

BIBLIOGRAPHIC DATA SHEET		1. Report No.	2. Report's Accession No.
4. Title and Subtitle		3. Report Date	6.
COMPREHENSIVE DEVELOPMENT PLAN City of Clatskanie, Oregon 97016 (preliminary draft)		June 30, 1978	
7. Author(s)		8. Performing Organization Rep. No.	
City Planning Commission: Sherman & Associates: Consultants			
9. Performing Organization Name and Address		10. Project/Task/Work Unit No.	
City of Clatskanie Planning Commission Sherman & Associates: 95 S. Nehalem Consultants Clatskanie, Oregon 97016 530 Conyers Street Clatskanie, Oregon 97016		N/A	
		11. Contract/Grant No.	
		77-02-02	
12. Sponsoring Organization Name and Address		13. Type of Report & Period Covered	
Department of Housing & Urban Development "701" Program Administered by: Executive Department Rm. 306 State Library Bldg. Salem, Oregon 97310		Preliminary draft	
14.			
15. Supplementary Notes			
To be revised and published in final form in June, 1979.			
16. Abstracts			
The Plan contains 13 sections: Introduction; Citizen Involvement & the Planning Process; Population & Growth; Land Use; Environment; Economic Development; Housing; Recreation; Transportation; Energy & Other Resource Conservation; Human Services; Community Policies; Action Items; Responsibilities & Schedules where appropriate. The plan is preliminary and will undergo extensive revision subsequent to appropriate public hearings, reviews, and coordination with other interested agencies. Since the document will be completed in final form utilizing a state grant from the State of Oregon Department of Land Conservation & Development most of the graphics and the final three sections are incomplete in this document. The plan is somewhat unique in treating many facets of small city government not associated with land use to make it truly comprehensive. It utilizes a two-case growth projection based on possible alternatives. Because of the preliminary nature of the document, much of the data collected is not available in publishable form.			
17. Key Words and Document Analysis. 17a. Descriptors			
17b. Identifier: Open-Ended Terms The City of Clatskanie Comprehensive Development Plan contains thirteen sections: Introduction, Citizen Involvement & the Planning Process, Population & Growth, Land Use, Environment, Economic Development, Housing, Recreation, Transportation, Energy & Other Resource Conservation, Human Services, Community Policies, Action Items, Responsibilities & Schedules where appropriate.			
17c. COSATI Field/Group			
8. Availability Statement		19. Security Class (This Report)	21. No. of Pages
Release Unlimited Price: \$10 ⁰⁰ /copy		UNCLASSIFIED	85
City of Clatskanie; P.O. Box 9; 95 S. Nehalem St. Clatskanie, Oregon 97016		20. Security Class (This Page)	22. Price
		UNCLASSIFIED	

PRELIMINARY DRAFT

COMPREHENSIVE DEVELOPMENT PLAN
CITY OF CLATSKANIE, OREGON

Prepared By

Shemman & Associates
530 Conyers Street
Clatskanie, Oregon 97016

July, 1978

The preparation of this report was financially aided through the Federal Grant from the Urban Renewal Administration of the Department of Housing and Urban Development under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended. Project No. _____

CITY COUNCIL

John C. Delisle, Mayor
Phillip E. Jones
Gerald W. Martin
Oren Tweet
Bessie M. Hausler
Elmer G. Spencer
Donavon Wooley

CITY PLANNING COMMISSION

Shirlee Salo, Chairperson
Gene C. Cope
Fred Erickson
Norman Doolittle
Michael Morrissey

CITY STAFF

Robert Wheeler, City Administrator
David C. Nelson, Chief of Police
Ernest C. Raappana, Superintendent of Public Works

CONSULTANT

Milton Sherman, Sherman & Associates

"COM·PRE·HEN·SIVE adj 1a: covering
a matter under consideration com-
pletely or nearly completely;
accounting for or comprehending
all or virtually all pertinent
considerations....."

WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY

INTRODUCTION

In today's times of changing ~~lif~~ values and life styles, the City of Clatskanie holds a unique position for small cities, even in the Pacific Northwest. A town of intense scenic beauty, charm and opportunity for the nature lover, it has not had to face explosive growth or major urban ills. With the adoption of this Comprehensive Development Plan it has the basic planning tool to manage and control its future growth in a way that should sustain and enhance its liveability and appeal.

Situated near the Columbia River on U.S. Highway 30, it is surrounded by the low mountains of the Coast Range. Essentially a bedroom community, it never-the-less has considerable future industrial growth potential. Land holding of moderate to large timber companies extend from the present city limits to the south, east and west, insuring a high level of aesthetic beauty and environmental quality from these economically sound open spaces. The commercial district, essentially at sea level, is surrounded by six low hills ranging to elevations of 800 feet that provide excellent residential home sites.

Except for the most rabid urban dweller it offers immensely varied opportunity for recreation and general liveability. Well-maintained networks of logging roads provide almost limitless nature trails. Roosevelt elk and deer are frequent visitors in the city limits, as are smaller game. The Clatskanie River, winding through town in much the same fashion as the famed San Antonio River Walk, is navigable to the Columbia, providing access and opportunity for recreational and commercial

boating and fishing.

The Longview-Kelso area in Washington (pop. about 30,000) is fifteen minutes away and provides access to Interstate 5, more varied commercial activity, excellent hospitals and a community college. The Portland Metropolitan Area is slightly over an hour's drive with its varied opportunities for shopping, dining, theater, colleges, museums, sports events and the other activities associated with a large urban center. The City of Astoria is a forty minute drive from Clatskanie, providing a gateway to the scenic Oregon and Washington coastline.

Temperature and precipitation records for the past 43 years reflect a mild moist climate. Summertime highs in the 90's or wintertime lows in the teens are limited to a few days a year. Measurable snows occur about four out of five years, but rarely occur more than two or three times and usually remain on the ground only a day or two. The average annual rainfall is 58 inches a year, which is the source of much of the rain-forest-like beauty of the surrounding forests.

In the final analysis, the people determine the viability of a community. The people of Clatskanie are a composite of "old-timers" of true pioneering stock, "newcomers" associated with area industrial and commercial growth, and many who have simply been drawn by the high level of liveability of the area. There are, as in all small cities, factions espousing particular views, but on balance there is a pervasive friendliness and general support of a policy of controlled growth.

CITIZEN INVOLVEMENT AND THE PLANNING PROCESS

All units of government, including the City of Clatskanie, know that an informed, involved citizenry is the essential ingredient for a successful democracy. This recognition has been a key part of Oregon's Comprehensive Planning Program since its beginning and is the first "Goal" of the state's Land Conservation and Development Commission. The goal recognizes the following components:

1. "To provide for widespread citizen involvement." The Council has designated the Planning Commission as the citizen advisory committee and they in turn have developed the citizen involvement program that relates to the development of the current Comprehensive Development Plan (CDP).
2. "To assure effective two-way communication with citizens." As required by law, all meetings of both the Council and the Planning Commission are open and advertised. Support of the press has been excellent in coverage of items of general interest or concern to the community resulting from Council, Commission or Budget Committee actions and meetings. Council and Commission members actively encourage citizens to bring problems, complaints and constructive suggestions to the appropriate meetings and be heard. Meeting agendas are structured to provide periods of time for citizen participation.
3. "To provide the opportunity for citizens to be involved in all phases of the planning process." In addition to the actions mentioned above, consideration is given in the selection of the seven lay members of the Budget Committee to representation of various view-points in the community.

In 1972 the Mayor appointed a Citizen's Advisory Group to review and comment on the city's long term and short range plans and goals and the necessary resources to achieve them. This group represented the following elements of the community: Employers, Churches, Schools,

the Business Community, Professionals, Seniors, Youth, Major Land-owners, Past Elected Officials, Citizens Emeritus, and the Service Organizations.

As deemed necessary or desirable by the Council or the Planning Commission, "Town Meetings" have been held to discuss major issues and air conflicting views.

4. "To assure that technical information is available in an understandable form." The city maintains a library of technical information obtained from the county, the Bureau of Governmental Research, various state agencies and the League of Oregon Cities in the City Hall. With limited staff and financial resources there are practical limitations on the quantity of technical information and the degree of staff assistance that can be made available to the public. However all material on hand is available to the public.
5. "To assure that citizens will receive a response from policy makers." All recommendations and adoptions made during the development, discussion, hearing, processes associated with this CDP shall be documented and made a part of the written record. The plan identified the rationale used to arrive at land use policy. Changes evolving from the discussion and hearing process will be reflected in modifications to the preliminary CDP.
6. "To insure funding for the citizen involvement program." The governing body is responsible for obtaining and providing the resources necessary to conduct an adequate citizen involvement program. They have consistently planned to supply those resources. However, in a budget approved by the voters of the city, there are practical constraints on the resources that can be made available for both this component and 4 above. The city has been active in pursuing available grants to assist in the planning process and the implementation of the citizen involvement program.

PLANNING AND THE PLANNING PROCESS.

Although the need for comprehensive planning may not be readily apparent to a citizen preoccupied with his own interests 'horrible examples' abound throughout the nation and the state of Oregon of the lack of comprehensive planning. These examples are characterized by some or all of the following: urban sprawl, severe traffic congestion, pollution, inadequate or very high cost services such as schools, water, sewer, police and fire protection, mis-used or under-utilized lands, high crime rates and a general degradation of livability.

By use of the term "comprehensive" we mean it to be all inclusive, considering all of the interrelated factors that impact our lives in our community; our natural resources including land, air and water and their orderly preservation, conservation, utilization and management; utilities; transportation systems; facilities such as schools, parks and hospitals; essential services such as police and fire protection; the water and sewer systems; health; jobs and other economic considerations; and housing. Most of these factors are not the primary responsibility of city government but the only concerted effort to interrelate all of them is through comprehensive planning.

The objectives of the CDP are:

1. To insofar as is practicable insure the future liveability of our community so that it is improved if possible and not substantially degraded.
2. To provide for the wise conservation, preservation, utilization and management of our natural resources.
3. To manage future growth, development and land utilization so that it is in harmony with the desires of the community.
4. To address the State of Oregon goals and resolve those basically conflicting issues in the best interests of the majority of the community.

5. To define the goals and policies of the City of Clatskanie and suggest actions with regard to the plan elements addressed.

Planning should be viewed as a continuum. The city in fact has a family tree of documents that must be consistent. Each of the documents on the tree (shown in Figure C-1.,) may treat a subject in varying degrees of depth and for varying periods of time but there should be no inconsistencies. For example, if the Comprehensive Plan defines a method of allowable land utilization known as Planned Residential Development, the Zoning and/or Subdivision Ordinances or a newly created Ordinance must establish the regulations concerning that type of land use. And of course all plans and related documents must be consistent with applicable and appropriate Federal and State law and the City's own Charter.

All plans contain assumptions and projections about an uncertain future. We live in a world of rapid change and these changes have a far-reaching impact on our daily lives and our plans. Some of the assumptions and projections in this plan were based on actions or on conditions that represent "worst case situations" that may not occur. Therefore, it is important that the plan be reviewed periodically both to validate or change these assumptions and to accommodate our changing needs and desires.

Long range capital improvement plans and programs should not be inconsistent with the related plans and the city's annual budget should be regarded as the short-term (one year) operating plan.

A Comprehensive Development Plan only has validity if several conditions are met:

1. The citizens for whom the plan is intended must participate in the generation of the plan and generally concur in it.
2. The plan must be reasonably capable of being implemented.
3. The City Council, Planning Commission and Staff must vigorously pursue

the implementation of the approved plan and the acquisition of the necessary resources to permit implementation.

4. To remain viable, the plan must be reviewed periodically to reflect changing conditions and assumptions and changing needs and desires of the people it is designed to serve.
5. All existing and future rules, regulations, ordinances, resolutions and policies must be reviewed for consistency with the plan.

In approaching this major revision of the CDP and fulfilling the goal of citizen participation, The Planning Commission was designated as the Citizen Involvement Committee. In June, 1977 they held a well-advertised town meeting to describe the need for a new CDP, generally outline the content of the revised plan, conduct a "brainstorming" session for ideas from the people, and get an expression of interest from those desiring to participate in drafting the various sections of the CDP. The Commission members and City staff identified people that were known to have an interest or some degree of expertise in the various sections of the plan. These people were personally contacted to seek their participation. Subcommittees were set up to treat the various sections of the plan. Originally each subcommittee was to prepare a draft of their assigned section but this proved infeasible. Discussions were held by the Planning Commission with the groups and the draft sections of the plan were prepared from the notes of those discussions. Where issued did not receive comment, they were addressed by the city's consultant and included for completeness. This preliminary draft of the CDP thus represents a "straw man" to encourage further discussion during the review process and significant revision is anticipated as a result of that process.

Appendix A lists those citizens that have been involved to some degree in the generation of the plan.

GOAL

To provide opportunity for all citizens to be involved in all phases of the planning process and to aggressively encourage citizen participation in the conduct of governmental planning and operations.

POLICIES

1. Maintain an on-going citizen involvement program that provides the opportunity for all citizens to be involved in the planning process.
2. Establish methods of maintaining effective two-way communications with citizens.
3. Continuously maintain a Citizens Advisory Group with representatives to include (but not be limited to) the following elements of the community:
 - A. Service Organizations
 - B. Business Community
 - C. Churches
 - D. Major Area Employers
 - E. Professional Community
 - F. Schools
 - G. Senior Citizens
 - H. Youth
 - I. Major Land-owners
 - J. Each geographic area of the City
4. All meetings of any elected or appointive body of the City shall be advertised and open with no restriction to the public except for duly-called Executive Sessions as provided by law.
5. All public meetings shall designate a period for citizen participation through comment or discussion and such participation shall be actively encouraged.
6. All citizens seeking a response to questions will re-receive a response. Verbal requests may receive a verbal or written response. Written re-

quests will receive a written response.

7. Within the constraints of available resources, the City will assure that technical information is available and open to the general public and will provide for the citizen involvement program.

ACTION:

1. Define and document the on-going citizen involvement program.
Responsibility: Planning Commission
Schedule: July, 1979; semi-annual review and update.
2. Institute a "Citizen Contact" system to insure that citizens receive prompt and effective response to questions and concerns.
Responsibility: City Staff
Schedule: February, 1979.
3. Review minutes of all meetings to insure that citizens have received an adequate response to inquiries.
Responsibility: City Staff
Schedule: Continuing.
4. Designate periods for citizen comment and discussion on all meeting agenda.
Responsibility: City Staff
Schedule: Continuing.
5. Prepare a summary of current city activities and items of general interest to be mailed at least quarterly with all water bills and published in the local newspaper.
Responsibility: City Staff
Schedule: Beginning July, 1979.
6. Review other citizen involvement programs through contact with LCDC field representatives and the LCDC central office. Make appropriate recommendations to the Planning Commission.
Responsibility: City Staff
Schedule: December, 1979.

7. On a semi-annual basis, screen publications of appropriate state agencies, the League of Oregon Cities and the Bureau of Governmental Research for publications of interest to the community. Obtain copies and make them available both at the City Hall and the Public Library.

Action: City Staff

Schedule: Begin July, 1979.

8. Include resources necessary to support the above actions in each annual budget.

Responsibility: City Staff

Schedule: Beginning with the FY 1979/1980 Budget.

POPULATION AND GROWTH

INTRODUCTION:

The most critical definition in the planning process is the projection of the city's population and growth potential. Standard statistical techniques for such projections used in large metropolitan urban centers have no meaning for small cities and can lead to very wrong conclusions and recommendations.

A brief look at the population history of Clatskanie, (Fig. I), illustrates the difficulty. Prior to the mid-1960's the primary factor determining growth was that of job availability. As the lumbering and related forest industry grew in the first two decades of the century, the town grew with it. Population peaked in the 1920 - 1930 time period to a level that was not reached again for forty years. (No intermediate data is available in that decade.) The onset of the depression years and the general unavailability of jobs caused a population decrease of about 40% and subsequent relative stability for about ten years. With the activation of the Beaver Army Ordnance Depot during World War II the population increased by about 200. This facility remained reasonably active during the Korean war years and was deactivated in the early 1960's, accounting for the population stability through the '50's and a slight population decrease in the early '60's. The next major economic impetus was provided by the construction of the large Crown Zellerbach paper products manufacturing facility in the 1965 time period.

CURRENT GROWTH FACTORS AND CONSIDERATIONS.

In retrospect, the time period of the mid-60's gave the first indication that a new primary factor affecting growth had appeared. That factor is the availability of housing and since then has steadily grown in importance. Today, with a relatively high degree of mobility among the work force, it has become the major factor. In the mid-60's there simply was not enough housing available to accommodate the influx of workers at the Wauna mill and although two small housing subdivisions were initiated they were not pursued vigorously. As a result, over half

the workers were forced to seek housing in nearby rural areas, Astoria, Rainier, or Longview. Housing needs are discussed more completely in Section VI: suffice it to say that without an active housing policy and vigorous pursuit of additional housing stock, the city cannot achieve a significant growth rate.

A final new factor affecting growth that has become most significant in the decade of the '70's is that undefinable "quality of life" that occupies so much of the thought, discussion and action of today's population. While it means different things to different people, it generally includes an appreciation of the natural environment, escape from noise, pollution, high-crime rates, senseless crimes and fast pace of the major urban centers. The high quality of liveability in Clatskanie is its greatest asset for future growth.

Some tabulation of these and other pro- and anti-growth factors is presented on Table I.

TRANSIENT POPULATION:

Since the activation of the Beaver Ordnance Depot in World War II Clatskanie has periodically had sizeable peaks of transients, as high as several hundred. These have mainly been associated with major construction jobs in the area in support of the original construction and occasional modernization and expansion of the Crown Zellerbach Wauna mill and the Portland General Electric construction of their turbine generating facility. These are mostly of one to three year duration and their principle impact is economic.

GROWTH PROJECTIONS:

Since 1974 the City staff has used a technique for population projection that postulates two cases, both reasonably realistic. The Case I situation represents a conservative assessment of facts and assumptions that result in the lowest growth rate deemed reasonable and prudent. Case II postulates a more volatile situation, again based on known facts and plans that stand a reasonable probability of being implemented. This case represents the most realistic upper limit of growth for the near-term situation that can be achieved. These projections are reviewed and revised annually to incorporate changing conditions, and new data and to keep them

TABLE 1 - POPULATION & GROWTH CONSIDERATIONS

PRO-GROWTH FACTORS	ANTI-GROWTH FACTORS
<p>PRIMARY:</p> <ul style="list-style-type: none"> Housing availability Economic development of local area (within 10 miles) Economic development of extended area (within 35 miles) Quality of life <ul style="list-style-type: none"> Shift from work ethic orientation Increased recreation and leisure pursuits Escape from urban ills <ol style="list-style-type: none"> 1. Pollution 2. Crime 3. Traffic 4. Pace <p>SECONDARY:</p> <ul style="list-style-type: none"> Federal, state & county emphasis on land-use planning and zoning High cost of rural service delivery Increased acceptance of commuting 	<p>PRIMARY:</p> <ul style="list-style-type: none"> Housing unavailability Lack of job opportunity Time-phasing of necessary growth ingredients <ol style="list-style-type: none"> 1. Industry 2. Labor Force 3. Housing 4. Support Services <p>SECONDARY:</p> <ul style="list-style-type: none"> Financing of Growth Costs

fresh and current. For the past five years the actual growth has fallen almost exactly between the projections of the two cases. The two cases and their basic assumptions are displayed in Figure 1 and Table 2.

GROWTH COSTS:

Major decisions that the city must face are how much growth?, at what rates?, how best to control growth?, and how to finance the costs of growth? Growth is generally desirable to a certain point, and that point varies with the availability of certain resources and facilities. Figure 2 illustrates a little understood point about the provision of services for a community. With most of the services provided by local government units, the cost per person served is extremely high with low populations. It appears to decrease to a low value with a population of about eight to ten thousand people then increase as either new major facilities are required or the governmental unit undertakes to provide additional services not deemed necessary or desirable by smaller cities. This assumes the provision of adequate, modern services by properly trained professionals. This can best be explained by taking a city police force as an example. It takes a minimum of five men to provide essentially 24 hour police protection to a community. A competent, well-trained professional force of five with the accepted level of benefits and a reasonable operating budget, clerical support and capital items will require a Police Department Budget of about \$150,000.00. This size of department could probably handle a population up to 2500. The cost per person served decreases from \$300.00 for a population of 500 to \$60.00 for a population of 2500. Although the absolute figures vary, the general shape of the curve in Figure 2 applies. Sharp increases occur at points B and C when either additional increases in personnel are required or additional major facilities such as sewage treatment plants or new water sources must be developed to accommodate increased population.

Recent studies suggest that there is an economic danger in uncontrolled and unplanned growth. While the actual dollar values presented in these studies are suspect because of the many simplifying assumptions made and factors not considered, it is certain that growth must be carefully planned and the costs of growth properly apportioned to those benefited, or the city may be assuming a disproportionate financial burden with growth.

CITY OF CLATSKANIE
POPULATION AND GROWTH
History and Projection

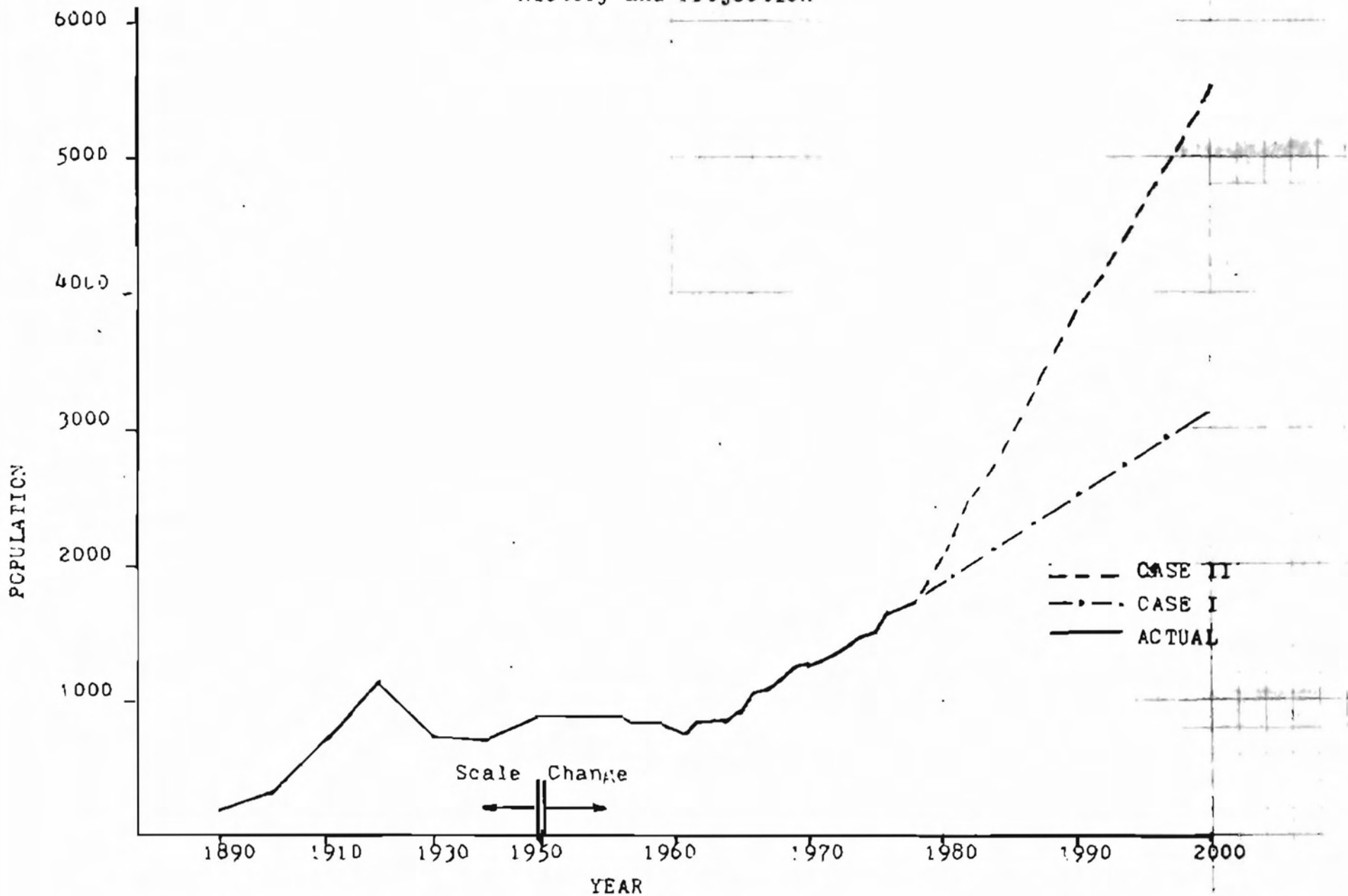


FIGURE 1.

MS 7/78

PROVISION OF MUNICIPAL SERVICES
COST PER PERSON SERVED vs. POPULATION

CONCEPT

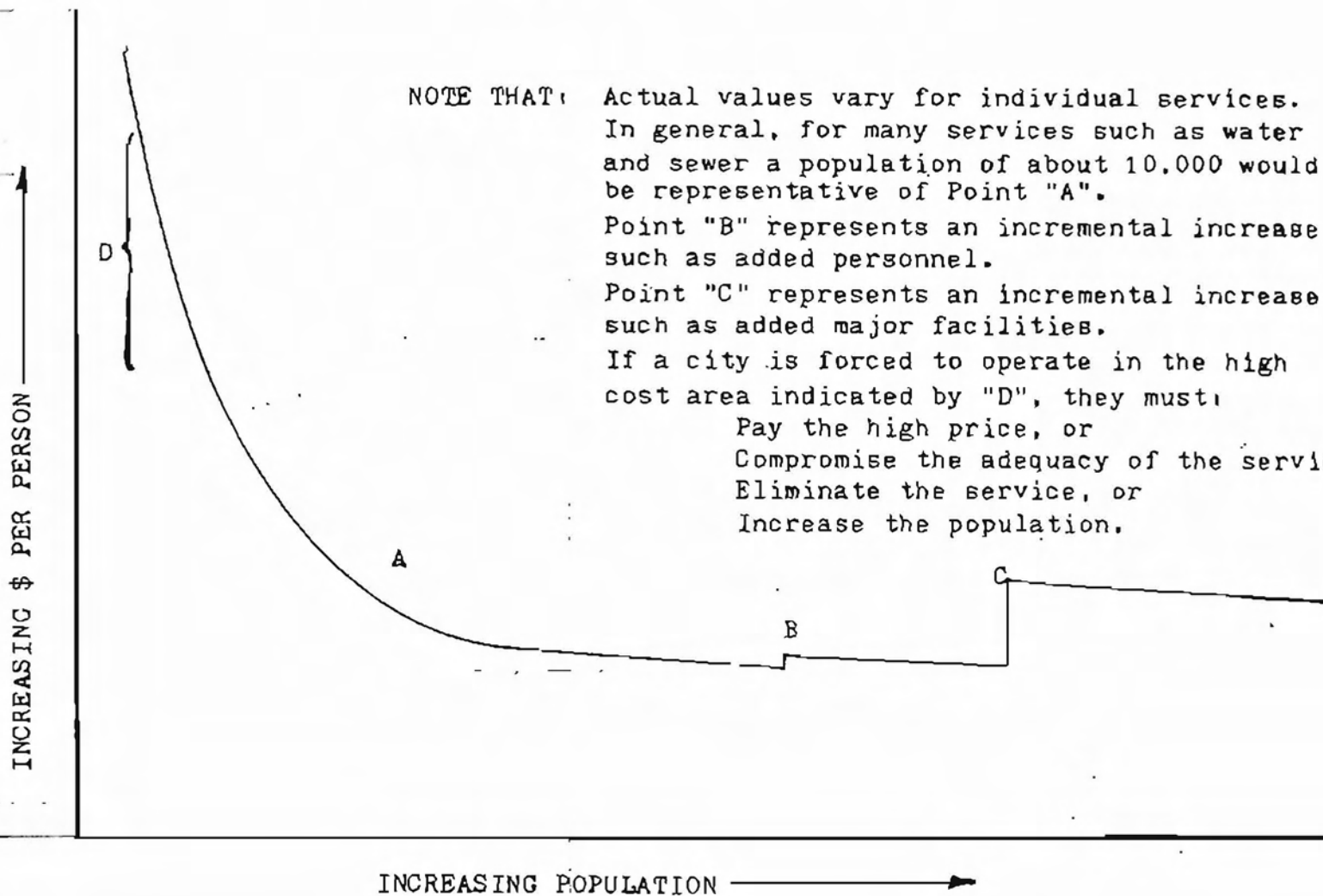


FIGURE 2

TABLE 2 - POPULATION & GROWTH PROJECTIONS

ASSUMPTIONS

Common Assumptions:

1. Currently planned and underway construction of 24 apartments and 15 single-family dwellings provide the basis for the 1979 estimate.
2. Current known plans for industrial expansion in the Wauna, Longview-Kelso and mid-County areas are considered.

CASE I.

1. No additional major industrial or commercial growth.
2. Continued ability of City to support with basic services; water, sewer and police protection.
3. Continued acceptance of commuting distances moderated by increasing commuting costs.
4. No major housing development activity.
5. Limited annexation.

CASE II.

1. P.U.D. forecast of area growth of 12/3/76 is realistic.
2. Because of increasingly stringent land use and zoning regulations and legislation, the City will capture 25% of the area population growth from 1979 through 1982; 35% from 1983 through 1988; and 50% from 1989 to 2000.
3. Average family size for the additional population will decrease from 3.3 in 1978 to 3.0 in 1985 to 2.7 in 1995.
4. The City will pursue an aggressive housing program.
5. Land annexation will occur as necessary to support growth.

GOAL

Plan and manage the growth of the city to accommodate those desiring to become residents in such a manner as to maintain or improve the community's living conditions and support services.

POLICIES

1. To encourage urban types and densities of development to take place within the city and its urban growth boundary.
2. To determine where and when and how much development will take place through deliberately planned extensions of utilities, facilities and annexations.
3. To include within the urban growth boundary ample land for future industrial, commercial and residential growth.
4. To protect and promote the vitality of the city as a center for civic, social, cultural and recreational activities; a primary source of goods and services for its residents; and with a viable, balanced, self-sufficient economy.

LAND USE

THE URBAN GROWTH BOUNDARY,

In defining the Urban Growth Boundary, the city is faced with many constraints and seemingly contradictory goals. The primary consideration is the ability to accommodate forecast growth and, at the same time, preserve and enhance the liveability qualities that make the area so desirable for residential use. But in order to provide the necessities and some of the amenities of urban life with fiscal restraint and responsibility, consideration and attention must be given to the economics of sound industrial and commercial growth and the increased tax base inherent in that growth. The current "tax revolt" and almost certain passage of some measure that will greatly curtail property tax rates makes these considerations much more important and significant.

The large timber holdings of Longview Fibre, Crown-Zellerbach and the Evenson Timberland Agency to the west, south and east of the existing city limits, interspersed with some smaller holdings to the northeast do much to insure the permanence of the natural beauty and the environment, but they place practical constraints on setting an adequate urban growth boundary.

The area immediately north of the existing city limits is comprised of small agricultural holdings in the dikelands of the Clatskanie Drainage District and the Beaver Drainage District. With a few exceptions these are not viable as commercial agricultural enterprises. Although the soil is predominantly Class II, as defined by the U.S. Soil Conservation Service, the limited growing season, high water table, high rainfall and limited parcel sizes are factors limiting the suitability of the area for commercial agriculture.

Most of the smaller land holdings are owned by people who have full or part-time jobs in the area and farm more as a choice of way-of-life than for significant economic gain.

Exceptions include the 3300 acre holding recently acquired by a partnership from the state of Washington for the purpose of large-scale bulb production and some much smaller holdings used for beef, sheep, blueberry and mint farming.

The importance of the Port Westward industrial site has been discussed in detail in the section dealing with economic development. Inclusion of this site in the city's Urban Growth Boundary is essential to the city's future. The workforce associated with future industrial growth will largely reside in the city, and the city will be called upon to provide the services and amenities necessary to support that workforce. When this growth appears imminent, the city should annex the necessary area within the urban growth boundary to permit orderly growth and provide it with a sound tax base consistent with the demands it will face.

The city, in turn, must provide for public services and facilities in an orderly and economically sound manner and have a demonstrable need to accommodate long-range urban growth requirements.

In examining the various alternatives, the city has concluded that the urban growth boundary shown in figure represents the best compromise available. It recognizes the constraints or conflicting goals of the existing forest lands, natural hazard areas such as flood plains and steep-sloped areas subject to subsidence, retention of the agricultural lands of the dikeland to the maximum degree consistent with economic and industrial growth, and the environmental concerns associated with the marine and animal life, the wetland game birds and the airshed quality.

Salient features of the proposed urban growth boundary are:

1. It contains a significant industrial base and area for future industrial development.
2. It contains sufficient area to maintain the quality of life the city desires including:
 - A. Low density residential development (10,000 sq. ft. minimum lot sizes.
 - B. Area for future open space and recreational areas.
 - C. Provisions for planned residential development.
 - D. Agricultural lands buffer industrial zones.
 - E. Forest lands to the west, south and east preserve the environment.
3. It enhances the economic viability of the city by providing for both existing and planned industry and by ample commercial zone for a healthy business environment.

4. There is sufficient area for the maximum planned growth, for the various potential users and to insure choices in the market place.

The urban growth boundary extends from one to six miles north and south and from one to three miles east and west. It comprises about 14 square miles or 9000 acres. Of the approximate 9000 acres, about 2000 would be zoned industrial, 3000 would be estimated to be unbuildable due to excessive sloping terrain (in excess of 20%), poor stability, high slide hazards or flooding, and the remaining 4000 would be a combination of residential and commercial acreage. This area includes the existing area of the city, about 650 acres. With the exception of about 40 acres in several ownerships in the southeast corner of the city, there are relatively few building sites remaining within the existing city limits. Figure 3 shows the proposed Urban Growth Boundary.

PLANNED RESIDENTIAL DEVELOPMENT:

The city will encourage planned residential developments (PRD) in the areas of the city where they are feasible and in the urban growth boundary. Planned residential developments are those housing developments which are planned to integrate residential use with collateral uses, and in which lot size, setback lines, yard areas, and dwelling types may be varied and modified to achieve particular design objectives and make provisions for open spaces, common areas, utilities, public improvements, and collateral non-residential uses. They might be described as a tract of land absolved from conventional

zoning to permit the clustering of residential use and perhaps compatible commercial and industrial uses.

An example of a planned residential development appropriate in our area might include a water-oriented complex of some combination of small residences, a mobile home park, house-boats, townhouses, individual moorages or common marina facilities, a boaterel, a boating supplies and accessories shop, a boat yard, a restaurant/lounge, a community convenience grocery, pleasure boat sales and service, and even a boat fabricator. Such a development, properly planned and executed, could be an attractive asset to the city and yet combine in one area the traditional land uses of single-family residential, multi-family residential, commercial and industrial.

Basically, planned residential developments are designed to:

1. Emphasize the blending rather than the separation of land uses.
2. Handle peculiar development problems of unique developments.
3. Incorporate improvements in land use, development techniques and costs.
4. Relate various land use elements within a development to the specific advantages and limitations of a particular site.
5. Encourage the creative and productive use of open spaces.

In working with developers proposing PRD's the accepted practice is to sit down with the developers to negotiate a good product

at a lower cost for the consumer than might otherwise be available. However, there are basic standards that should be included in considering PRD's.

Size. Size of a PRD will vary and depend on the allowable density in which the development is proposed. The city should encourage both large and small scale PRD's.

Density. The densities of the PRD's should be consistent with the allowable densities provided in the zoning ordinance. For example, a PRD which proposes to construct 100 housing units in a 10,000 square foot residential district should have at least a million square feet, or about 25 acres. The 100 units can be located throughout the 25 acres, or be clustered, or be grouped into smaller clusters, but the overall density should be compatible with the surrounding areas. Some areas may be developed to a greater density than that provided in the Zoning Ordinance because of critical topographical considerations or land acquisition problems. If other standards are met and there are no significant adverse impacts of the higher density then there should be provisions in the Zoning Ordinance or PRD Ordinance to permit some flexibility.

Related Uses. Within PRD's there may be a need for localized commercial and/or industrial activities. These should be allowed, but designed to conform with the overall development scheme of the PRD.

Utilities. Public utilities costs, such as those for water, sewer, electricity, sanitation, lighting, storm drains and the like, should be paid by the PRD and not by the general citizenry. The PRD should not be a financial burden to the community. Underground utilities are preferred for their aesthetic quality and should be required unless they are not feasible.

Streets. Construction of streets and sidewalks of a PRD should be the responsibility of the PRD, as in a normal housing subdivision. Improvement of city streets required to serve the PRD should be financed by the PRD.

Site Regulations. Siting regulations should be kept to a minimum consistent with safety requirements (such as access of fire equipment). There should be no attempt to require precise standards for lot size, setbacks and the like found in the Zoning Ordinance. Instead, the overall design, purpose and function of the PRD should be considered.

Open Space. There should be substantial amounts of open space in the PRD. This open space should be a designed characteristic and not developable for intensive use. Ownership and responsibility for the open space must be clearly and legally defined and controlled through deed restrictions, transfer of development rights or some other legally acceptable method.

EXISTING AND FUTURE LAND USE -CURRENT CITY LIMITS:

In examining the future needs of the city in land use, one must give consideration to the existing land use and the present land owners. Some deficiencies of the existing zoning are:

1. Zones tend to change at streets, leaving one side of the street zoned commercial, for example, and the other side zoned for R-10 residential. A much more realistic approach is to change zones in mid-block to permit compatible and like activities on a given street. This is much less significant in going from a high to low density residential zone than in the transition from commercial to multi-family, or multi-family to single family residential.
2. There is a shortage of land for multi-family housing. The need for this type of housing is discussed in the housing segment of the plan. Much of the land currently designated for multi-family housing has siting problems that would make multi-family development difficult and expensive. The area along N.E. 5th is an example. The proposed zoning map, figure 5, adds considerable multi-family zoned area.
3. The R-5 designation, 5000 square foot minimum lot size, has been retained in the southern portion of the city recognizing the historical original 50' X 100' lot sizes. This lot size is no longer suitable for today's

single-family homes, that tend toward one-story structures with two or three-car garages. The negative aesthetic impact of this high density housing has been minimized by the fact that many, if not most, of the property owners in this area have built on double lots or oversize lots.

4. All unzoned lands have been zoned in the proposed zoning map, including those annexed in 1973.
5. Recognizing the desirability of the minimum 10,000 square foot lot size for modern single-family housing, the remainder of the residential area has been so designated, with the provision that planned residential developments may be considered in those areas. Planned residential developments would seem particularly appropriate for consideration in the southeast corner of the city, the northwest corner (off Howard Drive) and the northeast portion just north of US 30 consisting of lands presently in the city limits and contiguous with the city limits that are annexable.
6. The commercial zone has been expanded to allow for the growth necessary to support the projected population growth.

GOAL

To guide and influence the location and nature of land development so that different activities are harmonious with each other and their environment.

POLICIES

1. To control land development and use so that the city retains its living qualities and natural amenities. The intensity and density of uses should be such that the city will be quiet, pleasant and have a small town character.
2. To arrange the uses of land so they are orderly, convenient and suitably related to each other.
3. To fulfill the needs of residents and property owners and take action to adequately provide necessary improvements and facilities within the city's fiscal constraints.
4. To facilitate a grouping or clustering of similar and supporting uses which will afford convenience for users and economize on public services and facilities.
5. To prevent undue concentrations or densities of uses which would overload streets and other public facilities or destroy living qualities and natural amenities.
6. To establish standards and conditions for development which will permit citizens to enjoy undisturbed use of their property and to provide a reliable basis for further private improvements.
7. To relate the use of the land to the limitations of the natural environment such as flood plains, soils, slope.

ACTIONS:

1. Adopt the Comprehensive Development Plan. Zoning and associated ordinances are intended to be compatible with the CDP and to accomplish its objectives. During refinement of the CDP and its adoption and in subsequent revisions to the CDP and related ordinances, this compatibility must be retained and strengthened.

Responsibility: City Council with support of Planning Commission and City Staff.

Schedule: Continuing.

2. Develop and adopt an appropriate Ordinance dealing with Planned Residential Developments.

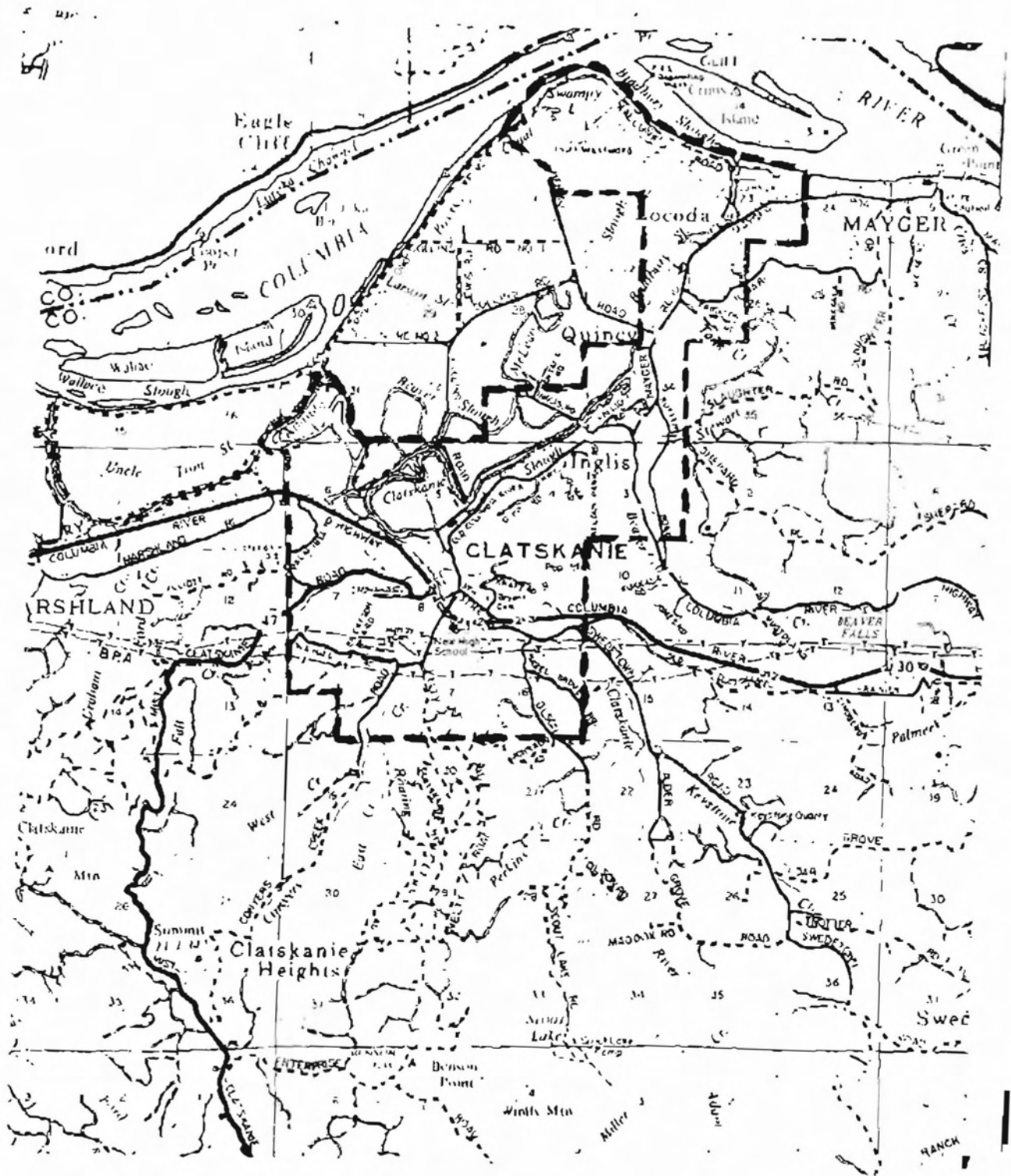
Responsibility: Development, City Staff; Adoption, City Council.

Schedule: June, 1979.

3. Areas outside the existing city limits but within the urban growth boundary remain under county zoning until annexed. The city will work with Columbia County within the area of concern on zoning, subdivision and building regulation matters to insure their consistency with the CDP.

Responsibility: City Staff.

Schedule: Continuing.



CITY OF CLATSKANIE

Urban Growth Boundary
(Designated by - - -)

FIGURE 3

HOUSING

INTRODUCTION.

The significance of housing availability as it relates to population and growth of the city has been discussed briefly in that section. Discussions have been held with many residents of the city to determine the housing needs and desires. Data on the existing housing stock and surveys of housing were gathered and analyzed. Vacancy factors of existing rental units and the rate of occupancy of new rental stock have been examined. With vacancy rates varying between 0 and 2% for the past ten years, several hundred families of local area employers forced to locate elsewhere because of the lack of suitable housing and an estimated twenty families per week seeking rental housing at the three local realty offices and the City Hall, one must conclude there is a dramatic housing need in the area that is both real and unmet.

The housing situation nationally presents a grim picture. Soaring housing costs have risen beyond the already high inflation rates. High demand and limited supply have made the resale of homes a seller's market. New housing lags farther behind with rising interest rates and a tight money market. Some of these factors may be of short duration, but in general analysts predict continued housing shortages for the long term.

As grim as the national picture is, the situation in the City of Clatskanie is even more aggravated. Even though the need is great from the City's standpoint, the absolute numbers involved are not sufficiently high to interest the developer of large tract single family housing. Accordingly, certain economies associated with tract housing have been denied the prospective local home buyer. Over 90% of the new housing starts in the past eight years

have been of the pre-cut or modular variety, with very few high quality custom features. Only within the past four years has there been any attempt to use FmHA funding for apartments. The thirty-three unit Solhavn Apartments were completed in 1976 and an additional twenty-four units began construction in July, 1978. Indicative of the need, the original thirty-three units were rented prior to completion and there has been a waiting list since.

SINGLE FAMILY HOUSING.

The predominance of single-family dwellings in Clatskanie reflects the desires of most Americans. They comprise 79% of the available housing units in the city. This includes mobile home units both on private lots and in parks. Surprisingly, 89.6% of the single-family units are owner occupied. Single-family rental units are limited to fifty, including six mobile homes.

MOBILE HOMES.

The City recognized the need for this alternative to the single-family residence and in 1973 passed a very progressive mobile home ordinance, permitting mobile homes meeting certain requirements to be sited on individual lots as a conditional use. There are currently 37 mobile homes on individual lots in the city limits. Many of these units represent a definite asset to the community's housing stock. Mobile home parks are permitted, but there has not been a quality mobile home park built in the city since the widespread acceptance of the mobile home as an alternative to single-family conventional housing in the late '60's and early '70's. The only mobile home park in the city was designed for the earlier generation of mobile homes and trailers and is

generally lacking in such amenities as accessory buildings, concrete pads, community facilities, screening, and mobile home placement to provide a degree of privacy. It is located in the commercial district along US 30 below the flood plain level and is subject to partial flooding in the normal winter rains. One of the city's obvious housing needs is a modern mobile home park.

MULTI-FAMILY HOUSING.

There are 136 multi-family housing units in the city or under construction. Four complexes, the the thirty-three unit Solhavn (with 24 additional units under construction), the Parkview Terrace apartments with twelve units and two two-story sixplexes make up 81 units. The remainder are duplexes, a triplex, several fourplexes and some individual apartments. There are generally waiting lists for these units and the vacancy factor is essentially zero. With the conditions of the marketplace removing the single-family home option from a significant percentage of the population, most notably the low or limited income, the younger people entering the workforce and the older retired person, the need for additional multi-family housing is obvious. As discussed in the section on land use, consideration has been given to additionally zoned lands for potential multi-family construction and use.

DETERIORATED AND/OR SUB STANDARD HOUSING..

Although the definition of deteriorated and sub-standard housing is rather subjective and is generally described as

some combination of dilapidation, disrepair, lack of suitable plumbing facilities, inadequate heating or wiring, lack of sewer, overcrowding and the like, this writer estimates that there are about 100 units of housing that would profit from significant and major rehabilitation. Rehabilitated housing represents one of the best potentials for the provision of safe, sanitary and decent housing for the low and moderate income people of the community. In addition, it provides several important benefits other than the provision of living space:

1. Assessed evaluation is increased on land and improvements on rehabilitated property, providing the local government with an improved tax base to support public services.
2. Costs of provision of public services (sewer, water, sidewalks, streets, etc.) in relation to rehabilitated homes are minimized or avoided.
3. Rehab of houses in a generally run-down neighborhood will often vitalize the neighborhood and rekindle community spirit.
4. Neighborhood stability is maintained making it attractive for long-time residents to remain in their homes.
5. Rehabilitated property is brought up to building and fire codes and qualifies for mortgage and fire insurance rates which contribute to its viability as shelter for low and moderate income people.
6. Rehabilitated property minimizes the risk to the general safety and health of the community.

SUMMARY OF EXISTING HOUSING STOCK:

Figures, except as noted, refer to the housing stock as of July 1, 1978. 65.8% of the dwelling units in the city are single-family residences and 89% of these are owner-occupied. Of the 46 rental single-family residences, about half are substandard. Including a 24 unit addition (now under construction) to an existing apartment complex, there are 131 multi-family rental units in the city. These comprise 20.6% of the dwelling units. Mobile homes, both in parks and on privately owned lots, make up a significant portion of the housing stock, 13.6%.

The above percentages do not include "transient" housing offered by motels and hotels. There are about 70 units of transient housing available and estimates of occupancy rates over the past five years vary from 75 to 100%. As discussed in the population and growth section, major facility construction and expansion programs have brought significant numbers of transients into the city and will probably continue to do so. Details of the existing housing stock are presented in Table .

FUTURE HOUSING NEEDS:

An aggressive housing policy is essential to the continued growth and economic health of the community. Clatskanie could fill 1,000 housing units within a two year period, but practically there is no way to achieve this level of construction.

This writer and area realtors estimate that within the next five five-year period there is a conservatively estimated market for for the following:

1. 200 multi-family rental units in the low-to-moderate rental range.
2. 200 single-family residences in the \$40,000 range.
3. 300 single-family residences in the \$40-60,000 range.
4. 200 single-family residences in the \$100,000 up range.
5. Mobile Home park facilities for 100 to 150 mobile homes.

In addition, for transient workers and younger people entering the job market for the first time there is a need for about 100 to 200 dwelling units. Rather than the traditional motel type, these could be of the one or two room "efficiency apartment" type with some provision for meal preparation.

With regard to mobile homes, a growing number of people have no alternative to home ownership other than mobile homes. With its emphasis on liveability, the city has an obvious attraction for a sizeable retirement population. Many retirees prefer the freedom from home-owner chores and costs offered either by apartments or a mobile home park. The city has an urgent need for one or two modern, well-planned mobile home parks capable of containing 50 to 100 mobile homes each.

GOAL

Support the provision of an adequate number of housing units to accomodate its citizens, and to allow for flexibility in housing location, type, density and price.

ACTION.

Action: Prepare jointly with the Chamber of Commerce material summarizing the city's support facilities and basic data, projected population growth and housing needs. Provide information to developers in the Portland Metropolitan Area specializing in smaller (50 to 100 unit) developments, multi-family housing and mobile home parks. Follow up to determine potential interest.

Responsibility: City Staff and Chamber of Commerce.

Schedule: April, 1979.

Action: Coordinate with appropriate Housing Authorities, mainly the Clatsop, Tillamook, Columbia County Authority to apprise them of the city's needs and support and the various programs available.

Responsibility: City Staff.

Schedule: December 1978 and continuing.

Action: Consider and develop policies to assist developers in providing necessary support services, water, sewer, streets and storm sewers for future planned developments.

Responsibility: Planning Commission and City Council.

Schedule: March, 1979.

Action: Investigate the desirability of a Planned unit development ordinance to allow flexibility in planning and site design, as well as providing for a mixture of housing types, densities and open space requirements.

Responsibility: City Staff study with recommendations to Planning Commission and City Council.

Schedule: July, 1979.

ECONOMIC DEVELOPMENT

HISTORY AND BACKGROUND:

The historical economic base of the area in the early days was dominated by the logging and fishing industries. In the mid-1920's, major Corps of Engineers diking projects caused both a temporary population influx and a realization of the dikelands potential for agriculture. Cabbabe farming was popular in the 1930's, and late in the decade there was a sizeable worm farming effort. Dairy farming was also extensive and much of the dairy products were processed at a cooperative creamery that operated in Clatskanie for many years. During the early 1940's mint farming became an extremely popular and economically significant cash crop and the dikelands were dotted with mint stills to process the oil. Unfortunately the crop was extremely demanding of the soil nutrients and the effort was relatively short-lived.

In 1902 Simon Benson began his logging, mill and shipping activities in the Clatskanie area and eventually his holdings grew to forty-five thousand acres. He developed seventy-five to eighty miles of railroad in the area to the southeast of Clatskanie. A total of nine camps within ten miles of the city employed about 250 men and women in his crews. From the nearby Wallace slough, 3 miles northwest of Clatskanie, Simon Benson, his long-time partner O.J. Evenson

and John Pastabend designed and built the famous Benson cigar rafts. Designed as an ocean-going raft to transport logs to the lucrative Southern California market and the Benson mills in San Diego, they reached a thousand feet in length and contained as much as six million board feet of lumber. They were an industrial and engineering marvel of their time.

Logging has continued as a basic industry in the area, and together with the related pulp and paper and milled lumber industries are the principle sources of employment in the area.

In 1966, Crown Zellerbach began construction of a major paper products mill at nearby Wauna, 9 miles west of Clatskanie. The mill has been very successful and is the major profit producer of any of the Corporation's mills. They are the most significant employer in the area with about 700 employees, 400 of whom live in Clatskanie and an estimated 300 living in the trade area outside the present city limits.

A timber mill of the Boise-Cascade Corporation is currently the sole industrial concern in the city and employs about 35 people.

Commercial fishing along the Columbia has been an historically significant factor in the growth of the area, but with the advent of tighter regulatory controls and limited seasons can no longer be considered a viable industry on its own.

Many commercial fishermen still operate in the area; but they supplement their income by fishing the Alaskan waters during the season or from other jobs. There is some commercial gillnet boat fabrication in the area.

During World War II, the Army Ordnance Corps established the Beaver Ordnance Depot at nearby Port Westward. It functioned actively until after the Korean war when it was put on a standby basis and eventually deactivated. This valuable industrial resource with deepwater docking facilities was placed under the authority of the Port of St. Helens and will be discussed in detail in following pages.

INDUSTRY:

The industrial growth of the area and the jobs and people they represent is keyed primarily to future developments at Port Westward and the expansion plans of the Crown-Zellerbach Corporation.

Port Westward.

This site is located about five miles north-northeast of Clatskanie, approximately 53 miles upriver from the mouth of the Columbia. The size of the site is approximately 1,200 acres. County planners have considered expanding the industrial zoning to include 3,000 acres. There is a conflict with the LCDC goal of agricultural land preservation in such an expansion that would need resolution.

The site has approximately 6,000 feet of river frontage on the main channel and 12,000 feet on Bradbury slough. The backup land ranges from 1,000 to 6,000 feet in depth. Marine terminal and docking facilities are provided both on the Columbia river and the Bradbury slough sides of the site. Rail service is provided by a spur of the Burlington-Northern. Highway access is provided by a nearby federal-aid secondary highway which ties into US 30.

Several industries expressed interest in the site but nothing was undertaken in a major sense until Portland General Electric assumed management of an 855 acre portion of the site in 1972. They began construction of an oil-fired turbine generating plant in 1973 which came on line in August, 1974. In 1977 they completed the second phase of the plant with the addition of a combined cycle add-on. The facility is intended for power generation to meet emergency and peak power demands and is capable of generating 600 megawatts, greater than the power output of Bonneville Dam. It occupies 120 acres of the 1200 acre site. As of this writing, recent studies and negotiations to establish a trans-shipment point for Alaskan oil by the AMAX Corporation at Port Westward seem to have halted.

Crown-Zellerbach.

Crown-Zellerbach has planned an expansion of its highly-profitable Wauna mill. They will employ an additional 420 people in the next two years.

COMMERCIAL:

Clatskanie has the typical small town commercial activity; two supermarkets, a variety store, a drug-variety store, two hardware stores, a building supply shop, two auto dealers, four gas stations, auto repair shops, and three small clothing stores. There are three taverns and three restaurant/cocktail lounges. Two motels and an assortment of beauty and barber shops and other specialty shops complete the commercial enterprises. Two doctors staff the small Clatskanie medical clinic and there are three practicing dentists and one lawyer in practice. The commercial community suffers from the proximity to Longview with several large chain stores and convenience food outlets. There seems to be enough local and tourist activity, however, to keep commercial enterprises stable and reasonably sound financially.

In the 1968 Comprehensive Development Plan for the city, mention was made of the desirability of attracting the tourist by creating a "motif" similar to Solvang, California and Leavenworth, Washington. In 1977, the Chamber of Commerce did some considerable study and concluded that it would be entirely feasible and appropriate for the city to adopt a Scandinavian theme. There are Finnish, Norwegian and Swedish ethnic roots in a large percentage of the population and the surrounding hills with their stands of Douglas fir and the diked lands along the Columbia bear physical similarities to the Scandinavian countries. More importantly, the Scandinavian products tend to be unique, of

very high quality, outstanding design and with a large and growing clientele in this country. Scandinavian crystal, stainless, high quality kitchen ware, furniture, hand-made Rya rugs, textile fabrics and designs, women's wear, and gift items come immediately to mind. Bakeries, delicatessen items and smorgasbord restaurants are examples of service-oriented commercial ventures. New businesses, specialty shops or additions of these kinds of items in existing stores are all possible. This kind of an approach to revitalizing the commercial community has the advantage of providing something not readily obtainable outside of major urban centers and attractive to tourists and residents of other near-by towns. Although it can be accomplished in stages, without a great deal of cost initially, it requires a great deal of planning, dedication, hard work and the support of the great majority if not all of the commercial community. Essentially a matter for the Chamber of Commerce to pursue, it would require some commitment on the part of the city to foster and support the theme concept in their own buildings and play a large part in city beautification. Visual attractiveness is one of the major factors in the success of such a program. Some local merchants have already taken steps to adopt the theme, but a successful venture will require much more serious commitment of the business community and support of the citizens.

Surveys conducted in 1977 by the Chamber of Commerce indicate that the citizens would like to see the following businesses in the community: Bowling alleys (mentioned by over 90%), youth center, high quality clothing (men, women and children), appliance center, antique store, shoe store, building supply and home

improvement store and fast food outlets.

INDUSTRY AND THE ENVIRONMENT:

Throughout this Comprehensive Development Plan there is a recurring theme of recognizing and maintaining the high degree of "liveability" of the city. Since this is considered the city's major asset, it is important that any future siting of industry consider its impact on that important quality. These considerations include environmental impact on the airshed, noise pollution, traffic flow, public service requirements and other factors that may be deleterious.

GOAL

Develop an industrial and commercial environment that will encourage a stable and diversified economy, provide new and continuous employment opportunity and increase the city's tax base.

POLICIES

1. Allocate adequate amounts of land for industrial and commercial growth.
2. Support the preparation of the Columbia County Economic Development Plan.
3. Protect existing and planned industrial and commercial areas from encroachment by incompatible land uses.
4. Make improvements in local conditions in order to make the city attractive to private capital investment.
5. Encourage the location of labor-intensive non-polluting industry in the city or urban growth boundary.

ACTION:

1. Obtain copies of the County Economic Development Plan for review and comment by the Council and Chamber of Commerce.
Responsibility: City Staff.
Schedule: As available, return comments in 30 days.
2. Meet with Port of St. Helens authorities to determine current status and express city interest and concern with regard to Port Westward development.
Responsibility: Mayor
Schedule: December, 1978; follow-up on at least six month intervals.
3. Adopt necessary plans and ordinances to assure adequate lands for industrial and commercial growth, both within the existing city and the urban growth boundary.
Responsibility: City Council.
Schedule: July, 1979.
4. Consider potential industrial and commercial requirements for essential services in utility, police and fire protection planning.
Responsibility: City Council, City Staff, P.U.D., Clatskanie Rural Fire District.
Schedule: Continuing.
5. Prepare material to promote Clatskanie as a desirable site for industry.
Responsibility: Chamber of Commerce with City Staff support.
Schedule: July, 1979.

INTRODUCTION:

The existing and potential recreational opportunities of the city and the surrounding area are so many and varied that they are truly staggering. They suffer only from a lack of definition, planning and resources to develop them and make them more available to the citizen. They are one of the major factors that contribute to the high quality of liveability of the City.

BOATING AND FISHING:

Perhaps the most popular form of recreation in the area is boating and the related activities of fishing, swimming, water skiing and picnicking. The Clatskanie river is navigable to the Columbia by way of the Beaver and Wallace sloughs. Game fish species on the Columbia include Coho and Chinook salmon, Steelhead, Cutthroat and Rainbow trout, Sturgeon and Crappie. The Clatskanie river has Chinook and Coho salmon, Steelhead, Cutthroat and Rainbow trout. Both the Beaver and Wallace sloughs contain significant quantities of warm water game fish including Bullhead catfish, Crappie, Bluegill, Large-mouth bass and Yellow perch.

A Columbia County owned and operated boat ramp, paved and lighted, with restrooms and picnic tables provides an excellent launching facility at the west end of the city on US 30. A smaller launching ramp is located in the City Park. A private club, the Beaver Boat Club, has moorage space for about 25 boathouses for its members. It is located just north of the city limits on the Beaver slough.

The privately-operated Kerry Marina is located about six miles west of the city on the Westport slough. Other potential marina sites are available in the planning area.

Jones Beach, located seven miles below Clatskanie on the Columbia is a favorite beach fishing area for Chinook salmon, Steelhead and Sea-run Cutthroat trout. There are no public facilities on the site.

Water skiing and swimming are generally excellent in the lower Beaver slough, the Wallace slough and the Columbia river. Many of the islands in the Columbia have sandy beaches and provide excellent spots for swimming and picnicking.

SCENIC RESOURCES AND NATURE TRAILS:

Highways.

Highway 42 from Clatskanie through Mist to Pittsburg is a state-designated scenic highway, and both Swedetown Road from Clatskanie to Swedetown and the old Columbia river highway east from Clatskanie are county scenic highways, as are the Quincy/Mayger/Alston Corners roads.

Scenic Towns and Sites.

Clatskanie is identified as one of two scenic towns in Columbia County, the other is Vernonia. Scout Lake, a city-owned lake of about five acres surface area, is located about four miles south of the city and is a scenic site with some excellent native rainbow trout.

Two other sites in the area are worth mentioning because they have been discussed by the County and the State with regard to their recreational potential. They are Mayger beach, extending west

from the old fishing docks at Mayger, about 6 miles northeast of the city and the picturesque Beaver Falls, about 4 miles east of the city. Mayger beach has considerable potential for fishing, swimming, picnicking and boat launching. Beaver Falls has potential as a scenic site for picnicking and fishing. Note that Columbia County is one of the few counties in Oregon without State recreational facilities.

NATURE TRAILS AND WILDLIFE:

There are about 100 miles of logging roads within a six mile radius of the city extending largely to the west, south and southeast. These serve as an almost unlimited network of nature trails. Many of these roads are rocked all-weather surfaces and can be traveled with care by passenger car. They provide some spectacular views of the forests, the Columbia river and the snow-capped mountains of Rainier, Hood and St. Helens.

Six miles southeast of the city, a wild, unroaded 3.5 mile stretch of the Clatskanie river winds through a narrow 300 to 400 foot deep canyon. This portion of the Clatskanie drainage was logged by railroad around the turn of the century and now supports large second growth timber. Douglas fir covers the slopes in the upper part of the canyon to an elevation of 750 feet, but red alder and big-leaf maple predominate along the river. Through most of this stretch the river cuts through siltstone formations that were deposited between layers of basalt. These bluffs are overhung with vine maple, moss and ferns. In most areas the river bedrock is overlain by basaltic cobbles and silt which provide excellent spawning beds for Steelhead trout and Coho salmon. Deep potholes

Inhabited by beaver and trout occur where the siltstone bedrock is exposed. Large pieces of petrified wood are often exposed in the stream channel. Other wildlife species besides beaver that use the area include Roosevelt elk and blacktail deer. This is one of the few remaining roadless river segments in the northern coast range and is an important fish spawning area and refuge for many species of wildlife. This stretch of the Clatskanie presents a rare opportunity for a "wilderness" hiking experience.

The dikelands, lying north of US 30 to the west of Clatskanie and north of the Clatskanie-Mayger Road to the east, are designated by the State Fish and Wildlife Commission as major waterfowl habitats. A portion of these lands as well as Wallace and Crim's Islands are known and potential habitats for the Columbian White-tailed deer, an endangered species. Principal waterfowl are Pintail, Mallard and Widgeon duck with significant numbers of Canadian geese, Green- and Blue-winged teal, wood duck and Merganser.

HUNTING:

During the appropriate hunting seasons, deer and elk are extensively and successfully sought in the areas surrounding the city. Summer populations of Black-tailed deer are estimated at 17,000 in Columbia County and Roosevelt Elk at 1,660. Some Black Bear, population 600, are hunted. Commonly hunted upland game are Ring-necked pheasant, Valley and Mountain quail, grouse, dove and pigeons. The waterfowl mentioned above are hunted in season and some regularly hunted non-game species with county populations

greater than 1000 include coyote, raccoon, rabbit, crow, nutria and greydigger. There is some limited trapping of muskrat, beaver and mink.

RECREATIONAL FACILITIES AND PROGRAMS

In addition to the private and county-operated facilities previously described, three governmental entities provide recreational facilities and programs. They are School District 5J, the Clatskanie Park and Recreation District and the City of Clatskanie.

School District 5J.

With the completion in the summer of 1978 of a new \$6 million high school complex, the community has excellent athletic facilities including a new football field with concrete stands, track, baseball fields, indoor gymnasia with separate rooms for exercise, weights, wrestling and basketball. A new theater/auditorium with excellent acoustics seats about 450. A modern, well-equipped kitchen has already been used for community dinners. Two tennis courts, in rather poor condition, lighted for recreational play are located at the former high school site, now in use as a middle school. School district officials have a policy of making their facilities available to the community on a non-interference basis with normal school activity.

Clatskanie Park and Recreation District.

In 1958, following a series of tragic swimming accidents, the

community built a swimming pool with a bathhouse in the city park. It was completed solely by volunteer work and donations and was representative of community spirit at its finest. In 1961 the Clatskanie Park and Recreation District was created, a special district with its own taxing authority. Their initial purpose was to operate and maintain the swimming pool. The city gave the district a long-term lease on the land upon its formation. In recent years they have expanded their activity to include summer recreation programs and they provided half of the funds for new tennis courts in the city park. Plans to further expand their activities were dealt a severe blow in the spring of 1978 when their attempt to receive voter approval on an increased tax base was defeated.

City of Clatskanie.

Clatskanie City Park.

Centrally located in the commercial district, the Clatskanie city park is about 14 acres, including a recently acquired 4 acre parcel. In 1973 a park development plan was prepared by the city staff and graduate students of Oregon State University. Implementation of the plan has been proceeding with available grant funds and city resources. Recent additions include a modern tiled restroom facility, complete hook-ups for three recreational vehicles, three acrylic-surfaced, lighted tennis courts and extensive rework of a World War II day room used as a community center building. Other facilities include picnic tables and fireplaces,

a covered picnic area, a rather decrepit fishing dock, a small boat launching ramp, a lighted baseball diamond and a football field with wooden bleachers used by the high school. With the acquisition of the new high school and their fine athletic facilities, some revision of the existing park development plan is in order. The recently acquired four acre parcel adjacent to the park contains a riding arena used by a local riding club and the SH club. The arena was constructed by the club members.

Scout Lake.

The city owns a 160 acre tract about five miles south known as Scout Lake. The acreage was donated by long-time residents of the area for the youth of the community. Scout Lake has about five acres of surface area, is spring fed and contains some fine rainbow trout. Bunkhouses and fire pits have been constructed from time to time by volunteers and Boy Scout troops. Unfortunately every attempt to improve the area has suffered major vandalism. Access is very difficult for passenger cars, since the last two or three miles of the access road is over lightly used logging roads that are not maintained unless there is logging activity in the area.

Gun Club.

The city, under an agreement with the local gun club, provides a site of about ten acres for target shooting. The area is immediately west of the city-owned Murray Hill Cemetery.

Other City-owned Lands with Recreation Potential.

For several years the city has owned a landfill for solid waste disposal with a franchised operator. The landfill has now been closed and in accordance with the franchise provisions, covered with clean fill material and seeded in grass. This area, comprising approximately 18 acres, represents a potential recreational site. Since the gun club site will someday have to be used for expansion of the city's cemetery, this property could be used for relocation. It could also be used for relocation of the riding club and 4H activities, thereby allowing expansion of the downtown park facilities. A small piece of land on the north side of town could be used for a "minipark" but the need and utilization are not apparent.

The City Library.

The city operates an excellent small city library in rented space at the corner of US 30 and Nehalem Street. Care has been taken to screen out dead books and they have about 4500 current books. Annual circulation is about 6500, although circulation figures jumped dramatically when they moved to their current location in the summer of 1978. Circulation is now estimated to be about 10,000 for the current fiscal year which would give them a turnover rate of 2.3, a high figure state-wide for the size of the library and the population. Space is quite limited and the city needs a permanent library facility. Rent currently costs 18.5% of their annual budget of about \$14,000.

Semi-Public and Private Facilities.

Mention has already been made of the Beaver Boat Club and Merry Mariners. The American Legion Hall, available for a nominal fee, provides an excellent place for dinners, dancing, games, private parties and similar recreation. The community center building in the city park has been used as a meeting place by several local clubs. New kitchen equipment has recently been added, which should increase its potential use. Half of the building is currently in use for a local head-start program.

RECREATIONAL NEEDS:

Youth.

In discussing needed recreational facilities with the young people of the community, the most requested was a youth center for games, dancing and general gathering. Both public and private attempts to provide this type of center in the past have suffered from vandalism and a general lack of interest and support.

There is a rapidly growing interest in skate-boarding and there is no appropriate place for this activity.

Improved maintenance and additional equipment are needed for the children's play area in the city park.

With the growing interest in slo-pitch, woman's softball and an active little-league program there is a need for additional baseball facilities, but this need should be met with shared use of the high school diamonds.

Senior Citizens.

A Senior Citizen Center in rented quarters provides a place for the social activities of the Seniors, supplemented by the use of one of the nearby Grange Halls for dances. There are no other specific activities available for them. Some interest has been expressed in horse-riding facilities and the city could put some pits in the city park.

General.

The most often expressed recreational need by all ages is for bowling alleys. The nearest lanes are in Longview and there are an estimated four to five hundred bowlers in the trade area currently active in various bowling leagues. This is an area for the private sector but should be supported in every way possible.

There are no golf courses in the immediate area but there are several within a reasonable driving distance and it is doubtful if one is economically feasible.

There are no bike trails in the area, nor has there been any general expression of interest in them.

GOAL

To provide healthful and pleasant recreational opportunities for the general citizenry within the available resources.

POLICIES

1. Encourage and support the development of recreational facilities by other public agencies and private groups to the degree resources permit.
2. Actively seek grants and alternative means of funding recreational facilities.
3. Encourage an integrated approach to meeting recreational needs by utilizing public and private facilities and avoiding duplication.
4. Continue development of the city's parks as resources permit.
5. Require that future housing projects and subdivisions consider areas for recreational use.

ACTIONS:

1. Identify the community recreational needs, opportunities and potentially available sites on a continuing basis.

Responsibility: City Staff with Planning Commission, Park & Recreation and School District 5J support.

Schedule: Annual review, prior to budget cycle.

2. Maintain a current list of federal and state grants available by periodic contacts with the Columbia County Park Coordinator, the State Superintendent of Parks and the League of Oregon Cities.

Responsibility: City Staff.

Schedule: Annual Review.

3. Develop and administer an integrated recreational program utilizing city, Park & Recreation and School District 5J facilities.

Responsibility: Park & Recreation, supported by City Staff and School District 5J.

Schedule: Spring, 1980.

4. As part of 3 above, coordinate with S.D. 5J and request they include refurbishing the existing two tennis courts in their next budget to improve the available tennis facilities.

Responsibility: City Staff

Schedule: To support the 1980/1981 Fiscal Year Budget.

5. Review and update the City Park Development Plan with particular emphasis on an improved children's play area, additional covered picnic area, fishing and boating docks and horseshoe pits. Define the best utilization of the space north of the existing tennis courts. Include a planned maintenance schedule as an integral part of the Park Plan.

Responsibility: City Staff coordinating with Park & Recreation and the Planning Commission.

Schedule: November, 1979.

6. Include at least one capital improvement program or project in each year's budget for the recreation needs of the community.

Responsibility: City Staff, with the assistance of Park and Recreation and the city service organizations.

Schedule: To support FY 1979/1980 budget.

7. Develop and implement an anti-vandalism program.

Responsibility: City Staff and City Council.

Schedule: May, 1979.

8. Plan the development of Scout Lake to include cleared tent areas, fire rings, firewood, pit latrines, beach improvement, solid waste removal, nature trails and access improvement and maintenance requirements. Implement as dictated by available resources and the effectiveness of the anti-vandalism program in 7 above.

Responsibility: City Staff and City Council.

Schedule: March, 1980.

9. Study the alternatives and make recommendations to the City Council and the Library Board for a new library facility.

Responsibility: City Staff.

Schedule: March, 1979.

10. Study the feasibility of constructing a city-owned marina north of the Burlington right-of-way between the Clatskanie river and the Boise-Cascade mill.

Responsibility: City Staff.

Schedule: December, 1979.

11. Request County and State support for the preservation of the segment of the Clatskanie river from Carcus creek to the fish ladder/falls west of Apiary.

Responsibility: City Staff and City Council.

Schedule: March, 1979.

12. Request and/or support the County and State in designating and developing recreational facilities at Beaver Falls and Mayger Beach.

Responsibility: City Staff and City Council.

Schedule: March, 1979.

ENVIRONMENT

GENERAL.

This section will treat briefly with the subjects of air, water and land resources quality and areas subject to natural disasters and hazards. The growing general awareness of the fragility of our natural environment and the need to protect it is felt perhaps more keenly in Clatskanie than in many parts of our country, since most of the residents have chosen this area as a place to live because of the high quality of the natural environment. Many of the residents work in the natural surroundings appropriate to logging, fishing, farming and the wood products industry.

There is general recognition that the natural resources of the area determine the economic, social and cultural values of the land for the general public and the individual. The extensive stands of timber surrounding the city protect the city's watershed, provide wildlife habitat, contribute to the area's economy and provide job opportunity, and provide recreational activity and scenic beauty. Similarly, the navigable portion of the Clatskanie River and the proximity of the Columbia River provide economic opportunity for boat fabrication, commercial fishing as well as the other benefits mentioned.

This small city does not have the expertise or the regional view to set and implement standards and regulatory programs or various environmental statutes and rules. This is more logically the purview of various state, federal and regional bodies and agencies. There is, however, significant local

A-

concern that these agencies are developing standards, rules and implementing programs for larger urban centers with severe environmental problems that are not applicable to the local situation. They ^{may} ~~are~~ ^{be} then applied without due regard for their local applicability and without exception considerations, thereby working some combination of unnecessary expense, inconvenience or hardship on the people.

A partial listing of federal, state and special district agencies that directly or indirectly effect the local environment follows, with a brief description of their functions:

Federal Agencies.

The Corps of Engineers has regulations dealing with navigable waterways including the Clatskanie River from the Beaver Slough to Nehalem Street. They also have regulatory control over the Beaver Drainage District. They conduct studies, issue permits, restrict or fund projects dealing with navigation, flood control, recreation, conservation, preservation, and wildlife management.

The Environmental Protection Agency sets standards for air and water quality to protect the high quality of the environment. Some of these standards are enforced by the Oregon Department of Environmental Quality.

State of Oregon.

Department of Environmental Quality creates and administers regulations concerning air, land, noise and water quality.

Because this agency issues septic permits, air discharge

and indirect source permits it has a direct impact

on both the environment and land use.

Department of Health develops and enforces standards relating to the solid waste disposal and water supply protection and testing.

State Water Resources Department provides technical information on well logs, ground water and surface water as well as establishing riparian rights.

Department of Forestry administers the regulations of the Oregon Forest Practices act on private forest lands that surround the city and have impact on the city's water quality.

Department of Fish and Wildlife is responsible for managing the wildlife resources of the state and the preservation of significant wildlife habitat.

Columbia County Planning Department is concerned with all aspects of the city's planning including environmental considerations, as is the State Land Conservation and Development Department.

AIR QUALITY.

There is a singular lack of competent technical data concerning the air quality of the Clatskanie area. The airshed is just off the main northwesterly flow from the Portland/Vancouver area to the Longview/Kelso/Rainier area. The surface winds in fall and winter prevail from the southeast, but the hilly ridges seem to screen substantially all of the Portland area air pollutants. Spring and summer prevailing winds are from the west and northwest. These patterns are

interrupted occasionally in the winter by cold polar air masses of high pressure air moving across northern Canada and creating occasional strong easterly winds. Similar dry high pressure air masses occur in the summer providing the more extreme hot spells. These patterns, both winter and summer, normally last only two or three days.

The only isopleth data available for the area at this writing was gathered by the now-defunct Columbia-Willamette Air Pollution Authority. Their 1970 winter and summer isopleth charts (isopleths are lines on the map at constant levels of suspended particulates in the air, measured in micrograms per cubic meter) would suggest marked screening of the area by the cliffs and low hills along the west bank of the Columbia from Portland north to the Rainier area. Point source emission charts suggest fairly intense contamination in the Rainier and Mayger areas with a lesser contamination by a factor of ten in the Clatskanie area. Since these data were collected, there has been intensive and very successful efforts in the Loneview-Kelso area and in the Portland-Vancouver area to minimize air pollution. These efforts have visibly reduced pollution levels. Attempts at obtaining precise definition of the carrying capacity of the Clatskanie airshed (including the Port Westward industrial site) have not been productive. In this writer's opinion, there is no reason to suspect significant detrimental impact on the area airshed, considering the application of modern technology in anti-pollutant control to any potential industry locating in the area.

WATER QUALITY.

The most significant water quality concern of the City of Clatskanie is the quality of the source of the municipal water system. Two surface streams, West Creek and Roaring Creek provide water for the system. West Creek is used constantly, Roaring Creek is only used as a summer supplement and during the annual cleaning of the West Creek impoundment. These creeks are fed from a myriad of small springs in the mountains of the Coast Range and are of excellent purity. Chemical analysis yields no natural mineral content of concern. There are no natural fluorides in the water. Background level turbidity is normally less than 2 NTU, although heavy fall and winter rains and occasional natural landslides can drastically raise turbidity levels to 40 to 50 and increase sedimentation dramatically.

There are no industrial sources of pollution to the Clatskanie River, and the city's new treatment plant for domestic sewage far exceeds the state requirement of 85%, operating well above 95%.

LAND QUALITY.

The only significant adverse land quality consideration in the planning area is the disposal of solid waste. In 1977 the city was forced to discontinue the use of its landfill. The landfill was operated by a franchisee, who also operated a local collection service. With the closure of the landfill the franchisee began the 90 mile roundtrip haul to the only sanitary landfill in Columbia County, Santosh near Scappoose.

WATER QUALITY

In reviewing county data on estimates of annual emissions (tons/year) of the three most significant types, total particulates, carbon monoxide, and sulfur oxides were examined. (Data as of June 28, 1976.) Some conclusions may be drawn: With regard to total particulates:

1. Point source emissions, as opposed to area source emissions, are the significant emission sources in the Columbia River valley.
2. Approximately 85% of all point source pollutants emanate from the State of Washington, 60748 tons as opposed to Columbia County emissions of 10,751.
3. There is no significant point source particulate emitter in the planning region, other than the PGE generating facility at Port Westward.

With regard to carbon monoxide:

1. Area sources account for about 97% of the 19,000 tons per year emitted in Columbia County.
2. 94% of the area source emissions are from motor vehicles.
3. Less than 1% of the vehicle miles occur in the planning area.
4. There is no significant local contribution to this pollutant, nor is there significant carbon monoxide pollution in the area.

With regard to sulfur oxides:

1. About 80% of the emissions are from point sources.
2. Industrial fuel combustion and the wood processing industries account for substantially all the point source emissions of sulfur oxides.
3. PGE at Port Westward accounts for about 5% of the total.

The added expense was reflected in the rate structure, which discouraged some customers, but more importantly, the closure of the landfill gave no opportunity for the individual to properly dispose of his solid waste. As a consequence, the problem of disposal of uncollected solid waste has gotten much worse. Prior to the closure, various studies estimated that of a total of 2,670 tons per year of solid waste generated in the Clatskanie area, only 1000 tons were collected. The remainder ends up incinerated, buried, or dumped into creeks, gullies and along roadsides.

NATURAL ENVIRONMENTAL HAZARDS.

The only significant environmental hazard in the planning area is the flood plain associated with the Clatskanie River and Beaver Creek, as well as some of the tributaries of the Clatskanie. The City enacted the appropriate resolutions and ordinances to participate in the national flood insurance program, and limited information defining the flood hazard area is available, but no hydrographic survey work has been undertaken to properly define the area. It is presumed that all lands below about 14 feet m.s.l. are flood prone. This includes much of the older downtown commercial district and the city park in the existing city limits and substantial areas in the urban growth boundary.

There is a known fault line that lies in an east-west orientation from the eastern edge of the urban growth boundary to beyond the Mayger-Alston Road, and an estimated 2000 acres in the urban growth area have slopes greater than 25%.

GOAL

1. In so far as it is within the capability of the City to do so, to maintain and improve the quality of the air, water and land resources of the city.
2. In so far as it is within the capability of the City to do so, to protect life and property from natural disasters and hazards.

POLICIES

1. To protect the long-range availability and use of those natural resource areas under the control of the city, such as the domestic water supply watershed and the Scout Lake property.
2. To support Federal, State, Regional and County objectives, rules, and regulations that are determined to ^{be} valid and relevant to the community and its area of concern with regard to air, water and land resource quality and areas subject to natural disasters and hazards.
3. To insure that the City and its Urban Growth Boundary are allocated a fair share of the region's carrying capability with regard to pollutants.
4. To encourage the County development of a solid waste disposal site in the North County area and their efforts to increase usage of disposal and resource recovery operations and discourage illicit disposal of solid waste.

5. To require that improvements or developments on land found subject to slumping, earth slides, or movement as determined by the Soil Conservation Service of the U.S. Department of Agriculture, the Oregon State Department of Environmental Quality, or any other competent agency shall not be permitted unless there is adequate demonstration by the developer that such considerations are incorporated into the plan for development.

ACTIONS:

1. Contact appropriate County and DEQ sources to determine the status and definition of the area natural resource carrying capacity.
Responsibility: City Staff.
Schedule: July, 1979, follow-up as required.
2. Define and map those locations within the urban growth boundary and the existing city limits that are known or suspect to be subject to natural disasters and hazards such as floods, slides and subsidence, and the like.
Responsibility: City Staff with the support of the Building Official, the Soil Conservation Service and the County Planning and Building Department.
Schedule: June, 1980.
3. Maintain continuing liaison with the League of Oregon Cities, the LCDC, and the State Department of Environmental Quality to be aware of new rules and regulations concerning the environment and advise the Council with regard to their impact on the City.
Responsibility: City Staff.
Schedule: Continuing.

4. Request the County Commissioners to advise of their progress in locating a solid waste disposal site in the North County area and progress being made to discourage illicit disposal of solid waste.

Responsibility: Mayor and City Council.

Schedule: April, 1979. Follow-up as required.

5. Review all building permits for new construction or developments in areas of known or suspect soil movement for demonstrable precautions against future disaster or major damage.

Responsibility: Building Official, Planning Commission.

Schedule: As required.

ENERGY AND OTHER RESOURCE CONSERVATION

In general, energy and resource conservation considerations are beyond the purview of our community and are basically studied, regulated and controlled at the Federal, State and Regional levels in much the same manner as environmental considerations.

There are two areas that should be discussed because of their fundamental impact on comprehensive planning for the City of Clatskanie. They are electrical energy resources and water resources.

ELECTRICAL ENERGY.

Because of the historically low-cost hydropower available in the Pacific Northwest, electrical energy is the primary source of energy for the home, commerce and industry. In this area there is an even higher reliance on electrical energy. Power is provided by the Clatskanie People's Utility District (PUD) which began operations in March, 1943. The PUD initially served 1,165 customers with annual energy requirements of 2 million KWH and a maximum demand of 600 KW. Average annual use for residential customers was approximately 1,000 KWH, at a cost of $3\frac{1}{2}$ ¢ per KWH. By 1975, the PUD was serving 2,607 customers with annual energy requirements in excess of 575 million KWH and a maximum demand in excess of 94,000 KW. The average annual use per residential account had increased to more than 26,000 KWH at an average cost of less than 1 ¢ per KWH.

The customer in the Clatskanie PUD area is currently receiving power at the lowest KWH cost in the United States. For the past several years they have been among the four or five lowest. There are three basic reasons for this. First, as a public utility they have very favorable arrangements with the Bonneville Power Administration for the purchase of power. Second, they operate very efficiently, with a lean organization and unusually low administrative and overhead expense. They have no bonded debt, in fact no long-term debt of any kind and have reserves slightly under one million dollars. In addition, they own appreciable percentages of the Trojan nuclear plant and other power generating facilities under construction. Third, a single customer, the Crown Zellerbach Wauna mill, not only uses 85% of their electricity, but uses it around the clock, seven days a week with no more than about a 5% variation. This not only tends to minimize their peak load demand but also permits them to operate at an incredibly high % load factor.

Their current price of .9 ¢ per KWH compares with a national average of about 3 ¢ per KWH, a Portland, Oregon price of 2.7 ¢ per KWH and a Pacific Northwest regional average of slightly in excess of 2 ¢ per KWH. This accounts for the unusually high dependence of the area on electrical power and the very high per capita or per residence consumption. The Clatskanie PUD is now the sixth largest electric utility (public or private) in the State of Oregon.

This happy state of electrical energy affairs for the area's

residential, commercial and industrial users greatly limits the economic incentives for electrical energy conservation, since even the generally-accepted cost-effective practice of increasing an uninsulated ceiling from R-0 to R-19 has a marginal payoff and additional insulation, weather-proofing, storm door installation and thermal glass installation become prohibitive from a cost/benefit standpoint. Exotic utility conservation considerations such as time-demand metering and attendant rate structures, block rates, life-line rates and the like would not save enough to pay for the increased administrative, operational and capital costs. As power costs increase (and these increases appear inevitable) cost/benefit ratios will change and conservation measures should be reevaluated.

This writer concurs in part with the findings of the Northwest Energy Policy Project with regard to the social aspects of energy conservation:

The two factual approaches of information and persuasion are the least effective in terms of altering people's actions. The two behavioral approaches of pricing and inducements (such as tax incentives or utility financing) are most effective in promoting specific short-term behavioral changes with regard to conservation. (Note that these behavioral changes may result in long-term benefits as in the case of insulation addition).

This writer disagrees, however, that the structural approach of regulation provides the most "encompassing" means of effecting long-term social change because of the technical and administrative problems of setting performance standards, estab-

lishing operating rules, devising allocation schemes and measuring performance (which implies large capital expenditures for acquisition, installation and maintenance of measuring devices).

Guidance, in which public leaders guide the society toward desired collective goals can certainly effect long-term social change, as can a "Technical Fix" scenario, in which a conscious national effort^{is made}/to use energy more efficiently by putting to use the practical, economical energy saving technology that is either available now or can be developed through a national effort.

Preliminary studies indicate that probably the most significant conservation effort that could be made in the area would be the installation of co-generating equipment at the Crown-Zellerbach plant. Utilizing heat generated in their industrial processes a possible megawatts could be achieved.

With regard to other users in the area by the year 2000, the probable conservation efforts will include:

- Residential:
1. Lower household thermostat settings.
 2. Added ceiling insulation to existing housing.
 3. Use of more efficient space heating systems.
 4. Building code requirements for new homes.
 5. Use of more energy efficient appliances.
 6. Limited solar energy use if cost/effective through new technology.

- Commercial:
1. Lower thermostat settings.
 2. Reduced ventilation and lighting levels.
 3. Add roof insulation to existing buildings.
 4. Use of heat conserving features in new commercial construction.

It is important to note that from an electrical energy standpoint there is no foreseeable shortfall that would inhibit the planned population and residential growth or preclude normal commercial and industrial growth, not considering an industry with extreme load demands.

WATER RESOURCES CAPACITY AND CONSERVATION.

Water resources are perhaps the fundamental determinant in establishing the area's carrying capacity in terms of population. The city's water system is treated more completely in the section on public facilities, but some comments are appropriate here. There are two conservation considerations, the basic water supply and the 733 acre watershed, an extremely valuable financial resource for the city.

Basic Water Supply.

The city's basic water supply comes from two spring-fed mountain streams, West Creek and Roaring Creek. The city has water rights to 2.0 cfs from West Creek and 1.4 cfs from Roaring Creek. These rights appear to be in excess of the capability of the two streams to produce. Capaletti weir measurements taken in September of '973 (the end of an unusually long dry season) yielded flow measurements of 1.5 cfs at West Creek and .52 cfs at Roaring Creek. Visual observations during

the severe drought of 1977 indicated similar flows so one can conclude that the existing supply sources have a capability to yield a minimum flow of 2 cfs or 1,300,000 gallons per day. This would supply the average annual daily water consumption (150 gallons per capita) for over 8600 people and the maximum daily water consumption (300 gallons per capita) for over 4300 people. Several other possibilities exist for alternate water sources. Fall Creek could provide an estimated 600,000 gpd, Conyers Creek, the springs at Scout Lake, Miller Creek, the Quincy Water District with an estimated ,000 gpd and Raney well installations on the Columbia similar to those in Rainier and St. Helens are all possible alternate sources. These comments speak only to source water, not reservoir capacity and distribution requirements. Improvements in these areas are under study and design by the city's consulting engineers. There are no fundamental constraints to providing water to the current and projected population of the city and the urban growth area.

The major conservation consideration for the city's water supply was taken in 1974, with the decision on the part of the City Council to adopt a water metering program. The two primary reasons for the program were conservation and considerations of equity in charging water customers. All water customers outside the city and all commercial and industrial accounts within the city are metered as of this writing, and residential customers are about 70% metered, with full metering forecast by the end of FY 1978/79.

It is not generally possible to time-phase the necessary capital improvements so that maximum demands can be met at all times over the years. The city has a three-stage emergency conservation plan to minimize water useage during periods of peak demand or extreme drought. A Stage 1 Alert consists of requesting citizen cooperation in minimizing non-essential water use and restricting sprinkling to alternate days; a Stage 2 Alert consists of limiting all non-essential water use; and a Stage 3 Alert consists of controlling water useage to a metered allotment with fines for over use. In prior years, because of mainline size constraints, distribution system deficiencies, or pumping capacity limitations the Stage 1 Alert has been used. If required because of phasing problems the Council will consider reverse rate structures.

Watershed Conservation.

The city-owned timberlands of the West Creek watershed comprise 733 acres, about 70% of the drainage basin of the creek. The other portions of the drainage basin are owned by Crown-Zellerbach and the Evenson Timber Co. This insures excellent opportunity to control harvesting practices that impact the water quality and quantity, as well as forestry practices that contribute to conservation of this valuable renewable resource, such as reforestation. The city has no land ownership in the Roaring Creek watershed. Those lands are owned principally by Longview-Fibre Co. and the Evenson Timber Co.

TRANSPORTATION

INTRODUCTION.

With regard to transportation, the City of Clatskanie is mainly automobile oriented and will continue to be for the foreseeable future.

Rail freight service is provided by the Burlington Northern Railway on their Portland-Astoria line that roughly parallels U.S. Highway 30. Passenger rail service (Amtrak) is available at Kelso, Washington, 18 miles from the city.

There are no airports in the immediate vicinity. General aviation operations are conducted at the Kelso Airport, the Astoria Airport and the Scappoose Airport, the latter two being about 45 miles from the city. With the exception of occasional feeder service from Astoria, Portland International Airport is the nearest commercial air facility. A heliport was put in operation adjacent to the fire station in the Spring of 1978, primarily for emergency med-evac.

Public scheduled bus transportation is provided by Greyhound Bus Lines but is limited to a single morning bus to Portland and an evening bus from Portland to Astoria.

A limited transportation service is provided for the transportation disadvantaged by Colco, a non-profit county-wide organization with a station in Clatskanie that provides transportation mainly for senior citizens to both the Longview area and the Portland area.

ROAD AND STREET SYSTEM.

Arterials. The major arterial serving the city is U.S. Highway 30. Essentially a two-lane highway from Scappoose to Astoria (with frequent stretches of third lane passing lanes and turn lanes) it widens to four lanes for about 2500 feet from the bridge over the Clatskanie River to the terminus of State Highway 47. All other roads and streets in planning area are two lanes or less. State Highway 47 extends west and then south to the cities of Vernonia and Forest Grove. Old U.S. 30 (now a county road) runs northeast of the city to Mayger

Road and through the rural community of Quincy to the Port Westward industrial site. Fifth Street extends to the southeast as Swedetown Road. State Highway 47, Old U.S. 30 and Swedetown Road are designated FAS (Federal Aid Secondary) roads in the national highway system. Nehalem Street is the only north-south street (more properly, northeast-southwest) crossing the Clatskanie River, and connects old U.S. 30 and Swedetown Road with U.S. 30 then extends to the south and carries all traffic from the rural areas south of the city. All of these arterials are marginal or submarginal with regard to carrying capacity, and safety for today's traffic conditions. They will become an increasing problem with future growth, not only in the city and the urban growth boundary but in the ^{low} incorporated portions of the surrounding area. A review of the State Highway Division plans indicate that there are no plans for further improvement of U.S. 30 in this century. Of particular concern to this study is the inadequacy of old U.S. 30 and Mayger Road to serve the potential industrial growth in the Port Westward Area, and the funneling of substantially all north-south traffic along Nehalem Street.

Collectors. There are five collector road patterns in the city and four outside the city. On the north side of the city Poplar-8th Street-Nehalem-Haven Acres serve as the collector route for the Haven Acres subdivision and the rural residences in the northeast. Haven Acres Road farther east serves the 7th Street-Wood Lane residents. Bel Air Drive in the southwest section serves as a collector for the high school traffic and the Bel Air development. Howard Drive and Orchard Street serve as collectors for the Crown View development. Bellflower serves as a collector for the southeast area within the city limits. Outside the city limits, the W.A. Hall Road, Conyers Creek Road (the old Clatskanie-Mist Market Road), Kelty Road and Olson Road serve as collectors for the rural areas to the south of the city. These roads are all maintained by the county and are in marginal condition. Although basically lightly travelled rural roads, they do handle significant logging traffic.

General. Probably no problem is more frustrating to local officials than the

provision of adequate streets and roads. Over the past decade, costs of road construction have increased at a much higher rate than cost-of-living and general inflationary trends would suggest. Technology and equipment in the paving industry have been geared to the national freeway and superhighway systems, not to small one-and-two-block jobs. Many small cities have been unable to obtain bids from paving contractors because the small size of the jobs will not warrant the use of the heavy equipment and skilled crews. The city's resources, traditionally from their share of state gas tax revenues, are not adequate for the most minimal maintenance chores, much less the financing of new construction. State and Federal grants for small cities are extremely limited, although the city has been fortunate in participation in the State's "Small City Allotment" program and one project in the Federal "Off-System" program. The State program, with its maximum single project cost of \$25,000 is not realistic in terms of today's paving costs, now at about \$110.00 per lineal foot of 40 foot street width.

In addition to the problems of resources, the city has no standards for street construction, curbing or sidewalks. Subgrade conditions vary widely throughout the city, ranging from well-drained sandy loam to heavy clays and swamp-like soils. As a result, the durability of streets varies. In some areas of the city an oil mat surface holds up well, while in others a two to four inch AC surface may deteriorate in four or five years. Many of the streets are uncurbed, causing raveling and breakdown at the surface edges which progress into alligating and general breakup of the surface. Table T-1 presents a summary of general road conditions in the City. Table T-2 provides a detailed inventory of the city's streets.

PEDESTRIAN PROVISIONS.

Generally there are sidewalks in the older high-density residential sections of the city and in the commercial district. There has been no significant history of pedestrian death or injury but there are significant hazardous areas

that should have sidewalks. Highway 47 from Howard Drive to U.S. 30 has hazardous curves with sight-obscuring banks. Frequent pedestrian traffic, mainly by school children, aggravates the hazard. Bel Air Drive, from the new road to the high school to the residential area on top of the hill is frequented by school children from the residences on Bel Air, and old U.S. 30 from Nehalem Street to the North city limits receives relatively heavy pedestrian traffic. Figure T-2 Identifies those streets with sidewalks and the pedestrian hazard areas.

GOAL

Provide the City of Clatskanie with a coordinated and planned transportation system with major emphasis on the automobile. The system should define, interconnect and reinforce the identity of the community and consider the needs of the transportation-disadvantaged, the pedestrian and the bicyclist.

POLICIES

1. To plan an integrated system of local, collector and arterial streets and highways for Clatskanie which is properly related to land use and other elements of the Comprehensive Development Plan, particularly residential neighborhood patterns.
2. To contribute to the unity and small town quality of the city by making travel between all parts convenient and safe.
3. To actively seek the acquisition of revenues from the following sources to finance transportation improvements:
 1. State gasoline tax allocation.
 2. State Highway Division special city allocations.
 3. Federal Revenue Sharing Funds.
 4. Community Development Block Grant Funds.
 5. Economic Development Grant Funds.
 6. Federal aid secondary funds available to the counties to expand city and county FAS routes.
 7. The General Fund.
 8. Special serial levies or bond issues.

ACTIONS:

1. Conduct average daily traffic count (ADT) studies using loan equipment (counties, other cities) if possible to determine traffic loads and flow patterns and establish priorities for future improvement projects.

Responsibility: City Staff

Schedule: Begin in September, 1979.

2. Notify the county, state and regional agencies that the city will cooperate on plans and programs to improve street, highway and other transportation facilities in the City of Clatskanie and in its urban growth boundary. Require coordination with the city by these agencies on future plans and programs so that the city may remain informed.

Responsibility: City Staff

Schedule: December, 1979.

3. Prepare application for participation in the State Highway Department special city allocations program. Submit applications annually or as eligible.

Responsibility: Preparation, City Staff, Approval and submittal, City Council.

Schedule: April, 1979.

4. Determine, on a semi-annual basis, the availability of funds from the sources listed in Policy 3 and make appropriate recommendations to the Planning Commission and City Council.

Responsibility: City Staff.

Schedule: July, 1979.

5. Establish standards for streets and sidewalks for the city recognizing the need for different standards for varying useage and subgrade conditions.

Responsibility: City Staff

Schedule: December, 1979.

6. Review all new subdivisions proposed for development within the urban growth boundary for type of streets required and appropriate traffic flow patterns and connection to existing or planned streets.

Responsibility: Planning Commission.

Schedule: As Required.

7. Issue building permits for proposed buildings only after a dedication of the required right-of-way width and a waiver of remonstrance for improvements on existing streets.

Responsibility: Building Inspector/City Staff

Schedule: As building permits are processed.

8. Issue building permits only after establishing that the building or improvement will not impede street projections or will not be in the right-of-way of proposed streets.

Responsibility: Building Inspector/City Staff

Schedule: As building permits are processed.

9. Review the city's right-of-way requirements for realism and make appropriate recommendations for amendment.

Responsibility: City Staff

Schedule: December 1979.

10. Investigate the feasibility of joint city/county participation in bike-way paths.

Responsibility: City Staff

Schedule: July, 1980.

11. Develop a program for sidewalk construction, maintenance and repair to allow the safe flow of pedestrian traffic. Develop standards for sidewalks and curbs.

Responsibility: City Staff

Schedule: December, 1979.