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METROPOLITAN AREA GENERAL PLAN

DRAFT TECHNICAL SUPPLEMENT

Lane Council of Governments
125 East 8th Avenue
Public Service Building
Eugene, Oregon 97401

June, 1982

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I. INTRODUCTION

This report provides metropolitan area citizens with information which will aid their understanding of the adopted Metropolitan Area General Plan contents and the process which led to Plan preparation. This report is not a summary of the Plan. Throughout this report, the Metropolitan Area General Plan may be referred to as the "Plan." References to more detailed information sources and to the offices where questions can be addressed are also contained in this report.

This report should be used in conjunction with the adopted Metropolitan Area General Plan as amended in 1982. The Plan and questions about its contents or the update adoption process can be directed to any of these offices:

Planning Offices

Lane Council of Governments
Public Service Building, 2nd Floor
125 East 8th Avenue
Eugene, Oregon 97401
687-4283

Eugene Planning Department
City Hall
777 Pearl Street
Eugene, Oregon 97401
687-5481

Lane County Planning Division
Public Service Building-Basement
125 East 8th Avenue
Eugene, Oregon 97401
687-4186

Springfield Planning Department
City Hall
225 North 5th Street
Springfield, Oregon 97477
726-3759

After the August 1980 Metropolitan Plan was adopted by the Eugene City Council (Ordinance No. 18686, July 28, 1980), the Springfield City Council (Ordinance No. 4555, August 4, 1980), and the Lane County Board of Commissioners (Ordinance No. 9-80, August 27, 1980 and amended by Ordinance No. 9-80-A, October 14, 1980), it was submitted to the Oregon Land Conservation and Development Commission (LCDC) with a request for "acknowledgment of compliance" with the statewide planning goals. After review in 1981, the LCDC returned the Plan with a list of required corrections. During the latter part of 1981 and early 1982, the August 1980 Plan was amended by three governing bodies: Eugene, Ordinance No. 18927, February 8, 1982; Springfield, Ordinance No. 5024, March 1, 1982; and Lane County, Ordinance No. 856, February 3, 1982. A more detailed summary of the update process is contained in Appendix E.

During the adoption process, changes were made to the drafts of the Plan in response to decisions made by the three Planning Commissions, the Eugene and Springfield City Councils, and the Lane County Board of Commissioners. The methodology for the update has not been substantially altered throughout the process. The figures in this document reflect changes to assumptions, policies, and allocations made by local decision-makers at the Planning Commission and City Council/Board of Commissioner levels. The figures in this document also reflect all changes made since the August 1980 Technical Supplement was published.

II. WHAT IS THE METROPOLITAN AREA GENERAL PLAN?

In 1972, the Eugene City Council, Lane County Board of County Commissioners, and Springfield City Council adopted the Eugene-Springfield Metropolitan Area 1990 General Plan or 1990 Plan. That plan called for updates to occur over time to reflect changing community conditions and attitudes.

The Metropolitan Area General Plan is the update which replaces the 1990 Plan. Both plans are long-range policy documents providing a broad, metropolitan-wide framework for consistent planning among governments within the metropolitan area. Chapter I of the Plan explains in more detail the purposes and the role of the General Plan and its relationship to the statewide planning goals and local plans (i.e., neighborhood refinement plans and other community plans and policies).

Chapter II deals with the fundamental principles of the Plan, including the concept of compact urban growth management and an urban growth boundary. The relationship between providing services to developing vacant land to meet population growth needs is addressed in this chapter. The Plan diagram, a generalized land use map, is also contained in Chapter II.

Chapter III includes 11 specific elements. Each of these elements is listed on the matrix in Chapter VI of this document, and each is organized in the same format: an introduction, findings (based on research analysis and observations taken primarily from the working papers), goals, objectives, and policies.

Chapter IV deals with the processes for amending, updating, and refining the Plan.

Chapter V, "Glossary," explains some of the terms used in the Plan.

After undergoing citizen review and comment, the updated Metropolitan Area General Plan was adopted in 1980 by the elected officials of Eugene, Lane County, and Springfield. After LCDC review in 1981, major amendments were adopted in 1982 to bring the Metropolitan Plan into conformance with statewide planning goals.

III. THE METROPOLITAN PLAN UPDATE

When the Eugene-Springfield Metropolitan Area 1990 General Plan (1990 Plan) was adopted by Eugene, Springfield, Lane County, and Lane Council of Governments officials in 1972, it contained a recommendation that major updates be undertaken every five years. The 1990 Plan played and the new Metropolitan Plan plays an important role in the Eugene, Springfield, and Lane County comprehensive planning programs in the metropolitan region. The two cities and Lane County rely on this General Plan for the broad, guiding goals and policies within which they carry out their more specific planning programs.

Work on the update of the 1990 Plan began in 1976, and the work program for the update process was adopted in late 1977. Between 1977 and 1980, background materials and several drafts of the updated Metropolitan Plan were prepared. After numerous meetings, two different versions of a revised Plan were adopted by Eugene, Springfield, and Lane County in August 1980. After review by the Oregon Land Conservation and Development Commission (LCDC) in 1981, the three local governments pursued a program to amend the Metropolitan Plan to bring it into conformance with the 15 applicable statewide planning goals. Those amendments were completed in early 1982, and "acknowledgment" from LCDC is anticipated in the summer of 1982.

During the update process, more than 250 public meetings of the 5 local committees, 3 local Planning Commissions, and 3 local elected bodies were conducted as part of the update. Those meetings took place over a period of seven years, between 1976 and 1982. There were at least 28 public meetings and hearings where citizens were invited to comment on the process and substance of the Plan; the results of the citizen comments fill more than 2,000 pages of published material.

For more details on the Metropolitan Plan's purpose, contents, and relationship to other plans and policies, refer to Metropolitan Plan, Chapter I, "Introduction."

PROCESS

For more details on the steps in the update process from 1976-1982, see Appendix E, "Summary of the Metropolitan Plan Update Process."

PARTICIPANTS

For more information on participants in the update process, refer to Appendix G, "List of Metropolitan Plan Update Participants."

PUBLICATIONS

For more information on documents prepared during the update process, see Appendix F, "Annotated Bibliography of Metropolitan Plan Update Publications."

IV. HOW TO USE THE METROPOLITAN PLAN

The Metropolitan Area General Plan is a policy document intended to provide the three jurisdictions and other agencies and districts with a coordinated guide for change over a long period of time. The major components of the policy document are: the written text, which includes findings, goals, objectives, and policies; the Plan diagram, complete with an urban growth boundary; and other supporting materials.

The goals, objectives, and policies contained in the Plan are not presented in any particular order of importance. When making decisions based on the Plan, not all of the goals, objectives, and policies can be met to the same degree in every instance. Use of the Plan requires a "balancing" of its various components on a case-by-case basis, as well as selection of those goals, objectives, and policies most pertinent to the issue at hand.

The Plan policies vary in their scope and implications. Some call for immediate action, others call for lengthy study aimed at developing more specific policies later on, and still others suggest or take the form of policy statements. The common theme of all the policies is acceptance of them as suitable approaches toward problem-solving and goal realization. Other valid approaches may exist and may at any time be put into the Plan through amendment procedures. Adoption of the Plan does not necessarily commit the jurisdictions to immediately carry out each policy to the letter but does put them on record as having recognized the validity of the policies and the decisions or actions they imply. The jurisdictions can then begin to carry out the policies to the best of their ability, given sufficient time and resources.

The degree to which the General Plan provides sufficient detail to meet the needs of each jurisdiction will have to be determined by the respective jurisdictions. Where conflicts exist among the General Plan, refinement plans, and existing zoning, each jurisdiction will have to establish its own schedule for bringing the zoning and refinement plans into conformance with the General Plan.

It is recognized that the needs, priorities, and resources vary with each jurisdiction and that the methods and timing used to implement the Plan will also vary.

For more details on the Plan purpose, Plan contents, and relationship of the Plan to other plans and policies, refer to the Metropolitan Plan, Chapter I, "Introduction."

THE PLAN DIAGRAM

The Plan diagram is a graphic depiction of:

1. the broad allocation of projected land use needs in the metropolitan area and
2. goals, objectives, and policies embodied in the text of the Plan.

The diagram was developed at a metropolitan scale to reflect the following:

1. Existing Land Uses

With few exceptions, such as near downtown Eugene, the Plan was developed with the assumption that projected land use needs would be met on undeveloped land rather than through redevelopment of existing uses. That assumption does not imply that redevelopment cannot or should not occur within the framework of metropolitan and local policies. The value of existing neighborhoods and mixed use are reflected in the diagram.

2. Allocation of Projected Land Use Needs to the Buildable Land Supply

Chapter V of this publication documents that process in more detail. Existing plans, such as the 1990 Plan and neighborhood refinement plans, and zoning were considered as part of the allocation process. There was a conscious attempt to recognize past planning when accommodating the future land use needs of the metropolitan region.

3. Plan Goals, Objectives, and Policies

The diagram was developed to meet statewide planning requirements and carry out longstanding local planning concepts of compact urban growth, coordinated capital improvements programming, sequential development, more efficient use of urban land through promotion of in-filling and increases in residential density, and an integrated nodal development concept.

In addition, it is important to recognize that the written Plan text takes precedence over the diagram where apparent conflicts or inconsistencies exist. The Plan diagram is a generalized map which is intended to graphically reflect the broad goals, objectives, and policies. As such, it cannot be used independent from or take precedence over the written portion of the Plan.

Land use designations shown on the Plan diagram are depicted on a metropolitan scale. Used with the text and local plans and policies, they provide direction for decisions pertaining to appropriate reuse (redevelopment), urbanization of vacant parcels, and additional use of underdeveloped parcels. They are not intended to invalidate local zoning or land uses which are not sufficiently intensive or large enough to be included on the diagram. They are based on local plans and policies.

Because of their special nature or limited extent, certain land uses are not individually of metropolitan-wide significance in terms of size or location. Therefore, it is not advisable to account for most of them on the Plan diagram. The descriptions of land use designations in the Metropolitan Plan, Chapter II-E, "The Plan Diagram," are intended to provide minimum standards and guidelines to local jurisdictions in determining appropriate new and expanded sites and locations for future urban uses.

In general, no uses smaller than five acres are shown on the diagram. There are a few exceptions, such as the River Road Park and Recreation ownership in River Road. Interpretation of the diagram for areas smaller than five acres

must often rely on Plan policy interpretation and local refinement plans and policies.

There are more than 90,000 land use parcels in the metropolitan region. It was not the purpose of the Plan update to determine the specific future of each of those parcels. Rather, it was the purpose to provide the generalized direction for metropolitan-scale decision-making. Clear and objective standards in local implementing ordinances insure that local decisions at a finer level of detail are made first within the context of the metropolitan policy document, including written goals and policies and the diagram. Then, more precise, refined local decisions are reached, based on more detailed analysis using local criteria and standards.

In creating the Plan diagram, planners used the sophisticated tools provided through the geographic data system (a computer map modeling system which is detailed to the sub-tax lot level). Use of computer-drawn plots (maps) and tabular information allowed planners to compare existing land use, zoning, 1990 Plan designation, vacant land data, and other factors with the allocations of projected land use. The resulting work maps and computations are only one component of the Plan diagram and should not be used in isolation as justification for diagram interpretation. As discussed earlier, the diagram must be interpreted based on Plan goals and policies and through more detailed local interpretation.

The computer translation of the diagram should not be used as a substitute for the officially adopted Plan diagram. In creating the computer version of the diagram, site-specific assumptions were made regarding the Plan land use designations. Those assumptions were not intended to replace the decision-making ability of local Planning Commissions and elected bodies when interpreting the General Plan within the context of local plans and the clear and objective standards contained in local implementing ordinances.

The geographic data system is a tool which must be understood to be applied properly. It does allow for cross-tabulation of information in graphic and tabular format which would not be possible otherwise.

A detailed site-specific urban growth boundary map is on file at each of the planning offices listed in Chapter I of this document.

APPENDICES

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- C. INVENTORY OF EXISTING LAND USE, UNDEVELOPED LAND, DWELLING UNITS BY STRUCTURE TYPE, AND BUILDABLE LAND INVENTORY
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- E. SUMMARY OF METROPOLITAN PLAN UPDATE PROCESS
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APPENDIX A

PROJECTED POPULATION, EMPLOYMENT, AND HOUSEHOLDS

V. THE DATA BASE AND BASIC METHODOLOGY

In this section, applicable information is summarized in a format which lends understanding to the process used in creating the Plan diagram. Many of the projections were prepared prior to developing the June 1978 draft of the text -- thus, the process described in this section also indicates how the intent of the text goals, objectives, and policies were considered and balanced during preparation of the Plan diagram.

The process is divided into three major steps described below. Each of these general steps is described in more detail in separate subsections.

1. Step 1 - Demand

In this step, assumptions and projections of future population and employment growth were translated into land use needs.

2. Step 2 - Supply

This step involved inventories of existing land use, existing zoning, and existing 1990 Plan diagram designations in the study area. Particular attention was directed to the vacant land supply and the natural (e.g., slopes) and human factors (e.g., lot size) which affect the vacant land inventory.

3. Step 3 - Allocations

In this step, land use needs (demand) were matched to buildable vacant lands (supply) in a process leading to the Plan diagram. During the allocation process, the various Plan text goals were balanced to achieve a Plan diagram reflecting the identified needs of the metropolitan region.

STEP 1 - DEMAND

In this step, population and employment projections were converted into general land use needs. The land use needs were expressed as an overall demand for residential, commercial, and industrial land. Some of the basic projections are reviewed in this section. References are made to Appendix A and sources where more detailed data and methodology are available. A major assumption that growth will occur is inherent in the demand calculations.

1. Population Projections

Population projections indicated a 64 percent increase from a 1977 metropolitan population of 185,000 to a total of 293,700 by the year 2000. The following graph depicts the actual and projected population growth for the metropolitan region and compares the update projections with 1990 Plan population projections.

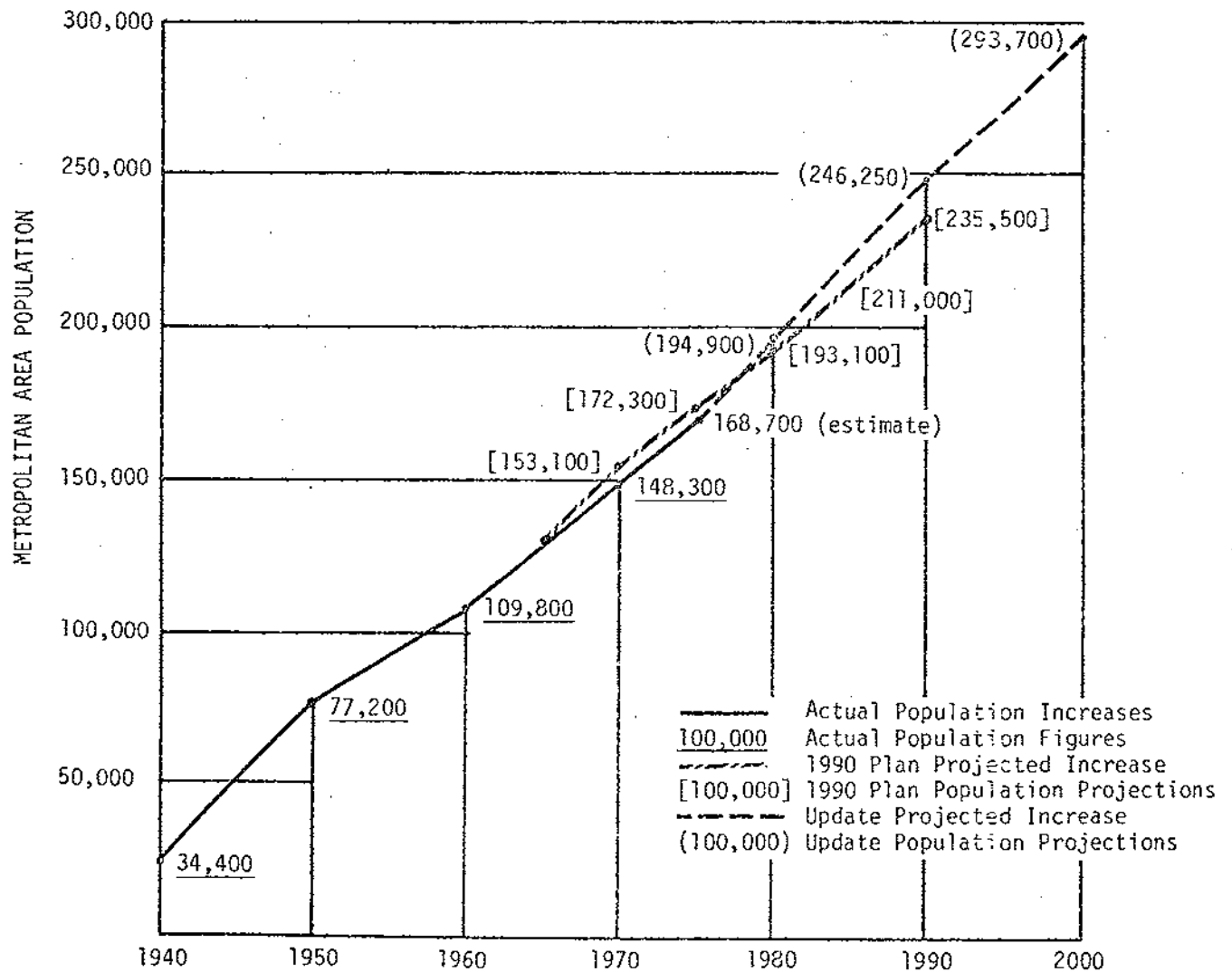
The projected increase results from a combination of natural increase (the difference in births over deaths) which constitutes

about one-third of the total and migration, which constitutes about two-thirds of the total.

Table A-1 in Appendix A of this report provides a summary of the metropolitan area population projections. Table A-2 in Appendix A indicates historic population growth in the metropolitan area.

Detailed information regarding population projections can be obtained from the publication, "Population, Households, and Employment," L-COG, 1978 (\$1.00).

FIGURE 1
METROPOLITAN POPULATION PROJECTIONS



2. Translate Projected Population Into a Demand for Households

The average size of households (average number of people living in a dwelling unit) was projected to decrease from 2.8 people in 1975 to 2.33 by 2000. This projected decrease was a result of several factors including: more single parents (choice and increased divorce rate), people living longer, people delaying childbearing until later in the life cycle (especially as more women join the work force), more people deciding to have fewer children or to remain childless, and more single-person households (by choice).

The implications of the projected decrease in average household size are twofold:

- a. more dwelling units will be needed to accommodate a fixed population and when coupled with a population increase, a significant number of additional units will be necessary, and
- b. the type of dwelling unit needed to serve the smaller households will be different from that demanded by a family with children.

Tables A-3 and A-4 in Appendix A provide summaries of this information.

More detailed information on the actual and projected decline of household size can be found in "Population, Households and Employment," L-COG, 1978 (\$1.00) and the "Housing" working paper, 1978, L-COG.

3. Dwelling Unit Projections by Structure Type

Based on household projections, on projections of the composition of the households (size, age, income, tenure [renters vs. owners]), and other trends in the metropolitan area, dwelling unit projections were prepared. These are summarized in Table 1.

A shift from single-family construction toward more multiple-family units is projected, but, for new construction between 1977 and 2000, single-family units are still projected to outnumber multiple-family units. Recent trends in new dwelling unit construction in Eugene and Springfield support the projections related to multiple-family and single-family ratios.

4. Employment Projections

Total employment is projected to increase from about 89,700 in 1980 to about 146,600 by 2000. Detailed projections for major employment sectors (manufacturing, government, retail trade, etc.) by five-year increments, are contained in Tables A-5 and A-6 in Appendix A.

For more detailed information, refer to "Population, Households and Employment," L-COG, 1978 (\$1.00).

TABLE 1

-METROPOLITAN AREA-

EXISTING AND PROJECTED DWELLING UNITS (d.u.'s) BY STRUCTURE TYPE***

<u>Structure Type</u>	<u>Existing d.u.'s (as of January 1, 1977) and % of Total</u>	<u>Projected new d.u.'s for study area (1977-2000) and % of Total</u>	<u>Total d.u.'s existing, new construction and % of Total</u>
Single-family	41,320 (63%)	26,800 (45%)	68,120 (54%)
Mobile home	3,620 (6%)	3,650 (6%)	7,270 (6%)
Duplex	5,530 (9%)	5,560 (9%)	11,090 (9%)
Multiple-family	<u>14,665 (22%)</u>	<u>23,975** (40%)</u>	<u>38,640** (31%)</u>
SUBTOTAL	65,135 (100%)	59,985** (100%)	125,120 (100%)
Outside the UGB*	<u>2,630</u>		<u>2,630</u>
TOTAL	67,765		127,750

* UGB - Urban Growth Boundary

** Includes 2,400 multiple-family units in and near downtown Eugene

*** The four structure types are defined in the Plan, Chapter V, "Glossary"

TABLE 2
1977-1979 BUILDING PERMIT ACTIVITY IN EUGENE AND SPRINGFIELD*

	Structure Type									
	Single-Family		Multiple-Family		Duplex		Mobile Home		Total	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Eugene	3,337	(56)	1,706	(29)	545	(9)	360	(6)	5,948	(100)
Springfield	1,541	(47)	635	(19)	716	(22)	406	(12)	3,298	(100)
TOTAL	4,878	(53)	2,341	(25)	1,261	(14)	766	(8)	9,246	(100)
Corrected for Townhouses**	4,354	(47)	2,865	(31)	1,261	(14)	766	(8)	9,246	(100)

* Only Eugene and Springfield figures are included since the vast majority of metropolitan building activity during 1977-79 occurred within the Cities.

** In Eugene, in the 1977-79 period, about 525 townhouses were classified by the Building Division as single-family type structures as each is on a single-lot ownership. They meet the updated definition as multiple-family units and corrections to the totals are indicated.

Multiple-family activity in the first part of the projection period is within 1 percent of the metropolitan projections used for the 1977-1985 period.

THE DETAILED METHODOLOGY FOR THE DWELLING UNIT PROJECTIONS IS CONTAINED IN THE "HOUSING" WORKING PAPER, L-COG, 1978.

5. Translation of the Projections into Land Use Needs

a. Employment

The methodology for determining commercial land use needs involves four steps:

- (1) determine the current employment for each major employment sector (refer to Tables A-1 and A-2 in Appendix A)
- (2) determine the current or most recent employee/acre ratio for the major employment categories for commercial -- 58.8 employees per acre (most recent data from Eugene's Economy; 1979 Update Industrial, Commercial, Housing, Economic Consultants Oregon, Ltd., December 1979, pp 18 and 21)
- (3) apply the employee/acre ratio to the employment projections to calculate acres of demand; the demand (1977-2000) of 780 acres for additional commercial results from the above steps
- (4) adjust the 780 net acreage demand by subtracting the neighborhood commercial demand (110 acres) and the special light industrial commercial (about 70 acres) - result: 600 acres of net demand; convert the net to gross by a factor of 20 percent ($600 \text{ net acres} \times 1.2 = 720 \text{ gross acres of community commercial demand}$)

Two methodologies for calculating industrial land use needs are used.

The first methodology parallels that used for determining commercial land use needs. The five steps are:

- (1) determine the current employment for each major employment sector (refer to Tables A-1 and A-2 in Appendix A)
- (2) determine the current or most recent employee/net acre ratios for the major employment categories:

heavy industrial = 10 employees/net acre

light-medium industrial = 18.5 employees/net acre

- (3) apply the employee/net acre ratios to the employment projections to calculate acres of demand; the following demand (1977-2000) for additional industrial land results from the above steps:

heavy industrial = 0 net acres

light-medium industrial = 700 net acres

- (4) determine the gross acreage demand for light-medium industrial land by accounting for land devoted to public rights-of-way (20 percent factor):

light-medium industrial --

$$700 \text{ net acres} \times 1.2 = 840 \text{ gross acres}$$

- (5) determine the factor for undeveloped portions of tax lots held for future expansion at any point in time (25 percent factor):

light-medium industrial --

$$840 \text{ gross acres} \times 1.25 = 1,050 \text{ gross acres demand}$$

The second methodology for determining demand for light-medium industrial land involves estimating current light-medium industrial land use per capita and application of that ratio to the projected population. The existing per capita ratio is calculated for 1977 land use by subtracting lumber and wood products acreage from total industrial; wholesale; and transportation, communications, and utilities acreage and dividing the remainder (2,283 net acres) by the 1977 metropolitan population estimate of 189,000 = 0.012 net acres per capita.

That ratio applied to the projected population results in the following:

$$\begin{array}{r} 105,000 \text{ projected population} \\ \times \quad 0.012 \text{ light-medium industrial net acres/capita} \\ \hline 1,260 \text{ net acres of demand} \end{array}$$

That net figure converted to gross acres (20 percent public right-of-way factor) and translated to total demand acreage by accounting for land held for future expansion at any point in time (25 percent factor) results in a total demand figure of 1,890 acres.

These two methodologies result in a reasonable range of demand for light-medium industrial land of 1,095 to 1,890 acres.

This range appears reasonable based on findings on actual metropolitan industrial development in 1977 and 1978. The average net industrial development acreage was 32. In industrial subdivisions platted during those two years, about 20 percent of the gross land area was devoted to public right-of-ways. The 32 net acres of actual annual development represents about 38.5 gross acres. In January 1980, about 25 percent of the tax lots with a light-medium type industrial use on them were undeveloped. It is reasonable to expect that:

- (1) those undeveloped portions of tax lots will be developed ultimately, and
- (2) as new industrial development takes place on whole tax lots, an average of 25 percent of the tax lot will be reserved for future expansion.

When the assumption that gross industrial acres should include this 25 percent factor is applied to actual 1977 and 1978 average development, the results show an annual consumption rate of about 48 acres. Over the 23-year planning period (1977-2000), about 1,105 total gross acres would be devoted to industrial use or held for future expansion based on 1977 and 1978 experience. That figure falls within the identified range.

Efforts to stimulate and diversify the local economy could result in an accelerated rate of consumption. Continued monitoring of industrial development will allow Eugene, Springfield, and Lane County to gain further understanding of industrial development processes.

b. Dwelling units

The methodology for converting dwelling unit projections into demand for additional residential land (1977-2000) involves three steps:

- (1) determine the percent of each projected structure type (refer to Table 1) assumed to be built within each of the three residential Plan designations (low, medium, and high density)
- (2) determine the average density for each structure type assumed to be constructed within each of the three residential Plan designations
- (3) calculate the demand acres for each of the three designations

The results from the application of the above three steps are summarized in Table 3. The tables representing each of the above steps are contained in Appendix B.

For more details on the methodology for calculating land use needs, refer to the working paper, "Residential, Commercial, Industrial and Public Facility Land Use Needs (Demand);" Plan Diagram Update Alternatives Technical Report (Chapter III, "Methodology"), and "Economy - Addendum" working paper, L-COG, October 1981.

TABLE 3

-METROPOLITAN AREA-

PROJECTED GROSS ACRE DEMAND FOR NEW RESIDENTIAL
CONSTRUCTION (1977-2000) AMONG PLAN DENSITY CATEGORIES

<u>Structure Type</u>	<u>ACRES</u>			<u>Total</u>
	<u>Low Density</u>	<u>Medium Density</u>	<u>High Density</u>	
Single-family	5,596	295	0	5,891
Mobile home	745	0	0	745
Duplex	715	53	0	768
Multiple-family	<u>1,199</u>	<u>599</u>	<u>192</u>	<u>1,990</u>
TOTAL	8,255	947	192	9,394

The major determination in the methodology is the density assumed for each structure type. The following table compares the update assumptions with 1976 density by structure type within the various residential Plan diagram categories.

The major shift indicated in Table 4 is the assumption for single-family units in low density areas. Recent trends in single-family subdivisions (1977 through early 1979) indicate lot sizes which would result in densities of at least 4.2 units per acre in Eugene and at least 4.4 units per acre in Springfield. The assumed density of 4.55 family units per gross acre (Table 4) for new construction implies an average lot size of approximately 6,700 square feet.

TABLE 4

-METROPOLITAN AREA-

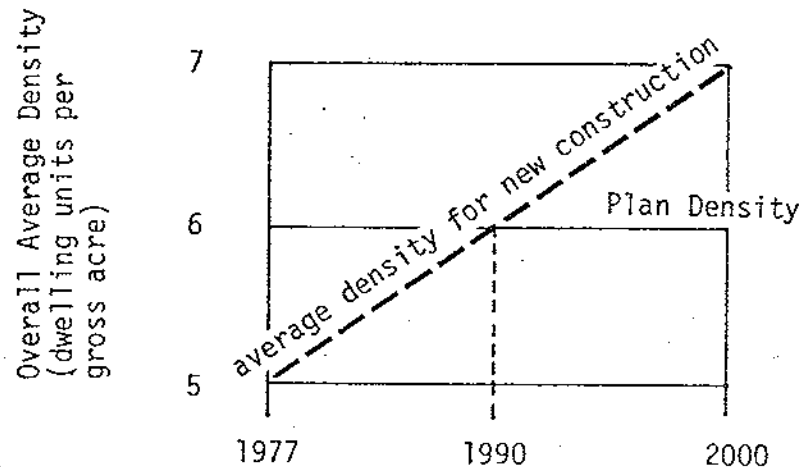
DRAFT GROSS DENSITY ASSUMPTIONS -
COMPARISON WITH EXISTING GROSS DENSITIES

<u>Structure Type</u>	<u>Plan Residential Designation</u>	<u>1976 Existing Density</u>	<u>Assumed Density for New Construction</u>
Single-family	Low density	2.8	4.55
Single-family	Medium density	4.2	4.55
Mobile home	Low density	4.9	4.90
Duplex	Low density	7.0	7.00
Duplex	Medium density	8.4	8.40
Multiple-family	Low density	7.7	7.00
Multiple-family	Medium density	14.0	14.00
Multiple-family	High density	<u>27.3</u>	<u>25.00</u>
Overall density		3.6	5.80

The major factor affecting the higher density focus for new construction (an overall density of about six units per acre for all structure types) is the projected continuation of the shift toward more multiple-family construction over the planning period. It is likely that attainment of that level will occur over a period of time as depicted in the graph below. During the early portion of the planning period, average densities for new construction may be below the assumed Plan density level and average densities in the latter parts of the planning period may be higher than that level. In any event, monitoring of the Plan and new development will allow local governments to assess progress in achieving higher residential densities.

FIGURE 2

INCREASED DENSITY FOR NEW RESIDENTIAL CONSTRUCTION



STEP 2 - SUPPLY

This step involves the inventory of the existing land uses, with particular attention to vacant private land. All allocations for the update focus on the previously agreed upon study area (the study area boundary is illustrated on Map No. 1 at the end of this report). The following two tables summarize the land supply data, as of January 1977, for the area within the urban growth boundary. The urban growth boundary is defined in the Plan in Chapter V, "Glossary." The rationale for the urban growth boundary is contained in the Plan in a section accompanying Auxiliary Map 3. A large-scale site-specific in urban growth boundary map is also on file at L-COG and the three local planning offices (addresses listed in the introduction section of this document).

Map No. 1, at the end of this report, depicts the 1977 existing land uses indicated in Table 5.

TABLE 5

EXISTING LAND USE (AS OF JANUARY 1977)
WITHIN THE ADOPTED 1982 URBAN GROWTH BOUNDARY

<u>Land Use Category</u>	<u>Subtotals</u>	<u>Total Acres</u>	<u>% of Subtotal</u>	<u>% of Total</u>
Residential	(12,951)		(26.9)	
single-family		11,128		23.1
mobile home		564		1.2
duplex		568		1.2
multiple-family		638		1.3
other (group quarters)		53		0.1
Industrial	(3,133)		(6.5)	
manufacturing		1,760		3.7
transportation, communi- cation, utilities		1,124		2.3
wholesale		249		0.5
Commercial	(3,155)		(6.6)	
retail trade		665		1.4
commercial services		1,663		3.5
recreation		827		1.7
Government	(2,052)		(4.3)	
public facilities		517		1.1
education		1,000		2.1
parks		535		1.1
roads and parking	(6,829)	6,829	(14.2)	14.2
water	(705)	705	(1.5)	1.5
unknown	(12)	12	(0.0)	0.0
Undeveloped Land (Vacant, Agricultural or Timber Use)	(19,314)		(40.1)	
Private		17,999		37.4
Public		<u>1,315</u>		<u>2.7</u>
TOTAL	(48,151)	48,151*	(100.1)	100.1

* This 48,151 figure is the sum of all the land use parcels whose centers fall within the urban growth boundary. That sum compares closely with the actual area within the urban growth boundary (48,411 acres) which is derived from a more accurate boundary description.

Not all of the 17,999 private vacant and agricultural acres (about 37 percent of the total area) were assumed to be available for development. Modification and closer analysis of the vacant land supply within the draft urban growth boundary includes consideration of:

1. the effect of natural physical factors upon the supply
2. to what extent recent land use changes affected the supply
3. other factors affecting the buildable lands inventory

The results of that analysis are summarized in Table 6. Some of the physical considerations are depicted on Map No. 3 at the end of this report, and more detailed tabulations of buildable land inventory are contained in Appendix C.

TABLE 6
BUILDABLE LANDS INVENTORY - SUMMARY

	<u>Acres</u>
Total Undeveloped Land	+19,314
Public undeveloped lands	-1,315
Physical limitations to development	-1,600
Small lots (less than 0.13 acres)	-80
Adjustments to existing land use classifications	-977
Miscellaneous - not assigned to a polygon	-11
	<u>-3,983</u>
	<hr/>
Buildable land inventory	+15,331
Allocations of urban uses	<u>-15,280</u>
Difference	+51

The remaining 51 acres are unaccounted for in the methodology but can be largely attributed to rounding of fractions of acres during the allocation process. This 51-acre total represents about 1/10 percent (0.1 percent) of the total 48,411 acres within the urban growth boundary.

Before allocation of new land uses was made, the area considered was further analyzed on the basis of ability to provide urban facilities and services (especially sanitary sewers, water, electricity, and transportation -- those services most directly linked to land use decisions); solar exposure (north vs. south slopes); housing costs (slopes vs. flatlands); ability to fit into a phasing program; physical factors (slopes, sand and gravel deposits, floodway, wetlands, significant vegetation and wildlife areas); proximity to airport noise, obstruction, and safety zones; agricultural productivity rating

(including considerations of compatibility of farming with nearby adjacent urban uses); and possible effects on satellite communities.

The result of this evaluation was identification of broad areas which were preliminarily removed from consideration for allocation of urban uses. From this process a tentative partial urban growth boundary was defined. This tentative boundary (shown on Map No. 2) did not circle the entire area. It was used to identify constraints to logical or possible urban expansion prior to matching the projected demands to the vacant land supply. Comparison of the draft urban growth boundary and various physical factors shown on Maps No. 3 and 4 at the end of this report will also provide understanding of the rationale behind location of the urban growth boundary.

STEP 3 - ALLOCATIONS

This step involved matching demand to the available land supply within the study area while balancing applicable local and statewide goals. A more detailed discussion of the methodology is contained in the Plan Diagram Update Alternatives Technical Report, Chapter III, "Methodology," L-COG, January 1979. Some of the major allocation assumptions were:

1. Compact urban growth can be better accomplished at densities higher than currently exist.
2. With the exception of downtown Eugene, the majority of new uses will be located on vacant land through in-filling and expansion onto urbanizable lands. Major redevelopment was not assumed with the exception of downtown Eugene.
3. Metropolitan land use demand (residential, commercial, industrial) will be met within the urban growth boundary.
4. In new residential areas, an average of 30 percent of new land use allocations will be in public and semi-public uses (e.g., roads and streets, neighborhood parks and schools, neighborhood commercial enterprises, and utilities and other public facilities).

In new industrial areas, an average of 25 percent of the total land area will be devoted to public right-of-way.

5. The allocation process will include a realistic attempt to match demand with vacant land in order to avoid miscalculating and unnecessarily constraining the availability of land for future development and to also avoid grossly overestimating land use needs.
6. Land uses will be distributed to allow Eugene and Springfield to share the burden of providing services to new urban development and to share in the revenue derived from new construction (see Table 11).

7. The allocation process will reflect the philosophy of urban growth and the urban growth boundary as embodied in the Plan (Chapter II).
 - a. Urban levels of development require the minimum level of key public services.
 - b. Sequential development will take place moving outward in logical, contiguous phases from the current urban service area.
 - c. In-filling on vacant lands within the current urban service area will be encouraged.
 - d. Annexation of new land will take place in a logical manner and will maintain a six to ten year supply of residential land at any point in time to protect choice in the market place and to help minimize restrictions on housing construction.

The cities will pursue an aggressive annexation program to add to inventories of industrial land.

- e. The Plan will be monitored to assess development trends for all categories of commercial, residential, and industrial land. The effects of development on the buildable land inventory will also be monitored.
- f. The Plan (and urban growth boundary) will be reevaluated every five years to meet new projections and policy direction.
- g. The Plan can be amended to reflect changing conditions or new policy direction.

All of these points were reflected in the allocation process which assumed phasing of development between the base point (1977) and the next update to ensure an adequate land supply to meet metropolitan land use needs.

The following is a brief outline of the allocation process:

1. Existing land use (January 1, 1977) in generalized map form was the basic framework to which new uses were allocated (see Map 1 at the end of this report).
2. Recent (1977-1979) subdivision activity and major land use changes were manually accounted for on the map of vacant land (refer to the buildable lands inventory).
3. The effect of prohibitions and limitations on the vacant land supply was accounted for using overlays (see Map 3 at the end of this report and the "Natural Assets and Constraints" working papers). Several key environmental resource areas were designated on the diagram as "natural resource," "sand and gravel," "agriculture," and "forest land." Examples of "significant vegetation and wildlife areas" identified in the working papers which are designated all or in part as either "natural resource" or "park and open space" are:

Oak Hill, Willow Creek, Bertelsen Slough, Goodpasture Island Ponds, and portions of the Willamette River Greenway.

4. A tentative partial urban growth boundary was transferred to the allocation map (see Map No. 2).
5. Allocations were made to the remaining buildable lands until the demand was met. Future land uses were allocated in the following order:
 - a. Heavy industrial
 - b. Special light industrial
 - c. Light-medium industrial
 - d. Commercial
 - e. High density residential
 - f. Medium density residential
 - g. Low density residential
 - h. Special heavy industrial
6. Once the projected demand was accounted for, the proposed urban growth boundary was drawn. (See Chapter VI of this report for more detail.)
7. Uses outside the urban growth boundary were designated.

Allocation of land uses was made to geographic subregions in the following priority order:

1. Allocate to vacant parcels within the existing cities.
2. Allocate to vacant parcels within the unincorporated islands surrounded by Eugene and Springfield.
3. Allocate to vacant parcels within the developed portions of unincorporated areas (e.g., River Road, Santa Clara, North Springfield, Douglas Gardens).
4. Allocate to outlying areas which appear most appropriate for urban development (Analysis Zones 015, 016, 018, 019, 029, and portions of 027, 002, 014, 028, 030 and 031 -- see Map No. 7, for analysis zone numbers.)
5. Continue to allocate outwardly to other analysis zones until the demand is met. (That expansion included all or portions of Zones 005, 008, 009, 010, 011, 012, 013, 014, 023, 030, 031, 035 and 036.) During this phase, additional areas considered included all or portions of certain zones (004, 009, 021 and 028).

6. Based on LCDC requirements, the urban growth boundary was reduced to exclude low density residential allocations which were in excess of projected demand. These deletions were required in the Willow Creek Basin (Analysis Zones 012, 013, 014, and 035) and East Thurston (Analysis Zones 030 and 031). Those latter areas deleted are within logical future (beyond the year 2000) urban service delivery areas and are designed "urban reserve" on the Plan diagram.

Other Plan diagram amendments are denoted in the 1982 Amendments to the August 1980 Metropolitan Area General Plan, L-COG, February-March 1982 (\$1.00).

The criteria used for allocating the various broad land use categories are noted in the following section:

ALLOCATION CRITERIA FOR MAJOR LAND USES

1. Heavy Industry

Allocate uses when vacant land is zoned M-3 and owned or adjacent to an existing heavy industrial use to meet Plan goals which promote expansion of existing businesses. Areas no more than twice the size of the existing site were so designated.

2. Special Light Industrial

- a. Large scale -- in excess of 50 acres
- b. Five or fewer ownerships
- c. Good access to transportation facilities, especially highways
- d. Buffered from detracting surrounding urban uses
- e. Campus-like atmosphere
- f. A number of sites were allocated within the urban growth boundary since anticipated industries in this category would add to the diversification of the local economy

3. Light-Medium Industry

- a. Transportation access (rail and/or highway)
- b. Existing adjacent land uses
- c. Existing zoning
- d. Existing 1990 Plan designation

4. Special Heavy Industry

- a. Good transportation access - rail and highway

- b. Large contiguous areas - a minimum of 50 acres with a variety of parcel sizes
- c. Existing zoning and Plan designations
- d. Compatibility with existing and planned uses
- e. Flat (0-5 percent slope)
- f. Resulting commuting patterns
- g. Long-term ability to extend urban services

5. Commercial

- a. It was assumed that 1 percent of residentially allocated acres would be devoted to neighborhood commercial development in response to Plan goals and policies related to economy, energy, transportation, and environmental design by promoting mixed use in residential areas. That assumption accounts for about 110 acres of the commercial demand.
- b. Criteria used in allocating community commercial and major retail commercial land use needs:
 - (1) allocate to existing commercial developments considering existing zoning and existing Plan designation
 - (2) allocate to new commercial centers of five acres or more (areas designated community commercial on the diagram) considering:
 - (a) transportation access
 - (b) nodal concepts, including easy access to identified transit stations and possible new transit stations
 - (c) proximity to concentrations of housing
 - (d) emphasis on allocating within the Cities in order to provide locational choice for commercial development early in the planning period
 - (3) allocate 10 acres of community commercial for each of the seven special light industrial sites in response to policies promoting office-based commercial development in special light industrial designated areas (total about 70 acres).

6. Residential High Density (over 20 units per gross acre)

a. Proximity to downtown Eugene and Springfield. Allocate as close to those centers as possible, then allocate outwardly, considering:

- (1) impact on adjacent land uses
- (2) access to street network and transit system (existing and planned transit stations and major routes)
- (3) proximity to places of employment and shopping, both existing and future
- (4) whenever possible, high density should not be located on the outer fringes of the developed area
- (5) since little vacant land exists in areas most logical for high density development, it was assumed that 2,400 multiple-family units would be constructed within a one mile radius of downtown Eugene through in-filling and some redevelopment

7. Residential Medium Density (10-20 units per gross acre)

a. Proximity to downtown Eugene and Springfield; allocate as close to those centers as possible, then allocate outwardly considering:

- (1) impact on adjacent land uses
- (2) access to street network and transit system (existing and planned transit stations and major routes)
- (3) proximity to places of existing and future employment and shopping
- (4) whenever possible, medium density uses should not be located on the outer fringes of the developing area
- (5) since little vacant land exists in areas most logical for high density development, it was assumed that 2,400 multiple-family units would be constructed within a one mile radius of downtown Eugene through in-filling and some redevelopment

8. Residential Low Density (1-10 units per gross acre)

For low density, demand was allocated on the basis of dwelling units rather than gross acres so that allocations to existing vacant small lots (in-fill) could be accounted for. Allocations to hillside areas of 20-45 percent slope were made at an assumed density of 3.5 dwelling units per acre.

SUMMARY OF THE ALLOCATION PROCESS AND RATIONALE FOR THE ALLOCATIONS

Heavy Industry

There were about 320 acres allocated for heavy industrial use on vacant lands zoned M-3 under the same ownership as an adjacent heavy industrial use, to allow for future expansion. It is not anticipated that these 295 acres will all be developed by 2000, but they do deserve protection for the long-range future to provide opportunities for expansion of existing operations and protect substantial capital investments. (Refer to finding #10 and policy #7, Plan, Chapter III-B, "Economic Element.")

Of the 320 acres, about 225 acres were located within either the city limits of Eugene or Springfield with the minimum level of key urban services available. The bulk of the unincorporated allocations (about 100 acres) were in the Highway 99 corridor northwest of Eugene.

Wegerheuser's property in Springfield was treated as a special case. Land surrounding Weyerheuser's current operations is being held for either future expansion or for buffering from noncompatible surrounding uses. Some of that land is vacant and some is classified as an existing use (log ponds or storage). These areas are included in the 977 acres shown in Table 6, "Buildable Lands Inventory."

Special Light Industry

During the process at least 29 potential sites meeting some of the criteria for special light industrial use were examined. (Refer to the "Economy - Addendum" working paper, L-COG, October 1981 for more details.) In order to provide opportunities for diversifying the local economy by attracting new industry to the metropolitan area, 7 sites (totaling 890 acres) which met the locational criteria, were designated on the Plan diagram. These sites were allocated for a special type of industrial use. It is not anticipated that all of these sites will be developed during the next 20 years, but their unique characteristics deserve protection for the long-term beyond the year 2000.

The following assumptions were made for the 890 gross acres allocated in this category:

Public right-of-way (20 percent of gross)	=	180 acres
Devoted to commercial use (10 acres per site)	=	70 acres
Buffering/landscaping (20 percent of gross)	=	180 acres
Net industrial use acreage	=	<u>460 acres</u>

TOTAL 890 acres

One of these sites is located within the Springfield city limits (Pierce) and three are located within Eugene's city limits (Cone-Breeden, West Park, Spectra-Physics). A total of about 405 gross acres are currently served with city services. The North Gateway site is outside and adjacent to the Springfield city limits. Both the West Terry and the South 11th sites are outside and adjacent to Eugene's city limits. In all three instances, the cities have plans to extend capital improvements to the sites to serve the approximately 485 gross acres of unincorporated land.

Both cities can annex these properties and allow development, using interim service devices under Plan policy. Because capital improvements are planned, ultimate services will be extended and "hook-up" to city services would take place. It was assumed that at least five acres in each of the eight sites would be used for office-based community commercial development. This mixed use concept reflects Plan goals and policies related to energy and transportation.

It was assumed that ten acres in each of the seven sites would be used for office-based community commercial development. This mixed use concept reflects Plan goals and policies related to energy and transportation.

Light-Medium Industry

In preparing the Plan, allocations of light-medium industry were made on the basis of locational criteria (zoning, transportation access, adjacent existing, or future uses). The result was about 1,890 acres of light-medium industrial use allocated. Many of these designated lands are already precommitted for industrial use or are best suited for industrial use in the long-term. The allocated acreage falls within the calculated demand range of 1,095 to 1,890 total gross acres.

Of the 1,890 total acres, about 710 were located within the City of Eugene and about 210 were located within the City of Springfield (920 acres total or about 49 percent of the total).

The unincorporated lands were located in several locations: Natron (about 160 acres), West Eugene (about 450 acres), Glenwood (about 80 acres), and Highway 99 corridor (about 280 acres).

Once the jurisdictional study of Glenwood is completed and a decision is reached about which city will serve that unincorporated area, capital improvement programming and service extension can begin. Springfield has

developed plans for extending services to the Natron area. Eugene is extending services to the unincorporated industrial lands in West Eugene.

Medium Density Residential

The best opportunity for meeting community goals regarding:

1. Energy,
2. Non-Automobile Transportation,
3. Air Quality,
4. Housing Opportunity,
5. Compact Urban Growth, and
6. Mixed Use (balanced land use)

appears to lie in medium density opportunities and in more efficient use of low density lands.

When combined, medium density (10-20 units per acre) and commercial uses provide even greater opportunities for achieving the metropolitan goals cited above. As a result, consideration was given to allocating medium density to all sites which met the locational criteria for medium density.

When considering the most appropriate locations for allocating medium density residential uses based on transportation criteria (especially transit and arterial street systems), it was found many of the prime locations were already developed and few large parcels of vacant land existed for medium density use. This was particularly true for downtown Eugene and Springfield but was also true for other locations such as the Gilbert Shopping Center and 18th and Chambers. Since major redevelopment was not projected to occur, it became apparent that remaining appropriate sites which best met medium density locational criteria should be designated for medium density use, even though they may not be needed by the year 2000. As a result, about 1,380 acres were allocated for medium density use.

Many of the medium density designations occur in concentrations at intersections of the existing or planned major street and highway network and along major arterials. Most of these designations are integrated with community commercial development. For more details on medium density residential assumptions for "floating nodes," refer to Appendix H.

Commercial

New commercial development was allocated to both existing commercial areas and to new development centers, usually in conjunction with high or medium density residential use.

About 35 acres were allocated for major retail use in the Mohawk Shopping area; about 30 acres were allocated in the Valley River major retail center; and about 25 acres of commercial development were assumed for downtown Eugene.

In total, about 100 acres of commercial demand were assumed for major retail center use.

It was assumed that approximately 1 acre of neighborhood commercial use would occur within each 100 acres of residential designation (a total of about 110 acres of neighborhood commercial).

It was assumed that ten acres of office-based commercial use would occur in each of the 7 special light industrial sites (70 acres total).

The remaining 520 acres of commercial use were allocated to community commercial designated areas for a total of about 800 acres of commercial allocation. For more details on commercial assumptions for "floating nodes," refer to Appendix H.

It is anticipated that some of the new commercial development will be accommodated through redevelopment and intensification of commercial use in existing commercial areas. This should be particularly true in the two downtown areas, but will also apply to other currently occupied commercial concentrations.

No new major retail centers were designated. Major retail development was encouraged through expansion of Valley River Center and the Mohawk Shopping Center (including the old Springfield Airport site) and through redevelopment in downtown Eugene. Moderate-sized commercial centers area were allowed in areas of larger community commercial designation.

High Density Residential

The 230 acres of high density residential designated land closely approximates the 192 acres of demand. The problems associated with allocating demand to quality locations which met locational criteria were greater than problems with medium density allocations. Not only were sites limited but compatability with surrounding existing residential developments was a problem.

It was assumed 2,400 multiple-family dwelling units would be constructed within 1 mile of downtown Eugene through in-filling and redevelopment. This redevelopment assumption was the major exception to the general allocation assumption regarding redevelopment. The 2,400 units may occur through a variety of techniques, and it should not be assumed that they will all occur in high rise structures. They may occur at densities less than medium or high (i.e., less than ten dwelling units per acre). For the 23-year planning period, this assumption would result in an average of about 105 units annually, which is approximately the annual rate of development which occurred between 1976 and 1979.

Low Density Residential

The calculated low density residential demand was 8,255 gross acres or 42,505 dwelling units based on an overall density assumption of 5.15 dwelling units per gross acre. For more details, review the housing demand methodology in Appendix B. The demand methodology did not account for the constraints of

the land supply -- the effects of slopes on density assumptions and of existing small lots on density assumptions.

Low density residential demand was the last use to be allocated. Remaining buildable lands not already allocated for other urban uses were designated for this use.

The methodology accounts for acreages, but allocations continued until the total dwelling unit demand was met. This flexibility allowed the density constraints referred to above to be accommodated.

The results of the low density residential allocation process are summarized:

6,575 "flatland" acres @ 5.15 d.u./ac.	=	33,860 d.u.
2,875 sloped acres @ 3.50 d.u./ac.	=	10,065 d.u.
Units allocated to existing small lots	=	<u>540 d.u.</u>
TOTAL		44,465 d.u.

Overall Residential Allocations

The overall result of the residential assumptions and allocations for all three land use categories is an allocation of about 67,605 dwelling units compared to a projected demand of 59,985 units (7,620 units in excess of demand).

The projected dwelling unit demand and dwelling unit allocations by residential category are outlined below:

TABLE 7

COMPARISON OF RESIDENTIAL DWELLING UNIT DEMAND AND ALLOCATIONS

	<u>Demand</u>	<u>Allocations</u>	<u>Difference</u>
Low Density	42,505	44,465	1,960
Medium Density	10,285	14,990	4,705
High Density	<u>4,795</u>	<u>5,750</u>	<u>955</u>
SUBTOTAL	57,585	65,205	7,620
	<u>2,400</u>	<u>2,400</u>	<u>0</u>
TOTAL	59,985	67,605	7,620

* Multiple-family units assumed within one mile of downtown Eugene.

The allocations of medium density and high density residential lands were done to meet three general criteria:

1. Demand
2. Address locational factors
3. Address Plan concepts regarding balanced land use and development nodes

It is recognized that not all of the allocated acres are likely to be built upon by the year 2000, but future developments in the longer term, beyond 2000, will benefit by the decision to allocate these uses based on locational factors and sound planning concepts.

The low density allocation progressed until the demand dwelling unit figure was approximated. The final urban growth boundary was determined based on consideration of land use needs and orderly, economic provision of urban services. For example, the urban growth boundary in the Willow Creek Basin follows tax lot boundaries which approximate the 500-foot contour; that contour represents a cutoff level for one tier of water service.

The approximately 1,960 units in excess of demand in the low density category would house about 4,570 people at 2.33 persons per household. That population represents about 1.5 percent of the projected metropolitan total of 293,700. At 5.15 units per gross acre, those 1,960 units represent 380 acres -- less than 1 percent of the total urban growth boundary area of 48,411 acres.

The residential allocations in excess of demand are reasonable when weighed against locational factors, nodal development concepts, orderly and economic provision of urban services, relative impact on overall projections and land area.

SUMMARY OF ALLOCATION STEPS

Results of the allocation process are summarized in the following table:

TABLE 8
RESULTS OF ALLOCATION PROCESS - NEW DEVELOPMENT
WITHIN THE URBAN GROWTH BOUNDARY

	<u>Gross Acres</u>	<u>Dwelling Units</u>	<u>Gross Density</u>
Heavy Industry	320	-	-
Light-Medium Industry	1,890	-	-
Special Light Industry	890	-	-
Special Heavy Industry	390	-	-
Commercial	730*	-	-
Low Density Residential	9,450	44,265	4.68
Medium Density Residential	1,380	14,990	10.86
High Density Residential	<u>230</u>	<u>5,750</u>	<u>25.00</u>
TOTAL	15,280	65,205**	6.11***

* 70 acres of the 800-acre commercial allocation is included in the "special light industrial" allocation.

** An additional 2,400 multiple-family units were assumed near downtown Eugene ($65,205 + 2,400 = 67,605$ total dwelling units).

*** $67,605$ dwelling units divided by $11,060$ gross acres = 6.11 d.u./gross acres density.

REVIEW AND SUMMARY RESULTS OF ALLOCATION STEPS

The five basic steps in the allocation process are outlined in this report. The following description, tables, and map provide a summary of those steps and considerations given to geographic subareas. Land Conservation and Development Commission Goal #14 "Urbanization" requires consideration of the following 7 factors when establishing an urban growth boundary:

1. Demonstrated need to accommodate long-range urban population growth requirements consistent with LCDC goals
2. Need for housing, employment opportunities, and livability
3. Orderly and economic provision for public facilities and services
4. Maximum efficiency of land uses within and on the fringe of the existing urban area
5. Environmental, energy, economic, and social consequences

6. Retention of agricultural land as defined, with Class I being the highest priority for retention and Class VI the lowest priority
7. Compatibility of the proposed urban uses with nearby agricultural activities

Steps 1 and 2

Allocate to vacant lands in the two cities and unincorporated islands surrounded by the cities. (Note: Some of these islands have been annexed since 1977). These areas already have the minimum level of key urban services or are logical areas for future annexation to provide orderly and efficient urban growth.

Step 3

Allocate to vacant lands in unincorporated developed areas (River Road; Santa Clara, including a portion of Zone 004; North Springfield; Douglas Gardens; Glenwood; and the industrial area in Zone D09). Because these areas already have many services available and in-filling could be permitted at the assumed urban densities when the minimum level of key urban services, including public sewers, are available. These areas were considered as the third logical step in the allocation process.

Step 4

Allocate to vacant lands in undeveloped unincorporated areas. First allocations were to zones which appeared to be of obvious urbanizable potential based on environmental considerations and potential provision of public facilities and services. Many of these zones are part of logical drainage areas which have been planned for urban development since adoption of the 1990 Plan: Zones 015, 016, 018, 019, (Eugene's South Hills); Zone 022 (Upper Laurel Hill Valley); portions of Zones 027, 028, 029, and 030 (areas south of Springfield, either on the north side of the drainage formed by Springfield's South Hills or land lying outside the flood plain [one exception to the flood plain criteria was a portion of the special light industrial site on South 28th Street]); a portion of Zone 031 (outside the flood plain in North Springfield); and a portion of Zone 014 (along West 11th Avenue in West Eugene). Zone 002 (North Willakenzie outside the flood plain and the known areas of sand and gravel deposits) was also included in this step due to its previous inclusion in the 1990 Plan and the public services already existing or planned for the area (schools, sanitary and storm sewers, water, electricity, fire station).

A cumulative total of allocations for all categories of land use were kept throughout this process. For each zone, development prohibitions (e.g., wetland acres, steep slopes) and density limitations (moderate slopes, small lots) were accounted for. Before progressing to Step 5, it was useful to review the allocations made through Step 4.

Those allocations (Steps 1-4) are contained in Table 9.

After completing Step 4, about 65 acres of commercial and about 6,200 low density dwelling units remained to be allocated to meet the projected demand.

The bulk of the land needed at the end of Step 4 was for low density residential use.

Step 5

Possible areas considered for inclusion within the urban growth boundary were all or portions of Zones 004, 009, 010, 011, 012, 013, 014, 021, 028, 030, 031, 034, 035, and 036 (cross-hatched on the Map No. 5 and listed on Table 10) . Note that most of the options remained in West and Southwest Eugene and only two possible areas remained in Springfield (Zones 030 and 031 in East Thurston and Zone 036 in the Natron-Mt. June area). There were more possible options for Eugene's expansion than for Springfield's expansion. Springfield's natural boundaries limited the options available within the update study area (which did not include the Mohawk Valley).

Table 10 summarizes some of the information used to determine which of the remaining zones, or portions thereof, to add to the urban growth boundary. Some assumptions were made about possible land use designations in those zones for suitable non-residential uses, based on locational factors and to account for prohibitions to development and density limiting factors. Detailed cost estimates were available for electric and water services. Subjective judgment was used regarding difficulty of providing sanitary sewer service.

Of the above areas, two were eliminated from further consideration -- Zone 004, due to agricultural capability and uncertainty about sanitary sewers and Zone 028, due to agricultural capability, problems with providing gravity services, and possible flood problems.

Except for some light-medium industrial designation west of Highway 99, land in Zone 009 was not included within the urban growth boundary due to concerns over airport noise, encroachment of urban growth toward the airport, and agricultural soils. Zone 021 (the Russel Creek Drainage Basin -- also known as the L.C.C. Basin) was not included due to relatively high costs of providing electrical and water service. Because of delays in completing the East Bank interceptor, it was felt that sanitary sewers would not be available to the Russel Creek drainage basin prior to 1985. Because Eugene was progressing in design of the West Eugene sanitary sewer system, the West Eugene sector (010, 011, 012, 013, 014 and 035) appeared to fit into a more realistic time frame for development than Zone 021.

A natural drainage basin defines the western and southern boundary of Zones 035, 012, 013, and 014. This general area is known as the Willow Creek Basin. Since a ridgeline forms the urban growth boundary for this area, provision of gravity system public services such as water and storm and sanitary sewers can be planned for the basin on a logical long-term basis.

TABLE 9

ALLOCATION (STEPS 1-4) COMPARED TO DEMAND
(Also see Allocation Map)

	Heavy Industry	Lt.-Medium Industry	Acres			High Density Res.	Medium Density Res.	Dwelling Units	
			Lt. Industry	Special Lt. Industry	Comm.			Low Density Res.	
DEMAND	0	700	0	0	780	192	947	42,505	
<u>ALLOCATIONS</u>									
Steps 1 & 2 Cities + Islands	204	854		363	487	141	917	18,985	
Step 3 Unincorp. Developed	80	121		262	62	10	282	6,639	
Step 4	<u>3</u>	<u>0</u>		<u>230</u>	<u>68</u>	<u>73</u>	<u>195</u>	<u>10,685</u>	
SUBTOTAL	287	975		855	617	224	1,394	36,309	
					<u>98*</u>				
					<u>715</u>				
REMAINDER**	0	0	0	0	65	0	0	6,196	

* Neighborhood Commercial (Steps 1-4)

** Remainder - Subtotal subtracted from Demand

AREAS CONSIDERED IN STEP 5 OF THE ALLOCATION PROCESS

Analysis Zone	Serviceable Private Area (AC)	Acres Assumed for Other Uses	Acres Assumed for Low Density	Low Density Dwelling Units ²	% Agricultural Soil Class					COMMENTS
					I	II	III	IV	V+	
004*	461	0	461	2374	91	8	0	0	0	excellent agricultural productivity/sanitary sewer service uncertain
por 009	350	40	310	1597	24	49	0	27	0	serviceable, but close to airport and fairly good agricultural soils
010	799	64	735	3785	0	30	1	69	0	moderate to poor ag. soils, services can be provided
011	521	372	149	767	0	1	0	99	0	marginal ag. productivity, poor drainage, services can be provided
012	752	15	737	2864	0	8	31	40	22	ag. soils not highly productive; new electrical substation required; water service to higher elevations require substantial capital improvements
013	351	0	351	1351	0	9	30	60	1	
014*	1673	99	1574	6311	0	7	34	26	32	ag. soils not highly productive, can be served fairly easily, but water to higher elevations requires substantial capital improvements
021	1172	211	961	4047	0	13	4	17	52	electricity and water relatively expensive, sanitary sewers would require expensive extension southward from Springfield Plant site
por 028	238	0	238	1226	0	42	3	17	28	mostly Class II ag. soils [new floodway data indicates problems]; gravity public services difficult
por 030*	250	0	250	875	0	2	1	28	64	problem with lineal extension of services. Easternmost point is about 10 miles from I-5.
por 031*	60	0	60	309	6	38	2	26	26	
por 034	227	15	212	1092			x	x		possible future problem with airport noise for residential uses
por 035	137	88	49	252			x	x		problem with electrical service
por 036	544	246	298	1408			x	x	x	problem with service extension; desirability partly depends on highway improvement

- * = part of the zone included in previous steps
 por. = only portion of the entire analysis zone considered for inclusion in UGB
 1 = some assumptions about land use patterns were made to facilitate analysis. They were not intended to serve as a draft land use proposal for the above areas
 2 = a potential total of more than 28,000 low density units could be accommodated in all areas being considered.
 x = soil analysis for these zones was conducted manually rather than by computer analysis. The major soil types by visual inspection are indicated.

In Springfield, Zone 036 was chosen for inclusion due to the status of the proposed improvement of the Jasper connector and the potential for providing more industrial land to Springfield. Portions of Zones 030 and 031 were also added based on drainage patterns and natural features which define logical areas for planning public services.

In addition to industrial lands along Highway 99, the urban growth boundary was drawn to include an area of existing and vacant industrial lands along Airport Road in Zone 008. This area contains about 175 acres of vacant land (about 25 acres of vacant land was included west of Highway 99 in analysis of Zone 009 for a total of about 200 acres of light-medium industrial designation in this vicinity).

The urban growth boundary was developed to also include the area between Awbrey Lane and Enid Station Road and Highway 99 and the Southern Pacific Railroad (Analysis Zone 005).

The result of the allocations within the urban growth boundary is summarized in Table 8.

Step 6

In 1981, the 1980 Metropolitan Plan was reviewed by LCDC. LCDC concluded the urban growth boundary was too large and that the allocation of low density residential lands should be reduced, specifically in the Willow Creek and East Thurston areas. Table 11 compares the 1980 allocations with those of the 1982 amended Plan.

TABLE 11

COMPARISON OF ALLOCATIONS (ACRES AND DWELLING UNITS [d.u.])
BETWEEN THE 1980 AND 1982 METROPOLITAN PLANS

<u>Plan Designation</u>	<u>1980 Plan Allocations</u>	<u>1982 Plan Allocations</u>
Heavy Industry	295 ac.*	320 ac.
Light-Medium Industry	1,842 ac.	1,890 ac.
Special Light Industry	1,032 ac.	890 ac.
Agricultural Industry	326 ac.*	0 ac.
Special Heavy Industry	0 ac.	390 ac.
Commercial	657 ac.**	730 ac.**
Low Density Residential	12,190 ac.	9,450 ac.
Medium Density Residential	1,519 ac.	1,380 ac.
High Density Residential	<u>234 ac.</u>	<u>230 ac.</u>
RESIDENTIAL SUBTOTAL	13,943 ac.	11,060 ac.
Low Density Residential	55,989 d.u.	44,265 d.u.
Medium Density Residential	16,503 d.u.	14,990 d.u.
High Density Residential	<u>5,850 d.u.</u>	<u>5,750 d.u.</u>
RESIDENTIAL SUBTOTAL	78,342 d.u.***	65,205 d.u.***

* In the 1980 Plan, Eugene and Springfield designated 326 acres of "agriculture-related industrial" in the Enid/Awbrey area. In Lane County's version, that area was designated "heavy industrial" for a Lane County total of heavy industrial of $295 + 326 = 621$ acres.

** In the 1980 Plan, 140 additional acres of neighborhood commercial were included in the residential allocation. In the 1982 Plan, about 110 additional acres of neighborhood commercial were included in the residential allocation at a rate of 1 acre of neighborhood commercial per 100 acres of gross residential allocation.

*** In the 1980 and 1982 Plans, an additional 2,400 multiple-family dwelling units were assumed within 1 mile of downtown Eugene.

The most significant changes made to the low density residential allocations in the 1980 Plan were removal of portions of the Willow Creek (about 2,475 acres) and East Thurston (about 500 acres) from the urban growth boundary. Those areas were designated "urban reserve" in the 1982 Plan (see the discussion of "urban reserve" which follows).

Other significant changes reflected recommendations of the Industrial Study Task Force. All three jurisdictions agreed to designation of portions of the Enid/Awbrey and Natron areas as "special heavy industrial." They also amended the "special light industrial" sites from 8 (about 1,030 acres) to 7 (about 890 acres).

Urban Reserve

In its review of the August 1980 version of the Metropolitan Plan, the LCDC concluded too much low density residential land was included within the year 2000 urban growth boundary. LCDC directed that portions of the natural drainage basins in East Thurston (portions of Analysis Zones 030 and 031) and Willow Creek (all or portions of Analysis Zones 012, 013, 014 and 035) be removed from the urban growth boundary so the allocations and demand were in closer balance. Those areas removed from the urban growth boundary within the natural service area were directed to be designated "urban reserve" (defined in the Metropolitan Plan).

The following points summarize the understanding of the urban reserve concept outlined at the LCDC hearing on the Metropolitan Plan in June 1981:

1. Urban reserve is designated outside the urban growth boundary.
2. Urban reserve areas are designated to protect resource values (agriculture and forest).
3. Urban reserve contains provisions for protecting parcels for ultimate urban densities.
4. Urban reserve allows for planning, sizing, and funding of capital improvements to meet long-term urban needs beyond the urban growth boundary and year 2000.
5. Urban reserve allows for ultimate, long-term future urban use to be arranged through subordinate diagram or policies or through refinement planning which could address timing issues. This is necessary to provide land use information upon which capital improvements (design and location) can be determined within the urban growth boundary adjacent to "urban reserve" lands.
6. Urban reserve lands may be included within the UGB through future updates or Plan amendments to reflect new data or changing needs.
7. There is flexibility to establish the urban growth boundary in Willow Creek and East Thurston to reflect the year 2000 needs.

For a better understanding of the implications of the allocations without analysis on a small geographic area basis (Appendix D), the following table of

distribution by broad geographic region is provided. The 1980 percentage split in population between incorporated Eugene (about 104,000) and Springfield (about 40,000) is about 70-30 percent. The allocations between Eugene and Springfield do not unduly favor either jurisdiction in any category of major land use. Low density residential gross densities in Springfield are slightly higher than in Eugene due largely to the greater number of vacant hillside parcels (at 3.5 dwelling units per acre) in Eugene (thus, a lower density allocated).

TABLE 12
ALLOCATIONS (ACRES, DWELLING UNITS, DENSITIES) OF NEW DEVELOPMENT BY BROAD GEOGRAPHIC REGION

Plan Designation*	Eugene (%)	River Road/Santa Clara (%)	Springfield (%)	Glenwood (%)	Totals (%)
HI	203 (100)	0 (0)	144 (0)	0 (0)	347 (100)
SHI	299 (58)	0 (0)	86 (42)	0 (0)	385 (100)
LMI	1,360 (75)	92 (0)	345 (22)	91 (3)	1,888 (100)
SLI	640 (61)	0 (0)	250 (33)	0 (0)	890 (100)
CC	380 (61)	43 (7)	301 (32)	6 (0)	730 (100)
Non-Residential Subtotal	2,882 (70)	135 (3)	1,126 (76)	97 (1)	4,240 (100)
Acres					
HDR	159 (67)	0 (0)	71 (33)	0 (0)	230 (100)
MDR	825 (65)	136 (10)	420 (25)	0 (0)	1,381 (100)
LDR	5,456 (65)	971 (8)	3,051 (27)	0 (0)	9,442 (100)
Subtotal	6,440 (65)	1,107 (9)	3,506 (27)	0 (0)	11,053 (100)
Dwelling Units					
HDR	3,975 (67)	0 (0)	1,775 (33)	0 (0)	5,750 (100)
MDR	8,960 (65)	1,477 (10)	4,561 (25)	0 (0)	14,998 (100)
LDR	24,768 (63)	5,035 (9)	14,616 (26)	4 (0)	44,423 (100)
Subtotal	37,703 (65)	6,512 (8)	20,952 (27)	4 (0)	65,171** (100)
Density					
HDR	25.00	0.00	25.00	0	25.00
MDR	10.86	10.86	10.86	0	10.86
LDR	4.54	5.19	4.85	0	4.70
Average	5.85	5.88	5.97	0	5.90**

* For key to Plan designations, refer to Table D-1 in Appendix D.

** When the 2,400 multiple-family dwelling units in downtown Eugene are added, the overall d.u. = 67,571 and the overall density is 6.11 d.u./gross acre.

redo %s

FINDINGS RESULTING FROM THE ALLOCATION PROCESS

1. The vacant land supply in and near (within one mile of) downtown Eugene and Springfield to which new commercial or residential uses can be allocated, is extremely limited.
2. During the redevelopment necessary to accommodate the additional 2,400 dwelling units allocated to downtown Eugene, care will have to be taken to avoid possible conflicts in existing surrounding residential neighborhoods.
3. The vacant land supply in and near (within one-half mile) of most transit stations identified in the Transportation Plan is limited.
4. With the exception of West 11th Avenue in Eugene and Main Street in Springfield, limited opportunities exist for increasing residential densities on vacant land along major transit routes identified in the Transportation Plan.
5. Opportunities for locating high density residential uses are limited when all the criteria for locating high density development are compared with the vacant land supply.
6. The number of possible sites for locating large scale special light manufacturing developments within the metropolitan area are limited but not all eight sites will necessarily be converted to industrial use by the year 2000.
7. From a metropolitan-wide perspective, the most efficient areas of future expansion (when cost of extending many public services and natural constraints are taken into account) are to the west and southwest of Eugene.
8. Expansion to the west and southwest of the Eugene will require a commitment to provide better transportation access between those areas and other metropolitan locations, including downtown Eugene. For example, the 6th-7th arterial extension outlined in the 2000 Transportation Plan within the Eugene east-west corridor will be needed, along with other improvements, to serve the land uses allocated for the planning period.
9. Expansion southeast of Springfield will also require extension of public services and improved transportation facilities.
10. Many of the allocations of more intensive land uses (industrial and high and medium density residential) were based on locational criteria. If the methodology assumptions and projections hold true, not all of these lands will be developed by year 2000. However, due to locational factors, they should be protected for the designated use in order to achieve long-range metropolitan goals.

NOTE: It was not always possible to meet the criteria (e.g., some special light industrial sites contain more than five ownerships). A more detailed treatment of the allocation criteria is contained in Chapter III, "Methodology," in the Plan Diagram Update Alternatives Technical Report, L-COG, January 1979.

VI. LANL CONSERVATION AND DEVELOPMENT COMMISSION (LCDC) STATEWIDE GOALS AND THE URBAN GROWTH BOUNDARY

The preparation of a comprehensive plan requires a balancing of complex, competing, and sometimes contradictory points of view. Preparation of the Metropolitan Area General Plan was no exception to this balancing requirement.

The various LCDC adopted statewide goals or standards (adopted April 1977) must be considered during preparation of comprehensive plans by cities and counties. The Metropolitan Area General Plan is not a complete comprehensive plan; it is a general policy framework plan, and as such, provides the metropolitan-wide planning direction within which Eugene, Springfield, and Lane County conduct their comprehensive planning programs and products. In some instances, the local jurisdictions rely solely on the General Plan to meet certain LCDC goal requirements.

During preparation of the Plan, the LCDC goals were considered. Readers of the Plan will notice a similarity in the organization of Chapter III, "Specific Elements" and the LCDC Goals. The findings, goals, objectives, and policies of the Plan reflect not only statewide concerns but perhaps more importantly, local values and emphasis within the context of the statewide goals. The diagram, in turn, reflects a balancing of the goals, objectives, and policies of the Plan.

In this chapter, a brief description of how each of the applicable LCDC Goals was addressed is presented. Particular attention is directed to LCDC Goal #14, "Urbanization" and the 7 criteria which must be considered when establishing an urban growth boundary. Readers interested in one particular goal can use the matrix to find the appropriate section(s) of the Plan which addresses, either directly or indirectly, a particular goal. The matrix also includes some of the background documents and other plans which were used in preparing the Plan and are directly referenced in the text. Some of the relationships among the various Plan topics can be envisioned by studying the matrix. LCDC Goals #1 and 2 are not listed on the matrix since they are more process-oriented than the other 3 applicable goals.

GOAL 1 - CITIZEN INVOLVEMENT

Preparation of the Metropolitan Area General Plan has involved citizens in all phases of the work program. L-COG's Metropolitan Area Planning Advisory Committee (MAPAC) is a 21-member citizen committee which was given the responsibility for obtaining metropolitan-wide citizen input into the Plan. In addition to their regular public meetings, where MAPAC discussed background material and draft Plan elements, MAPAC conducted public meetings to solicit public involvement in the work program (April 1977), the draft text (August-October 1978), and the three Plan diagram alternatives (February 1979). MAPAC also maintains a mailing list of approximately 1,200 people and groups who have expressed interest in the Plan.

During the adoption phase, Eugene, Lane County, and Springfield were responsible for their own individual citizen participation programs.

LCDC GOAL MATRIX

LCDC GOAL MATRIX		LCDC GOALS													
		Agriculture	Forest	Natural Resources	Air, Water	Hazards	Recreation	Economy	Housing	Public Services	Transportation	Energy	Urbanization	Greenway	
DRAFT PLAN		3	4	5	6	7	8	9	10	11	12	13	14	15	
I.	Introduction						x		x	x	x			x	
II.	Fundamental Principles														
	B. Growth Management	x	x	x					x	x	x	x	x		
	D. Urbanizable & Urban Land	x	x	x		x	x	x	x	x	x	x	x	x	
	E. Plan Diagram								x	x			x		
III.	Specific Elements														
	A. Residential/Housing								x	x	x	x	x		
	B. Economy							x		x	x	x	x		
	C. Environmental Res.	x	x	x	x	x	x						x	x	
	D. Willamette Greenway				x	x	x							x	
	E. Environmental Design		x	x			x							x	
	F. Transportation				x		x	x	x		x	x	x	x	
	G. Public Utilities & Facilities				x			x	x	x			x		
	H. Parks & Recreation			x			x						x	x	
	I. Historic Preservation			x											
	J. Energy							x	x	x	x	x	x		
	K. Citizen Involvement														
IV.	Plan Review, Amendment, Refinement and Jurisdictional Responsibility												x		

WORKING Papers

1.	Existing land use, housing, historic resources			x				x	x	x	x			
2.	Public Facilities				x		x	x	x	x	x		x	
3.	Natural Assets & Constraints	x	x	x	x	x	x						x	x
4.	Energy							x	x	x	x	x		
5.	Residential Land Use & Housing							x						
6.	Economy							x						
7.	Air Transportation							x			x		x	
8.	Land Use Needs							x	x	x			x	

OTHER Documents

1.	Three Alternatives Technical Report	x	x	x	x	x	x	x	x	x	x	x	x	x
2.	T-2000				x						x		x	
3.	Mahlon Sweet Master Plan										x		x	
4.	Metro Bikeway Master Plan				x		x				x			x
5.	T-2000 Technical Report										x			

All three jurisdictions relied upon their respective Planning Commission and Committee for Citizen Involvement for citizen involvement in the adoption process. Joint public hearings by all three Planning Commissions were held in December 1979. Eugene's Planning Commission held its own public hearing in April 1980 and Springfield's Planning Commission held its own hearing in May 1980. The three elected bodies held two joint public hearings in May 1980.

After local adoption by ordinance in late 1980, the Plan was submitted to the Oregon Land Conservation and Development Commission for "acknowledgment of compliance" with the 15 applicable statewide planning goals.

After LCDC consideration and action in June, August and September 1981, the Plan was returned to the local jurisdiction with a list of required amendments.

The local amendment process (August 1981-March 1982) again involved MAPAC; a citizen involvement program for the amendment phase was prepared. Proposed Plan amendments were the subject of three joint public hearings:

1. November 1981 - Joint Planning Commissions
2. December 1981 - the three elected bodies
3. January 1982 - the three elected bodies

For more details on the process and an annotated bibliography of Metropolitan Plan update documents, refer to Appendices E and F.

GOAL #2 - LAND USE PLANNING

The Metropolitan Area General Plan is but one segment of the comprehensive planning programs for Eugene, Springfield, and the metropolitan portion of Lane County. It is a general policy framework plan setting broad direction for land use planning in the metropolitan area through a cooperative planning effort involving those three governments, with assistance from the Lane Council of Governments. Development of refinement plans (e.g., neighborhood plans), functional plans (e.g., a metropolitan transportation plan), and other community plans (e.g., city goals and studies) occurs within the broad context of the adopted Metropolitan Area General Plan.

Important features of the draft Metropolitan Area General Plan include the policies and the Plan diagram, complete with an urban growth boundary.

In preparing the buildable lands inventory, particular attention was directed to Goals #3-7. During preparation of the urban growth boundary, particular attention was directed to Goals #3, 9, 10, 11, and 14. Preparation of the Plan involved a balancing of the goals.

Numerous policies in the Plan address the relationship of the General Plan to other planning documents and implementing measures (such as zoning ordinances).

GOAL #3 - AGRICULTURAL LANDS

Preparation of the Plan involved consideration of agricultural lands, including inventories of resources (see Map No. 4 at the end of this report); preparation of policies addressing agricultural issues; and designation of land uses indicating agricultural, urban, and other rural uses. For a better understanding of how the diagram affects agricultural lands, refer to criteria 6 and 7 in the section addressing Goal #14, "Urbanization." Refer to the matrix for sections of the Plan and other documents providing further information on agricultural resources and issues.

GOAL #4 - FOREST LANDS

Preparation of the Plan involved inventorying forest lands and vegetation resources, developing policies regarding forest lands and resources, and designating forest lands on the diagram. Forest lands are not designated within the urban growth boundary where the need to accommodate urban uses in a compact manner is of primary importance, especially where the orderly and economic provision of public facilities is possible.

GOAL #5 - OPEN SPACES, SCENIC AND HISTORIC AREAS, AND NATURAL RESOURCES

As indicated in the matrix, several Plan elements address subjects in Goal #5. Several areas in the diagram are designated "natural resource" in response to the inventories of metropolitan resources, including fish and wildlife areas. Areas of known sand and gravel resources are located outside the urban growth boundary to protect them from urban development (see Map No. 3 at the end of this report). Natural resources areas are also addressed in Goal #3, "Agriculture" and Goal #4, "Forest Lands."

GOAL #6 - AIR, WATER, AND LAND RESOURCES

This goal has particular applicability to air and water quality; many land resources are specifically addressed in Goals #3, 4 and 5. As indicated in the matrix, four Plan elements directly or indirectly address air and water resources. Separate planning programs are directed toward maintaining and improving air and water quality and quantity in the metropolitan area. Those programs are referenced in the Plan. As indicated in the matrix, the "Natural Assets" and "Public Facilities" working papers and several other planning documents address air and water resources in the metropolitan area.

GOAL #7 - AREAS SUBJECT TO NATURAL DISASTERS AND HAZARDS

The most up-to-date information on flooding potential within the metropolitan area was inventoried. Soil constraints for development were considered as one of the factors in determining density limitations on hillside areas with moderate slopes. Steep slopes (greater than 45 percent) were treated as prohibitions to development in compiling inventories of available vacant lands. No metropolitan scale data on potential geological hazards exists. The "Natural Assets and Constraints" working paper, L-COG, April 1978, should be referred to for information on floodway hazards, soil constraints for development, soil erosion potential, and geologic hazards. The Environmental Resources element contains policies addressing hazard potential. In many (not all) instances, the known floodway fringe boundary

was used as the line delineating the urban growth boundary. In some cases, urban uses were allocated to the floodway fringe (not the floodway) where public service availability and proximity to other urban development make such development logical. Policies directed toward protecting development planned within the floodway fringe are contained in the Environmental Resources element. Known floodway fringe and slope areas are shown on Map No. 3, at the end of this report.

GOAL #8 - RECREATIONAL NEEDS

In addition to the open spaces designated in response to Goal #5, "Parks and Recreation Facilities and Willamette Greenway Elements" and the "Park and Recreation Facilities" section of the Public Facilities working paper address metropolitan recreation needs. The need for a more detailed metropolitan parks and recreation plan is pointed out in the "Parks" element of the Plan. Auxiliary Map No. 2 in the Plan indicates existing neighborhood and community parks in the metropolitan area. The allocation of new residential uses contains a factor accounting for new small governmental uses such as neighborhood parks.

GOAL #9 - ECONOMY OF THE STATE

In preparing the Plan, employment projections by broad employment sectors were made and the projections were translated into demand figures for commercial and industrial lands. The diagram reflects the allocations of new commercial and industrial uses and responds to several policies in the draft text by allowing for expansion of existing businesses and identifying adequate commercial and industrial sites which meet the locational requirements for the various broad land use categories of commercial and industrial uses being planned for. In some cases, allocations were made to:

1. provide choice for firms desiring to locate in the metropolitan area, and
2. allow for expansion of existing firms.

The description of the land uses shown on the diagram are contained in Section II-E of the Plan. All commercial and industrial descriptions should be referred to in order to gain an understanding of land use implications for the metropolitan economy.

GOAL #10 - HOUSING

The Plan responds to the housing goal by providing for a variety of housing types, density levels, and locations within the metropolitan region. The dwelling unit projections, density assumptions, and locational criteria for medium and high density designations were carefully calculated to balance goals such as energy and transportation and to place related land uses in proximity to one another (e.g., residential and commercial uses) in a configuration that compliments the overall goal of compact urban use and adopted metropolitan policies promoting non-automobile methods of transportation (e.g., transit, bicycles, pedestrian). The Residential Land Use and Housing element of the Plan also addresses the special housing needs

of particular segments of the metropolitan population (e.g., elderly, low income).

The projections and translation of projections into demand for land include considerations of different dwelling unit structure types. However, one of the most common misconceptions about the diagram is that the three residential density designations are related to particular dwelling types (single-family, duplex, or multiple-family). The low density designation indicates a density range of up to ten dwelling units per gross acre. Structures may be single-family detached, duplexes, mobile homes, triplexes, planned unit developments, or other multiple-family type dwelling units. Refer to tables in Appendix B, for more information on this issue.

Another misconception about the Plan is that multiple-family structures represent apartments or rental units. While multiple-family structures can, in some cases, be rental units, more and more multiple-family units are being constructed and sold for owner occupancy. Refer to the definition of multiple-family dwelling unit in Plan, Chapter V, "Glossary."

A common concern regarding the Plan is that the average density level of about six dwelling units per acre for new construction will convert the metropolitan area into a high density city of concrete, asphalt, and shadows. This is not the case. The densities are slight increases above development trends of the past few years. Some public policy decisions will be necessary to achieve the density prescribed, but that level is a realistic one which will not drastically reduce the "livability" of the urban area. Increasing densities provides an opportunity to achieve more efficiency with the limited amount of land available and to reduce the rate of urban expansion onto resource lands surrounding the metropolitan area. The discussion of density (in this report) should be reviewed to obtain an understanding of the implications of the density level called for in the Plan (see also Appendix B).

GOAL #11 - PUBLIC FACILITIES AND SERVICES

Future urban growth is linked to the ability to plan and provide for new and improved public services and facilities. Coordination between the public and private sectors is vital. Furthermore, the Plan addresses the need to develop capital improvement programs as a key phasing mechanism and as a means to make land in various categories "available" for development from the public sector standpoint.

The minimum level of key urban services (those services required for urban level development) is also defined in Chapter II. During preparation of the Plan, it was recognized that providers of public facilities and services may not all agree on the direction of growth within the metropolitan area. Some agencies are affected differently and in varying degrees by new development in a particular geographic region. For example, city sewers and fire protection may be available in an area, and water and electricity provided by a public utility may also be available but schools, parks, and a needed street widening may not. Cooperation and coordination among public services providers are necessary in developing and implementing the Plan.

The two Cities play an important role in future development since they are the logical units of government best suited for providing a wide range of urban services.

GOAL #12 - TRANSPORTATION

Since adoption in June 1978, the Eugene-Springfield Area 2000 Transportation Plan (T-2000) has served as the transportation plan for the metropolitan area. The 2000 Transportation Plan includes policy statements and facilities for future automobile and transit improvements. The Plan also addresses bicycle, pedestrian, and paratransit (defined in Plan, Chapter V, "Glossary") needs. The 2000 Transportation Plan is a multi-modal plan for surface transportation in the metropolitan area. Those interested in learning more about how T-2000 addresses Goal #12 should refer to Section F of the Eugene-Springfield Area 2000 Transportation Plan Technical Report, L-COG, January 1978, where each of the 9 points in Goal #12 is addressed. Once the Metropolitan Plan is adopted, the 2000 Transportation Plan will be assessed and reevaluated to determine the implications of the new land use distribution upon transportation systems.

As indicated in the matrix, two other adopted plans help guide transportation improvements in the metropolitan area -- the Metropolitan Bikeway Master Plan and the Mahlon Sweet Field Master Plan. Both of these Plans are referenced in the Metropolitan Plan.

Careful planning for lands surrounding the airport (see Map No. 3 at the end of this report) and the relationship between transportation and land use were major considerations affecting preparation of the draft Metropolitan Plan. Existing and future facilities and services were integrated into the allocation process leading to the land use diagram.

GOAL #13 - ENERGY CONSERVATION

By considering transportation criteria during the allocation of urban uses (particularly commercial, industrial, and residential), an energy-efficient land use configuration has been reflected in the diagram. Refer to the locational criteria for the various land use categories outlined in this report. Policies related to on-site energy conservation and to developing a coordinated metropolitan energy conservation plan are set forth in the Energy element. (See also discussion under Goal #14, criteria 5.)

GOAL #14 - URBANIZATION

This goal requires orderly and efficient transition from rural to urbanizable land and establishment of an urban growth boundary. The goal stipulates seven criteria which must be considered when the urban growth boundary is established or changed. The goal also contains criteria to be considered when converting urbanizable land to urban land. The terms urban lands, rural lands, urbanizable lands, and urban growth boundary all have specific meaning according to the LCDC Goals; they are all defined in the Plan, Chapter V, "Glossary".

Chapter V, "The Data Base and Basic Methodology," of this report provides some of the explanation of how the proposed urban growth boundary was developed. Where appropriate, reference will be made to earlier sections in that chapter.

A detailed, site-specific urban growth boundary map is on file for public review at the four planning offices listed in this report, Chapter I, "Introduction." The seven criteria to be considered when establishing an urban growth boundary are addressed as follows:

1. Demonstrated need to accommodate long-range urban population growth requirements consistent with LCDC Goals
2. Need for housing, employment opportunities, and livability

These two criteria are closely related and are addressed as one point.

As indicated in Chapter V of this report, the population projections were translated into a demand for housing and into employment projections. The housing demand was translated into dwelling unit projections. The dwelling unit and employment projections were translated into land use demands for residential, commercial, and industrial uses. The allocation process matched the land use demand to the available (buildable) land supply.

Prior to making those allocations, the land supply had been refined to remove hazard lands and sensitive lands from the supply (see Map No. 3). These lands total about 1,600 acres within the urban growth boundary or 9 percent of the private vacant land supply. In some instances, areas where combinations of hazards and assets existed (for example, within the floodway fringe where Class I and II productive agricultural soils overlie sand and gravel deposits and rich aquifer recharge areas and river sloughs harbor valuable wetlands and open spaces), physical factors provided the definition of the boundary location.

A wide variety of living situations has been provided throughout the metropolitan area, and the various density ranges and the mix of structure types offer diverse living opportunities.

The allocations of industrial uses were made to encourage diversification of the local economy, to provide employment opportunities, and to assure site and location requirements unique to various sectors of the economy (see also discussion under Goal #14, criteria 5).

The allocation process attempted, within the constraints of existing land uses and the vacant land supply, to designate uses in a manner maximizing opportunities for using transit and minimizing dependence on automobile use and average trip lengths.

All of these factors have an impact on the livability of the metropolitan region. By adopting a plan which calls for continuing increases in urban residential densities, the community can consciously move toward a relatively more compact urban growth form and further reduce urban growth pressures on rural lands.

The Plan further supports housing, economic and livability concerns in the residential land use and housing, economic, environmental resources, public services, facilities and utilities, and environmental design elements, in the Metropolitan Plan, Chapter III.

3. Orderly and economic provision for public facilities and services

The minimum level of key urban facilities and services are those required when converting urbanizable land to urban through annexation to a city. Those services are listed on page II-B-4 of the Plan. In addition to the minimum level services, a full range of key urban facilities and services should be provided to urban areas. These are listed on pages II-B-4-5 of the Plan. This distinction among services emphasizes the relative importance of certain services in urban areas.

In developing the urban growth boundary and allocating land uses, certain of the minimum level of key urban facilities and services were given more attention than others because of their relationship to land use distribution. These are sanitary sewers, water, electricity, airport, and surface transportation (streets and highways). Even though they are not one of the minimum level services, transit service and facilities were also given strong consideration due to implications for energy and reducing traffic congestion. Most of these services involve large capital investments and are fixed systems. When considering these services, adopted Plans (e.g., Mahlon Sweet Field Master Plan, T-2000 Plan) were referred to.

Other services considered to a lesser degree were schools, parks, police, and fire. While these services may also require capital expenditures, they can in some instances, adapt and shift to changing situations by altering service delivery.

Natural drainage basins and the ability to provide services to an area were considered. Not only was the ability to serve particular geographic areas considered, but the order in which they could be serviced was also considered. In some cases, provision of one public service to an area was easier than provision of another service. In these cases, trade-offs were necessary and strongest consideration was given to water, sanitary sewers, and transportation facilities, due to the strong land use relationship to those services.

The "urban reserve" designation was applied to limited geographic areas outside the urban growth boundary where ultimate extension of urban services beyond the year 2000 needs is logical.

4. Maximum efficiency of land uses within and on the fringe of the existing urban area

The decision to plan for higher residential densities within the urban growth boundary and the allocation process supports efficient

use of land within the urban growth boundary. Attempts to allocate residential, commercial and industrial uses in concentrated arrangements, application of locational factors such as transportation access (both existing and planned streets and transit facilities and services), proximity of job and living situations, and concentration of uses in nodal configurations (nuclei of more intense uses), all attest to the consideration of an energy-efficient land use pattern.

In the Plan, Chapter II-D, which is related to urban and urbanizable land, ties demand and the ability to provide services. When boundaries (e.g., city limits) are expanded within the urban growth boundary to allow for conversion of urbanizable lands to urban lands, the minimum level of key urban services must be available or imminent. This requirement promotes in-filling and orderly, logical, sequential conversion of undeveloped urbanizable land with the urban growth boundary.

The Plan allows for flexibility when serving and annexing industrial lands.

5. Environmental, energy, economic, and social consequences

Environmental concerns were directly addressed in the text in the Environmental Resources, Willamette River Greenway, River Corridors and Waterways, Environment Design, and Parks and Recreation Facilities elements of Chapter III. During preparation of the Plan diagram, environmental concerns were accounted for in developing the vacant land inventory and the urban growth boundary. Refinement of the vacant land supply involved consideration of wetlands, significant vegetation and wildlife areas, and steep slopes. (Refer to Map No. 5, "Plan Diagram Update Alternatives Technical Report," L-COG, January 1979, and the "Natural Assets and Constraints" working paper, L-COG, April 1978.) Environmental factors were considered in developing the urban growth boundary (see Plan, Auxiliary Map No. 3). That map and the accompanying urban growth boundary description keyed to Auxiliary Map No. 3 indicate locations where environmental or natural physical factors were actual criteria used in establishing the urban growth boundary.

Energy concerns were addressed primarily through the land use allocations. In making the allocations, the relationship between jobs and residences was considered. Higher density, in general, and higher densities near downtowns, transit stations (existing and planned), and along planned bus rapid transit routes and major arterial streets are examples of the consideration Energy was given during the allocation process. Unfortunately, many of the hillside areas to the south of Eugene and Springfield which can be most economically served with water and sanitary sewers are on the north-facing slopes, thus reducing solar access potential.

Energy concerns were also addressed in the Transportation and Energy elements in Chapter III of the Plan.

Economic concerns were addressed in the Economic element in Chapter III of the Plan. The allocations of commercial and industrial lands to meet employment demands will help insure that locational choices exist for new firms moving into the metropolitan region. Many of the allocations of commercial and industrial lands were made to allow for expansion or relocation of existing businesses. The allocations of industrial lands in several categories were made so:

- a. lands most suitable for industrial development are preserved for those uses,
- b. adequate supply is available to the types of firms which can add to the continued diversification of the metropolitan economy, and
- c. areas already characterized by industrial uses can continue to develop industrially.

While there is not a social element in the Plan, social concerns are woven throughout many of the goals and policies of the Plan. Development of the elements on Environmental Resources and Design, Parks and Recreation, Historic Preservation, Transportation, Energy, Housing, Economy, and Citizen Involvement included consideration of social ramifications. One of the most frequently mentioned social concerns expressed is related to density. Some people perceive that the density goal in the Plan will result in a living environment similar to that of large eastern cities. While the Plan calls for higher densities and more multiple-family units, the majority of homes are still projected to be single-family. The average density for new construction of 6 dwelling units per acre, when combined with the existing overall density of about 3.6 units per acre, will result in an average overall density of about 4.6 units per acre. The Plan does not propose achieving higher densities through construction of multi-story skyscraper living units to meet housing demand. Many of the new multiple-family units will be constructed in cluster developments or planned developments where condominiums or apartments can be carefully integrated into the natural and urban landscape.

6. Retention of agricultural land as defined, with Class I being highest priority for retention and Class VI the lowest priority
7. Compatability of the proposed urban uses with nearby agricultural activities

These two criteria are closely related and are addressed as one point. The inventory of agricultural soils is contained in the "Natural Assets and Constraints" working paper, L-COG, April 1978 and the "Agricultural Lands - Addendum" working paper, L-COG, October 1981 (also see Map No. 4 at the end of this report). One of the findings of that study was:

Almost all of the study area is covered by areas recommended for prohibition or limitation of development or by agricultural soils (working paper, page 11).

One of the assumptions of that study was:

Trade-offs between natural assets and constraints and other community goals, such as housing costs and the costs of providing public services, will occur during later phases of the Metropolitan Plan update process (working paper, page 12).

The Plan contains a policy (Chapter III-C, "Environmental Resources" element), which requires further study of buffering agricultural lands on the urban fringe from the negative effects of urban development.

In addition to the 7 criteria which must be considered when establishing or changing an urban growth boundary, Goal #14 sets forth 4 criteria which must be considered when urbanizable land is converted to urban uses.

"The conversion of urbanizable land to urban uses shall be based on consideration of:

1. orderly economic provision for public facilities and services,
2. availability of sufficient land for the various uses to insure choices in the marketplace,
3. LCDC Goals, and
4. encouragement of development within urban areas before conversion of urbanizable areas."

The section of the Plan dealing with "Phasing and Surplus Urban and Urbanizable Land," Chapter II-D, addresses points 1, 2 and 4 above. Consideration of the LCDC Goals was addressed in a comprehensive fashion when establishing the urban growth boundary as part of the Plan preparation and need not be addressed again when urbanizable land is converted to urban land (e.g., urbanizable land is annexed to a city).

Policies governing these important points can also be found in the Metropolitan Plan, Chapters II-B, "Fundamental Principles - Growth Management and the Urban Service Area" and III-G, "Public Utilities, Services, and Facilities."

GOAL #15 - WILLAMETTE RIVER GREENWAY

The Willamette River Greenway is the subject of individual planning processes by Eugene, Springfield, and Lane County within the metropolitan area. The Plan includes a specific element reflecting the decisions resulting from those processes and elaborates on some of the concepts of the Greenway as they might be applied to other important metropolitan waterways. The Greenway is depicted on the Plan, Auxiliary Map No. 2.

GOALS #16-19

These goals address coastal concerns and are not applicable to the metropolitan area.

In its review of the 1980 Metropolitan Plan, the LCDC found the Plan to be in compliance with Goals #1, #8, #12, and #13. LCDC "orders to comply" associated with corrections to the Metropolitan Plan can be reviewed in the Summary of Proposed Metropolitan Plan Amendments, Chapter II, "LCDC Review of Metropolitan Plan," L-COG, November 1981. That document outlines proposed amendments to the August 1980 Metropolitan Plan designed to address each LCDC Goal correction required.

The ten working papers (see Appendix F) and the 1982 Amendments to the August 1980 Metropolitan Area General Plan, L-COG, February-March 1982, responded to the specific deficiencies noted by LCDC.

URBAN GROWTH BOUNDARY FINDINGS

1. The background data; working papers; refinement plans; local policies; General Plan text findings, goals and policies; and the diagram land use designations in and outside the urban growth boundary combine to create the fundamental principles of growth management for the Eugene-Springfield metropolitan area. The resulting urban growth boundary is not a static tool or the only tool in growth management; rather it is the result of a combination of complex, interrelated concepts which provide direction for growth from the perspective of 1980. The urban growth boundary does not equate exactly to the year 2000 needs -- certain lands within the urban growth boundary which have unique locational characteristics may provide opportunities for achieving long-range, positive urban growth management benefits beyond the year 2000.
2. The urban growth boundary is subject to reexamination as a result of new projections, changing conditions, new information, and changing community attitudes. The urban growth boundary established in 1980 is designed to serve the land use needs of a projected population (293,700) rather than serve a given year such as 2000. Depending upon the rate of growth, the boundary may serve metropolitan needs to 1995 or 2005 and beyond.
3. More important to achieving compact urban growth than the urban growth boundary are policies guiding annexation and the provision of the minimum level of key urban services. These policies promote in-filling; promote logical, sequential contiguous growth; reduce scattering and sprawl; and provide for an adequate serviced land supply at any point in time to meet the market demand. The Plan contains key policies addressing all of these points.
4. The metropolitan population is projected to increase from 185,000 people in 1977 to 293,700 by 2000.
5. The metropolitan employment is projected to increase from 89,700 employees in 1980 to 146,600 by 2000.

6. The average metropolitan household size is projected to decrease from 2.79 people per household in 1975 to 2.33 by 2000.
7. There are 59,985 new dwelling units projected to be necessary to accommodate the projected population increase, taking into account the declining average household size, conversions, demolitions, and vacancy rates.
8. Changes in average household size and social preference of renters and homeowners are forecast to result in a shift toward an increasing proportion of multiple-family units and a decreasing proportion of single-family dwelling units.
9. The Plan diagram designates and the urban growth boundary contains sufficient allocated lands to accommodate 67,600 dwelling units (refer to Table 8).
10. The 67,600 allocated dwelling units exceeds the projected demand by about 7,600 units, of which about 5,650 are in the medium and high density residential designation. These units were allocated based on locational factors designed to meet the nodal compact land use policies of the Plan for Energy and Transportation goals. The 1,900 low density residential units represent less than 3 percent of the total projected dwelling unit demand, and their inclusion was a result of drawing the urban growth boundary along a logical service area to meet Goal 14, "Urbanization," factors related to orderly and economic provision of public services.
11. Medium density residential uses were allocated according to locational criteria. These allocations provide unique opportunities to meet long-range metropolitan goals regarding energy, residential density, and non-automobile transportation alternatives (transit, bicycle, pedestrian, paratransit).
12. The character of metropolitan industry is shifting away from heavy industrial use (predominately lumber and wood products) toward more light and medium industrial uses.
13. New light-medium industrial uses are characterized by higher employee/acre ratios than are heavy industrial uses (18.5:10.0 respectively).
14. Commercial employment in the metropolitan region is projected to continue recent trends toward more service-oriented and office-based commercial activity.
15. Most recent ratios indicate an average of about 58.8 commercial employees/acre for new development.
16. The Plan diagram designates and the urban growth boundary contains sufficient allocated lands to accommodate the commercial and industrial demands of the metropolitan region (refer to Table 8).

17. Heavy industrial, light-medium industrial, special light industrial, and agriculture-related industrial uses were allocated according to locational criteria. Lands in excess of demand were allocated to take advantage of unique locational characteristics and address long-range metropolitan economic diversification goals related to expansion of existing firms and attraction of new firms.
18. The livability of the metropolitan region is accounted for in a variety of ways.
 - a. In North Eugene and Springfield, East Santa Clara and South Springfield, the urban growth boundary was drawn to exclude Class I and II agricultural soils within the floodway fringe.
 - b. Park and open space designations within and immediately outside the urban growth boundary provide for a variety of active and passive recreational opportunities and include swaths of park and open space along the Springfield Mill Race, Willamette and McKenzie Rivers, Amazon Canal, portions of South Eugene ridgeline, and a portion of the North Willakenzie area along the urban growth boundary. Some identified significant vegetation and wildlife areas are designated.
 - c. The residential allocations and policies provide a wide range of living alternatives in terms of location, structure type, density, and price range.
 - d. The economic element and the land use designations recognize a shift away from heavy industry toward more non-polluting light industrial uses.
 - e. The higher density compact urban growth form, reinforced with commitment to strong central cities and nodal concentration concepts, will make non-automobile transportation alternatives more attractive and will enhance Transportation and Energy savings.
 - f. Plan policies related to environmental design address livability within the urban growth boundary by supporting concepts of urban design integrated with the natural environment.
 - g. Plan policies related to maintaining and improving air and water quality will result in a more livable urban environment.
19. In many instances, the urban growth boundary was developed with provision of public services as the prime criterion for determining location. This is particularly true where the urban growth boundary follows a ridgeline in the south hills of Eugene and Springfield.
20. Relative costs of providing such key urban services as water, electricity, sanitary sewers, and transportation were used to establish relative order for development in the allocation steps, as outlined in this report.

21. Potential for providing future transit service to new and existing concentrations of integrated commercial and medium density development was considered in developing locational criteria for relatively intense land uses.
22. Higher densities and commitment to policies supporting a compact urban growth form by encouraging in-filling, promoting mixed uses, developing strong downtowns, coordinating public service provision with new growth, clustering new relatively intense development at key points in the transportation system, and reducing sprawl and leapfrog development are all indicators of Plan intent to make efficient use of land within and on the fringe of the current urban service area (defined in Plan, Chapter V, "Glossary").
23. Policies on annexation and controlling development beyond the Cities, on rural and urbanizable lands, address the commitment to using urban lands and lands on the fringe of urban areas efficiently.
24. In addition to points covered in finding #18 regarding livability, the Plan addresses environmental concerns in the following ways:
 - a. It treats the floodway and steep slopes as prohibitions to development.
 - b. It protects wetland vegetation.
 - c. It protects sand and gravel resources.
 - d. It protects productive farmlands within the floodway fringe on the immediate edge of the metropolitan area.
 - e. It designates ample park and open space to meet a variety of recreation and natural area needs.
 - f. It designates forest resources on rural lands outside the urban growth boundary.
 - g. It addresses the need to protect urban fish and wildlife resources.
 - h. Significant vegetation and wildlife resource areas are designated "natural resource" for protection of unique habitats and species.
25. The Plan addresses Energy consequences through:
 - a. policies in the Energy and Transportation elements;
 - b. land use allocations which reinforce concepts of mixed and balanced land use (houses in proximity to jobs, shopping, and recreational opportunities);

- c. consideration of the relationships between land use and surface transportation systems including automobile, transit, bicycle, pedestrian, and paratransit means of travel; and
 - d. support for continued increases in multiple-family living opportunities and higher densities.
- 26. The Plan contains adequate commercial and industrial allocations to meet the land use needs associated with the projected employment for the metropolitan area.
- 27. Commercial and industrial land uses were allocated according to locational criteria which reflect realistic expectations that private investment and development will occur on those lands.
- 28. The Plan recognizes that not all commercial and industrial lands are immediately available for development. Public facility and service extensions are required before some lands can be rendered developable in accordance with other Plan policies. The Plan also recognizes that not all allocated commercial and industrial lands may be needed immediately to meet the growth needs of the metropolitan economy.
- 29. Unlike low density residential allocations, allocations of commercial and industrial lands were made in a sequence which facilitated the ability to annex and service them with a greater degree of flexibility so programs to attract new industry and further diversify the local economy could be carried out expeditiously.
- 30. Social consequences of the Plan are addressed in many ways:
 - a. through provision of a variety of housing opportunities (location, type, density, and price range),
 - b. through promotion of alternative transportation means and energy conservation,
 - c. through promotion of diversifying the economy and promotion of small-scale commercial and industrial uses in mixed use situations,
 - d. through support for maintaining viable neighborhoods,
 - e. through protection of the environment and promotion of sound environmental design,
 - f. through protection of historic resources, and
 - g. through provision of a variety of park and recreation sites and opportunities.
- 31. Other than the hillside areas on the southern border of the metropolitan area and sand and gravel deposits adjacent to the

Willamette and McKenzie Rivers, much of the metropolitan region is situated on the floor of the Willamette Valley. The soils on the valley floor are typically Agricultural Class I-IV. (Refer to Map 5 at the end of this report.)

32. The most valuable agricultural areas lie to the north and northwest of the metropolitan area, where the Willamette Valley widens. (Refer to Map 5 at the end of this report.)
33. In North Springfield, North Thurston and the North Willakenzie area of Eugene, the McKenzie River, along with its flood plain, associated sand and gravel deposits, agricultural soils, and valuable wetlands provide a natural topographic definition to the metropolitan region. In these portions of the metropolitan region, the urban growth boundary was developed to exclude (in most instances) the known sand and gravel deposits, flood plain, wetlands, and rich Class I and II agricultural soils adjacent to the McKenzie River. (Refer to Map 5 at the end of this report.)
34. To the south of Jasper Road, between 28th Street and Mt. Vernon Road in Springfield, the middle fork of the Willamette River, along with its flood plain, valuable wetlands, known sand and gravel deposits, and agricultural soils provide a natural topographic definition to the metropolitan region. In this portion of the metropolitan region, the urban growth boundary was developed to exclude (in most instances) the known sand and gravel deposits, floodplain, wetlands, and rich Class I and II agricultural soils adjacent to the middle fork. (Refer to Maps 4 and 5 at the end of this report.)
35. East of the Santa Clara area and west of the North Willakenzie area, the main stem of the Willamette River forms a natural definition for the urban growth boundary. In these areas, the urban growth boundary was drawn to exclude the known sand and gravel deposits, floodplain, wetlands, and rich Class I and II agricultural soils adjacent to the Willamette River. (Refer to Maps 4 and 5 at the end of this report.)
36. To the southeast, south, southwest, and west of Eugene, a ridgeline running from "Moon Mountain" through Hendrick's Park, Spencer Butte through Bailey Hill, Murray Hill through Oak Hill to the south end of Crabtree Hill near Royal Avenue defines a natural drainage area of the Amazon and Willow Creek. The urban growth boundary was drawn to meet the projected residential demand in the Willow Creek area. The remaining land in this natural drainage service area was designated "urban reserve" (see also #44).
37. South of East Springfield (Thurston area), hills form a natural topographic definition to the metropolitan region. In this area, the urban growth boundary was developed to provide orderly and economic public services. The urban growth boundary was drawn to meet the projected residential demand in the East Thurston area. The remaining land in the national drainage service area was designated "urban reserve" (see also #44).

38. Northwest of Eugene, agricultural considerations and concern with urban encroachment toward the airport and safety around Mahlon Sweet Field were factors in establishing the urban growth boundary.
39. North of Santa Clara and to the north, in general, encroachment onto the most productive agricultural area in Lane County was the prime consideration in establishing the urban growth boundary.
40. Plan policies regarding in-filling and sequential development outward, in conjunction with provision of public services to prevent leapfrogging, provide protection for agricultural lands on the fringe of the current urban service area (defined in Plan, Chapter V, "Glossary").
41. Plan policies support agricultural uses on the undeveloped lands within the current urban service area (defined in Plan, Chapter V, "Glossary") until in-filling occurs. Plan policies support agriculture as an interim use on the fringe of the cities but within the urban growth boundary (on urbanizable lands) until annexation and subsequent development occurs. The Plan designates areas of outright agricultural use outside the urban growth boundary. Where possible, natural features (e.g., sloughs) or human barriers (e.g., railroad dikes) were used to separate agriculturally designated lands from planned urban development with the urban growth boundary.
42. Development of the urban growth boundary included consideration of the 7 criteria in LCDC Goal #14, "Urbanization."
43. Development of the Plan projections, assumptions, findings, goals, objectives, policies, diagram, and urban growth boundary) involved an open process with an active citizen involvement program. Development and adoption of the Plan represents thoughtful compromise, reflecting a balance of local perspectives and a balance of all 15 of the LCDC Goals applicable to the metropolitan region.
44. The "urban reserve" designation in Willow Creek and East Thurston recognizes these areas as part of logical, natural service areas beyond and adjacent to the urban growth boundary. Planning, sizing, and financing of public services is to be considered for these areas. Until they are added to the urban service area at some future date, they are to be protected for resource use. In northwest Santa Clara, the "urban reserve" designation was applied because this area will be bisected with sanitary sewer extension when Santa Clara is served. It is part of the logical service area for the Santa Clara region.

TABLE A-1

POPULATION PROJECTIONS - METRO STUDY AREA

1970 BASE YEAR POPULATION

<u>AGE GROUP</u>	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>	<u>PCT MALE</u>	<u>PCT FEMALE</u>	<u>PCT TOTAL</u>
0- 4	6,396	6,171	12,567	8.5	8.5	8.2
5- 9	7,386	7,105	14,491	9.8	9.1	9.5
10-14	7,490	7,256	14,746	9.9	9.3	9.6
15-19	8,064	8,203	16,267	10.7	10.5	10.6
20-24	8,754	9,088	17,842	11.6	11.7	11.6
25-29	6,176	5,949	12,125	8.2	7.7	7.9
30-34	4,915	4,737	9,652	6.5	6.1	6.3
35-39	3,819	4,029	7,848	5.1	5.2	5.1
40-44	4,122	4,163	8,285	5.5	5.4	5.4
45-49	4,074	4,338	8,412	5.4	5.6	5.5
50-54	3,752	4,008	7,760	5.0	5.2	5.1
55-59	3,185	3,394	6,579	4.3	4.4	4.3
60-64	2,622	2,707	5,329	3.5	3.5	3.5
65-69	1,834	2,205	4,039	2.5	2.9	2.7
70-74	1,319	1,875	3,194	1.8	2.4	2.1
75-79	957	1,420	2,377	1.3	1.9	1.6
80+Older	965	1,544	2,509	1.3	2.0	1.7
TOTAL	75,830	78,192	154,022	100.0	100.0	100.0

1975 TOTAL POPULATION

<u>AGE GROUP</u>	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>	<u>PCT MALE</u>	<u>PCT FEMALE</u>	<u>PCT TOTAL</u>
0- 4	7,370	6,982	14,352	8.6	7.9	8.3
5- 9	6,737	6,491	13,228	7.9	7.4	7.6
10-14	7,914	7,637	15,551	9.3	8.7	9.0
15-19	9,680	9,680	19,368	11.3	11.0	11.1
20-24	11,575	10,743	22,318	13.5	12.2	12.8
25-29	7,209	7,571	14,779	8.4	8.6	8.5
30-34	5,407	5,875	11,282	6.3	6.7	6.5
35-39	5,302	5,139	10,441	6.2	5.8	6.0
40-44	4,083	4,271	8,353	4.8	4.9	4.8
45-49	4,280	4,386	8,666	5.0	5.0	5.0
50-54	3,847	4,197	8,044	4.5	4.8	4.7
55-59	3,683	4,068	7,752	4.3	4.6	4.5
60-64	3,005	3,360	6,365	3.5	3.8	3.7
65-69	2,336	2,648	4,984	2.8	3.0	2.9
70-74	1,531	2,079	3,610	1.8	2.4	2.1
75-79	994	1,645	2,639	1.2	1.9	1.6
80-84	630	1,099	1,729	0.8	1.3	1.8
85+Older	421	808	1,228	0.5	1.0	0.8
TOTAL	86,010	88,679	174,689	100.0	100.0	100.0

1980 TOTAL POPULATION

<u>AGE GROUP</u>	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>	<u>PCT MALE</u>	<u>PCT FEMALE</u>	<u>PCT TOTAL</u>
0- 4	7,217	6,837	14,054	7.6	7.0	7.3
5- 9	7,775	7,365	15,140	8.2	7.5	7.8
10-14	7,337	7,094	14,431	7.7	7.2	7.5
15-19	10,165	10,111	20,276	10.6	10.3	10.5
20-24	13,211	12,255	25,466	13.8	12.4	13.1
25-29	9,947	9,201	19,148	10.4	9.3	9.9
30-34	6,439	7,523	13,962	6.8	7.6	7.2
35-39	5,825	6,300	12,126	6.1	6.4	6.3
40-44	5,569	5,391	10,959	5.9	5.5	5.7
45-49	4,257	4,511	8,768	4.5	4.6	4.5
50-54	4,057	4,256	8,313	4.3	4.3	4.3
55-59	3,790	4,272	8,062	4.0	4.4	4.2
60-64	3,471	4,019	7,490	3.7	4.1	3.9
65-69	2,675	3,274	5,949	2.8	3.4	3.1
70-74	1,942	2,490	4,432	2.1	2.6	2.3
75-79	1,152	1,824	2,976	1.3	1.9	1.6
80-84	656	1,272	1,928	0.7	1.3	1.0
85+Older	458	994	1,453	0.5	1.1	0.8
TOTAL	95,943	98,991	194,933	100.0	100.0	100.0

1985 TOTAL POPULATION

<u>AGE GROUP</u>	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>	<u>PCT MALE</u>	<u>PCT FEMALE</u>	<u>PCT TOTAL</u>
0- 4	9,315	8,814	18,129	8.6	7.9	8.3
5- 9	7,838	7,427	15,265	7.3	6.7	7.0
10-14	8,564	8,157	16,721	7.9	7.3	7.6
15-19	9,672	9,636	19,309	8.9	8.6	8.8
20-24	13,745	12,836	26,581	12.7	11.5	12.1
25-29	11,736	10,918	22,654	10.8	9.8	10.3
30-34	9,313	9,289	18,602	8.6	8.3	8.5
35-39	6,953	8,021	14,974	6.4	7.2	6.8
40-44	6,159	6,606	12,765	5.7	5.9	5.8
45-49	5,764	5,681	11,445	5.3	5.1	5.2
50-54	4,085	4,434	8,519	3.8	4.0	3.9
55-59	4,030	4,380	8,410	3.8	4.0	3.9
60-64	3,599	4,246	7,845	3.4	3.8	3.6
65-69	3,098	3,924	7,022	2.9	3.5	3.2
70-74	2,230	3,081	5,312	2.1	2.8	2.5
75-79	1,460	2,189	3,649	1.4	2.0	1.7
80-84	763	1,416	2,179	0.8	1.3	1.0
85+Older	489	1,184	1,673	0.5	1.1	0.8
TOTAL	108,814	112,231	221,052	100.0	100.0	100.0

1990 TOTAL POPULATION

<u>AGE GROUP</u>	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>	<u>PCT MALE</u>	<u>PCT FEMALE</u>	<u>PCT TOTAL</u>
0- 4	10,438	9,877	20,314	8.7	8.0	8.3
5- 9	9,772	9,249	19,021	8.1	7.5	7.8
10-14	8,463	8,055	16,518	7.0	6.5	6.8
15-19	10,710	10,514	21,224	8.9	8.5	8.7
20-24	13,065	12,170	25,235	10.8	9.8	10.3
25-29	12,356	11,530	23,886	10.2	9.3	9.8
30-34	11,065	10,923	21,988	9.2	8.8	9.0
35-39	9,708	9,701	19,409	8.1	7.8	7.9
40-44	7,208	8,259	15,467	6.0	6.7	6.3
45-49	6,295	6,827	13,122	5.2	5.5	5.4
50-54	5,513	5,551	11,065	4.6	4.5	4.5
55-59	4,018	4,506	8,524	3.4	3.7	3.5
60-64	3,789	4,321	8,110	3.2	3.5	3.3
65-69	3,191	4,108	7,299	2.7	3.3	3.0
70-74	2,557	3,649	6,206	2.2	3.0	2.6
75-79	1,658	2,676	4,335	1.4	2.2	1.8
80-84	950	1,684	2,635	0.8	1.4	1.1
85+Older	544	1,345	1,889	0.5	1.1	0.8
TOTAL	121,301	124,946	246,246	100.0	100.0	100.0

1995 TOTAL POPULATION

<u>AGE GROUP</u>	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>	<u>PCT MALE</u>	<u>PCT FEMALE</u>	<u>PCT TOTAL</u>
0- 4	10,970	10,380	21,349	8.3	7.6	7.9
5- 9	10,886	10,304	21,189	8.2	7.5	7.9
10-14	10,388	9,870	20,258	7.8	7.2	7.5
15-19	10,604	10,407	21,011	9.0	7.6	7.8
20-24	14,085	13,036	27,121	10.6	9.5	10.0
25-29	11,677	10,860	22,537	8.8	7.9	8.4
30-34	11,676	11,529	23,205	8.8	8.4	8.6
35-39	11,440	11,324	22,764	8.6	8.3	8.4
40-44	9,922	9,923	19,845	7.5	7.3	7.4
45-49	7,318	8,456	15,775	5.5	6.2	5.9
50-54	6,024	6,674	12,698	4.6	4.9	4.7
55-59	5,364	5,591	10,955	4.1	4.1	4.1
60-64	3,777	4,441	8,218	2.9	3.3	3.1
65-69	3,355	4,178	7,533	2.6	3.1	2.8
70-74	2,631	3,816	6,447	2.0	2.8	2.4
75-79	1,894	3,158	5,052	1.5	2.3	1.9
80-84	1,075	2,052	3,127	0.9	1.5	1.2
85+Older	646	1,563	2,209	0.5	1.2	0.9
TOTAL	133,733	133,733	271,293	100.0	100.0	100.0

2000 TOTAL POPULATION

<u>AGE GROUP</u>	<u>MALES</u>	<u>FEMALES</u>	<u>TOTAL</u>	<u>PCT MALE</u>	<u>PCT FEMALE</u>	<u>PCT TOTAL</u>
0- 4	11,294	10,688	21,982	7.8	7.2	7.5
5- 9	11,288	10,682	21,970	7.8	7.2	7.5
10-14	11,388	10,811	22,199	7.9	7.3	7.6
15-19	12,402	12,099	24,501	8.6	8.2	8.4
20-24	13,781	12,718	26,498	9.6	8.6	9.1
25-29	12,555	11,595	24,149	8.7	7.8	8.3
30-34	10,912	10,777	21,689	7.6	7.3	7.4
35-39	11,974	11,870	23,844	8.3	8.0	8.2
40-44	11,578	11,487	23,064	8.0	7.8	7.9
45-49	9,929	10,053	19,982	6.9	6.8	6.9
50-54	6,983	8,242	15,225	4.9	5.6	5.2
55-59	5,820	6,652	12,473	4.1	4.5	4.3
60-64	4,983	5,463	10,446	3.5	3.7	3.6
65-69	3,333	4,272	7,605	2.4	2.9	2.6
70-74	2,754	3,865	6,619	2.0	2.6	2.3
75-79	1,941	3,290	5,232	1.4	2.3	1.8
80-84	1,219	2,412	3,631	0.9	1.7	1.3
85+Older	<u>740</u>	<u>1,854</u>	<u>2,594</u>	<u>0.6</u>	<u>1.3</u>	<u>0.9</u>
TOTAL	144,874	148,827	293,701	100.0	100.0	100.0

TABLE A-2

HISTORIC POPULATION - EUGENE-SPRINGFIELD METROPOLITAN AREA

	<u>Metropolitan</u>	<u>City of Eugene</u>	<u>City of Springfield</u>	<u>Unincorporated Metropolitan *</u>
1910	-	9,009	1,838	-
1920	-	10,593	1,855	-
1930	30,000	18,901	2,364	8,735
1940	34,443	20,838	3,805	9,800
1950	77,200	35,879	10,807	30,514
1960	109,830	50,977	19,616	39,237
1970	148,346	79,028	26,874	42,444
1975	168,685	94,600	34,900	39,185
1976	-	96,660	35,580	-
1977	-	100,450	37,500	-
1978	-	100,400	38,400	-
1979	189,000	106,000	40,950	42,050

* Calculated by subtracting city populations from metropolitan totals.

NOTE: 1910, 1920, 1930, 1940, 1950, 1960, and 1970 are U.S. Census figures. 1975, 1976, 1977, 1978, and 1979 are estimates by the Center for Population Research and Census, Portland State University. 1975 and 1979 are metropolitan estimates by L-COG.

Table A-3 shows the average household size for the U.S., Lane County, and the metro study area for the period 1960-2000.

TABLE A-3
AVERAGE HOUSEHOLD SIZE
1960-2000

<u>Year</u>	<u>U.S.</u>	<u>Lane County</u>	<u>Metro Study Area</u>
1960	3.33	3.24	3.13
1970	3.14	3.04	2.95
1975	2.92	2.84	2.79
1980	2.75	2.67	2.63
1985	2.64	2.56	2.53
1990	2.55	2.47	2.45
1995	2.48	2.40	2.38
2000	2.43	2.35	2.33

TABLE A-4
HOUSEHOLD PROJECTIONS
METRO STUDY 1980-2000

<u>Year</u>	<u>Total Population</u>	<u>Population in Group Quarters</u>	<u>Household Population</u>	<u>Average Household Size</u>	<u>Total Household</u>
1980	194,000	6,140	188,760	2.63	71,750
1985	221,100	6,630	214,470	2.53	84,750
1990	246,200	7,160	239,040	2.45	97,550
1995	271,300	7,740	263,560	2.38	110,750
2000	293,700	8,350	285,350	2.33	122,450

TABLE A-5

METRO AREA* NON-AGRICULTURAL WAGE AND SALARY
EMPLOYMENT PROJECTIONS BY SECTOR

1977-2000 (APRIL FIGURES)

EMPLOYMENT SECTOR	ACTUAL YEAR					
	1977	1980	1985	1990	1995	2000
WAGE AND SALARY	76,200	82,500	95,100	108,100	120,800	137,000
MANUFACTURING	13,900	14,200	14,800	15,600	16,100	16,600
Percent	(18.2)	(17.2)	(15.6)	(14.4)	(13.3)	(12.1)
Lumber and Wood	8,900	8,600	8,400	8,100	7,800	7,500
Other Durable	2,300	2,700	3,200	3,800	4,300	4,800
Food Products	900	900	900	1,000	1,000	1,000
Other Non-Durable	1,800	2,000	2,300	2,700	3,000	3,300
NON-MANUFACTURING	62,300	68,300	80,300	92,500	104,700	120,400
Percent	(81.8)	(82.8)	(84.4)	(85.6)	(86.7)	(87.9)
Contract Construction	3,700	3,000	3,100	3,300	3,500	3,600
Trans. Comm. Util.	4,000	4,300	4,800	5,300	5,900	6,400
Trade:	20,100	23,000	28,500	34,200	39,800	49,100
Wholesale Trade	4,400	5,300	6,700	8,200	9,600	11,100
Retail Trade	15,700	17,700	21,800	26,000	30,200	38,000
Finance Ins. Realty	3,900	3,900	4,600	5,200	5,900	6,500
Service & Misc.	13,700	15,500	18,700	21,900	25,100	28,300
Government:	16,900	18,600	20,600	22,600	24,500	26,500
Federal	1,500	1,500	1,700	1,900	2,000	2,300
Education	10,900	12,000	12,900	13,800	14,700	15,500
Local Government	4,500	5,100	6,000	6,900	7,800	8,700

* The metropolitan study area is comprised of Census Tracts 10, 18-54, and the Goshen portion of Census Tract 17.

TABLE A-6

METRO AREA TOTAL EMPLOYMENT PROJECTIONS BY SECTOR
1980-2000 (APRIL FIGURES)

<u>EMPLOYMENT SECTOR</u>	<u>YEAR</u>				
	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>
TOTAL EMPLOYMENT	89,700	104,200	118,300	132,600	146,600
MANUFACTURING	14,700	15,300	16,000	16,500	17,200
Lumber and Wood	8,800	8,600	8,300	8,000	7,700
Other Durable	2,800	3,300	3,900	4,400	5,000
Food Products	1,000	1,000	1,000	1,000	1,000
Other Non-Durable	2,100	2,400	2,800	3,100	3,500
NON-MANUFACTURING	75,000	88,900	102,300	116,100	129,400
Contract Construction	3,600	3,900	4,000	4,300	4,600
Trans. Comm. Utilities	4,300	4,900	5,400	5,900	6,500
Trade:	25,300	31,600	37,700	44,100	50,000
Wholesale Trade	5,600	7,200	8,700	10,300	11,800
Retail Trade	19,700	24,400	29,000	33,800	38,200
Finance Insurance Realty	3,900	4,600	5,200	5,900	6,500
Service & Miscellaneous	19,100	23,100	27,200	31,200	35,100
Government:	18,600	20,600	22,600	24,500	26,500
Federal	1,500	1,700	1,900	2,000	2,300
Education	12,000	12,900	13,800	14,700	15,500
Local Government	5,100	6,000	6,900	7,800	8,700
AGRICULTURE	200	200	200	200	200

APPENDIX B

HOUSING DEMAND METHODOLOGY AND RESIDENTIAL DENSITIES

CONCLUSION AND SUMMARY

The 1990 General Plan (predecessor to the Metropolitan Plan) established the concept of a compact urban growth form. Residential density and land use arrangements contained in the Eugene-Springfield Metropolitan Plan continue that concept as a means of guiding development. Data in Tables __, __, and __ show the assumptions which were made in development of the Metropolitan Plan and goals and policies which have resulted from these assumptions are reasonable. In some cases, the Metropolitan Plan assumptions are already being met. This appendix is intended to outline the housing demand methodology and demonstrate that nothing now contained in the Metropolitan Plan or individual implementing ordinances can be construed in a way which will prohibit achieving the density and structure mix assumptions contained in the Plan.

Residential land allocations in the Metropolitan Plan are partially predicated on the assumption that greater efficiencies for both the public and private sectors can be achieved through increased densities. Goal #10 compliance requirements direct that the jurisdictions ensure that sufficient mechanisms exist; i.e., policy and ordinance provisions, to allow the private sector to respond to these assumptions in an efficient and timely manner. The Metropolitan Plan is intended to set forth a sufficiently flexible framework within which the private sector can respond to public sector goals.

Both the Cities of Eugene and Springfield recognize the importance of providing a variety of implementing mechanisms which will continue to allow Plan assumptions to be met. The Metropolitan Plan assumed certain densities and structure types in making residential land allocations. While these are projections and assumptions, available data show that the metropolitan area is experiencing building trends consistent with assumed densities and structure mix.

HISTORY

Since adoption of the 1990 General Plan (predecessor to the Metropolitan Plan) in 1972, the compact urban growth form concept has been used to guide development of the metropolitan area. That concept assumed that over an extended period, increased residential densities would occur. However, other goals and policies placed emphasis on the existing character of the area, especially in well-established neighborhoods. In order to balance these two competing goals, the area adopted policies which provide opportunities to gradually increase densities in established areas and provided mechanisms which allowed substantially higher densities in newly developed areas.

METROPOLITAN PLAN

In developing the August 1980 version of the Metropolitan Plan, the community considered three basic alternatives:

1. Abandon the concept established in 1972 by the 1990 Plan and provide policies and ordinances which would emphasize low density development.

2. Maintain the current emphasis on substantially higher densities in newly developing areas with gradual increases in established neighborhoods. Notably, under this alternative, nodal development land use patterns were proposed to respond to the adopted Eugene-Springfield Area 2000 Transportation Plan.
3. Adopt policies and ordinances which would encourage substantial redevelopment in established areas at significantly greater densities and also provide mechanisms to allow higher densities in newly developing areas.

Table B-1 compares new overall densities and residential land allocations for each alternative.

TABLE B-1
FUTURE AVERAGE RESIDENTIAL DENSITY AND
LAND ALLOCATION COMPARISON
THREE PLAN ALTERNATIVES
JANUARY 1979

<u>Alternative</u>	<u>Future Average Residential Density/ Gross Acre</u>	<u>Residential Land Allocation (Acres)</u>
1	3.7	15,980
2	5.6	10,485
3	6.0	9,480

Source: "Plan Diagram Update Alternatives Technical Report," L-COG, January 1979, Table V-2.

Through an extensive citizen involvement process and discussion by elected and appointed officials, direction was established to develop a plan reflecting concepts contained in Alternative 2 with density goals which were a compromise between Alternatives 2 and 3. Residential land allocations and assumptions found in the Metropolitan Plan reflect the result of that decision.

METROPOLITAN PLAN DENSITY ASSUMPTIONS

Table B-2 compares data for the metro area, comparing assumed densities for new construction with densities existing in 1976 by structure type and Plan designation.

TABLE B-2

METROPOLITAN AREA DRAFT GROSS DENSITY ASSUMPTIONS
COMPARISON WITH EXISTING GROSS DENSITIES

<u>Plan Residential Structure Type</u>	<u>Plan Residential Designation</u>	<u>1976 Existing Density</u>	<u>Assumed Density for New Construction</u>
Single-Family	Low Density	2.8	4.55
Single-Family	Medium Density	4.2	4.55
Mobile Home	Low Density	4.9	4.90
Duplex	Low Density	7.0	7.00
Duplex	Medium Density	8.4	8.40
Multiple-Family	Low Density	7.7	7.00
Multiple-Family	Medium Density	14.0	14.00
Multiple-Family	High Density	27.3	25.00
Overall Density		3.6	5.80

Source: "Draft Technical Supplement," L-COG, August 1980, page 13.

These data are calculated on units per gross acre. Density figures per gross acre provide data on the number of residential units which would occur as a result of development on a vacant acre of land; i.e., raw land with no streets, parks, churches, or other public/quasi-public facilities which occur as part of a residential area. In developing residential land allocations for the Metropolitan Plan, 30 percent of vacant residential land was assumed to be developed in non-residential uses (this factor is based on analysis of existing development in the metro area. 1977 non-residential uses ranged from 32-34 percent among census tracts. An assumption was made that efficient use of land would result in average of 30 percent of residential-designated land dedicated to non-residential uses.) Consequently, in order to calculate net density resulting from residential land allocations, density per gross acre data should be multiplied by a factor of 143 percent; i.e.,

$$\text{gross} = \text{net} \times 0.7, \text{ net} = \frac{\text{gross}}{0.7} = \text{gross} \times \frac{1}{0.7} = \text{gross} \times 1.43$$

The results of those calculations; i.e., 143 percent x density/gross acre (Table B-2) are shown in Table B-3.

Gross density references in the Plan and background papers were used for the following reasons:

1. The 1990 Plan density ranges were expressed in gross density terms -- comparability was improved.

2. In implementing the Plan, developers and the Planning Commission were most familiar with gross acreage terms in zoning, planned unit development, and other ordinances.

TABLE B-3

METROPOLITAN AREA NET DENSITY ASSUMPTION
COMPARISON WITH GROSS DENSITIES

<u>Plan Residential Structure Type</u>	<u>Plan Residential Designation</u>	<u>Assumed Density Per Gross Acre</u>	<u>Assumed Density Per Net Acre</u>
Single-Family	Low Density	4.55	6.5
Single-Family	Medium Density	4.55	6.5
Mobile Home	Low Density	4.90	7.0
Duplex	Low Density	7.00	10.0
Duplex	Medium Density	8.40	12.0
Multiple-Family	Low Density	7.00	10.0
Multiple-Family	Medium Density	14.00	20.0
Multiple-Family	High Density	15.00	21.4
Overall Density		5.8	8.3

The Metropolitan Plan also assumed that multiple-family housing will become increasingly important in meeting the housing needs of the area. Table B-4 compares the relative and actual number of various housing types existing in January 1977 with the projections made in the Metropolitan Plan (duplexes are included in the multiple-family category; mobile homes are included in the single-family category).

TABLE B-4

METROPOLITAN AREA
EXISTING AND PROJECTED DWELLING UNITS (d.u.'s) BY STRUCTURE TYPE

Structure Type	Existing d.u.'s (as of January 1, 1977) and Percent Total	Projected New d.u.'s for Study Area (1977-2000) and % of Total	Total d.u.'s Existing New Construction and % of Total
Single-Family	41,320 (63%)	26,800 (45%)	68,120 (54%)
Mobile Home	3,620 (6%)	3,650 (6%)	7,270 (6%)
Duplex	5,530 (9%)	5,560 (9%)	11,090 (9%)
Multiple-Family	<u>14,665 (22%)</u>	<u>23,975 (40%)</u>	<u>38,640 (31%)</u>
SUBTOTAL	65,135 (100%)	59,985 (100%)	125,120 (100%)
Outside the UGB*	<u>2,630</u>		<u>2,630</u>
	67,765		127,750

* Urban Growth Boundary

Source: "Draft Technical Supplement," L-COG, August 1980, page 10

The projections were broken down further into five-year intervals by structure type, as indicated by Table B-5. The projections of housing demand by five-year intervals allows more meaningful monitoring and comparison of demand with actual development trends.

TABLE B-5

PROJECTIONS OF NEW DWELLING UNITS BY STRUCTURE TYPE
(1977-2000) BY FIVE-YEAR INTERVALS

Structure Type	1977-85	1985-90	1990-95	1995-2000	Totals 1977-2000
Single-family	10,700	6,050	5,740	4,310	26,800
Mobile home	940	850	900	960	3,650
Duplex	2,030	1,200	1,230	1,100	5,560
Multiple-family	<u>4,310</u>	<u>960</u>	<u>1,100</u>	<u>5,855</u>	<u>23,975</u>
TOTAL	17,980	9,060	8,970	12,225	59,985

A THIRD COMPONENT OF THE DEVELOPMENT OF THE RESIDENTIAL LAND USE

A third component of the computation of metropolitan residential land use needs was the assumption regarding distribution of new structure types among the three Plan diagram residential categories (low density, medium density, high density). Table B-6 summarizes those assumptions.

TABLE B-6

ASSUMED DISTRIBUTION OF NEW UNITS AMONG PLAN RESIDENTIAL DESIGNATIONS

<u>Structure Type</u>	<u>Low Density</u>		<u>Medium Density</u>		<u>High Density</u>		<u>Total</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Single-Family	25,460	95	1,340	5	0	0	26,800	100
Mobile Home	3,650	100	0	0	0	0	3,650	100
Duplex	5,005	90	555	10	0	0	5,560	100
Multiple-Family*	<u>8,390</u>	<u>35</u>	<u>8,390</u>	<u>35</u>	<u>4,795</u>	<u>20</u>	<u>21,575</u>	<u>90</u>
TOTAL	42,505		10,285		4,795		57,585*	

* 2,400 multiple-family units (10 percent) assumed within 1 mile of downtown Eugene through in-filling and redevelopment

Once the distribution assumptions of dwelling unit structure types among the three residential Plan designation categories was determined, the density of each structure type within each Plan category was determined (Table B-7).

TABLE B-7

GROSS DENSITY ASSUMPTIONS BY STRUCTURE TYPE FOR NEW
CONSTRUCTION AMONG PLAN RESIDENTIAL DESIGNATIONS*

<u>Structure Type</u>	<u>Low Density</u>	<u>Medium Density</u>	<u>High Density</u>	<u>Total</u>
Single-family	4.55	4.55	-	4.55
Mobile home	4.90	-	-	4.90
Duplex	7.00	10.50	-	7.20
Multiple-family	<u>7.00</u>	<u>14.00</u>	<u>25.0</u>	<u>10.80</u>
TOTAL	5.15	10.86	25.0	6.38

* Based on demand only. The densities were modified during the allocation process due to slope limitations and size of existing vacant lots. The overall resulting density was 6.1 dwelling units per gross acre.

TABLE B-8

PROJECTED GROSS ACRE DEMAND FOR NEW RESIDENTIAL CONSTRUCTION
(1977-2000) AMONG PLAN RESIDENTIAL DESIGNATIONS*

<u>Structure Type</u>	<u>ACRES</u>			<u>Total</u>
	<u>Low Density</u>	<u>Medium Density</u>	<u>High Density</u>	
Single-family	5,596	295	0	5,891
Mobile home	745	0	0	745
Duplex	715	53	0	768
Multiple-family	<u>1,199</u>	<u>599</u>	<u>192</u>	<u>1,990</u>
TOTAL	8,255	947	192	9,394

* Based on demand only. The demand acres were modified during the allocation process due to slope limitations and size of existing vacant lots. The resulting acreages of allocations can be reviewed in Chapter V, Table 8, of this document.

Residential land use needs (Table B-8) for the Metropolitan Plan were calculated based on projected structure type split, assumed distribution of structure types among residential land use categories, and assumed density for each structure type within each category.

Two examples of calculation for Table B-8:

Example 1 - Single-Family

26,800	(New units projected)
x .95	(% units assumed to be built in low density designations)
25,460	(# units in low density designations)
25,460	(# units in low density designations)
- 4.55	(assumed gross density of units in low density designations)
5,596	(low density demand acres)

Example 2 - Multiple-Family

23,975	(New units projected)
x .35	(% assumed to be built in low density designations)
8,390	(# in low density designations)
8,390	(# in low density designations)
- 7.0	(assumed gross density in low density designations)
1,199	(low density demand acres)

Note that in both examples the assumed gross density is within the 0-10 range allowed within low density designated areas. All multiple-family units will not be constructed at seven units per gross acre (ten units per net acre). Those multiple-family units were not assumed to average the uppermost density range limit allowed, but some may be constructed at 10 units per gross acre (14.3 units per net acre).

It may also be useful to know how many single-family units could be expected in a low density area or how many multiple-family units in a medium density area. Table B-9 contains this information. For example, in low density areas, about 60 percent of the new construction could be assumed to be single-family dwelling units and about 20 percent multiple-family units; in high density areas only multiple-family units would be assumed.

TABLE B-9

DISTRIBUTION OF STRUCTURE TYPES WITHIN PLAN
RESIDENTIAL DESIGNATIONS BASED ON DWELLING UNIT DEMAND

Structure Type	Low Density		Medium Density		High Density		Total	
	No.	%	No.	%	No.	%	No.	%
Single-family	25,460	59.5	1,340	13.0	0	0	26,800	46.5
Mobile home	3,650	8.6	0	0.0	0	0	3,650	6.3
Duplex	5,005	11.8	555	5.4	0	0	5,560	9.7
Multiple-family*	8,390	19.7	8,390	81.6	4,795	100	21,575	37.5
TOTAL	42,505	100.0	10,285	100.0	4,795	100	57,585	100.0

* Does not include 2,400 multiple-family units assumed within 1 mile of downtown Eugene

LCDC GOAL #10 AND #14 COMPLIANCE REQUIREMENTS

The Goal #10 compliance requirement adopted by the LCDC provided several directions for improvements to the Metropolitan Plan and ordinances of individual jurisdictions. One such direction was embodied in Goal #10 compliance requirements 1 and 2 and can be summarized as follows:

Ensure the density and structure type assumptions used in development of the Metropolitan Plan can be achieved and that implementing mechanisms provide for clear and objective processes; i.e., LCDC "St. Helen's policy," in order to allow the private sector to respond to market demands in a timely and efficient manner.

This direction is important, not only in response to statewide goals but also in order to facilitate local growth of the Eugene-Springfield metropolitan area. Table B-10 demonstrates that the area is already achieving some of the density assumptions of the Metropolitan Plan. Table B-11 shows the percentage of single-family and multiple-family structure types by Plan designation existing as of January 1, 1980. Data in these tables demonstrate that the assumptions of the Metropolitan Plan are reasonable, and the goals and policies which evolved from them are being implemented.

TABLE B-10

METROPOLITAN AREA DENSITY CONSUMPTION BY
STRUCTURE TYPE AND PLAN DESIGNATION
1980 AND ASSUMED PLAN DENSITIES

<u>Plan Residential Structure Type</u>	<u>Plan Residential Designation</u>	<u>1980 Existing Net Density</u>	<u>Assumed Plan Densities Per Net Acres</u>
Single-Family	Low Density	3.85	6.5
Single-Family	Medium Density	2.49	6.5
Mobile Home	Low Density	5.43	7.0
Duplex	Low Density	9.65	10.0
Duplex	Medium Density	10.81	12.0
Multiple-Family	Low Density	15.02	10.0
Multiple-Family	Medium Density	18.27	20.0
Multiple-Family	High Density	54.20	21.4
Overall Density		8.3	5.0

Source: L-COG Geographical Information Base

TABLE B-11

METROPOLITAN AREA STRUCTURE DISTRIBUTION BY PLAN DESIGNATION
JANUARY 1, 1980

<u>Generalized Land Use</u>	<u>Low Density</u>		<u>Medium Density</u>		<u>High Density</u>		<u>Total</u>	
	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>	<u>No.</u>	<u>%</u>
Single-Family	41,033	96.2	1,104	2.3	485	1.1	42,622	100
Mobile Home	3,025	96.2	117	3.7	1	.1	3,143	100
Duplex	5,716	87.5	582	9.0	234	3.6	6,532	100
Multiple-Family	<u>5,122</u>	<u>39.3</u>	<u>4,830</u>	<u>37.1</u>	<u>3,062</u>	<u>23.5</u>	<u>13,014</u>	<u>100</u>
TOTAL	54,896		6,633		3,782		65,311	

Source: L-COG Geographical Information Base

Compliance requirement 7 of Goal 14, Urbanization," adopted by the Land Conservation and Development Commission (LCDC), reads as follows:

"Amend the Metro Area Plan to specify that minimum residential densities will be applied through the refinement planning process, as required by the Metro Area Plan, Policy 23, Page III-A-6."

In response to this compliance requirement, one policy and several supplementary policies were added to the Metropolitan Plan through the 1982 amendments. Policy 34 is added and reads as follows:

"In newly developing areas, techniques such as planned unit developments shall be employed to achieve density assumptions of the underlying Metropolitan Plan. The cities shall review the provisions of the residential zoning ordinances and make changes, as necessary, to further development of single and multiple family housing units in the number and density anticipated by the underlying plan."

Newly adopted Policies 31, 32, and 33, under Residential Land Use and Housing, supplement this Policy 34. They provide direction to use zoning, in accordance with other policies established in the Plan, as one technique to achieve densities and the variety of housing types envisioned, meet the multiple housing needs of the metropolitan area, and maintain a six-year supply of undeveloped urban residential land in all three residential categories. These policies anticipate application of zoning districts on a case-by-case basis in accordance with the directions established by the Metropolitan Plan. Combined, these policies will direct development of refinement plans in newly developing areas and provide for encouragement of higher densities.

New Policies 16-18 in the Metropolitan Plan, Chapter II-B, "Fundamental Principles," subsection "Growth Management and the Urban Services Area," reads as follows:

- "16. Refinement and functional plans shall be consistent with the direction established by the Metropolitan Plan and include findings recognizing this consistency.
17. Refinement and functional plans shall be consistent with goals, objectives and policies of the Metropolitan Plan.
18. Local implementing ordinances shall provide a process for zoning lands in conformance with the Metropolitan Plan using clear and objective standards."

In combination, these policies require the densities in the Metropolitan Plan to be carried out through refinement planning and other Plan implementation techniques.

APPLICABLE METROPOLITAN PLAN PROJECTIONS AND ASSUMPTIONS

The following outline assumptions used in developing the Metropolitan Plan, which are related to Goal #10, "Housing Issues" (see "Housing" working paper, page 53):

1. A significant shift for new construction toward a greater proportion of multiple-family and a reduced proportion of single-family structure types is projected (Table B-4).

2. Increasing density within the framework of a compact land use form will be achieved using a combination of mechanisms -- many of which are already being implemented.
3. Achieving the compact land use form and higher densities (more efficient use of residential land) requires private forces to implement Plan goals within a public policy framework. In other words, market forces are a very important variable affecting taste, affordability, structure choice, and density. The Plan sets the general direction; implementation techniques continue to guide new development gradually toward Plan goals.
4. Increased densities for new construction will not occur primarily through designating high density acres (20 or more dwelling units per gross acre or 28.5 units net). In other words, skyscrapers are not the solution to increasing density in the Eugene-Springfield metropolitan area.
5. The majority of residential land, even with the projected shift toward a lower proportion of single-family structure types, is still in the low density land use category.
6. Increases in density of single-family structures have been occurring in the metropolitan area during the past 12 years. Plan assumptions are compatible with that trend.
7. The assumed densities of structure types for new construction is not radically different from January 1, 1976 densities except for single-family.
8. A major factor affecting overall Plan densities is the distribution of multiple-family structures assumed to be constructed within low density residential Plan designation areas.
9. In January 1976, the distribution of multiple-family structures in the metropolitan area by 1990 Plan designation was:
 - 18 percent in low density
 - 28 percent in medium density
 - 54 percent in high density
10. Since Eugene adopted its Planned Unit Development Ordinance in 1976, a shift in the type of multiple-family constructed has changed. Instead of predominance of multiple-family units as apartments in medium and high density areas, a growing share of multiple-family construction has been in low density areas.
11. The Plan assumptions reflect that shift and provide direction for encouraging that trend.
12. Implementing measures provide a pathway for continuing that trend.
13. Market factors and trends indicate additional forces working to achieve the Plan assumptions.

CODE PROVISIONS

Both cities have adopted by ordinance, mechanisms which allow the private sector to respond to market demands for various structure types and densities which are consistent with adopted policies. Specifically, these mechanisms are aimed at providing flexibility in terms of density and structure type within various residential zoning districts. The following briefly outline examples of these mechanisms from the Cities of Eugene and Springfield:

Eugene

1. Panhandle Lots

Allows creation of residential lots with reduced frontage requirements. The effect of this provision is to:

- a. make better use of odd shaped lots;
- b. provide for in-filling, which is an important part of the compact urban growth concept; and
- c. make more efficient use of existing public services.

2. Planned Unit Developments

Allows all structure types in any residential area at densities up to the maximum provided for in the Plan; e.g., ten units per acre in low density areas.

3. Duplex, Triplex, and Fourplex Provisions

Allows development of these structure types (25 percent duplex, 15 percent triplex, and 10 percent fourplex) in new subdivisions of ten or more lots, located in any residential area.

4. Cluster Subdivision

Allows relaxation of requirements for lot area, lot coverage, and yard requirements in an approved "cluster subdivision" of four acres or less. The effect of this mechanism is to create greater flexibility in small subdivisions which may be using odd shaped parcels and therefore becoming an important part of the compact urban growth form.

5. Controlled Income and Rent Housing

Allows multiple-family housing at up to 14 units per acre in low density areas for housing aimed at low income households; i.e., 25 percent of gross family income devoted to housing.

Springfield

1. Panhandle Lots

Allows creation of lots in low density areas with reduced frontage which are 6,000 square feet or greater in size. The effect of this mechanism is to:

- a. allow use of odd shaped parcels;
- b. encourage in-filling, which is important to the compact urban growth concept; and
- c. make more efficient use of existing capital facilities.

2. Planned Unit Development

Allows development of all structure types in any residential area and includes provisions for density bonuses which can increase a project's density by 20 percent over normal subdivision standards. The effect of this mechanism is to provide for a wide variety of structure types throughout the city and allow increased densities.

3. Duplexes

This portion of Springfield's zoning code allows construction of duplexes in all low density areas, on lots of 6,000 square feet or greater. This is an important mechanism to increase density for small developments.

4. Low Density Residential District (RL) Standards

These standards allow use of multiple-family structures in accordance with zoning code standards at densities up to ten units per acre in low density areas. The effect of this provision is to:

- a. provide greater flexibility for developers in the low density area,
- b. allow response to varying market demands through multiple-family structure types without requiring planned unit development procedures, and
- c. allow densities up to the maximum provided for in the Plan.

5. Minor Partitions

Allows partitions in low density areas which would create lots as small as 5,000 square feet in area.

APPENDIX C

INVENTORY OF EXISTING LAND USE, UNDEVELOPED LAND, AND DWELLING UNITS BY STRUCTURE TYPE

The original documentation of land use data within the Metropolitan Plan Update Study Area was subdivided into 72 "analysis zones." While use of these zones was convenient for planners working on the update project, they rarely conformed to reporting needs for other users or projects. The information has been consolidated into 16 more identifiable geographic areas within the urban growth boundary for this report; those 16 areas are shown on Map No. 6 at the end of this report. Some information is provided for the general area on a broader scale (Tables C-1 and C-2). It is still possible, through the geographic data system, to reorganize this information according to other appropriate boundary definitions.

Detailed information on existing land use and dwelling units is provided for each of those 16 subareas in Tables C-3 and C-4.

Table C-5 contains the buildable land information for the 16 subareas (see also Table 6 in Chapter V of this document for more information on the Buildable Land Inventory).

TABLE C-1

TOTAL AREA WITHIN THE PLAN BOUNDARY

Inside the Urban Growth Boundary: 48,412 acres

Within Urban Reserve:

Northwest Santa Clara	521 acres	
Willow Creek	2,476 acres	
East Thurston	502 acres	
Total Urban Reserve	3,499 acres	3,499 acres

Other Rural Areas Within the Plan Boundary:

Airport Vicinity	6,178 acres	
Spencer Butte	275 acres	
Russel Creek Basin (L.C.C.)	2,770 acres	
Mt. Pisgah	5,503 acres	
North Springfield/Thurston	3,403 acres	
North Willakenzie	2,582 acres	
Total Other Rural	20,211 acres	20,211 acres

TOTAL 72,122 acres

TABLE C-2

EXISTING LAND USE FOR METROPOLITAN PLAN AREA
DATA AS OF JANUARY 1, 1977

	<u>Within the Urban Growth Boundary</u>	<u>In Urban Reserve</u>	<u>In Other Rural</u>	<u>Total</u>
Residential				
Single-Family	11,128	361	786	12,275
Duplex	568	0	2	570
Mobile Home	564	45	90	699
Multiple-Family	638	0	7	645
Group Quarters	53	0	0	53
Industrial				
Industrial	1,760	0	201	1,961
Wholesale Trade	249	0	0	249
Transp.-Comm.-Util.	1,124	22	351	1,497
Commercial				
Retail Trade	665	1	8	674
Services	1,663	16	41	1,720
Recreation	827	0	90	917
Government	518	13	1,826	2,357
Education	1,000	0	186	1,186
Parks	535	0	289	824
Roads-Parking	6,829	114	562	7,505
Water	705	1	942	1,648
Undeveloped				
Public	1,317	21	2,159	3,497
Private	<u>18,006</u>	<u>2,970</u>	<u>12,454</u>	<u>33,430</u>
TOTAL	48,149	3,564	19,994	71,707*

* This figure is the sum of all parcels whose centers fall within the Plan boundary. It is about 415 acres less than the true area within the Plan boundary shown in Table C-1. That margin of error is less than 1/2 percent (0.5%).

TABLE C-3

EXISTING LAND USE IN ACRES* BY SUBAREA WITHIN THE URBAN GROWTH BOUNDARY
DATA AS OF JANUARY 1, 1977

Subarea	Residential	Industrial	Commercial	Government	Parks	Roads	Water	Undeveloped Public	Undeveloped Private	Total
City of Eugene**	6,279	1,141	1,980	1,007	472	3,766	310	600	5,820	21,384
Laurel Hill Valley	13	0	1	4	0	2	0	1	285	307
No. Willakenzie	196	13	11	19	0	59	0	91	703	1,094
South Eugene	246	2	16	3	5	79	0	3	1,251	1,606
Willow Creek	152	63	104	1	0	54	0	0	1,170	1,544
West Bethel	88	29	9	0	0	22	35	3	1,349	1,537
Highway 99 North	180	329	100	5	0	117	0	1	718	1,448
River Road	942	274	61	135	2	332	107	37	372	2,263
Santa Clara	1,135	24	55	107	8	418	4	38	1,033	2,823
Glenwood	100	65	70	1	0	72	141	0	145	593
City of Springfield**	2,465	635	706	217	43	1,579	68	215	2,343	8,274
South Springfield	246	27	5	0	0	40	0	2	1,118	1,437
Douglas Gardens	224	0	1	0	0	80	2	254	1,492	1,484
Natron	37	99	0	0	0	10	0	0	361	507
Thurston	58	0	2	0	0	18	4	14	250	346
North Springfield	585	18	26	9	5	168	29	52	588	1,493
TOTALS	12,952	3,134	3,155	1,517	535	6,817	701	1,315	17,999	48,131

* Totals may not add due to rounding of fractions.

** Totals for the two incorporated cities also include unincorporated islands surrounded by the cities.

TABLE C-4

NUMBER OF EXISTING DWELLING UNITS BY STRUCTURE TYPE
BY SUBAREA WITHIN THE URBAN GROWTH BOUNDARY
DATA AS OF JANUARY 1, 1977

	<u>Single- Family</u>	<u>Duplex</u>	<u>Mobile Home</u>	<u>Multiple- Family</u>	<u>Totals</u>
City of Eugene*	22,062	3,178	1,158	10,635	37,033
Laurel Hill Valley	20	0	0	0	20
No. Willakenzie	236	2	213	8	459
South Eugene	147	10	4	0	161
Willow Creek	103	4	10	0	117
West Bethel	46	0	3	0	49
Highway 99 North	183	20	19	0	222
River Road	3,181	396	41	132	3,750
Santa Clara	3,958	340	119	32	4,449
Glenwood	169	16	503	11	699
City of Springfield*	8,333	1,740	1,140	3,284	14,497
South Springfield	61	0	2	0	63
Douglas Gardens	389	14	146	0	549
Natron	5	0	2	0	7
Thurston	70	0	5	0	75
North Springfield	<u>1,853</u>	<u>118</u>	<u>21</u>	<u>24</u>	<u>2,016</u>
TOTALS	40,821	5,838	3,388	14,126	64,173

* Totals for the two incorporated cities also include existing dwelling units from within the unincorporated islands surrounded by the cities.

TABLE C-5

BUILDABLE LAND INVENTORY (ACRES) BY SUBAREA

	Total Acres	Private Undevel- oped Acres	Prohibi- tions	Small Lots Less Than 0.13 ac.	Limit- ations	Small Lots 0.13 to 0.25 ac.
City of Eugene*	22,384	5,820	652	51	1,041	325
Laurel Hill Valley	307	285	50	0	206	0
No. Willakenzie	1,094	705	43	0	0	2
South Eugene	1,606	1,251	117	2	972	4
Willow Creek	1,544	1,170	140	0	0	0
West Bethel	1,537	1,349	13	0	0	0
Highway 99 North	1,448	718	0	0	0	0
River Road	2,263	372	36	4	0	17
Santa Clara	2,823	1,033	48	2	0	17
Glenwood	593	145	58	7	0	4
City of Springfield*	8,274	2,343	170	14	17	144
South Springfield	1,437	1,118	0	0	52	11
Douglas Gardens	1,484	492	0	0	0	2
Natron	507	361	132	0	365	0
Thurston	346	250	40	0	220	0
North Springfield	1,483	588	102	0	0	10
TOTALS	48,131	17,999	1,600	80	2,873	536

* Totals for the two incorporated cities also include existing dwelling units from within the unincorporated islands surrounded by the cities.

APPENDIX D

PLAN DESIGNATIONS AND ALLOCATIONS
(Acres and Dwelling Units)

Descriptions of the Plan designations can be found in the Metropolitan Plan, Chapter II-E, "Plan Diagram - Text." Table D-1 lists the genral designations and abbreviations for the designations used in subsequent tables.

The following tables reflect the acres of Plan designation within the Metropolitan Plan boundary (Table D-2) and allocations of projected land use needs to buildable lands within the urban growth boundary (Table D-3).

Table D-4 shows the dwelling unit allocations for each of the 16 subareas.

TABLE D-1

GENERAL METROPOLITAN PLAN DESIGNATIONS AND ABBREVIATIONS

<u>Plan Designation</u>	<u>Abbreviation</u>
Low Density Residential	LDR
Medium Density Residential (includes mixed use)	MDR
High Density Residential (includes mixed use)	HDR
Community Commercial (includes mixed use and major retail commercial)	CC
Heavy Industrial	HI
Special Heavy Industrial	SHI
Light-Medium Industrial	LMI
Special Light Industrial	SLI
Government	G
Education (this is a subcomponent of the Government designation)	E
Parks and Open Space	P
Natural Resource	N
Sand and Gravel	S
Agriculture	A
Forest	F
Rural Residential	RR
Rural Commercial	RC
Water	W

TABLE D-2

TOTAL LAND AREA (ACRES) BY PLAN DESIGNATIONS*

<u>Plan Designation</u>	Within Urban Growth Boundary	Within Urban Reserve	Within Other Rural
Low Density Residential	28,830	0	0
Medium Density Residential**	2,960	0	0
High Density Residential**	700	0	0
Community Commercial**	2,590	0	0
Heavy Industrial	2,970	0	0
Special Heavy Industrial	440	0	0
Light-Medium Industrial	3,720	0	0
Special Light Industrial	930	0	0
Government	455	0	1,800***
Education	490	0	155***
Parks and Open Space	3,425	30	3,965
Natural Resource	230	0	0
Sand and Gravel	350	0	2,395
Agriculture	0	1,230	0
Forest	0	1,565	0
Rural Residential***	0	700	395
Rural Commercial***	0	0	10
Water	55	0	120
TOTALS	48,170	3,580	19,990

* Rounded to nearest five acres. Columns may not add due to rounding. Total of 71,730 acres, with 80 acres unassigned to a land use designation. These figures represent existing developed land and undeveloped land by Plan designation.

** Includes mixed use Plan designations.

*** For more details, refer to "Exceptions" working paper, L-COG, November 1981.

TABLE D-3

ALLOCATIONS OF PROJECTED LAND USE NEEDS TO PRIVATE UNDEVELOPED BUILDABLE LANDS*
DATA AS OF JANUARY 1, 1977

Subarea	HDR**	MDR**	LDR	CC	LMI	HI	SHI	SLI	G	P	Total
City of Eugene	102	565	2,224	313	718	140	0	345	7	344	5,280
Laurel Hill Valley	0	0	229	5	0	0	0	0	0	1	285
No. Willakenzie	0	0	640	0	0	0	0	0	5	0	702
South Eugene	0	0	972	0	0	0	0	0	0	193	1,251
Willow Creek	57	210	538	47	0	0	0	95	0	0	1,170
West Bethel	0	0	783	0	356	0	0	200	0	6	1,349
Highway 99 North	0	0	70	0	286	63	299	0	0	0	1,718
River Road	0	85	153	22	28	0	0	0	0	12	372
Santa Clara	0	51	818	21	64	0	0	0	13	0	1,033
Glenwood	0	0	0	6	91	0	0	0	0	38	145
City of Springfield	51	227	942	237	220	141	0	0	1	7	2,343
South Springfield	10	0	1,060	9	0	0	0	0	0	0	1,118
Douglas Gardens	10	65	319	9	0	3	0	0	0	0	493
Natron	0	28	365	10	125	0	6	0	0	0	361
Thurston	0	0	220	5	0	0	0	0	0	0	250
North Springfield	0	100	109	31	0	0	0	120	0	0	588
TOTALS	230	1,381	9,448	730	1,888	347	385	890	26	660***	17,998*

* This table was developed from computer-generated data with some manual adjustments. The totals compare closely with the metropolitan totals in Table F, Chapter V, of this document.

** Includes mixed use.

*** Most of these park lands are accounted for in the 977 acres of adjustments to the buildable land inventory in Table 6. Many of these acres have been purchased as public park lands since 1977.

**** This total includes 270 acres in other land use categories (i.e., natural resource and water) which are part of the prohibitions in the buildable land inventory (Table 6).

TABLE D-4
ALLOCATED DWELLING UNITS BY PLAN DESIGNATION BY SUBAREA

LDR Subarea	LDR					Unencumbered*****	Subtotal	Total
	HDR*	MDR**	Small		Limitations*****			
			Lots***					
City of Eugene	2,550	6,136	325		3,644	6,092	10,061	18,747
Laurel Hill Valley	0	0	0		721	118	839	839
No. Willakenzie	0	0	2		0	3,296	3,298	3,298
South Eugene	0	0	4		3,402	0	3,406	3,406
Willow Creek	1,425	2,281	0		0	2,771	2,771	6,477
West Bethel	0	543	0		0	4,032	4,032	4,575
Highway 99 North	0	0	0		0	361	361	361
River Road	0	923	17		0	788	805	1,728
Santa Clara	0	554	17		0	4,213	4,230	4,784
Glenwood								
City of Springfield	1,275	2,465	144		60	4,764	4,968	8,708
South Springfield	250	0	11		182	5,191	5,384	5,634
Douglas Gardens	250	706	2		0	1,643	1,645	2,601
Natron	0	304	0		1,278	0	1,278	1,582
Thurston	0	0	0		770	0	770	770
North Springfield	0	1,086	10		0	561	571	1,657
TOTALS	5,750	14,998	536		10,057	33,830	44,423	65,171

- * High Density Residential at 25 dwelling units per gross acre.
 ** Medium Density Residential at 10.86 dwelling units per gross acre.
 *** Low Density Residential - small lots at one d.u. per lot.
 **** Low Density Residential - slope limitations at 3.5 d.u./gross acre.
 ***** Low Density Residential - unencumbered flatland at 5.15 d.u./gross acre.

APPENDIX E

SUMMARY OF METROPOLITAN PLAN UPDATE PROCESS

This annotated outline follows the chronological order of the Metropolitan Plan update process.

THE EUGENE-SPRINGFIELD METRO AREA GENERAL PLAN, 1972.

This general plan for the metropolitan area was adopted in 1972 by Eugene, Springfield, and Lane County. This plan established general goals and objectives concerned with guiding growth in the area. It was developed to accommodate land use need projected for the year 1990. It contained a land use diagram and was the first to introduce the concept of an urban service area. The 1990 Plan also called for a major update every five years.

METROPOLITAN PLAN UPDATE

This process began in 1976 in response to the 1990 Plan requirement that an update be conducted every five years and the Oregon Land Conservation and Development Commission's requirements that the comprehensive plans of cities and counties comply with statewide planning goals. The following steps document the process which was used to update the General Plan for the metropolitan area:

1. Initiation of Update Process (1976-1977)

This step involved data gathering, identification of issues, recognition of a citizen involvement committee, establishment of a policy committee, preparation of a draft work program, and development of a citizen involvement program for the update process.

2. Formulation and Adoption of Work Program (1977)

In this step of the update process, the Metropolitan Area Planning Advisory Committee (MAPAC) conducted two public meetings in April 1977 to receive public comment on Plan update issues, the update work program, and MAPAC's Reevaluation Summary. After those two public meetings, the Eugene and Springfield City Councils and the Lane County Board of Commissioners reviewed the draft work program. The work program was formally adopted by the MPPC in December 1977.

3. Development of Working Papers (November 1977 to May 1978)

During this period, the staff prepared eight background papers (see attached annotated bibliography). Public involvement and development of the working paper occurred through MAPAC subcommittees prior to final publishing. MAPAC had the opportunity to make recommended changes and MPPC authorized printing of the amended working papers.

4. Preparation of Draft Update Text (June 1978 to November 1978)

In this step of the process, staff prepared draft text elements, and MAPAC commented on each. MPPC authorized release, and MAPAC held 13 neighborhood-level public meetings throughout the metropolitan area in October 1978. The resulting products include the preliminary test document, and a summary of public testimony from the 13 public meetings conducted. Methods used to notify the public included news releases and mailout of MAPAC newsletters to interested citizens and groups (through the course of the process this mailing list grew to over 1,500 individuals and organizations).

5. Preparation of Plan Diagram Alternatives (July 1978 to February 1979)

This step in the process involved preparation of three Plan diagram alternatives. These alternatives varied primarily by changing assumptions about housing mix and residential densities. The result was three diagram alternatives (low density, medium density, and high density), which resulted in three urban growth boundaries, the largest of which was associated with the low density alternatives.

Associated with public release of the technical document and summary document, which examined the implications of these three growth scenarios, was the undertaking of an extensive citizen involvement campaign. The results of that public campaign are documented in the "Analysis and Description of the Community Forum" (see Appendix F, "Annotated Bibliography"). Over 1,200 people participated in an all-day workshop at the Lane County Fairgrounds; the theme of the workshop was "Where Do We Grow From Here?" Complete public testimony from the all-day workshop is contained in a 485-page document, "Complete Public Testimony on the Metropolitan Plan Update Alternatives," L-COG, 1979 (also see Appendix F, "Annotated Bibliography").

6. Preparation of Draft Plan (February 1979 to September 1979)

Based on the public testimony received on the draft test in the 13 public hearings and the community forum, MAPAC released its September 1979 Draft Plan (see Draft Metropolitan Area General Plan, L-COG and Draft Metropolitan Area General Plan: Background Report, L-COG, December 1979). Public release of that plan was authorized by MPPC in September 1979. Combined, MAPAC, MAPAC subcommittees, and MPPC conducted more than 100 meetings leading to the public and release of the September 1979 Draft Plan. The Draft Plan was formally forwarded to the Eugene, Springfield, and Lane County for hearings and ultimate adoption. To assist in public understanding of the Draft Plan, the City of Eugene published a poster size version of the Draft Plan diagram and all the recommended policies and distributed them throughout the community.

7. Planning Commission Review Hearings and Recommendations (October 1979 to April 1980)

In this phase of the process, three joint public hearings were conducted by the Eugene, Springfield, and Lane County Planning Commissions in December 1979. In addition, the Eugene and Springfield Planning Commissions conducted individual public hearings on the Draft Plan during the period October 1979 to April 1980. The three Planning Commissions formed a planning committee to:

- a. develop citizen involvement at the Planning Commission level,
- b. develop a schedule for Planning Commission adoption,
- c. establish meeting structure, and
- d. resolve differences among the three governing bodies.

After considering the testimony from five public hearings and meeting innumerable times to resolve differences, reach agreement on, and recommend amendments to the September 1979 Draft Plan, the Planning Commissions forwarded their recommendations to the three elected bodies in the April 1980 version of the Plan (see Draft Metropolitan Area General Plan; Recommendation of Eugene, Springfield, and Lane County Planning Commissions, L-COG, April 1980). Where the Planning Commissions were unable to resolve differences, two versions of certain Plan text and diagram recommendations were forwarded to the elected officials and public for further review and amendment.

8. Elected Officials' Review and Adoption (April 1980 to October 1980)

In this stage of the process, two joint public hearings were conducted by the Eugene and Springfield City Councils and the Lane County Board of Commissioners in May 1980 (see "Public Testimony, Eugene City Council, Springfield City Council, Lane County Board of Commissioners, Joint Public Hearings, May 29 and 31, 1980," L-COG, June 1980 and "Staff Summary and Response to Public Testimony from May 29 and 31 Joint Public Hearings," L-COG, June 1980).

Another result of this phase of the process was the creation of the "Joint Elected Officials Coordinating Committee." The purpose of this committee was to:

- a. review the proposed citizen involvement process at the elected official level,
- b. develop a schedule leading to adoption, and
- c. resolve remaining differences between the governing bodies.

As a result of this process and after considering public testimony:

- a. The Eugene and Springfield City Councils adopted an identical version of the Metropolitan Area General Plan:

Eugene - July 28, 1980 - Ordinance No. 18686

Springfield - August 4, 1980 - Ordinance No. 4555

- b. The Lane County Board of Commissioners adopted a difference version of the Metropolitan Area General Plan:

Original adoption - August 27, 1980 - Ord. No. 9-80

Amended adoption - October 14, 1980 - Ord. No. 9-80-A

Each governing body conducted public hearings on the proposed ordinances according to their individual charter requirements.

9. Oregon Land Conservation and Development Commission (LCDC) Review (October 1980 to September 1981)

Two versions of the August 1980 Metropolitan Plan were submitted to LCDC for "acknowledgment of compliance" with statewide planning goals in October 1980. LCDC conducted public hearings and reviews of the Metropolitan Area Comprehensive Planning Programs (including the Metropolitan Plan as a major component of each of the three individual comprehensive Plan programs).

After meetings in June, August, and September 1981, LCDC concluded that the August 1980 Metropolitan Plan did not comply with all of the statewide planning goals. LCDC directed certain corrections be made to the Plan and granted a 150-day continuance to allow the three governments to make the necessary amendments to the August 1980 Plan.

10. Industrial Study Task Force (November 1980 to April 1981)

This 13-member group was appointed by Eugene, Springfield, and Lane County elected officials to study the treatment of industrial lands in the Metropolitan Plan. After 24 public meetings over a 6-month period, the Task Force submitted its recommendations to the 3 elected bodies as the "Industrial Study Task Force Final Report," L-COG, April 1981 (see Appendix F, "Annotated Bibliography"). The recommendations of the Task Force were incorporated into the amendment process for the Metropolitan Plan outlined in Section K, "Amendments to the August, 1980 Metropolitan Plan."

11. Amendments to the August 1980 Plan (September 1981 to March 1982)

After the 150-day continuance was granted by LCDC on September 26, 1981, work began to address the corrections required by LCDC to the Metro Plan and to its respective implementing ordinances.

The Elected Officials Coordinating Committee (EOCC) provided policy direction to the staff during this phase of the update process. MAPAC recommended a citizen involvement program for the amendment

phase. This program and the schedule for the amendment phase associated with the August 1980 Plan were approved by EOCC.

In November, as part of the amendment process, ten new working papers were prepared, and proposed Plan amendments were released to the general public after review by MAPAC and approval by EOCC (see Appendix F, "Annotated Bibliography"). After public notification, a joint public hearing was conducted by the Eugene, Springfield, and Lane County Planning Commissions on November 17, 1981. Two joint public hearings on proposed Plan amendments were conducted by the Eugene and Springfield City Councils and Lane County Board of Commissioners on December 15, 1981 and January 12, 1982. After considering the public comments, the three governments adopted a common plan:

Lane County, Ord. No. 856, adopted February 3, 1982
City of Eugene, Ord. No. 18927, adopted February 8, 1982
City of Springfield, Ord. No. 5024, adopted March 1, 1982

12. Resubmittal to LCDC and Ultimate Acknowledgment

In May 1982, the LCDC extended the continuance period for the Eugene-Springfield metropolitan area to July 1, 1982. It is anticipated that the amended Plan and the implementation measures adopted individually by Eugene, Springfield, and Lane County will be resubmitted to the State prior to July 1, 1982 with request for acknowledgment.

APPENDIX F

ANNOTATED BIBLIOGRAPHY OF METROPOLITAN PLAN
UPDATE PUBLICATIONS

This annotated bibliography lists the major and minor publications produced during the 1990 Plan update process - beginning with the 1990 Plan.

1. The Eugene-Springfield Metropolitan Area 1990 General Plan, L-COG, 1972

This plan was adopted by Eugene, Springfield, and Lane County in 1972 and provided the policy framework which guided growth in the metropolitan area from 1972 to August 1980, when the Metropolitan Area General Plan was adopted.

2. MAPAC Reevaluation Summary, L-COG, February 10, 1977

This document identified issues and subject area which needed to be addressed to update the 1990 Plan to reflect year 2000 projections and the applicable LCDC statewide planning goals.

3. 1990 General Plan Reevaluation and Update: Popular Summary, March 2, 1977

This document summarized assumptions, identified issues, and outlined the Metropolitan Plan update process for public review in advance of the April 5 and 7, 1977 MAPAC public meetings on the work program.

4. Summary of Issues Identified at the Meetings of April 5 and 7, 1977

This document summarized issues raised by the public regarding the Metropolitan Plan update process.

5. Adopted Work Program, December 1977

This work program was adopted by MPPC based on public input, MAPAC recommendations, and amendments requested by the Eugene, Springfield, and Lane County Board of Commissioners.

6. Population, Households, and Employment, L-COG, February 1978

This document detailed the projection which formed the basis for the Metropolitan Plan update.

7. Working Papers, L-COG, November 1977 to May 1978

The following subjects were treated in the working papers prepared by the planning team and MAPAC under the direction of MPPC in late 1977 and the first half of 1978. These papers served as background information for preparation of the Draft Metropolitan Plan.

- a. Existing land use, housing characteristics, and historic resources
- b. Public facilities
 - (1) fire protection

- (2) police service
- (3) park and recreation facilities
- (4) school facilities
- (5) sanitary sewers service
- (6) storm sewers and service
- (7) water service
- (8) electrical service
- (9) inventory of natural gas service
- (10) transportation
- c. Natural assets and constraints
 - (1) flood hazards
 - (2) soil constraints for development
 - (3) agriculture land (see also "Agricultural Lands - Addendum," October 1982)
 - (4) vegetation/wildlife/wildlife habitat (see also "Natural Resource Areas: Conflict Resolution for Significant Areas," January 1982)
 - (5) sand and gravel resources
 - (6) forest lands (see also "Forest Lands - Revised," October 1981)
 - (7) scenic areas
 - (8) water (see also "Groundwater - Addendum," October 1981)
 - (9) air
 - (10) Willamette River Greenway (see also "Willamette River Greenway," October 1981)
 - (11) geological hazards
 - (12) archeological sites
- d. Energy
- e. Residential land use and housing

- f. A description of the metro area economy (see also "Economy - Addendum," October 1981)
 - g. Transportation
 - h. Residential, commercial, industrial, and public facilities land use needs (demands)
8. Preliminary Text, Eugene-Springfield Metropolitan Area General Plan, L-COG, June 1978

This document contained the new draft text for the Metropolitan Plan. Chapters of the 1990 Plan were reorganized and expanded upon to more closely parallel the subject headings of the LCDG Goals. Chapters were organized to include introduction, findings, goals, objectives, and recommended policies. (The diagram and descriptions of land use designations were not treated in this document.)

9. October Comments on the Preliminary Update Plan Text Draft, L-COG, November 15, 1978

This document provided a summary of public concerns expressed at the 13 October MAPAC meetings, where the public commented on the preliminary update text. It also contained all the written testimony (42 pages).

10. Plan Diagram Update Alternatives Technical Report, L-COG, January 1979

This document provided an evaluation of three residential growth scenarios. The dwelling unit mix and associated residential densities were varied to create a relatively low, medium, and high density alternative -- each with corresponding urban growth boundary.

11. Plan Diagram Update Alternatives Summary Report, L-COG, January 1979

This document provided an evaluation of three residential growth scenarios. The dwelling unit mix and associated residential densities were varied to create a relatively low, medium, and high density alternative -- each with corresponding urban growth boundary.

12. Complete Public Testimony on the Metropolitan Plan Update Alternatives, L-COG, 1979

This document contains 485 pages of testimony received at the Community Forum held at the Lane County Fairgrounds in February 1979 (see #14 below). These comments were directed at the three residential density growth scenarios.

13. Community Forum Description and Analysis, L-COG, February 1979

This document summarized the citizen involvement process and techniques used at the Community Forum and in conjunction with the three diagram alternatives. It also contains a 45 page summary distilled from the 485 pages of public testimony from the Community Forum. About 1,200 citizens attended this event.

14. Draft Metropolitan Area General Plan, L-COG, September 1979

This document is the Draft Plan prepared by MAPAC and forwarded by MPPC to the three governing bodies in September 1979. The draft test (including recommended goals and policies) reflected changes to the June 1978 preliminary test in response to public comments. This draft also contained a recommended Plan diagram, which was a hybrid from the three diagram alternatives developed by MAPAC after consideration of the public testimony from the Community Forum.

15. Draft Metropolitan Area General Plan: Background Report, L-COG, December 1979

This report documented the rationale for the recommended September 1979 Plan.

16. Complete Public Testimony From The Three Joint Planning Commission Hearings, December 1979, With Staff Summary and Comments, L-COG, January 1980

This document contained public testimony, oral and written, from the joint public hearings conducted by the Eugene, Springfield, and Lane County Planning Commissions in December 1979. At the request of the Planning Commissions it also contained a staff summary of issues and staff comments corresponding to those issues.

17. Draft Metropolitan Area General Plan: Recommendation of Eugene Planning Commission to Eugene City Council, Eugene, April 1980

This document was prepared by the Eugene Planning Commission as a recommendation to the Eugene City Council in early April 1980. This document served as a catalyst for resolving many of the differences at the Planning Commission level.

18. Minutes and Written Testimony From April 8 Hearing on Metropolitan Plan Draft Recommendations of Eugene Planning Commission, Eugene Planning Department, April 16, 1980

This document contained the results of the Eugene Planning Commission's public hearings on Eugene's version of the Metropolitan Plan.

19. Springfield Planning Commission: Minutes of May 8, 1980 Public Hearing on the Metropolitan Plan

This document contained the results of the Springfield Planning Commission's public hearings on Springfield's version of the Metropolitan Plan.

20. Draft Metropolitan Area General Plan; Recommendation of Eugene, Springfield, and Lane County Planning Commissions, L-COG, April 1980

This draft of the Plan outlined the changes to the September 1979 Draft Plan recommended jointly by all three Planning Commissions. The April 1980 Draft Plan contained both versions of the respective recommendations where differences remained among Planning Commissions.

21. Public Testimony, Eugene City Council, Springfield City Council, Lane County Board of Commissioners, Joint Public Hearings, May 29 and 31, 1980, L-COG, June 1980

This document contained oral and written testimony submitted at the joint public hearings on the April 1980 Draft Plan held by the three governing bodies.

22. Staff Summary and Response to Public Testimony From May 29 and 31 Joint Public Hearings, L-COG, June 1980

At the request of the joint elected officials, staff prepared a summary of the issues raised at the May 1980 joint public hearings and a response to those issues.

23. Eugene-Springfield Metropolitan Area General Plan, as adopted by the City of Springfield, June 30, 1980

This plan was adopted by Springfield on June 30, 1980. Additional amendments were later made to this version of the Plan as the Springfield representatives continued to negotiate with Lane County and Eugene officials to reach compromises on areas of differences.

24. Metropolitan Area General Plan, L-COG, August 1980

While the two cities were able to agree on a common version of the Plan, they and Lane County were unable to reach compromise on all Plan differences. The two versions of the August 1980 Metropolitan Plan were submitted to LCDC, with request for acknowledgment of compliance with the statewide planning goals in October 1980. This plan replaced the 1990 Plan as the general, guiding land use document for the metropolitan region.

25. Draft Metropolitan Area General Plan Technical Supplement, L-COG, August 1980

This document provided the background information and rationale for the August 1980 Metropolitan Plan.

26. Industrial Study Task Force Final Report, L-COG, April 1981

This report contained the findings and recommendations of the Industrial Study Task Force. This 13-member body was created to review industrial lands treatment in the August 1980 Metropolitan Plan. The Task Force was created in response to compromises reached on the urban growth boundary in the northwest Highway 99 corridor.

27. MAPAC's Metropolitan Plan Update Process Evaluation: Summary Conclusions and Recommendations, L-COG, September 1981.

This document summarizes an evaluation of the Metropolitan Plan update process from the start-up point in 1976 through the first round of the local adoption process in 1980. The report contains recommendations for improvements to the next update process.

28. Amended DLCD Acknowledgment of Compliance Staff Report (for the Eugene-Springfield Metropolitan Area), adopted by LCDC, August 6, 1981 (Goals #1-4 and 6-15)

This staff report, as adopted by LCDC, contained discussions, conclusions, and specific corrective actions necessary to bring the Metropolitan Plan into compliance with the statewide planning goals (#1-4 and 6-15).

29. DLCD Acknowledgment of Compliance Staff Report, adopted by LCDC, September 24, 1981 (Goal #5)

This staff report, as adopted by LCDC, contained discussions, conclusions, and specific corrective actions necessary to bring the Metropolitan Plan into compliance with the statewide planning Goal #5, "Natural Resources."

30. 1981-82 Working Papers

These ten working papers were developed in direct response to corrective actions ("Orders to Comply") required by LCDC. They contained the background information for many of the amendments to the August 1980 Metropolitan Plan.

- a. Exceptions
- b. Agricultural Lands
- c. Forest Lands Revision
- d. Natural Resource Areas
- e. Conflict Resolution for Significant Areas
- f. Noise
- g. Groundwater

- h. Economy Addendum
 - i. River Road - Santa Clara Sanitary Sewer Facilities Plan
 - j. Emergency Medical Services
 - k. Greenway Addendum
31. Summary of Proposed Metropolitan Plan Amendments, L-COG, November 1981
- a. "Additional Proposed Metropolitan Plan Amendments" memorandum from EOCC, December 10, 1981
 - b. "Proposed Amendment to Metropolitan Plan" memorandum from the Metropolitan Planning Team (staff), December 11, 1981
 - c. "Goal 5 Metropolitan Plan Amendments" memorandum from the Metropolitan Planning Team (staff), December 15, 1981

This document and the memorandums contained the proposed draft amendments prepared by the Metropolitan Planning Team. After review by MAPAC, public release of the document was authorized by EOCC in November 1981. This document and the memorandums were subject to public hearings at the Planning Commission and elected official level.

32. Public Testimony and Recommendations From the Three Planning Commissions, November 17, 1981, Joint Public Hearing, L-COG, November 1981

This document contained the minutes and oral testimony submitted to the three Planning Commissions in a joint public hearing on November 17, 1981. It also contained Planning Commission recommendations forwarded to the respective elected bodies as of November 24, 1981.

33. Public Testimony on Proposed Metropolitan Plan Amendments From the December 15, 1981 Joint Public Hearing of the Eugene and Springfield City Councils and the Lane County Board of Commissioners, L-COG, December 1981

This document contained the minutes and written testimony submitted to the three elected bodies at their December 15, 1981 joint hearing.

34. Summary of Issues From Written Testimony, January 4, 1982

This summary of issues from the written comments from the December 15, 1981 joint public hearing of the three elected bodies was prepared at the request of the elected officials, to assist them in considering possible amendments to the Metropolitan Plan.

35. Joint Public Hearing on LCDC Goal 5, "Natural Resources" and Joint Meeting on Proposed Metropolitan Plan Amendments From the January 12, 1982 Joint Public Hearing and Meeting of the Eugene and Springfield City Councils and the Lane County Board of Commissioners, L-COG, January 1982

This document contained written testimony and minutes from the January 12, 1982 joint public hearing on LCDC Goal #5, "Natural Resources." It also contained the minutes from the joint elected officials meeting of January 12, 1982, where the elected officials reached informal agreements on amendments to the August 1980 Metropolitan Plan.

36. 1982 Amendments to the August 1980 Metropolitan Area General Plan, L-COG, February-March 1982

This document contained the amendments as officially adopted by the three governing bodies, as outlined below:

Lane County, Ord. No. 856, adopted February 3, 1982
City of Eugene, Ord. No. 18927, adopted February 8, 1982
City of Springfield, Ord. No. 5024, adopted March 1, 1982

This document is of historical significance. It represents the consensus reached by the City Councils of Eugene and Springfield and the Lane County Board of Commissioners on issues which were debated extensively within the metropolitan region between 1976 and 1982. This document, having been adopted by ordinance by the three governing bodies, serves as the guiding land use policy document for the Eugene-Springfield metropolitan area. The Metropolitan Plan, as amended in 1982, contains goals, policies, a land use diagram, and a sites-specific urban growth boundary mutually agreed to by Eugene, Springfield, and Lane County.

APPENDIX G

LIST OF METROPOLITAN PLAN UPDATE PARTICIPANTS

The following is a list of the major participants in the 1990 Plan update process from 1976-1982.

1. Metropolitan Area Planning Advisory Committee (MAPAC)

The 21-member MAPAC has 7 members each representing Eugene, Springfield, and Lane County. This citizen advisory and citizen involvement committee has an ongoing Metropolitan Plan role and operates under bylaws adopted by the Lane Council of Governments (L-COG) Board of Directors.

2. Metropolitan Plan Policy Committee (MPPC)

The seven-member MPPC provided policy direction for the update during 1976-1979. MPPC had one elected official and one Planning Commission member each from Eugene, Springfield, and Lane County; the seventh member was a MAPAC representative.

3. Metropolitan Planning Team

Staff Planners from Eugene, Springfield, Lane County, and L-COG cooperated to prepare draft materials for public review and support the update process.

4. Eugene, Springfield, and Lane County Planning Commissions

All three Planning Commissions were involved in the update process. Each had representatives on MPPC, the Planning Commission Coordinating Committee and the Elected Officials Coordinating Committee (EOCC).

5. Planning Commissions Coordinating Committee (PCCC)

Two members from each of the three Planning Commissions met several times between October 1979 and April 1980 to consider public testimony and seek compromises among Eugene, Springfield, and Lane County.

6. Eugene City Council, Springfield City Council, Lane County Board of Commissioners

All three elected bodies have ultimate responsibility for adopting the Metropolitan Plan and implementing Plan policies. The elected officials participated in all phases of the update from development of the work program through adoption of ordinances. The elected officials, through EOCC, continue to provide policy direction for the LCDC acknowledgment process.

7. Elected Officials Coordinating Committee (EOCC)

When the recommendations of the Planning Commissions were forwarded to the three elected bodies in April 1980, EOCC was formed to provide policy direction to the process, consider public testimony, and seek compromises among Eugene, Springfield, and Lane County.

This committee consists of two Eugene Councilors, two Springfield Councilors, two Lane County Commissioners, and one ex-officio member from each of the three Planning Commissions.

8. Industrial Study Task Force

This thirteen (13) member committee was formed by joint resolution of the Eugene and Springfield City Councils and the Lane County Board of Commissioners to evaluate treatment of industrial lands in the Metropolitan Plan. The task force's "Final Report" contained recommendations for specific industrial policy and land use diagram amendments to the August 1980 Metropolitan Plan.

9. Other Governmental Units

Representatives of units of government other than City of Eugene, City of Springfield, and Lane County were involved in the Metropolitan Plan update process in varying degrees.

Representatives of other governmental units include local agencies (such as school districts, water districts, utility boards), state agencies (such as Department of Forestry, Department of Transportation, Department of Environmental Quality), and federal agencies (such as Soil Conservation Service, Federal Highway Administration, Environmental Protection Agency).

10. Oregon Land Conservation and Development Commission (LCDC)

All city and county comprehensive plans must meet statewide planning goals. Comprehensive plans, after local adoption, must be reviewed and acknowledged by LCDC for compliance with the statewide goals. In the Eugene-Springfield metropolitan area, the Metropolitan Plan is an important component of the Eugene, Springfield, and Lane County comprehensive planning programs.

11. General Public

The citizen involvement process for the Metropolitan Plan was geared toward the general public. Participants in the process included individuals (such as property owners), community organizations (such as neighborhood groups), and special interest groups (such as Lane County Homebuilders Association). Some groups from outside the metropolitan area also participated in the local process (such as 1000 Friends of Oregon).

APPENDIX H
FLOATING NODE ASSUMPTIONS

Plan allocation assumptions for each of the seven "floating nodes" designated on the diagram follow. The Plan description of the "floating node" is contained in the Metropolitan Plan, Chapter II-E, "Plan Diagram - Text."

A. NORTH WILLAKENZIE

Approximately 550 acres of buildable land existed within the urban growth boundary north of the 1977 Eugene city limits. Low density allocations to this are under Metropolitan Plan methodologies equaled about 2,840 dwelling units. Once arterial access to that area is certain, a "floating node" could be established to serve the North Willakenzie area. Plan allocation assumptions for this node are:

5 acres commercial
20 acres medium density residential
25 acres total

B. BETHEL-DANEBO

Two nodes were assumed in this area. In total, the Bethel-Danebo area, including vacant lands already inside the Eugene city limits and additional urbanizable lands within the urban growth boundary, contained about 1,470 acres of undeveloped residentially designated land representing the potential for about 8,700 new dwelling units. The Plan assumptions for those two nodes were:

No. 1:

10 acres commercial
30 acres medium density residential
40 acres total

No. 2:

5 acres commercial
20 acres medium density residential
25 acres total

C. SOUTHWEST EUGENE

In 1977, about 1,060 low density acres planned for approximately 4,000 dwelling units were allocated to Southwest Eugene. Plan allocation assumptions for this node are:

5 acres commercial
20 acres residential
25 acres total

D. SOUTH EUGENE

In this case, planners could not find a suitable vacant site that met the criteria for this concept (proximity to existing or planned arterials). For this reason, this node may be accommodated through expansion of an existing neighborhood commercial development or may occur at two (or

more) dispersed, smaller-scale neighborhood centers. Plan allocation assumptions for this node are:

5 acres commercial
20 acres residential
25 acres total

E. LAUREL HILL VALLEY

This valley contained about 226 acres between the 1977 Eugene city limits and the urban growth boundary, accommodating an allocated 720 low density dwelling units. This area is to be served with an extension of Glenwood Boulevard (a two lane collector - see 2000 Transportation Plan, project #37). Eugene is currently working on an update of the Laurel Hill Neighborhood Plan, which was originally adopted as Eugene's first neighborhood plan in 1974. Location of the planned collector street will include consideration for the floating node. Plan allocation assumptions for this node are:

5 acres commercial
15 acres residential
20 acres total

F. SANTA CLARA

At urban densities, this area can accommodate approximately 3,900 dwelling units on low density designated lands. A commercial area along River Road, somewhat centrally located, would best serve this area. Plan allocation assumptions for this node are:

5 acres commercial
30 acres medium density residential
35 acres total

SUMMARY

1. The approximate total allocation assumptions associated with the seven floating nodes designated in the Metropolitan Plan are:

40 acres commercial
100 acres medium density residential
55 acres residential*
195 acres total

* Density will depend on South Hills Study limitations.

2. The acres allocated for each of the "floating nodes" were subtracted from the buildable land inventory. There was no double counting of acres to account for demand accommodated in floating nodes.

MAPS

MAP NO. 1 - Generalized Existing Land Use - 1977

MAP NO. 2 - Tentative Urban Growth Boundary

MAP NO. 3 - Natural Features and Airport Limitation Areas

MAP NO. 4 - Agricultural Soils

MAP NO. 5 - Allocation Methodology - Order of Allocations to Geographic Subregions

MAP NO. 6 - Geographic Subregions

MAP NO. 7 - Analysis Zones











MAP NO. 8 - Urban Growth Boundary - West Section

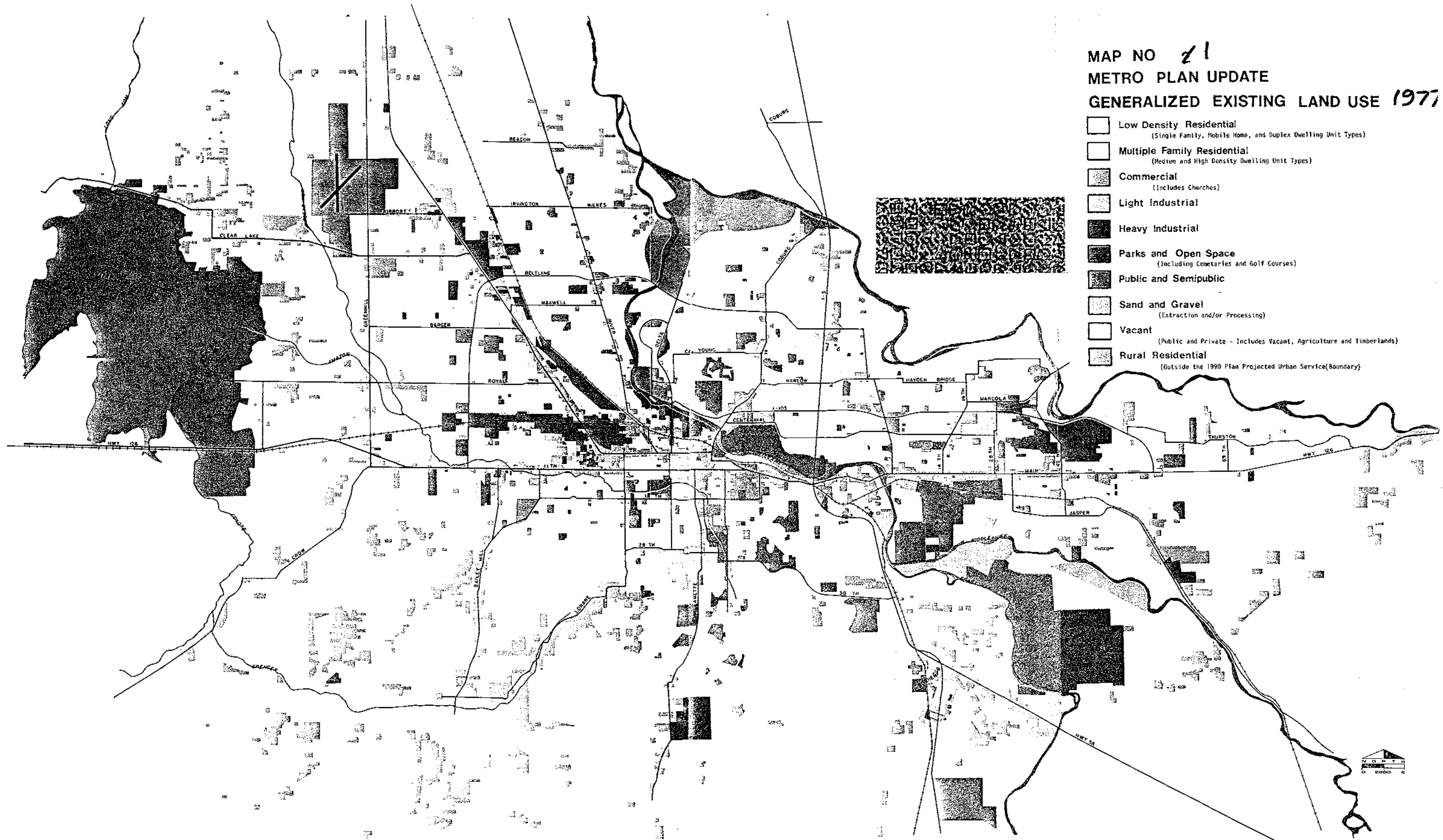
(This map will indicate the adopted urban growth boundary, Plan boundary, and 1982 Eugene city limits on a geographic data system plot [map].)

MAP NO. 9 - Urban Growth Boundary - East Section

(This map will be similar to Map No. 7 except it will cover the Springfield portion of the metropolitan area.)

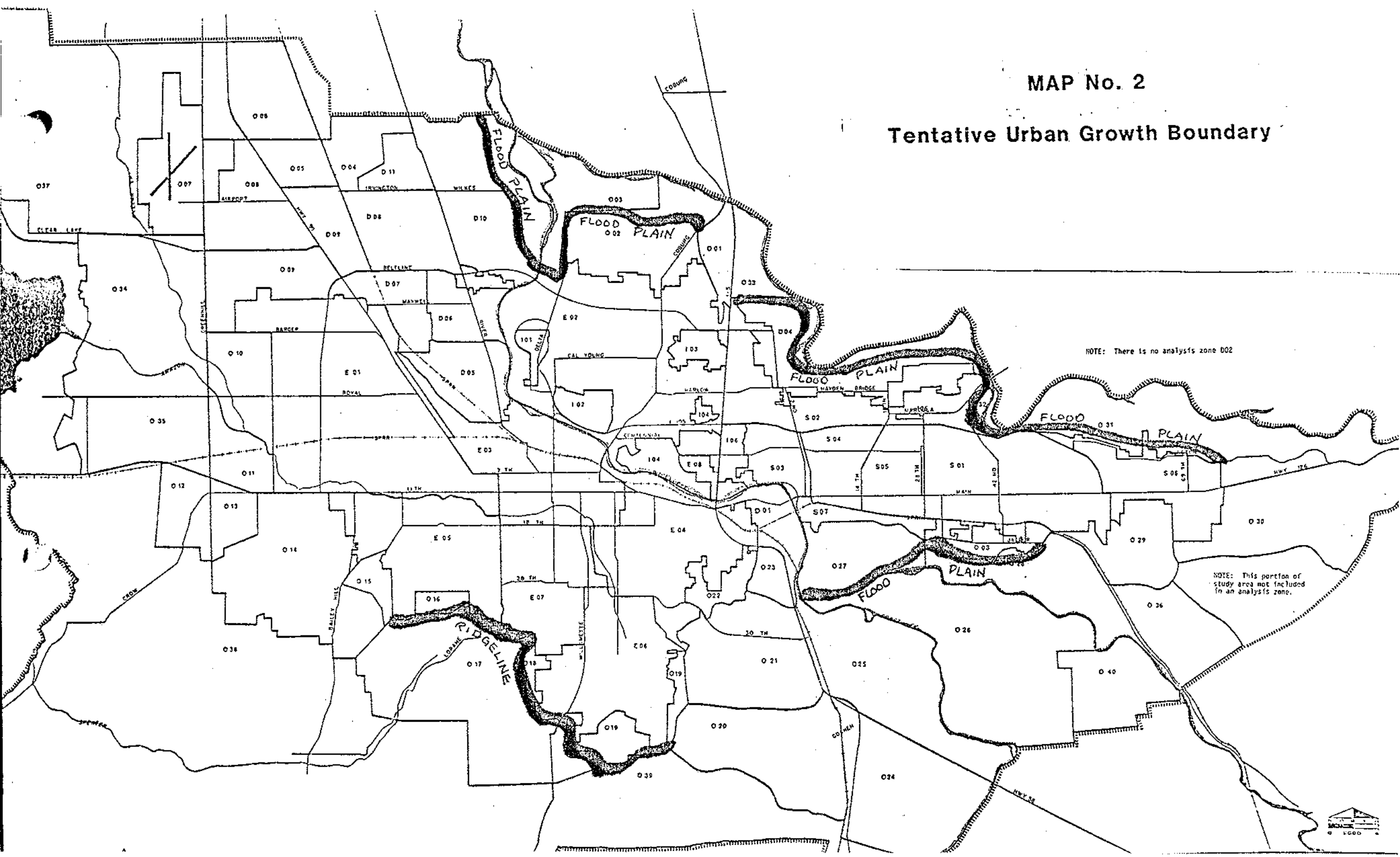
MAP NO 21
METRO PLAN UPDATE
GENERALIZED EXISTING LAND USE 1977

-  Low Density Residential
(Single Family, Mobile Home, and Duplex Dwelling Unit Types)
-  Multiple Family Residential
(Medium and High Density Dwelling Unit Types)
-  Commercial
(Includes Churches)
-  Light Industrial
-  Heavy Industrial
-  Parks and Open Space
(Including Cemeteries and Golf Courses)
-  Public and Semipublic
-  Sand and Gravel
(Extraction and/or Processing)
-  Vacant
(Public and Private - Includes Vacant, Agriculture and Timberlands)
-  Rural Residential
(Outside the 1990 Plan Projected Urban Service Boundary)



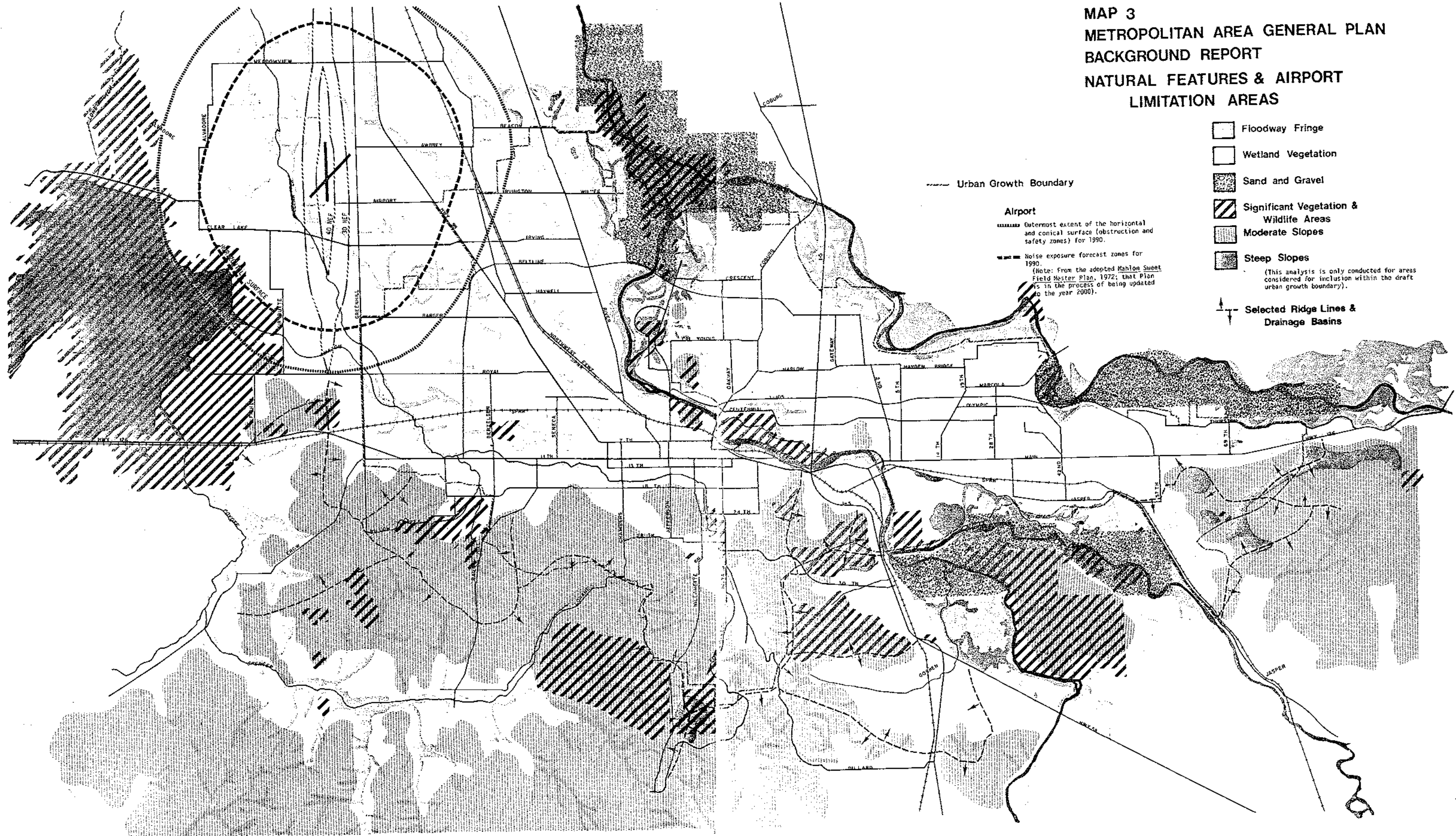
MAP No. 2

Tentative Urban Growth Boundary



EXAMPLE

MAP 3 METROPOLITAN AREA GENERAL PLAN BACKGROUND REPORT NATURAL FEATURES & AIRPORT LIMITATION AREAS



METROPOLITAN PLAN UPDATE, 1981
FIGURE C-2
GENERALIZED AGRICULTURAL SOIL
CAPABILITY RATING

— Jurisdictional/Plan Boundary

CLASSES I-II

CLASSES III-IV

CLASSES VI-VIII *

* There are no Class V agricultural soils in the Metropolitan area.

BEACON
COBURG
WOODBURY
WILKES
FINE
BLUETIDE
WATKINS
CROW
LORANE
GOSWEN
SPRING
DILLARD
HWY 58

0 2000 4

 CLASSES I-II⁻

CLASSES III-IV

 CLASSES VI-VIII *

* There are no Class V agricultural soils in the Metropolitan area.



MAP NO. 5

ALLOCATION METHODOLOGY: ORDER OF ALLOCATION TO GEOGRAPHIC SUBREGIONS

- STEPS 1 & 2 - Cities and Unincorporated Islands
- STEP 3 - Unincorporated, Developed Areas
- STEP 4 - Undeveloped, Unincorporated Outlying Zones
- STEP 5 - Last Increment of Allocations

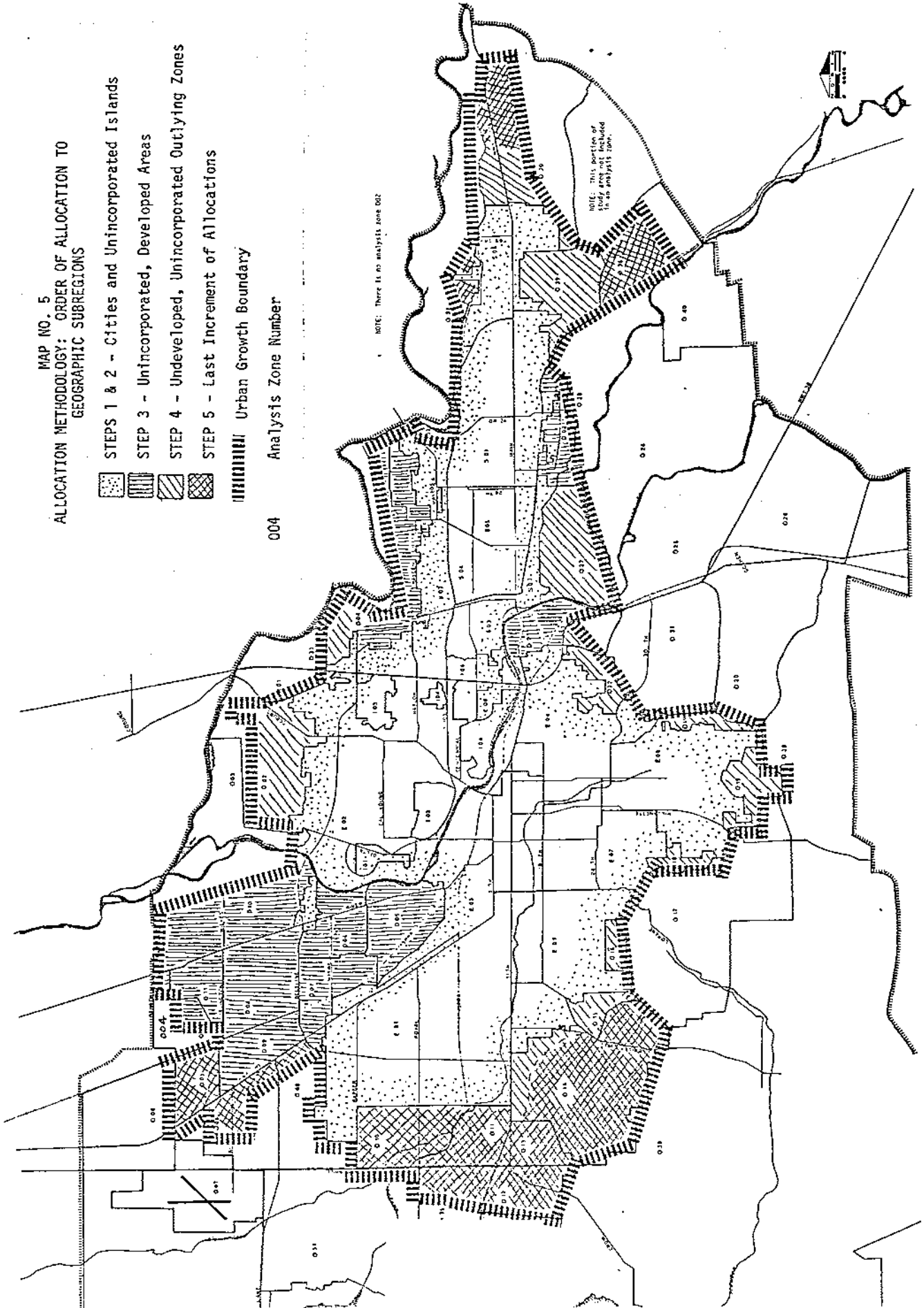
Urban Growth Boundary

Analysis Zone Number

004

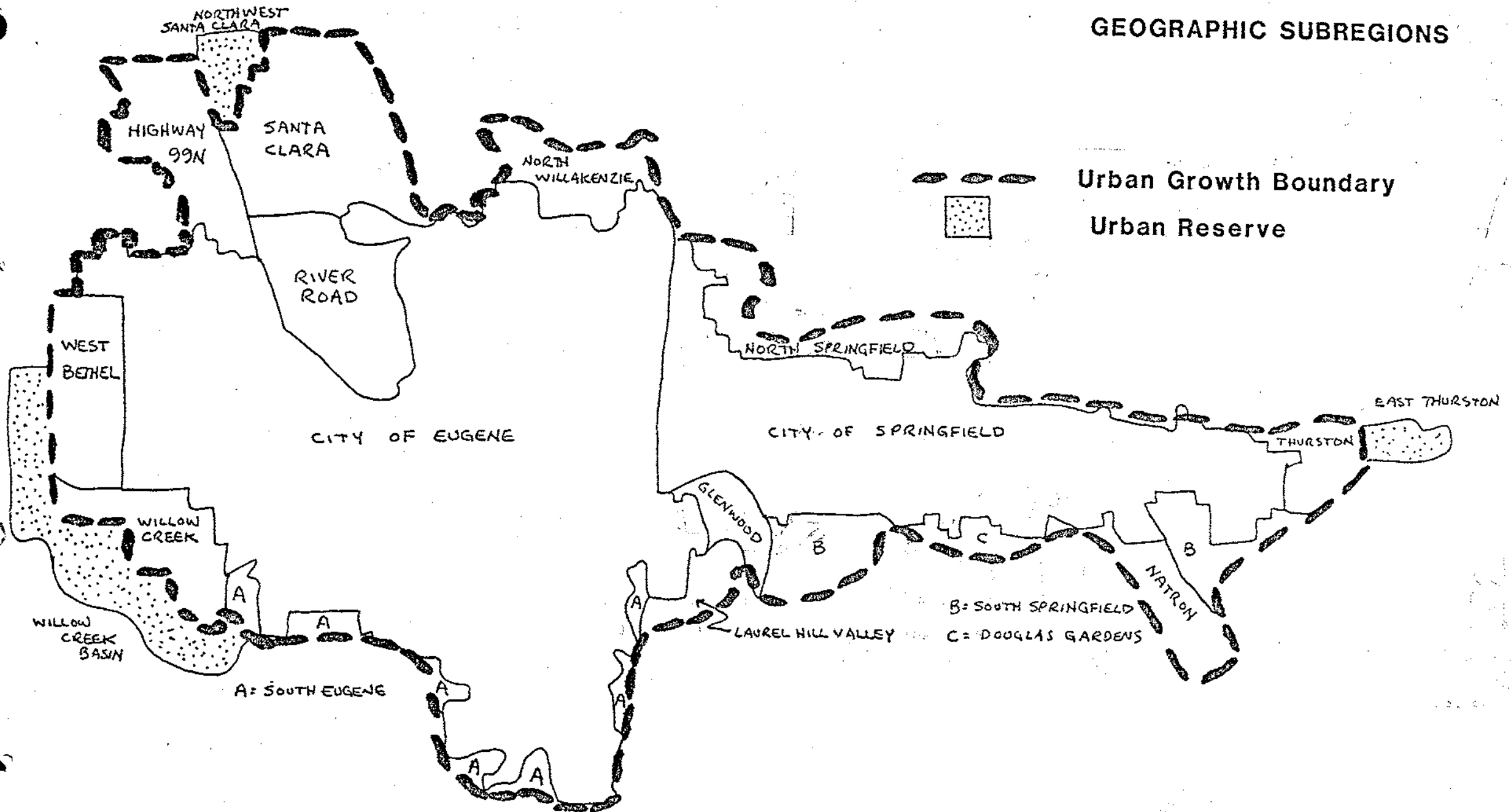
NOTE: There is no analysis zone 002

NOTE: This portion of study area was excluded from analysis zone.



MAP No. 6

GEOGRAPHIC SUBREGIONS



MAP NO 17 METRO PLAN UPDATE 71 ANALYSIS ZONES

- Zone Prefix
- E City of Eugene
 - S City of Springfield
 - I Unincorporated islands surrounded by incorporated city
 - D Unincorporated areas with dense existing development
 - O Unincorporated outlying areas without dense development
 - Study Area

