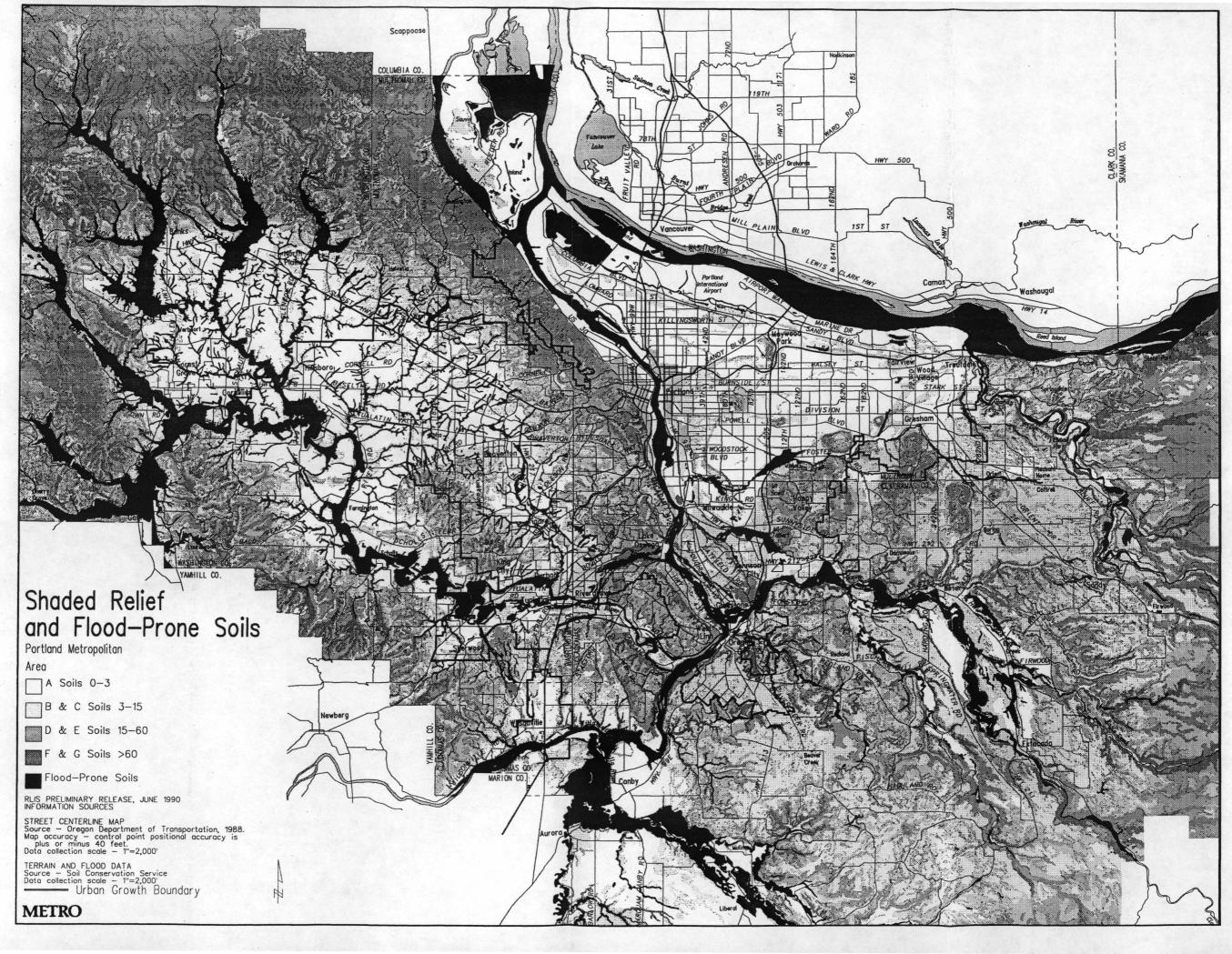
December -June, 1993

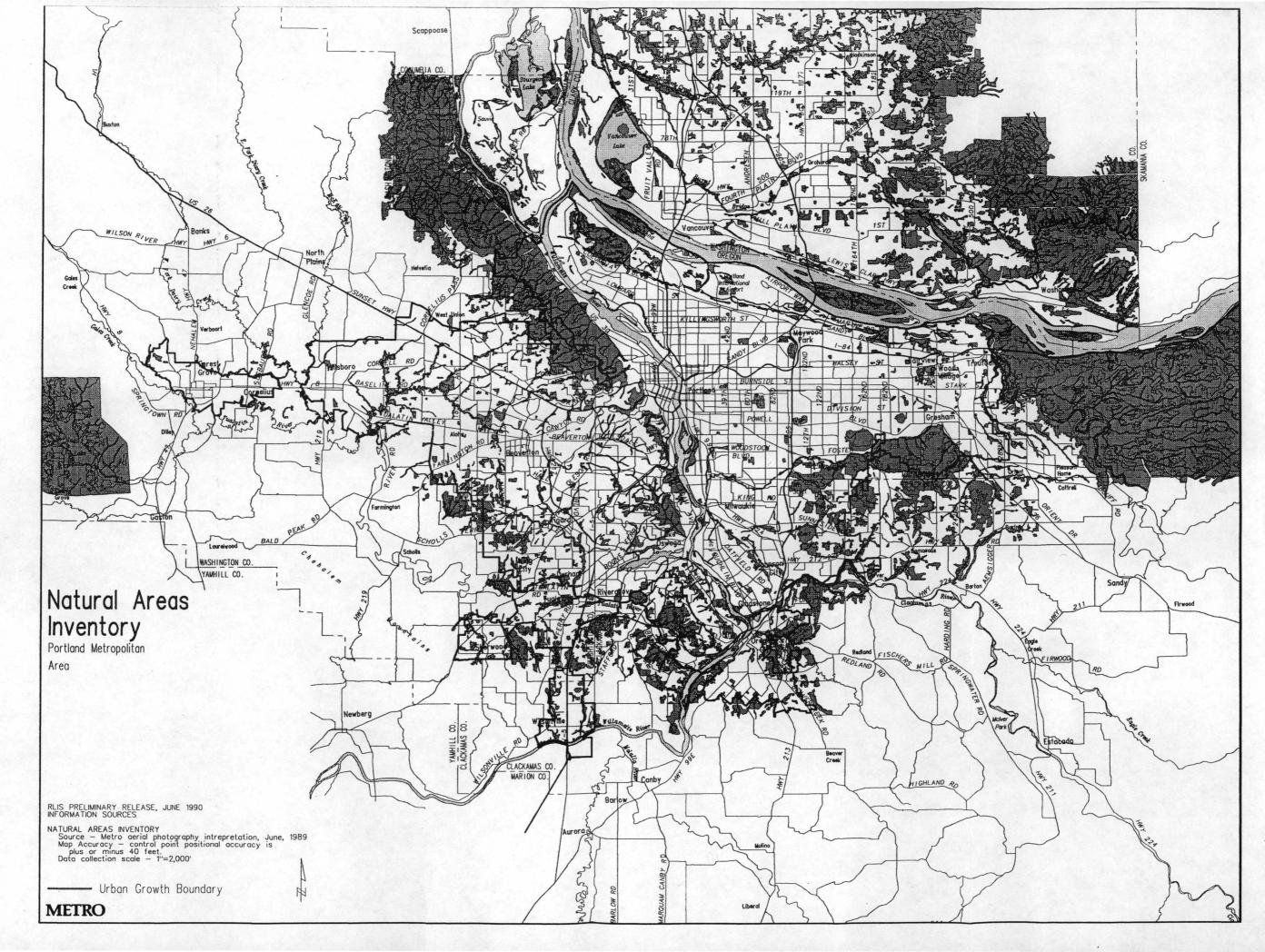
FIGURE 1

SUMMARY OF PHASE 1 PROCESS AND PRODUCTS

January -May, 1992







·		

Table 1
List of Technical Reports
Phase I, Region 2040

Generic Name of Report	Date of Draft ^a	Authorb
Public Involvement (Round 1)	100	
Summary	July	ECO Northwest
Random Survey of Citizens	April	Decision Sciences
Stakeholder Interviews	June	Cogan Sharpe Cogan
Local Government Workshops	July	Cogan Sharpe Cogan
Regional Growth Conference	June	Metro
Public Workshops	July	Cogan Sharpe Cogan
Preliminary Technical Analysis		
Existing Conditions: The Natural and Built Environment	May	ECO; Design Group
Mixed-Use Urban Centers	May	Cambridge Systematics
Population and Employment Forecasts (working notes only)	August	Metro
Tabloid: Preliminary Concepts and Development Prototypes	September	Metro, Cogan Sharpe Cogan, ECO, Design Group
Round 2 of Public Involvement		
Summary of Round 2 of Public Involvement	December	Cogan Sharpe Cogan
Flyer: Summary of Public Involvement for Phase I	Forthcoming (93)	Cogan Sharpe Cogan, Metro
Final Analysis for Phase I		
Recommended Concepts for Phase II	December	Metro Council
Final Report (this document)	June (93)	ECO
Newsletter: Summary of Phase I and Overview of Phase II	Forthcoming (93)	Metro

^a Many publications underwent final edits between November 1992 and March 1993; they are dated with the date of their publication as final reports, not the date of their draft publication.

^b This report sometimes refers to the *Public Involvement Group* (Cogan Sharpe Cogan, Decision Sciences, and Pacific Rim Resources) and the *Design Group* (Ernest Munch, Walker & Macy, and Salauddin Khan).

What Factors Influenced Metro's Definition of Growth Problems and the Policies for Addressing Those Problems?

Section 3

The concepts for the possible future form of the region must balance the visionary and the pragmatic. Without vision, the region will grow inevitably to be more of what it is; without pragmatism, a vision is an idle hope. The region is not an empty plain on which all possibilities are open for human invention. It is constrained by its landscape, its built environment, its laws, and the wishes of its citizens.

CONSTRAINT 1: THE PREFERENCES OF RESIDENTS

The public involvement activities summarized were undertaken between February to June, 1992. The purpose of the first round of public involvement was to learn what planners, policy makers, and the general public (1) like and dislike about the region and their neighborhoods, (2) believe are the most important problems and issues created by growth, (3) suggest as ways that development might occur to accommodate that growth, and (4) suggesting criteria to consider in planning for growth.

The public involvement process in Round 1 used five different techniques, each summarized in its own report:³

- 1. Telephone survey of 405 households in the region selected at random (also referred to as the survey of the general public).
- 2. Interviews of stakeholders (representatives of governments, agencies, interest groups, neighborhoods, or businesses).
- 3. Surveys and exercises at the Metro Growth Conference

³See Table 1 for the titles of the technical reports summarized here. In addition, the Summary Report for Round 1 of Public Involvement provides an evaluation of the research methods used, and the reliability and comparability of the data collected.

- 4. Workshops for local government elected officials and planning commissions (also referred to as *Kits*: packets of information and questionnaires, with instruction for their use)
- 5. Regional public workshops.

The people who participated in each of the five activities break into two groups: (1) those who clearly had previous experience with the types of issues addressed (in most cases because their jobs or public service commitments are directly related to regional growth, land use, and transportation), and (2) those who did not. Viewed this way, the Growth Conference, stakeholder interviews, and local government kits all addressed the first group. The random telephone survey addressed the second group. The public workshops probably included both types of participants.

The responses from the activities in the first group (the active participants in regional growth decisions; in general, the stakeholders) are remarkably consistent. Respondents like the quality of life; they don't like traffic congestion. They support concepts that make future development more concentrated. They favor growth in existing areas before expanding to new areas, mixed-use development, urban in-fill, and more investment in transit. They favor concepts that concentrate growth in high-density corridors, inside the UGB, and in mixed-use developments that are denser and more transit-supportive than today's typical suburban subdivisions.

The responses from the activities in the second group are similar to those from the first group, with one notable exception. The telephone survey purposely tried to talk to people about their <u>neighborhoods</u>; the other activities for the various stakeholders focused more on regional development. Thus, it is not surprising to find the first group much more vocal about site-specific issues (e.g., quiet, rural lifestyle, good neighbors): they were asked to be.

There are some differences between the groups on responses on identical questions, but the differences are small. The general public, like the active participants, strongly supports investment in transit and growth in developed areas (more than twice as many people favored growth in developed areas as in undeveloped areas, with 25% strongly in favor). Also similar, there is no agreement on suburban-versus downtown-type growth: responses were evenly distributed across the scale of 1 to 7. The general public was, however, less supportive of mixing residential uses with employment or with shopping (very slight preferences for a mix).

These points are consistent with another observation made in the report on the telephone survey results: in open-ended questions, interviewers found a lot of hostility by respondents to the idea of introducing high-density housing in their neighborhoods. Together, these results suggested that (1) concepts, at a minimum, will have to allow for a diversity of development types—not all new development can occur in existing areas or in mixed-use neighborhoods; and (2) design will be very important—Region 2040 must try to show how the building that the concepts are composed of address the issues of concern to the public: quiet, privacy, security, environmental quality. This last point is difficult since to some extent it requires Metro to begin in Phase I the evaluation that is supposed to occur in Phase II.

The previous paragraph describes a small variation in an otherwise consistent picture. We found ample justification from the public involvement activities for developing a concept that focuses growth inside the UGB first in mixed-use centers supported by more transit. That concept, however, must (a) be sensitive to many of the neighborhood design issues raised, and (b) be balanced by other concepts. Those other concepts should respond to a strong difference of opinion about suburbanversus downtown-type development, and about the need for offering choices on whether to live in mixed-use developments.

CONSTRAINT 2: THE POLICIES THAT ALLOW OR REQUIRE GOVERNMENT ACTIONS

We briefly referred earlier to the state laws and regional policies that support or require the kind of regional planning the *Region 2040* embodies. In this section we discuss a few of them in more detail.

At the state level, the dominant driver of long-run planning for growth is Oregon's land-use law. The Land Conservation and Development Commission (LCDC) requires local governments to develop plans that conform to state goals. All jurisdictions in the region have such plans. But it is also required that those plans be periodically updated and reviewed (about every 6-8 years). As part of that update, local plans must be brought into conformance with any new state policies adopted since the previous state review. LCDC has adopted strong rules relating to transportation, and may also adopt rules relating to urban growth boundaries and development within them. Metro and local governments must attempt to comply or risk sanctions from the state.

The policies of the Department of Environmental Quality are likely to get stronger as it attempts to comply with federal requirements for clean air and water. These issues are regional in scope and require coordination at a federal, state, or regional level. The ability of DEQ and Metro to improve air and water quality will depend heavily on the

pattern of regional growth. Thus, *Region 2040*, though primarily focusing on land use, is constrained in its land-use solutions by its obligations to protect environmental quality.

Metro's own policies have a strong influence on the kinds of solutions Region 2040 can develop. We described the RUGGOs previously. They provide a general policy framework for the concepts that Region 2040 should explore. The RUGGOs cover the topics shown in Table 2.

Table 2
RUGGO TOPICS

Natural Environment	Built Environment	Growth Management
Water Resources	Housing	Urban/Rural Transition
Air Quality	Public Services and Facilities	Developed Urban Land
Natural Areas, Parks and	Transportation	Urban Growth boundary
Wildlife Habitat	Economic Opportunity	Urban Design
Protection of Agricultural and		-
Forest Resource Lands		

Some examples of *RUGGO* policies are:

- Make all functional plans (e.g., Metro plans for functions like solid waste, transportation, and land use) consistent with the State Implementation Plan for air quality.
- Develop a regionwide system of trails to link public and private open space, and wildlife habitats. Provide greenspaces between communities.
- Protect resource lands outside the urban growth boundary from urbanization.
- Designate mixed-use urban center: nodes of relatively high density, supportive of non-auto transportation modes and urban levels of public facilities and amenities. The region should have a balanced transportation system, less dependent on the private automobile, supported by mixed-use development.
- Require that housing densities support adopted public policy for the development of the regional transportation system and designated mixed-use urban centers.
- Locate jobs and housing close to one another.

- Make the highest transportation priority be meeting the mobility needs of mixed-use urban centers, when designated. Such needs should be met through a combination of intensifying land uses and increasing transportation system capacity.
- Increase the use of transit.
- Reduce sprawl; make a clear distinction between urban and rural lands.
- Preserve regional features that create a "sense of place."
- Reinforce Portland as the central city.

Because of the scope of and participation in the process of adopting RUGGOs, they arguably reflect a regional consensus about regional growth. If so, then any plans or policies Metro adopts are constrained by the RUGGOs; that is, they must be consistent with the RUGGOs. Despite their generality, our interpretation of the RUGGOs is that they are much more in favor of changes in land-use policy to increase density than they are of the low-density development patterns that have been the predominant form of residential growth in the region.

Metro has yet other responsibilities and policies that require it to evaluate policies for managing regional growth. As the Metropolitan Planning Organization, Metro is the conduit for federal transportation funds to the region. The new Intermodal Surface Transportation Efficiency Act opens federal highway funds to the kinds of alternative transportation modes Portland has pioneered. And in November 1992 citizens of the region approved Measure Number 26-3, granting a Charter to Metro that made growth management a primary function.

Finally, any vision of the region's land use and transportation will be shaped by the separate visions of the region's cities and counties. The statewide land-use program is at its core a program for local planning.

But having noted all the policy constraints on the vision that *Region 2040* might develop, we must also note that policies may be changed. In fact, determining whether and how to change policies is the primary purpose of a planning process of this type. Thus, *Region 2040* must explore regional development patterns that are more than the sum of the local plans for the region. If citizens of the region can agree on a pattern that offers greater opportunities for diminishing the negative impacts of growth, then they should be allowed to adopt policies that lead toward that pattern, even if those policies require amendments to regional goals or local plans.

CONSTRAINT 3: THE FORCES THAT ENCOURAGE AND SHAPE GROWTH

The amount of growth in a region is only partially dependent on public policy. The key public policies that regions have to affect growth are the provision of public facilities (and the taxes that generate the revenues to provide them), and policies to encourage or inhibit the development of land. Though these policies make a big difference in absolute terms, the variations in these policies across regions are not large compared to variations in other economic factors. Thus, unless the Portland region adopts policies radically different from those now being adopted by regions across the nation, public policies are likely to have a small effect on the amount of growth, and slightly greater affects on the type and distribution of growth.

A region grows because of a combination of advantages in quality of life, cost of living, job opportunities, and wages relative to other regions. The Portland metropolitan area has substantial advantages in quality of life (livability) that draw people to the region who can bring jobs with them or create new jobs. The resulting economic vitality attracts many other people in search of better jobs.

National trends and regional characteristics suggest the Portland metropolitan area will grow rapidly in the next ten to twenty years—faster than it did during the last ten years. After that, the aging of the population will slow the component of growth from natural increase (the excess of births over deaths). Growth will become increasingly a function of migration, which depends on the regional characteristics mentioned above (which *pull* people into the region), and national and international conditions and policies over which the Portland region has little control (which *push* people from their current locations to any other region that offers more opportunity).

Obviously, the farther into the future that one tries to predict, the more uncertain those predictions become. Metro tried to bracket the range of possible futures by making forecasts not only on past trends, but also by simulating what happens as the current population ages, and by making different assumptions about the kind of migration (the main driver of population and employment growth) the region will get. For example, what happens if the region become a melting pot for skilled workers and international immigrants, or a prime destination for retiring baby-boomers?

The simulations led to future populations for the Portland-Vancouver region that ranged from 2.0 to 2.8 million (compared to about 1.4 million now) with several simulations in between. Taking a middle ground (2.5 million), and backing out estimates of population that would go to Vancouver, Metro decided to use 756,000 people as the likely growth

for the Oregon portion of the metropolitan region between now and 2040. Clearly the actual growth could be much larger or smaller, but this estimate seems reasonable for the purposes of this project.

Note that even the lowest simulation forecasts substantial growth for the region: about 425,000 people. In the opinion of the experts who reviewed these simulations. The forces driving the growth of the Portland region suggest that no growth or very little growth is an unlikely future.⁴ In the absence of public policies that change the ways development occurs to accommodate that growth, many of the characteristics that people associate with the livability of the region are likely to deteriorate: congestion will increase, open space will decrease, air pollution will increase.

CONSTRAINT 4: THE NATURAL AND BUILT ENVIRONMENT

Region 2040 is concerned primarily with design at a regional scale, and secondarily with concepts for neighborhood design that achieve some of the objectives described by citizens during workshops and interviews (February to June, 1992). As a first approximation of the principles for regional design, the Design Group reviewed the standard texts on regional design (see Existing Conditions: The Natural and Built Environment). Most of those principles are incorporated into a report done for Metro by the University of Oregon entitled Ten Essentials for a Quality Regional Landscape (January 1992). The Design Group used a more general set of principles that did not put as many limits on the potential concepts that could be developed:

1. Protect the Natural Environment of the Region. This general statement was made specific. In all of the concepts, the Design Group assumed that, in general, development would not occur on land in floodplains, steep slopes, or wetlands. They used Metro's RLIS to identify these land and subtract them from the inventory of buildable land. To the extent possible (which varied by concept) development should not occur on high-quality soils (Site Class I and II).

Figures 2 and 3 show the location of these key natural features, and suggests how they will shape the future pattern of growth.

⁴Such an outcome is unlikely without unprecedented government regulation.

2. Preserve and Reinforce Important Places. To help identify those places the Design Group conducted research to describe how the region developed. A sense of history is an important component of a sense of place. Any concept should work with the natural and built features that define activity nodes and community boundaries, the links between communities, and landmarks. The Design Group mapped these characteristics; that map informed the subsequent development of concepts.

Among the principles the Design Group adopted to develop land-use concepts: reinforce downtown Portland as the central city; take advantage of the grid pattern, flatness, and density of development on the near eastside to create higher-density, transit-supportive areas; recognize the essentially auto-dependent nature of development in the west and south hills; preserve the centers of historic older towns like Hillsboro and Forest Grove; create points of arrival along highways entering the region.

3. Develop a Future Regional Form from the Existing One. Though this point seems obvious, it bears stating. Historical growth lead to the existing patterns of development (buildings and the supporting transportation system and other public facilities): those patterns strongly influence what future development will look like. Any future concepts must build logically from the existing transportation corridors and concentrations of development.

Figure 4 shows the principal transportation corridors that will influence future growth; and Figures 5 and 6 where population and employment are concentrated now.

- 4. Provide a System of Greenspace for Views, Recreation, Transportation, and a Sense of Place. This principle overlaps with the first one, since the system of greenspace will have substantial overlap with floodplains, wetlands, and land with steep slopes.
- 5. Provide Services Efficiently. In general, compact development patterns should cost less than dispersed ones. Consider the location of existing public facilities and how they can be expanded to accommodate growth. Metro Staff applied this principal to identify lands most likely to be included in the urban growth boundary if it were to be expanded.
- 6. Provide Opportunities for a Choice of Lifestyles. Accommodation must be made for both the traditional patterns of development and for new ones (for example, as reflected in work being done by Tri-Met and LUTRAQ on transit-supportive development). The concepts must allow for a variety of neighborhoods, housing types, and businesses, consistent with environmental and infrastructure constraints. Phase I does not go to the level of detail on neighborhood design that these and similar reports contain.

			·	

oad System

Figure 4

			·

Population Density

Figure 5

		•

Employment Density

Figure 6

		•		

REGION 2040 FOCUSED ON REGIONAL CONCEPTS

The terms land-use pattern, development pattern, and urban form get used interchangeably, but they can have different meanings depending on the size of the area to which the terms are applied. We distinguish among three levels:

- Site level. At this level urban form refers to residential and commercial buildings and their relationship to one another as they form a cluster.
- Neighborhood/community level. At his level urban form refers to clusters of buildings and their relationship to one another to form a community. Typical types of clusters being discussed as the focus of future development are main streets, neotraditional developments, and mixed-use centers.
- Regional level. At his level urban form refers to communities and their relationship to one another to form cities and a region.

Region 2040 has focused primarily on the regional level, and secondarily on the neighborhood level. The two are obviously connected. It is difficult for people to express a preference for a regional urban form without thinking about the kinds of neighborhoods that region would comprise. The tabloid published in September 1992 that described preliminary concepts for regional growth also showed pictures of the kinds of places implied by the different intensities of use contained in the concepts.

THE CONCEPTS WERE SHAPED BY THE CRITERIA DISCUSSED IN SECTION 3 OF THIS REPORT

Prior to the tabloid, we conducted a literature review to help understand what made mixed-use urban centers happen, or at least the kinds of conditions typically present at the successful ones. The idea was the same: we wanted to know more about what came to be referred to as the building blocks of the region—the neighborhoods it comprises. The research confirmed many of the ideas that were expressed during public involvement, and uncovered a few that received less attention:

• There are and will continue to be many different workable designs for different land uses. For example, there is no preferred type or design

of residential development. Household (family) type, age of household members, income, income, and individual preference all influence the type of housing people want and will pay for. Type of housing, topography, and neighborhood all influence what a given square footage of housing will cost. People's satisfaction with their housing will be greatest when they have a variety of choices about how to make tradeoffs among the multiple characteristics of housing.

- The problems many people associate with higher density are often the problems of poor design or cheap development. The images in the tabloid demonstrate that any type, style, or intensity of land use can enhance a community if it is well designed: if it fits with the landscape, buffers conflicting uses, and so on. We expect the Visual Preference Survey that is now being conducted in the Portland region will find what has been found in other regions: that many people like to look at pedestrian environments more than auto environments; that they prefer well-designed and landscaped medium-density (5-10,000-square-foot, single-family lots, with some duplexes and apartments) neighborhoods to the sameness of some larger-lot subdivisions. Similarly, many studies by state and regional agencies (particularly Tri-Met) have demonstrated that design clearly makes a difference to transit ridership.
- The region should strive to ensure choice, not to dictate a small subset of past or future land-use patterns. The point is not to develop a plan that puts everyone in high-density apartments on an LRT line. Rather, it is to ensure that a diversity of housing types can be built so that households can continue to have a choice about the housing characteristics that best suit their needs and budgets.
- More opportunities will be needed for people to choose higher-density environments. We come to this conclusion for three principal reasons. First, many of the problems of growth are the problems of dispersion. Dispersion requires auto trips, since transit costs become prohibitive in low-density areas. Dispersion often increases the per unit costs of extending public facilities. Single-family (dispersed) housing costs more to build per unit (and usually per square foot) than multi-family (concentrated) housing when the cost of land is controlled for. In short, not only planners but also a high percentage of the citizens who responded during public involvement

Region 2040: Final Report, Phase I

⁵See James E. Frank. 1989. The Costs of Alternative Patterns: A Review of the Literature. Washington, D.C.: ULI.

⁶Comparing single-family detached housing to multi-family walkups, and assuming land for multi-family housing is zoned to allow construction outright. Estimates for comparable square footage of wood frame construction show the construction costs per square foot for single-family housing is approximately 17% greater than row housing and 33% greater than multiple-family housing (Marshall Valuation Service, Feb. 1993). See also Tri-Met, 1993, *Planning and Design for Transit*, pages 59-68 for cost comparisons of residential prototypes.

believe that allowing some increase in density is essential to managing the problems of growth. Second, Metro's demographic analysis shows an aging population; as parents become emptynesters, as people age and spouses die, housing preferences change toward smaller units with less yard and better access. Third, upperincome families will always have choice among a variety of housing types. For lower-income families, however, there is no choice without affordability. Higher densities allow equivalent structures and amenities at a lower cost (at the obvious sacrifice of private space around the housing unit).

Mixed-use urban centers are one way to encourage density, but the public sector probably cannot make them happen by policy alone. Our report on mixed-use centers postulates an apparently simple equation for urban centers: Urban Center = Density + Mixed Use + Transit + Amenity. Though most of these conditions are necessary for urban centers, there is little evidence that the public sector can make them happen if the market does not view them as potentially profitable. At a minimum, however, the public sector can (a) express its interest in such type of development and its willingness to work with developers with similar interests, (b) remove barriers to such development by creating appropriate new plan designations and zoning (which means working with neighborhoods to establish the conditions under which that type of development would be successful), by financing programmatic environmental assessments for general areas of potential development, and so on; and (c) coordinating investments in public infrastructure so that designated sites have sufficient capacity of all public services to accommodate development.

An argument can be made that a region is no more than the sum of its neighborhoods, and that a regional concept need go no further than describing the kinds of places in which people would live, work, shop, and recreate. An alternative view is that one must show regional systems and regional relationships at a regional level. Metro chose to emphasize the second view, with the result that the concepts are displayed as a map of possible future land uses. The concepts are shown at a regional level, but the different concepts imply a different mix of neighborhood and building designs.

Region 2040: Final Report, Phase I

⁷With the possible exception of transit. Many urban centers (referred to as *Edge Cities*) have been developed around the automobile. In the Portland region, however, public policies at the state, regional, and local level are all moving in the same direction: to emphasize a regional commitment to transportation corridors and transit, and to encourage (if not require) any large-scale, mixed-use development to be tied to transit.

AT A REGIONAL LEVEL, THE CONCEPTS FOR URBAN FORM FOCUS ON WHERE GROWTH WILL BE ACCOMMODATED AND AT WHAT DENSITY.

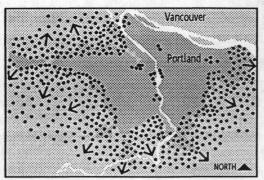
At the regional level, our research led to the conclusion that there are only a few distinct ways to describe growth patterns, though there are certainly a large number of those patterns could develop at the subregional level (e.g., there are a lot of ways one could allocate growth to subareas of the region that would be consistent with a concept of "concentrate development inside the UGB.")8 Figure 7 shows how we displayed these concepts to the public in the tabloid of September, 1992. In summary, the concepts differ in where they accommodate growth: will growth expand the region at its urban edge, increase the density of development in its existing urbanized area, or shift to new cities outside the urban area?

- Expansion (Concept A). Emphasize growth in the suburbs, the urban fringe, and adjacent to the urban fringe. Those are the areas where the bulk of the growth in the 1980s occurred, and where the most vacant land for development is available. If development occurs at densities similar to the ones now observed in the market. land inside the existing UGB will be insufficient to accommodate all the growth expected by 2040. Thus, regional urban growth will require expansion at the urban fringe.
- Concentration (Concept B). Emphasize growth in the existing urbanized area. The description of this concept that most people understand is "freeze the UGB." With a fixed supply of land growth can only occur by using land inside the UGB more intensively (for example, by increasing densities of new developments, in-fill development, and redevelopment).

⁸We base this conclusion on our review of (1) recent long-run, regional planning efforts for Toronto, Vancouver, B.C., Seattle, and the Bay Area, as well as previous efforts for Portland made by the Columbia Region Association of Governments, and (2) the literature of urban economics regarding the pattern of development in metropolitan areas.

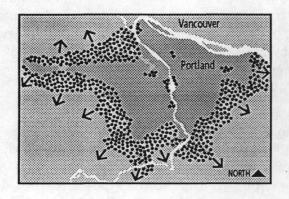
⁹Note that this analysis is entirely supply-side: it assumes that demand will not be reduced (in other words, that the growth of population and employment would be less than predicted) despite restrictions of land supply that would increase the price of land. Whether that assumption is approximately correct requires an analysis beyond the scope of this study. At its extreme this alternative begins to approximate the kind of regulation unprecedented at a regional scale that would be required to slow growth to rates substantially below those expected.

Figure 7
Schematic Concepts



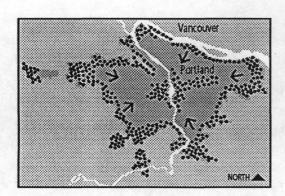
Base Case

Reflects current land-use policies and development practices.



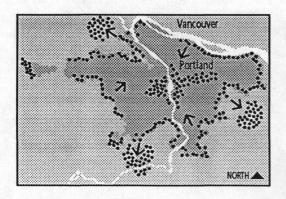
Concept A

Shows what happens if most growth occurs outside the urban growth boundary. There will be some increase in densities and more mass transit.



Concept B

Accommodates growth within the existing urban growth boundary. There is an emphasis on mass transit and increased densities.



Concept C

Combines more intense use of the land inside the existing urban boundary with development outside the boundary in new communities.

- Concentration of the expansion (Concept C). Relieves some pressure inside the UGB by allowing concentrated development in limited areas outside the UGB. We refer to this concept as growth in cities outside the UGB (or satellite cities). Development inside the UGB would probably occur at densities between those of Concepts A and B.
- Deflection (No concept developed). Emphasize growth outside the region, either proactively or reactively. This kind of alternative was suggested by several people during public involvement. It was often prefaced with a statement like "Why do you assume that the growth will come? Why not an alternative that doesn't accommodate the expected growth?" An example of proactive policies to achieve this end is joint planning with outlying areas like Woodburn, Newberg, and Vancouver: the hope would be that those cities would become larger as policies in metropolitan Portland forced growth elsewhere. An example of reactive policies to achieve the same end might be a variation of Concept B: by limiting land supply and imposing other constraints on development the forecasted growth just does not occur.

Metro chose not to carry the concept of deflection forward as a distinct concept, but rather to evaluate the ideas it embodies as part of Phase II. The work program for Phase II is likely to include a task that discusses the pros and cons of no-growth or low-growth policies. Moreover, the resolution adopted by Metro requires Phase II to consider effects of the concepts on growth in Clark, Columbia, Yamhill, and Marion Counties.

These concepts were developed in more detail and refined through review by the Region 2040 project team: consultants, Metro staff, the Region 2040 Management Committee (planners from cities, counties, and public agencies in the region) during July and August 1992. The refined concepts were described and illustrated in the tabloid published in September 1992. The 20,000 copies of the tabloid were distributed by mail, and at about 65 public workshops and open houses held in October and November 1992. Based on its review these comments, and those received from Metro's standing policy and technical committees (the Joint Policy Advisory Committee for Transportation, the Transportation Technical Advisory Committee, the Regional Policy Advisory Committee, and the Regional Technical Advisory Committee) the project team made some adjustments to their definitions and to the general scope of the evaluation proposed for Phase II.

The concepts, as adjusted, were considered by the Metro Council and approved at its meeting on 22 December 1992. They are shown in Figures 8, 9, and 10.10 The full resolution adopted by the Metro Council can be found in Appendix A of this report. The concepts adopted are identical in most ways to those just described. The Council did, however, add some details that it deemed necessary in view of public comment.

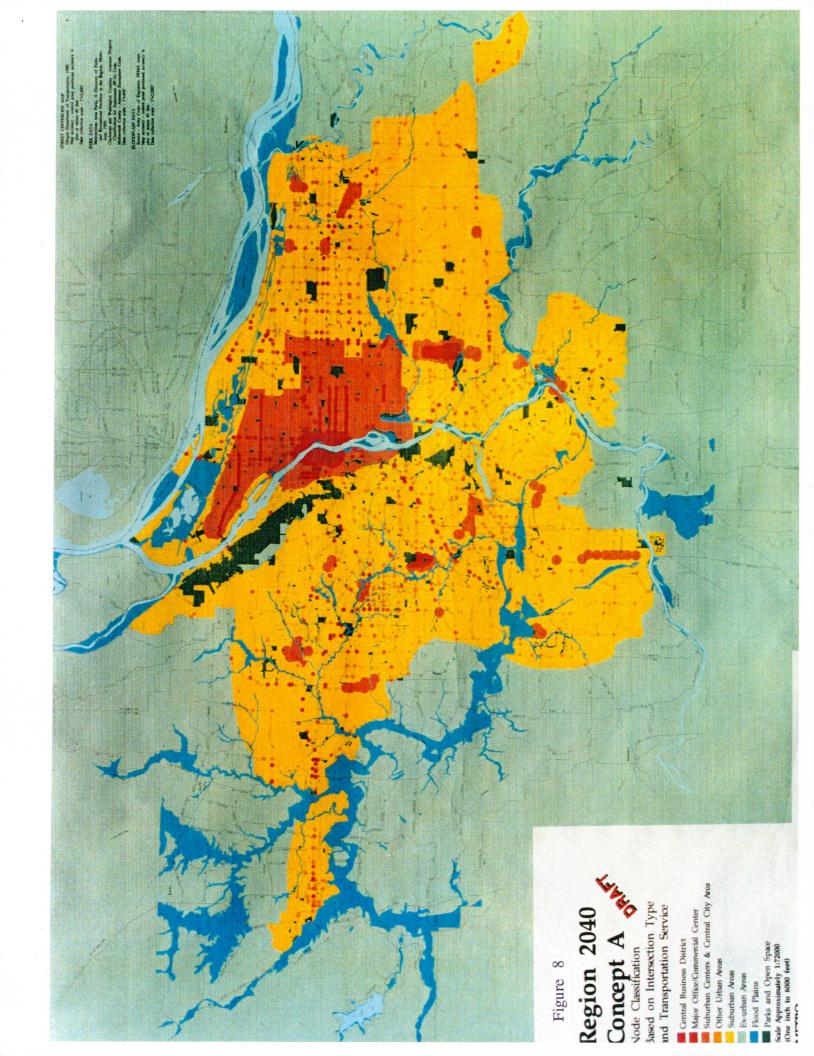
- Concept A. The Council defined this "expansion" concept as continuing with current policies and accommodating forecasted growth through currently adopted comprehensive plans and continued expansion of the urban growth boundary.
- Concept B. The Council defined this "concentration" concept as growing inside the urban growth boundary and accommodating forecasted growth by increasing development intensities, especially where such development could be served by transit.
- Concept C. The Council defined this "satellite" concept as accommodating forecasted growth through some increases in intensities of use inside the current urban growth boundary and by some growth occurring in areas of concentrated urban development outside the current urban growth boundary.

The resolution further stipulates that:

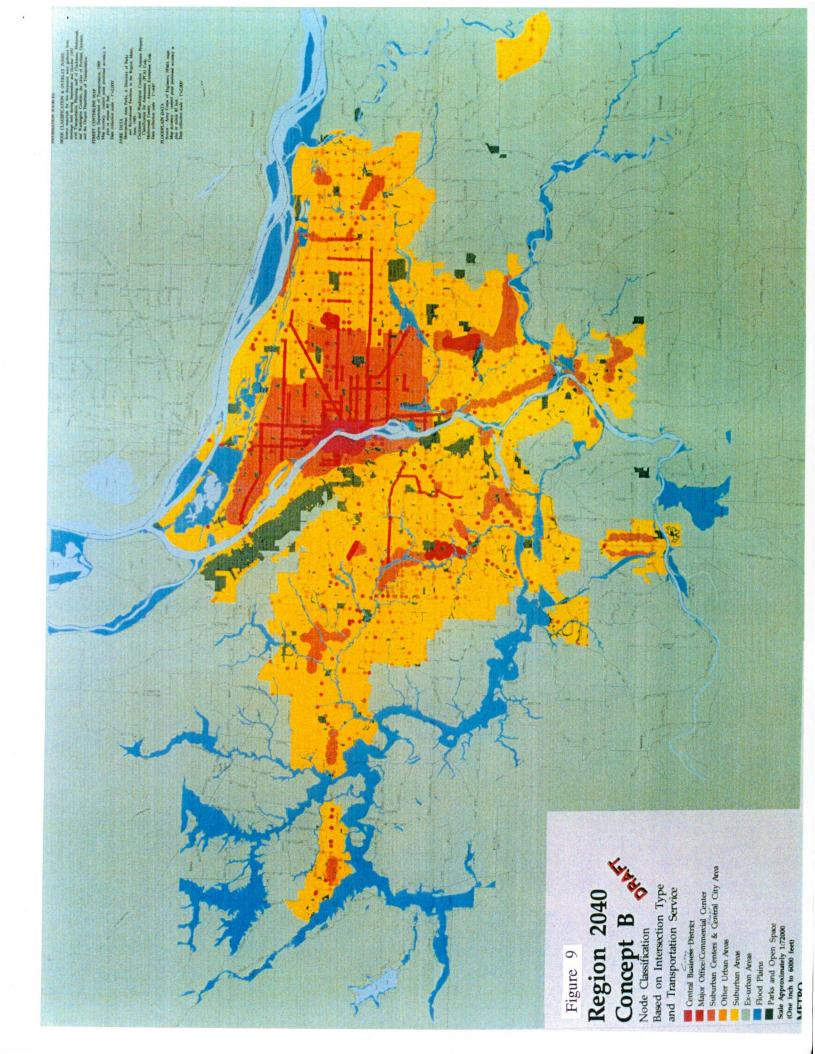
- All of the above concepts will endeavor to meet the intent of newly adopted policies such as RUGGOs, the State of Oregon's Transportation Rule and Urban Reserve Rule, and the Clean Air Act of 1990.
- A base case for comparison purposes will be developed that will <u>not</u> attempt to meet such new policies. (In other words, what is the region likely to be like if it continues with trends uninfluenced by new policies?)
- Each growth concept will include an element related to the Greenspaces Master Plan and the full tri-county area and take into consideration effect on growth in Clark, Columbia, Yamhill and Marion Counties
- Many variations on the concepts are possible. The resolution references an Exhibit A which describes a minimum set of variations on each concept to be addressed in Phase II. (These variations respond to comments raised during round 2 of public involvement.)
 Other variations may be included later.

Region 2040: Final Report, Phase I

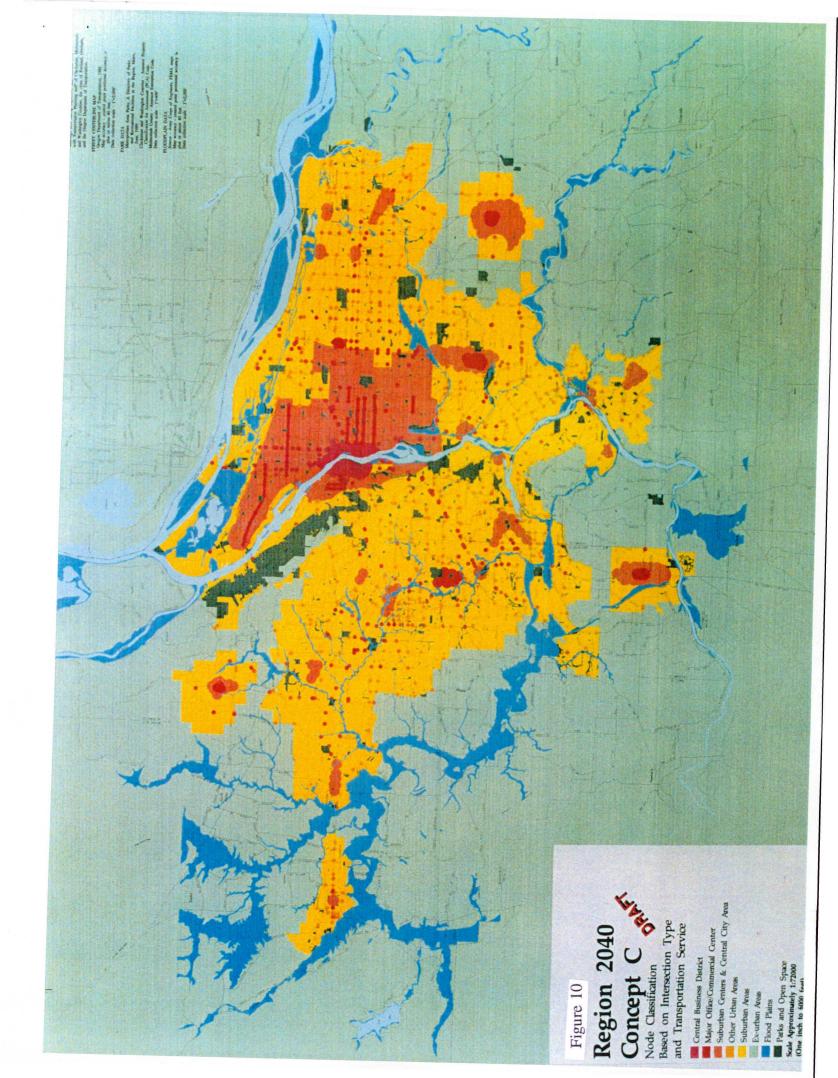
¹⁰Figures 8, 9, and 10 show a computer-generated version of the concepts; they are similar, but not identical, to those shown in the tabloid. The Council resolution acknowledges that there are many ways each concept could be drawn: Figures 8, 9, and 10 show one way for purposes of illustration. Phase II of the project will refine and work with variations of these concepts.



		•	•



		•	•



	•	

- The evaluation in Phase II will consider the benefits and costs each concept, including a comparison of the costs of infrastructure.
- Region 2040 shall be amended to ensure requirements of the Metro Charter related to development of a "Future Vision" are addressed including establishment of a "Future Vision Commission" and development of a regional framework plan.

Section 5

Why do the More Detailed Views of the Concepts Look the Way they Do?

THERE ARE MANY POSSIBLE VARIATIONS FOR ANY CONCEPT

The Metro resolution described in the previous section recognizes that many variations of a given concept are possible. But as we pointed out in Section 1 of this report, Phase I has, for several good reasons, always been intended to provide illustrations of the future urban form of the region. That urban form is best illustrated for the full region by a map.

Thus, the dilemma. We are required to illustrate concepts with maps, but there is no demonstrably "best" way that any given concept could unfold. For example, for Concept C, growth in cities outside the UGB, we identified over a dozen possible locations for what might be up to three urban areas outside the region's contiguous urban growth boundary.

Our maps of each concept show only one of many possible futures. The maps are intended to facilitate understanding of the essential characteristics of the concepts, not to persuade citizens or policy makers that they represent the only or best way the concept could be developed.

ALL CONCEPTS ATTEMPT TO MEET SOME GENERAL CRITERIA

The concept maps presented in this report are illustrative. In so saying, however, we do not imply that they are arbitrary or haphazard. We believe them to be among the more reasonable of the possible futures.¹¹ They have, however, been through technical review, and meet the criteria that follow.

SENSITIVE TO NATURAL AREAS

Using Metro's RLIS database we identified all land in floodplains, wetlands, or steeply sloped areas. We assumed no development would

¹¹Assuming the concept were to be implemented in its pure form. We believe that the future reality will be that the region develops with policies that create some type of hybrid concept that we have not illustrated.

occur in these areas and subtracted them from estimates of the acreage of vacant land. Taking out these areas for open space leaves a supply of buildable, vacant land that all concepts have to work with. In addition, for Concept C, the design team did field reconnaissance of all areas in Metro's boundaries but outside the UGB looking for areas of roughly 10 square miles that were not contiguous to the UGB and not predominantly flood plains, wetlands, steep slopes, or Class 1 or 2 soils.

GENERALLY CONSISTENT WITH LOCAL LAND-USE PLANS (THOUGH SOME SUBSTANTIAL CHANGES PROPOSED)

Concept A is a simple extrapolation of existing plans and trends. Land is developed according to its present plan designation; more land is required outside the UGB. Concepts B and C are not constrained by existing plans; they are constrained, however, by existing development. The results is that they do not radically alter the general land use patterns of the region. They do allow changes in land use by allowing more intensive use of land at existing or planned transportation nodes. In those cases, we assumed a standard mix of development types (e.g., commercial, residential) and densities (e.g., for single-and multi-family housing) independent of the underlying designations of current plans.

SENSITIVE TO TRANSPORTATION CORRIDORS AND EMPLOYMENT CENTERS

Concept A explicitly considers travel time to employment centers and assumes that vacant buildable land closer to existing employment centers should develop before land that is farther from them (other things equal). Concepts B and C assume that land near high-capacity transportation corridors (freeways, major arterials, LRT lines), and particularly at points where such corridors cross, will develop more intensively than other land. The existing pattern of development exhibits a strong correlation between density of development and intensity of transportation infrastructure. Concepts B and C assume that most existing employment centers will continue to grow. Concepts B and C identify some areas inside the UGB that, because of their locational characteristics (proximity to existing development, buildable land, and good transportation services), are likely to grow more than others. New growth areas were located along LRT lines.

Build on existing infrastructure to reduce cost

Concept A considered two proxy measures of infrastructure cost for determining where the UGB might be expanded most efficiently: Metro used its database to determine the existence of sewers, and travel time to employment centers. Concept B is based on the assumption that most

infrastructure costs decrease as land development moves from low to medium density. We have no predisposition on Concept C: there are reasons to believe its infrastructure costs could be greater (distance from the central city) and reasons to believe it might be smaller (denser development patterns, less congestion).

LOGICALLY LINK INTENSITY OF LAND USE AND TRANSPORTATION SYSTEMS

Technicians and the public (see section on public comments below) have similar ideas about how land use and transportation should interact. In general, land should develop more intensively in areas where there is or can be more transportation capacity.

With this principle in mind, we put more growth of all types along corridors and at crossroads in all concepts. All concepts put more intensive development at LRT stations, though Concepts B and C assume more LRT than Concept A. All concepts work from the existing highway system: there are few opportunities for new highway corridors; those that exist are primarily near the urban fringe.

ACCOMMODATE ALL THE FORECASTED GROWTH

Another way of stating this criterion is, How do you know you put the right amount of each color on the map? Originally, Phase I was to include a preliminary evaluation of the concepts to make some rough estimates of either (1) the amount of land that would be required outside the UGB to accommodate forecasted growth (for Concept A), or (2) the amount and level of different residential densities that would have to occur inside the UGB to accommodate forecasted growth (for Concepts B and C).

That analysis requires Metro staff resources for data reduction and mapping. When the Metro Council adopted the Phase I concepts in December 1992, they opened the door on the work that needed to be done for Phase II. Metro judged it more important to proceed on schedule with the transportation and land-use modeling of Phase II. That modeling includes forecasts of (1) population and employment growth (a demographic/economic model), (2) where that growth will locate (a land use model that allocates growth to 100 zones in the region based primarily on land capacity and access), and (3) the number of trips by type and location (a transportation model). At this time, Metro is still considering conducting the type of capacity analysis described in the section: it may emerge as a technical report later in Phase II.

RESPOND TO PUBLIC COMMENTS

In October and November, 1992, the public reviewed the preliminary concepts as described in the tabloid. About 65 public meetings, workshops, and open houses were held. A technical report entitled Summary of Round 2 of Public Involvement describes the results of that public review. In summary, we found:

- 1. Participants in Round 2 supported further analysis of the three growth concepts. Most felt that the three concepts adequately convey a reasonable range of alternatives for the region's future.
- 2. The participants reaffirmed the underlying design principles described in this report. Specifically, they said: use high-capacity rail as a guiding principle; concentrate development along transit corridors; use greenspaces as the organizing principle for urban form; preserve farm, forest, and other resource land; and use mixed-use developments to reduce separation between home and work.
- 3. In a majority of meetings, someone mentioned the ideas of (1) adding a "no growth/slow growth" concept, and (2) expanding the planning area to include areas beyond Metro's boundary. Most variations of the concepts we had considered in the preliminary design of concepts were mentioned at least once: make the UGB smaller; eliminate the UGB; plan for less growth than projected; plan for more growth than projected; combine Concepts A & B, A & C, or B & C.
- 4. A majority of participants preferred Concepts B or C to A. While few participants supported Concept A, most recognized it a useful comparison and a likely future if Concepts B or C cannot be implemented. Participants suggested variations on Concept A, including consideration of urban reserves, the housing and transportation rules, and natural resource protection.
- 5. Concept B was readily understood and widely supported, particularly as a means of protect resource lands outside the UGB. Suggested modifications included different size and character for proposed nodes, and better definition of mixed-use centers.
- 6. Participants generally supported Concept C, satellites, though they had concerns about the satellites being too close to the UGB and about preserving open space between the satellites and the UGB. Suggested modifications related to the size of the satellites (make them bigger; make them smaller), their use

- (make them mixed use; make them special use); and their location and design.
- 7. For all alternatives, participants asked questions about the policies that would be necessary to implement the concepts, how the concepts fit with existing policies (e.g., the state transportation and urban reserve rules), and how the concepts would be financed.

All of these findings were considered in the development of the concepts shown in Figures 8, 9, and 10. Though many variations on the concepts were suggested, the Metro Council decided not to amend concepts that the public generally agreed covered the range of alternatives, but rather to direct Phase II to make sure that those variations get explored further.

How Will These Concepts Help Make Regional Decisions About Growth?

Chapter 6

When it began developing the *RUGGOs*, Metro was fully aware that it was embarking a multi-year project for gaining consensus about the direction and form of regional growth. The *RUGGOs* provided a general framework of goals for growth and development. *Region 2040* is intended to move toward specific policies that regional or local governments can adopt to encourage the kind and form of urban growth that the citizens they represent want.

Metro does not believe that such policy decisions can be made quickly. Phase I of *Region 2040* has made no attempt to adopt policies. It has not even evaluated specific policies. Rather, it has concentrated exclusively on (1) learning what the public values about the region, what it dislikes, and what kind of future it wants; and (2) defining concepts for growth that cover a range of technically plausible and publicly acceptable futures. Metro will evaluate those concepts, with their many variations, in Phase II of *Region 2040*.

The concepts described in this report define the futures that Metro and the citizens of the Portland metropolitan region must evaluate. On the one hand, since Phase I has only defined general concepts it is not incorrect to say nothing has been decided. All policies are still open for debate: that debate will be informed by the evaluation that will occur in Phase II. On the other hand, Phase I has established a framework for that debate. Everyone in the region has had an opportunity to participate in decisions about that framework.

A contribution of Phase I that is not trivial has been to bring the issue of regional growth—an issue fundamental to the future quality of life of the region's residents—to public attention. Our work in both Round 1 and Round 2 of public involvement convinced us that the public is ready to engage this issue. Certainly there is no consensus, nor will there ever be. But everything we learned during workshop and open houses suggest that people understand that growth is a mixture of opportunities and problems, and that the problems will probably get worse if public policies do not change. *Region 2040* offers the hope of using technical tools to inform a process of public decision making that will provide real direction for regional growth

We hope we have explained the purposes of *Region 2040* and Phase I persuasively. We reserved for ourselves this last page of our last report to express our opinion about the future of *Region 2040*. These are our guesses, based on our professional judgment, and do not necessarily reflect the views of the Metro Council, its staff, or members of the Management Committee for *Region 2040*.

The evaluation in Phase II will not be definitive. People will want from it much more than technicians can deliver. For every variable that the technicians can measure approximately, the public will introduce another that has not been measured well, if at all. Phase II will be successful to the extent that it (1) does a credible job of identifying, describing, and (to a lesser extent) measuring the *key* components of livability, (2) presents its results in a format that is intuitive and understandable, and (3) allows any interested parties to join the debate and craft the solutions.

The difficulty that any political process has of making anything greater than small changes to the status quo means that Phase II, even if well managed, will be lucky to produce anything more than minor modifications to existing policies. If a concept for future development is adopted regionally, it will probably be a hybrid of the three concepts.

Though the UGB will be retained for now, policies will not be so strong as to say that it will not be expanded upon further study in the near future (i.e., within the next 5 to 10 years, well before 2040). Policies allowing and perhaps encouraging increased densities will be adopted; polices requiring increased density will not. The development of satellite cities may be encouraged, but no policies that would lead to their establishment will be adopted. Policies regarding the pricing of infrastructure—the policies that offer the greatest promise for achieving the kind of urban form suggested in Concepts B and C—will be debated but not adopted at the end of Phase II. We hope they will be adopted later if the problems Region 2040 is concerned about become more real.

The livability of the region has probably not deteriorated enough to provide decisionmakers with the mandate they need to adopt policies whose short-run impacts will be unpopular with many of their constituents. The region will have trouble moving from the general goals of the RUGGOs, which people can agree to as long as they remain abstract and without economic affect, to policies that would cause the form of the region to change from where market conditions are taking it anyway (those policies are difficult precisely because they would have an economic impact).

Taking a more optimistic view, *Region 2040* will almost certainly have increased the awareness of the public and decision makers about the kinds of benefits and costs that growth generates, the difficulty of deciding how much and what kind of growth is best for the region's citizens, and the kinds of policies that must be implemented if the course of growth is to be changed. Rapid change in the absence of real crisis may not be possible. It may be that the best a region can hope for is a high level of interest and understanding among its citizens and decision makers about the trade-offs of growth. That allows for a continuing debate and continuing policy adjustments.

APPENDIX A

METRO COUNCIL RESOLUTION

Clerk of the Council

BEFORE THE COUNCIL OF THE METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF DESIGNATING THE) REGIONAL GROWTH CONCEPTS TO BE) EVALUATED IN PHASE II OF THE) REGION 2040 PROJECT

RESOLUTION NO. 92-1712C

Introduced by Rena Cusma, Executive Officer

WHEREAS, The Metro Council adopted the Regional Urban

Growth Goals and Objectives in order to ensure the region's livability

is protected as growth occurs; and

WHEREAS, It is necessary to consider alternative urban forms to implement the Regional Urban Growth Goals and Objectives; and

WHEREAS, The citizens of the region approved on November 3, 1992, Measure Number 26-3, granting a Charter to Metro which made growth management a primary function; and

WHEREAS, The Region 2040 project has been undertaken to guide Metro in the management of the Portland metropolitan area urban growth boundary, future amendment to the Regional Transportation plan and to help ensure that transportation and land use are coordinated; and

WHEREAS, The Region 2040 project is intended to address the concerns of the region about the long-term aspects of growth in the region; and

WHEREAS, The approved work program for Region 2040 Phase I calls for Metro to determine a reasonable range of alternatives for accommodating growth to be evaluated in Phase II; and

WHEREAS, The Region 2040 project has completed a telephone survey of over 400 randomly selected citizens of the region about their concerns and values about growth; and

WHEREAS, Two series of workshops with the elected and appointed officials of the cities and counties of the region have been conducted in the spring and fall of this year concerning growth in the region; and

WHEREAS, Interviews with 52 representatives of public and private agencies and organizations from throughout the region have been conducted gathering their thoughts about growth in the region; and

WHEREAS, Two series of public workshops and open houses were advertised in the newspaper of general circulation as well as community newspapers and were held during the spring and fall of this year gathering public values and concerns about growth in the region; and

WHEREAS, 20,000 copies of a 12-page publication were prepared and distributed this fall which provided background on possible growth choices and provided the opportunity for citizens of the region to add or amend growth concepts; and

WHEREAS, RTAC and TPAC, RPAC and JPACT have reviewed, revised and recommend the evaluation of these regional growth concepts; and,

WHEREAS, growth choices depicted in the publication intend to show broad policy options and not to specify land use

designations, transportation facilities or employment centers; now, therefore

BE IT RESOLVED,

- 1. That the Metro Council directs staff to begin evaluation of growth concepts as follows:
 - Concept "A" continuing with current policies
 accommodating forecasted growth to the year 2045
 through currently adopted comprehensive plans and
 continued expansion of the urban growth boundary;
 - Concept "B" growing inside the urban growth boundary accommodating forecasted growth to the year 2045 by not enlarging the present urban growth boundary and increasing development intensities focused on transit inside the current boundary; and
 - Concept "C" satellite communities growing at the edge accommodating forecasted growth to the year 2045 through some increases in intensities of use inside the current urban growth boundary and by some growth occurring in areas of concentrated urban development outside the current urban growth boundary.
- 2. That all of the above concepts will strive to be workable models and will endeavor to meet the intent of newly adopted policies and requirements including Metro's Regional Urban Growth Goals and Objectives and the State of Oregon's Transportation Rule and Urban Reserve Rule and the Clean Air Act of 1990.

- developed to provide an examination of the implications of implementing existing plans and policies not including new provisions of the State's Transportation Rule and Urban Reserve Rule, the Regional Urban Growth Goals and Objectives or the Clean Air Act of 1990. That detailed base data and assumptions will be provided for timely review to all TPAC and RPAC jurisidictions.
- 4. That each growth concept will include the full tricounty area and take into consideration effect on growth in Clark,
 Columbia, Yamhill and Marion Counties.
- 5. That a study of growth pressures will be completed in two parts. The first part will identify and analyze factors, both internal and external, which influence growth and describe how the growth options respond. The second part of the study will identify possible actions which may be taken to discourage or encourage growth and the feasibilty of application.
- 6. That the concepts described above could be designed in a myriad of ways and are subject to further technical definition, but that Exhibit "A" outlines the minimum set of variations for each concept that will be examined further. However, during Phase II of the project, other variations may be developed or proposed and Exhibit "A" is not intended to limit the possibility of other variations being evaluated.
- 7. That each concept will incorporate an element related to the Greenspaces Master Plan.

- 8. That for each of the regional growth concepts, Region 2040 shall develop a further level of detail which facilitates evaluation in terms of livability, density, economic, governmental and social costs, benefits and impacts, including the evaluation of public and private costs. That for each concept, Region 2040 shall develop a comparative analysis of public infrastructure and services. Several variations to each concept may be considered. It is Metro's intention for the process of refinement and evaluation to be as inclusive as possible to encourage participation and ultimate consensus on alternatives.
- 9. That the Region 2040 project shall be amended to 2045 to ensure requirements of the Metro Charter related to development of a "Future Vision" are addressed including establishment of a "Future Vision Commission" and development of a regional framework plan.

ADOPTED by the Council of the Metropolitan Service District this 22rd day of December, 1992.

Jim Gardner, Presiding Officer

Possible Refinements to Designated Regional Growth Concepts

For each concept there will be developed a further definition of detail sufficient to allow evaluation of impacts on liveability and economic vitality. Numerous variations of each concept are possible. The following are a minimum set that will be developed. During the development and further definition of the variations, it may be concluded that additional variations should be added. The following list is therefore a minimum that will be pursued, but is not intended to be an exclusive list which cannot be amended as deemed appropriate.

Concept "A" Continuing with Current Policies

The basic framework for Concept "A" is existing comprehensive land use plans and current urban growth boundary policies.

- 1. Concept "A" will be refined to determine the location for expansion of the urban growth boundary considering the following factors: a) contiguity with the existing boundary; b) a balanced consideration of factors 1 through 7 of Goal 14 and RUGGO, including accessibility of expansion areas to the jobs of the region, the ease of providing sanitary sewers and avoidance, where possible, of rural resource lands; and c) no expansion into floodplains or the Columbia Gorge Scenic area.
- 2. Two variations of the highway system would include: a) the Sunrise Corridor, Mt. Hood Parkway and Western Bypass as freeway/expressway level facilities; and b) the Sunrise Corridor, Mt. Hood and the Western Bypass as arterial, non-freeway improvements.
- 3. The Transit assumptions will include a basic radial transit system in which: a) the east-west light rail line from Gresham to Hillsboro will exist; b) there will be north-south light rail service connecting Milwaukie, Clackamas Town Center, Vancouver and Portland International Airport; c) there will be an additional radial light rail line to the southwest quadrant of the region; and d) the light rail and bus transit service level will be that described in the existing Regional Transportation Plan. A basic level of bicycle and pedestrian improvements would be included in this option.

Concept "B" Growing Inside the Urban Growth Boundary

A basic assumption of Concept "B" is that the current urban growth boundary would not be expanded.