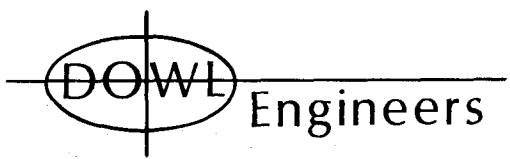
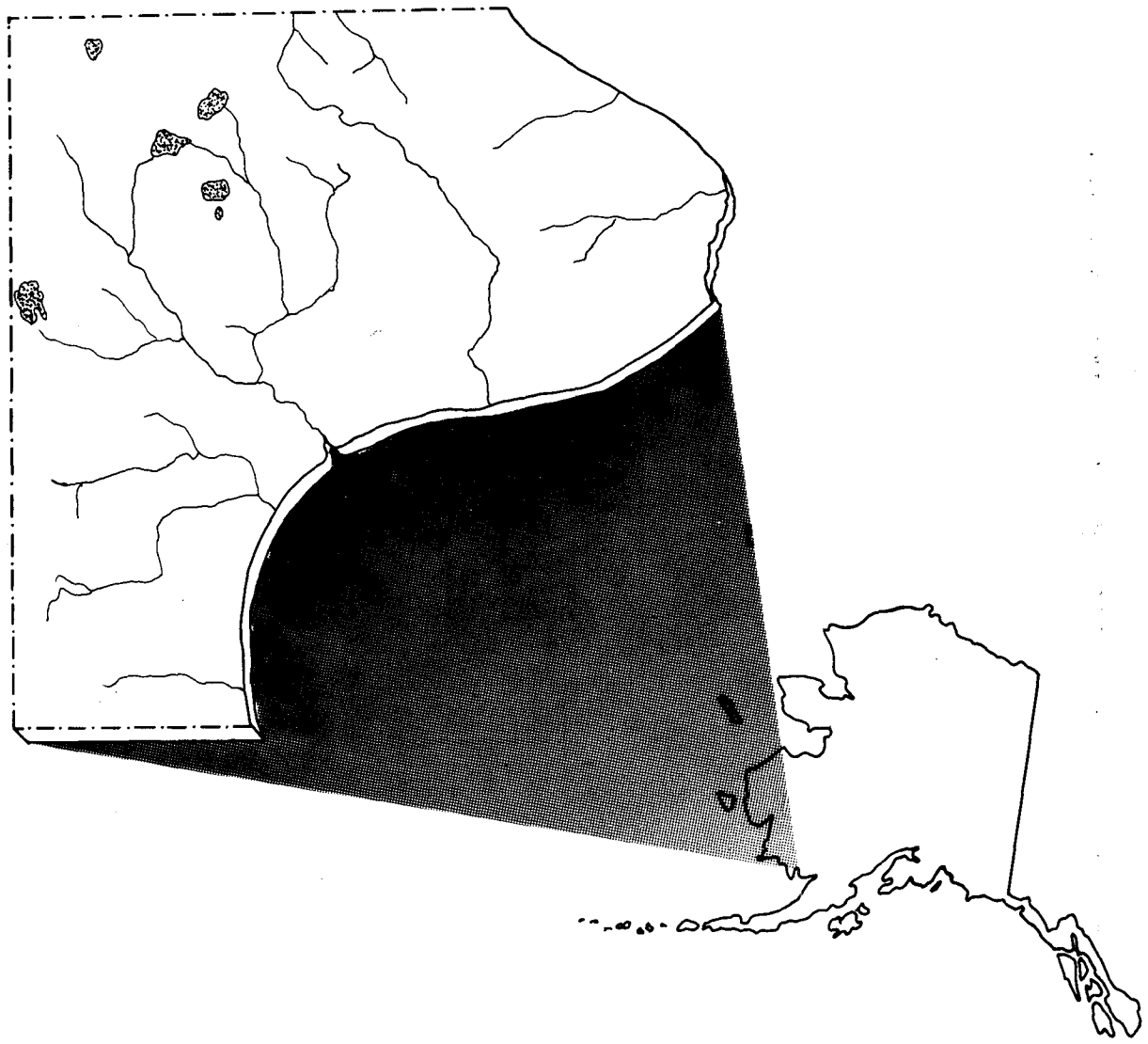


CITY OF DILLINGHAM COMPREHENSIVE PLAN UPDATE

Phase I



November 1981

DILLINGHAM COMPREHENSIVE PLAN UPDATE
PHASE I

Prepared for:
CITY OF DILLINGHAM
Dillingham, Alaska

Prepared by:
DOWL ENGINEERS
Anchorage, Alaska

November 1981

The preparation of this report was financed in part through a Comprehensive Planning Grant from the Department of Housing and Urban Development, under the provisions of Section 701 of the Housing Act of 1954, as amended, and the Division of Community Planning, Department of Community and Regional Affairs of the State of Alaska.

April 15, 1982
W.O. #12973

Ms. Laura Schroeder
City Manager
CITY OF DILLINGHAM
P.O. Box 191
Dillingham, Alaska 99576

Subject: Transmittal - Dillingham Comprehensive Plan Update
Phase I

Dear Ms. Schroeder:

We are pleased to transmit this final copy of Phase I of the Dillingham Comprehensive Plan Update. The graphic and narrative information contained in this study should be of significant value in evaluating both the potential growth of Dillingham and in assisting the City in coping with the day-to-day issues arising from the rapid development occurring in Dillingham.

This Phase I Report is in a unique form. The mapped information has dominated the format of the study. This is indicative of the emphasis placed on updating baseline information. The most convenient and useable way to present the information gathered was in graphic form. The narrative portion of the study provides additional backup information.

We have enjoyed working on this project and look forward to working further with the City of Dillingham in its planning efforts.

Very truly yours,

DOWL ENGINEERS

Gregory L. Jones
Planning Director

GLJ:jbtf22a

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I. INTRODUCTION

A. PURPOSE OF THE STUDY

Dillingham's Comprehensive Plan is intended as a tool to help the public and elected decision makers within the City to address questions and issues concerning the future growth and development of Dillingham. Dillingham is in a unique situation both geographically and historically. It is located strategically within the upper Bristol Bay region, a location that has helped create and reinforce Dillingham's position as a regional center. In this function, Dillingham provides a variety of transportation, communication, economic and governmental services to its own residents and the residents of the 28 villages within the Bristol Bay region. It serves as an employment center, an industrial center and a trading center. Its position within the region is firmly established. The prospects for the future of the community are described by most people who know it in terms like prosperity, growth and opportunities.

From a historical perspective Dillingham is also in a unique position. Bristol Bay has developed over the years into one of the most important fisheries in the entire world. With proper management of the fishing resources it can continue in that capacity. Thus, the impetus for continued economic importance and growth within the region can be assured. The potential for new growth of economic generators is also high. Tourism is becoming an increasing important part of the Dillingham's economy, as transportation links with other parts of the State and the rest of the world become more efficient and more convenient. Dillingham's location near excellent hunting and fishing areas

has allowed it to develop into a popular center for such activities. Recreational facilities have continued to grow and expand along the rivers and lakes surrounding the Dillingham area. The development of the tourism industry can provide important economic opportunities for the residents of Dillingham and the surrounding area. This further reinforces their position as a regional center within the upper Bristol Bay area.

The long-term potential for energy related, industrial and transportation activities looms on Dillingham's horizon as a major issue facing the community. The pure economic benefits from such activities can be significant. The impacts, both negative and positive, on the community can also be significant. A number of major decisions will be made by entities outside Dillingham and by the community itself that will determine the amount of involvement that Dillingham will have in energy development activities. The impacts that the community will feel as a result of those activities could be significant.

The decisions concerning Dillingham that are made both within the community and by outside entities should be based upon knowledge of Dillingham's own self-determined plan for the future. A strong comprehensive plan for Dillingham which expresses its needs, desires and plans for the future will help establish viability of the community in the eyes of decision makers in industry, and government throughout the State.

Dillingham is facing the potential of several years of continued rapid growth and expanded economic activity. One of the most critical times for any community to provide proper planning is during the period of rapid growth. Generally during such times the community spirits are high,

the economy is strong, jobs are plentiful, and activity occurs at a fast pace. However, such rapid growth if unplanned can create a number of social, economic and governmental problems. These include: An overburdening of public services; a short-fall of public facilities; deteriorating and over-utilized transportation systems and undesirable land use and growth trends. These create adverse economic as well as aesthetic conditions. In short, rapid unplanned growth makes public services expensive to provide and can result in a general deterioration of the living environment of the community.

The Comprehensive Plan is not a cure-all. It offers advice and guidance. It does not by its existence predetermine the future of the community. It takes dilligence to make the plan work. The Comprehensive Plan will provide recommendations for decision makers to use in monitoring the development process. In order for those recommendations to be effective they must be based upon sound background information.

As new land uses develop, as economic activities expand, as governmental programs change or as other changes in the elements that make up the character of the community occur, the impacts of those changes on the Comprehensive Plan must be assessed. This should be an on-going process. It will take the time and the attention of the City of Dillingham to make this process work. By keeping the background information up to date and by utilizing the recommendations included in the Comprehensive Plan the goals and objectives of the community can be continually updated and can be expected to be accomplished.

Dillingham's last Comprehensive Plan was prepared in 1971. At the time of publication it was an excellent document.

It set forth the basic goals of the community. It included a variety of information concerning physical, socioeconomic and governmental characteristics of the community. Because of the initial quality of that document, it has served Dillingham well as a planning tool. In reviewing development to date we found a remarkable similarity in the existing community today to that which was predicted as part of that plan.

Much of the information contained in that plan is still current and useable. However, substantial portions of the plan have been outdated by growth and changes within Dillingham. The plan now serves as a basis for new planning activities. Information concerning the geographical setting, the background and history, and basic physical conditions within the community are still accurate. Such economic information concerning population, economy, employment and income, and housing while accurate at the time that report was written have now changed and are in need of updating. Recommendations for future land use, community facilities, and the overall goals and objectives of the community should also be made based upon the updated information.

To accomplish those ends the City has embarked upon this updating process. It is understood that this is a two year process, however, this time schedule may have to be extended if the funding is unavailable and the City's enthusiasm for the project decreases. This report and the information contained herein will act as a supplement to the 1971 plan. It will not totally replace that plan. The final chapter of this report recommends activities that should be accomplished in Phase II of the Comprehensive Plan Update. Upon completion of those activities, Phases I

and II can be combined into a document that that will then totally replace the 1971 plan.

B. METHODOLOGY

For any comprehensive plan to be effective it has to be based upon real life information and the desires and needs of the residents of the community, individually and as a whole. This phase of the Comprehensive Plan Update is intended to provide those things. After an initial organization meeting, with the people involved in the comprehensive planning effort, a meeting was held in Dillingham to discuss the process and products that should develop from this comprehensive planning effort. A key element of this plan was determined to be the Community Attitudes Survey. A survey form was developed by the consultant and reviewed in detail by the Planning Commission and City Council. At the same time that was going on, additional information relative to the baseline data effecting Dillingham was being developed and prepared for mapping.

The Community Attitudes Survey was conducted in the late winter and spring prior to the beginning of fishing season, to ensure the broadest possible representation of the community's residents. A scientific sample method was used as described later. The results of the Community Attitudes Survey was tabulated and cross-referenced and an overview was prepared. (See Appendix A.) The Planning Commission reviewed these in detail and working with the consultants a set of goals and objectives was developed based on the database information being developed and results of the Community Attitudes Survey. Through the summer months these were reviewed several times by the Planning Commission, City Council, and City staff. The staff of the

Alaska Department of Community and Regional Affairs also reviewed the goals and objectives.

At the same time, the mapping information was being developed. The information mapped as part of this Comprehensive Plan Update includes land status, land use, utilities, soils, fish and wildlife habitats, hazard areas, significant views, and archaeological sites. Information was mapped for the entire boundary of the City of Dillingham and on a more detailed scale for the intensively developed areas in the downtown portion of the community. A separate set of maps for each area was prepared.

Additional research was done into population trends and characteristics, housing trends and characteristics, and the economy of the community and region. Information was related to the existing 1971 plan. The majority of this information came from existing sources, however, housing information was updated by the detailed land use information that was prepared for the mapped portion of the plan. Much of the data concerning the population trends and the economy was available from other studies currently being undertaken by other governmental entities. All this information was assimilated, analyzed and included into this report document.

Finally, recommendations were made for continuing the planning process in Phase II. These recommendations are made based upon the data available as part of the existing 1971 Comprehensive Plan, the activities and products resultant from this Phase I update and the needs and desires of the community as expressed in of the Community Attitudes Survey. Recommendations for continuing the planning process include not only activities designed to complete a comprehensive plan document but also steps necessary for the

implementation of the plan and keeping the plan updated on a continuing basis.

The study process described briefly above has resulted in a document that accurately reflects the needs and desires of the community and the situation that exists in Dillingham today. The results of this planning process will allow the community to identify the possibilities available to it or deal with the development that is expected to occur in Dillingham during the planning period.

II. GOALS & OBJECTIVES

A. INTRODUCTION

The foundation of any comprehensive planning effort should be a statement about and by the community concerning the direction that future growth and development should take. A variety of subjects should be addressed. They include: Economy, government, the environment, public facilities and services, land use and transportation. Collectively, they determine the character of the community.

Goals and objectives are the most common format used to express the desires of the community with the respect to the future. The goals presented below generally apply to the community as a whole and are designed to represent methods by which the City of Dillingham can improve the community and its individual components.

The objectives listed with each goal should be viewed as statements of intent. They express the direction in which efforts will be expended in trying to achieve each of the goals. The implementation program that will result from this plan should be based on the objectives that are finally adopted. If those objectives are achieved and if they fairly represent the desires set forth in the goals, then the goals will be implemented.

It should be remembered that the goals and objectives do not represent hard fast rules. They are general guidelines to be used by the community to help determine the direction of their efforts in trying to maintain the overall quality of the community.

B. METHODOLOGY

The development of the goals and objectives was one of the most time consuming element of this phase of the Comprehensive Plan Update. This factor is consistent with the importance of the goals and objectives. The primary basis of the goals and objectives is the Community Attitudes Survey. A sample of the survey is included in the appendix (see Appendix A). This sample survey also indicates the cross tabulation and totals of the survey results.

The Community Attitudes Survey was conducted on a scientific sample basis. A list of residents of Dillingham to be surveyed was taken from City records on a random basis without regard to any specific characteristics of the individuals. We received a 100 percent response (exactly 100 surveys returned). The surveys were conducted by the high school students from Dillingham High School.

A variety of people from all walks of life were surveyed, however, some common traits tended to surface. The typical respondent was a male in his thirties who has lived in Dillingham year-round for more than ten years. The respondent plans to stay in Dillingham indefinitely. There are about four persons in his household. The family obtains part of its living from subsistence activities, most common of which are moose and caribou hunting, followed by fishing, berry picking and gardening. The majority of those respondents live in single-family homes and own the home that they live in.

Most respondents feel that Dillingham is growing at about the right pace or even a little too fast. The majority would not like to see many more people encouraged to live in Dillingham. The majority feel that the maximum popula-

tion should be around 2,000 people (currently 1,700). The things that most residents like best about Dillingham are its small size; the fact that they know their neighbors; and, that they are close to the natural environment. The things they like least are the bad roads, the dust and mud, the lack of commercial services, and the shortage of parks and recreation and cultural facilities.

The Community Attitudes Survey indicates that the majority of the residents would like to see additional development of specific types. These include fishing related industrial development and other marine oriented activities, such as boat repair. The survey indicates a need for more shops and stores, especially clothing and grocery stores, automotive, shoe and hardware stores. The reaction was somewhat mixed toward tourism, but most feel while it probably shouldn't be greatly encouraged, it is compatible with the fishing industry.

There was a strong feeling indicated in the Community Attitudes Survey that qualities of the community that drew people to Dillingham should be preserved. The majority of the people feel that land use should be regulated. They feel that industrial and commercial uses should be concentrated in one or more specified areas and not randomly spread throughout the community. The waterfront should be reserved for water-dependent industries and businesses.

Construction standards should also be regulated in areas where construction might be unsafe or dangerous, such as along the river where erosion has occurred. Flooding and construction in flood prone areas are also concerns that should be addressed through City regulation according to the respondents.

Density is also a matter that should be regulated by the City according to most respondents. Many of those surveyed felt that the homes are too close together in the HUD housing area and in the downtown area. They indicated that, while density should be regulated in these areas and more areas should be added that would allow residential development, they would not like to see the City annex any more land.

There was very little support indicated for development of oil and gas facilities in or near Dillingham. The majority of respondents felt that OCS development is not compatible with the community and should occur as far away as possible for the most part. There was support for the Coastal Management Program from the respondents to the survey. This reflects again the community's commitment to maintain the environmental and lifestyle characteristics unique to Dillingham.

As indicated above, the greatest problem Dillingham residents see is bad roads, dust and mud. They also see a need for theater and auditorium facilities, and a museum. A swimming pool was often mentioned in the survey, as were other active recreation uses such as a bowling alley and parks. The respondents indicate they would be willing to pay to use these facilities.

Based upon the items indicated above and the rest of the detail results of the survey the drafts of the goals and objectives were prepared. These were reviewed by the City staff, Planning Commission, City Council and the Alaska Department of Community & Regional Affairs staff. Public hearings were held and a number of amendments were made to this initial draft.

In its final form this goal and objective document is based upon a primary goal on a series of objectives and policies addressing specific community characteristics, needs and desires. The policies to the extent possible are specific as to projects and scheduling of activities necessary to implement the objectives and the primary goal. This type of approach to goal formulation should be very effective in helping Dillingham respond to the needs and desires of the community and implementing the plan in general. The following is a summary of the primary goal and the objectives and policies adopted as part of this plan. Appendix B is a more detailed listing and explanation of each of the goals and policies with the two years as a reference when necessary.

C. PRIMARY GOAL

TO CREATE AN ATMOSPHERE THAT WILL ENHANCE THE QUALITY OF LIFE, RATHER THAN EMPHASIZE THE QUANTITY OF GROWTH. IMPROVEMENTS SHOULD BE MADE TO ALL OF THE ELEMENTS THAT GIVE THE COMMUNITY ITS CHARACTER. THIS WOULD INCLUDE MAINTAINING GROWTH RATES AT OR BELOW THEIR CURRENT RATE, BROADENING THE ECONOMIC BASE TO ALLOW MORE EMPLOYMENT AND COMMERCIAL SERVICES, IMPROVEMENT OF PUBLIC SERVICES AND TRANSPORTATION FACILITIES, A HIGHER QUALITY OF RESIDENTIAL LAND DEVELOPMENT, AND AN INCREASED EMPHASIS ON PROVISION OF PUBLIC FACILITIES.

1. ECONOMIC OBJECTIVE

ENCOURAGE THE DEVELOPMENT OF A BROAD BASED ECONOMY.

Policies

- a. Encourage growth in marine and fishing oriented industries.
- b. Emphasize Dillingham's role as regional service and commercial center.
- c. Take active role in natural resource development planning to assure no adverse impact on the community.
- d. Help facilitate provision of areas, access, utilities, and stable fuel and power rates for economic generators.
- e. Permit tourism which has no significant adverse impacts.

2. LAND USE OBJECTIVES

DEVELOP A REALISTIC AND RESPONSIVE LAND USE PLAN.

Commercial Land Use Policies

- a. Help facilitate provision of areas for convenience businesses and business services.
- b. Investigate alternative forms of land use regulations to determine which best suits Dillingham (within 2 years).
- c. New commercial development should locate with other commercially developed uses or where there is a demonstrated need, with no adverse impacts.

Residential Land Use Policies

- a. Residential development should concentrate in areas set aside for residential use.
- b. Overall density should follow two guidelines:
 - 1) Maximum one-unit/acre where no sewer exists unless engineered otherwise.
 - 2) Small lots and high density limited to areas where appropriate public utilities and services are available.
- c. Additional areas should be set aside for residential development.
- d. Improvement of public services and discouragement of future intrusions of commercial/industrial.

Industrial Land Use Policies

- a. Locate to minimize conflicts with residential uses. Potential locations for development are the waterfront and the airport.
- b. Transportation routes should avoid minor residential roads.
- c. Support business services which complement industrial uses.

3. TRANSPORTATION OBJECTIVE

MAINTAIN, UPGRADE AND ENHANCE TRANSPORTATION FACILITIES.

Policies

- a. Review internal transportation demands annually to determine the system's adequacy and set priorities for improvement.
- b. Within one year develop streets and highways plan.
- c. Review and update subdivision requirements.
- d. Maximize community input into local and State transportation planning.
- e. Within one year make improvements to small boat harbor.
- f. Promote expansion of small boat harbor to be complete in two years.
- g. Make a number of improvements to airport.

4. RECREATION OBJECTIVE

TO PROVIDE A BROAD CHOICE OF RECREATIONAL OPPORTUNITIES TO ALL SEGMENTS OF THE COMMUNITY AND DEVELOP AND MAINTAIN A NEIGHBORHOOD ORIENTED RECREATION FACILITY AND PROGRAM SYSTEM.

Policies

- a. Develop park plan within two years to include standards, identification of areas and methods of payment.

- b. Find funding methods through local, State and federal sources.
- c. Hazard areas and marginal lands should be used for recreation and open space areas.
- d. Encourage development of museums, theaters and auditoriums.
- e. Enhance youth facilities.
- f. Appoint a citizen advisory park board.

5. GOVERNMENTAL OBJECTIVE

PROVIDE FOR DIRECT CITIZEN PARTICIPATION IN THE PLANNING PROCESS.

Governmental Policies

- a. Appoint citizen advisory boards.
- b. Organize special workshops on applicable topics.
- c. Encourage formulation of neighborhood based planning groups.
- d. Solicit public input on a regular basis.

6. ENVIRONMENTAL OBJECTIVE

TO INSURE THAT THE UNIQUE CHARACTERISTICS OF DILLINGHAM ARE MAINTAINED AND ENHANCED NOW AND IN THE FUTURE.

Environmental Policies

- a. Encourage an understanding of the relationship between human well-being and environmental quality.
- b. Promote the establishment of State and federal policies designed to protect the area surrounding Dillingham.
- c. Encourage activities and development practices that promote retention and reestablishment of vegetation within the community.
- d. Establish a dust control program.

7. PUBLIC SERVICES OBJECTIVE

TAKE ACTIONS TO PROVIDE A BROAD VARIETY OF QUALITY SERVICES WHICH WILL IMPROVE AND ENHANCE THE LIVING ENVIRONMENT.

Public Services Policies

- a. Immediately upgrade roads in Dillingham with local, State and federal funds.
- b. Improve sewer and water systems.
- c. Develop a storm water drainage system.
- d. Upgrade and enhance the law enforcement and fire protection facilities.
- e. Address parking problems in heavily developed areas.

- f. Insure that parks and recreational facilities are provided as soon as possible.
- g. Address dog control within the City.
- h. Encourage development of job training courses.

III. POPULATION

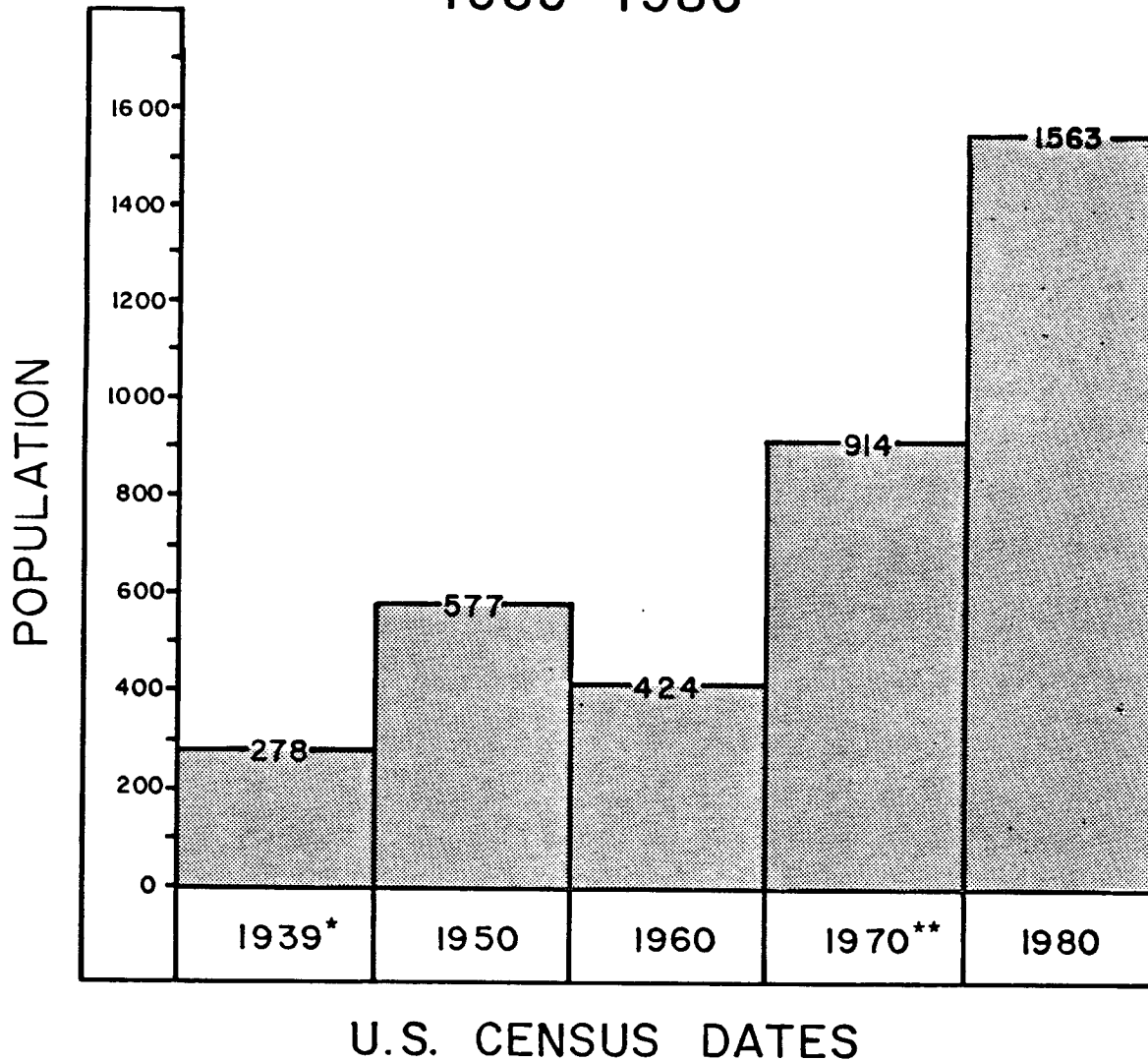
A. PAST TRENDS

Dillingham has witnessed an erratic growth rate during the last four decades. This type of growth makes it difficult to establish an exact growth trend on which to base future population projections. In Dillingham's case, by determining the factors which have had the major influences on the past population growth rates it is possible to analyze the factors themselves and project their influence into the future. (See Figure 1.)

In review, the period between 1939 and 1950 experienced a growth rate of 107.6 percent. This increased the population from 278 to 577. A 26.5 percent decrease in the population between 1950 and 1960 dropped the number of residents from 577 to 424. According to the 1970 U.S. Census, Dillingham grew at a near 12 percent average annual rate between 1960 and 1970. This increased rate of growth raised the resident population from 424 to 914. The decade of the 1970s, which ended with the 1980 census was another high growth period for Dillingham, with a 71.0 percent increase in population. The official 1980 population was 1,563 people.

As stated above, in a case such as Dillingham's, where there is no consistent historical growth trend, it is very important to determine those factors which influenced the growth fluctuations in the past. An analysis of these factors should help in the preparation of a growth projection for the future.

FIGURE 1
POPULATION TRENDS
Dillingham, Alaska
1939-1980



* Census taken in October 1939.

** Includes Kakanak, Nelsonville and Wood River Village which were added to Dillingham upon its incorporation in 1963.

Sources:

U.S. Department of Commerce, Bureau of the Census, January 1981. 1980 Census of Population and Housing, Alaska: Preliminary Reports, (PHC 80-P3)

U.S. Department of Commerce, Bureau of the Census, May 1971. 1970 Census of Population, Number of Inhabitants: Alaska. Washington, D.C., U.S. Government Printing Office, PC(1)-A3.

U.S. Department of Commerce, Bureau of the Census, 1960. United States Census of Population: 1960, Number of Inhabitants Alaska. Washington, D.C., U.S. Government Printing Office, PC(1)-A3.

Alaska Consultants, Inc.

The economy of Dillingham is in large part dependant upon the fishing industry. The decrease in population between 1950 and 1960 appears to be a reflection of a significant decline in the red salmon fishery in Bristol Bay.

The 1970 U.S. Census indicates that Dillingham underwent a major growth and recovery period between 1960 and 1970, however, it appears that much of this growth was on paper only. In 1963 Dillingham incorporated and extended its boundaries to include Kanakanak, Nelsonville and other outlying areas. These areas were not previously included in the Dillingham census figure. The 1971 Comprehensive Plan suggests that the growth rate from 1960 to 1970 was only 17 percent based on an approximate 1960 population of 800 for the now incorporated area.

1970 through 1980 was a true growth period in which the population increased by 71.0 percent. This growth was due to several factors including recovery of the Red Salmon fishery, passage of the Native Claims Settlement Act of 1971, the organizations that were created after passage of the act and the increased importance of Dillingham as a regional service and commerical center.

The Native Claims Settlement Act was passed in 1971. Following its passage new organizations such as the Bristol Bay Native Association, Bristol Bay Area Health Corporation, and the Bristol Bay Area Hospital were created and located in Dillingham. These organizations created new positions for employment and produced a large number of social service contracts. This growth was important in the early 1970s an it continues to be a major factor influencing growth at this time.

The mid to late 1970's witnessed a change in two major growth factors. First of all there has been a significant resurgence in the Red Salmon Fishery which is now equal to record levels for the past 97 years. The second factor is the role which Dillingham plays as a regional government, service, and trade center. Government offices and activities of federal, State and local agencies have been expanded. Commercial and services trade has increased significantly in the last decade. All of these helped influence the recent growth.

B. POPULATION COMPOSITION

Alaska Consultants, Inc. include a fairly detailed review of Dillingham's population composition in their study entitled Baseline Socioeconomic Conditions, North Aleutian Shelf and Navarin Basins Socioeconomic Systems. Their study has indicated a shift in the percentage of Alaska Natives and whites. In 1970 Alaska Natives, primarily Aleut and Eskimos, made up 63.6 percent of Dillingham's population. Whites at that time accounted for 35.6 percent while 1 black and 6 grouped as others made up the final .8 percent of the population.

The 1980 Census still reports Alaska Natives as the predominant group, however, their percentage of the population composition has dropped to 57.0 percent. Whites as an ethnic group increased to 42.2 percent of the population. One black, 4 Asian Pacific, and 7 others again accounted for .8 percent of the population (see Figure 11).

The Composition of Dillingham's population goes through an annual fluctuation during fishing season. The seasonal salmon fishery draws many people from outside the region to Dillingham.

FIGURE 2

COMPOSITION OF POPULATION BY RACE AND SEX
 Dillingham, Alaska
 1970

<u>RACE</u>	<u>SEX</u>		<u>TOTAL</u>	<u>PERCENT OF TOTAL</u>
	<u>MALE</u>	<u>FEMALE</u>		
White	167	158	325	35.6
Negro	0	1	1	0.1
Indian	5	8	13	1.4
Aleut	191	195	386	42.2
Eskimo	96	87	183	20.0
Other	<u>6</u>	<u>0</u>	<u>6</u>	<u>0.7</u>
TOTAL	465	449	914	100.0

COMPOSITION OF POPULATION BY RACE
 Dillingham, Alaska
 1980*

<u>RACE</u>	<u>TOTAL</u>	<u>PERCENT OF TOTAL</u>
Aleut, Eskimo & American Indian	891	57.0
White	660	42.2
Asian Pacific	4	.3
Black	1	.1
Other	<u>7</u>	<u>.4</u>
TOTAL	1563	100.0

* Statistical Analysis is not complete for sex characteristics.

Sources:

University of Alaska, Institute of Social, Economic and Government Research. September 1973. Age and Race by Sex Characteristics of Alaska's Village Population. College. (Alaska Review of Business and Economic Conditions. Vol. X, No. 2.)

Alaska Consultants, Inc.

U.S. Department of Commerce, Bureau of the Census.

The more long-term change indicated by the census is probably due to the increase in governmental, public, and transportation related jobs during the last decade. Many of these positions, teachers, medical staff, police, and airport staff, for example have been filled by whites.

Detailed U.S. Census data covering age and sex composition of the population is not yet available for comparison with 1970 data.

C. POPULATION PROJECTIONS

Because of the lack of a consistent growth trend through the last few decades it is difficult to make a population projection based upon past growth activity within the community. We have identified many of the components effecting the change and thus have attempted to prepare a series of three projections that establish a range within which the community should grow. A minimum and maximum projection will be made on that basis. The third project is a mid-range which is identified as the most likely level of growth that should occur within the community.

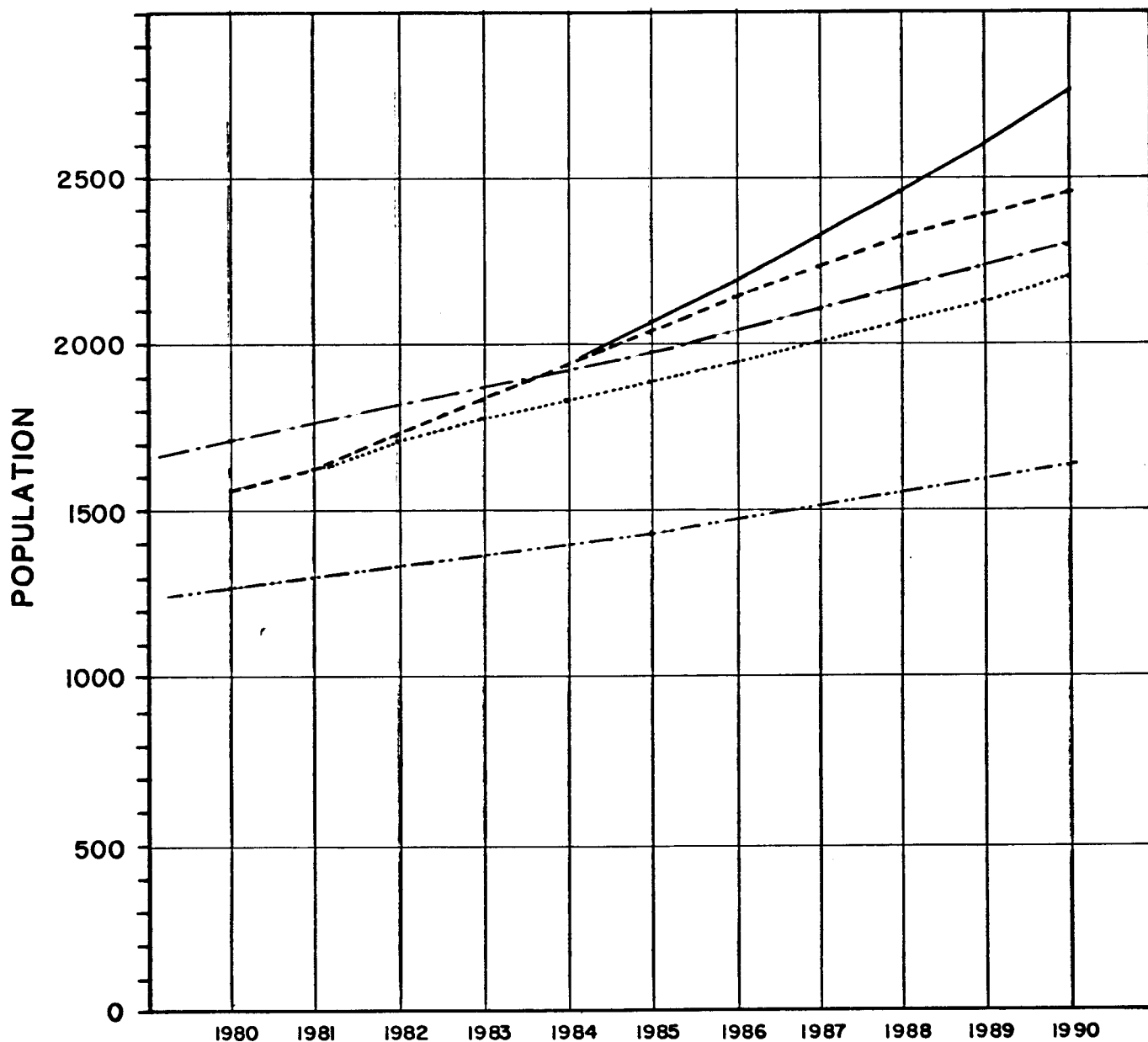
The maximum projected growth was derived from continuing the very high 6 percent annual growth rate that has occurred through the 1970s. The projection envisions a continuation of that rate through the 1990s. As indicated in Figure III, following this growth scenario would result in a population of approximately 2,749 in 1990. The low growth rate scenario assumes an almost immediate slowdown that will stabilize at a 3 percent annual population increase in 1984. The resulting population would be 2,184 in 1990.

FIGURE 3

POPULATION PROJECTIONS

Dillingham , Alaska

1980 - 1990



- 1981 HIGH PROJECTION
- 1981 PREDICTED GROWTH RATE
- 1981 LOW PROJECTION
- . - . - . 1971 COMPREHENSIVE PLAN-PROJECTION
- - - - - 1979 FACILITIES PLAN FOR WASTEWATER DISPOSAL SYSTEM - PROJECTION

A reasonable predicted growth rate for Dillingham is based upon characteristics of both the high and low rate scenario. Historically growth rates change as a previously small community grows rapidly into a regional center and begins to reach economic stability. This is occurring in Dillingham. While the raw numbers of people entering the community throughout the planning period will remain high, the percentage of population increase per year will decrease because of the increased size of the population base. Thus, the predicted growing in Dillingham is indicated as a short-term continuation of a high 6 percent per year growth through 1984. As the population base stabilizes, the per year growth rate will tend to decrease, although large numbers of people will probably continue to move to the community. In the 1985-86 area it is projected that the growth rate will be about 5 percent per year. In 1987-88 a 4 percent growth rate is projected and the growth of the community is expected to stabilize at approximately 3 percent per year in 1989 and 1990. Three percent per year is considered a healthy growth rate for a community the size of Dillingham, one that will insure economic prosperity in the future but still one that can be accommodated if careful planning techniques are utilized. This projection represents an increase of population to 2,451 people by 1990.

It should be noted that this projection differs significantly from the projections indicated in the existing 1971 plan. That plan projected the population in Dillingham of 1,270 people by 1980, and a long-term projection of 1,625 people by 1990. Based upon revenue sharing estimates the community had reached a population in excess of the 1,625 by 1981, because of that we feel that an optimistic growth rate of 3 percent per year is justified for the long-term projection.

As discussed earlier the current high rate of growth reflects the recent increase and apparent recovery of Bristol Bay Red Salmon Fishery. This reflects the dependence of the Dillingham economy and population base upon the fishing industry. The State of Alaska, Department of Fish and Game have indicated that the record level fishery will continue based on the level of escapement they have recorded. The continuance of the good Red Salmon Fishery, the apparent new interest in developing a bottom fish industry, and the increased growth that will be related to increased services and trade within Dillingham as a regional center should maintain the current high growth rate for the initial years in the 1980s. A variety of secondary services should accompany this high growth rate. This is important since residents expressed a desire in the Community Attitudes Survey to have local access to a wider variety of commercial and governmental services.

IV. HOUSING

A. PAST TRENDS

The amount and condition of the housing stock within Dillingham has been a concern of both residents and government in Dillingham for several years. While a detailed housing stock condition survey was not part of the scope of this service a substantial amount of information is available concerning housing problems and trends that have been reviewed and included in this report. The 1971 plan pointed out that in 1970 housing conditions in Dillingham were seriously affecting the welfare of the community. According to a survey done in October 1970 prior to the preparation of the Comprehensive Plan, approximately 30 percent of the total housing units in Dillingham were considered of good construction quality and of adequate space. Fifty-two percent of the housing was deteriorating, although repairable. Almost 20 percent of the housing was delapidated, too costly to repair, and not suitable in many cases for human habitation due to health and safety problems. Since that time the housing situation in Dillingham has improved, although the problem has been by no means solved.

The housing problem in Dillingham is related primarily to the quality of the housing while the quantity of housing is at times inadequate, the physical suitability of the housing stock is a constant and continual problem.

The basic factor affecting the quality of housing in Dillingham is the economy. Dillingham's economy has been focused on the fishing industry. This dependence upon fishing creates a cyclical pattern in the economy on an

annual basis and over a period of years. Both of these cycles, short term and long term, promote an atmosphere of uncertainty which leads to the use of temporary housing structures for permanent housing and a reluctance on the part of individuals, developers and bankers to risk a large investment in quality housing. Associated with the economy is the high cost of building materials in Dillingham. These high material costs tend to limit the amount of new home construction and major repair jobs that are necessary to make some of the structures habitable. The trend in the past has been to make do with the existing buildings, with minor repairs. The lack of an enforceable building code has also contributed to the problem. The construction requirements common in many areas are not present in Dillingham and therefore there is no minimum standards for housing construction.

The stabilization of Dillingham's economy through a diversification of its economic base will help alleviate many of the problems associated with housing. Adoption and enforcement of some type of building code would result in an increase of quality in the basic housing unit and should help maintain a longevity to that quality. Such regulation may also increase the cost of new housing and upgrading. In doing so the quantity of available housing may be affected.

In 1970 the census reported that 266 year-round dwellings existed within the community. The 1980 Census indicates a total of 581 housing units in Dillingham. This represents 119 percent increase over the 1970 figure.

Vacancy rates are also indicated to have increased dramatically between 1970 and 1980. The 1970 Census reported a

vacancy rate of 10.5 percent in Dillingham. The 1980 Census reported a vacancy rate of 19.6 percent.

Both the housing count numbers and the vacancy rate are disputed figures. The City of Dillingham feels that the 1980 figure includes a number of uninhabitable shacks in the total housing unit figures. They also included 50 newly constructed HUD homes, which were at that time under construction and which are now occupied. A recent survey by the City completed August 1981 indicates that there are no housing vacancies in Dillingham. Single family and duplex dwelling units number 348 and multi-family units numbered 50 for a total of 399 housing units within the community.

B. HOUSING PROJECTIONS

Utilizing the population projection for Dillingham of approximately 2,451 people in the year 1990 the projection for required housing units can be made. The population projection indicates in excess of 900 additional people within the next decade. The number of new housing required is calculated by dividing the projected number of new people by a factor which represents the average number of persons per housing unit. The 1980 census and recent housing studies have indicated that average household size in Dillingham has remained fairly constant through the last decade. Household size averages between 3.2 and 3.4 persons per unit. If we assume that this ratio of housing size will continue throughout the planning period we arrive at a projected housing need of 269 to 286 new units by 1990.

The residential land use analysis conducted by Simpson, Usher, Jones, Inc. for the City in 1977 reported that approximately 87 percent of the housing within Dillingham was single family or duplex units. Assuming this trend continues the projected housing need would be met by between 235 and 250 new single family or duplex housing units within the planning period. This represents a 70 percent increase over the current number of similar units. The remaining units will be made up of apartments, multi-family dwellings, and other types of dwelling units such as mobile homes and temporary dwellings.

V. ECONOMY

Historically the fishing industry has been the primary factor affecting the economy of Dillingham and the upper Bristol Bay region. The industry in Dillingham consists both of fishing and fish processing. Since fishing is a highly seasonal activity this has caused a substantial seasonal fluctuation in the economic activities in Dillingham. This has been offset to a certain extent by the role that Dillingham plays as the regional center for the upper Bristol Bay area. The commercial services and goods provided in Dillingham as well as the governmental activities are normally carried out on a year-round basis. This stabilizing influence has served to offset seasonal fluctuations of the fishing industry. Other industries have begun to expand such as tourism and the transportation industry. These industries play a minor role in the overall economic picture of Dillingham. At present however the potential for future growth is significant.

In October 1980 Alaska Consultants, Inc. conducted a detailed survey of employment in Dillingham as part of a study of baseline socioeconomic conditions done for the Bureau of Land Management, Alaska Outer Continental Shelf Office. Figure 4 shows the summary of that survey.

Figure 4 indicates that Dillingham had a total of 828 jobs in 1980. Approximately one-third of these jobs were fishing and fish processing related. Manufacturing, as classified in Figure 4, is almost exclusively fish processing. The fishing related industries are, by far, the major employer within the Dillingham community. In addition, some of the other categories include fishing related jobs including transportation, communications, the trade sector, and public utilities. Based on that, it is probably safe to assume that in excess of 40

FIGURE 4

AVERAGE ANNUAL FULL-TIME EMPLOYMENT
 Dillingham Area
 1980

<u>INDUSTRY CLASSIFICATION</u>	<u>NUMBER OF JOBS</u>	<u>PERCENT OF TOTAL JOBS</u>
Agriculture, Forestry, & Fishing	100	12.1
Mining	0	0
Contract Construction	34	4.1
Manufacturing	155	18.7
Transportation, Communication, & Public Utilities	96	11.6
Trade	101	12.2
Finance, Insurance, & Real Estate	18	2.2
Service	144	17.4
Government	<u>180</u>	<u>21.7</u>
TOTAL	828	100.0

Source:

Alaska Consultants, Inc. October 1980.

percent of all jobs were related to the fishing industry in the Dillingham area.

Dillingham's position as a regional center is reinforced by the high number of jobs within the government sector. The baseline socioeconomic conditions study showed that the federal government was the smallest among the governmental employees with 16 jobs. The State accounted for 44 of the governmental jobs. The local government provided 120 jobs within the community.

Also reinforcing the community's position as a regional center is the high number of service jobs in Dillingham. The majority of those jobs are associated with three employers, the Bristol Bay Area Hospital, the Bristol Bay Native Association and the Bristol Bay Area Health Corporation. As indicated earlier, these organizations sprang up after the passage of the Alaska Native Claims Settlement Act of 1972 and have grown rapidly ever since.

Dillingham serves the region with transportation, communications and trade with almost 200 jobs available in those combined categories. In contrast, the contract construction, finance, insurance and real estate categories show a relatively low number of jobs available (52 combined). As population grows throughout the region and the demand for these types of trade, financial and real estate services increases their role in the region will also increase.

It is difficult to assess the number of people in the workforce in Dillingham. Employment and unemployment statistics are not available specifically for the City of Dillingham. The State of Alaska keeps statistics for the Bristol Bay area without breaking out Dillingham itself. From an occupational skill standpoint information is available on a relative level of workers within various skills by studying the Alaska Department

of Labor and Employment Security Division information from the Dillingham Job Service Office. Figure 5 indicates the number of persons registered in each of the occupational categories utilized by the State at the Dillingham Job Service.

It should be noted that fishermen normally do not use the services of a job service center in seeking fishing employment. Thus, the number of registrants within the farming, fishing and forestry area is fairly low inspite of the fact that a large number of highly skilled fishermen reside within the community. It should also be noted that this figure only represents the number of people who registered at the Job Service area during fiscal year 1980. Those that did not need to seek employment or were not interested in seeking employment would not be included. The figures included in this figure should be used as a comparison only to determine the relative number of workers within each occupational category within the community.

Employment within Dillingham fluctuates with the seasonality of the fishing industry. This is typical of most Alaskan coastal communities that are dependent a large part on fishing as an economic base. The Research and Analysis section of the Alaska Department of Labor has noted that employment in Dillingham varies between 139 percent of the permanent work force during the peak of the fishing season to 75 percent of the permanent work force during the middle of winter (1979, insured employment). Since this data includes only insured employment, it does not include fishermen. Had fishermen been included in those statistics the range would have been much wider.

Because of employment statistics are not available for Dillingham, we must look at the Bristol Bay area as a whole. The State's figures show an annual average unemployment of 7.4 percent compared with a statewide average of 9.6 percent. In 1980, March was the time of peak unemployment in the region at

FIGURE 5

OCCUPATIONAL SKILLS
 DILLINGHAM JOB SERVICE REGISTRANTS
 FY 1980*

<u>OCCUPATIONAL CATEGORY</u>	<u>NUMBER</u>	<u>PERCENT OF TOTAL</u>
Professional/Technical/Managerial	33	12.1
Clerical and Sales	40	14.7
Services	44	16.1
Farming, Fishery, Forestry	30	11.0
Processing	22	8.0
Machine Trades	13	4.8
Benchwork	--	---
Structural Work	51	18.7
Miscellaneous	16	5.9
Unskilled	<u>24</u>	<u>8.8</u>
TOTAL	273	100.0

* Fiscal year ends September 30.

Sources:

Alaska Department of Labor, Employment Security Division, Anchorage.
 Alaska Consultants, Inc.

10.9 percent. During the fishing season the unemployment dropped to 5.1 percent. These figures are somewhat misleading. Alaska Consultants states in the BLM/OCS Baseline Socioeconomics Condition Report, "The unemployment rates of the Bristol Bay labor area are officially lower than those recorded for the State. This is not really the case. Unemployment statistics include only those persons who have registered for employment and who are actually seeking work. In the Bristol Bay area as in most other rural areas of the State, the potential workers do not register because there are no jobs available. For statistical purposes, these people are considered to be outside of the labor force and therefore excluded from State statistics. Thus, "real" unemployment rates for this area would doubtless be significantly higher than statewide averages."

Bare in mind that the above information concerns a region as a whole. Dillingham's economic vitality is growing and the year-round economy is stabilizing due in large part to its increasing importance as a regional center. Because of these factors unemployment in Dillingham is not as prevalent as in the region as a whole.

VI. LAND USE

A. PAST TRENDS

In developing a projection of land use it is important to contrast past land use patterns with existing patterns to help establish land use trends. It is also important to review those critical factors which bring about development and govern where it will occur. Factors incorporated into this analysis include projected growth, housing needs, location of existing roads and utilities, and the suitability of the areas for development.

A number of static characteristics have affected the pattern of Dillingham's development over the years. These include the fishing industry's dependence upon the waterfront, the location of suitable soil for development and the surface and subsurface hydrology of the area.

The present townsite has been inhabited for many years. It was a traditional Eskimo village originally, although Dillingham started becoming a major regional center around the turn of the century when the Arctic Packing Company set up a cannery near Snag Point. By 1910 there were up to 10 fish processing plants operating in the Nushagak Bay area. The community was named Dillingham after William Paul Dillingham. In 1931 the first post office was established in the area.

The 1971 Comprehensive Plan outlined land use within the corporate limits of Dillingham. The primary area of development at that time was the established downtown area. It contained all of the industrial complexes, most of the commercial and public uses, and the concentrated residential

land use. The secondary area of concentrated development was in the Windmill Hill and airport vicinity where there were several commercial, public and multi-family uses. Single family housing was fairly prominent. The remaining development was associated with the Public Health Service Hospital at Kanakanak and a sparse distribution of single family residences along the major roadways.

The land use inventory and analysis of the existing conditions done as part of this study indicate a continuance of the pattern evident in 1971. The location and percentage of uses has remained fairly constant during the last ten years. Commercial, public, and residential uses have all increased in the downtown area. The residential increase is due primarily to the H.U.D. housing project located just north of downtown. Commercial uses have also increased at the airport. The Windmill Hill area has incurred an obvious increase in residential development as have two other areas. The first area is located just west of the airport while the other is along Aleknagik road just northeast of Shannon Lake.

B. PROJECTED DEMANDS

The projected growth for Dillingham is higher in numbers than the last decade, however, the rate of growth will be less. The future land use is expected to follow the existing trend with some minor differences in concentration due primarily to the location of the limited amount of developable land.

Industrial uses are expected to continue to be located in the downtown area along with the principle commercial growth. A limited amount of commercial growth will also

continue at the airport. This growth will probably be related to airport and transportation activities.

Residential growth, as mentioned before is anticipated to increase by 70 percent. The location of these housing units should follow the existing trend. The downtown area may experience some in filling on vacant lots but the majority of development will probably occur outside of this area. Sewer and water lines are currently being installed to serve the Windmill Hill area which will make this area suitable for fairly dense development. The remainder of the new housing should occur in the areas adjacent to the roadways which are suitable for new development. The roads in most cases are located on suitable ground as is apparent on the accompanying overlays.

This pattern may be altered if new roads are extended into suitable areas which at this time are inaccessible. These tracts of land, in many cases, lend themselves towards subdivision development which could concentrate the new housing into several defined areas rather than the more typical random and sparse pattern which occurs along the roadways at this time.

VII. NATURAL FEATURES

A. SOILS SUITABILITY

Soils have inherent characteristics which determine their suitability for development. To analyze these characteristics a matrix has been prepared (see Figure 6). The characteristics used for this analysis include slope, flood potential, drainage, water table and permafrost. Bearing capacity, which is usually an important factor in the evaluation of soils prior to development was not utilized because the data provided by the Soil Conservation Service did not correspond to the required depths of footings for new structures. Soil Conservation Service data is limited to a depth which generally does not exceed 60 inches.

The data used to evaluate each soil type such as degree of slope, depth of water table, presence of permafrost, and susceptibility to flooding was taken directly from the 1965 Dillingham Area Soils Report prepared by the U.S. Department of Agriculture's Soil Conservation Service.

The matrix, which served as the basis for the suitability map was prepared by assigning a value to each characteristic according to the suitability of the soil based on the limitation of that characteristic alone. Limitations of a low magnitude received a higher point scale designation indicating high suitability. Those factors which occur in varying degrees such as slope and depth of water table were split into ranges of limitation. These ranges were assigned appropriate weight values for their high, moderate, low or low minus suitability for development. The total point value of each soil type was then used to determine soils development suitability whether it be high, moderate or low.

FIGURE 6 SOILS MATRIX

Limitations and Suitability
For Development

		SOIL TYPES																	LAND TYPES		
MAP CODE		A1A	A1B	A1C	A1D	Hy	KaA	KaB	KaC	KaD	KaE	NuA	NuB	NuC	SaA	SaB	Gr	Tf	Tm		
Suitability Limitations	SLOPE	●	◐	◑	○	◑	●	◐	◑	○	◑	●	◐	◑	●	◐	●	●	●	●	
	FLOOD POTENTIAL	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	◑	◑	◑		
	DRAINAGE	●	●	●	●	○	●	●	●	●	○*	○*	○*	○	○	○	●	○	◑		
	WATER TABLE	●	●	●	●	○	●	●	●	●	○	●**	●**	○	○	○	○	○	○		
	PERMAFROST	●	●	●	●	◑	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	TOTAL SUITABILITY VALUE	75	72	72	68	31	75	72	72	68	60	61	62	62	61	58	53	46	38		
DEVELOPMENT SUITABILITY		●	●	●	◐	○	●	●	●	◐	○	◐	◐	○	○	○	○	○	○		

LEGEND			
SYMBOL	SUITABILITY VALUE	LEVEL OF SUITABILITY	FINAL SUITABILITY
●	15	High	70-75 pts.
◐	12	Mod.	62-69 pts.
○	8	Low	0-61 pts.
◑	0	Low-	

Data Source: Soils of the Dillingham Area, Alaska; Soil Conservation Service, United States Department of Agriculture, 1965

* MODERATE DRAINAGE IS IMPAIRED BY ICE INTO LATE SUMMER.
 ** HIGH WATER TABLE CAN BE MODIFIED BY DRAINAGE ON THE SLOPES.

The soils development suitability map was prepared by taking the designation from the matrix and displaying each outlined soil type according to that designation of high, moderate or low suitability for development.

Explanations for these soil characteristics and their importance in determining suitability were detailed fairly well in the 1971 Dillingham Comprehensive Plan. To reduce repetition, they were not included in this report.

Soil suitability is a very important factor for consideration in the planning process. Together with the location of hazard areas such as flood plains, it is probably the single most governing factor for the location of future growth in the Dillingham area.

The characteristics which determine soil suitability are also those which contribute heavily to the cost of development. In many cases factors such as poor drainage, high water table, severe slope, potential flooding, and permafrost may even preclude development in an area.

The 1971 Comprehensive Plan identifies many of the problems that marginal soils pose to typical community development. It is clear that without sewers, development should be limited to those areas that can support the safe operation of a traditional septic tank and drainfield system. Septic tank disposal systems are hampered by poor drainage, high water tables, moderate to severe slopes, and permafrost. Roads, another functional part of urban development are not as restricted by marginal soils, however, development of roads on poor soils may be prohibited by the increased cost of construction related to those soils.

Future growth in Dillingham should be encouraged to concentrate in the areas characterized by the soils identified in this report as highly or moderately suitable for development. It should be these areas that the roads and utilities extend through and to as growth occurs.

The limited amount of suitable area for development combined with the complex physical positioning of these areas makes comprehensive planning essential to the continuation of Dillingham's quality of life.

B. NATURAL HAZARDS

Natural hazards are major considerations for future planning and in many cases may be limiting factors for development. This Comprehensive Plan covers two such hazards which effect Dillingham, beach erosion and flooding.

The beach erosion hazard area was determined to be essentially the same as reported in the earlier plan so its boundaries remain the same. This topic certainly warrants more investigation based on reports that areas of the shoreline are receding at a rate of 2 to 10 feet per year.

The 100 year flood plain represents that area that will be effected by a flood which has the probability of occurring once every 100 years. The 100 year flood plain depicted in this update of the Comprehensive Plan reflects the most current information available which is the Flood Insurance Study (preliminary) prepared by the Federal Emergency Management Agency. The final report has not been published as yet but authorities at FEMA indicated that no major changes are foreseen prior to publishing.

The report is very good in its explanation of the flooding experienced in Dillingham and should be referenced for further information.

The tsunami warning station in Palmer, Alaska indicated that Dillingham was not in an area prone to tsunamis and was not on their list of hazard areas.

It is important to emphasize at this point that natural hazards as well as soil suitability are limiting factors on development and both should be considered to determine the suitability of any one site for development. The soil suitability overlay and natural hazards overlay can be put together as a composite to evaluate development suitability.

C. FISH AND WILDLIFE

Anadromous and Freshwater Fish

In the summer, the Nushagak River, Wood River, other smaller streams, and associated lakes in the Dillingham area support prolific runs of all five species of Pacific salmon. Of the five species, sockeye or red salmon are the most abundant, and are of significant commercial importance for Bristol Bay area fishermen. Spawning sockeye lay their eggs in the numerous freshwater streams and lakes during late summer/early autumn. The eggs develop in the gravel stream bottom, then the sockeye fry will move into the lakes where they will spend from one to three years. Out migration occurs in spring, between mid-May and mid-July. The sockeye spend between one and four years in salt water before returning to their freshwater systems to spawn and die.

King (chinook), coho (silver), chum (dog) and pink (humpy) salmon all have similar life histories as the sockeye, although the timing of spawning and migration vary between species. Commercially significant king salmon runs occur in the Nushagak River System commencing in early June and continuing through early July. Coho (silver) salmon are also abundant in the Nushagak River system, while chum and pink salmon are present in lesser numbers.

Other anadromous fish found in the Nushagak and Wood River drainage systems include the Arctic char, steelhead trout, and burbot. Freshwater fish are also abundant in the numerous streams and lakes. Northern pike, whitefish, grayling, lake trout and rainbow trout are all found in the freshwater streams and lakes.

Small Mammals

The Dillingham area supports a large and diverse small mammal population. The region sustains red fox, ground squirrel, weasels, mink, land otter, porcupine, shrew, lemming, and red-backed and tundra vole. All of these mammals make use of the coastal zone, beaches and wet tundra. The fox scavenge the beaches for carrion, birds, eggs and chicks. In addition muskrat, and, of particular interest, beaver are found in this region. They inhabit the protected vegetated wetlands bordering salt marshes, streams and lakes.

Large Mammals

The undeveloped areas surrounding Dillingham support several species of large mammals. Wolves do not occur in large numbers but range throughout the region. Brown bear are less abundant than on the Alaska Peninsula. They re-

main in the higher elevation hills to the north of Dillingham in the spring and move down to the lowlands in mid-June.

The late summer salmon runs provide a prime source of fish, then in early autumn their diet shifts to fruits and berries.

Moose are found in moderate numbers in the region. During the spring and summer the moose are scattered throughout the region, primarily in the higher elevations. During fall and winter the moose move to lower elevations in search of food sources, such as willow, aspen and birch.

Coastal/Marine Fauna

Marine and coastal resources in the Dillingham area are abundant, however species diversity is relatively low. The intertidal beaches support polychaetes, softshell clams, cockles and razor clams. Common subtidal invertebrates include sea anemones, sea urchins, sea cucumbers, tunicates, basket stars, hermit crabs, sponges and abundant starfish. Marine fish, such as the boreal smelt and capelin spawn along the shore of Nushagak Bay and in the Nushagak River.

Avian Fauna

Avian fauna are abundant in the Dillingham area. The marine waters of Nushagak Bay support thousands of seabirds, including slender-billed shearwaters, common murrelets, glaucous-winged gulls and black-legged kittiwakes. Horned and tufted puffins, Kittlitz's murrelets, arctic terns, parasitic jaegers, and pomarine jaegers are common in summer months.

Coastal birds and passerine are also abundant, and their distribution is dependent on vegetation types. Yellow warblers, Wilson's warblers, common redpolls, fox sparrows and golden-crowned sparrows nest in the willow and alder brush thickets. Pine grosbeaks and winter srens are found in the spruce hardwood forested areas, bank swallows nest in the banks along the coastline of the Nushagak and Wood Rivers, and parasitic jaegers are common in the tundra regions bordering the area. Magpies and ravens are also common and nest throughout the area.

The bald eagle is a summer resident of the Dillingham area and can be found nesting in the tops of trees or preying upon seabirds, ground squirrels, and some fish and invertebrates. Willow ptarmigan, rock ptarmigan and spruce grouse are all permanent residents of the Dillingham area. Willow ptarmigan nest inland in the higher hills in the summer. Spruce grouse can be found in the forested undeveloped regions.

The Nushagak and Wood Rivers, associated mud flats and wetlands areas provide essential habitat for waterfowl and shorebirds during their spring and fall migrations. Peak migrations occur during the first week of May, however migration is determined by the severity of winter, favorable winds and ice melt. Five species of geese, whistling swans, and sandhill cranes can be found utilizing the area. Common scoeters and scaup are the most abundant waterfowl, and red-throated loons and red-breasted mergansers are also common. Shorebirds found within the area include plovers, short-billed dowitcher, black turnstones, least sandpipers, lesser yellow-legs, snipe and northern phalaropes.

Most of the abundant shorebirds, seabirds and coastal birds leave the area in winter. The extent of ice cover deter-

mines when and how many birds leave the area. During mild winter/light ice cover, some kind eiders, scoters, emperor geese and other waterfowl overwinter in the area. Sea-birds, however, become totally pelagic in the winter and move offshore to open water. Pine grosbeaks, common redpolls, and water ouzels remain in the region during the winter. The pine grosbeak feeds on birds and fruits of plants within the spruce forests; the common redpoll obtains its winter food supply from seeds on birch and alder trees; and the water ouzel lives in rapidly moving open water and feeds on aquatic organisms.

D. HISTORICAL AND ARCHAEOLOGICAL SITES

There are nine recorded archaeological and/or historical sites in Dillingham. The sites, which are on file with the State of Alaska Historic Preservation Office represent historic and prehistoric settlements, historic buildings, early aircraft, old boats of historic significance, and an early cannery. The recent passage of the Historic and Archaeologic Preservation Act (1979) has restricted the release of detailed site locations in public documents in order to protect the valuable cultural artifacts from vandalism and destruction. Because of this, site locations have been generalized on the Comprehensive Plan Update map. The generalized circles indicating the locations have been randomly placed over the sites so that the center of the circle does not necessarily represent the exact site. When a proposed project is located in or in close proximity to a circle identifying historic or archaeological site the State Historical Preservation Officer should be contacted. In some instances, it may be necessary to obtain written clearance from the SHPO prior to actual site development.

VIII. RECOMMENDATIONS OF WORK STEPS TO COMPLETE PHASE II

The scope of this report was limited to updating certain specified information relative to Dillingham's Comprehensive Plan (see Appendix C). The information contained herein and on the attached maps serve as a basis for completing a new comprehensive plan for Dillingham. It is understood that the City will attempt to finish this update within the next year. In the interim this information can be combined with the 1971 Comprehensive Plan and serve adequately as a planning tool.

A number of steps need to be taken to complete this update process. In general the comprehensive planning process involves a determination of where the community is at the beginning of the planning effort (inventory), and where the community would like to go in terms of its future development (goals and objectives). The plan elements provide strategies, methods and implementation measures to get from here to there. The following is a listing and discription of the tasks that are recommended for completion of Phase II.

A. INFORMATION ASSIMILATION

As indicated earlier, a number of studies are being done currently that should provide inventory information and policy information that could affect Dillingham in the future. These studies include the BLM/OCS Socioeconomic Baseline Studies, the Upper Bristol Bay Management Study being conducted by the State and federal government. A number of smaller but still significant studies are underway concerning a variety of subjects including the usage of peat for fuel, and fish and wildlife harvest forecasts. This information needs to be gathered, analyzed, and assimilated into baseline information and policy recommendations.

With the synthesis of that information, Phase II will then have three basic sources of information policies with which to work: 1) The synthesis of on-going studies; 2) the products of this Phase I report, and 3) the City's existing Comprehensive Plan and utility plans. The combination of data and policies from these three sources into the final Comprehensive Plan document at the end of Phase II will represent an overall comprehensive planning approach for Dillingham.

B. LAND USE MAPS

The next step in the mapping for the Dillingham plan should be preparation of future land use plans. The information contained in this Phase I report should provide all of the data necessary to make the final decisions concerning the future land use recommendations in Dillingham. The decisions should be made based on a combination of physical and socioeconomic data. These include soils suitability, hazards, fish and wildlife habitat, and scenic view basins, along with the socioeconomic information included on the land status, land use and utilities maps. This information will determine the lands available and appropriate for development. The final land use map should be heavily influenced by the goals and objectives included herein to insure that the future land use in Dillingham is responsive to the expressed needs and desires of the community residents.

C. HOUSING STRATEGIES

Housing has been identified throughout the years as one of the major problems facing the Dillingham community. It was

expressed as a problem in the 1971 Comprehensive Plan. It was identified again as a problem in planning studies done by DCRA by the Department of Community and Regional Affairs in 1975. It was again pointed out in the 1977 Residential Land Analysis. Finally, a Community Attitudes Survey conducted as part of this phase as part of the Comprehensive Plan update again emphasized the need for improving the housing conditions in Dillingham.

A substantial amount of time and effort needs to be expended by the community in developing a housing strategy to help improve existing housing conditions and to insure that future housing development is adequate in terms of numbers and type to meet the demands of this rapidly growing community. As long as Dillingham remains a vital and important regional center for the upper Bristol Bay region the demand for housing within the community will increase. If adequate housing is not available there will continue to be a tendency to utilize unhealthy and unsafe structures for residential purposes. This can be combated through positive steps by the City, State, and private sector to improve the existing housing stock and establish goals and strategies to develop new housing within the community. This should include recognition that the private sector will have to play a major role in improvement of existing housing and development of new housing, the plan should address possible methods of encouraging private sector housing activity as well as investigating housing sources within the public sector. This should be a major element of Phase II of the Comprehensive Plan.

D. PUBLIC FACILITIES AND SERVICES PLAN

An area that was consistently identified in the Community Attitudes Survey and Public Input program as being in need of additional attention and upgrading was the provision of public services and facilities by governmental units in the Dillingham area. In order to be responsive to the needs of the growing community, the Comprehensive Plan should address a variety of public facilities and services in making recommendations for future development. The areas that should be addressed in Phase II of Comprehensive Plan include education facilities, recreational facilities, cultural facilities, social programs, utility and energy sources and public safety including fire and police services.

Coordination should occur between the city's planning efforts and the school district's Capital Improvements Program and curricular program. While the plan should not necessarily determine the educational facilities and services that should be planned for the future, the plan should serve as a coordination tool between the city and the school district to assure that new educational facilities and services are adequate to meet the growth levels and characteristics that are expected within the community.

Many recreational and cultural facilities are needed in Dillingham. This includes commercial recreation as well as public parks and outdoor recreation facilities. Cultural facilities are also needed including areas for concerts, plays and other performing arts. Specific attention should be paid to these in Phase II of the Comprehensive Plan.

Social programs are provided in Dillingham by a variety of entities, including the State of Alaska, the Bristol Bay

Native Association, the City of Dillingham and the federal government. The social programs include everything from low income assistance through child care and alcoholism programs. They should be inventoried as part of Phase II of the Comprehensive Plan and recommendations should be made for their future operation based upon projected growth within Dillingham.

Utilities are obviously basic to the growth potential and infrastructure for any community. Phase II of the Comprehensive Plan should recommend areas where utilities should be extended based upon the land use plan. The plan should address the level of utility services in general necessary to serve the growth projections community wide. This section should also address the energy resources available to the community to operate both public utilities as well as meet private demands.

Public safety services and facilities has been a controversial issue in Dillingham in the past. The need for and necessary level of public safety services in the community should be identified based upon both land use recommendations as well as growth projections. These should be quantified so that they could be included in capital improvements programming as well as general city budgeting.

By addressing the above described areas of public facilities and services, Phase II of plan will provide the decisions makers within the community as well as the public in general with policy statements relative to future allocations of funds and other community resources. This is the essential part of a comprehensive planning element and should not be left out of future planning activities in Dillingham.

E. TRANSPORTATION PLAN

Transportation planning for Dillingham will become more critical in the near future. Population growth is accelerating and the demands for all types of transportation facilities, both internal and external to the community are growing. The elements of the transportation characteristics of the community that should be addressed in the next phase of the Comprehensive Plan include roads and streets, trails, docks and harbors and airports.

As the population grows in Dillingham the need for upgraded roads and trails is becoming more acute. There was a time when roads in Dillingham were nothing more than minor trails which required a four wheel drive vehicle to negotiate. Dillingham now has all types of vehicles including snow machines, three-wheelers, dirt bikes, standard passenger sedans, pick-up trucks and larger vehicles. With this increase in internal transportation demand within the community there needs to be an assessment of the demand for roads in terms of their capacity as well as in terms of the areas which should be served by roads. This should be coordinated with the trails system, for both motorized and nonmotorized uses, so that conflicts between incompatible modes of transportation can be eliminated or at least monitored and controlled where necessary.

Dillingham is a regional center for the upper Bristol Bay area. It is the main port facility that supplies both the growing commercial areas and residential areas of Dillingham but also the villages from the surrounding region. The ports and harbors in Dillingham are a matter of regional importance. An inventory of the type and capacity of these docks needs to be made and included in the Comprehensive Plan. Any plans for future expansion or needs for up-

grading should be identified so that they can be included in the Capital Improvements programming for the city.

The same type of regional influence is exerted by Dillingham's airport. It serves as the primary links between Dillingham, the villages and the rest of the state and world. Being the only jet port in the immediate surrounding area, the airport has significant importance from both the cargo as well as the passenger movement standpoint. There should be coordination with the State Department of Transportation and Public Facilities on master planning for the Dillingham airport and the impact for the airport should be measured on the community. Land use decisions should be made with care to assure that the future of the airport is protected from incompatible growth. At the same time, potential future changes in airport facilities and operational methods should be reviewed as part of the community's plan to assure that they are not going to have an adverse impact on the surrounding neighborhoods.

All of these transportations both internal and external to the community should be coordinated with the land use decisions, the implementation measures, and the public facilities development to assure that the transportation characteristics of the community are in harmony with the goals and objectives set forth in Phase I of the Comprehensive Plan.

F. IMPLEMENTATION MEASURES

A number of implementation measures were identified in the Community Attitudes Survey as being potentially appropriate for use in Dillingham. Large number of respondents to the

survey indicated a willingness to accept land use controls at varying levels to help insure a higher quality growth within the Dillingham community. Some of the implementation measures that should be considered as part of Phase II should be:

1. More strict subdivision regulations;
2. Building codes;
3. Land use and development regulations (zoning);
4. Tax incentives;
5. Floodplain regulations;
6. Capital improvements programming;
7. Municipal land management techniques; and
8. Public facility phasing.

Any or all of these may be appropriate for use in Dillingham. Regardless of which ones are determined to be most effective it is vitally important that a significant amount of effort be delegated to implementation measures as part of Phase II.

The final test in measuring the effectiveness of any comprehensive planning process are the implementation measures used to assure that the policies, goals and objectives in the plan will take effect. The implementation can take many forms. Typically they include a variety of policies, operating procedures and regulatory functions that deal with all elements of the community. In many cases implementation techniques include using existing ordinances and administrative tools. In other areas policies can be recommended for governmental actions. In some cases new ordinances are appropriate. The implementation measures can include a range of options from passive policies through actual ordinance enforcement. Direct actions can

be taken by the City in allocating land uses in come cases and in others the only action that can be taken is an attempt to persuade other entities to respect the desires as set forth in the plan. It will take dilligence and an energetic approach on the part of the City to implement this plan.

APPENDIX A

COMMUNITY ATTITUDES SURVEY COMPILATION

1. How long have you lived in Dillingham?

- A. 4 Less than 1 year;
- B. 8 1 to 2 years;
- C. 18 3 to 5 years;
- D. 16 6 to 10 years;
- E. 24 More than 10 years; 50%
- D. 30 Always lived here.

2. How old are you? 31-45 yrs (>50% 23-45) Sex: >50% M F

3. If you have not always lived in Dillingham, what town did you live in before coming to Dillingham? 50/50 inside, outside Alaska.

For how long? From Alaska: <10 yrs; many from Anchorage
From Outside: 50% >10 yrs, 10% <10 yrs

4. How many months of the year does your household live in Dillingham?

- A. 1 0 to 3 months;
- B. 1 4 to 6 months;
- C. 4 7 to 9 months;
- D. 3 10 to 11 months; 98%
- E. 82 Year-round.

5. How long do you and your family intend to remain in this community?

- A. 3 Less than 1 year; <10%
- B. 4 1 to 5 years;
- C. 64 Indefinitely or Permanently; 75%
- D. 18 Don't Know.

6. What kind of subsistence hunting, fishing, or other subsistence activities does this household do?

Moose and caribou are most hunted; limited subsistence fishing and berry-picking are common. Salmon fishing, game bird hunting and gardening also occur.

*7. What percentage of your yearly household food supply does your family obtain from subsistence activities? _____%

Of 15 answers, 12 were 1%-50%, 3 were 60-90%

8. Does this household obtain more or less of its food from subsistence hunting, fishing, berry picking, and other subsistence activities today than it did 5 years ago, or have things stayed about the same?

- A. 21 More Today;
- B. 24 Less Today;
- C. 43 About the Same;
- D. 5 Don't Know.

*9. About how many months of the year do you spend primarily on subsistence activities? _____ Months

Of 11 answers, 3 were less than 2 mos.; 1 answer each for 2-6 mo.; one each for 10, 11 and 12 mos.

*10. In general, what portion of the money this household spends on food, clothing, household goods and other items is spent outside of Dillingham or ordered from stores outside of Dillingham? 18 answers: 9 \leq 50%, 9 \geq 60%

(5-50) (60-100)

* Few answers; difficult to assess.

11. Do you think that there is a need for more shops and stores in Dillingham?

- A. 69 Yes 73%
- B. 18 No
- C. 8 No Opinion

12. If yes, what kinds of shops and stores do you think are needed in Dillingham?

Clothes; grocery, automotive, shoe, hardware.

13. Do you think that there is a need for more industrial development, such as fish processing plants, construction yards, fuel tanks, and warehousing in Dillingham?

- A. 55 Yes
- B. 18 No
- C. 17 No Opinion

14. If yes, what kinds of industrial development do you think are needed? Marine-oriented: ports, boat repair, fuel marina, fish processing; also warehousing.

Where should this industrial development take place?
Squaw Creek, Airport, Boat Harbor

15. Are there enough jobs available for people who want to work in Dillingham?

	<u>Permanent</u>	<u>Seasonal</u>
Yes	<u>16</u>	<u>44</u>
No	<u>56</u>	<u>34</u>
No Opinion	<u>11</u>	<u>9</u>

16. What is the greatest problem Dillingham residents face in finding satisfactory jobs?

Lack of education, training skills, experience; followed by too few jobs available and low pay. Also unwillingness to commit to punctuality and excellence.

17. Although little tourism presently takes place in Dillingham, do you think tourism in general is desirable, undesirable or do you have mixed feelings?

A. 21 Desirable
B. 27 Undesirable
C. 37 Mixed Feelings 40%
D. 9 No Opinion

18. What kind of tourist facilities do you think would be necessary if tourism became more important in Dillingham?

Lodging; also transportation, restaurants

19. Do you think tourism is compatible with the fishing industry?

A. 43 Yes
B. 25 No
C. 24 No Opinion

20. Do you think that it is better for industrial uses such as processing plants or storage yards to be concentrated in one or two parts of town or should industrial uses be allowed anywhere?

A. 62 Concentrated
B. 16 Anywhere
C. 9 No Opinion
D. 4 Does Not Matter

21. Do you think that the waterfront along the river should be used primarily for industrial uses, business uses, or for residences?

- A. 41 Industry 75%, weighted toward industry and business
- B. 33 Business
- C. 17 Residences
- D. 7 Other
- E. 13 No Opinion
- F. 11 Does Not Matter

22. Do you think that the land along the waterfront should be reserved for businesses that are water-dependent?

- A. 52 Yes
- B. 21 No
- C. 17 No Opinion

23. Do you think that the City should regulate how land is used in Dillingham?

- A. 55 Yes
- B. 23 No
- C. 13 No Opinion

24. Do you think that the City of Dillingham should regulate building in areas that are unsafe or dangerous?

- A. 71 Yes
- B. 13 No
- C. 9 No Opinion

25. Do you think erosion along the river is a serious problem in Dillingham? If so, do you think the City should try to reduce the damage to structures caused by shoreline erosion by requiring new buildings near the shoreline to meet standards designed to reduce property damage?

- A. 73 Yes
- B. 16 No
- C. 3 No Opinion

26. Do you think flooding is also a problem? If so, do you think the City should adopt special construction requirements for new buildings that are located in areas known to be subject to flooding?

- A. 34 Yes
- B. 30 No
- C. 4 No Opinion

27. Do you think there are areas of town where houses are too close together?

Where: _____

- A. 50 HUD Housing? (Also: Lake Road, Hospital
- B. 54 Downtown? Bingman's Apts., houses &
- C. 10 Windmill Hill? commercial bldgs.)
- D. 2 Wood River Road?
- E. 7 Other?

28. Do you think the City should set standards on how far apart houses should be in new subdivisions?

- A. 69 Yes
- B. 16 No
- C. 7 No Opinion

29. The City of Dillingham provides the following public services and facilities. Check the method you think should be used to pay for these services or facilities.

	<u>City Real Property Tax</u>	<u>Personal Property Tax</u>	<u>Sales Tax</u>	<u>Special Direct Assessment</u>	<u>Service Charges</u>	<u>Federal or State Funds</u>
(1) <u>Road Maintenance</u>	26	15	13	4	2	53
(2) <u>Snow Removal</u>	28	20	15	3	8	36
(3) <u>Sewer & Water</u>	29	11	7	8	28	22
(4) <u>Police Protection</u>	36	27	19	2	1	30
(5) <u>Fire Protection</u>	38	27	17	6	2	30
(6) <u>Parks & Recreation</u>	13	14	18	6	6	46
(7) <u>Schools</u>	22	22	13	6	4	54
(8) <u>Library</u>	22	18	23	4	6	40
(9) <u>Harbors & Docks</u>	24	7	9	13	26	43

30. What type of housing are you currently living in?

- A. 72 Single Family House
- B. 12 Apartment
- C. 8 Trailer
- D. 6 Other (Specify) duplexes, hotel, HUD

31. How many people live in this house?

- 4 Summer (4-6)
- 4 Year-round (3-6)

32. Do you:

- 61 Own your home
- 27 Rent your home
- 6 Other

33. Is your house connected to city water and sewer service?

A. 25 Yes

B. 67 No

34. Are you satisfied with your present housing situation?

A. 60 Yes

B. 27* No

C. 4 No Opinion

If not, why? * crowded, too small, too expensive, leaks
dirty, don't own it, falling down, poor water/sewer, noisy
too much money to heat

35. What type of housing should be encouraged in Dillingham?

A. 79 Single Family Housing

B. 36 Apartments

C. 7 Trailers

D. 6 Other

36. Where do you think commercial development in the City of Dillingham should be located?

A. 35 Concentrated in one general location >50%

B. 28 Concentrated in more than one area

C. 22 Randomly throughout the community

D. 15 Does not matter

If it should be in one location, say where: Closer to air-
port; away from city; in city; by water; Kanakanak Lk. Rd.

37. What use do you believe should be made of the City land where the old City aircraft landing strip was located?

Parks, recreational use; residential

38. Do you think Dillingham is growing -

- A. 41 Too Fast
- B. 6 Too Slow
- C. 35 About Right
- D. 8 No Opinion

39. Do you think more people should be encouraged to move to and settle in Dillingham?

- A. 24 Yes
- B. 53 No
- C. 15 No Opinion

The current population of Dillingham is about 1,700 year-round residents. What do you think the ideal population of Dillingham should be?

A. _____ Total Population	<u>700</u>	<u>2000</u> (15)
B. _____ No Opinion	<u>900</u>	<u>2500</u> (4)
	<u>1100</u>	<u>3000</u> (7)
	<u>1300</u>	<u>3500</u>
	<u>1500</u> (6)	<u>4000</u> (2)
	<u>1700</u> (8)	<u>5000</u> (6)

40. Do you think the City of Dillingham should initiate a program of annexation of land areas currently outside the city limits?

- A. 17 Yes
- B. 60 No
- C. 22 No Opinion

If "yes", specify what area(s): _____
_____.

Why should this area be annexed? _____
_____.

If "no", tell why:

Too much land control;

Some people built outside city because they don't want to be in so
leave them along!

Services not maintained now, so "why spread the butter thinner?"
[About 13 responses to this effect]

Unsurveyed land causes problems;

"Can't discard broken toy for new one anymore," too many problems
with current land;

Can't keep streets smooth now;

City limits are same size as Anchorage now;

Ruin scenery;

High taxes;

Should be "limited" city limits.

41. What do you like most about living in Dillingham?

	<u>No. of Responses</u>
Rural Life - Lifestyle - Slow Paced	17
Personal Freedom	8
Fishing	5
Access to Natural Enviornment	6
People	15
Hunting	2
Quiet	2
Country	3
Privacy	2
Fresh Air	3
Small	9
Easy to Get Around	
Owning My Own Home	3
Outdoor Activities	
Subsistence Rights	
Job Opportunities	4
Individual Say Still Counts	1
Good Pay Scales	
Remoteness/Isolation	4
Being Able to Know Everyone	2
Location	3
Closeness of People	
Excitement of this Area	
Beauty	
Outdoor Recreation	3
Friendly	2
Family	
Low Population	3
Less Crime	
Economy	
My Paycheck!	
It's Home	

42. What do you like least about living in Dillingham?

No. of Responses

Being surveyed by Anchorage!	
Declining Education	
Rivers/Lakes	
Fishing/Summer Fishermen	2
Can't Get Machinery to Town	
High Prices for Food/Cost of Living Here	8
Gray Skies/Climate	4
No Indoor Recreation	2
Not Enough People Benefit from Tax Payments	
Lack of Social Life/Dining Out/Cultural Activities	4
Taxes	2
Dust/Mud ("Even Nome has paved roads!")	22
Trash	3
Bad Roads	17
Fast Growth	2
Boredom	
Crime/Vandalism/Drug Abuse	5
Urbanization/City Life	2
Alcoholism & Related Crime	6
Too Many New People/Too Many People	4
No Sidewalks	3
Poor Housing	
Lack of Competition in Business/Industry	
Pollution	
Apathy - Lack of Community Support	
"Prejestist" People	
Not Enough Harbors	
No Recreation	5
Wien's Air Traffic Monopoly & Expense	6
Growth of Local Gov't & Outside Influences	
Traffic & Strangers	2
Freight Costs	
Gossip	
No Alternate Energy	
Lack of Moderately Priced Land	

43. What type of cultural facilities do you think are needed most in Dillingham? Theater/auditorium; museum

Would you be willing to pay a fee to use these cultural facilities? X Yes No No Opinion
(Almost without exception)

44. What type of recreational facilities do you think are needed most in Dillingham? Swimming pool; theater, bowling alley

Would you be willing to pay a fee to use these recreational facilities? X Yes No No Opinion
(Almost without exception)

45. How important do you believe the Alaska Coastal Management Program is to the residents of Dillingham?

- A. 58 Very Important
- B. 20 Moderately Important
- C. 5 Little Importance
- D. 6 No Importance

46. How do you feel about the proposed federal outer continental shelf oil and gas lease sale planned in Bristol Bay?

- A. 5 Strongly Support
- B. 17 Support
- C. 19 Neutral
- D. 19 Object
- E. 31 Strongly Object

47. Do you think that oil and gas development associated with the lease sale should be located in Dillingham?

- A. 30 Yes
- B. 44 No
- C. 17 No Opinion

48. If a shore-based oil and gas development facility were to be built in the Dillingham area, where should it be located?

- A. 19 Near the developed part of Dillingham.
- B. 63 Away from the developed part of Dillingham.

Please list any specific sites that you believe would be good locations for such a facility Kanakanak area; also Standard Oil Dock, Squaw Creek area, Coffee Pt., old airport, below hospital on Nushagak R., Clark Pt., Snag Pt. Windmill Hill, Naknek, Twin Hills.

49. Do you think that oil and gas development is compatible with the fishing industry?

- A. 30 Yes
- B. 43 No
- C. 13 No Opinion

Why? _____

50. What do you believe the City of Dillingham should do to prepare for the population increase associated with oil and gas development? (How much Increase?) _____

[Very few answers]

51. What do you believe the City of Dillingham should do to prepare for the industrial demands of oil and gas development?
- A. 39 Increase Docking Space
 - B. 32 Increase Warehouse Space
 - C. 30 Increase Water Supply System
 - D. 49 Restrict Oil & Gas Development to a Specific Location
 - E. 7 Other (Specify) All-tide dock; nothing; let industry do it; don't let them drill here; assistance programs for expansion of commercial interests due to increased population.
52. Most state land in the Dillingham area is located near Warehouse Mountain. What should this land be used for?
- A. 31 Wildlife Habitat/Undeveloped
 - B. 55 Residential and Recreational Homesites
 - C. 6 Commercial/Industrial Sites
 - D. 3 Other (Specify) Park, Recreation Facilities
53. What effect would the sale of this land for homesites have upon the residents of the Dillingham area?
- A. 10 No Effect
 - B. 23 Positive Effect
 - C. 9 Negative Effect
 - D. 33 Mixed Effect
 - E. 8 No Opinion
54. What type of land is most needed for Dillingham's future development?
- A. 58 Residential Land
 - B. 34 Commercial Land
 - C. 28 Industrial Land
 - D. 31 Public Facility Land
 - E. 4 Other (Specify) Recreation, Dock & Waterfront

55. What comment(s) would you like to make about the future development of the Dillingham area, about this survey in general, about any question in this survey, or about any aspect of life in Dillingham?

We need recreation facilities;

Dillingham needs to be more organized & mature about solving their own problems, less selfish, more common sense;

Good survey! Hope it does well;

Need upgraded roads, transportation, recreation, alcoholism programs, law enforcement;

Keep oil of Dillingham;

Good Survey;

Almost too late for orderly development. First plan wasn't folowed.

Council must have enough guts to zone;

Want to keep uniqueness of Dillingham where neighbors know each other. Stress family life. Do creative thinking for planning rather than do it the way everybody else does it;

Look into developing fire dept. more trucks;

More things in winter for kids to do;

Splendid idea to gather local opinion;

Keep future orientation to fish industry;

Improve airport & storage facilities;

A need for residential land to develop;

Good to get our opinion;

Pave roads, a town fix-up week;

This survey is important for our future;

Must have adequate housing - land costs;

Extremely high and more reasonable rents;

Please pave streets and storm drains;

Lets make sure it grows right;

Good survey!

Should have a current comp. plan and other regs. that are understood and followed by city;

Growth should be orderly, less special interest groups making decisions;

More objective positive decision making;

Hope info. is used effectively, not statistically;

Good step in involving community and making them aware of future shock!
Need city-wide cleanup committee;
Commendable survey - majority should rule...thanks for opportunity to state opinion;
Electrical generation by hydro/wind farm should be encouraged;
Please, after 22 yrs. in Dillingham, no more welfare programs...causes harm...would like to see less people get off the plane one day and try to run the town the next!
Good idea to survey...hope action occurs;
Lack of facilities is serious handicap;
Designate sales tax toward specific community;
Don't want boom town;
No more people;
Careful planning will benefit everyone;
Wealth spread among u...coming years are important to Dillingham;
Long range zoning...protect environment & natural resources, prevent pollution, overcrowding;
Helplessness..its going to happen anyway;
Keep rural asmosphere...fishing main industry...not oil boom town ...almight dollar will reign supreme;
No quick solutions please...growing pains scary...caution...we all need to care;
*Need updated Dillingham plat (survey)...current one useless;
Incentive needed to get whole city involved...too much gov't by special interest groups;
Too much alcoholism - close bars earlier;
Beef-up police and pay;
Growth in organized manner;
Need broader tax base support which is equal.

56. Check the one answer in each Column (A, B, C, etc.) which most nearly describes how you feel about the facility or service indicated.

	<u>A.</u>	<u>B.</u>	<u>C.</u>	<u>D.</u>	<u>E.</u>
<u>Facility or Service</u>	<u>Presently Very Good</u>	<u>Acceptable for now but will need upgrading in future years</u>	<u>In need of immediate & substantial upgrading</u>	<u>Non-existent presently and should be provided as soon as possible</u>	<u>Non-existent and not needed & no effort should be made to provide</u>
1. <u>Water</u>		X			
2. <u>Sewer</u>		X	-		
3. <u>Law Enforcement</u>	-	X			
4. <u>Fire Protection</u>	-	X			
5. <u>Radio-TV Communications</u>	-	X			
6. <u>Telephone Communications</u>	X				
7. <u>U.S. Postal Service</u>		X	-		
8. <u>Road System</u>			X		
9. <u>Elementary School Facilities</u>	-	X			
10. <u>Secondary School Facilities</u>		X			
11. <u>School Transportation Services</u>		X			
12. <u>Park & Recreational Facilities</u>				X	
13. <u>Dog Control</u>		-	X	-	
14. <u>Refuse Collection & Disposal Facilities</u>		X			
15. <u>Library Facilities</u>		X			
16. <u>Emergency Medical Service</u>		X			
17. <u>Snow Removal</u>		X			
18. <u>Road Maintenance</u>		-	X		
19. <u>Parking</u>			X		
20. <u>Airline Service</u>		-	X		
21. <u>Docking Facility</u>		X			
22. <u>Small Boat Harbor</u>		-	X		
<u>Job Training</u>			-	X	

'-' indicates the column had nearly as many entries as 'X' column, or alot more than the remainder of columns.

APPENDIX B

PRIMARY GOAL

APPENDIX B

PRIMARY GOAL

TO CREATE AN ATMOSPHERE THAT WILL ENHANCE THE QUALITY OF LIFE, RATHER THAN EMPHASIZE THE QUANTITY OF GROWTH. IMPROVEMENTS SHOULD BE MADE TO ALL OF THE ELEMENTS THAT GIVE THE COMMUNITY ITS CHARACTER. THIS WOULD INCLUDE MAINTAINING GROWTH RATES AT OR BELOW THEIR CURRENT RATE, BROADENING THE ECONOMIC BASE TO ALLOW MORE EMPLOYMENT AND COMMERCIAL SERVICES, IMPROVEMENT OF PUBLIC SERVICES AND TRANSPORTATION FACILITIES, A HIGHER QUALITY OF RESIDENTIAL LAND DEVELOPMENT, AND AN INCREASED EMPHASIS ON PROVISION OF PUBLIC FACILITIES.

The primary goal is a general expression of the direction that the community should take. It is a brief summary of the community's feelings toward future development and growth. The basis of this goal is an emphasis on the quality of life in Dillingham rather than emphasis on quantity or growth. The Community Attitudes Survey strongly indicates that the growth rate of Dillingham should be maintained at or below its current level, but the various elements of the community that contribute to its lifestyle should be improved. The emphasis should be on quality rather than quantity.

It is clear after reviewing the results of the Community Attitudes Survey that the majority of the people who live in Dillingham live there because they like the lifestyle. There are a number of factors that make up that lifestyle. They are addressed in this goal, as well as the more detailed goals that follow. The primary goal strives to strengthen and preserve the lifestyle that Dillingham offers. It is clear through the responses to the Community Attitudes Survey that in order to more fully appreciate and participate in the Dillingham lifestyle the residents and property owners of the community need

to have more opportunities for employment and desire more commercial services. They would prefer Dillingham to be self-sufficient in terms of the goods and services that are needed for everyday life, rather than relying on the larger population centers in Alaska.

I. ECONOMIC OBJECTIVE

TO ENCOURAGE THE DEVELOPMENT OF A BROAD BASED ECONOMY WHICH RESPONDS TO THE REQUIREMENTS OF THE COMMUNITY BY PROVIDING OPPORTUNITIES FOR EMPLOYMENT AND INCREASED COMMERCIAL SERVICES.

The Community Attitudes Survey indicates feelings which are almost contradictory: There is general agreement in insisting that the economic base of Dillingham be increased and broadened, that areas along the river be set aside for new waterfront related industrial development, and that more employment as well as a wide variety of new commercial services (i.e., stores, shops, etc.) be made available. All of this, however, is to be made available without encouraging new growth. Even more significant, the economic independence that the community desires should be accomplished without allowing outer-continental shelf oil development to encroach on the city. To a certain extent this can be done through city policies, land-use decisions and taxation.

In general the respondents to the survey feel that rapid economic growth is not necessarily inevitable and is, to a certain extent, objectionable. As indicated in the primary goal, they want to see more emphasis on quality of lifestyle, less emphasis on quantity, both in terms of jobs and population.

Policies

1. The economic base of Dillingham should be strengthened and broadened by encouraging growth in the marine and fishing oriented industries.
2. The role Dillingham plays as a regional service and commercial center for this part of Southwestern Alaska should be emphasized.
3. The city and community should take an active role in natural resource development planning to assure that the impacts of such natural resource-related activities do not create an adverse impact on Dillingham.
4. Help facilitate provision of areas, access, utilities, and stabilized fuel and power rates for economic generators.
5. Permit tourism activities that do not have an adverse impact on Dillingham.

II. LAND USE OBJECTIVE

TO DEVELOP A REALISTIC AND RESPONSIVE LAND USE PLAN FOR THE DILLINGHAM COMMUNITY BASED UPON THE COMMUNITY ATTITUDES SURVEY (MARCH 1981), THE GOALS AND OBJECTIVES OF THE COMMUNITY, AND THE ECONOMIC, ENVIRONMENTAL AND SOCIAL CHARACTERISTICS OF THE COMMUNITY.

This objective provides a broad base for the development of a land use plan, one that will take into account as many of the characteristics of the community as is possible. The objective emphasizes the existing balance

between economic, environmental and social characteristics of Dillingham. It requires the consideration and utilization of the results of the Community Attitudes Survey. By stating the goal as broadly as this we are indicating that land use decisions within the community cannot be made on the basis of a single issue or a single set of facts. Land use decisions should be made based upon the interrelationship of all of the characteristics of the community. The land use goal indicates a determination on the part of the community to preserve the physical and human characteristics of the lifestyle while considering the economic factors affecting the community.

Commercial Land Use Policies

1. Help facilitate provision of areas for the development of convenience businesses and business services to provide goods and services to the residents of Dillingham.
2. The city should investigate alternative forms of land-use regulation within the next two years to determine which process is best suited for Dillingham.
3. New commercial development should be concentrated in areas that are developed with commercial uses and where there is a demonstrated need. This new development should not have a significant environmental impact on Dillingham.

Residential Land Use Policies

1. Residential development should be concentrated in areas set aside for residential use.

2. The overall density of Dillingham should be developed under the following two guidelines:
 - a. Maximum one-unit/acre where sewer is not available unless an alternative disposal system can be engineered to require less area for sanitary disposal.
 - b. Small lots and high density developments should be limited to areas where appropriate public utilities and services are available.
3. Additional areas should be set aside for residential development.
4. The city should attempt to take actions to improve the quality of existing and new housing such as improvement of public services and discouragement of future commercial/industrial intrusions.

Industrial Land Use Policies

1. Areas that are utilized for industrial development should be located so that potential conflicts between industrial and residential uses are minimized. Potential areas of development include the waterfront and the airport.
2. Transportation routes to and from industrial areas should be laid out to avoid use of minor residential roads.
3. Support of business services which complement industrial uses should be encouraged.

Natural Hazard Land Use Policies

1. The City of Dillingham should, within the next year, develop a natural hazards map based on all available information.
2. Public and private land developers should be encouraged to utilize marginal lands by incorporating them into land development plans as open space and less intensively used areas.

III. TRANSPORTATION OBJECTIVE

TO MAINTAIN, UPGRADE AND ENHANCE TRANSPORTATION FACILITIES SUCH AS ROADS, WATER, AIRPORT, DOCK, SMALL BOAT HARBOR, RAIL, AND AN ALL-WEATHER PORT.

This objective addresses transportation on two levels. First, it is important to focus attention on the internal demands of the residents of Dillingham for transportation facilities. The road system needs improvement. This was expressed loudly and clearly in the Community Attitudes Survey. Along with road improvements should come drainage improvements and thus dust and mud control. Not only is upgrading necessary but long-range facility planning also needs to be done.

Another important concern expressed in the Community Attitudes Survey is the need for upgrading the existing airport and expanding existing air service to and from major population centers, as well as smaller villages within the region. Dillingham's almost total reliance on air service to many parts of Alaska makes this a significantly important objective.

Transportation Policies

1. The community should review its internal transportation demands annually and determine adequacy of road facilities in various parts of the community and the necessity for upgrading in order to meet the demands on a continuing basis.
2. An official streets and highways plan should be prepared by the city within one year. The plan would identify the city's roadways by classification (arterial, collector, etc.), prescribe improvement standards and set priorities for upgrading and new construction. This plan would assist the city in the internal budget planning and would be an important asset in seeking state and federal funds for transportation facilities.
3. The city should review its subdivision requirements to update and make them consistent with the official highways and street plan.
4. Efforts should be made to maximize public community input into local and state transportation planning and design.
5. Within one year improvements should be made to the small boat harbor that will increase its capacity and safety so it can accommodate the demand for space during peak seasons.
6. The city should promote expansion of small boat harbor to be complete in two years.

7. The following improvements should be made to the Dillingham Airport:

- a. Inclusion of aviation type businesses;
- b. Construction of private hangars;
- c. Installation of small plane tie-downs;
- d. Upgrade and expand terminal;
- e. Improve vehicle parking facilities;
- f. Create a long-term parking area;
- g. Develop crosswind runway;
- h. Improve vehicular circulation;
- i. Increase security.

IV. RECREATION OBJECTIVE

TO PROVIDE A BROAD CHOICE OF RECREATIONAL OPPORTUNITIES TO ALL SEGMENTS OF THE COMMUNITY AND DEVELOP AND MAINTAIN A NEIGHBORHOOD ORIENTED RECREATION FACILITY AND PROGRAM SYSTEM.

Recreational facilities are one of the most often mentioned community needs expressed in the Community Attitudes Survey. Residents of Dillingham expressed a strong desire for more intensive active recreational facilities. This would include play fields, ball diamonds, and general recreation areas. A swimming pool was mentioned often, as well as other indoor facilities that could be used by the community as a whole. The survey also indicated in some cases a desire for recreational programs to be administered by the local government. These types of programs would be relatively expensive and should be given careful consideration as to cost and participation prior to implementation.

Cultural facilities, as well as recreational, were considered badly needed within the community. These would include museums and various cultural programs that could be made available to the residents.

Policies

1. Within two years the city should develop a park plan which includes the following: Standards for community park and recreation facilities; identification of areas for immediate and future facility location; priorities for each facility; and, the ability of the community to pay for those facilities.
2. The city should attempt to find funding methods through local, state and federal sources to acquire and develop all season active recreational facilities within the community.
3. Geological hazard areas and marginal lands such as floodplains, waterfront bluffs, swamps and peat bogs should be used for suitable recreational and open-space programs.
4. Efforts should be made to encourage, through investment of public funds, the development of cultural facilities such as museums, theaters and auditoriums.
5. The city should attempt to increase and enhance youth facilities within the community.
6. The City Council should appoint a park board made up of residents of the community who will provide information to the council on development of the park plan.

V. GOVERNMENTAL ORGANIZATION OBJECTIVE

TO MAKE THE PLANNING PROCESS OF THE GOVERNMENT RESPONSIVE TO THE PUBLIC BY PROVIDING FOR DIRECT CITIZEN PARTICIPATION IN THE PROCESS.

The main purpose of this objective is to assure that government maintains a positive posture within the community. Obviously, the government over which the city has the most control is the city government. The majority of the community's attention should be placed on the operations of the city. It is also possible to affect the relationships that the community has with other governmental agencies, and those opportunities should be pursued.

Policies

1. The City Council should appoint citizen advisory boards to research and provide input concerning formulation of plans such as park and open space, recreation, transportation, etc.
2. The city should organize special workshops on applicable topics such as alternate energy resources, land use, construction techniques, recreational facilities, etc.
3. Encourage the formulation of neighborhood-based planning groups.
4. The city should solicit public input on a regular basis to keep up with the changing needs of the community.

VI. ENVIRONMENTAL OBJECTIVE

TO INSURE THAT THE UNIQUE CHARACTERISTICS OF DILLINGHAM RURAL LIFESTYLE, PHYSICAL SETTING AND SUBSISTENCE ACTIVITIES ARE MAINTAINED AND ENHANCED NOW AND IN THE FUTURE. THE UNIQUE CHARACTERISTICS OF THE RURAL LIFESTYLE AND PHYSICAL SETTING WERE OFTEN MENTIONED IN THE COMMUNITY ATTITUDES SURVEY. SUBSISTENCE HUNTING AND FISHING WERE ALSO MENTIONED AS IMPORTANT.

The purpose of having an environmental objective is to assert a commitment on a part of the community to help future generations enjoy the lifestyle and environmental qualities that make Dillingham a pleasant and desirable place to live. The environmental objective is not intended as a vehicle to put a lid on development or growth. It is intended as a policy statement to guide growth and development in a manner that will help preserve the qualities of the communities that are important to its residents. If growth and development are allowed to damage the the rural atmosphere or subsistence opportunities, it will difficult to retain those qualities that the people consider desirable. This objective simply expresses a commitment to avoid that scenario.

Policies

1. Encourage an understanding of the relationship between human well-being and environmental quality.
2. Encourage the establishment of policies by the state and federal governments, ones affecting the surrounding region, that will help the City of Dillingham protect the quantity and quality of water resources and prevent future damage within the community.

3. Encourage activities and development practices that promote retention and re-establishment of as much vegetation within the community as possible.
4. The city should establish a dust control program.

VII. PUBLIC SERVICES OBJECTIVE

TO TAKE WHATEVER ACTIONS ARE NECESSARY TO PROVIDE OR ENCOURAGE THE PROVISION OF A BROAD VARIETY OF SERVICES WITHIN THE COMMUNITY ON A QUALITY RATHER THAN QUANTITY BASIS THAT WILL IMPROVE AND ENHANCE THE ALREADY DESIRABLE LIVING ENVIRONMENT IN DILLINGHAM.

This objective is intended to express the need on the part of the community to emphasize quality in providing public services, rather than to take a shotgun approach to those services without regard to how well they are executed. The Community Attitudes Survey indicated a number of public services and facilities that are in need of substantial upgrading or will need upgrading in the near future. This objective and the following policies indicate the city's commitment to upgrade those that are in need of upgrading and to assure the provisions of those which are needed now.

Policies

1. The city should attempt to immediately upgrade the roads in Dillingham through the use of local, state and federal funding.

2. The sewer and water system should be improved.
3. The city should develop a storm water drainage system.
4. The city should upgrade and enhance its law enforcement and fire protection facilities.
5. Parking problems in the heavily developed areas should be addressed in an attempt to reduce the hazard and inconvenience that is caused by the present lack of parking facilities.
6. The community should insure that public services such as parks and recreation facilities are provided as soon as possible.
7. Dog control should be addressed in an attempt to solve what is rapidly becoming a serious health and safety concern.
8. The development of job training courses through the local school district, as well as through the University of Alaska and various state and federal programs, should be promoted.

APPENDIX C

SCOPE OF SERVICES

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SCOPE OF SERVICES

INTRODUCTION

The City of Dillingham has requested funding from the Division of Community Planning, Department of Community and Regional Affairs, to update the City's Comprehensive Plan. In response to this request, the following work program was developed to identify important community issues; conduct an attitudinal survey of community residents; analyze housing, land use, and economic conditions and develop projections through 1990; develop base maps; map biophysical and cultural characteristics and values; and identify goals, objectives and policies for guiding future development in the City of Dillingham.

TASKS

The City, with the assistance of the Department, shall be responsible for carrying out the work tasks identified below. It is anticipated that all or portions of this work program may be contracted to a qualified consulting firm(s).

I. DATA COLLECTION AND MAPPING

A. Attitudinal Survey

1. Develop an attitudinal survey questionnaire which meets with the approval of the City and the Department. This survey shall include questions related to coastal management, petroleum development and other issues of regional

importance as well as issues relating solely to the City of Dillingham.

2. Train the survey interviewers and conduct the survey according to standards acceptable to the City Council and the Department.
3. Produce a cross tabulation of the survey results and a report explaining the findings of the survey.

B. Housing, Land Use, and Economic Development Analysis and Projection Preliminary Reports

1. Inventory and evaluate the current supply of housing within Dillingham in relation to current needs and the demand projected through 1990.
2. Analyze the current economy of Dillingham identifying major employers, workforce, unemployment and underemployment and an initial assessment of the type and extent of future growth.
3. Analyze the current land use and develop a land use projection through 1990.

C. City Mapping

Develop the following reproducible mylar maps at a scale of 1" = 750' or other suitable scale for the corporate limits of Dillingham.

1. Base Map which includes all surveys, section lines and numbers, and transportation systems.

2. Land Ownership Status, by Type
3. Major electrical transmission, sewer and water lines
4. Soil Development Suitability including a matrix identifying the characteristics of each soil type included in the soil development suitability categories.
5. Fish and Wildlife Habitat
6. Scenic View-shed and Historic and Archeological Sites
7. 100 Year Flood Plain, Erosion Hazard and Tsunami Hazard

D. Developed Area Mapping

Develop the following 1" = 200' scale mylar maps for the developed area of the City of Dillingham. The developed area maps shall cover the area included in the 1" = 200' scale mylar composite photographs owned by the City. This area generally includes the area outlined in Attachment 1. The base shall be either the aerial photography or a tracing of the aerial photography, whichever provides the cleanest base map.

1. Base and Land Use Map which includes all surveys, section lines and numbers, transportation systems, structures and developed areas. Each structure or developed area will be identified as to its current type of use (single-family or

multi-family residential, commercial by type, industrial by type and public by type).

2. Land Ownership Status, by Type
3. Major utility lines and easements including electrical, telephone, sewer and water and communications.
4. Soil Development Suitability including a matrix identifying the characteristics of each soil type included in the soil development suitability categories.
5. Fish and Wildlife Habitat
6. Scenic View-shed and Historic and Archeological Sites
7. 100 Year Flood Plain, Erosion Hazard and Tsunami Hazard

II. POLICY DEVELOPMENT AND REVIEW

- A. Based on the data collected in Task I (A-D) and other existing information, the City shall develop a preliminary set of goals, objectives and policies. The products developed in Task I (A-D) and the preliminary goals, objectives, and policies will be presented at a public meeting.
- B. Based upon the information gathered and the comments received at the public meeting a set of draft goals, objectives and policies will be developed and presented at a public hearing.

- C. Based upon the public hearing comments, a listing and discussion of final goals, objectives, and policies will be developed and presented to the City Council.

III. FINAL PRODUCTS

- A. 100 copies of a final report will be produced in a format acceptable to the City which will include the following:
 - 1. An explanation of the general process used to arrive at the recommended goals, objectives and policies.
 - 2. A listing and discussion of the final goals, objectives and policies presented to the City Council.
 - 3. A description of the methodology used and a discussion of findings and products of each of the data collection tasks (Task I [A-D]).
 - 4. Recommendations for future work needed to prepare an updated comprehensive plan for the City.
 - 5. A bibliography of information sources used.
- B. The original mylar maps produced in completing Tasks I(C) and I(D) will be retained by the City and a mylar copy of each map will be supplied to the Department. In addition, 50 sets of bluelines will be provided both the Department and the City.

- C. A written or electronic transcript will be made of the public hearing (Task II [B]) and retained by the City.
- D. A copy of the attitudinal survey individual and cross tabulations will be furnished to the Department and to the City.
- E. The original attitudinal survey responses will be retained by the City.

SCHEDULE

Based on the importance of the commercial fishing season to the City of Dillingham, the completion date for delivering the final products to the City is May 1, 1981. This schedule may be adjusted by the mutual agreement of City and the Department. The following schedule will be generally complied with in completing this project.

January 15, 1981	Begin Data Collection (Task I[A-D])
March 19, 1981	Public Presentation (Task II[A])
April 9, 1981	Public Hearing (Task II[B])
April 23, 1981	Presentation of Final Goals, Objectives and Policies (Task II[C])
May 1, 1981	Final Products Delivered (Task III[A-C])

PROJECT BUDGET

The total budget of this project shall not exceed \$22,500. The actual cost of this project shall be paid on a basis of two-thirds (66-2/3%) by the Department from a U.S. Department of Housing and Urban Development grant and one-third (33-1/3%) by the City of Dillingham.

APPENDIX D

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APPENDIX D

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