

COMPREHENSIVE PLAN
FOR THE
ISLANDS DISTRICT
OF
SKAGIT COUNTY
WASHINGTON

AUGUST 1975

SKAGIT COUNTY PLANNING DEPARTMENT
120 W. Kincaid Street
MOUNT VERNON, WASHINGTON 98273

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ISLANDS DISTRICT - SKAGIT COUNTY WASHINGTON
COMPREHENSIVE PLAN

Prepared by the Skagit County Planning Department

Robert C. Schafeld Director
CERTIFICATE OF ADOPTION

This is to certify that the Official Comprehensive Plan for the
Islands Area of Skagit County is hereby adopted by:

The Skagit County Planning
Commission on January 12, 1976

John A. Garner
Chairman

Jim Sargent
Vice-Chairman

William W. Vaz
Secretary

The Board of County Commissioners
on January 20, 1976

Howard Miller
Chairman

Bill Sullivan
Commissioners

Jack Wyllie
Commissioner

This text together with the Comprehensive Plan Map, comprises the
Comprehensive Plan for the Islands District of Skagit County.

AUGUST 1975

COMPREHENSIVE PLAN
FOR THE
ISLANDS DISTRICT
OF
SKAGIT COUNTY, WASHINGTON

SKAGIT COUNTY PLANNING DEPARTMENT

Robert C. Schofield - Director

David C. Hough - Zoning Administrator

Steve Harvey - Associate Planner

Otto Walberg - Associate Planner
(planner in charge)

Bill Shuler - Human Resource Planner

Delbert Heutink - Technical Advisor

Chris Allen - Assistant Planner

"The preparation of this report was financially aided through a grant from the Washington State Department of Ecology with funds obtained from the United States Department of Commerce, and appropriated for section 305 of the Coastal Zone Management Act of 1972."

Contract No. 675 - 029D

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Terrestrial Wildlife of Western Skagit County

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APPENDIX A

Terrestrial Wildlife of Western Skagit County

APPENDIX B

Aquatic Biota of the Skagit Basin

0.2 MAP INDEX

Island Area Planning District
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0.3 PREFACE

Chapter 172, 1st Extraordinary Session, Laws of 1973 amended RCW 36.70.320 (known as the Planning Enabling Act) to allow Comprehensive Planning on a District or less than entire county basis.

The Skagit County Planning Department has adopted the District approach to Comprehensive Planning to facilitate the preparation and adoption of current, viable plans specifically tailored to the needs and objectives of each of the several separate and distinct geographical areas of the county.

The six Planning Districts selected for Skagit County are generally identified as follows:

- North Central District - including the area surrounding Sedro Woolley

- Northwest District - including the area surrounding Burlington

- Island District - including the area surrounding Anacortes

- Southwest District - including the area surrounding LaConner

- South Central District - including the area surrounding Mount Vernon

- Upriver District - including the area surrounding Concrete

The Islands Planning District is the third in a series of six areas that are under revision for a new Comprehensive Plan for Skagit County. The Comprehensive Plan for the County, combining the six different districts, is scheduled for completion in 1976.

It should also be noted that Chapter 172, 1st Extraordinary Session, Laws of 1973, which amended the Planning Enabling Act as mentioned above, does not invalidate previous Comprehensive Plans or those portions of previous Comprehensive Plans covering areas other than the Planning District. Since there are a number of areas which can best be considered on the basis of a countywide plan, the District Plan should be considered to be a supplement to the Countywide Comprehensive Plan adopted in 1968. In areas wherein there is an apparent conflict, the District Plan takes precedence. When all six districts plans are completed, the new Comprehensive Plan will be considered complete and the 1968 Plan will then be superseded in its entirety.

0.4 FOREWARD

The Islands District Plan contained in this volume and illustrated in principle on the accompanying map, is the third in a series of six District Comprehensive Plans stemming directly from the Comprehensive Land Use Planning Alternatives Program completed in 1973.

This series of six District Plans, when completed, will form an entirely new Comprehensive Plan for Skagit County.

SUMMARY - ISLANDS AREA COMPREHENSIVE PLAN

The Island Comprehensive Plan described and evaluated in this document is an important milestone in Skagit County's planning program. This plan represents a culmination of several years effort to update and revise the Comprehensive Plan for Skagit County. This plan for the Island area is the third in a series of revisions of Skagit County's Comprehensive Plan.

However, this plan for the Islands area does not represent a completion of the planning process for this area. This plan will and should be in turn be amended and revised as community standards change. No comprehensive plan should be considered as the final answer to all land use problems and decisions, it can be a valuable and usable guideline through which decisions related to land use can be made. As with any guideline, this plan should be used regularly by decision makers in order to reap the best benefits a comprehensive plan can provide.

The recommendations contained in this plan can best be described by the following generalization:

1. The existing and future agricultural use of the floodplain should be provided with at least 20 year flood frequency protection.
2. The variety of lifestyle's available in the Island area, both rural and urban, should be maintained or expanded in those areas where the physical environment and existing developments are compatible.
3. Development of the unprotected floodplain area should be stopped.
4. New development should be directed to floodsafe uplands of the Island area.
5. Commercial goods and services should be provided by the traditional urban centers. Highway services only should be provided at key arterial intersections.

- C. Industrial uses should be located near urban centers or in areas where the physical environment and existing or proposed land uses are conducive and compatible with the proposed industrial development.

This Comprehensive Plan will produce a pattern of development for the Island area of Skagit County that will: 1) preserve the resource productive areas; 2) provide a variety of living environments, and 3) maintain control over the costs associated with community growth and improvement.

0.6 SUMMARY SHEET - ISLANDS E.I.S.

Nature of this report: Draft Environmental Impact Statement

Sponsor: Skagit County Planning Department
Skagit County Courthouse Annex II
120 W. Kincaid Street
Mount Vernon, Wash. 98273

Type of Proposed Action: Legislation

Official Title of Proposed Action and Summary of the Proposed Action:
Islands District - Skagit County Comprehensive Plan Amendment

The proposed legislative action will amend and revise a portion of the current and official Skagit County Comprehensive Plan. The portion for which the Comprehensive Plan is being amended is approximated as the area lying west of the center of the Swinomish Channel, and those outlying islands in the western portion of Skagit County bounded to the north, south, and west by the county line. This area contains approximately 52 square land miles, all within Skagit County, Washington.

Summary of Environmental Impacts:

A Comprehensive Plan, by its nature, is a permissive document in terms of potentially allowing a wide variety of land uses to occur. It is also restrictive in that adherence to the provisions, policies, and goals of a Comprehensive Plan will preclude a variety of land uses from occurring. Thus, there is a balance of the liabilities and benefits of a Comprehensive Plan.

No comprehensive plan will have a direct environmental impact. A comprehensive plan does not develop projects, or prohibit, or promote, degradation of the environment directly. The various provisions and policies of a comprehensive plan will, upon implementation, affect the environment either beneficially or detrimentally. However, each specific development, or each consumption of land, at the project level, is the point in time or source at which environmental assessments and impact statements should be developed, issued, reviewed, and commented upon.

Comprehensive plans are not rigid, fixed documents, they are merely references of the various standards a neighborhood, community, or region has developed to guide the development of the areas, so as to provide an identifiable lifestyle and life quality, against which various forms of

land development or use may be analyzed and evaluated. A comprehensive plan can and should change as community standards and goals change.

A list of environmental impacts of a comprehensive plan would include all of the aspects of that plan both in terms of all of the varied types of activities it would condone for finite areas and all of the larger group of activities that would be precluded in finite areas.

The comprehensive plan will:

1. Allow substantial development of large land area for development of the following use activities:
 - a. residential
 - b. commercial
 - c. industrial
 - d. public
 - e. agricultural
 - f. forestry
2. Prevent many types of development and land use activities.
3. Provide minimum use standards for development and land use activities.
4. Allow habitat change for numerous indigenous species of flora and fauna.

Summary of Alternatives

A. No Comprehensive Plan

Comprehensive plans are required by the Revised Code of Washington, thus this alternative would require a change in state law which is beyond the range of control of the Board of County Commissioners.

B. More Proscriptive Comprehensive Plan

A more proscriptive comprehensive plan could at an extreme preclude all forms of development and land use activities and could propose that as existing development and land use activities are amortized that the area they occupy be returned, or allowed to return, to its natural status.

C. More Liberal Comprehensive Plan

A more liberal comprehensive plan could allow any form of development to occur in any area, adjacent to any other developed or undeveloped area, in which any form of degradation or alteration of existing systems would be allowed.

- D. For discussion of the alternatives for the Island District refer to Chapter 4 in the plan.
- 3. Recommended Plan
 - A. For a discussion of the recommended plan refer to Chapter 6 of the Island Area Comprehensive Plan.
 - B. For a graphic representation of the Island Area Comprehensive Plan, see Map .

Review Period: 35 days July 28 - August 31, 1975
(Comment Period deadline is August 31, 1975)

Recipients of the Document: 1) Skagit County Planning Council
2) Skagit Regional Planning Council
3) Skagit County Board of Commissioners

0.7 LIST OF DOCUMENTS

1. Comprehensive Plan - Skagit County, January 1968.
2. Comprehensive Land Use Planning Alternatives for the Skagit River Floodplain and Related Uplands, Skagit Regional Planning Council, April, 1973.
3. Skagit County Water, Sewerage, and Drainage Facilities Plan, Skagit Regional Planning Council, June 1970.
4. Skagit County - A Strategy for Environmental Protection and Economic Development, The Urban Land Institute, November, 1972.
5. Skagit County Agriculture: An Economic Mainstay, Department of Agriculture, Washington State University, 1972.
6. A Tourist and Recreation Strategy for Skagit County, Northwest American, 1972.
7. The North Cascades Highway, Its Impact on Local Community Economics, Community Development Services, 1972.
8. Puget Sound and Adjacent Waters Study, Pacific Northwest River Basins Commission, 1970.
9. Soil Survey - Skagit County Washington, U.S. Dept. of Agriculture, Soil Conservation Service, January 1960.
10. Solid Waste Management Plan, Skagit County Planning Department, 1971
11. North Puget Sound Region for 1971, A New Plan for Law and Justice, Northwest Regional Council.
12. Overall Economic Development Plan (Skagit County Washington), Skagit County Development Association, 1972.
13. Skagit County Emergency Services Operations Plan, Skagit County Department of Emergency Services, October 1972.
14. Skagit County Comprehensive Park and Recreation Plan, Jongejan, Gerrard, Associates, 1973.
15. Skagit County Industrial Site Survey, Latourell Associates, 1972.
16. Skagit County Water Quality Management Program, CH2M/HILL, 1974.
17. Swinomish Comprehensive Plan, Stevens, Thompson, Runyan, 1972.

0.8 PREAMBLE FOR THE SKAGIT COUNTY COMPREHENSIVE PLAN

On September 10, 1968, the Skagit County Board of County Commissioners adopted a revision of its Comprehensive Plan which stated as follows:

"This text together with the Comprehensive Plan-Map, the 'Analysis of Population in Skagit County', the 'Skagit County Economic Base', October, 1964, 'Parks and Recreation', A Plan for Skagit County, comprises the Comprehensive Plan for Skagit County."

Chapter II, entitled "Purpose and Intent" of the Comprehensive Plan on Page 9 explained the intent of Skagit County as follows:

This Plan should be periodically reviewed by the Planning Commission and said Board. In addition to adding more detailed plans, it may be necessary from time to time to change basic features of the Plan, as economic, social or technological changes indicate a better basic pattern of land use or a need for re-evaluation of planning principles and objectives.

The Washington State Planning Enabling Act, RCW 36.70.340 provides that:

When the Comprehensive Plan containing the mandatory subjects as set forth in RCW 36.70.330 shall have been approved by motion by the Board and certified, it may thereafter be progressively amplified and augmented in scope by expanding and increasing the general provisions and proposals for all or any one of the required elements set forth in RCW 36.70.330 and by adding provisions and proposals for the optional elements as set forth in RCW 36.70.350. The Comprehensive Plan may also be amplified and augmented in scope by progressively including more completely planned areas consisting of natural homogeneous communities, distinctive geographic areas, or other types of districts having unified interests within the total area of the county

Skagit County recognizes that its Comprehensive Plan must be studied continually and revised whenever new technology, techniques and other data indicate that the best interest of the County, or any portion thereof, will be served thereby.

Skagit County recognizes, as it moves forward from its long range generalized plan, adopted in 1965, and amended in 1968, to more precise plans for development, that because of the vast amounts of land within the boundaries of Skagit County, 1,735 square miles, and because of the great diversity of the kinds of land and needs of its citizenry, and in order to make the Comprehensive Plan more meaningful as a guide and a tool for the regulation of land, it is in the best interests of the people of Skagit County to supplement the plan by dividing the county into natural homogeneous communities and geographic areas in order that more precise development policies can be developed and adopted for the more natural homogeneous communities and geographic areas.

Therefore, Skagit County, for planning purposes, is divided into the following districts:

- 1) North Central
- 2) Upriver
- 3) South Central
- 4) Southwest
- 5) Northwest
- 6) Island

and, in conjunction with the revision and updating of the general provisions that apply to the county as a whole, more precise plans and guidelines that will apply more particularly to the specific areas will be developed for these areas or districts.

The following describes the approximate boundaries of the six planning areas of Skagit County:

- 1) North Central:
North - Skagit County Line
South - Skagit River
West - A line running north from the Skagit River along the District Line Road to the Cook Road, then west along the Cook Road to Highway I-5, then north along I-5 to the County Line.

East - A line running north from the Skagit River beginning at a point lying between Sections 21 and 22, Range 6, Township 35, and continuing north to the County Line (generally between Lyman and Hamilton)

2) Upriver:

North - Skagit County Line

South - Skagit County Line

West - A line running between county lines, parallel to a north/south line between Section 21 and 22, Range 6, Township 35 (generally between Lyman & Hamilton)

East - Skagit County Line

3) South Central:

North - Skagit River

South - Skagit County Line

West - South along the Skagit River from its intersection with I-5

East - A line running south from the Skagit River beginning at a point lying between Section 21 and 22, Range 6, Township 35 (Generally between Lyman and Hamilton)

4) Southwest:

North - A line running west beginning at a point between Section 12 and 13, Range 3, Township 34, generally south of Avon

South - Skagit County Line

West - The center of the Swinomish Channel

East - South along the Skagit River from its intersection with I-5

5) Northwest:

North - Skagit County Line

South - Skagit River, to a line running North along the Pulver Road to a line running west beginning at a point between Sections 12 and 13, Range 3, Township 34 (generally south of Avon)

West - The center of the Swinomish Channel

East - A line running north from the Skagit River along the District Line Road to the Cook Road, then west along the Cook Road to Highway I-5, then north along I-5 to the County Line.

6) Islands:

All of the islands of Skagit County lying west of the center of the Swinomish Channel.

NOTE: The Island Planning District does not include the city of Anacortes.

(See "Scope", page 8, 1968 Skagit County Plan)

The text portion of the Comprehensive Plan, including the illustrative materials tables and charts, is designated as the "plan policies." It sets forth in narrative form the public objectives, policies and standards to be applied when guiding the future growth of Skagit County.

In addition to the plan policies there is also a map portion of the Comprehensive Plan, which is designed and intended to illustrate the application of the plan policies in a general way.

The Comprehensive Plan is an expression of public policy outlining the general guidelines for the future development of the county and is not designed or intended to establish precise land use boundaries in either the policies or the map portion of the plan.

1. PHYSICAL ENVIRONMENT

The physical environment is a complex of many interrelated elements. Often times action upon one seemingly isolated element has subsequent impacts upon other elements. It is important therefore, to know these elements and their relationships with other elements, including man.

The physical characteristics section is composed of the following sections:

- 1.1) Geology
- 1.2) Slope
- 1.3) Soils
- 1.4) Septic Suitability
- 1.5) Floodplain
- 1.6) Shoreline Characteristics and Processes

The diverse physical environment can be mapped and discussed for specific areas, such as the Islands Planning area.

The value of an analysis of the Physical Environment is that those responsible for planning decisions can more clearly understand the relationship between the consumption of land areas and the effects of that consumption upon the other elements of the environment.

1.1 GEOLOGY

1.1.1 Geologic Units

The geology of the area is composed of four generalized geologic units:

Quaternary alluvium and glacial deposits

Jurassic - Cretaceous sedimentary and volcanic rocks

Basement complex, pre-Middle Devonian

Serpentine and ultrabasic rocks

1.1.2 Geology Map

The geology map locates these geologic units in the planning area on a generalized basis. Refer to Geology Map.

1.1.3 Sub-area Analysis

The scouring force of glaciers, especially during the Fraser Glaciation of the Pleistocene Ice Age, in combination with, other forces including the uplifting of the Cascades and the effects of the Skagit River system, produced the lowlands and influenced many of the land forms in the study area.

Guemes Island, Sinclair Island, March's Point area and the Swinomish area are primarily characterized by Quaternary alluvium and glacial deposits with small amounts of Jurassic - Cretaceous sedimentary and volcanic rocks scattered at the southern extremities of the islands. The Swinomish area also shows some areas of ultrabasic rocks near Hunot Point and Hope Island.

Cypress Island is primarily Serpentine and ultrabasic rocks on the southern two-thirds of the island, while Jurassic - Cretaceous units are found on the northern one-third.

The Fidalgo area is a conglomeration of the four geologic units. Jurassic-Cretaceous units predominate the eastern side, from Cap Sante south to Similk Bay and also at Deception Pass. Serpentine and ultrabasic rock protrude at Washington Park in Anacortes and also on Burrows and Allan Islands. Basement complex, pre-Middle Devonian units are situated in the middle portions of the Fidalgo area and also extend along almost the entire western side of the Fidalgo area. The Quaternary alluvium and glacial deposits are found on the northwest and southeast portions of the Fidalgo area.

Additional data is contained in the tables which deal with the following subject area:

1. Movements of the land surface
2. Allowable bearing capacities of earth materials
3. Explanation of rocks of the study area
4. Divisions of geologic time
5. Pleistocene sequence in the Puget lowland

1.2 SLOPE

1.2.1 Element of Slope

The two main elements of slope that must be considered when examining the possibility of development are steepness (slope %) and aspect (the orientation of a sloping ground surface with respect to geographic north).

1.2.1.1 Slope Steepness

Slope steepness affects the rate at which precipitation is drained from the surface. On steep slopes surface runoff is rapid and water does not long remain available to plants. On gentle slopes, much of the precipitation can penetrate the soil and become available for prolonged plant use. The thickness of the soil may be lessened by the process of erosion. Thus, the characteristics of the soil itself may often be related to slope steepness.

The occurrence of certain geologic processes such as overland flow, earth flow, mud flow, landslides, rockfall, and soil creep are also directly related to the steepness of the slope and thus effect the amount to which a certain piece of land can be developed. The eroding capacity of these processes increases directly with the angle of the slope.

1.2.1.2 Slope Aspect

The second element of slope which may have an effect on its use is slope aspect. As stated earlier, this concept is involved with the direction in which the slope is facing. It has direct influence upon plants by increasing or decreasing their exposure to sunlight and prevailing winds. Upon divides, peaks, and ridge crests the soil tends to be drier because of rapid drainage and because the surfaces are more exposed to sunlight and to drying winds. Generally speaking, slopes facing the sun have a warmer, drier environment than slopes facing away from the sun. Another example might be the location of a ski area. Some slopes have more snow, due in part to their slope aspect.

1.2.2 Slope Map

For discussion purposes, slope has been classified and mapped into five categories. These are:

0-3%	15-30%
3-8%	30+ %
8-15%	

These categories are derived from Soil Conservation Service maps, and the United States Coast and Geodetic Survey map of the planning area.

The slope map locates these categories of slope on a generalized basis in the Islands area. Refer to Slope Map.

1.2.3 Sub-area Analysis

The outlying islands in this area are generally characterized primarily by somewhat steep slopes, 15%+ except for Guemes and Sinclair Islands who exhibit gradual slopes of 0-8% with some 15%+ slopes on the southeaster lip of Guemes.

The three sub-areas of Fidalgo Island proper also exhibit different slope characteristics. The Swinomish Reservation area is primarily gradually sloped, 0-8% grade, for the eastern portion while the western part shows a considerable amount of area that are 8-15%, and greater in some instances. The March's Point area is primarily gently sloping with the majority of the slopes at 0-3% with some areas of 3-8% in the center of the point. The western half of Fidalgo is characterized by slopes over 15%, with some areas of 3-15% occurring primarily around the several lakes that dot the island. Areas of the 3-15% slope are near the western side of Heart Lake, east of the Rosario Road, and east of SR 20 near Gibraltar.

1.2.4 Planning Implication

The numerous mountains, hills, and valleys of Skagit County are a product of many forces over a certain expanse of time. However, the general shapes and slopes that have been created were probably most influenced by the last glaciation, the constant flow of the Skagit River System and the movements of the earth's crust. By analyzing these slopes, one can understand both their potentials and their weaknesses and the connection in the proper functioning of our ecosystem.

1.2.5 Supplemental Information

For more detailed information of the aspect of the physical composition of the Islands planning are, Skagit Land Use Alternatives has a more extensive discussion of the planning implications of slope and of view characteristics associated with topographic features of this area.

View is also a factor of land use planning that is dealt with in the above mentioned section. The other areas of emphasis discussed are:

1. Slope steepness
2. Slope steepness and accelerated land erosion
3. Slope aspect
4. View characteristics
5. Slope analysis of the study area

1.3 SOILS

1.3.1 Soil Types

Of the fifty-six (56) soils found in the Skagit County area, twenty-five (25) are represented in the Islands Portion of Skagit County. The soils found in this area are:

Aa-Alderwood	M-Made Land
B1-Bellingham	Mu-Mukilteo
Bo-Bow	Nr-Norma
Cg-Cagey	Rf-Rifle
Cw-Coastal Beach	Rb-Rough Broken Land
Cl2-Coveland	Rk-Rough Rocky Land
E-Everett	Se-Semiahmoo
Fa-Fidalgo	Sq-Squalicum
Gi-Giles	Sm-Sumas
Ie-Indianola	Ta-Tanwax
Kp-Kline	Td-Tidal Marsh
Lu-Lummi	Ts-Tisch
Ly-Lynden	

1.3.2 Soils Map

The soils map locates the above soil types in the planning area, on a generalized basis. Detailed information on the above soils types is contained in Tables 1, Soil Characteristics; Table 2, Soils Suitability, and Table 3, Agricultural, Pasture, Forestry and Soil Suitability, pages 29, 38, and 47, respectively, in Comprehensive Land Use Planning Alternatives for the Skagit River Floodplain and Related Uplands. Refer to Soils Map.

1.3.3 Sub-area Analysis

Vendovi, Jack, Cypress, Burrows, Allan, Hope, Goat, Ika, Saddlebag, Hat, Huckelberry, Dot and other smaller islands are primarily characterized as Rough Rocky land with some scatterings of Fidalgo soils. The characteristics of these soils are; variable drainage, medium to rapid surface runoff, no high water table, steep, stony, droughty and best suited for forestry. These types of soils have severe limitations for filter fields in regards to septic suitability conditions.

Sinclair Island is primarily characterized by Bow and Indianola soils with Rough Rocky and Cagey soils in limited quantities. The Bow soils, predominantly on the northern portion of the island, have very slow runoff, variable drainage and also severe limitations for septic filter fields. The Indianola soils have excessive drainage characteristics no high water table, and are susceptible to droughty conditions.

Guemes Island is primarily Alderwood soils in the center regions of the island with a belt-like area around the periphery composed of Bow, Everett, and Rough Broken soil. The exception to this area is the southeast corner which is mostly Rough Rocky soil. Surrounding almost the entire island, with the exception of the southeast corner, is a coastal beach zone composed of gravelly coastal beach material. The predominant Alderwood soil displays characteristics of usually well drained soils where the soil and subsoil are permeable, runoff is slow, drainage is medium down to the hardpan layer, ground water is more susceptible to lateral movement, and the ground seems best suited to forestry and some pasture use. This type of soil has severe limitations also for septic filter fields.

Fidalgo Island can be examined in three different areas due to its soil configurations. The Swinomish Indian Reservation area is characterized by three main soil types. The eastern half is primarily Bow soils while the western half is mostly Alderwood. The northeast corner is mostly Lummi soil which has poor drainage, continual high water table and severe septic limitations. Along the edge of the Swinomish Channel there are several areas of man-made soils which are made up of a variety of materials.

The March's Point area is typified mainly by Bow soils interspersed with areas of Coveland, Giles and Bellingham soils in smaller numbers. All those soils have variable drainage characteristics depending on seasonal ground water tables and is good pasture land when adequately drained.

The western half of Fidalgo Island is characterized by two main soil areas. The area lying north of Lake Campbell to the city of Anacortes city limits is mostly classified as Rough Rocky land except for a strip along the Haykost Road which has a combination of Alderwood and Everett soils. The area lying south of Lake Campbell is also Rough Rocky land except for areas along the Rosario Road and the Gibraltar Road which has some areas of Alderwood, Bow and Samish soils.

The remaining soils, which are found in smaller quantities than the above, are not susceptible to generalizations about capabilities or characteristics because great variation can occur within relatively small areas. The best source of information on soil capabilities of Skagit County is a soil survey issued in 1960 by the United States Department of Agriculture, Soil Conservation Service.

1.3.4 Planning Implications

Soils of almost the entire area of the islands are classified as Capability Class, Class IV-Class VII. Class VI soils have very severe limitations that make them marginal for common field crops and require extra care. Most can be used for pasture, recreation, wildlife cover or forestry if the climate is favorable. Class VII soils also have severe limitations, such as steep slopes, rocky ground, and low water tables which are not suited to tilled crops but can be utilized for forest production in most cases.

The entire area has potential erosion or past erosion damage and is a source of sediment to the surrounding region.

The capabilities and characteristics of soils have an important role in determining what land use and intensity of land use that should occur within an area.

1.3.5 Supplemental Information

The Comprehensive Land Use Planning Alternatives for the Skagit River Floodplain and Related Uplands report deals with soils through the following discussions:

1. Soils of study area - general overview
2. Soil forming processes
3. Soil characteristics
4. Properties of major soils groups
5. Soils suitability (planning implications)
6. Soil suitability table
7. Agriculture, pasture, forestry and soil suitability

1.4 SEPTIC SUITABILITY

1.4.1 Elements of Septic Suitability

Septic suitability is a term used to define the conditions pertaining to a certain area with respect to individual sewage disposal systems or subsurface drainfields. The suitability of an area is usually thought of in terms of degree (i.e., good, moderate, poor, very poor, etc.). The information presented in this section is an attempt to give a generalized picture of the septic suitability of the study area. Every site proposed for development should be tested thoroughly.

Strict regulations pertaining to the use of septic tanks are necessary because of the potential health hazard involved if a system fails. For this reason, septic tanks are considered to be an interim solution to the problem of sewage disposal.

Land areas are classified in one of four categories: a. possessing only slight limitations with regard to septic suitability; b. possessing moderate limitations; c. being of a variable nature (primarily with regard to soil depth and slope), and d. possessing severe limitations.

1.4.2 Septic Suitability Map

The septic suitability map is a graphic display of the acceptability of septic tanks of various areas in this planning area. It must be emphasized that this is a generalized map. It does, however, give an initial insight into the septic suitability of a general area. The only way to obtain accurate information as to the suitability of a specific area is to perform a series of tests at that site during the time of greatest precipitation. Refer to Septic Suitability Map.

1.4.3 Sub-area Analysis

Due to the extreme variability of septic suitability this plan will not generalize by sub-area. The need for percolation test prior to development is emphasized for all non-sewered developments.

1.4.4 Planning Implications

The suitability of soils for the use of septic tanks as a means of sewage disposal is an important locational factor in the planning process. Sewer systems cannot always be provided to a given area at a certain time, usually

because of economic reasons. Distance is also an important economic factor in relation to sewer systems. There might be too great a distance between the outer extremities of existing facilities and a new development which delay the extension of these services.

1.4.5 Supplemental Information

The report, Comprehensive Land Use Planning Alternatives for the Skagit River Floodplain and Related Uplands, deals in greater depth with the whole question of septic suitability and provides a generalized table which analyzes the septic suitability of the various soils types found in the Islands planning area:

1. Planning implications
2. Suitability criteria
3. Septic tank design
4. Suitability map analysis
5. General septic suitability of Skagit County soils

1.5 FLOODPLAIN

1.5.1 Floodplain and Its Management

Effective floodplain management is an alternative to flood control projects. Floodplain management is designed to provide an approach which will permit the use and development of floodplain lands for the optimum benefit of the region's population and its economic activities without having to provide structural measures of protection to prevent flood damages. The primary concern of floodplain management is to minimize the number of structures on the floodplain and/or to require that new structures be built to offer minimum resistance to floodwater in certain crucial areas. The floodplain management plan will reduce present and future flood damages by controlling and directing the amount of development on the floodplain by the use of floodplain zoning and regulations to restrict developments and thru the flood-proofing of buildings on the floodplain. Levees, in combination with existing upstream storage are capable of providing on 3-15 year protection to the floodplain areas.

Floodplain management does not create a substantial land use planning problem in the Islands portion of Skagit County, as it does in other parts of the county, with the ever increasing amount of encroachment by residential and commercial developments.

1.5.2 Floodplain Map

The floodplain map displays the 100 year floodplain in the Islands portion of Skagit County. Refer to Floodplain Map.

1.5.3 Sub-area Analysis

In the Islands district, the area within the 100 year floodplain is primarily agriculturally oriented and is located on the northeastern part of the Swinomish Indian Reservation.

1.5.4 Planning Implications

The revised Comprehensive Plan for the Islands Planning area reflects good floodplain management policy in that new development is proposed mainly for the uplands (and hence flood safe) parts of this area and agricultural use of the floodplain area is encouraged.

There are several ways by which a floodplain management program can be implemented. These are: 1. land use controls; 2. tax adjustment; 3. public

policy directing the construction and location of public facilities and service out of flood prone area; 4. flood proofing existing structures; and 5. structural flood control measures. All of these management approaches are or will be exercised to prevent loss of life and reduce property damage.

1.5.5 Supplemental Information

The Flood Characteristics section of the Comprehensive Land Use Planning Alternatives for the Skagit River Floodplain and Related Uplands report contains the following chapters:

1. General Flood Information
2. Historical Flooding
3. Economic Considerations of Flooding
4. Existing Flood Control Projects
5. Proposed Flood Control Projects
6. Federal Flood Insurance Program
7. The Federal and State Role in Floodplain Management
8. Floodplain Management

A thorough review of the above chapters will provide a basic understanding of the relationship between floodplain management and land use planning and can ably supplement this Comprehensive Plan for the Islands area.

1.6 SHORELINE CHARACTERISTICS AND PROCESSES

1.6.1 General

The shorelines of Skagit County islands exhibit almost every conceivable form of marine shore environment found in Puget Sound. The major islands, Cypress, Sinclair, Guemes, and Fidalgo, though in close proximity to one another, are unique in their physiographic make-up and shoreline characteristics. Their shoreline geomorphology ranges from dune and marsh lowlands to cobbly and rocky beaches backed by gently rolling uplands, to terraced or benched uplands with or without definite beach zones, to more steeply sloping uplands in the form of cliffs and bluffs whose faces originate far below the water's surface. Each type owes its existence, its past and its future, to a multiplicity of interrelated processes and materials that have collectively created the uniqueness and diversity of these shore resources. The Skagit County Shoreline Inventory provides tabulated print-out maps exhibiting this great variety of beach and upland combinations and is available for review at the Planning Department.

The following is a brief discussion of two major beach types or shoreforms of concern to the developmental policies of this comprehensive plan: erosion beaches and accretion beaches. Although these types do not make up a majority of the island shorelines, they do present certain critical problems and opportunities that need to be addressed in this document. Recent investigations and reports are becoming available in this relatively new field of analysis and management that will foster and develop a greater understanding of our shoreline program. The following is by no means exhaustive and is subject to modification and addition as the field expands.

1.6.2 Erosion Shoreforms

These shoreforms are subject to the erosive power of waves, either on a daily basis at all tide levels or on an infrequent basis such as during high high tides or storms and periods of extraordinary wind influenced waves. Their physiographic profile is generally in the form of a bluff measuring several feet to several hundred feet high and may be composed of bedrock, glacial till or "boulder clay", glacial outwash material such as gravel, sand, and sediments, and clay-silt material deposited as former river deltas and lake bottoms. Each type of bluff material is subject to its own rate and

extent of erosion and possesses a wide degree of characteristics relative to suitability for recreation, residential development, and other uses.

The beach or foreshore is usually the wet intertidal zone, one which is under water during high tide periods. The width, height, and extent of the beach varies greatly, if it exists at all, being dependent upon the wave energy levels, exposure, bluff and beach material, the stability of the bluffs or cliffs, and the existence of longshore drift to carry and deposit beach material. Also common in this area are marginal dry beaches along the high tide line possessing a narrow, shallow berm of sand or gravel along with driftwood. Such beaches are usually wetted by breaker activity and higher high tides. The beach material is relatively unstable and is constantly involved in beach feeding and longshore drift activity.

Examples of these erosional shoreforms can be found along the west side of Fidalgo Island in Burrow's Bay, along Similk and Dewey Beaches, the west and east shores of Guemes Island, and along some shores of Sinclair Island. Also, numerous crescent shaped "pocket" beaches are found scattered around the island shorelines, owing their origin to bedrock erosion and/or bank and bluff erosion and deposition.

The suitability and desirability of erosional shoreforms for most types of development is generally poor. Unless public sewers are available, bedrock sea cliffs, though able to support structures if not fractured or extensively weathered, offer no capabilities for present sewage disposal standards. Bluffs and banks, from low, gently sloping types to high, steep varieties, possess highly variable qualities for developmental uses. Engineering properties such as shear strength shrink-swell, permeability, and bearing capacity will influence and place constraints on shoreline development.

Aside from the erosional effects of waves and surface water runoff, bluffs are also subject to material mass movements or sliding. The delicate, gravitational balance of bluff shorelines of this county can be disturbed by man, nature, or a combination thereof. These disturbances usually occur due to the following:

1. Undercutting of the toe from wave erosion alone, man-made excavations, or wave erosion accelerated by improperly located, placed or built bulkheads and shore protection devices.

2. Overloading the tops of bluffs with structures and landfills.
3. Saturating the bluff by septic tank drain field waste water, lawn watering, leaking water and sewer lines, or roadside drainage ditch runoff. Saturation can reduce the cohesion of bluff materials and increase the load.
4. Vibration from earthquakes, blasting, or heavy equipment operation.

Failure to recognize the relatively unstable features and geology of banks and bluffs and the damage potential of normal and storm wave systems has lead to loss of private as well as public property investments and structures. Poorly located, designed, constructed, and maintained structures placed for protecting shoreline property and buildings often intitiate and accelerate the deterioration of the very shoreline resource the owner wishes to save and utilize. Such activity also has the potential to damage adjacent and nearby beaches and properties, create use conflicts with other shoreline and water users, and endanger public life and safety.

1.6.3 Accretion Shoreforms

Accretion shoreforms or beaches are characterized by a relatively permanent backshore composed of a berm of sand, gravel, and driftwood that is wetted only under extreme wave and tide conditions. They owe their formation and existence to the material from erosional bluffs and banks, carried by longshore or littoral drift, and deposited where wave and current influence diminish. These deposits take the form of spits, points, hooks, bars, and barrier beaches which may accrete to enclose marshes, lagoons, fresh water streams and estuaries. Accretion beaches along our marine shorelines are, therefore, the end result of the above geo-hydraulic, or land and moving water, process. And, in Skagit County, such shoreforms are a limited recreational and aesthetic marine resource.

Although a majority of Skagit County shorelines are protected from direct Pacific Ocean storm systems, local storm conditions can create violent and sometimes destructive wave action on all beach and shoreforms of the islands area. Structural development on accretion shoreforms, therefore, may require substantial investment in protective devices that may lead to the deterioration of the very resource that attracted the development. Also, the desirability of sewage disposal systems in this environment is questionable.

1.6.3.1 ACCRETION BEACH SYSTEMS
ISLANDS DISTRICT

LOCATION	TYPE	EXTENT	MATERIAL ORIGIN
Guemes Island SW corner	Bay barrier	2,100 feet	Feeder bluff to NW Feed action: active Drift is south and east
Cypress Island NW shore, Tide Point	Point	100 feet	Adjacent feeder bluffs Drift is north and south
Sinclair Island			
a. NW corner near Urban	Point	1,200 feet	Adjacent feeder bluffs Drift is south and west
b. North Point	Point (closed)	2,000 feet	Adjacent feeder bluffs Drift is north and east
Samish Island (NW Area Planning District)			
a. Camp Kirby	Point-spit	1,500 feet on each side	Adjacent feeder bluffs Net drift to south
b. Scotts Point	Point (closed)	150 feet on each side	Adjacent feeder bluffs Net drift to east
Padilla Bay - mouth of Joe Leary Slough (NW Area Comprehensive Plan)	Spit	800 feet	+ 1 mile to the south Drift is to the north

Source: Wolf Bauer
Shore Resource Consultant, 1974.

DEVELOPMENTAL CHARACTERISTICS

This portion of the Comprehensive Plan District is oriented toward the impact man has had on land and land use in the Islands area. The boundaries of man's impact are less readily definable than the boundaries of the physical environment. Man is a mobile influence on his environments; population, land use, land ownership, etc., are not fixed and stable factors. For this reason some of the chapters of the Developmental Characteristics section deals with a larger land area than the Islands Planning area.

An inventory and analysis of the developmental characteristics, when combined with data on the physical environment, provide a set of parameters within which the decision making functions of the planning process can occur. The interrelationship of the natural and man made developmental systems must be clearly reviewed to successfully develop meaningful land use decisions.

The Developmental Characteristics section of the Comprehensive Plan is composed of the following chapters:

- 2.1) History of Development
- 2.2) Population Analysis and Projections*
- 2.3) Land Use Patterns
- 2.4) Housing Analysis and Projections*
- 2.5) Land Ownership
- 2.6) Economic Base Analysis*
- 2.7) Transportation
- 2.8) Open Space - Recreation
- 2.9) Community Facilities

*These chapters are oriented to both the Islands area and to some extent to the entire County, due to the nature of the data.

2.1 HISTORY OF DEVELOPMENT

2.1.1 Orientation

This chapter of the Comprehensive Plan is a very brief synthesis of An Illustrated History of Skagit and Snohomish Counties published by the Interstate Publishing Company. While the following summary is concerned with early European settlement of this area, this Plan recognizes the impact that earlier Indian culture exerted upon this area. The history of Indian culture in Skagit County is contained in a book by Chief Martin J. Sampson.

2.1.2 Early settlement of the Islands Area

The European settlement of Skagit County began on Fidalgo and Guemes Islands about the year 1859. March's Point attracted the first settlers on Fidalgo Island primarily because it was an existing prairie. William Munks, who has been claimed to be the first permanent settler on Fidalgo Island, bought an existing homestead late in 1859. Development of a permanent settlement on Guemes Island occurred about 1866 and was further enhanced by certain mining operations on the island (primarily copper) that put focus on this location.

Progress on Fidalgo Island was quite rapid in the 1870's. Mr. Munks established the first store which served many of the early settlers whose primary occupation was farming on a small scale. The large-scale farming operations were being established on the Samish and Skagit Flats.

The part of Fidalgo Island across the Swinomish Slough from the city of La Conner had been an Indian village long before any white settlement began and almost the entire southeast section of Fidalgo Island was set aside by executive order of the President for the establishment of the Swinomish Indian Reservation in September of 1873.

Around the 1890's there was a tremendous upsurge in the division of property (platting). The price of land rose to new heights and the number of real estate transactions was greater than ever before. The land was surveyed in 1891 giving the old pioneers, who held their property through squatters rights, a chance to secure a more satisfactory title and encouraging other individuals to come to the area. It was at this same time that the commercial fishing industry got its initial beginnings in the Fidalgo area with the construction of fish-processing plants. During this same

period, the necessity to dredge the Swinomish Channel was realized so as to aid navigation and commerce and thus positively impacted the commercial importance of the Fidalgo area and Skagit County.

2.1.3 County Growth

As the county became more accessible and its great wealth of resources became known, it saw much growth. The greatest growth actually came in these earlier years, between 1900 and 1910. During these years the county grew from 14,272 people to 29,241. This was an increase of 105%. The population began leveling off between 1910 and the 30's, but between the 30's and the 60's it rose steadily once more. However, between the 60's and the 70's, the population has again shown signs of leveling off. It is interesting to mention that the County saw more than half its growth in the ten years between 1900 and 1910.

	<u>1900</u>	<u>1910</u>	<u>1920</u>	<u>1930</u>
Population	14,272	29,241	33,142	35,142
% of Increase		104.9	14.1	5.3
	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1970</u>
Population	37,650	43,273	51,350	52,000
% of Increase	7.1	14.7	18.9	0.2

2.1.4 Sub-area Analysis

The geographical location of the City of Anacortes is conducive to its growth potential. It sits as an outlet to the Skagit River Basin, is near the entrance to Puget Sound, and possesses a relatively deep harbor for ocean-going ships. Anacortes, originally called Ship Harbor, was settled about 1860. 1876 saw the appearance of Amos Bowman who many feel is the person responsible for the development of Anacortes. His family operated a wharf, store, post office and newspaper and also printed a map of Puget Sound and the Anacortes area that was the cause of much immigration, as was the concept of Anacortes being the terminus for a trans-continental railroad.

The boom of the 1890's saw an incredible number of lands platted in the city, primarily for speculation. Speculation was rampant and within a few months in early 1890, the City of Anacortes grew from a few dozen to several thousand. However, the expectations for development subsided, the bubble burst, and

many people were ruined. During this time, though, the city had become incorporated into a 3^d class city and had established a city government.

In the late 1890's, several fish canneries were commenced which were later followed by saw and shingle mills which stimulated further growth but not at the same previous scale.

Until the land development boom in 1889, Dewey was small settlement with a post office. When every available townsite on Fidalgo Island was being purchased and platted, it too was platted as Fidalgo City (with 341 square blocks) while nearly the same platting procedure was occurring at Gibraltar.

In 1891 an electric motor line was built from Anacortes to Fidalgo City and cars made two trips over the tracks. It was compelled primarily to secure a large land bonus promised the company who developed the line.

William Munks also recorded his plat for Fidalgo during the 1890 boom. He received a post office, the second in Skagit County, but the boom collapsed and so did the development of Fidalgo as most of the land reverted back to farming.

Many other communities have come and some are now gone. Although they have left interesting histories, to trace each is a task beyond the scope of this document.

2.2 POPULATION ANALYSIS AND PROJECTION

2.2.1 Orientation

The analysis of population for an area and the projection of future population for that area are basic to the planning process. However, the smaller the area under investigation the more difficult it is to adequately and accurately project population. The variables of population size, land use patterns, population distribution, and acceptable densities have a large effect on regional areas the size of Skagit County and within sub-regional areas these variables can create immeasurable impact.

For the above reason, it is necessary to view sub-regional areas within the context of a larger geographic unit especially with regard to population and its projection.

2.2.2 Elements of Population Analysis

The analysis of the population of an area and the subsequent projections derived from its are basic to the planning process. The gauging of growth potential must be expressed in terms of the population it can be expected to sustain; i.e., the size of the population, its composition, and characteristics, and its special distribution.

2.2.2.1 Size

Population size gives an indication of the overall dimensions of the physical environment, which can be used as a measure of the growth potential for various categories of land use. With the addition of the time element, future trends in population size are estimated and these become a part of the basis for estimating the dimensions and space needs for various land uses in the future. The qualitative aspect of population analysis is the study of its composition and characteristics. This includes such considerations as household sizes, sex, races, and nationalities, and income composition. This information is important when estimating residential space requirements for various dwelling types consistent with existing and anticipated family sizes,

income levels, and needs. It also assists in determining the amount of emphasis, both physically and socially, needed for recreation areas, schools, and other community facilities for all segments of the population young, old, in-between, singles, families, rich, poor, black or white.

2.2.2.2 Population Distribution

The final element is population distribution. With accurate information of this nature, combined with other data, it can be determined how various land uses and facilities can and should be located in an area. Population analysis not only aids in determining the proper land uses within a given period of time, but also helps to determine how these total space needs should be allocated to different parts of the planning area at a particular time.

2.2.3 Births, Deaths, and Migration

Population change can be a rather complex phenomenon. It can involve such things as annexation and consolidation. But for the most part, population change occurs by death, births, and migration. All types of forecasts take these things into consideration, either explicitly or implicitly.

Deaths tend to be the most stable of the three elements. It is interesting to note, however, the impact of modern medicine on the mortality rate of a population. Since the greatest advances in medicine the first half of the century were in the control of infectious diseases, especially those to which babies are particularly susceptible, the sharpest drop was in mortality of infants and young children. This, combined with a rather stable life expectancy, has a tendency to lower the overall death rate. The lower death rate and a fluctuating birth rate have caused the exponential type of growth in world population.

The birth rate has a major role in population analysis and can cause many changes in a specific population. Due to the more complex factors involved in birth rates, they are more difficult to speculate upon than death rates. It seems far easier to judge what can be done in lowering death rates in the future, than to judge what people may want to do regarding the size of their

families. Values and attitudes can be of a very elusive nature. Ideas about such things as marriage, birth control, adoption, family size, divorce, and abortion tend to change and this in turn has an effect on the birth rate.

Migration has become an important factor in population analysis because of the increase of mobility within the present American society. Migration is also difficult to estimate with any degree of certainty. Some causes of migration are:

1. The desire for better economic opportunities.
2. The attraction of milder, more suitable climates.
3. Desire for better living or housing conditions.
4. Movements for reasons of health, education, or retirement.

Of these reasons, the first is usually considered to be responsible for the major percentage of migration in most communities. Also, such basic considerations as prosperity or depression, peace or war, and so on, can have a very marked influence on the volume of net migration. The elements of births, deaths, and migration are important components of population change.

2.2.4 Characteristics and Trends Effecting Population in Skagit County.

The total population of Skagit County at the time of the 1970 census was 52,381. This was a 2% increase over the 1960 population of 51,350. Of this 1970 population, 24,241, or 46.3% people lived in an urban environment, while 28,140, or 53.7%, maintained a rural type of existence. This trend is less significant than in previous years, for there has been a marked deceleration in both migration to the city and migration from the country in Skagit County.

Ninety-eight and one-tenth percent of the total 1970 population in Skagit County are white, only 1.9% were non-white. The non-white total increased only slightly from the previous decade and has deviated only .4% since 1940. Out of the 1970 total of 1,011, 650 people were American Indian, 182 were Mexican-American, 134 were Oriental, and 45 were Black. Minorities are examined by enumeration district and contracted with the total population composition.

The average age of the population of Skagit County has increased in the last decade, while the number of young children has decreased. The county exceeds the state in the percentage of people over 45. This has an effect on the rate of natural increase and may have had a part in the decrease in the rate of population growth in the county. The decrease in the younger age groups can probably be attributed to the decreasing number of births since 1960. These trends can have an effect on the extent and type of community facilities to be provided in an area.

There has been a slight increase in the number of deaths over the last 10 years. This is probably due to the fact that the increased number of older people also causes an increase in the number of deaths. The people that were part of the big population surge of 1900-1910 are now reaching the average maximum age and thus dying at an increasing rate. This trend could increase if the county becomes more widely accepted as a possible location for retirement. The number of deaths can be seen as an element of population changes.

2.2.4.1 Migration

When net migration is included with these other elements, it is further evidence of the overall decrease of population growth in Skagit County over the last 10 years. Between 1940 and 1950 the county experienced a "plus" net migration of 3,348 people. In the time period between 1950 and 1960 there was also a plus or "in" net migration of 2,269. However, between 1960 and 1970, net migration was minus or "out" of the county by 2,271 persons. The people born in the big post-war population surge were now becoming old enough to enter the labor market, as mentioned earlier a prime factor in relation to migration is the desire for better economic conditions. When these people could not find enough work in the county, they had to look elsewhere. Also, the desire for higher education lured people out of the county. The county's agricultural and extractive resources economic base cannot support great increases in employment or persons with masters and doctorate degrees. These people then generally find work in more urbanized areas where the demand for their talent and background is higher. This phenomenon of migration can be seen more clearly in the age/sex pyramid and the components of population change at the end of this section.

2.2.4.2 Distribution

Population distribution, past, present, and future, is shown at the end of this section. In 1970, the population of the county was 46.3% urban and 53.7% rural. The change over previous years is as follows:

	<u>Urban</u>		<u>Rural</u>	
1970	24,241	46.3%	28,140	53.7%
1960	23,008	44.8%	28,342	55.2%
1950	15,448	35.7%	27,825	64.3%

As can be seen, the county is becoming increasingly urban, but at a slower pace. It is felt that this is due to the overall decrease in the rate of population growth. Whether there is slow or fast population growth, the areas to be most affected would probably be the Mount Vernon area, particularly eastward, the Sedro Woolley area, and the Fidalgo Island area. Provided that such things as: 1. agricultural zoning; 2. 1.0 acre minimum lots; 3. flood zone restrictions, and similar measures are maintained, major portions of areas such as the south Skagit Floodplain, the Samish Floodplain and the Middle Skagit River will not become extensive residential locations. However, portions of these areas out of the danger of flood and not conflicting with agricultural areas, could assume a higher proportion of people. These could include such areas as Bow Hill, Pleasant Ridge, Bayview, and the area east of Conway. If the restrictions mentioned earlier are not enforced, areas such as west Mount Vernon and west Burlington could grow, causing a split in the agricultural land and increasing the danger of flood damage to both life and property.

2.2.5 Population Trends and Forecast - Skagit County

Historically, it has been hard for demographers and planners to acquire the degree of accuracy in their predictions of population growth in less populated areas that they have attained in more densely populated areas. The larger numbers provide a higher degree of accuracy. For example, if a person owned four cars and one broke down, he would not feel the loss as much as a person who owned one car and lost the use of it.

There are a number of population forecasting methods, each being of different complexity and accuracy. For the more general purposes of this study, the migration and natural increase method was used. Age and sex groups were also considered. A range in the 2000 population estimate was derived using this method. The corresponding range is shown at the end of this section.

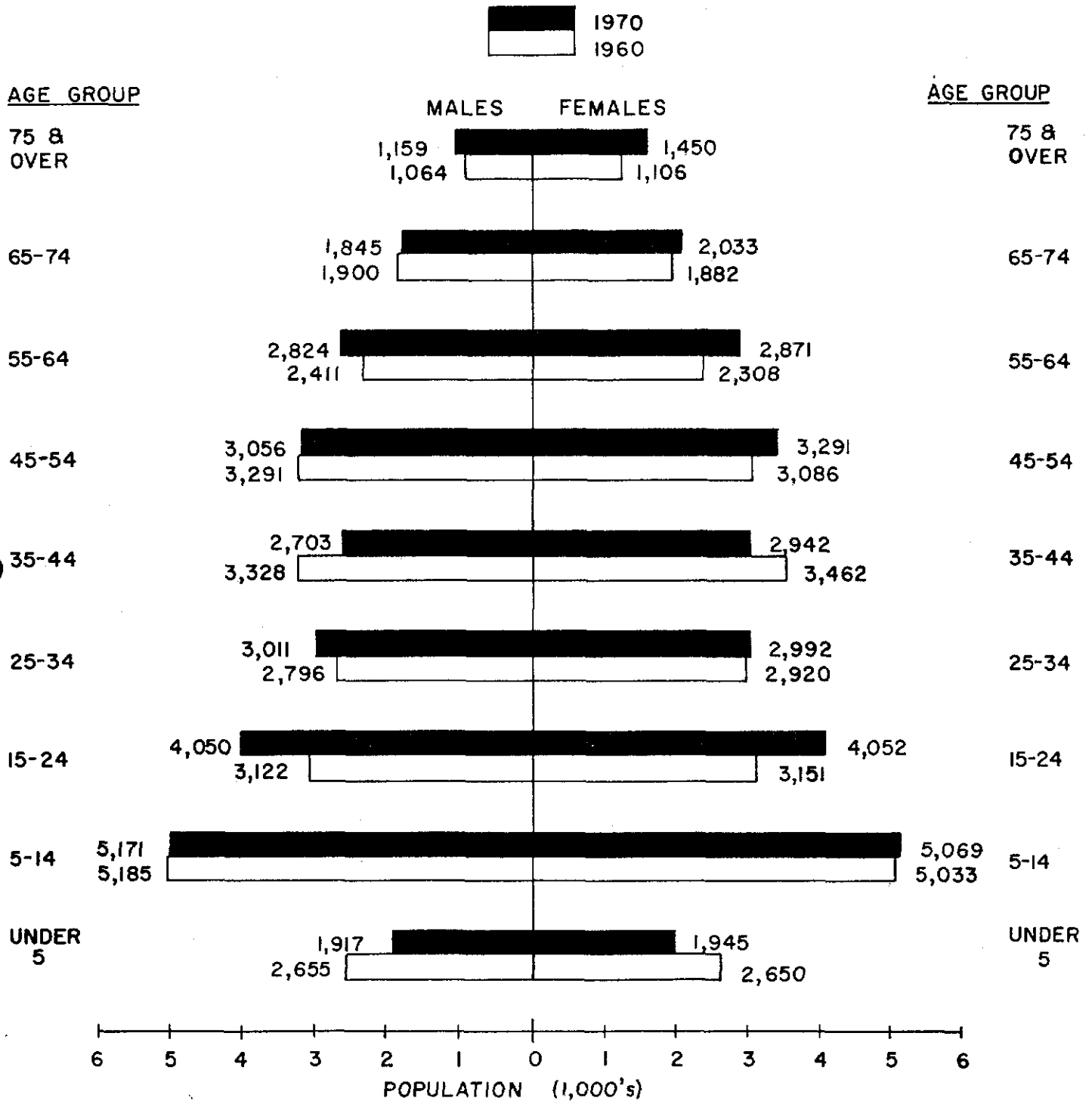
As can be seen at the end of this section, the percent increase of population for Skagit County has decreased over the last 10 years to approximately .2% per year. This fact, combined with the decrease in births and young children, shows that the county's population is leveling off, at least for a while. The fact that migration has been "out" instead of "into" the county recently is another important sign of a stabilizing period. Assuming that there are no major economic changes in the county or in adjacent areas, this trend should continue during this planning period. However, if major economic changes do occur, for instance south of the county, Skagit County could be in the path of possible expansion. This would be, in all probability, beyond the 26 year confines of this study.

Although it is very difficult to project population trends for the Islands area, or other specific areas, it seems likely that this area would draw people to settle here because of the atmosphere that this environment exudes. Saltwater shorelines, climate, view, recreational opportunities, etc., would draw populations primarily from two groups: 1. retired persons (as can be seen from the increasing numbers of older citizens on the Age-Sex Ratio Analysis) and, 2. those who can afford a second home or recreational lot. Permanent residents may also come into the area if jobs are available in the economic market. With the possibility of refinery expansion in the future, as well as utilization of the industrial sites in the City of Anacortes and the immediate vicinity, the possibility for future effects on population increases in this area.

The construction force for the proposed Nuclear Plant could produce an impact on the county for a limited time. The time span would be from 6-10 years with the majority of the labor force leaving after construction is completed. It is anticipated that the majority of the labor force would be commuting to the site from outside the county. However, those that set up temporary residence in the county would put an increased demand on goods, services and housing facilities within the county.

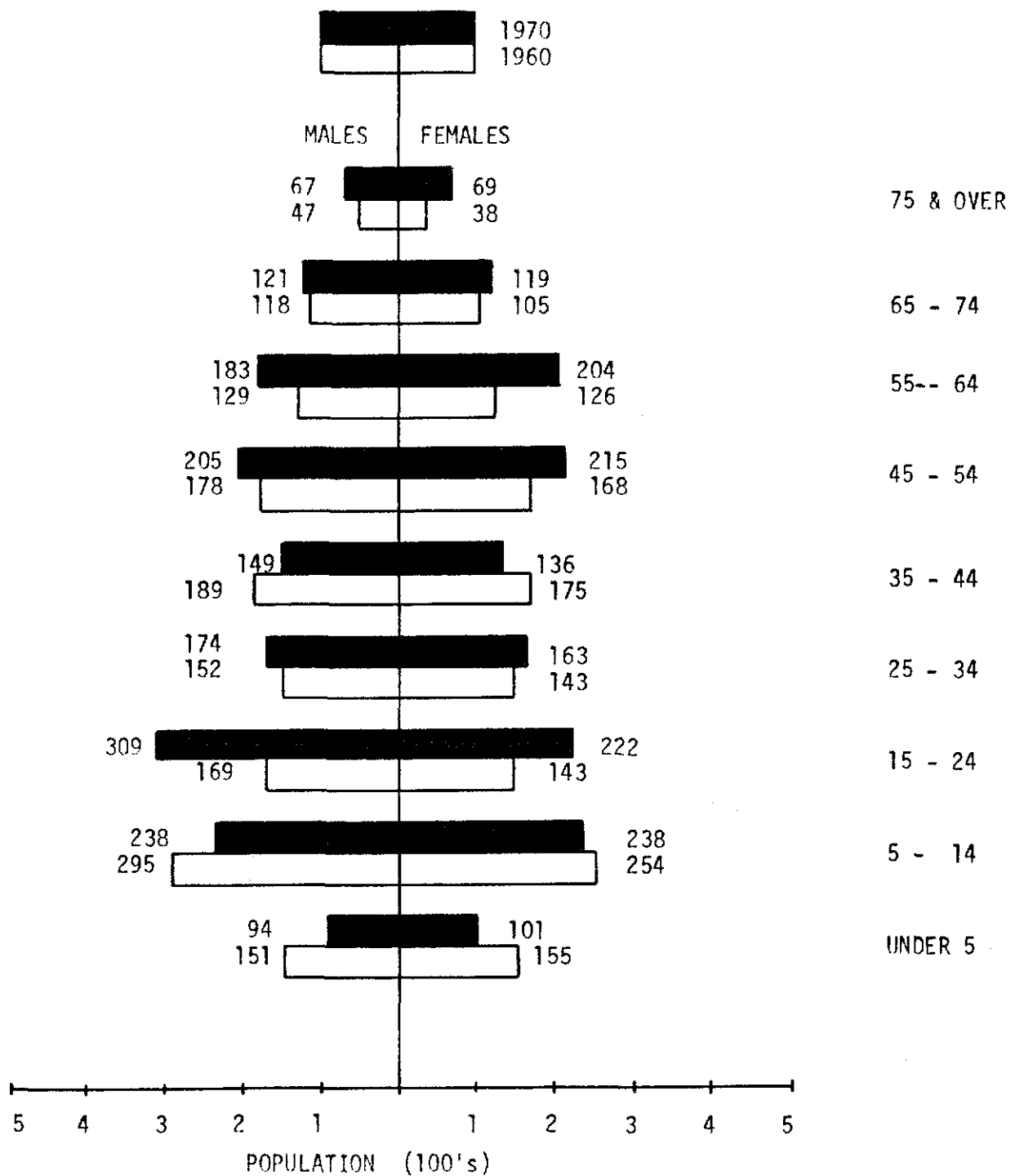
2.2.6 SKAGIT COUNTY

AGE & SEX DISTRIBUTION (PYRAMID), 1960-1970



* DERIVED FROM U.S. CENSUS BUREAU DATA

2.2.6.1 ISLANDS DISTRICT AGE & SEX DISTRIBUTION (PYRAMID) 1960 - 1970



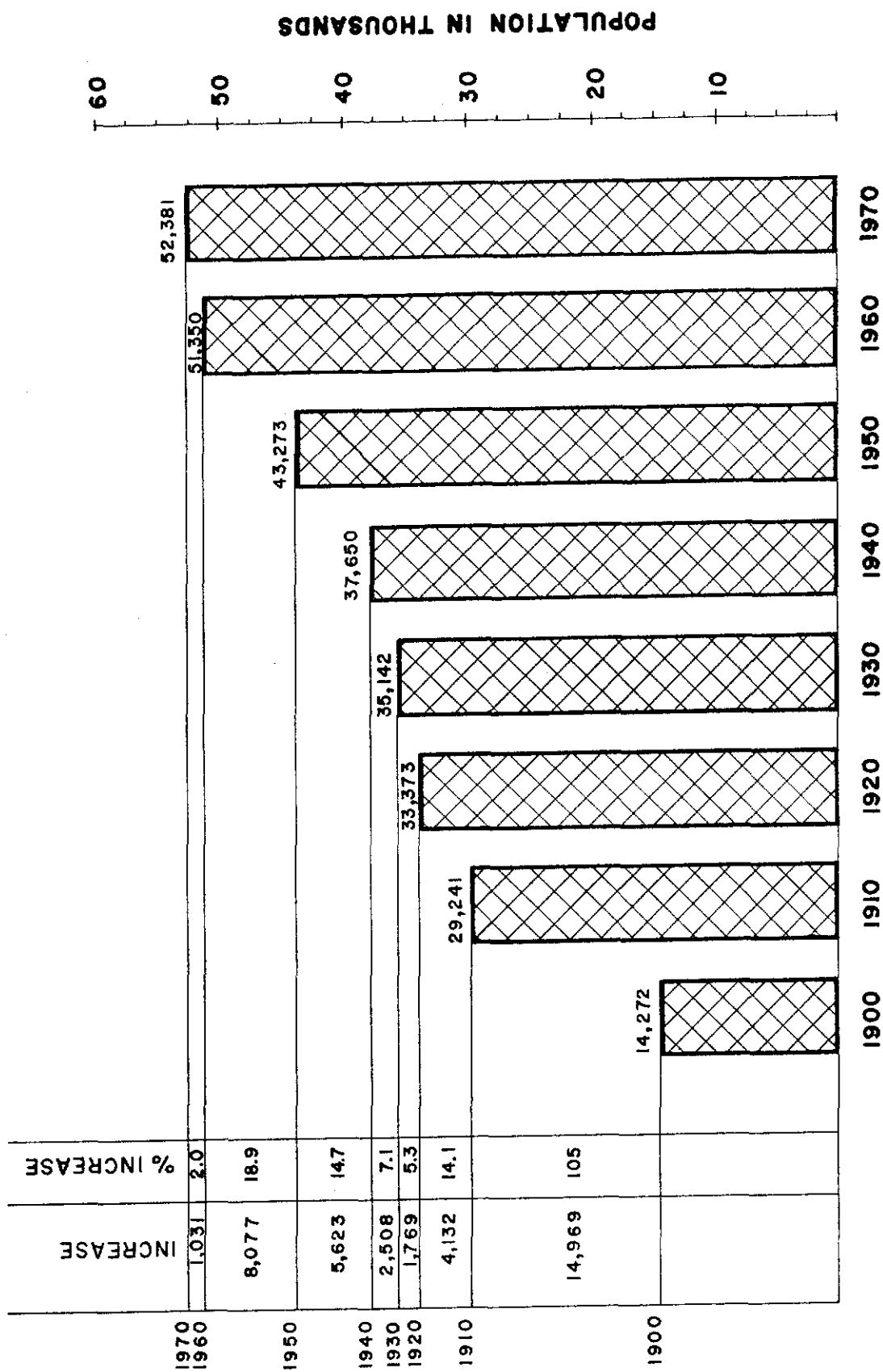
* Derived from U.S. Census Bureau Data

- Excludes the City of Anacortes

The actual population range projected here consists of a high and a low estimate. The low end of the range is, in actuality, an extension of the present population trend of .2% increase per annum. Given the decrease in births, the increase in migration out of the county, and the firmly established economic base of the county, this was considered to be reasonable as a low figure. The effects of a major upturn in the economy of the Puget Sound Region as a whole could cause a number of situations in Skagit County. However, there would be a time lag, with the effects of such an occurrence not being felt soon, as it would over a period of time afterwards. Also, the Seattle-Everett metropolitan area would have ample room for such expansion if such an occurrence happened. However, at least the beginnings of such a phase were taken into account in the high figure of the projection range. It is based on the figures derived in the Comprehensive Plan for Skagit County, 1968.

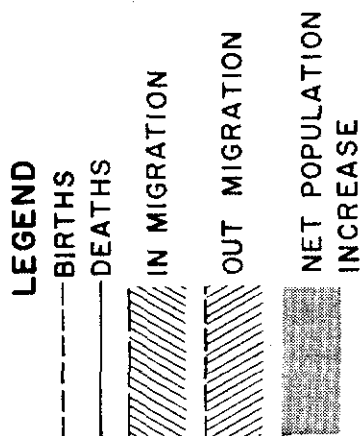
Thus, although seeming very small, there is quite a degree of flexibility reflected in this range. The assumptions on which it is based were derived from U.S. Census Bureau data. As stated before, a great change could occur causing an upsurge of development within this county.

2.2.7 POPULATION GROWTH, SKAGIT COUNTY



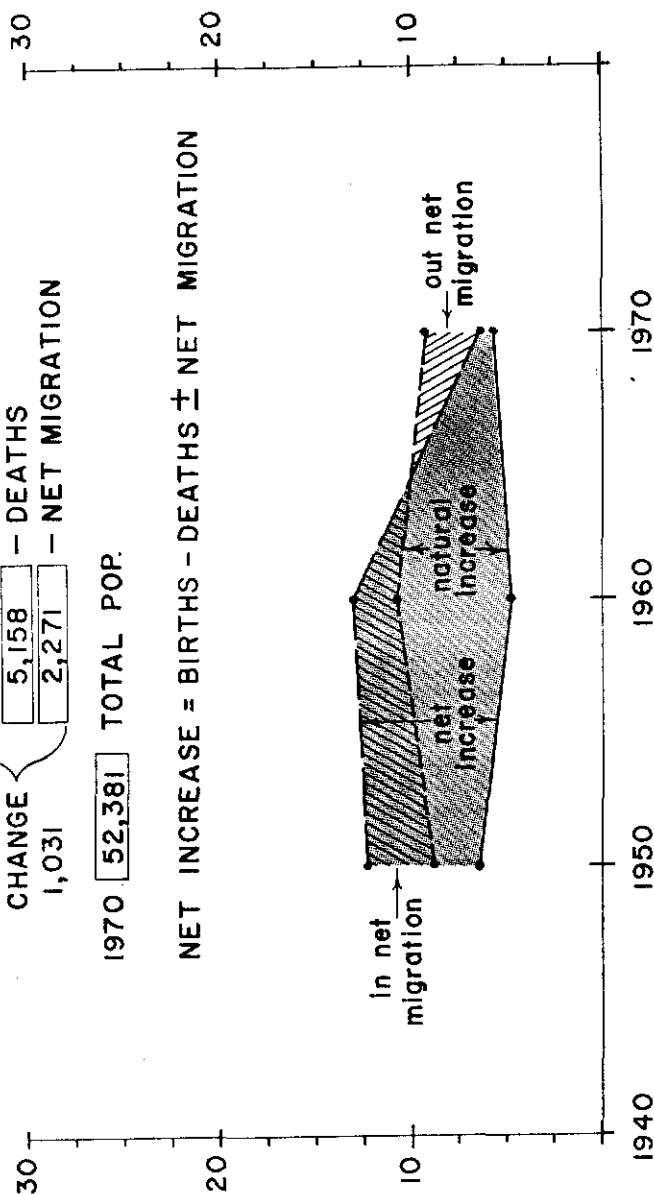
* U.S. CENSUS BUREAU

2.2.8 COMPONENTS OF POPULATION CHANGE



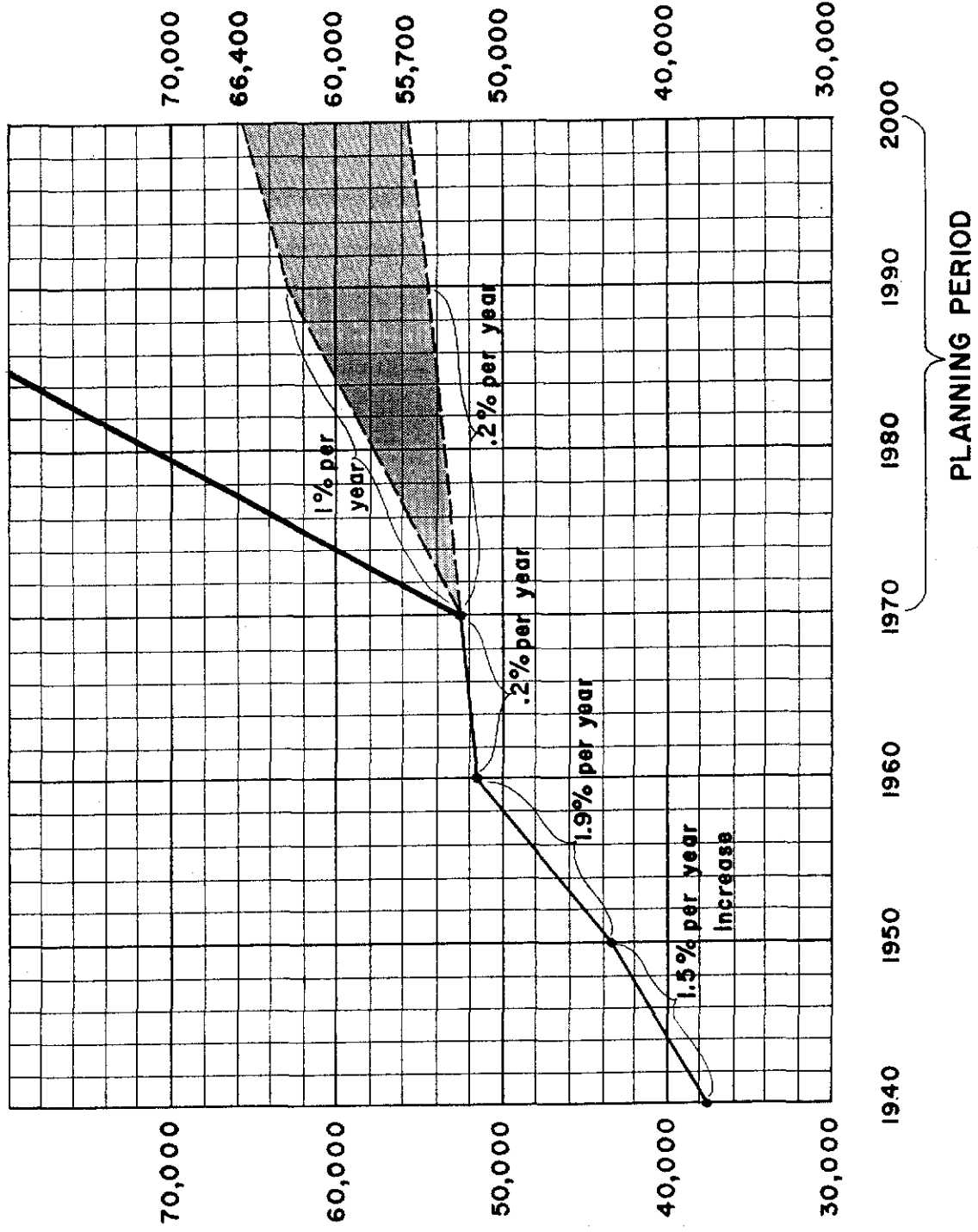
1940	37,650	TOTAL POP.	NET CHANGE	+ BIRTHS	- DEATHS	+ NET MIGRATION
			5,623	8,248	6,113	3,438
1950	43,273	TOTAL POP.	NET CHANGE	+ BIRTHS	- DEATHS	+ NET MIGRATION
			8,077	10,368	4,560	2,269
1960	51,350	TOTAL POP.	NET CHANGE	+ BIRTHS	- DEATHS	+ NET MIGRATION
			1,031	8,460	5,158	2,271
1970	52,381	TOTAL POP.				

NET INCREASE = BIRTHS - DEATHS ± NET MIGRATION



* DERIVED FROM
U.S. CENSUS BUREAU
FIGURES

2.2.9 SKAGIT COUNTY PROJECTED POPULATION GROWTH TO 2000



*DERIVED FROM U.S. CENSUS BUREAU FIGURES

2.2.10 INTERIM PROJECTED POPULATIONS
STATE OF WASHINGTON
1970 - 2000

County	1970*	1974**	1980*	1990*	2000*
Skagit	52,381	53,000	52,950	53,500	54,000
Snohomish	265,236	267,100	290,130	324,250	363,700
Whatcom	81,950	85,200	90,110	104,400	118,500

Information from the Office of Program Planning & Fiscal Management

* October, 1972

** April, 1974

2.2.11 POPULATION ISLAND AREA
by Census Division (1970)

AREA		POPULATION	TOTAL HOUSING UNITS	AVERAGE FAMILY SIZE	% OCCUPANCY
Div. 8	Ed. 16	284	266	2.3	.91
Div. 9	Ed. 26	636	246	2.89	.89
Div. 18	Ed. 66	613	301	3.01	.65
Div. 19	Ed. 67	874	403	2.85	.76
	68	600	281	2.7	.79
Anacortes Division					
	Ed. 17	762	388	2.26	.87
	18	241	96	2.71	.93
	19	1,158	448	2.73	.93
	20	1,384	504	2.86	.96
	21	393	148	3.0	.89
	22	756	257	2.92	.94
	23	878	320	2.81	.91
	24	542	186	3.04	.96
	25	<u>1,579</u>	<u>513</u>	<u>3.26</u>	<u>.94</u>
Total		10,700	4,357	2.81	.88

By Land Use Data Analysis (1972)

Using the data developed for the Comprehensive Land Use Planning Alternatives for the Skagit River Floodplain and Related Uplands, it is estimated that there are 4,356 residential dwelling units in the Islands area. If 4,357 dwelling units are multiplied by the occupancy rate for the Islands area (.88), and by the average family size for the Islands area (2.81), it can be estimated fairly accurately that 10,773 persons resided in this area at the time of the 1972 land use analysis.

Enumeration districts 17-25 reflect the population at 7,693 for the city of Anacortes. This would indicate that the population of the unincorporated areas of the Island district was 3,080.

2.2.12 POPULATION PROJECTIONS FOR THE ISLANDS AREA

AREA	1960 *1	1970 *2	1985 Low	1985 High	2000 Low	2000 High	1990 High *3
Anacortes	8,414	7,693	7,819	8,927	8,050	10,362	15,677
C.D. #8	265	284	292	329	299	374	660
C.D. #9	777	636	655	734	674	827	172
C.D. #18	532	613	631	707	650	800	1,388
C.D. #19	1,188	1,474	1,513	1,700	1,558	1,925	3,373
Population of Census Divisions	11,176	10,700	10,910	12,397	11,231	14,288	21,270

*1 Official U.S. census figures

*2 Official U.S. census figures

*3 Sewer, Water, Drainage Plan, Skagit County - - Stevens, Thompson, Runyan

2.2.13 Population Map

The population map displays the 1960 population, 1970 population, and year 2000 estimated population projections for the Islands Planning area.

2.2.14 POPULATION PROJECTIONS FOR THE ISLANDS AREA TO THE YEAR 2000

LEGEND



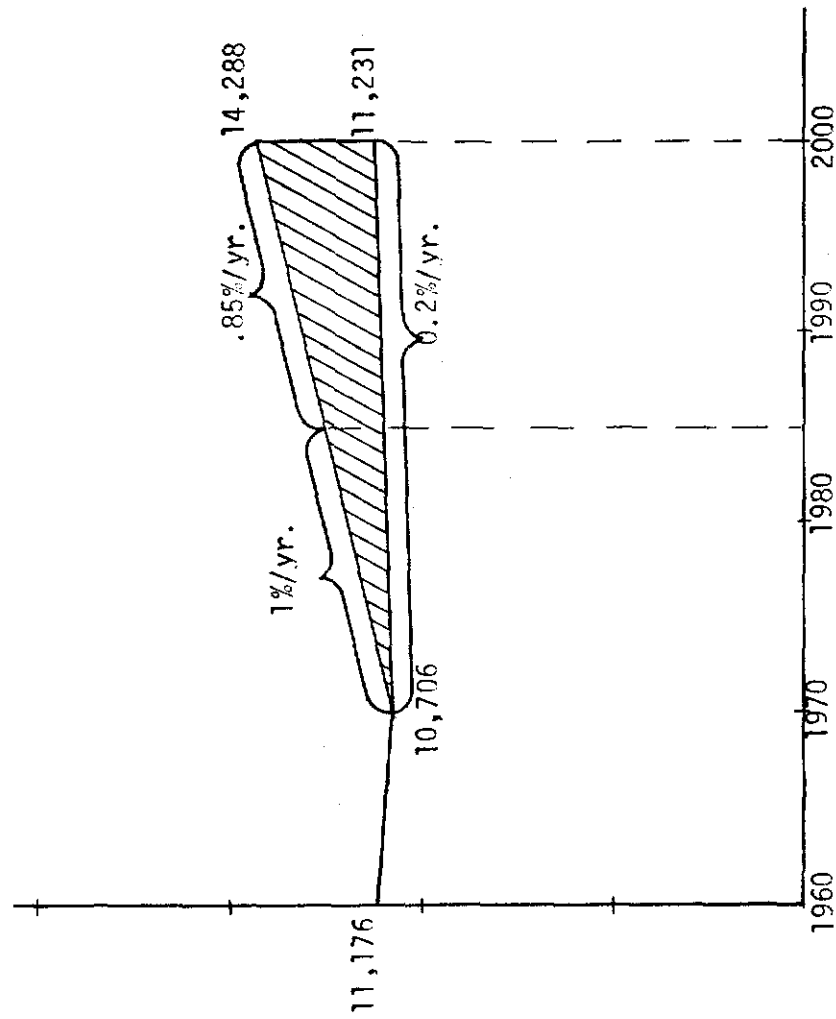
Projected Population Range

Low Range - Based on previous 10 year growth rate of 0.2% per year

High Range- Based on 1% average annual growth rate

(Skagit County Comprehensive Plan, 1968)

The 85% reflects projected decline in fertility ratio, after second generation post WWII Baby Boom



2.3 LAND USE PATTERNS

2.3.1 Orientation

The existing land use patterns for the Islands area were surveyed and mapped on a parcel by parcel basis in the summer of 1972. This parcel by parcel land use survey was **also** performed throughout the entire county. The information is recorded on section maps at a scale of 1"=400'. Each land use is identified and located both in relation to property lines and in relation to change in land use characteristics within individual parcels of property.

2.3.2 Generalized Land Use

The chart below displays the major classifications of land use by activity and area for Skagit County.

GENERALIZED LAND USE (by activity)				
USE	% of Units	% of all Units	Acres	% of Acres
Residential ¹	18,040	90.06	11,108	1.89
Community	341	1.70	1,116	.19
Commercial ²	1,305	6.51	1,009	.17
Industrial	346	1.73	2,400	.41
Transportation	--	--	6,686	1.14
Forest	--	--	451,612	76.81
Agriculture	--	--	111,735	19.00
Parks	--	--	2,301	.39
TOTAL	20,032	100.00	587,967	100.00

2.3.3 Land Use by Density

Land use by structures for activities and area within Skagit County are tabulated below. This section examines the countywide totals of land uses as inventoried in section 2.3.4--County Summary.

¹ Less accessory buildings

² Less parking lots

2.3.3 Land Use by Density

Land use by structures for activities and area within Skagit County are tabulated below. This section examines the countywide totals of land uses as inventoried in section 2.3.4 - County Summary.

2.3.3 LAND USE CLASSIFICATIONS BY DENSITY (COUNTY)

Land Use Density	Structures/Acre	Acres Allocated Per Structure
Single Family	1.98	.50
Multi-Family	1.85	.54
Mobile Home	2.64	.38
Accessory Building	4.55	.22
Group Housing	1.32	.76
Vacant-Unused	1.03	.97

	<u>Services/Acre</u>	<u>Acres/Services</u>
Community Service	.29	3.39
Quasi-Public	.32	3.08
Vacant-Unused	.33	3.00

	<u>Commercial/Acre</u>	<u>Acres/Commercial</u>
Goods	2.02	.49
Services	1.11	.90
Parking	.72	1.39
Warehouse	1.79	.56
Vacant-Unused	1.59	.63

	<u>Industry/Acre</u>	<u>Acres/Industry</u>
Heavy	.09	10.63
Light	.29	3.44
Vacant-Unused	.19	5.27

	<u>Barns/Acre</u>	<u>Acres/Barns</u>
Barns & Out Buildings	2.00	.50
Vacant-Unused	.34	2.96

2.3.4 Generalized Land Use

The Generalized Land Use Table for Skagit County contains nine land use classifications and compares these classifications by 1) the number of structures in each classification; 2) the percentage in each classification; 3) the acreage in each classification, and 4) the percentage of acres in each classification.

2.3.5 Sub-area Analysis

See the following table entitled: Islands Proper

COUNTY SUMMARY

2.3.4 LAND USE INVENTORY

Existing Land Use	Number	Acres	Acres-% of Total	Acres-% Land Use Classification
1. Single Family	15,094	7,594	1.29	68.36
2. Multi-Family	313	169.50	.03	1.53
3. Mobile Home	1,293	490	.08	4.41
4. Accessory Bldg.	7,103	1,562	.27	14.06
5. Group Housing	47	35.50	.01	.32
6. Vacant	1,293	1,257	.21	11.32
1. Community Service	211	716.25	.12	64.18
2. Quasi-Public	121	372.75	.06	33.40
3. Vacant	9	27	---	2.42
1. Goods	482	238.75	.05	23.65
2. Services	594	533	.09	52.80
3. Parking	77	107	.02	10.60
4. Warehouse	186	103.75	.02	10.28
5. Vacant	43	27	---	2.67
1. Heavy	167	1,774.75	.31	19.98
2. Light	103	354	.06	3.98
3. Tran./Util./Corridor	1,226	6,686.50	1.14	75.27
4. Vacant	13	68.5	.01	.77
1. Standing		430,839	73.36	95.40
2. Harvested		20,696	3.52	4.59
3. Vacant		76.5	.01	.01
1. Crop Active		60,412.50	10.28	54.07
2. Crop Inactive		725	.12	.65
3. Pasture Active		40,655	6.92	36.39
4. Pasture Inactive		3,207.75	.55	2.87
5. Woodlot		2,751.75	.64	3.36
6. Barns & Outbuildings	4,511	2,251.75	.38	2.01
7. Vacant	247	731.50	.12	.65
1. Aquatic - Marine				
2. Aquatic - Fresh				
3. Park	81	1,939	.33	100.00
4. Forestry Park				
5. Shoreline, Dikes, Levees				
6. View Spot - Turnoff				

ISLANDS PROPER SUMMARY

2.3.5 LAND USE INVENTORY

Existing Land Use	Number	Acres	Acres-% of Total	Acres-% Land Use Class.
1. Single Family	1,448	907	2.61	55.99
2. Multi-Family	6	11	.03	.68
3. Mobile Home	97	43	.12	2.65
4. Accessory Building	541	117	.33	7.22
5. Group Housing	0	0	.00	0.00
6. Vacant	924	542	1.56	33.46
1. Community Service	12	50	.14	78.13
2. Quasi-Public	7	14	.04	21.87
3. Vacant	0	0	.00	0.00
1. Goods	11	16	.05	8.21
2. Services	39	158	.46	81.03
3. Parking	5	12	.04	6.15
4. Warehouse	5	8	.02	4.10
5. Vacant	1	1	.00	.51
1. Heavy	59	1,237	3.55	85.55
2. Light	3	5	.02	.34
3. Tran./Util./Corridor	63	203	.58	14.04
4. Vacant	1	1	.00	.07
1. Standing	955	25,255	72.56	98.94
2. Harvested	28	269	.77	1.06
3. Vacant	0	0	.00	
1. Crop Active	110	1,566	4.50	31.48
2. Crop Inactive	5	25	.07	.50
3. Pasture Active	209	2,103	6.04	42.27
4. Pasture Inactive	112	707	2.03	14.21
5. Woodlot	122	404	1.15	8.12
6. Barns & Outbuildings	177	69	.20	1.39
7. Vacant	19	101	.29	2.03
1. Park	48	984	2.83	100.00

- Area includes Indian Reservation at Swinomish

2.3.6 LAND USE INVENTORY - ISLANDS AREA

<u>EXISTING LAND USE</u>	<u>NUMBER</u>	<u>ACRES</u>	<u>% OF TOTAL</u>
Residential	3,016	1,620	4.61
Community	19	64	.18
Commercial	61	195	.55
Industrial	126	1,446	4.11
Forest	983	25,524	72.57
Agriculture	754	4,975	14.15
Other	<u>117</u>	<u>1,346</u>	<u>3.83</u>
Total	5,076	35,170	100.00

- Based on land use data gathered in 1972 land use analysis study.

2.3.7 Validity

The validity of the land use data was checked by comparing the number of single family residential units (not including accessory buildings) with the 1970 census data on single family dwelling units. The 1972 land-use survey indicated that there were 1545 single family dwelling units in the project area. The 1970 census figures indicate that there were 1497 single-family dwelling units.

Comparison of Residential Dwelling Units

1972 Land Use Survey	1,545
1970 Census Data	<u>1,497</u>
	48

Taking into account new construction between the 1970 census and the 1972 Land Use Survey there appears to be a high level of correlation between the two data sets.

The other figures given by the Land Use Survey could not be checked for comparability because information was not available to make comparisons. Thus, the dwelling unit comparison indicates that the validity of the 1972 Land Use Survey is reasonable and satisfactory.

2.3.8 Land Use Map

The land use map of the Islands Planning area is generalized by 40 acre increments. The forty (40) acre generalization was developed by aggregating the land uses in each quarter of a quarter of a survey section (i.e. 640 acres (1 square mile) = 1 section) within each of the Townships and Ranges in the project area. The illustration on the next page demonstrates the quarter of a quarter of a section concept.

2.3.9 Availability of Land Use Data

The raw and bulk land use data is available at the Skagit County Planning Department Office.

In addition to the section maps containing parcel and land use characteristic information, the land use data is cross-referenced with numerical land use data logs. These land use data logs described each 40 acre parcel of land, in terms of the 1) various land uses within that 50 acre parcel;

6.1 DERIVATION & ORIENTATION OF PLAN

6.1.1 Derivation

The land use plan is derived from attempts to use to advantage the beneficial aspects of the physical environment; areas have been designated for development where slope, soils, geology, and septic suitability are favorable for various forms of development. Some additional areas for residential development have been added to accommodate a general public demand for latitude in regards to substantial growth areas in development plans.

This plan is an amendment to earlier comprehensive planning efforts. The plan has refined earlier land use development trends, and by means of this refinement, has substantially reduced and redistributed the amount of land area designated for various forms of development. This was done to reflect the expressed desires of the community and because projections do not demonstrate a need for a superabundance of development designated areas.

6.1.2 Orientation

The primary orientation of this plan is to preserve and, where possible, expand resource productive areas; i.e., agriculture, forestry, fisheries. The secondary level of orientation is to preserve the lifestyle currently enjoyed in Skagit County while leaving sufficient areas available for intense developments that are buffered from the resource productive and rural living areas. The third significant orientation of the plan is to provide a pattern of development in which the public costs associated with community growth can be controlled.

The reduction in land area available for development will produce continued use of resource productive areas, rather than a non-productive holding for development of those areas not suitable or needed for the continued growth of the Islands area.

The redistribution of land area designated for development is a reflection of current community standards and provides an opportunity for development

in these areas that has not occurred in areas designated by earlier comprehensive planning efforts.

6.2 AREAS DESIGNATED FOR DEVELOPMENT

6.2.1 High Density Residential

This plan provides an extremely wide range of land uses for the current and projected population of the Islands area. Within and immediately adjacent to the major urban area, Anacortes, this plan recommends high density single family residential densities and multi-family residential densities, when served by both sewer and water systems.

6.2.2 Low Density Residential

The lower density rural residential areas are located primarily along Skagit and Similk Bays and would use the public and commercial services of the urban area. The rural residential areas are proposed for Snee-Oosh, Dewey, Similk Beach, Gibraltar and Shelter Bay.

6.2.3 Commercial and Industrial

The urban area of Anacortes should continue to supply the vast majority of commercial services for the Islands area and also supplement the March Point area for industrially oriented activity.

6.2.4 Agriculture, Forestry and Fisheries

The agricultural area is located at the north eastern end of the Swinomish Reservation adjacent to the Swinomish Channel.

The forestry areas are located primarily on Cypress Island, near Mt. Erie, on the Swinomish Reservation and in Deception Pass State Park.

The surrounding saltwater shorelands are designated so as to retain their existing qualitative and quantitative levels, in order to preserve the excellent fisheries resources provided in Padilla, Skagit and Similk Bays and other shoreland habitats.

6.2.5 Period of Plans Effect

The plan projects land use patterns to the year 2000 and beyond. The amount

of land shown for each land use classification is greater than the projected demand. However, the land projected is scaled so as to not spread investment resources too thin, and hence lower the overall quality of development for the Island area.

This plan provides an ample opportunity for urban type growth, but still has large areas available for dispersed rural residential development. The areas projected for higher densities of development are also projected to receive the level of service that accompanies an urban situation, while the rural residential areas would not receive a high level of public services.

6.3 DENSITIES AND INTENSITY OF DEVELOPMENT

6.3.1 Residential

In computing the areas for required residential, commercial, industrial, and public land uses, the following general densities are projected. Urban densities are approximately three dwelling units per acre for single family and ten dwelling units per acre for multi-family. In rural residential areas the densities are one dwelling unit per acre, either single family or townhouse. The rural open space density is one dwelling unit per five acres. The residential density for agricultural areas is one dwelling unit per 30 acres. In forestry areas the residential density is one dwelling unit per 40 acres.

6.3.2 Commercial

The intensity in commercial areas is related to the areas of service and nature of the operation. Shopping centers and neighborhood commercial activities are located near arterial and secondary roads of sufficient capacity to accommodate the additional generated traffic, turning movements, ingress and egress, as well as through traffic.

Indiscriminate strip commercial development along thoroughfares is discouraged in this Comprehensive Plan for the Islands area.

6.3.3 Industrial

The land designated for Industry is located primarily around March's Point.

Tidelands in Padilla Bay on the western side of Swinomish Channel has been designated as Industrial Reserve.

While not designated for any specific areas, it is the strong recommendation that industrial parks, which can use the physical environment to advantage, should be encouraged for the industrial designated areas.

Areas shown to contain commercial quantities of mineral or material deposits have been reserved for use and need a Surface Mining Permit from the Department of Natural Resources and a Conditional Use Permit from the Planning Department for their operation.

6.4 POPULATION PROJECTIONS

This Comprehensive Plan projects that population in the Islands area will increase from the existing population of 10,700 to between 11,231 and 14,288 persons by the year 2000 based on current trends. These population projections may be low, and will need to be closely scrutinized after the 1980 census. The population will be distributed relatively evenly between those residing in urban and rural areas. The land areas designated for residential development in the Islands area would house a population of 25,780. This represents an approximate supply of 180% of the projected need for the year 2000.

6.5 ESTIMATED PLAN COSTS

The plan does not cause direct expenditure of funds. Certain aspects of the plan, when implemented, will cause funds to be spent, but the amount, and nature of expenditures, will have to be calculated at that time.

6.6 PLAN POLICIES

The following planning policies are adopted to augment the other provisions of this Comprehensive Plan for the Islands area.

6.6.1 General Land Use Recommendations

- 6.6.1.1 The existing agricultural, pasture and forestry lands, especially those in the floodplain, are to be protected from other forms of development. The

prime agricultural lands should be protected from encroachment by higher uses.

- 6.6.1.2 The agricultural areas should be provided with at least 20 year flood frequency protection.
- 6.6.1.3 The Open Space Taxation Laws of 1970 and 1973 should be retained as viable and useful methods of land use control.
- 6.6.1.4 The urban area should take advantage of the existing vacant land area and fill in these areas at approximately the same level as the adjacent neighborhoods, prior to expansion of existing boundaries.
- 6.6.1.5 Where possible, planned unit residential development should be used to cluster neighborhoods and to create open space areas within residential areas.
- 6.6.1.6 The areas designated for high density residential development should only be fully developed when all urban services are available.
- 6.6.1.7 Low density development of a significant degree should occur in areas where the physical environment is compatible and the resource production and extraction activities do not occur.
- 6.6.1.8 Residential development should continue in the same density, provided adequate water and sewer conditions are present. High density development should occur only if public water and a sewerage system are installed to serve the area.
- 6.6.1.9 The creation of land in any Bay by means of diking, drainage, and fill procedures should be discouraged.
- 6.6.1.10 Dredge disposal sites should be located so as not to adversely effect Swinomish Channel, the Skagit River or other waters in terms of fish migration, wildlife habitat, agriculture or aquaculture operations.
- 6.6.1.11 Use and utilization of Padilla Bay, Skagit and Similk Bays for aquacultural enterprises should be encouraged.
- 6.6.1.12 A pre-arranged system of flotation devices should be utilized to contain a possible major oil spill.
- 6.6.1.13 The land use control ordinance of Skagit County should be regularly amended to accommodate changes in community standards and needs.

- 6.6.1.14 The elements and policies of the Shoreline Master Plan Program and the River Basin - Water Pollution Abatement Program should be integrated into this plan upon their adoption by the Skagit County Board of Commissioners.
- 6.6.1.15 Unilateral and independent actions of the Swinomish Tribal Community are inconsistent with this comprehensive plan for the Islands area and Skagit County. Industrial, commercial and residential development on the Swinomish Reservation should be coordinated with the plans and policies of Skagit County government in order to more comprehensively plan for the total development of the area.
- 6.6.1.16 The Zoning map shall be revised to conform to this Comprehensive Plan.
- 6.6.2 Industrial/Commercial
 - 6.6.2.1 Commercial and industrial development should be directed away from the prime agricultural and pastoral lands and out of the danger of flooding and the seasonally high ground water table.
 - 6.6.2.2 Commercial and/or industrial activities directly related to agricultural production, or similar thereto, could be allowed in the agricultural areas provided they can sufficiently justify their location.
 - 6.6.2.3 Highway related commercial services should be located at major intersections in order to better serve those customers.
 - 6.6.2.4 Commercial services in the incorporated areas should be adequate to serve the majority of residents in the area.
 - 6.6.2.5 A buffer should be established between the industrial/commercial activities and the residential areas.
 - 6.6.2.6 Any commercial areas, especially those related to SR 20, should be in cluster form having specific design specifications.
 - 6.6.2.7 A buffer zone or proper screening should be established and maintained within the entire periphery of industrial developments.
 - 6.6.2.8 The extension or creation of new docking or unloading systems for oil transmissions should be closely reviewed. Expansion and/or modification of present facilities shall be given priority over the construction of new unloading locations.

- 6.6.2.9 A system of oil containment devices should be developed and instigated in order to prevent a major oil spill mishap from spreading past the immediate vicinity.
- 6.6.2.10 Air pollution problems resultant from the existing developed industries in the area should be seriously considered when contemplating future industrial expansion in the area.
- 6.6.2.11 Industrial Reserve: That area of tideland in Padilla Bay lying west of the center of the Swinomish Channel and north to March Point is designated as Industrial Reserve. This designation would not preclude the industrial development of the area but would hold industrial development of the area in abeyance until such time that; a) the need is demonstrated, b) all other sites are exhausted, and c) the development of the area is a total project, not on a piecemeal basis. Because of the unique situation in Padilla Bay, any project will have to be evaluated in terms of benefits and deficits for the County, as well as the region, in terms of economy and environment.
- 6.6.2.12 Future filling of the tidal flats in Padilla Bay should be a coordinated effort to provide a sound base for development, yet at the same time preventing future maintenance and expansion factors in light of the ecological balance of the area.
- 6.6.2.13 Industrial expansion should take place largely in the form of well-planned industrial parks which are compatible with an urban area. The importance of specific design standards must be reiterated, especially when considering the impact of industrial land upon adjacent residential areas and the tourist economy of the entire countywide area.
- 6.6.2.14 The Skagit County Planning Department endorses the idea of utilizing professional planning personnel to prepare comprehensive plans for Port of Anacortes developments.
- 6.6.3 Transportation
 - 6.6.3.1 The Skagit County Planning Department should have design review authority over any development, prior to construction, adjacent to any scenic highway or major arterial (density, depth and type of screening to be determined on each individual proposal).

6.6.3.2 A second high-arch bridge for SR 20's westbound traffic across the Swinomish Channel should be investigated and pursued.

6.6.3.3 Skagit County's ferry service capacity should be enlarged to adequately serve the projected demand from the islands.

6.6.4 Open Space/Recreation

6.6.4.1 The tourist industry and recreational activities should be pursued to add to the significant aspect of the Island area economy.

6.6.4.2 The Planning Department should develop a Recreational Trails and Open Space Plan for Skagit County. This plan would identify and list the present and potential sites for future recreational activities and incorporate a variety of areas for utilization by the varied pursuits of the recreating public.

6.6.4.3 Those smaller outlying islands offshore should be conceptualized as future saltwater park sites (i.e. Ika, Goat, Hat, Huckleberry, Jack).

6.6.4.4 A forested buffer area along SR 20 at Pass Lake, lying south of the highway, should be established to enhance the entrance to Deception Pass State Park.

6.6.4.5 User-oriented facilities should be designed to provide a wide range of recreational opportunities, depending on age, sex, and ability, for those utilizing the facilities.

6.6.4.6 Consideration should be given to establishing a recreational trail network that would link Deception Pass to Washington Park in Anacortes. Access could be co-ordinated thru State Parks and the City of Anacortes and easement purchases in other areas.

6.6.5 Community Facilities

6.6.5.1 Plans for new utilities (sewer, water, solid waste) should be coordinated on a regional basis to attain more efficient, equitable, and economical levels of service throughout the community.

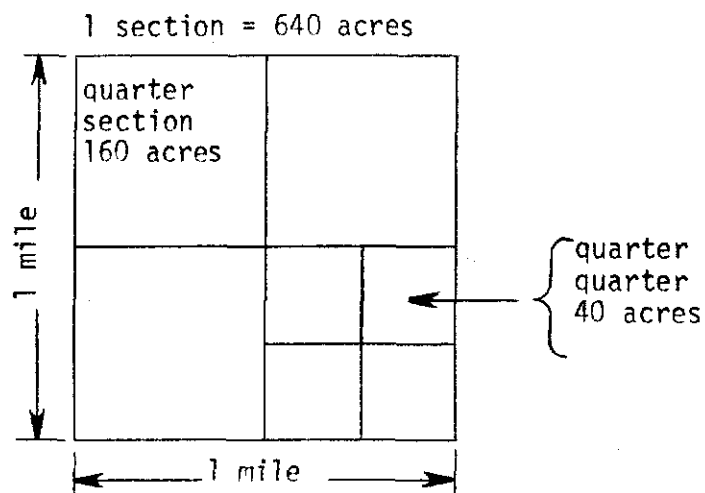
6.6.5.2 The use of package plant sewage systems or other new technology systems should be utilized where possible in the rural areas of the county. Efficient systems at a reasonable price would greatly facilitate residential development in the outlying areas.

- 6.6.5.3 New or improved utility transmission lines should utilize existing corridors whenever and where ever possible. If unable, utilize measures designed to mitigate current and future impacts.
- 6.6.5.4 Library service within the county should become coordinated at the regional level to assure a more equitable, cheaper, efficient system throughout the county. Once accomplished, a more comprehensive service would develop.
- 6.6.5.5 The various school districts which have not already prepared a comprehensive plan should do so. These plans, when completed, will be incorporated into the Comprehensive Regional Plans for Skagit County.
- 6.6.5.6 The Urban Arterial Plans and proposals of the county and the various municipalities are recommended for approval and endorsement where they conform to the provisions of this Comprehensive Plan.
- 6.6.5.7 The Open Space Recreation and Trails Plan in other sections of this report are recommended for adoption to expand the available level of community facilities in the planning area.
- 6.6.5.8 The Comprehensive Plan approves in general by reference, the recommendations of the four studies completed under the auspices of the Skagit County Development Association in 1972. (These recommendations are summarized in the Economic Base Analysis Section of this report).
- a. Skagit County: A Strategy for Environmental Protection and Economic Development, Urban Land Institute, Washington D.C.
 - b. Skagit County Agriculture: An Economic Mainstay, Department of Agriculture, Washington State University.
 - c. A Tourist and Recreation Strategy for Skagit County, Northwest American, Seattle, Washington.
 - d. Skagit County Industrial Site Survey, The Latourell Associates, Seattle, Washington.
- 6.6.5.9 The Comprehensive Plan for the area approves and endorses the objectives of the Skagit County Parks and Recreation Comprehensive Plan.
- 6.6.5.10 The Comprehensive Plan for the area approves and endorses the objectives of the Skagit County Urban Arterials Board on Federal Aid Secondary.
- 6.6.5.11 The Comprehensive Plan for the area approves and endorses the recommendations of the Skagit County Department of Emergency Services Plan (1972).

- 6.6.5.12 The Skagit County Planning Department solicits recommendations regarding health service delivery from the statewide Comprehensive Health Planning Organization and recommends that a Comprehensive Health Plan for the Skagit Region be prepared and adopted as soon as possible.
- 6.6.5.13 Full governmental and law enforcement agency participation in the minimum recruitment and training standards of the Washington State Law Enforcement Training Commission will be encouraged. A regional goal will be that by 1974 all law enforcement personnel will have satisfactorily completed a basic training program prescribed by the Washington Law Enforcement Officers Training Commission.
- 6.6.5.14 County and local police jurisdiction are encouraged to devise "back up" programs to assist all agencies in participating in the minimum standards training program.
- 6.6.5.15 A county-wide disaster plan should be developed to study potential hazards and elements of disaster which might occur within the County, and also a methodology by which knowledge of these identified hazards can be applied to the reduction of effects of a disaster impact.

2) the number of each of the land uses, and 3) the acreage of each of the land use classifications which occur in that 40 acre parcel of property.

The land use data logs are also available for reference purposes in the Skagit County Planning Department. The information contained in the data logs is prepared by computerization and has been key punched onto cards for use in a computer. These keypunched cards are also available at the Skagit County Planning Department Office.



supported by a grant from the U.S. Public Health Service. The Skagit Regional Planning Council has endorsed the ongoing activities of the Comprehensive Health Planning Council.

The Skagit County Planning Department solicits recommendations regarding Health Service Delivery from the Comprehensive Health Planning Council of Whatcom, Skagit, Island, and San Juan Counties.

2.9.4 Water Sewage and Drainage Facilities

Public water is provided to the Islands area via two sources; the City of Anacortes water supply system and Skagit County PUD No. 1. The City of Anacortes system delivers water to the city, the chemical plants and oil refineries in the March Point area, and also supplements the Skagit County PUD No. 1 transmissions to both the Similk and Dewey Beach areas on Fidalgo Island. Private water, both community water systems and private wells, serve the remainder of the Islands area.

The Skagit County Water Quality Management Program was recently completed by the Skagit Regional Planning Council and CH2M/HILL. This study showed that approximately 70% of the Islands population is served by some form of community sanitary waste sewerage systems:

- | | |
|---------------------------------------|------------------|
| 1) Anacortes & Skyline | (7,150 people) |
| 2) Swinomish Indian Community | (18 dwellings) |
| 3) Skagit County Sewer District No. 1 | (220 people) |
| 4) Shelter Bay Development | (150+ in summer) |

Septic tanks are assumed to provide individual waste disposal in the other rural areas, and where permitted, as an interim measure in the urbanizing areas.

The Skagit County Water, Sewerage, and Drainage Facilities Plan, was completed in 1970 for the Skagit Regional Planning Council by Stevens, Thompson, Runyan. This report proposed trunk sewer lines be extended to serve areas adjacent to:

- 1) Satterlee Road
- 2) Gibraltar Road
- 3) Campbell Lake Road (Heart Lake Road to SR 20)
- 4) Yokeko Drive (extending northwest to Pass Lake)
- 5) Deception Road
- 6) SR 20 (Campbell Lake Road to Deception Road)

CH2M/HILL's report enumerated those areas in the Islands district that are cited as sewage disposal and/or water quality problem areas. These are:

Anacortes - An estimated 590 people in or near the city limits are still served by septic tanks.

West shore of Fidalgo Island - Physical land characteristics are unsuitable for septic systems.

Padilla Bay - Area beaches have been degraded by septic tank failures.

Pass Lake -

Heart Lake - Problems of eutrophication resulting primarily from

Lake Erie - natural causes.

Lake Campbell -

Whitmarsh - Potential for leachate from previous sanitary landfill.

There is need for area and countywide coordination in community facilities including sewer, water, and drainage facilities. There is a great need to attain an optimum level of services for the greatest possible number of people in the most efficient and economically manner possible. Many times a regional management organization will create an "economy of scale" that would not have been realized under a traditional, fractionated district form, thereby affecting a savings of a certain amount of tax dollars.

The conclusions and recommendations of the Skagit County Water, Sewerage and Drainage Facilities Plan and the Skagit County Water Quality Management Program both conform with the goals and objectives of the comprehensive plan. These plans are available at the Planning Department Office.

2.9.5 Solid Waste Disposal

The majority of the County is now served by two main landfills, Gibraltar and Inman pits, and by the end of 1975, a third site upriver will be opened to serve the eastern portion of the County. A series of "Green Box" disposal units will serve the smaller communities and rural areas with disposal of wastes at the three main landfills. Gibraltar Pit, approximately 3/4 miles south of the Gibraltar Road - Highway # 525 intersection, is intended to serve Anacortes and rural Fidalgo Island residents. This landfill will allow household waste and selective commercial and industrial waste.

3 COMMUNITY GOALS AND OBJECTIVES

The two previous chapters of the Comprehensive Plan for the Islands area have dealt with the Physical Environment and the Developmental Characteristics of the Islands part of Skagit County. Together, these chapters form the background against which information about the needs of the Islands area can be examined.

Citizen attitudes about potential land use patterns are addressed in this chapter. These citizen attitudes provide a tempering for the development of a comprehensive plan.

This chapter of the Islands area comprehensive plan, is composed of the following sections:

- 3.1 Level of Analysis
- 3.2 Citizen Input questionnaire
- 3.3 Citizen Groups and Public Hearings
- 3.4 Planning Policy Objectives

3.1 Level of Analysis

After the information relevant to the physical, developmental, and community facilities characteristics has been gathered and analyzed, it becomes necessary to use that information in accordance with the desires and needs of the community. This section attempts to provide that tempering.

Citizen attitudes were explored by several techniques: citizen advisory groups, surveys, public meetings and hearings, and technical advisory committees. The outcome of these attitude assimilation techniques are discussed in the chapter on Planning Policy Objectives.

3.2 Citizen Input Survey

3.2.1 Purpose

This survey, in the form of a questionnaire printed in the Skagit Valley Herald, served to direct the development of the alternative land-use plans with regard to recommended lot sizes, distribution of development areas, and promoting development in the upland areas of the county.

3.2.2 Analysis of Results

Compilation and review of the 351 responses (0.6% of county population) by Planning Department staff allows some generalizations to be made as they apply to the planning area. It is believed that the countywide responses are also indicative of attitudes of the Islands area residents.

3.2.2.1 People like the rural lifestyle of the area.

3.2.2.2 People dislike the lack of career employment opportunities.

3.2.2.3 Sixty per cent (60%) of the respondents did not want a change in the general appearance of the area. Of those who wanted a change, a majority wanted a more rustic appearance. Physical aspects most often cited were the mountains, forested areas, and aquatic environments.

3.2.2.4 Poorly maintained residences and urban clutter rated as the two most unattractive aspects of the area.

3.2.2.5 People seemed satisfied with the type and variety of housing available. Low income housing was not favored, except for the elderly.

3.2.2.6 Approximately sixty-three per cent (63%) felt that future residential development in the floodplain should be curtailed.

3.2.2.7 The people want a wide distribution of lot sizes throughout the county. The preferred size was a split between a 1/4 acre lot and a one or more acre size lot. Also, respondents favored a 30 acre minimum lot size in the agricultural zone.

3.2.2.8 73.5% did not feel floods represented a serious threat to them personally. However, 50% are in favor of increasing flood protection, but were not agreeable to sharing the expenses; 39% agreed that the costs should be borne by those benefitting from the protection.

3.2.2.9 Agriculture was very important to 83% of the respondents. A majority (57%) were in favor of policy and standards for preserving farm land and a greater number feared that this resource could be threatened by urban related speculation and development.

3.2.2.10 Outdoor recreation qualities rated high with the respondents with a majority favoring the development of a moderate recreation/tourism program.

3.2.2.11 Regarding industrial development, all answers exhibited a strong preference for industry that did not conflict with the beauty and lifestyle of the area.

3.2.3 Conclusions

The Comprehensive Plan for the Islands Area should protect the agricultural lands, strive to protect the rural atmosphere, and expand indoor and outdoor recreational facilities, while allowing for reasonable, well-planned industrial and commercial growth.

3.3 Citizens Groups and Public Hearings.

Further citizen input and involvement has been enhanced by the formation of a Citizen Advisory Committee and by regarding attitudes and consensus at public hearings.

The present Citizens Advisory Committee has been meeting monthly to discuss planning goals and objectives and developmental models and patterns for the Islands area and other projects. Their input has been invaluable in aiding the Department staff on establishing policies and recommendations for the Comprehensive Plan.

3.4 Planning Policy Objectives

After tabulating and reviewing the citizen input from the preceding techniques, the staff developed the following planning policy objectives. These

objectives have formed the basis and rationale for the alternative models and subsequent alternative plans discussed in the following sections.

3.4.1 These planning policy objectives are:

- 3.4.1.1 Provide and maintain lifestyles which best preserve the natural beauty of the area, minimize public investments, and which allows private investment the greatest possible latitude within the interests of community health, safety, and welfare.
- 3.4.1.2 Preserve the agricultural base of the area, so as to retain both the primary economic base and the rural atmosphere of this area.
- 3.4.1.3 Protect agricultural lands from flooding to a 20 year frequency.
- 3.4.1.4 Protect existing urban areas from flooding to a 50 year frequency.
- 3.4.1.5 Exclude further development in the agricultural lands for economic, safety, and aesthetic reasons; and conversely, to encourage the location of future development in suitable well-planned uplands areas.
- 3.4.1.6 The location and quantity of land designated for urban related uses, i.e., residential, commercial, and industrial, should be based upon estimates of present and future needs, environmental impact, various private and public economic criteria, and the resulting social ramifications.
- 3.4.1.7 Provide the public services required to fulfill state and federal regulations in a manner compatible with the general attitudes of the people of the Islands area.
- 3.4.1.8 The coordination of urban services should be handled on a metropolitan level to insure efficiency and economy of operation, and to provide specialized regional facilities.
- 3.4.1.9 Municipal, public, quasi-public, and private standards, plans, regulations, and efforts should be coordinated with those of the area, the county and the region, realizing that successful integration of development cannot be accomplished without coordination of efforts.

4 ALTERNATIVE LAND USE PLANS

The previous sections of the plan have dealt with the various elements that comprise a comprehensive plan. This section is an attempt to deal with alternative land use plan patterns and rationale behind the different forms of development.

Alternative land use concepts have been developed to reflect the various aspects of the physical environment, the developmental characteristics and citizen attitudes.

This section contains the following chapters:

- 4.1 Comprehensive Plan Alternatives
- 4.2 Planning Policy Constants
- 4.3 Methods Used in Plan Analysis

4.1 Comprehensive Plan Alternatives

4.1.1 No Comprehensive Plan

The alternative of not having a comprehensive plan is not applicable in this instance, as the Revised Code of Washington (R.C.W. 36.70.320) requires that,

"Each planning agency shall prepare a comprehensive plan for the orderly physical development of the county and may include any land outside its boundaries which, in the judgement of the planning agency, relates to planning for the county." . . .

In the instance of Skagit County and the Islands area, a comprehensive plan already exists for these areas.

4.1.2 Utilize Existing Plan

The utilization of the present Comprehensive Plan, derived in 1968, would mean it would be used for a general guide for development for the next few years. The existing plan was developed on a "saturation concept" envisioning a rapid increase in population and development in the area. The plan text gives a cursory investigation into the physical characteristics considered in plan development but a more indepth investigation should occur. Besides the fact of community sentiment is against further implementation of certain aspects of the existing plan, the plan lacks some environmental considerations that also should be addressed.

In this period of environmental awareness, a stronger based information source should be included in the Comprehensive Plan in order to make more effective policy decisions. Any piecemeal amendments to the plan could have an unforeseen undesirable impact on future land use and developmental patterns on the area.

4.1.3 Unlimited Growth Plan

An unlimited growth plan would allow for a variety of growth, which would be limited primarily by market demand and minimal constraints designated in the Comprehensive Plan. This loose framework of land use designations would allow market demands to control land prices, uses and developmental levels

which would operate at a minimal level of restraint. Whereas the plan may address some of the environmental concerns, it would still allow maximum utilization of developable properties.

The unquantifiable environmental effects of an unlimited growth plan, and the unascertainable costs associated with uncontrolled growth (utilities extensions, demands on public services, etc.) could also produce undesirable impacts in the Islands area.

4.1.4 Limited Growth Plan

The limited growth plan, basically a no-growth plan, would in essence severely diminish the subdivision of property, provide for no new extensions of utility systems, public services, nor road systems, as well as diminish the opportunities for employment in the area. This plan would provide environmental conditions in relatively their present situation but would force development and population to other areas in Skagit County which could result in far greater adverse effects.

This plan is not representative of the majority of people in the area, nor is it in the best interests of the entire population of Skagit County. Because of its unrealistic limitations and the evident adverse effects it could have on the area, it too was found undesirable.

4.1.5 Proposed Plan

The proposed plan is thought to be the most workable alternative and most reflective of the needs and desires of the residents in the area. It addresses the goals and objectives of the area and also considers the environmental concerns from a solid background of base information.

4.2 Planning Policy Constants

The following land-use planning recommendations are felt to be of great significance to Regional planning regardless of which alternative land-use plan is developed. Any of the strategies leading to a Comprehensive Plan for the Skagit Region should adopt these conclusions and recommendations.

4.2.1 General Recommendations and Conclusions

- 4.2.1.1 Existing agricultural and pasture lands in the floodplain should be protected from encroachment by other land uses.
- 4.2.1.2 The Open Space Taxation Law of 1970 and 1973 are viable and popular land-use control methods within Skagit County and should be retained.
- 4.2.1.3 Existing urban areas should be protected from flooding to a 50 year frequency, either by means of dikes, or by additional upriver storage.
- 4.2.1.4 Future commercial and industrial developments should concentrate in the uplands areas, away from the prime agricultural/pastoral lands and out of the danger of flooding and the seasonal high ground water table.
- 4.2.1.5 Future urban expansion, especially residential, should focus on adjacent upland areas.
- 4.2.1.6 Expansion of city limits within flood hazard areas should not be proposed unless protected from floods to a 50 year flood frequency level.
- 4.2.1.7 The unincorporated upland areas with good physical characteristics are suitable for light residential use. The degree to which these areas are utilized varies with each alternative plan.
- 4.2.1.8 Some unincorporated areas within the floodplain are shown in a particular use category because they presently exist as such. Expansion in some of these areas is not recommended.
- 4.2.1.9 The areas shown as high intensity residential should have all the urban services including sewer systems. The light residential areas should have septic tanks or package plants.
- 4.2.1.10 The county, as well as the various municipalities, should adopt specific design standards for industrial parks.
- 4.2.1.11 New commercial development, especially along major arterials and highways should not be of the "strip" type. Highway commercial uses should be located in "cluster" form at strategic interchanges.
- 4.2.1.12 The county and various municipalities should adopt specific design criteria for commercial districts.
- 4.2.1.13 Five years after the adoption of a Regional Comprehensive Plan, the land zoned for industrial use on the floodplain that has not been utilized for industrial purposes, should be backzoned to its existing use.

4.2.1.14 The Shoreline Master Plan and River Basins Plan will be integrated into this plan at the time of their completion.

4.2.1.15 Planned unit developments could be used to create cluster neighborhoods in new residential areas, if possible.

4.3 Methods used in Plan Analysis

4.3.1 Determining Densities

In computing the areas required for residential use and the subsequent population loads, the following general factors were used:

	<u>High Density</u>	<u>Low Density</u>
Lot Size	.25-1.00 Acre	1-5 Acres
Average Lot Size	.50 Acre	2.5 Acres
Average Family Size	3.2	3.20
Housing Units Per Acre	2.0	.4
Persons Per Acre*	6.4	1.28

*Average Family Size x Units/Acre = Persons/Acre

4.3.2 Community Facilities Planning Constants

4.3.2.1 Plans for new utilities (sewer, water, solid waste) should be coordinated on a regional basis to attain more efficient, equitable, and cheaper levels of service throughout the community.

4.3.2.2 The use of package plant sewage systems should be utilized where possible in the rural areas of the county. Efficient systems at a reasonable price would greatly facilitate residential development in the outlying areas.

4.3.2.3 The Urban Arterial Plans and proposals of the county and the various municipalities are recommended for adoption where they conform to the provisions of the alternative land-use plans. The Urban Arterial networks combined with the existing arterial system provides an excellent circulation pattern for the area.

4.3.2.4 Library service within the county should become coordinated at the regional level to assure a more equitable, cheaper, efficient system throughout the county. This could also be accomplished through a statewide library system. Once these are accomplished, a more comprehensive service plan can be developed.

- 4.3.2.5 The various school districts which have not already prepared a comprehensive plan should do so. These plans, when completed, will be adopted by reference in the Comprehensive Regional Plan for Skagit County.

4.3.3 Policies Used to Develop Alternatives

The land use alternatives project various land use patterns which the Islands area could assume in planning to the year 2000 and beyond. The amount of land shown in each land use classification is greater than the actual projected need in all cases. This was done to prevent the resulting Islands Comprehensive Plan from becoming overly restrictive and hence possible artificially inflating land values.

It is also recognized, however, that overemphasizing the projected need for any one land use category produces a false sense of high valuation for many landowners. This situation might also tend to spread investment resources too thin. This demonstrates the necessity for scaling land-use patterns when developing alternative plans.

6 ISLANDS AREA COMPREHENSIVE PLAN

This section contains the Comprehensive Plan for the Islands Area of Skagit County.

All of the information in the previous sections has been evaluated in the development of this Comprehensive Plan.

This section is composed of the following chapters:

- 6.1) Derivation and Orientation of Plan
- 6.2) Areas Designated for Development
- 6.3) Densities & Intensity of Development
- 6.4) Population Projections
- 6.5) Estimated Plan Costs
- 6.6) Plan Policies

2.4 HOUSING

2.4.1 Orientation

Housing, much like population, is a regional characteristic which can best be evaluated for an entire political subdivision. It is difficult to meaningfully evaluate housing supply and demand characteristics for a concise area because the housing market is fluid.

For this reason, the housing element for the Northwest area must rely on an analysis of housing for the entire Skagit Regional Planning area. Complementing this housing element is the land use analysis preceding this chapter. The combination of land use patterns and housing characteristics provides a sound basis for projecting housing needs and hence, potential land use patterns.

2.4.2 Housing Types

Housing in the Skagit Regional Planning area is composed primarily of detached single family residential structures occupying separate and legally defined parcels of property with a sparse scattering of varying densities of multi-family residential structures. Housing in the planning area occupies larger lots than does housing in the State of Washington or the United States, as would be expected a semi-rural area.

Housing at the national and state level is undergoing a substantially more rapid change than is housing in the area.

The greatest areas of change appear to be in the rate of economic growth and the rate of change of the number of persons per household. This area is not experiencing the same rate of economic growth as the State of Washington or the United States; our economy is expanding at a slower rate of increase than the state or the nation. The number of persons per household for state and nation are decreasing more rapidly than average household size for this area. These two factors have a stabilizing effect on the housing market of the planning area and on the lifestyle of the residents of the area. This stability will allow for a steady and measured improvement in the housing inventory of the study area.

One of the more significant features of dissimilarity between this planning area and the State of Washington is the rate of change of the urban-rural, incorporated-unincorporated population trend. As can be seen in the following chart series, there has been a general expansion of population and housing in both incorporated and unincorporated urban areas in Washington State. However, in this planning area the rate of urban growth is limited. Statewide rural population has remained relatively stable for both incorporated and unincorporated areas, while the rural population in the Skagit area reflects a considerable decrease. The slight growth of urban incorporated areas of this area is due primarily to annexations by existing communities of the fringe area adjacent to communities and the building activity in these areas.

While the population in Skagit County has not expanded significantly in the last decade, the number of occupied housing units has expanded from 15,759 to 17,185, a change of 1,426 more occupied housing units. However, the total number of housing units has only changed by 215 units, from 19,360 in 1960 to 19,575 in 1970. This indicates: 1. a high rate of occupancy and thus greater utilization of the housing resources; 2. a smaller average household size. It can also be assumed that a substantial number of deteriorated and/or delapidated structures have been demolished in the last decade, because approximately 1,100 building permits for new residences have been issued in that period and the total housing supply has increased only by 215 residential units.

2.4.3 Housing Characteristics

On the following pages are tables of housing characteristics, both on a county wide and area level, designated by census divisions and municipalities.

Table #1 is "Housing Characteristics of the Islands Area" which is taken from the census divisions in the area.

Table #2 is a summary of County housing characteristics.

A table of county housing characteristics by census division and municipality is presented on the following page (Table 2.4.3.2).

2.4.4 Housing Characteristics - Conclusions

The significant conclusions which can be drawn from these two summaries of housing characteristics are as follows (with the applicable figures for the Islands area in parentheses).

2.4.3.1 HOUSING CHARACTERISTICS OF THE ISLANDS AREA
By Census Division

Census Division No.	8	9	18	19	Anacortes	Total
1. Total population	284	636	613	1,474	770	10,708
2. Total Housing Units	266	246	301	684	2,860	4,357
3. Total Occupied Units	111	219	195	528	2,653	3,706
4. Occupancy Rate	.417	.891	.647	.772	.979	.741
5. Occupancy Status (Owner) %	72 64.9	142 64.9	166 85.1	412 78.0	2,022 76.2	2,814 73.8
6. Occupancy Status (Renter) %	39 35.1	77 35.1	29 14.8	116 21.9	631 23.7	892 26.7
7. Seasonal & Migrant (Vacant) % Total H.V.	144 54.1	-0- -0-	-0- -0-	2 -0-	1 -0-	147 .003
8. Average Family Size	3.26	3.27	3.11	3.58	3.44	3.33
9. Average Value Unit Owner Occupied	26,440	16,620	21,060	26,920	17,160	21,640
10. Mobile Home Trailer	-0-	5	5	49	28	87
11. Average Monthly Rent Renter Occupied	60	81	78	90	76	385
Occupied Unit by No. Persons/Unit	1	37	35	69	502	673
2	72	112	80	238	950	1,452
3	40	46	19	84	421	610
4	39	59	23	64	421	606
5 & up	31	71	48	73	433	656

2.4.3.2 SHERIFF COUNTY HOUSING CHARACTERISTICS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	MU	A	SW	ES	TOTAL
1. TOTAL POPULATION	1018	1174	1475	2571	983	989	1933	284	636	1040	1725	2249	1337	2269	2029	1103	3238	613	1474	8804	7701	4598	3138	52,351
2. TOTAL HOUSING UNITS	479	465	537	852	20	312	774	266	246	358	564	722	445	1288	714	372	1109	301	684	3267	2860	1775	1159	19,575
3. TOTAL OCCUPIED UNITS	322	377	488	793	14	291	632	111	219	324	550	691	416	673	653	328	1032	195	528	3003	2653	1670	1106	17,165
4. OCCUPANCY RATE (OWNER)	672	910	909	931	700	915	617	417	891	905	975	957	934	923	914	881	931	647	172	944	973	940	955	1,875
5. OCCUPANCY STATUS %	218	283	403	681	0	232	408	72	142	273	433	579	313	528	510	241	814	166	412	2000	2022	1215	759	12,799
6. OCCUPANCY STATUS % (RENTER)	57.7	75.2	82.5	85.9	0.0	79.3	77.3	64.9	64.9	84.2	73.7	83.8	75.2	78.4	78.1	73.4	79.6	85.1	75.0	64.8	76.2	72.8	68.0	74.4% C.U.
7. OCCUPANCY STATUS % (VACANT) % TOTAL H. U. SEASONAL & MIGRANT	104	94	85	112	14	59	144	39	77	51	117	112	103	143	143	87	218	29	116	1083	631	455	347	4,351
8. AVERAGE FAMILY SIZE	3.16	3.25	3.46	3.22	702	2.93	3.51	3.26	3.27	3.12	3.32	3.25	3.15	2.22	3.44	2.10	3.61	3.11	3.58	3.44	3.44	3.61	2.63	3.28
9. AVERAGE VALUE UNIT	10,710	9,590	10,630	16,760	0	15,800	17,660	26,440	16,420	24,820	18,300	20,190	16,430	19,120	21,320	18,420	19,630	21,060	26,920	19,490	17,160	14,460	15,190	17,775
10. MOBILE HOME - TRAILER	7	12	35	62	0	43	36	0	5	21	20	60	36	19	67	5	48	5	49	103	28	35	20	716
11. AVERAGE MONTHLY RENT	53	50	45	68	65	61	72	60	81	85	91	79	71	74	84	75	76	78	90	90	76	69	83	76
1. RENTER OCCUPIED	53	47	75	102	2	42	77	30	37	36	80	77	68	87	105	41	163	35	69	740	502	393	256	3,129
2. AVERAGE MONTHLY RENT	98	139	179	247	5	87	95	51	72	112	155	224	127	202	207	104	344	80	238	374	950	551	380	5,581
3. OCCUPIED UNIT BY NO. PERSONS / UNIT	42	61	75	127	2	44	226	12	40	46	75	113	63	78	100	51	168	19	24	504	421	250	160	2,761
4. OCCUPIED UNIT BY NO. PERSONS / UNIT	45	52	59	143	3	41	197	10	39	59	97	115	62	126	102	47	126	23	64	422	421	222	131	4,006
5. RENTER OCCUPIED	78	78	100	171	2	77	114	8	31	71	112	187	96	180	135	85	229	48	73	443	433	254	179	4,035
6. RENTER OCCUPIED	379	707	71	1,042	88	1,483	90	1,545	90	1,820	91	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820
7. RENTER OCCUPIED	19	245	24	101	8	110	7	110	6.4	110	6.4	110	6.4	110	6.4	110	6.4	110	6.4	110	6.4	110	6.4	110
8. RENTER OCCUPIED	7	20	2	30	2.5	25	1.5	25	36	2.1	36	2.1	36	2.1	42	2	42	3	18	24	36	52	1	342
9. RENTER OCCUPIED	*	2	2	2	16	1.3	46	2.8	1.5	46	17	1.0	1.0	14	1	14	28	2	9	37	44	26	0	276
10. RENTER OCCUPIED	3	30	3	3	1.3	147	136	182	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165	165
11. RENTER OCCUPIED	100	295	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
12. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
13. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
14. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
15. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
16. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
17. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
18. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
19. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
20. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
21. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
22. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
23. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
24. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
25. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
26. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
27. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
28. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
29. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
30. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
31. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
32. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
33. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
34. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
35. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
36. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
37. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
38. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
39. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
40. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
41. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
42. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
43. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
44. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
45. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
46. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
47. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112	112
48. RENTER OCCUPIED	46	108	108	112	112	112	112	112	112	112	112	1												

1. There were 52,381 residents in Skagit County in 1970. (10,708)
2. There were 18,575 dwelling units in Skagit County in 1970. (4,357)
3. 17,185 of the 18,575 dwelling units were occupied. (3,706)
4. The average household size was 3.28 persons per dwelling units. (3.33)
5. The occupancy rate was approximately 88%. (74%)
6. Of the occupied units, 2,814 were owner occupied. (74%)
7. There were 892 rental occupied units, or approximately 26%. (27%)
8. The average value of the owner occupied units was \$17,775. (\$21,640)
9. The average monthly rental was \$76. (\$77)
10. 3,129 (673) dwelling units were occupied by one person.
11. 5,651 (1,452) dwelling units were occupied by two person.
12. 2,761 (610) dwelling units were occupied by three persons.
13. 2,606 (606) dwelling units were occupied by four persons.
14. 4,085 (656) dwelling units were occupied by five or more persons.
15. Of the 19,575 dwelling units, 17,124 (or approximately 89%) were classified as sound.
16. 1,634 dwelling units (or approximately 8%) were classified as deteriorating.
17. 618 dwelling units (or approximately 3%) were classified as dilapidated.
18. There are 716 (87) mobile homes used as dwelling units.
19. It was estimated that 2,257 homes were in need of repairs or remodeling.
20. Within the next 20 years, approximately 2,084 (527) new dwelling units will have to be constructed if:
 - a. The average household size remains stable.
 - b. The projected population rate of 1% annually is achieved.
 - c. A significant economic event doesn't occur in the planning area, or in the adjacent counties.
21. During the last four years the following number and types of subsidized housing has been developed for low income families in Skagit County:

Low Rent Public Housing

May 1971	20 units	family
Jan. 1971	50 units	family
Dec. 1971	60 units	elderly
Jan. 1971	50 units	elderly

residents of this planning area.

3. Residential land uses should not be mixed with incompatible land uses.
4. All urban services should be provided to the residents of the planning area living in middle and high density residential areas.
5. Services of a rural nature should be provided to the residents of the planning area residing in low density areas.
6. The building code should be revised to stimulate either the repairs or eventual demolition of deteriorating housing.
7. Land use policies should continue to be promulgated by local government.
8. Financing of residential development should continue to be controlled by the state and federal government, especially with regard to the amount of available capital and the interest rate at which capital can be expanded.
9. Private enterprise should be encouraged to fulfill the demands of the housing market.
10. Land use regulations should be revised and amended as technology modifies development techniques, so the planning area will benefit from state and federal experiments in residential development.
11. Publically financed housing should continue to be provided for the elderly and for low income families in such a manner that efficiently allows for diversity in housing.

2.4.6 Housing - Demand

It is estimated that the various real estate firms in the Skagit Planning area sold approximately 600 residential dwelling units in 1971. They were predominantly single family residential structures that sold for an average price of \$20,700. The single family units average approximately 1,200 sq. ft. in area. The median home sold in 1971 was approximately three to five years old and was financed with monthly payments of approximately \$160 per month.

The average sales of area real estate sales firms were approximately 18-22 houses per year for the last five years. Whereas each builder constructs an average of 14-16 residences annually, which is approximately 255 residential structures in 1971. Approximately 60% of the new homes built in 1971 were

financed through "235" or "502" Programs. The conventionally financed construction accounted for approximately 102 new residences; this figure corresponds very well with the Building Department estimate of approximately 1,100 new residences constructed in the last decade.

The two primary problems encountered in producing and selling houses mentioned by builders and relators were land use controls and septic problems; the secondary problems are financial and the availability of suitable structures and/or lots.

In 1970 a housing survey was completed by the Skagit County Rural Development Committee to determine:

1. The number of living units in the county.
2. Number of homes needing repair.
3. Projected needs by 1980 based on information contained in the Skagit County Comprehensive Plan and Skagit Regional Sewage, Water and Drainage Facility Plan.

In November of 1973 an update of this study was done to compare what the actual growth has been in comparison to earlier projections. This was done by examining the building permit logs of various agencies. The survey dealt with single family units, farms, apartment units, duplex and four-plex, modular homes and mobile houses that were built or installed between 1971 and November 1973.

The resulting figures show that new construction is increasing more rapidly than growth projection, the major areas of growth are in the rural areas of the county as opposed to urban, and if the growth rate continues, the 1980 housing projection need will be met by 1974. For the Islands area specifically, including the City of Anacortes, figures show the need for 158 units in order to reach the 1980 projected goal (132 of which are in the City of Anacortes).

2.5 LAND OWNERSHIP PATTERNS

2.5.1 Orientation

Like the other chapters of this section on Developmental Characteristics, this chapter on land ownership patterns is to some extent related to the entire Region rather than the more specific Island area. Accordingly, reference must be made to the Regional area, however, the specific analysis of areas overlapping the Island portion of Skagit County have been included in this chapter.

Study of land ownership patterns results in a more precise picture of past, present, and future trends in land development for a study area. Trends in parcelization and ownership were the primary elements under consideration in this chapter on Land Ownership Patterns.

2.5.2 Parcelization and Subdivision

The dividing of a piece of land into separate saleable parcels is a common practice in the field of land development. Although it was beyond the means of this study to amass the amount of data for a complete study of all county land parcels, a sample of 56 randomly selected sections (56 areas of 1 square mile each) throughout the county were taken and studied through the years 1941-1972. This statistical sample was more than adequate to establish trends in parcelization in the study area. It was found that between the years 1941 and 1959 there was an average increase of approximately 3.7 parcels per square mile section. Between 1959 and 1972 this increase was 4.3 parcels per square mile. This demonstrates a reasonably steady increase in the amount of parcelization over the past 20 years. These figures (the number of parcels per square mile section) were then placed on a graph (#1) and compared with population trends and number of housing units for the same time span, Graphs 3, 4, and 5. The corresponding results were then placed together on Graph 6 to show similarities and differences among the trends.

This series of graphs included in this section attempts to demonstrate further the correlations between population, parcelization, and housing unit trends. As can be seen, Graph 1 plots the number of parcels per square mile section against the population figures for 1940, 1960, and 1970.

When the results of this graph are compared with Graph 4, which plots the number of housing units against the same population figures, the trend of parcelization exceeding the number of housing units is more easily seen. Graph 5 compares the number of housing units directly with the amount of parcelization and shows a smaller increase in the amount of speculative subdividing of land.

These graphs show that in Skagit County there has been a steady increase in parcelization of land. Population and the total number of housing units, on the other hand, show signs of leveling off in later years. All of this seems to demonstrate that there is a trend toward more subdivision than is really needed. As slow as parcelization has been, it still has remained on a steadily increasing course.

This presents the people of the county with some problems. There is an increased burden on land-use management. A single piece of land is easier to manage in terms of water, sewer, drainage, roads, and other utilities, not to mention the added expense to assess the taxes on the extra parcels. In the case of platted subdivisions, the developer often initiates the utilities to stimulate the sale of the properties, but sells out before all the utilities are completed. Combined with this is the fact that people often buy land purely for speculative reasons, not intending to live on the land. However, the people that do buy and build a home on the land want to be serviced with the remaining utilities and services. The number of people having actually bought and lived on the land does not make extension of the full package of utilities and services economically feasible. The taxpayer thus absorbs this loss.

More parcelization or subdivision also makes land values rise becoming an economic burden to potential buyers, as well as a tax burden to adjacent land owners. Adjacent land is almost automatically forced into subdivision. Leap frogging of subdivision farther out to take advantage of cheaper land expands cities beyond their economic limit.

Another aspect of over parcelization is the fact that it is substantially harder to acquire a number of parcels for the purpose of aggregating for a special use. This problem is characterized in the public sector by acquisition of land for parks, schools, community centers, and other similar facilities.

2.5.3 Other Elements of Land Ownership

Other elements studies included parcelization and land ownership trends in each geographical/planning area. The state and federal lands of the county are also an important element of this section. An inventory of all public lands in the area was conducted by the Planning Department and is on file.

The question of land values and uses for various areas is important with respect to locational analysis. However, due to budgetary and time restraints, it was not feasible to attempt a specific and precise consideration of this area of emphasis.

2.5.4 Sub-area Analysis

It is important to remember in this area the effects of the 1890 upsurge in the division of property (platting) relative to the expected growth potential for the City of Anacortes and the surrounding environs. Lands were platted at Gibraltar, Fidalgo City, March's Point, on Guemes Island and smaller divisions scattered elsewhere in the Islands area that may have had an effect on resultant parcelization patterns and needs for smaller tracts.

Consideration also has to be given to the physical limitations of the land; steep slopes, rugged terrain, rock outcroppings, and some vertical shoreline frontages.

Outlying Islands

1941-1959

Between 1941-1959 these areas remained similar in reference to land ownership patterns. Parcelization was not widespread with large ownerships in many sections. The exception to this was the beginnings of increasing amounts of small lot ownerships near the shoreline areas of the outlying islands.

1959-1972

During this latter period parcelization steadily increased adjacent to the shoreline areas with the interior portions remaining relatively stable.

March Point

1941-1959

Between these years there was an increase in consolidation of parcels in this area, primarily as the result of vast acreage purchases by the refineries.

1959-1972

The amounts of small parcels further declined during this period due mainly to the consolidation of properties by the refineries.

Swinomish Area

1941-1959

The majority of sections in this area remained quite constant during this period. The lands along the western edge, those adjacent to the shoreline areas, did exhibit a tendency to parcelize during this period.

1959-1972

The parcelization during this period was displayed again along the shoreline areas. This was contrasted to a consolidation of parcels among some areas in the interior portions into larger ownerships.

Fidalgo Proper

1941-1959

The parcelization in this area stayed relatively the same for the interior portions. The major parcelization occurred along the western edge of the island, adjacent to the shoreline areas.

1959-1972

Parcelization increased during this period in both the interior portions and the saltwater shoreline areas. Better access and the desire for small vacation lots were the primary motivations for subdivision during this time.

The City of Anacortes remained a relatively large landowner in this area with large holdings near the Mt. Erie-Whistle Lake area which serves as a watershed area for the City.

2.5.5 State and Federal Lands

Obviously, the large amount of state and federally owned land in Skagit County affects the area in that the government has control of the development of these lands. When one remembers that more than 50% of Skagit County's total land area is under state or federal jurisdiction, how the rest of the land is developed becomes a rather meaningful question. Furthermore, when one accepts the fact that agriculture is a permanent economic base in the planning period of this study and subtract these agricultural lands and

and other previously developed or unsatisfactory areas, and subtracts the state and federal lands from the total area, the amount of land presently available and suitable for development is substantially reduced. In addition to the fact that the county exercises no control over federal lands, the county also receives little or no tax revenues from them. Of course, it can be said that as long as the land is in federal control, it will be protected and maintained. The benefits from the tourism stimulated by such wilderness areas will be a great boost to the county's economy when reasonably and properly developed. Also, the county receives monies from the state on County Trust Land. When this land produces income from logging, the county receives a percentage of the income earned. The remainder is retained by the state as a management fee. This County Trust Land is one of several types of state ownerships. However, this type seems to be the most widespread and beneficial in Skagit County.

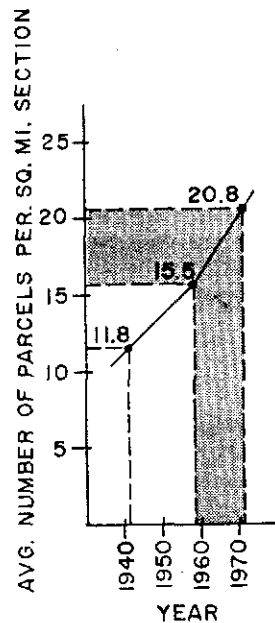
2.5.6 Land Ownership Map

A map depicting the amount and location of these state and federally owned lands has been prepared as a part of this plan.

2.5.7.1 LAND OWNERSHIP PATTERNS

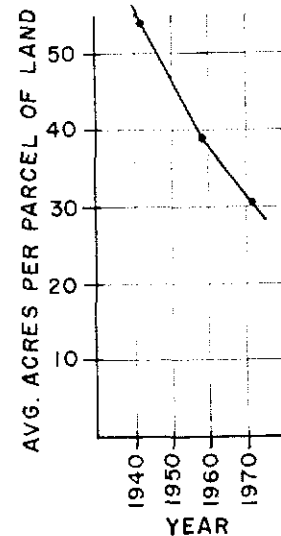
GRAPH 1

THIS GRAPH PLOTS PARCELIZATION OF LAND WITH YEARS. IT SHOWS PARCELIZATION TO BE GREATER IN THE LAST 13 YEAR PERIOD, THAN IT DID IN THE PREVIOUS 18 YEAR PERIOD. THIS WOULD ALSO MEAN THAT AVERAGE PARCEL OR LOT SIZE IS BECOMING SMALLER.



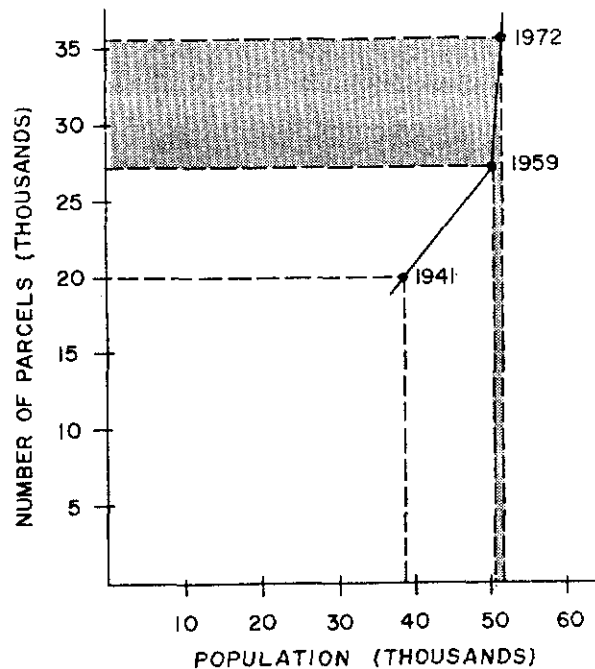
GRAPH 2

THIS GRAPH SHOWS THE DECREASING SIZE OF PARCELS OF LAND THROUGH THE YEARS.



GRAPH 3

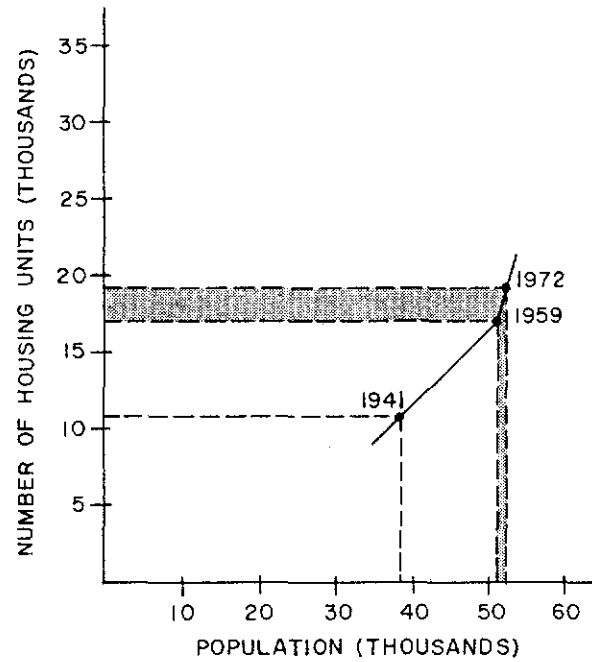
THIS GRAPH PLOTS THE PARCELIZATION, OR NUMBER OF PARCELS IN UNINCORPORATED PORTIONS OF THE COUNTY, AGAINST POPULATION. IT SHOWS A SUBSTANTIAL INCREASE IN SUBDIVISION AND PARCELIZATION RELATIVE TO A RATHER SMALL INCREASE IN POPULATION.



2.5.7.2 LAND OWNERSHIP PATTERNS

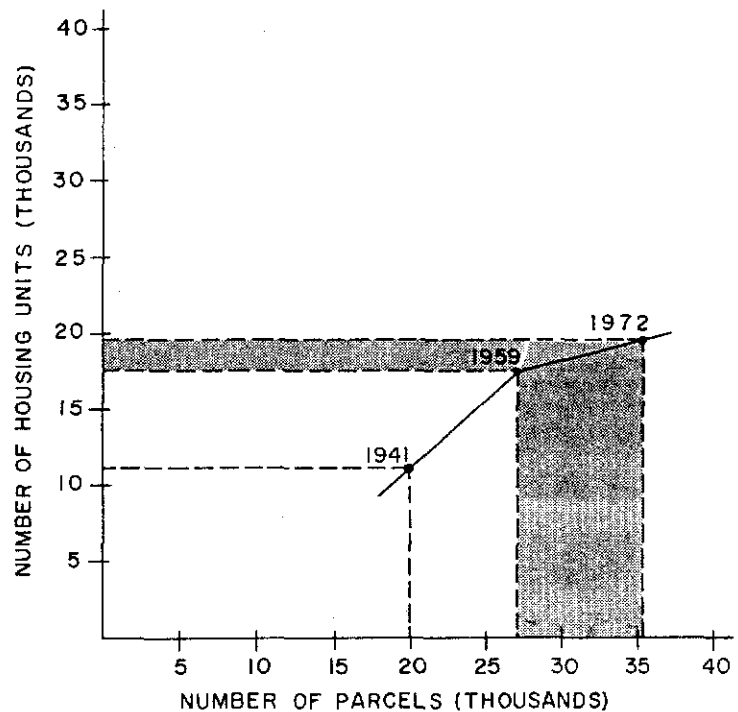
GRAPH 4

THIS GRAPH SHOWS THE NUMBER OF HOUSING UNITS IN THE COUNTY INCREASING AT A GREATER SCALE THAN POPULATION.



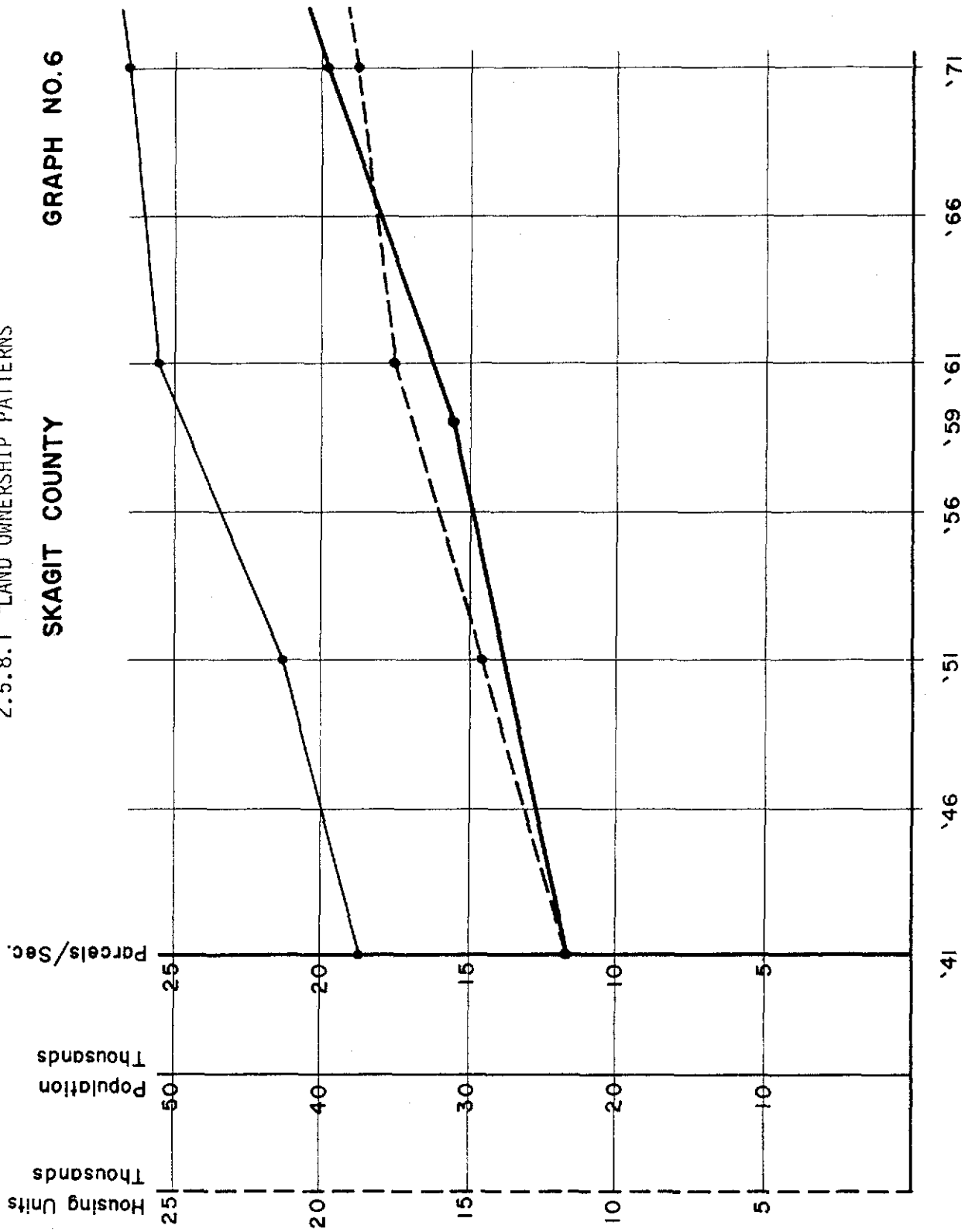
GRAPH 5

THIS GRAPH ILLUSTRATES THE SMALLER INCREASE IN HOUSING RELATIVE TO PARCELIZATION AND SUBDIVISION.



2.5.8.1 LAND OWNERSHIP PATTERNS

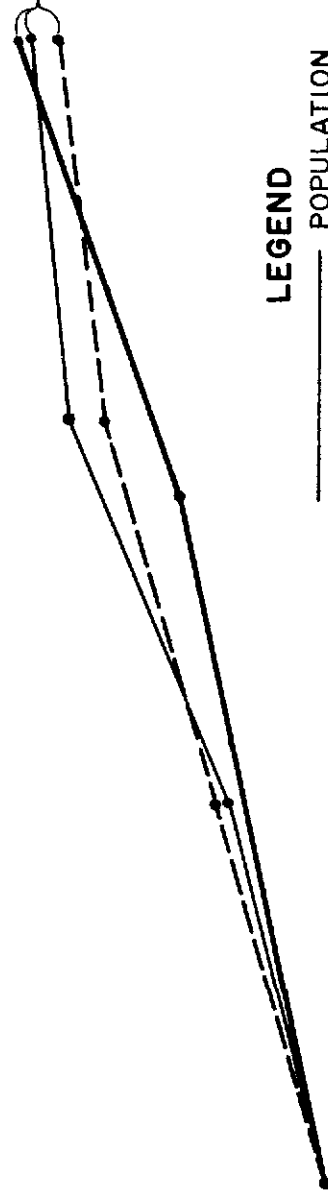
SKAGIT COUNTY GRAPH NO.6



*COMPARISON OF HOUSING UNITS, POPULATION, AND NUMBER OF PARCELS OF LAND/SECTION

POPULATION PARCELIZATION AND NUMBER OF HOUSING UNITS, SKAGIT COUNTY

Increasing Subdivision
& Parcelization Relative
To Population &
Housing Units.



LEGEND

- POPULATION
- NO. OF HOUSING UNITS
- PARCELIZATION

2.6 ECONOMIC BASE ANALYSIS

2.6.1 Orientation

The analysis or evaluation of the economy of the Islands area must be done in relation to Skagit County and the surrounding Northwest Washington Region. To date there has been no economic base analysis made which pertains only to the Islands area.

The economic sources of revenue in the Islands area primarily stem from three areas: 1) oil refineries, 2) sea-food processing, and 3) the wood products industry. Other activities in the area include: recreation, tourism and other commercial and industrial operations primarily in and around the City of Anacortes.

In that economy of this area is tied closely to that of the region, many of the goals, objectives and findings of regional studies are directly applicable to the Islands area. This plan adopts those findings, summaries of which are outlined in this section after a brief overview of the Skagit Regional Planning area.

The diverse elements which comprise the economic base of the Skagit Regional Planning area have been investigated and analysed by a number of organizations and agencies. Some of the reports have dealt with specific aspects of the Skagit economy, while other reports have been oriented toward the general composition of the total regional economy.

2.6.2 Economic Base Analysis Information Sources

A list of these reports, studies, and analysis of Skagit's economy are available from the Skagit County Planning Department.

Most of these studies were done under the auspices or direction of the Skagit County Development Association, while others were done by private corporations or consultants, and are not available for public consumption.

The latest economic studies relating to the Skagit Planning area are as follows:

- I. Skagit County Agriculture: An Economic Mainstay
- II. Skagit County Industrial Site Survey
- III. A Tourist and Recreation Strategy for Skagit County with Recommendations for Implementation
- IV. The Urban Land Institute Report on Skagit County
- V. The North Cascades Highway: A Study of Its Impact on Local Community Economics
- VI. Overall Economic Development Plan (Skagit County, Wash.)

These reports and studies represent the most recent and detailed analysis of the Skagit Regional economic structure. All of these studies, except the Overall Economic Development Plan (Skagit County, Washington), were developed concurrently with the Skagit Regional Comprehensive Plans. The above listed reports deal with the three primary elements of Skagit's regional economic structure: 1) agriculture; 2) industry-commerce, and 3) tourism-recreation. To bring these economic elements together, the Skagit County Development Association, the Washington State Department of Commerce and Economic Development, and the Economic Development Agency of the Federal Government contracted for the services of the Urban Land Institute.

2.6.3 Economic Goals & Objectives

The goals and objectives of all of these reports can be summarized as follows:

- a. Preserve the existing agricultural economic structure of the Skagit area.
- b. Promote compatible diversified industrial development for the Skagit area.
- c. Expand and promote tourism and the recreational attributes of the Skagit and Islands area.
- d. Provide additional flood protection for existing urban areas.
- e. Develop safe and adequate sewer, water, and drainage systems for the Skagit and Island area.
- f. Pursue area-wide planning and economic development.

The Islands area contains adequate land areas to accommodate diverse community and industrial development providing the economic goals and objectives outlined in this analysis are adopted and followed. In the

same vain, these reports stress the need and the desirability of preserving the existing agricultural economic structure of the area. A balance must be reached between the various, diverse land uses. To date, our land areas have been adequate to absorb a variety of land uses without major conflict or incompatibility. However, the various agricultural, community, and industrial organizations and agencies must work together to insure that the wise use and allocation of this land is continued for the benefit of all citizens.

The adequacy of the land areas is an indication of the philosophy of the Skagit Regional Planning Council that diverse and compatible land uses which do not damage existing economic activities are encouraged to locate in the Skagit area.

To further benefit from and continue cooperation with development organizations and agencies, the reports listed are adopted as the economics element of this report. It is the intent of this plan to conform to the majority of the goals and objectives expressed in these reports. The goals and objectives are summarized in tables at the end of this section.

2.6.4 SUMMARY OF ECONOMIC GOALS AND OBJECTIVES

From Skagit County Development
Association Reports

Report No.

- I. Skagit County Agriculture: An Economic Mainstay
- II. Skagit County Industrial Site Survey
- III. A Tourist and Recreation Strategy for Skagit County with
Recommendations for Implementation
- IV. ULI Report on Skagit County
- V. The North Cascades Highway: A Study of Its Impact on Local
Community Economics
- VI. Overall Economic Development Plan (Skagit County, Wash.)

The recommendations of these six reports are summarized on the following pages. This summary is indexed by the number of the report, as indicated above, and the page and paragraph on which the recommendations are more fully described.

2.6.4.1 SUMMARY OF ECONOMIC GOALS AND OBJECTIVES

From Skagit County Agriculture:
An Economic Mainstay

<u>Report Number</u>	<u>Page Number</u>	<u>Paragraph Number</u>	
I	x	1	-- retain agricultural land
I	x	2	-- use agricultural specialists
I	x	3	-- continue agricultural research
I	x	4	-- investigate use of irrigation
I	x	5	-- co-op or lease agricultural equipment
I	x	6	-- use time left to make land resource decisions
I	x	7	-- develop agricultural labor force
I	xi	1	-- work with and cooperate with environ- mental protection agencies
I	xi	3	-- expand hog and broiler chicken industries
I	xi	4	-- expand fresh market capabilities
I	xi	5	-- increase use of commodity commissions

2.6.4.2 SUMMARY OF ECONOMIC GOALS AND OBJECTIVES
From Skagit County Industrial Site Survey

REPORT NUMBER	PAGE NUMBER	PARAGRAPH NUMBER		COST PER ACRE	# OF ACRES
II	7	1	-- Anacortes	NA	180
II	10	1	-- E. Anacortes N. SR 536	\$4,330	400
II	16	1	-- S.E. Anacortes S. SR 536	\$2,866	1,360
II	21	1	-- F.E. Anacortes N. SR 536	\$21,563	900
II	25	1	-- W. Swinomish Channel N. SR 536	\$18,750	40

2.6.4.3 SUMMARY OF ECONOMIC GOALS AND OBJECTIVES
 From A Tourist and Recreation Strategy
 For Skagit County With
 Recommendations for Implementation

<u>Report Number</u>	<u>Page Number</u>	<u>Paragraph Number</u>	
III	13	2	-- identify or develop destination attractions
III	13	2	-- improve attractions, making them more convenient
III	13	2	-- provide tourist services
III	13	2	-- promote attractions and services
III	20	3	-- advertising & promotion program
III	25	4	-- steam railway excursion
III	27	1	-- resort development
III	62	4	-- control location of commercial
III	62	5	-- prevent high-density recreational developments
III	62	6	-- support Wild & Scenic Rivers Act
III	62	7	-- establish park and open space systems
III	63	2	-- develop and lease vacation lots to general public
III	63	3	-- expand motel facilities (mid-river)
III	63	4	-- establish campground near I-5 - SR 20
III	84	3	-- coordinate & develop public & private marinas

2.6.4.4 SUMMARY OF ECONOMIC GOALS AND OBJECTIVES
From Urban Land Institute Report on Skagit County

<u>Report Number</u>	<u>Page Number</u>	<u>Paragraph Number</u>	
IV	16	2	-- classify the river under the wild & Scenic Rivers Act
IV	24	1	-- hold existing employment levels at their present levels
IV	27	1	-- adopt sound land use policies and programs
IV	29	4	-- prevent the decentralization of towns and cities
IV	34	3	-- protect and retain high- quality farm land for agricultural production
IV	36	1	-- preserve the natural beauty of the county
IV	36	1	-- develop new facilities and services to support a tourist, recreation industry
IV	57	1	-- maintain a high-quality living environment
IV	57	2	-- part of the industrial development effort should be devoted to assisting growth in existing local industry

2.6.4.5 SUMMARY OF ECONOMIC GOALS AND OBJECTIVES

From the North Cascades Highway:
A Study of Its Impact on
Local Community Economics

<u>Report Number</u>	<u>Page Number</u>	<u>Paragraph Number</u>	
V	90	4	-- cluster commercial development
V	91	2	-- State of Washington assume leadership & coordination State Parks & Recreation
V	92	5	-- private developer should look long range
V	92	6	-- regulate signs
V	93	1	-- coordinate promotional activities
V	93	2	-- upgrade substandard sections of highway
V	94	2	-- U.S. Park & Forest & State Highway should protect ecology of wilderness area
V	94	3	-- in-park facilities must integrate and be secondary

2.6.4.6 SUMMARY OF ECONOMIC GOALS AND OBJECTIVES
 From Skagit County Overall Economic
 Development Plan

<u>Report Number</u>	<u>Page Number</u>	<u>Paragraph Number</u>	
VI	72	2	-- construct adequate sewer facilities
VI	73	3	-- develop Anacortes Industrial Park & deep water facilities
VI	73	4	-- develop solid waste management plan
VI	74	2	-- continue construction of & improve arterial network
VI	74	4	-- develop Swinomish Salmon Plan
VI	75	2	-- develop Swinomish Boat Marina and Storage Facilities
VI	75	4	-- expand Manpower Training Program
VI	75	6	-- provide adequate housing in Skagit County
VI	76	2	-- continue with development of new crops
VI	76	3	-- research in extending harvest season
VI	76	5	-- prepare comprehensive park, recreation & facilities plan
VI	77	2	-- identify resource & non-resource oriented industrial development (feasibility study)
VI	77	4	-- expand and alter Skagit County Courthouse facilities

2.7 TRANSPORTATION - ROADS AND CIRCULATION

2.7.1 Orientation

Ground elevations vary from near sea level in the Skagit and Samish River agricultural basins to foothills in the far western and central regions of the county, to finally the rugged alpine regions of the Cascade Mountains. In the Islands area and the eastern part of the county, the rolling and mountainous topography has greatly influenced the location and configuration, as well as the construction costs of road development. The flat terrain of the broad agricultural basins has not greatly influenced road location and development since road alignments generally follow along or parallel section lines with no major topographical problems.

Streets and roads provide the main means by which people move about, travel, and ship goods and services. They act to determine where people choose to live, shop, and pursue leisure activities. Certain land uses, whether they are farming or manufacturing, require roads that provide direct and efficient means of transportation. These uses largely influence where and how roads are built. Once established, other land uses such as residential, commercial enterprises and support industries are attracted to and become established along such roadways. Soon more arterials and connectors, as well as road improvements, are needed to meet the needs of the increased traffic. These in turn act as stimuli for further development and thus, demand for increased public expenditures rises.

Roadways and the resultant circulation system must be a critical part of a comprehensive planning effort. In this section, the existing road system will be examined and in other sections land use and development patterns are analyzed. From these analyses future road circulation needs and problems can be identified and means to meet and solve them determined.

2.7.2 Classification of Arterials

The existing road system in the Islands area as well as in the county was recently surveyed and classified by the engineering consulting firm, VTN Washington, Inc. In their study, available at the County Engineer's Office or the Planning Department, proposed road design standards and an arterial classification system are discussed and recommended for adoption. Also included is a priority array to be used as a guide for the development of a six year construction program.

The roads within the study area were extracted from the county priority array and are listed according to priority number with a high priority rating number indicating importance of construction. It is not a rule for a road construction improvement program, but is a guide for scheduling road improvements. Suggestions for improvements are included in the evaluation and are represented by the following:

R - Reconstruction	CR - Complete reconstruction on new alignment
W - Widening	
S - Resurfacing	D - Drainage Improvement
SW - Shoulder Widening	SI - Spot Improvement

Existing roads are classified according to the following arterial designations and their functions:

Primary Arterial - To expedite the movement of through traffic from city or town to city or town with combined populations greater than 500 people. To expedite the movement of through traffic to major traffic generators such as major shopping areas, major commercial and industrial complexes, and major recreational areas. To collect and distribute traffic from freeways, expressways, and other major state highway routes to less important arterial roads, or directly to traffic destinations.

Secondary Arterial - To collect and distribute traffic from higher type arterial highways to less important roads or directly to traffic destinations. To serve secondary traffic generators such as commercial, industrial, and agricultural areas, outlying grouping of residence areas, an important grouping of churches, a recreation facility, a community center and a large hospital.

Collector Arterial - To collect and distribute traffic from higher type arterial highways to access streets, or directly to traffic destinations. To serve traffic within a community, a neighborhood, or commercial and industrial complex. To serve community traffic generators such as small group of stores, a club house, a grange hall, a small hospital and a residential area.

2.7.3 SKAGIT COUNTY ROAD PRIORITY
Priority Rating Summary

ROAD NO.	NAME	SECTION	LENGTH	TERMINI COUNTY ROUTE MILE POSTS	PRIORITY RATING	SUGGESTED IMPROVEMENT
1661	MARCH POINT RD..	1C	2.26	SR 536 TO SOUTH MARCH PT. 3.50 to 5.76	54	W
4001	SNEE-00SH RD.	1	3.79	RESERVATION RD. TO SUNSET DR. 0.00 to 3.79	30	W-SW
4001	SNEE-00SH RD.	2	1.46	SUNSET DR. TO PIONEER PKWY. 3.79 to 5.25	30	-
4200	PIONEER PKWY.	1B	0.30	SNEE-00SH RD. TO LA CONNER C.L. 0.22 to 0.52	30	-
1661	MARCH POINT RD.	1B	1.35	SR 536 to S. MARSH PT. RD. 2.15 to 3.50	29	-
1121	HEARTS LAKE ROAD	1	2.65	ANACORTES C.L. TO CAMPBELL LK. RD. 1.35 to 4.00	27	SW
4200	PIONEER PKWY.	1A	0.22	SNEE-00SH RD. TO LA CONNER C.L. 0.00 to 0.22	25	CR
1091	HAVKOST RD.	1	1.41	MARINE DR. TO ANACORTES C.L. 0.00 to 1.41	23	-
1061	MARINE DRIVE	2B	0.91	HAVKOST RD. TO ROSARIO RD. 3.19 to 4.10	21	SW
1390	CAMPBELL LK. RD.	1	1.51	SR 525 TO HEARTS LAKE RD. 0.00 to 1.51	21	-
1061	MARINE DRIVE	1A	0.38	ANACORTES C.L. TO HAVKOST RD. 1.52 to 1.90	18	SI
1361	GIBRALTER RD.	1C	1.88	SR 525 TO DECEPTION RD. 0.58 to 2.46	18	SI
1466	S. MARCH POINT RD.	1	2.42	SR 536 TO MARCH POINT RD. 0.00 to 2.42	16	W
4021	RESERVATION RD.	1	5.86	SO. MARCH PT. RD. TO PIONEER PKWY. 0.00 to 5.86	16	SW

1661	MARCH POINT RD.	1A	2.15	SR 536 TO S. MARCH POINT RD. 0.00 to 2.15	15	SW
1361	GIBRALTER RD.	1A	0.11	SR 525 TO DECEPTION RD. 0.00 to 0.11	14	SW
1361	GIBRALTER RD.	1B	0.47	SR 525 TO DECEPTION RD. 0.11 to 0.58	14	SW
1031	ROSARIO RD.	1	0.99	HEARTS LAKE RD. TO MARINE DR. 0.00 to 0.99	12	-
1061	MARINE DRIVE	2A	0.19	HAVKOST RD. TO ROSARIO RD. 3.00 to 3.19	12	-
1061	MARINE DRIVE	1B	0.44	ANACORTES C.L. TO HAVKOST RD. 1.90 to 2.34	11	-
1271	DECEPTION RD.	1A	0.56	GIBRALTER RD. TO SR 525 0.00 to 0.56	11	-
1271	DECEPTION RD.	1B	0.50	GIBRALTER RD. TO SR 525 0.56 to 1.06	11	-
1061	MARINE DRIVE	1C	0.45	ANACORTES C.L. TO HAVKOST RD. 2.34 to 2.79	8	-
1361	GIBRALTER RD.	1D	0.60	SR 525 TO DECEPTION RD. 2.46 to 3.06	8	SW
1031	ROSARIO ROAD	2	3.34	MARINE DR. TO SR 525 0.99 to 4.33	7	-
1061	MARINE DRIVE	1D	0.21	ANACORTES C.L. TO HAVKOST RD. 2.79 to 3.00	6	-
1751	W. SHORE DRIVE	1	3.00	EDENS RD. TO GUEMES ISL. RD.	-	-
1841	GUEMES ISL. RD.	1	3.20	S. SHORE DR. TO W. SHORE DR.	-	-
1905	S. SHORE DR.	1	1.40	GUEMES ISL. RD. TO HOLIDAY BLVD.	-	-
1960	EDENS ROAD	1	2.80	W. SHORE DR. TO HOLIDAY BLVD.	-	-

The following is a list of those roads in the Islands area that have been classified based upon the VTN study:

Primary Arterials

- SR 20 (Swinomish Channel to Sharp's Corner)
- SR 20N (Sharp's Corner to Anacortes City Limits)
- SR 20S (Sharp's Corner to County Line)
- Rosario Road (County Line to Marine Drive)
- Havkost Road (Marine Drive to Anacortes City Limits)
- Reservation Road

Secondary Arterials

- Campbell Lake Road

Collector Arterials

- Guemes Island Road
- West Shore Road
- Eden's Road
- South Shore Road
- March Point Road
- Gibraltar Road
- Heart Lake Road
- Deception Road
- Snee-Oosh Road

The existing Federal Aid Secondary (FAS) System and the recommended FAS System for future development funding is depicted on a map in the County Commissioners office. Placing roads under the FAS System enables the County to receive federal aid for improvements and up-grading. In all cases county determines the allocation of such funding, using the monies for priority projects. The degree of intensity of development in certain parts of the county would cause the county to focus these funds on roadways in and around these developing areas. Thus, there is a need for a continuing planning process for road systems based on land use patterns.

- 2.7.4 Bridges play an important role in determining circulation and traffic routing in that their existing condition directly effects the overall roads trafficability; i.e., the loads the bridge can bear without undue stress to its structure. The county is presently pursuing a six year construction program (1975-1981) of replacing many of the wooden bridges with those of concrete materials for longer life and durability. There are no plans for bridge replacement under this program forseen for the Islands area in the near future. The only project listed for the Islands area in the 1975-1981 construction program is the painting of the LaConner bridge scheduled for 1975.

The Swinomish Channel features a new high arching bridge for eastbound traffic on State Route 20 at the northern end of the channel. A similar high arching bridge for the westbound traffic should be investigated. It would eliminate traffic delays for both the westbound travelers and those boating individuals who need the bridge raised, as well as facilitating easier transportation lines for commercial shipping.

2.7.5 FERRY SERVICE

Skaqit County presently operates one ferry that serves the population on Guemes Island. The present ferry size seems inadequate to serve the expected population and the amount of development anticipated. Projected increases in population and development of the offshore islands indicate that other future considerations should be given to: 1) future vessel capacity, and 2) route modifications to include Cypress and Sinclair Islands.

2.8 OPEN SPACE - RECREATION

2.8.1 Orientation

Skagit County has a unique rural environment and even though the county now has an abundance of open space it is the responsibility of the county to plan ahead and save sufficient and meaningful park and open space to fulfill the needs of its citizens.

Tables in the Land Use Analysis Section indicate that the majority of the Islands area land is either agriculture (14%) or forest (72%), both of which can be categorized as open space.

The entire Islands areas are surrounded by saltwater shorelines. There are several large lakes lying on Fidalgo Island that are the main bodies of fresh water in the area.

2.8.2 Goals & Objectives of Open Space - Recreation

The Islands Region cannot be isolated in any discussion of open space or recreational activities. The areas open space and recreational resources attract and are utilized by not only area citizens, but primarily by vacationers and travelers from within and outside the state. The existence of developed recreational facilities, the attractiveness of the saltwater shorelines and the surrounding environs, provide this attraction to the area.

Since recreation has a region-wide impact upon the area's resources, this plan adopts those goals and objectives stated in the Comprehensive Land Use Planning Alternatives that apply to recreation. They are:

1. Locate and define potential recreation areas and outdoor recreation activities.
2. Determine and evaluate the recreation needs of resident and non-resident populations.
3. Preserve and maintain the aesthetic qualities and interesting attractions of the Skagit area.
4. Examine potential outdoor recreation areas as to their:
 - a. feasibility for acquisition and ownership.
 - b. prior history of recreational and/or other activities.
 - c. the need for urgency of acquisition.
 - d. relation to transportation corridors for public access.
5. Develop a trails plan as a subsection of the overall recreation plan.
6. Indicate the need for suitable indoor recreation areas.

7. Provide both urban and rural open space recreation areas.
8. Explore the functional inter-relationships between local, state, and federal recreational programs and coordinate programs whenever possible.

2.8.3 Demand-Supply and Need for Open Space

The following table summarizes the recreation activity needs for the Skagit area to the year 1990. The data included in the table is a refinement of detailed information developed by the Skagit County Planning Department for the Skagit County Parks and Recreation Commission. The detailed information is contained in two volumes: 1. Park Study - Demand, and 2. Park Study - Standards, Needs, Costs. These studies are available for review at the Skagit County Planning Department.

2.8.4 OPEN SPACE - RECREATION SUPPLY AND DEMAND TABLE

Activity	Standard	Demand				Need			
		Supply	1970	1980	1990	1970	1980	1990	
Boating Moorage	.01 acres/unit	10.79 ac.	8.30 ac.	9.52 ac.	10.77 ac.	2.49 ac. (excess)	1.27 ac. (excess)	.02 ac. (excess)	
Boating Trailered	.04 acres/unit	29.32 ac.	33.20 ac.	38.08 ac.	43.08 ac.	3.88 ac.	8.76 ac.	13.76 ac.	
Boating Canoeing	.02 acres/unit	203.83 ac.	7.26 ac.	8.32 ac.	9.42 ac.	196.57 ac. (excess)	193.99 ac. (excess)	191.35 ac. (excess)	
Camping	.14 acres/unit	117.46 ac.	625.80 ac.	861.00 ac.	1,101.66 ac.	508.30 ac.	734.54 ac.	984.20 ac.	
Field Sports	1 field/6,000 pop	32 flds.	8.6 flds.	9.0 ac	10.6 ac.	23.4 ac. (excess)	23.0 ac. (excess)	21.4 ac. (excess)	
General Recreation Playground/parks	1.25 acs/1,000 pop	155 ac.	130 ac.	142 ac.	160 ac.	25 ac. (excess)	3 ac. (excess)	5 ac.	
Golf	144 person/course	3-18 holes 1-9	10.4 ac.	12.0 ac.	13.0 ac.	6 ac.	8 ac.	9 ac.	
Hiking	.05 miles/unit	600 mi.	11.10 mi.	17.10 mi.	23.25 mi.	588 mi. (excess)	582 mi. (excess)	576 mi. (excess)	
Picnicking	.01 acres/unit	18.70 ac.	29.60 ac.	34.00 ac.	38.50 ac.	10.90 ac.	15.3 ac.	19.8 ac.	
Swimming	.02 acres beach/ unit	15 ac.	46.20	60.00 ac.	74.84 ac.	31.20 ac.	45.00 ac.	59.84 ac.	
Winter Sports	30 people/acre	none	27.2 ac.	31.3 ac.	35.4 ac.	27.2 ac.	31.3 ac.	35.4 ac.	

There were four activities that had a high need for creating more facilities; whether to expand existing facilities or to create new ones. These activities were: camping, swimming, golf, and picnicking; with several other activities also having a need to a lesser extent.

For the county, camping, swimming, and picnicking areas should be high on a priority. These activities need could be met with just a minimum of site expansion as these activities are linked to each other. Golfing should not be as great of concern because of the nature of the activity and the people it serves, plus a greater chance of private sector to invest in golf courses.

2.8.5 Inventory of Existing Recreation Facilities

The saltwater, shorelines, and forested park areas are the main attractions for recreational pursuits in the Islands area. Fishing, boating, hiking and other recreational activities are actively pursued by both residents and visitors at the various parks and playgrounds in the area.

There are no Federal parks within the Islands area. The Washington State Park and Recreation Commission maintains that part of Deception Pass State Park that lies in Skagit County on the southern end of Fidalgo Island; also Hope Island, Saddlebag and Dot Islands, Skagit Island and other smaller parcels. The Washington State Game Department maintains several public fishing access points, and other state agencies own property used for recreation in the area. The Skagit County Park Board operates only one facility in the Islands area, that being at Heart Lake. The park system of the City of Anacortes administers approximately 190 acres outside the city limits. The Anacortes school system utilizes approximately 44 acres for playgrounds and athletic fields on school properties.

Under the provisions of Washington's Open Space Tax Law of 1973, the granting authority may impose certain conditions when giving approval to Timber and Open-Space Open Space designated applications. The Planning Commission has considered and recommends approval of these two classifications with the following conditions: The applicant allow reasonable public access for the purpose of recreational activities commensurate with that area, except that the applicant may restrict his land for camping and motor vehicles.

Thus, the public has reasonable access to areas other than parks or private campgrounds for various forms of recreational activities.

2.8.6 Inventory of Potential Outdoor Recreation Areas

The following is a list of potential park sites found in the Islands area. These sites, listed by priority of acquisition and development, were gathered from two separate park studies; Skagit County Potential Park Inventory done in 1971 by the Skagit County Planning Department, and, Skagit County Comprehensive Park and Recreation Plan done in 1973 by Jongejan/Gerrard/Associates Inc, and Lee Johnson & Associates, Inc., both of which are available for reference at the Skagit County Planning Department. The priorities array is only a recommended outline for federal, state and local agencies to follow in order to provide and maintain a well balanced, diversified recreational program.

The priority numbers are a part of the total county priority array illustrated in the Skagit County Potential Park Inventory.

<u>PRIORITY</u>	<u>SIZE</u>	<u>SIZE</u>	<u>ACTIVITIES</u>
3	Bests Lake	25 acres	Picnic, fishing, camping
	Anacortes' Cranberry Lake	400 acres	Camping, hiking, fishing, Picnicking, trails
3	Heart Lake		Fishing, camping, hiking
17	Ika Island Chain	80 acres	Hiking, canoeing
	Kiket Island	100 acres	Camping, picnic, trails
3	Lake Erie (North End)		Picnic, swimming, camping fishing
	Padilla Bay	72 acres	Park, picnic
2	Pass Lake		Hiking, camping, fishing picnicking, boating
3	Shannon Point	15 acres	Picnic, camping, trails
	Similk Beach		Hiking, picnicking
	Turner Bay		Shellfish, picnic
	Weaverling Spit	2 acres	Reststop trails
	Whitmarsh Junction		Boat launch

The Washington State Department of Highways is presently considering designating SR 20 (from the Swinomish Channel to Sharp's Corner; then SR 20 N to Shannon Point, and SR 20 S to Deception Pass) as a part of their bicycle route log. There is a potential need in the near future for a recreational trails study and inventory for Skagit County which would assist in this sort of designation process.

2.8.7 Supplemental Information

The Skagit County Board of Commissioners have recently adopted a county-wide Park Plan, entitled Skagit County Park & Recreation Comprehensive Plan. This Comprehensive Plan supercedes the previous Open Space and Recreation Element of the Skagit County Comprehensive Plan.

2.9 COMMUNITY FACILITIES

2.9.1 Orientation

Previous portions of this plan have dealt with a variety of characteristics which together form the environment of the community. This portion deals with the capital outlays that have been made to make the overall characteristics of the community better suited to the needs of its residents.

Existing public utilities, services, and facilities are delineated here. An inventory of this type is necessary to determine what should be changed or expanded to serve the projected needs of the community.

The Community Facilities portion of this report is composed of the following:

2.9.2) Education Facilities

2.9.3) Personal Services

2.9.4) Sewer, Water, Drainage Facilities

2.9.2 Educational Facilities

The maintenance of a sound school system is not only a benefit to the children of the area, but it is also an asset to the area as a whole. Besides the primary result of supplying a child with the best possible education, there are secondary and tertiary effects of a good school system. The schools tend to unite the community through P.T.A., sports events, school concerts, joint use of school and public facilities, and other activities. The community is also benefited by the increase in the overall education of its present and future members. In this way, the people can be better prepared to determine their own future.

2.9.2.1 Intermediate School District 108

Education in the study area is conducted under the general supervision of Intermediate School District 108 (ISD 108) headquartered in Bellingham. ISD 108 is a four-county organization of school districts, which encompasses the school districts of Whatcom, Skagit, Island, and San Juan Counties. This District has a records keeping function as mandated by state law, acting primarily in the capacity of a coordinating and service agency for the public and private school districts in the four-county North Sound area. Serving the Island area, the Anacortes School District # 103, a first class district, falls within the general supervision of ISD 108.

Finding ways of objectively and accurately examining existing educational facilities is a great problem. Any evaluation of educational facilities, unless conducted by an unbiased expert, will contain biases and weaknesses. It is for this reason that it is up to the people of the Island area and the Anacortes School District to join with their educators in evaluating their own goals and priorities. The following is a brief evaluation of the educational resources of this area.

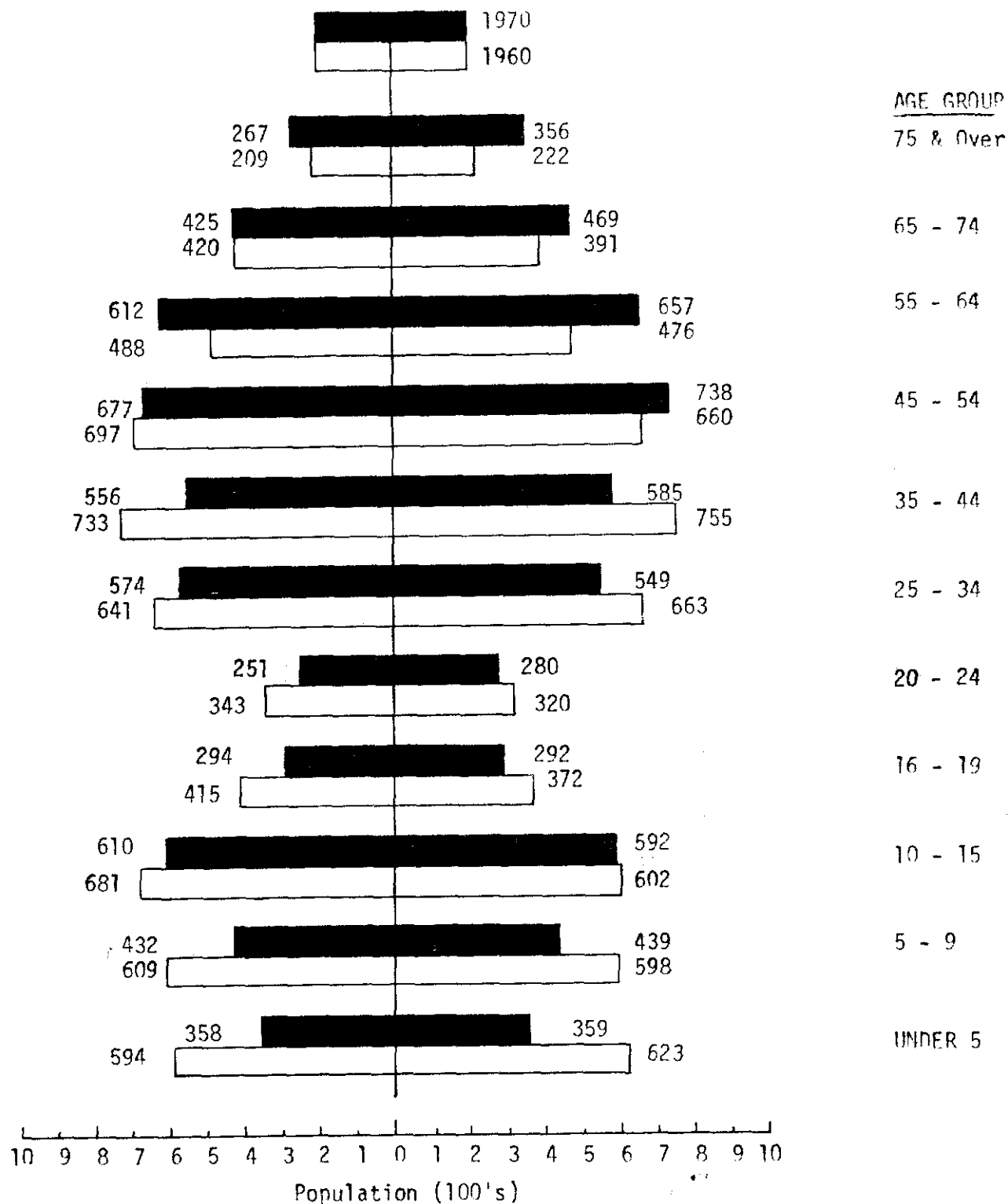
2.9.2.2 Islands Educational Facilities

As noted, the Island area is served by the Anacortes School District # 103 (except for the area on the southern end of the Swinomish Indian Reservation which is served by the La Conner School District # 311).

The total number of students in 1974 was approximately 2,272 with a student teacher ratio of approximately 22 to 1. There are seven schools within the district: six elementary and one high school.

<u>School (Grade)</u>	<u>1974 Enrollment</u>	<u>Sq. Ft./Sq. Ft. Per Pupil</u>	<u>Acreage</u>	<u>Year Built Additions</u>
Island View (K-6)	399	33,152/ 83.09	9.2	1958
Mt. Erie (1-6)	243	21,660/ 89.14	15.7	1955
Whitney (1-3)	188	10,400/ 55.32	3.5	1961
Fidalgo (K-6)	279	40,922/146.67	15.0	1957
Secret Harbor (8-12)	29	4,896/168.83	2.0	1965
Junior High (7-9)	599	70,080/117.0	12.5	1948
Senior High (10-12)	534	68,002/127.34	11.0 59.4 (field)	1931, '55, '59

In 1960 the population of the Anacortes District was approximately 11,150. In 1970 this figure decreased to 10,706. This was a net decrease of 444 of approximately 4%.

AGE - SEX DISTRIBUTION 1960-1970
(Derived from U.S. Census Data)

TOTALS: 1. 1960 = 11,150

2. 1970 = 10,706

3. Number of women of child-bearing years (16-45)
1960 = 2110
1970 = 1706

NOTE: Includes the southern end of the Swinomish Indian Reservation which lies within the La Conner School District.

By examining the age/sex pyramid for the Anacortes District (including the southern portion of the Swinomish Reservation) it can be seen that the number of children under five years of age has declined sharply (41%) in the last decade. The number of children between the ages of five and nine have also decreased. This decrease in the younger age groups (836 children, 34% in the 0-9 year categories between 1960 to 1970) has a significance in terms of the future needs of the district in both enrollment trends and construction projects. As can be seen too, the number of women of childbearing age have also decreased.

These figures, combined with the state's estimations of Skagit County's population growth point to a basic reduction in the growth trend in the district. There may be sporadic increases which cause a slow overall growth rate. This would seem to be the case, providing that no major economic changes affect the district or the County.

The center of attention should be a program to keep pace with adolescence. The high school is the primary target, with construction focus being on reguilding and remodeling. Future remodeling is hoped for the junior high school in the future. All aspects of educational facilities should be examined to determine their relevance to the continuing educational excellence of the district.

2.9.2.3 State Assistance Requirements

The state plays an important role in school district planning because of its assistance in financing projects. Financial capability and capital outlay expenditure is dependent upon bond monies. A ceiling amounting to 20% of the assessed valuation for school bond indebtedness has been established by state law. School districts must be bonded to at least 10% of their 20% capacity to qualify for state assistance in their construction programs. State funds are made available to school districts which qualify by placing them on a "priority of needs" list, which is referred to as the state "Gray Book." This book lists the school districts which are entitled to assistance and the corresponding percentage of state participation that they may expect.

The state standards for financial assistance are based upon a square footage allocation for each unhoused pupil in the school district. The allocation for each unhoused pupil of the school district. The allocation for elementary students is 70 sq. ft. per pupil and the allocation for junior high school students is 90 sq. ft. per pupil. In addition, the state also sets a ceiling for construction costs beyond which they will not participate. The state will participate with the school district in the percentage previously mentioned, up to a total cost per sq. ft. of \$27.11. Thus, any construction costs exceeding \$27.11 per sq. ft. would have to be assumed by the school district.

The formula for state assistance would be:

$$\begin{array}{rcl} \text{A percentage of the number} & 70 \text{ sq. ft./ pupil} & \\ \text{of unhoused students} & \text{or} & \times \$27.11/\text{sq.ft.} \\ & 90 \text{ sq. ft./ pupil} & \end{array}$$

2.9.2.4 Summary

Nearly all public school districts in Skagit County are experiencing a diminishing rate of growth insofar as student population is concerned. This is primarily a reflection of two unrelated events: 1) birth control is overcoming the cyclic effect of the WW II baby boom, and 2) there are relatively few promotional opportunities for young adult families in the planning area. Thus, young career oriented county residents must migrate to urban centers where greater opportunities exist.

This diminished rate of growth is allowing school districts to reduce student per classroom ratios and this reduces the demand for additional classrooms. Nearly all school districts are at 100% of capacity and some of this capacity is housed in substandard facilities which reduce educational opportunities and substantially increase the maintenance cost per student. However, recent voter reluctance to approve levies and the existence of high interest rate of bonds for long range capital acquisition combine to create great difficulties in updating educational facilities.

2.9.3 Personal Services

2.9.3.1 Emergency Services

A revision of the Skagit County Emergency Services Operations Plan was completed in October 1972 by the Skagit County Department of Emergency

Services. Further details involving emergency services may be obtained by consulting the above cited document and the Emergency Services Department.

The emergency services operation plan is primarily used as a guideline to develop a county civil defense network that is prepared for both military attack and natural disasters, as well as to provide for the effective utilization of all available governmental and private resources within the county, both manpower and materials, to minimize the effects of such a disaster. Coordination of the activities of all the organizations and manpower that may be involved in an emergency is a major element of the plan. It would also provide for effective utilization of all resources available from sources outside Skagit County.

Although Federal and State levels of government have responsibilities and controls in an emergency, the Skagit County Department of Emergency Services is the coordinator of all county and city officers and employees, together with those volunteer forces enrolled to aid them during a disaster, and all groups, organizations, and persons who may by agreement or law be charged with the protection of life and property during such an emergency.

Direction and control during a disaster would channel from the governor's office to the County Board of Commissioners.

For the purposes of coordination with the land use plan for the Island Region, this report regards the Emergency Services Operations Plan for Skagit County as the minimum standards for which emergency services should be maintained.

2.9.3.2 Law and Justice

The Northwest Regional Council is a four-county association composed of Skagit, San Juan, Island and Whatcom counties. The primary function of this council is to develop and adopt plans and recommendations to improve law and justice service throughout the region.

The expertise of this council in this detailed and critical area of public service has been utilized in the development of this planning program, therefore, the following summary recommendations and conclusions are used as the basis for the Law and Justice section of this report.

Planning Recommendations

- 1) Full governmental and law enforcement agency participation in the minimum recruitment and training standards of the Washington State Law Enforcement Training Commission will be encouraged. A regional goal will be that by 1973, all law enforcement personnel will have satisfactorily completed a basic training program prescribed by the Washington Law Enforcement Officers Training Commission.
- 2) County and local police jurisdiction will devise "back up" programs to assist all agencies in participating in the minimum standards training program.
- 3) Recruitment programs in high schools, vocational schools, colleges and universities will be undertaken to interest highly motivated and qualified young men and women to pursue law enforcement careers.
- 4) This region strongly recommends that the Washington State Legislature, the Washington State Law and Justice Committee, and the Washington State Law Enforcement Training Commission expand the capacity of the State's basic law enforcement training program so that there are more basic training sessions available for local law enforcement agencies.
- 5) Since crime problems are not confined to city and county boundary lines, there is a need for police planning to be extended and coordinated on a regional basis. This planning could involve an exchange of information and intelligence as to specific criminal investigations, and adequately equipped crime laboratory to serve the region or a limited consolidation of communication systems.
 - a. A Consolidation Jail Plan for the Regional Council has been developed which will have an impact on correctional and law enforcement agencies and facilities. The regional jail concept would handle the sentenced offender and would allow Skagit County facilities the opportunity to handle the pre-adjudicated individuals and provide better care and facilities for those who are held in the present accommodations.
 - b. With the possibility of the construction of a nuclear power plant bringing non-resident construction workers into the County during

the construction period, and that as a direct result, increased burdens being placed upon law enforcement agencies in the county, Puget Power has agreed to make "Construction Impact Payments" to assist law enforcement agencies in meeting these increased burdens.

The Skagit County Sheriff's Department is the largest law enforcement agency in the county (a staff of 30). It has assumed a great deal of responsibility within the county, including almost all of the criminal investigative work. The future development of the Island Region will put more demands on this department, although these demands will vary somewhat according to the pattern and form of development. A more urbanized situation in the Anacortes area would cause the municipal department to grow with the increased population and concentration of development. The Sheriff's Department would also have to increase its personnel to assist the city and to handle the spillover effects of an urbanized situation. A more rural dispersed pattern of development would obviously cause an increase in the demand for direct law enforcement services supplied by the Sheriff's Department.

It is difficult to predict the exact needs of area law enforcement agencies in the future for much of the level of service provided is determined by public sentiment and availability of qualified personnel. Standards pertaining to law enforcement levels for various densities of development also seems to be quite rare, if not non-existent.

The Northwest Regional Council has recently completed a new report entitled, Northwest Regional Council Comprehensive Law and Justice Plan, 1975, that is intended to help the four-county area agencies to: 1) improve the function of the Criminal Justice System and, 2) reduce the incidence of crime in the areas. This plan acts as a supplement to the Law & Justice section of this report.

2.9.3.3 Health Service Delivery

The field of Health Services Delivery is addressed more fully in the documents developed by, and being developed by, the Comprehensive Health Planning Council of Whatcom, Skagit, Island, and San Juan Counties. This Council is a four-county organization of elected officials and interested citizens, as well as health delivery professionals. The Council is partially