

ST. PAUL COMMUNITY STUDY

An Economic and Social Analysis of St. Paul,  
Pribilof Islands, Alaska

by

Don C. Foote  
(McGill University)

Victor Fischer  
(University of Alaska)

George W. Rogers  
(University of Alaska)

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## FOREWORD

This report is the result of a study undertaken for the U.S. Bureau of Commercial Fisheries in furtherance of the Fur Seal Act of 1966. The work gave the co-authors a rewarding opportunity to engage in a most worthwhile project and become acquainted with one of the unique areas in this world. Collectively and individually, the Pribilof Islands, the St. Paul community and its people, the fur seals and the Bering Sea provide most interesting subjects for research and analysis.

All three principal investigators participated in the overall study design, general analysis of results and development of conclusions. The Institute was fortunate in being able to obtain the participation of Dr. Don C. Foote, currently of McGill University and soon to join the University of Alaska; he carried out most of the basic research on resources, economy and population, and had prime responsibility for developing the forecasting models. Research support was provided by Richard Sobel of McGill University and Barbara Bebell of St. Paul. Prime responsibility for editing the report vested in James Babb of the Institute staff.

The Bureau of Commercial Fisheries provided complete cooperation and support for the study. Extensive fiscal, demographic and other files were made available to the investigators. While everyone at B.C.F. was most helpful, special appreciation for assistance in the study and review of the report draft needs to be given to W. N. Anderson, Robert H. Geiman, Donald R. Johnson, Helen Saale, Robert Simpson, Harold Thayer, Al Tracy, and Ford Wilke. The authors are particularly grateful to Howard Baltzo, Director of the Marine Mammal Resources Program, for his guidance, assistance and hospitality, both in St. Paul and Seattle.

The general, friendly advice of Senator E. L. "Bob" Bartlett, author of the Fur Seal Act of 1966, was most welcome. Many other agencies and individuals provided assistance toward specific aspects of the research program.

An important part of the study effort was the personal visit to the Pribilofs by the three investigators. It provided a "feel" for the fur seal industry and the St. Paul community and its environment that is otherwise impossible to achieve. A series of meetings was held with the village council, and there were many individual discussions, some official and others informal, with local residents. All of these contacts proved of great value. Terenty Philemonof provided much information and many insights, and Clara Prokopiou, Marjorie Stepetin and Tikhon Stepetin were most helpful.

Final and most important mention goes to Illiodor (Eddie) Merculieff, the late council president of St. Paul. He was a strong advocate of self-government and increased independence of federal support. As a knowledgeable leader and articulate spokesman, he helped mold some of the key conclusions of this report.

The successful evolution of St. Paul into a self-governing community will be a fitting living memorial to Eddie Merculieff.

Victor Fischer, Director  
Institute of Social, Economic  
and Government Research

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## INTRODUCTION

This study analyzes the economic and social base of St. Paul and reviews the community's ability to support municipal government and services.

St. Paul was first settled in the 1780's, when the Russians brought Aleuts to the Pribilof Islands for the taking of fur seals. During most of the intervening 180 years, the people have lived under conditions of semi-slavery and exploitation. First the Russians and then the Americans exercised total control over the local inhabitants, maintaining them for the sole purpose of manning the fur seal industry.

The Pribilof Islands have since 1910 been under the direct jurisdiction of the U.S. Department of the Interior. Management has for some years been vested in the Bureau of Commercial Fisheries of the Fish and Wildlife Service. The government's prime objective is conservation, management and protection of fur seals. In addition, government responsibility has included providing for the health and welfare of the two Pribilof Islands communities - St. Paul and St. George. In the past, residents received free housing, clothing, food, household supplies, health care, education, and other services; these were supplemented by a limited but gradually increasing cash wage. As of 1962, all workers receive standard government wages in accordance with the type of work they perform and the period for which they are employed.

St. Paul has all the external manifestations of the typical company town. It has an orderly layout and relatively excellent physical facilities. Employment is available to all residents, either on a permanent or seasonal

basis. The price of these benefits has been dependence on a single industry over which the people have no influence, limited mobility, restricted political power, and a requirement for a cash wage to sustain existing living standards. All these conditions - physical, economic, social, political - are so different from other Alaskan communities as to make comparative evaluation meaningless. Recognition of the existing situation and characteristics provides the basis for future change.

Significant changes have begun occurring in recent years. The Bureau of Commercial Fisheries now places a greater emphasis on economic operation of the sealing industry and is attempting to phase out its community and welfare responsibilities. The people of St. Paul have willingly assumed some of the transferred proprietary functions, and their leaders have pushed vigorously for a greater degree of self-government. In this, they have had much support at the state and federal levels.

The desire to give St. Paul the right to manage its own affairs found favor with the U.S. Congress and is reflected in the Fur Seal Act of 1966. This legislation, sponsored by Senator E.L. Bartlett of Alaska and supported by the Interior Department, provides for transfer of land, property and facilities to St. Paul and its residents and for transitional grants to assist the community in providing municipal services. These benefits are predicated on a determination by the Secretary of the Interior that "a viable self-governing community which is capable of providing adequate municipal services is established or will be established prior to the conveyance by the (townsite) trustee of any property to the natives of the Pribilof Islands."

This study was designed to assist in making the determination required under the Fur Seal Act of 1966. The conclusions, based on projection of existing trends and conservative assumptions, are:

- (1) the economy is adequate to support the local population,
- (2) the community can afford to incorporate as a city, and
- (3) it can provide adequate municipal services.

Thus, the basis exists for the federal steps necessary to make possible establishment of a self-governing municipality on St. Paul.

In the process of carrying out this study and arriving at these conclusions, it became most evident that special attention must be paid to achieve an effective transitional process. In addition, a community development program should be initiated at the earliest opportunity to plan for St. Paul's future.

Whether the people of St. Paul choose the path of self-government remains to be determined. A favorable vote on municipal incorporation will to a large extent depend on the manner in which the next steps are handled by the Federal Government. While a rational basis exists for accepting municipal status, the last few years of increasing self-reliance may not have been sufficient to overcome the dependence on government nurtured by many decades of support and control from outside. There is a need, therefore, for a temperate and constructive approach to the transition period, coupled with the shedding of remaining vestiges of colonial attitudes held by some government officials.

Successful establishment of an incorporated community will help move St. Paul toward a higher level of per capita income and an improved standard of living. Continuing effort will, however, be required to attain a more

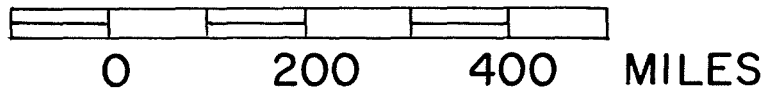
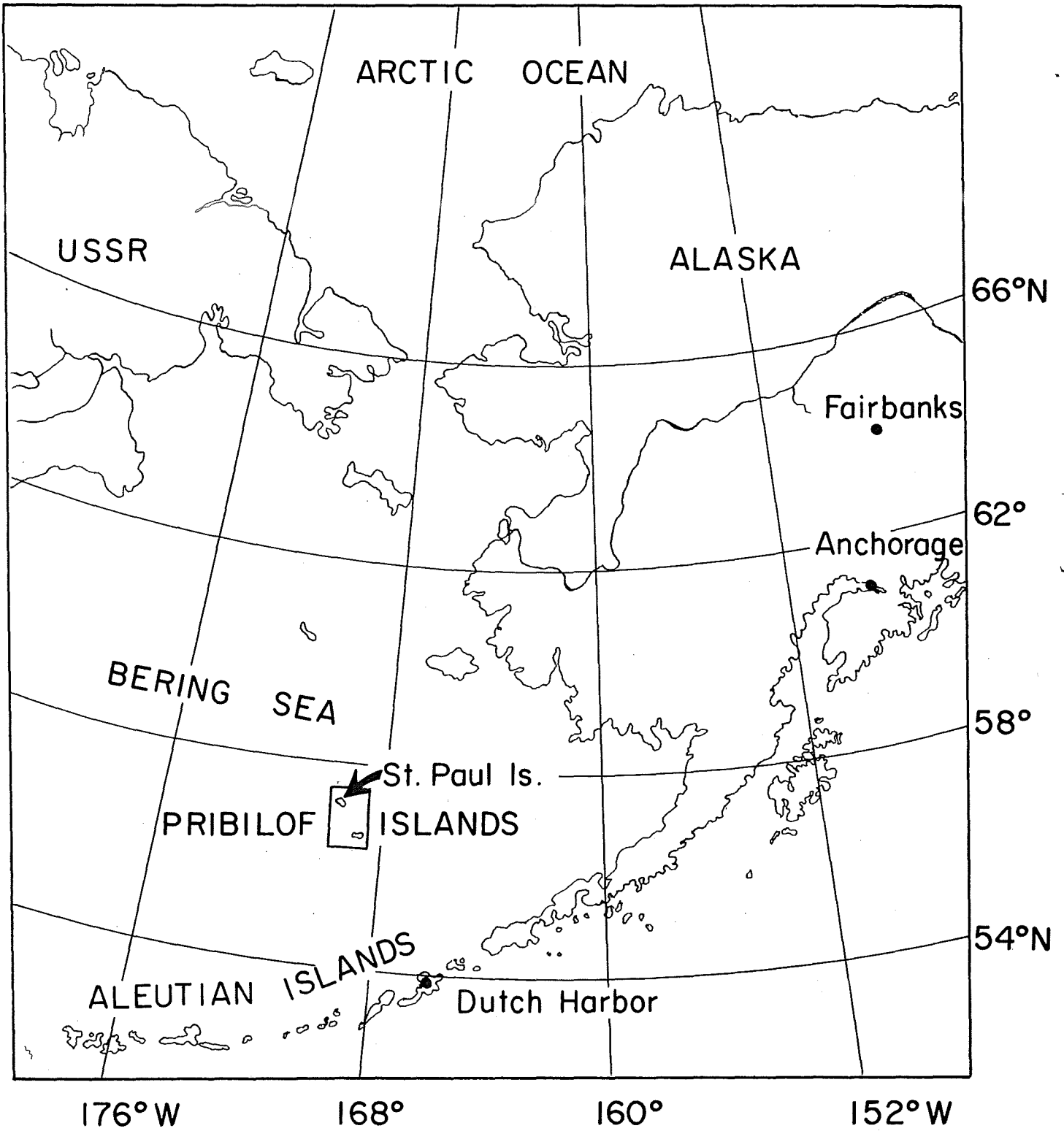
adequate and diversified economic base. A prime vehicle toward such an effort would be a comprehensive development program, evolved by the community in cooperation with the Federal Government and the State of Alaska.

PART ONE. THE GENERAL SETTING --

ST. PAUL, THE PRIBILOF ISLANDS AND  
THE EASTERN BERING SEA

The Pribilof Islands have unique climatic and physical characteristics. These provide the environmental basis for the key natural resource of the islands--the fur seal--on which the economy of St. Paul is centered. It is in the context of the physical assets and the fur seal industry that the community's future must be analyzed. The following three chapters provide the background for the socio-economic review that is the prime purpose of the report. Only sufficient material on which to base a general understanding of the St. Paul community is included here; additional information is readily obtainable by those who wish to delve in greater detail into the topics covered by the next three chapters.

MAP 1



## CHAPTER 1. THE GEOGRAPHIC BASE

### The Pribilof Islands

The Pribilof Islands are located in the Bering Sea about 240 miles north-northwest of Dutch Harbor in the Aleutian Island chain (Map 1). Geographical data for the five islands of the Pribilof group are given in Table 1.

TABLE 1

#### THE PRIBILOF ISLANDS

<u>Island Name</u>	<u>Geographical Position</u>		<u>Area in Sq. Miles</u>	<u>Highest Pt. (ft.)</u>
	<u>Lat. N.</u>	<u>Long. W.</u>		
St. Paul Island	57° 10'	170° 15'	44.0	662.5
St. George Island	56° 35'	169° 35'	33.5	994.0
Otter Island	57° 03'	170° 24'	0.77	285.0
Walrus Island	57° 11'	169° 56'	0.02	-
Sea Lion Rock	57° 06'	170° 18'	0.003	-

#### Geology and Topography

The Pribilofs are composed predominantly of volcanic deposits. On St. Paul Island, the deposits are in the form of lava flows and sills of basaltic habit and alkaline character (basalts, olivine basanite), with minor amounts of pyroclastic tuffaceous material and intercalated sedimentary beds. The sedimentary rocks are mainly derived from basaltic rocks of Pleistocene age. Recently formed alluvial sediments, mainly in the form of sand, cover about one-seventh of the island. There are

no economically valuable minerals on the island, although some crystals of gem quality can be found.

The west and southwest portions of St. Paul are relatively high and mountainous, with precipitous cliffs along the coast (Map 2). The remainder of the island is a comparatively low, rolling plateau interrupted by a number of extinct volcanic peaks. Bogoslof Hill, a conical 590-foot high crater near the center of the island, and Polovina Hill, double-peaked and 470 feet high near the east end of the island, are conspicuous above the plateau and are the dominant landmarks. From the latter hill, the island stretches away in a low, narrow neck to Hutchinson Hill, about 100 feet high, on Northeast Point. West of Lukanin Bay, the island's south coast is rocky, with bluffs at the points. In general, the remaining island shore line is sand beach with some rocky sections. Impressive sand dune formations are found along the north shore, particularly west of Big Lake.

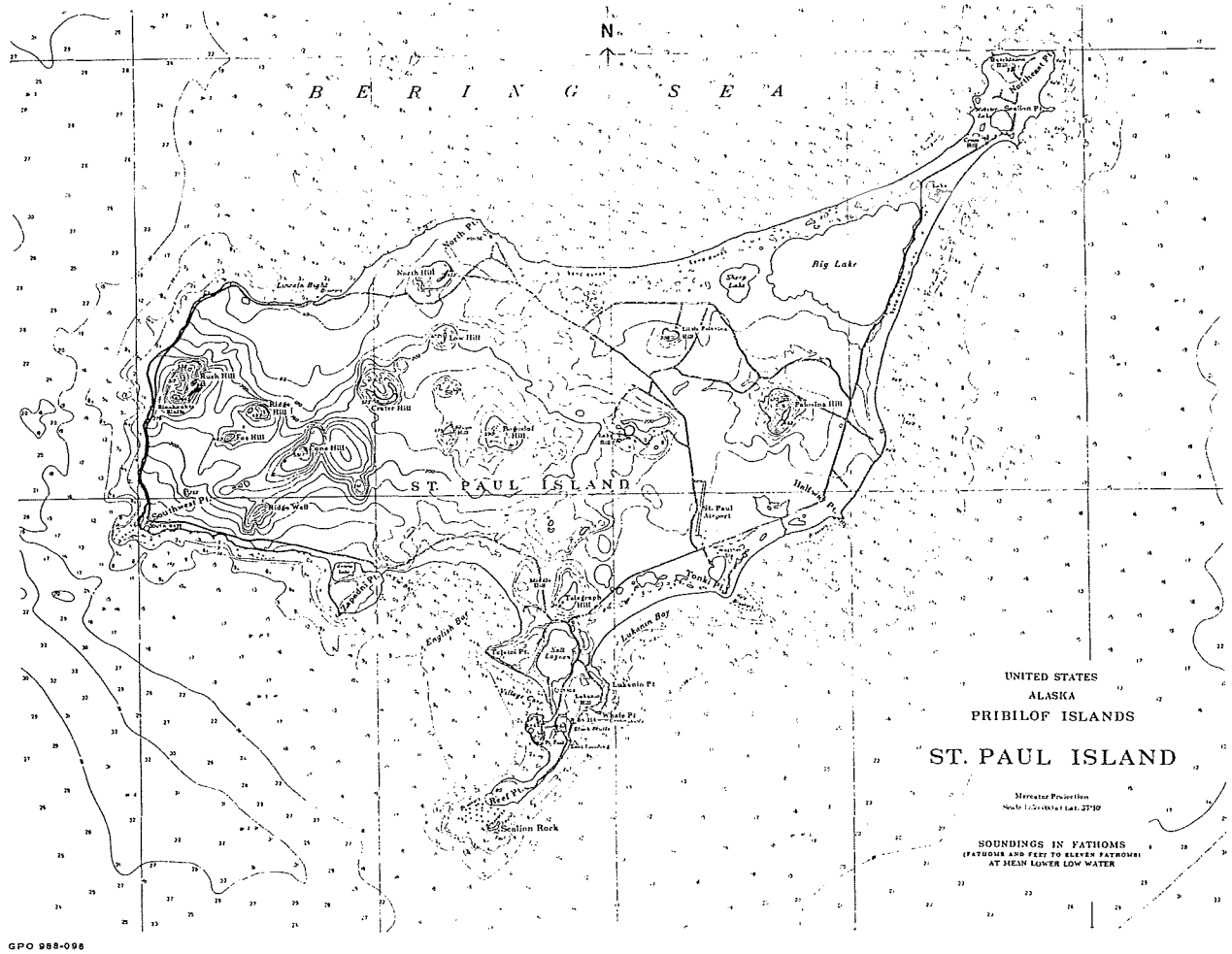
#### Climate

The climate of St. Paul is determined by the cold waters of the Bering Sea. This maritime condition produces cool weather in all seasons and results in a narrow range of mean monthly temperatures, varying from a low of about 24°F. in February to a high of about 48°F. in August (Table 2). Precipitation, mostly in the form of fog and rain, is common throughout the year and occurs in heavy concentrations during summer and autumn.

St. Paul shares much of the stormy weather associated with the prevailing Aleutian low pressure cell. Good weather is rare and of short duration, and winds constantly change direction.



MAP 2



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Late spring and summer are relatively mild and very foggy, with frequent periods of light weather, comparatively few strong winds, and considerable rain. From the beginning of September, gales become frequent and heavy fogs gradually lessen. Toward the latter part of the month, snow often accompanies the storms. During all of autumn,

TABLE 2

CLIMATOLOGICAL DATA FOR ST. PAUL

<u>Month</u>	<u>Air Temperatures (°F)</u>			<u>Precipitation (inches)</u>	
	<u>Daily Max.</u>	<u>Daily Min.</u>	<u>Monthly</u>	<u>Mean Total</u>	<u>Mean Snow &amp; Sleet</u>
Jan.	29.9	22.9	26.4	1.82	12.8
Feb.	27.7	19.9	23.8	1.13	8.8
Mar.	28.8	20.1	24.5	1.17	8.2
Apr.	33.8	26.3	30.1	1.02	4.7
May	39.1	31.2	35.2	1.18	1.9
June	45.6	37.3	41.5	1.31	0.1
July	49.3	42.4	45.9	2.43	0.0
Aug.	51.0	44.9	48.0	2.99	0.0
Sept.	48.6	42.0	45.3	3.49	0.1
Oct.	42.3	35.9	39.1	3.12	2.2
Nov.	37.0	30.6	33.8	2.59	5.3
Dec.	32.7	25.8	29.3	1.99	9.6
Year	38.8	31.6	35.2	24.24	53.7

Total Annual Mean Number of Days:

<u>Clear</u>	<u>Partly Clear</u>	<u>Cloudy</u>	<u>Ppt. .01" or more</u>	<u>Snow, sleet .01" or more</u>	<u>Heavy fog</u>
22	69	274	200	18	42

frequent, violent gales come from almost any direction. Prevailing winter winds are northerly; in summer, southerly winds prevail.

Although mean monthly temperatures are not severe, temperatures in winter sometimes can dip well below zero. Lakes are frozen in the winter months, and occasionally heavy, wind driven snow drifts cover the island.

St. Paul lies along the southern limit of winter sea ice, and the island may be surrounded by drifting pans and blocks from February to May.

### Continental Shelf

The continental shelf underlying the eastern Bering Sea is one of the largest in the world, having an average width of about 400 miles. In the southern Bering Sea, the shelf extends westward to Unimak Pass in the Aleutian chain and hence northwestward, passing to the south and west of the Pribilof Islands. It reaches the Siberian coast near Cape Navarin. The shelf is composed of extensive flat areas less than 50 fathoms deep, and is usually covered with sand and mud. Although the slope beyond the shelf is relatively steep, much of it is apparently suitable to trawling. Approximately 91,000 square miles of shelf area exist in the eastern Bering sea east of a line drawn from the Pribilof Islands to the north end of Nunivak Islands (Table 3).

Near St. Paul, the normal depths of the shelf are broken by numerous reefs and some islands. Shallow water extends off-short for about three-quarters of a mile around Otter Island. Rocky ledges, covered with less than three fathoms of water, are known at distances of five miles to the northeast and over seven miles to the west of St. Paul. Along the

TABLE 3  
 SQUARE MILES (NAUTICAL) OF CONTINENTAL SHELF AND  
 UPPER CONTINENTAL SLOPE ARE BY  
 DEPTH INTERVALS AND REGIONS

Depth Interval In Fathoms	1-49	50-99	100-299	TOTAL
<u>Region</u>				
Oregon-Washington	3,600	3,700	2,800	10,100
British Columbia and SE Alaska	9,800	10,800	9,600	30,200
Gulf of Alaska	9,300	19,900	7,400	36,600
Alaska Peninsula	14,500	9,000	4,800	28,300
Eastern Bering Sea	<u>73,200</u>	<u>17,600</u>	<u>3,100</u>	<u>93,900</u>
TOTAL	110,400	61,000	27,700	199,100

SOURCE: Alverson et al., 1964.

north shore, depths over five fathoms are found a mile or more from shore; however, southerly approaches to the island are made dangerous by several reefs located within one mile of the coast.

#### Off-shore Waters

The Pribilof Islands are situated within a portion of the north-eastern Pacific Ocean dominated by subarctic Pacific waters. One unique feature of these waters is a salinity structure characterized by a surface minimum, by increasing salinity with depth, and by a sharp halocline between 100 and 200 meters depth. The Pribilofs can be considered as

lying within the contact zone between two major domains of the subarctic Pacific water, the Western Subarctic Domain and the Coastal Domain.

### Currents and Tides

The major ocean circulation pattern of the Bering Sea is cyclonic, flowing eastward along the north side of the Aleutians, northward in the eastern portions of the Bering Sea and southward along the Siberian coast. The eastward moving current north of the Aleutians mixes with waters flowing northward through various Aleutian passes. Locally, the surface currents are influenced by prevailing winds and, therefore, vary greatly depending upon the weather.

The diurnal range of the tide at St. Paul is 3.2 feet. Around the island, the tidal current sets eastward on the flood and westward on the ebb, following the trend of the shore.



## CHAPTER II. THE RESOURCE BASE

### Non-Renewable Resources

St. Paul Island has no economically valuable minerals, although some crystals of olivine or rhytile may reach proportions and quality suitable for use as semi-precious gems. Tourists on the island are encouraged to visit Black Diamond Hill where they may find shiny crystals of augite, a form of hematite peculiar to the Pribilofs. Sand deposits suitable for construction purposes are relatively widespread, although coarse gravels are scarce. The basic volcanic rock of the island, when properly quarried, crushed and laid, makes an adequate base for roadways and secondary aircraft landing strips. Significant production of non-renewable resources within the general Bering Sea region is largely contingent on exploration and development of petroleum and natural gas deposits in Bristol Bay. No expansion of the non-fuel mineral industry into the Aleutian Island chain or along the eastern Bering Sea coast is foreseen by 1975.

### Renewable Marine Resources

#### Bottom Fish

Commercial bottom fish resources in coastal waters depend upon the densities of fish populations present and the amount of habitable continental shelf and continental slope available. Continental shelf regions, with relatively shallow depths and subject to the vertical mixing of water, are generally highly productive.

The principal commercial bottom fish (demersal) of the eastern Bering Sea include four species of roundfish - pollack, Pacific Ocean perch, true

TABLE 4  
ESTIMATED WEIGHTS OF STANDING CROP IN ALL  
BOTTOM FISH IN MILLIONS OF  
POUNDS BY DEPTH INTERVAL AND REGION

Depth Interval In Fathoms	1-49	50-99	100-299	TOTAL
<u>Region</u>				
Oregon-Washington	224	225	359	808
British Columbia and SE Alaska	909	1,005	916	2,830
Gulf of Alaska	448	1,081	683	2,212
Alaska Peninsula	458	361	438	1,257
Eastern Bering Sea	<u>9,197</u>	<u>2,208</u>	<u>386</u>	<u>11,791</u>
TOTAL	11,236	4,880	2,782	18,898

SOURCE: Alverson, et al., 1964.

cod and sablefish (blackcod) - and five species of flounders - yellowfin, flathead, turbot, rock sole and starry flounder. Estimates of the standing crop of bottom fish in the eastern Bering Sea (Table 4) and the potential yield of the Bering Sea region (Table 5) show clearly the extent to which the area is productive.

Shrimp and King Crab

Although a large number of various species of shrimp inhabit waters adjacent to Alaska, only six species have been found in commercial quantities. Pink shrimp (Pandalus borealis) and the sidestrip shrimp (Pandalopsis dispar) are probably the most important species in Alaskan



TABLE 5  
ESTIMATED POTENTIAL ANNUAL YIELD OF  
PARTICULAR BOTTOMFISH SPECIES IN THE  
BERING SEA REGION

<u>Species</u>	<u>Potential Annual Yield in Millions of Pounds</u>		
Pacific Pollack	190.0	to	250.0
Pacific Ocean Perch	50.0	to	100.0
Pacific Cod or Truecod	38.0	to	50.0
Sablefish or Blackcod	30.0	to	50.0
Turbot	40.0	to	80.0
Yellowfin Sole	400.0	to	600.0
Flathead Sole	60.0	to	80.0
Rock Sole	200.0	to	300.0
Starry Flounder	<u>10.0</u>	to	<u>30.0</u>
TOTAL	1,018.0		1,540.0

waters. While little exact scientific study has been carried out on the exact shrimp population of the Bering Sea, estimates based on Japanese fishing and other evidence suggest a potential annual yield of between 40 and 70 million pounds from the eastern Bering Sea.

The king crab industry of Alaska has been one of the most rapidly expanding segments of the United States fishing industry. The second most important producing region after Kodiak Island is the Aleutian and Bering Sea region, where American fishermen took a 40.1 million pound harvest in 1966. During the same period, fishing fleets from the Soviet Union and Japan also took large catches from the same area. In 1965,

Japanese fishermen processed about 35,000 cases of blue king crab captured in the Pribilof area. The Bering Sea region industry utilizes two species of king crab. Another crab species, the tanner crab, is also a potential resource.

#### Halibut and Herring

In addition to bottom fish and shellfish, the region presently produces a significant amount of herring and halibut. A measure of this fishery can be made from Japanese catches in 1964 of 93.9 million pounds of herring and 5 million pounds of halibut from the eastern Bering Sea.

#### Marine Mammals

The highly productive eastern Bering Sea also supports a number of marine mammals. At least nine species of toothed whales and porpoises, eight species of baleen whales, seven species of seals, walrus (Order Pinnidpedia) and the sea otter inhabit the region. The few species that occur in numbers large enough to be commercially valuable resources are the Steller sea lion, northern fur seal, harbor seal, common finback whale, sei whale, humpback whale and, perhaps, the little piked whale. At the moment, Japan and the Soviet Union conduct whaling operations in the region, presumably exploiting the finback and sei whales.

Utilization of harbor seals is sporadic along the Alaskan coast, although the capture of baby animals on the north side of the Alaska Peninsula supports a limited seasonal sealing industry. The Steller sea lion population of the Aleutian and Pribilof Islands is estimated to be over 106,000 animals, divided among the geographical locations given in Table 6. Little commercial use is made of this species; however, random kills are made at many points, including St. Paul Island, and some sea lion pups may be harvested for their pelts.

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TABLE 6  
DISTRIBUTION AND NUMBERS OF STELLER SEA LIONS ON  
THE ALEUTIAN AND PRIBILOF ISLANDS

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<u>Place</u>	<u>Estimated Population</u>
Aleutian Islands	100,200
St. Paul Island and Sea Lion Rock	300
Otter Island	160
Walrus Island	4,500
St. George Island	<u>1,200</u>
TOTAL	106,360

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SOURCE: Kenyon and Rice, 1961; Kenyon, 1962.

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In the immediate vicinity of St. Paul Island, ringed, ribbon and bearded seals are rarely seen; walrus are occasional visitors; and harbor seals are common during much of the ice-free season. White whales apparently do not frequent the region, and killer whales are not often observed. Recently, seven sea otters were introduced to the island, but the present status of the animals is unknown. Because St. Paul lies at the northern limit of the species range, transplanted otters may have difficulty in establishing a breeding population.

Of all the marine mammals present in the eastern Bering Sea, the northern fur seal (Callorhinus ursinus) is the commercially most important to the United States. Breeding colonies of the species are located only on St. Paul and St. George Islands and on Sea Lion Rock in the Pribilof group. Additional northern fur seals breed farther to the west on the

Commander Islands, on Robben Island and on the Kurile Islands. About 80% of all northern fur seals, or approximately 1.5 million animals, visit the Pribilofs each summer. Of these, between 50,000 and 60,000 are harvested annually under a program directed by the Bureau of Commercial Fisheries, a division of the Fish and Wildlife Service, United States Department of Interior. (The fur seal program is discussed further in the next chapter.)

Very few fur seals venture north of the Pribilofs. In winter, eastern Pacific seals migrate south to the Channel Islands off Santa Barbara, California. In the western Pacific, seals range from the Commander Islands in the north to the seas southwest of Kinkazan Peninsula on northern Honshu and into the Sea of Japan. Bull seals from the Pribilofs usually winter in Alaskan waters, mainly the Gulf of Alaska, while the older females and young travel far south.

Seals returning to St. Paul Island in summer arrive at varying times, depending upon their age and sex. The first to arrive are the oldest bulls, who begin landing at their breeding rookeries in late April and appear in increasing numbers until the middle of June. By this time, the oldest females have already started to arrive and join the harems that the bulls are attempting to establish. Three- and four-year old males, which make up the bulk of the commercial kill, arrive in late June, July and early August. Nearly half of the four-year old males arrive by July 18, and half of the three-year olds arrive by July 28. Half of the four-year old females arrive by August 28. Three-year old females arrive still later, and two-year old females and yearling males arrive in October and early November. The main exodus of seals from their breeding grounds takes place during November, even while some yearlings may be still

arriving. By the end of the year, the beaches of St. Paul are usually deserted.

### Renewable Terrestrial Resources

#### Reindeer

St. Paul supports several important species of land animals and a variety of birds. Reindeer have lived on St. Paul for many decades. Although it has been calculated that the island's size and vegetation can sustain a resident deer population of from 1,200 to 1,500, the actual number of animals present has fluctuated widely in past years. In 1938, over 1,900 deer were reported. By 1952 the herd was so small, however, that additional reindeer had to be imported from Nunivak Island. Despite this, the herd declined to less than 200 head in 1966.

#### Foxes

Wild blue and white foxes are abundant on St. Paul. The fox population was for many years deemed an important resource, and efforts were made to maintain a supply of both animals. During the 1950's, however, official attitudes changed and the foxes were considered a pest. A three year extermination program, using strychnine poison, failed to eliminate the population, and recent evidence suggests the animals are again becoming common. The present fox population on the island is unknown, but in years past it has been large enough to yield a season's catch of 605 blue and 45 white pelts.

#### Birds

Many species of birds visit St. Paul from spring to autumn. Migratory birds, particular king and common eiders, old squaws and harlequins, pass over the island. A number of cliff nesting birds, the common and thick-

billed murre, puffins, cormorants and kittiwakes inhabit colonies on the island and surrounding areas, including Sea Lion Rock and Otter and Walrus Islands. The St. Paul colonies contain well over a million birds. Other sea birds, such as gullaceous gulls and terns, are common throughout the summer months.

#### Vegetation

Although the climate of St. Paul is relatively mild, and spruce trees might have occupied the island at one time, there are no natural forests at present. Instead, the island is covered in many places by luxuriant grasses, sedges and a variety of wild flowers. Lichens and some alpine plants appear at higher elevations.

## CHAPTER III. THE FUR SEAL INDUSTRY

### Introduction

The fur seal rookeries of the Commander Islands in the western Pacific were discovered in 1741 by Russian explorers. However, it was not until the once great population of sea otters began to decline in the last decades of the 18th century that Russian traders and hunters turned their attention to fur seal pelts. In 1786, after three years of searching for the eastern seals' breeding grounds, Gerassium Pribilof discovered the islands of St. George and St. Paul and their immense wealth of breeding seals.

### Early Development of the Fur Seal Industry, 1786-1911

The Russians began to take a large annual harvest of fur seal pelts soon after the discovery of St. Paul. Incomplete historical records suggest that between 1789 and 1869, the Pribilof Islands produced more than 2.5 million skins. By 1805, when the Russian-American Company took charge of the island industry, the Pribilof seal herd had declined to a point where a closed season was declared from 1806 to 1810. Additional periodic closures in the early 19th century did not prevent a continued decrease in the herds. Finally, from 1835 to 1867, a restricted kill of male animals and prohibition against the taking of females resulted in a slow growth of the seal population.

When the United States purchased Alaska in 1867, and with it the Pribilof Islands, the fur seal population had increased to a point where it sustained an annual kill of several thousand males. Although the United States government intended to continue the conservation practices of

the Russians, the Pribilof herd was ruthlessly decimated by private American interests during 1868 and 1869.

An 1868 Act of Congress prohibited the killing of fur seals, and in 1869 the Pribilof Islands were set aside as a special reservation for the protection of the animals. A year later, the United States Treasury Department was authorized to lease exclusive rights to the islands' fur seal resources, with the stipulation that no female seals were to be killed. Under the first 20-year lease, starting in 1870, the Alaska Commercial Company took 1,854,029 pelts. A second 20-year lease granted to the North American Commercial Company produced only 342,651 seal skins for the period ending in 1909.

Unfortunately for the North American Commercial Company, its contract period coincided with the heyday of pelagic sealing. Commercial pelagic fur hunting began about 1868 and reached its greatest extent between 1889 and 1909. In that short period alone, an estimated 600,000 animals were taken on the high seas by American, Japanese and Canadian sealers.

The combined effects of the land-based and pelagic sealing were so great that by 1909 only about 200,000 northern fur seals remained. Approximately 134,000 of these animals were found on the Pribilof Islands.

#### Operations Under International Agreement and Controlled Conservation, 1911-67

After extended diplomatic negotiations and a long series of ineffectual bilateral agreements, the United States, Japan, Canada and Russia concluded a convention on July 7th, 1911, for the protection of the fur seals of the North Pacific. This convention, with some modifications instituted in 1942, 1957 and 1964, is still in effect. Under the agreement, pelagic sealing was prohibited except by aborigines using primitive weapons. In lieu of pelagic hunting rights, Japan and Canada each received 15 per cent of



pelts harvested by the United States and the Soviet Union, with certain exceptions for the sharing of Russian production, particularly for the period 1964-67. The convention of 1911 and its amendments have provided a sound basis for a rational management program for the Pribilof fur seals.

Initially, the seal herd was the responsibility of the U.S. Bureau of Fisheries. In 1940, the Bureau was reorganized within the newly formed Fish and Wildlife Service of the Interior Department. Finally, in 1956, the Bureau of Commercial Fisheries (B.C.F.) was established in the Fish and Wildlife Service. This Bureau is presently responsible both for the taking of fur seals and for conducting research related to management and conservation of the seal herd. Administration of the program rests primarily with the B.C.F. regional office in Seattle, Washington.

From 1911 to 1955, various conservation and management techniques were employed by the U.S. Government to stimulate growth in the Pribilof seal herd and still maintain a reasonable yearly harvest. The annual kill fluctuated between 15,000 and 31,000 animals of all ages during the period 1919 to 1928, and between 40,000 and 65,000 seals from 1929 to 1940. Apparently, the herd increased at a rate of from 6 to 8 per cent per year from 1925 to 1948.

The annual seal harvest ranged between 59,000 and 77,000 between 1945 and 1955. Additional research during this time provided insights into seal population dynamics and possible new management programs. In order to maintain a stable seal pup population of about 500,000 per year by lowering mortality and eliminating wide fluctuations in the survival of young seals, the government decided to reduce the total female population from an estimated 1,200,000 to about 800,000. Scientific evidence suggested that the reduced herd would sustain an annual yield of about 60,000 males and 30,000 females.

TABLE 7  
 ACTUAL AND ESTIMATED FUR SEAL HARVEST FOR THE  
 PRIBILOF ISLANDS 1955-1973

<u>Year</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>
1955 act.	65,453	-----	65,453
1956 act.	95,849	26,977	122,826
1957 act.	46,195	47,423	93,618
1958 act.	47,860	31,059	78,919
1959 act.	30,176	27,634	57,810
1960 act.	36,320	4,296	40,616
1961 act.	82,099	13,875	95,974
1962 act.	53,460	24,455	77,915
1963 act.	42,278	42,976	85,254
1964 act.	48,223	15,986	64,209
1965 act.	41,216	9,805	51,020
1966 act.	52,497	481	52,978
1967 act.	55,638	10,034	65,672
1968 est.	55,000	12,000	67,000
1969 est.	60,000	10,000	70,000
1970 est.	60,000	10,000	70,000
1971 est.	62,000	13,000	75,000
1972 est.	62,000	13,000	75,000
1973 est.	62,000	13,000	75,000

The herd reduction program began in 1956 and terminated after the 1963 season. Recently revised calculations suggest that, while the original predictions on the annual take of male animals were accurate, the production of females will probably lie between 9,000 and 18,000 yearly. Even this amount may have to be reduced to maintain the herd at the planned level. In the years since 1955, the total annual kill on the Pribilof Islands has ranged from about 40,000 to over 120,000. Figures for recent harvests and those projected to 1973 are given in Table 7.

## Seal Processing

The Pribilof fur seal industry is divided into three distinct operations. The first is the actual harvest and preparation of raw seal skins for shipment from the islands; the second is the processing and shipment of seal carcass by-products; and the third is the final tanning and sale of finished seal skins by a U.S. Government contractor, the Fouke Fur Company of Greenville, South Carolina. Both operations related to the seal skins are labor intensive, there being at least 36 different steps in the island-based process and about 100 individual processes in the Fouke factory. Some automation in the island by-products plant has reduced the number of manual workers.

Up to and including the 1961 season, the Bureau of Commercial Fisheries operated a by-products plant on St. Paul Island for the production of oil and meal from fur seal carcasses. Due to poor market conditions that had developed by 1961, increased costs of operations, and the need to meet expensive replacement costs for equipment and machinery, government operation of the plant was discontinued. There had been no attempts to utilize the fur seal carcasses from the much smaller harvest on St. George Island.

During the 1962 and 1963 seasons, the bureau entered into an agreement with Monarch Marine Products of Vancouver, British Columbia. This company attempted to ship the frozen carcasses by vessel to Vancouver for ultimate use as a mink diet supplement. It had little success and was unable to continue the venture.

Interest in use of the seal carcasses in mink diet had been established, however, and in 1964 the bureau entered into a five-year contract with Oregon-Alaska Marine Products, Inc. for the utilization of all carcasses on St. Paul and St. George Islands. The firm installed a 500-

ton cold storage facility on St. Paul Island. The ground, bagged and frozen seal carcasses are shipped to the mink industry in Oregon. The operation has been successful to the company and to the government.

In 1966, Oregon-Alaska Marine Products waived their right to the St. George Island carcasses because they considered a venture there would be unprofitable. The Bureau of Commercial Fisheries has solicited other proposals for the use of the St. George Island carcasses and these are resulting in arrangements for shipments to Japan.

#### Proceeds from Fur Seal Industry

Until 1952, appropriations for the administration of Pribilof Islands were made from the general funds of the U.S. Treasury. Starting with fiscal year 1952 and continuing through fiscal year 1959, appropriations were made from the general fund but were limited to an amount equal to 60 per cent of the proceeds paid into the Treasury during the preceding fiscal year from the sale of fur seal skins and other products. These funds remained available for expenditures during the current and next succeeding fiscal years.

Beginning with fiscal year 1960, appropriations have been made from a special Pribilof Islands Fund made up of the proceeds from the sale of seal skins and other products. Appropriations are limited to an amount not exceeding the total proceeds of such sales paid into the Treasury during the preceding fiscal year.

Under the provisions of the Fur Seal Act of 1966, the Pribilof Islands Fund must cover all costs of handling and dressing of seal skins and the sale of finished pelts. The fund must also cover the costs of biological

TABLE 8

ACTUAL AND PROJECTED RECEIPTS, APPROPRIATIONS AND STATE OF ALASKA  
 PAYMENTS FROM THE PRIBILOF ISLAND FUND 1959-1972

<u>Fiscal Year</u>	<u>Receipts</u>	<u>Appropriations</u>	<u>Payment to State of Alaska</u>	
			<u>Amount</u>	<u>Fiscal Year</u>
1959	2,884,648	1,851,500	813,919	1960
1960	3,220,405	1,940,000	1,050,002	1961
1961	2,839,862	2,099,000	536,809	1962
1962	2,742,403	1,981,000	702,852	1963
1963	3,566,764	2,017,000	589,300	1964
1964	3,568,102	2,468,000	963,635	1965
1965	2,555,345	2,454,000	300,017	1966
1966	2,571,902	2,464,000	200,000	1967
1967	3,100,000	2,468,000	442,000	1968
1968	3,483,000	2,620,000	604,000	1969
1969	3,602,000	2,645,000	670,000	1970
1970	4,017,000	2,645,000	960,000	1971
1971	4,025,000	2,545,000	1,036,000	1972
1972	4,025,000	2,545,000	1,036,000	1973

research, payments made to a municipal corporation authorized under the act, civil service retirement and disability payments covered by the act, and the carrying out of all other provisions of the act.

Since the final product of the industry is a beautiful, soft supple fur that has been able to command prices of over \$100 per pelt on the world market, revenues from the industry have been consistently high. During the past ten years, gross receipts from the sale of furs have ranged between \$3.8 million and \$5.4 million yearly. Net receipts from sales--gross receipts less contractors' processing costs and one per cent

discount on cash sales--have generally been from \$2.5 to \$3.5 million during this period.

The processing and marketing of seal skins has been so successful that the U.S. Government has earned an annual net profit for many years. Alaska has received 70 per cent of the annual net profits since 1959, when it became a state.

The Bureau of Commercial Fisheries anticipates increased fur seal receipts and profits in the future. A summary of actual and projected receipts, appropriations and payments to the state for the period 1959-1972 is given in Table 8.

## PART TWO. POPULATION AND ECONOMY

The purpose of this study is to determine whether there exists or can be developed on St. Paul Island, in accordance with the Fur Seal Act of 1966, a "viable self-governing community which is capable of providing adequate municipal services." The community is defined as being within the physical limits of a townsite to be established by the Secretary of the Interior, with its members consisting of all individuals within this area who are "natives of the Pribilof Islands." The members of the community are further defined as "any Indians, Aleuts, or Eskimos who permanently reside on said (St. Paul) island." For study purposes, therefore, a number of persons who would typically be considered members of the community are excluded by reason of ethnic classification (e.g., non-native teachers, nurses, Bureau of Commercial Fisheries employees and other workers who are year-round residents of the island).

The community economy is likewise limited for the purposes of the study to only those households and individuals who are "natives of the Pribilof Islands," and income and employment data are in terms of this physical-ethnic definition. When considering community income, for example, income earned by non-native residents and non-resident seasonal workers is excluded from the base, although they generate secondary income within the community economy.

Because of the unique nature of the definition of the community and since the primary purpose of the study is to determine community viability, terminology used here does not always conform strictly to standard or conventional usages. Rather, statistical data are classified and analyzed in terms of an economic model which treats income and employment in terms of source in relation to the "community."

Basic income and employment of community members are considered to be derived from sources outside the "community," i.e., wages and salaries paid by and purchases made by the Bureau of Commercial Fisheries and other federal and state agencies, earnings from off-island employment of residents, tourist expenditures, and welfare, unemployment, old age and other payments from social programs. These sources are basic in that they generate and support the dynamic sector of the community's economy, and it is from them that both current and future viability must largely evolve. This basic income is non-community in terms of source, as it is generated by resources, markets and employment outside the physical-ethnic limits of the definition of community.

Secondary income and employment are considered to be derived from the further exchange of money within the community for purchase of goods and services from members of the community and the provision of community-financed services. This income and employment is derivative in the sense that it is generated by consumption financed by the basic income and employment received by the residents. Again, by the terms of the special definition of community being used, only secondary income earned by native residents is considered here as part of the community economy.



CHAPTER IV. THE POPULATION OF ST. PAUL

Excellent census records, dating back to at least 1875, have been kept on the St. Paul population. Normally, the local census, taken on December 31st of each year, recorded those persons actually present on the island and those temporarily absent. The data presented here summarize population characteristics relevant to this study; among those, the movement of people is most important as a factor in future population composition.

In 1876, the resident population was 243. By 1927 it had dropped to 202. From that date onward (Table 9 and Figure 1), the population increased to the 1966 level of about 470 persons. For the past decade, the average rate of natural increase, births over deaths, has been about 1.91 per cent.

FIGURE 1

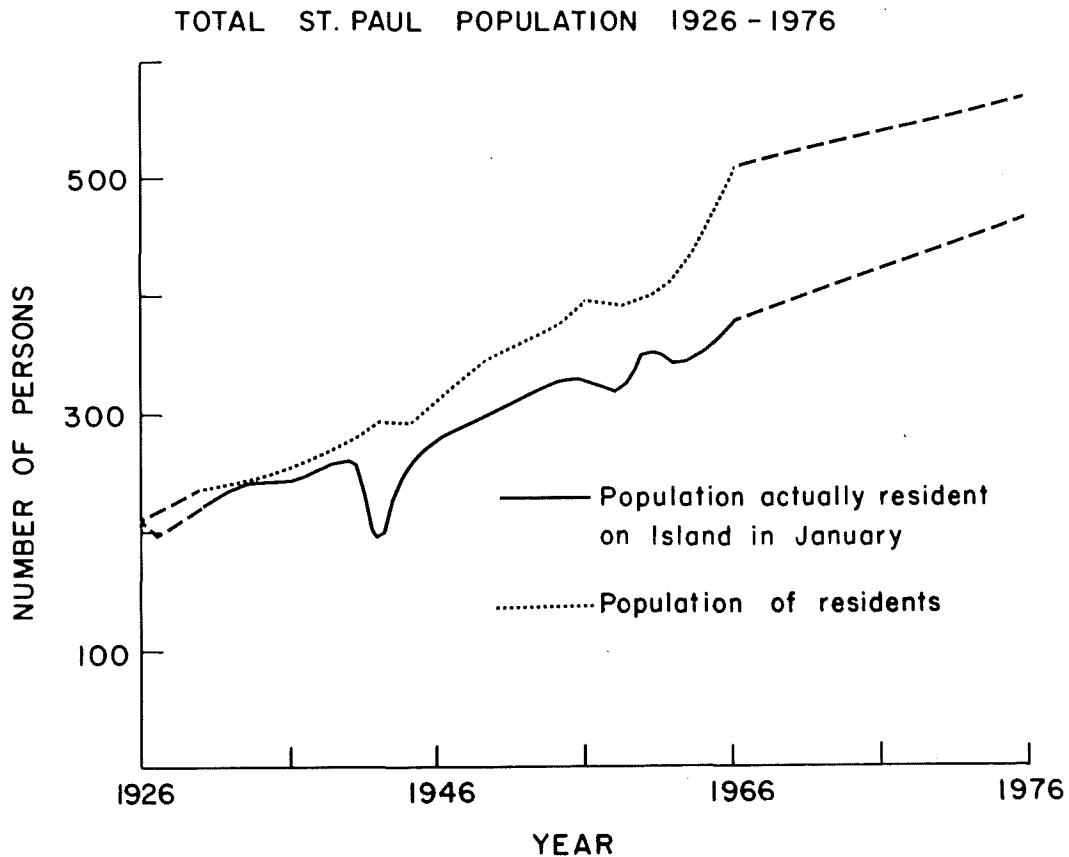


TABLE 9  
POPULATION OF ST. PAUL 1925-1966

<u>Year</u>	<u>Birth</u>	<u>Death</u>	<u>Departures</u>		<u>Absent Indef.</u>	<u>Arrivals</u>		<u>Total Real Population Accredited to Island</u>	<u>Actual Population on Island</u>
			<u>Perm.</u>	<u>Temp.</u>		<u>Perm.</u>	<u>Temp.</u>		
1925								182	
1926	7	2	2	11		20		211	202
1927	11	7	0	26		3		215	189
1928									
1929									
1930	11	3	2	11		5		233	222
1931	13	5	0	17		1		241	232
1932	9	12	4	1		0		233	232
1933	15	3	3	12		0		242	230
1934	10	8	6	10		5		243	233
1935	11	4	4	20		0		247	227
1936	11	5	2	16		2		253	256
1937	13	3	0	13		0		263	256
1938	7	1	4	12		0		265	253
1939	10	3	1	17		3		274	259
1940	7	7	2	15		1	3	273	261
1941	14	4	1			3		285	285
1942	9	1		106		2		295	189
1943	10	14	2	52		0	2	291	241
1944	7	8	4	40		3	6	289	254
1945	11	2	1	50		10	0	307	257
1946	9	3	1	39		2		314	275

Table 9 (continued)

<u>Year</u>	<u>Birth</u>	<u>Death</u>	<u>Departures</u>		<u>Absent Indef.</u>	<u>Arrivals</u>		<u>Total Real Population Accredited to Island</u>	<u>Actual Population on Island</u>
			<u>Perm.</u>	<u>Temp.</u>		<u>Perm.</u>	<u>Temp.</u>		
1947	19	6	2	45		4	3	329	287
1948	9	1	4	49		2	5	335	291
1949	12	4	0	57		1	4	344	291
1950	10	3	1	47		0	5	350	308
1951	14	3	3	53		3	3	361	311
1952	6	4	2	49		1	8	362	323
1953	12	4	3	54		1	8	369	322
1954	19	11	7	54		2	8	372	326
1955	11	1	3	48		4	5	383	340
1956	10	4	4	65		0	6	385	326
1957	9	5	5	35	22		7	384*	334
1958	9	3	9	45	22	1		382*	319
1959	13	5	8	28	24	1		383*	345
1960	12	2	5	30	28		20	392*	350
1961	10	3	2	35	31	3	7	396*	337
1962	15	3	2	42	32	7	4	414*	340
1963	10	3	9	61	32	7	80	416*	330
1964	11	1	1	76	41	37	11	461*	355
1965	12	4	3	121	41	34	12	501*	347
1966	16	14	8	100	41	19	11	510*	380

\* To arrive at accredited native population figure recorded in annual BCF census, subtract number of "indefinitely absent" population.

The present residents of St. Paul community are Aleutian Islanders, some of whose forefathers migrated to the Pribilof Islands as many as 180 years ago. As can be seen in Table 10, only 3.6 per cent of the 1966 population of St. Paul were not born on the Pribilofs.

Movement to and from St. Paul is of two forms: temporary and permanent arrivals and departures. Table 9 lists the changes in population attributed to this movement. Since 1962, permanent departures have exceeded permanent arrivals by only two persons (Table 11).

The significance of permanent movement lies not only in total numbers, but also in the composition of the migrants and their reasons for travel. It is clear from Table 12 that the majority of permanent departures were females in the age group 15 to 34. The reasons for permanent departures, given in Table 12, indicate that most females left the island in order to marry. Unlike the women, permanent movement of men to or from St. Paul caused no net change in the critical age group 15 to 34.

Although permanent emigration to St. Paul since 1926 produced a net increase in the age group 1 to 14, it did not result in a significant imbalance between males and females. Data summarized in Tables 13, 14 and 15 show that in the age groups 1 to 19, there has been no significant change in the population composition since 1926. As shown in Table 16 and Figure 2, the greatest variation and overall difference between sexes occurs in the age group 20 to 49. Since 1926, males have outnumbered females in this age group.

One would expect that the adult female migration pattern and continued imbalance between sexes in the age group 20 to 49 would affect the marital status of many St. Paul residents. Tables 17 to 21, and Figures 3 and 4, illustrate the trend whereby more and more men, particularly between the

TABLE 10

## NUMBER OF ST. PAUL ISLAND RESIDENTS NOT BORN ON ISLAND

Census Year	<u>A</u> Born on St. George Is.		<u>B*</u> Non-Pribilof Born		<u>C**</u> Non-Pribilof Born/Prib. Parent		<u>Totals</u> Cols Col A&B B	
	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>		
	1926	1	7	4	15	-	1	27
1936	1	7	-	8	-	-	16	8
1946	7	13	3	4	8	3	27	7
1956	6	11	3	8	6	2	28	11
1966	42	33	4	13	13	8	92	17

\*Not born on Pribilof Islands and not of Pribilof Island parents.

\*\*Not born on Pribilof Islands but with at least one parent Pribilof Island born, e.g., children born at Funter and Anchorage, Alaska.

TABLE 11

SUMMARY OF PERMANENT  
ARRIVALS AND DEPARTURES, ST. PAUL  
1926 - 1966

<u>Departed</u>	<u>Age Groups by Years</u>					<u>Total</u>
	<u>0-14</u>	<u>15-34</u>	<u>35-49</u>	<u>50-over</u>	<u>Unknown</u>	
Male	17	24	9	2	4	56
Female	20	74	11	1	4	110
Total	37	98	20	3	8	166
<u>Arrived</u>						
Male	34	24	10	7	1	76
Female	31	39	9	5	4	88
Total	65	63	19	12	5	164
<u>Difference</u>						
Male	+17	0	+1	+5	-3	+20
Female	+11	-35	-2	+4	0	-22
Total	+28	-35	-1	+9	-3	-2

TABLE 12  
 DESTINATION AND REASON FOR  
 PERMANENT DEPARTURES FROM  
 ST. PAUL, 1926 - 1966

<u>Destination</u>	<u>Male</u>	<u>Female</u>	<u>Reason for Departure</u>	<u>Male</u>	<u>Female</u>
St. George	8	22	Marriage	0	51
Aleutians and Alaska Pen.	4	30	Widowed	1	5
Anchorage Area	3	7	Divorced	0	5
Bristol Bay	3	1	Bachelor	1	0
SE Alaska	9	19	Accompanying or joining spouse	1	8
Seattle-Portland	6	5	Accompanying or joining parents	14	24
California	3	8	Adopted	5	5
Other States	3	5	Military	9	0
Unknown	17	13	Work	13	0
			School	3	0
			Unknown	10	12
TOTAL	56	110	TOTAL	56	110

ages of 20 and 39, have not married. In 1966, there were 44 unmarried men in St. Paul, but only 10 single females, aged 20 to 39. Furthermore, Tables 22 and 23 indicate that the traditional movement of women from the Aleutian Islands or Alaskan mainland to St. Paul declined sharply after 1926 (Figure 5). In 1966, only nine married women in a total of 74 were born on the Pribilof Islands. Moreover, during the decade prior to 1966, there was no appreciable increase in the non-Pribilof born women married to St. Paul men.

TABLE 13

AGE AND SEX COMPOSITION OF  
ST. PAUL RESIDENTS  
1926 - 1966

Age Group	1926			1936			1946			1956			1966		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	10	19	29	20	26	46	23	21	44	29	28	57	34	38	72
5-9	22	12	34	32	13	45	27	23	50	30	26	56	26	27	53
10-14	15	13	28	8	18	26	17	23	40	22	20	42	31	21	52
15-19	11	17	28	21	15	36	27	14	42	22	22	44	36	31	67
20-24	11	9	20	12	5	17	9	14	23	16	22	38	23	20	43
25-29	3	2	5	10	10	20	25	11	36	30	6	36	20	14	34
30-34	5	8	13	11	6	17	8	6	14	10	12	22	16	13	29
35-39	9	6	15	4	3	7	9	9	18	21	12	33	16	3	19
40-44	6	2	8	3	6	9	11	3	14	8	5	13	10	10	20
45-49	4	5	9	9	4	13	3	3	6	8	9	17	20	11	31
50-54	-	4	4	2	2	4	3	6	9	8	4	12	10	9	19
55-59	4	2	6	3	4	7	6	1	7	2	3	5	6	6	12
60-64	2	2	4	-	1	1	1	2	3	-	3	3	8	2	10
65-over	<u>3</u>	<u>3</u>	<u>6</u>	<u>2</u>	<u>3</u>	<u>5</u>	<u>2</u>	<u>5</u>	<u>7</u>	<u>5</u>	<u>2</u>	<u>7</u>	<u>6</u>	<u>4</u>	<u>10</u>
TOTAL	105	104	209	137	116	253	171	142	313	211	174	385	262	209	471

TABLE 14  
 PERCENTAGE OF ST. PAUL  
 MALES BY AGE GROUPS<sup>1</sup>  
 1926 - 1966

Age Group	1926	1936	1946	1956	1966
0-9	30.5	37.9	29.2	27.9	22.9
10-19	24.8	21.2	25.7	20.9	25.6
20-29	13.3	16.1	19.9	21.8	16.4
30-39	13.3	10.9	9.9	14.7	12.2
40-49	9.5	8.8	8.2	7.6	11.5
50-59	3.8	3.6	5.3	4.7	6.1
60-over	4.8	1.5	1.8	2.4	5.3

<sup>1</sup>Percent of total population.

TABLE 15  
 PERCENTAGE OF ST. PAUL  
 FEMALES BY AGE GROUPS<sup>1</sup>  
 1926 - 1966

Age Group	1926	1936	1946	1956	1966
0-9	29.8	33.6	31.0	31.0	31.1
10-19	28.8	28.5	26.8	24.2	24.9
20-29	10.6	12.9	17.6	16.1	16.3
30-39	13.5	7.8	10.6	13.8	7.6
40-49	6.7	8.6	4.2	8.0	10.0
50-59	5.8	5.2	4.9	4.0	7.2
60-over	4.8	3.4	4.9	2.9	2.9

<sup>1</sup>Percent of total population.



TABLE 16  
 PERCENT MALES AND FEMALES  
 AT ST. PAUL BY AGE GROUPS<sup>1</sup>

Age Group	1926		1936		1946		1956		1966	
	M	F	M	F	M	F	M	F	M	F
0-9	50.8	49.2	57.2	42.8	53.2	46.8	52.2	47.8	48.0	52.0
10-19	46.4	53.6	46.8	53.2	53.6	46.4	51.2	48.8	56.3	43.7
20-29	56.0	44.0	59.4	40.6	57.6	42.4	62.2	37.8	55.8	44.2
30-39	50.0	50.0	62.6	37.4	53.2	46.8	56.4	43.6	66.7	33.3
40-49	58.8	41.2	54.6	45.4	70.0	30.0	53.4	46.6	58.8	41.2
50-59	40.0	60.0	45.4	54.6	56.3	43.7	58.8	41.2	51.6	48.4
60-over	50.0	50.0	33.4	66.6	30.0	70.0	50.0	50.0	70.0	30.0

<sup>1</sup>Percent of individuals in each age group.

FIGURE 2  
 AVERAGE PERCENTAGE DIFFERENCE BETWEEN  
 MALES AND FEMALES BY AGE GROUPS 1926-1966  
 (Plotted for Males only)

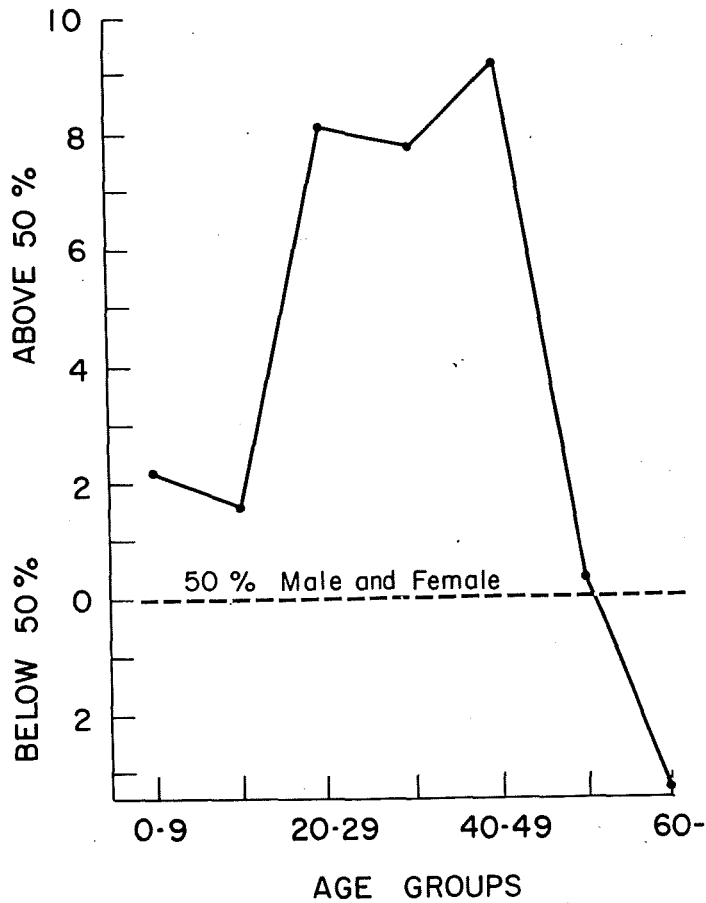


TABLE 17  
 MARITAL STATUS OF ST. PAUL ISLAND POPULATION  
 1926

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Married:			
15-19	2	4	6
20-29	9	9	18
30-39	12	14	26
40-49	7	6	13
50-64	<u>1</u>	<u>-</u>	<u>1</u>
Totals	35	35	70
Single (unmarried or divorced):			
20-29	5	1	6
30-39	1	0	1
40-49	0	0	0
50-64	0	1	1
65 and over	<u>0</u>	<u>0</u>	<u>0</u>
Totals	6	2	8
Widowed:			
under 40	1	1	2
40-49	3	2	5
50-64	2	4	6
65 and over	<u>1</u>	<u>5</u>	<u>6</u>
Totals	7	12	19
Marital Status:			
Married	33	31	64*
Widowed	7	12	19
Single	<u>6</u>	<u>2</u>	<u>8</u>
Totals	46	45	91

\*Age 20 and over.

TABLE 18

## MARITAL STATUS OF ST. PAUL ISLAND POPULATION

1936

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Married:			
15-19	0	4	4
20-29	11	14	25
30-39	12	9	21
40-49	11	7	18
50-64	3	4	7
65 and over	<u>1</u>	<u>0</u>	<u>1</u>
Totals	38	38	76
Single (unmarried or divorced):			
20-29	10	1	11
30-39	2	0	2
40-49	1	0	1
50-64	0	0	0
65 and over	<u>0</u>	<u>0</u>	<u>0</u>
Totals	13	1	14
Widowed:			
Under 40	1	0	1
40-49	0	3	3
50-64	1	4	5
65 and over	<u>1</u>	<u>3</u>	<u>4</u>
Totals	3	10	13
Marital Status:			
Married	38	34	72*
Widowed	3	10	13
Single	<u>13</u>	<u>1</u>	<u>14</u>
Totals	54	45	99

\*Age 20 and over.

FIGURE 3

NUMBER OF UNMARRIED OR DIVORCED ST. PAUL RESIDENTS

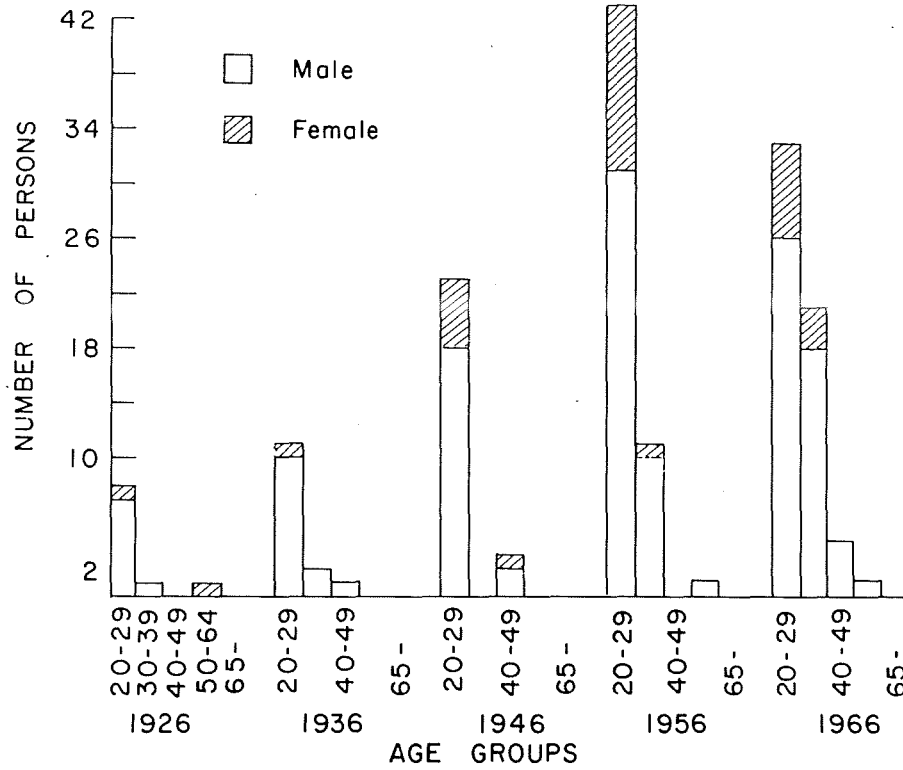


FIGURE 4

NUMBER OF UNMARRIED OR DIVORCED ST. PAUL RESIDENTS Ages 20 to 49 1926-1966

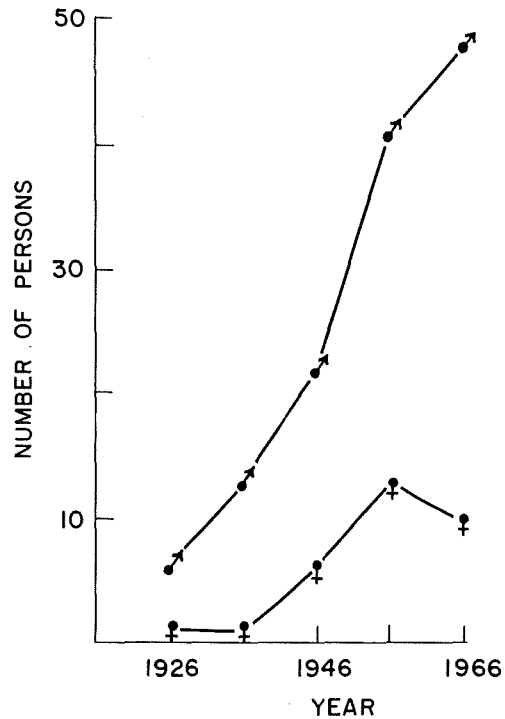


TABLE 19  
MARITAL STATUS OF ST. PAUL ISLAND POPULATION  
1946

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Married:			
15-19	0	1	1
20-29	15	19	34
30-39	13	14	27
40-49	10	5	15
50-64	7	6	13
65 and over	<u>1</u>	<u>1</u>	<u>2</u>
Totals	46	46	92
Single (unmarried or divorced):			
20-29	18	5	23
30-39	2	0	2
40-49	2	1	3
50-64	0	0	0
65 and over	<u>0</u>	<u>0</u>	<u>0</u>
Totals	22	6	28
Widowed:			
Under 40	3	2	5
40-49	2	0	2
50-64	2	4	6
65 and over	<u>1</u>	<u>4</u>	<u>5</u>
Totals	8	10	18
Marital Status:			
Married	46	45	91*
Widowed	8	10	18
Single	<u>22</u>	<u>6</u>	<u>28</u>
Totals	76	61	137

\*Age 20 and over.

TABLE 20

MARITAL STATUS OF ST. PAUL ISLAND POPULATION  
1956

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Married:			
15-19	0	14	4
20-29	14	14	28
30-39	22	23	45
40-49	14	12	26
50-64	6	5	11
65 and over	<u>2</u>	<u>0</u>	<u>2</u>
Totals	58	58	116
Single (unmarried or divorced):			
20-29	31	12	43
30-39	10	1	11
40-49	0	0	0
50-64	1	0	1
65 and over	<u>0</u>	<u>0</u>	<u>0</u>
Totals	42	13	55
Widowed:			
Under 40	1	1	2
40-49	2	2	4
50-64	3	6	9
65 and over	<u>2</u>	<u>3</u>	<u>5</u>
Totals	8	12	20
Marital Status:			
Married	58	54	112*
Widowed	8	12	20
Single	<u>42</u>	<u>13</u>	<u>55</u>
Totals	108	79	187

\*Age 20 and over.

TABLE 21  
MARITAL STATUS OF ST. PAUL ISLAND POPULATION  
1966

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Married:			
15-19	0	2	2
20-29	17	26	43
30-39	14	12	26
40-49	25	21	46
50-64	16	11	27
65 and over	<u>2</u>	<u>2</u>	<u>4</u>
Totals	74	74	148
Single (unmarried or divorced):			
20-29	26	7	33
30-39	18	3	21
40-49	4	0	4
50-64	1	0	1
65 and over	<u>0</u>	<u>0</u>	<u>0</u>
Totals	49	10	59
Widowed:			
Under 40	0	2	2
40-49	1	0	1
50-64	7	6	13
65 and over	<u>4</u>	<u>2</u>	<u>6</u>
Totals	12	10	22
Marital Status:			
Married*	74	72	146
Widowed	12	10	22
Single	<u>49</u>	<u>10</u>	<u>59</u>
Totals	135	92	226

\*Age 20 and over.

TABLE 22  
MARRIED OR WIDOWED ST. PAUL RESIDENTS NOT BORN  
ON ST. PAUL ISLAND  
1926 - 1966

Census Year	<u>Born on St. George</u>				<u>Total</u>	<u>Non-Pribilof Born</u>				<u>Total</u>	<u>Grand Total</u>
	Married		Widowed			Married		Widowed			
	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>		<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>		
1926	0	6	1	1	8	1	10	2	4	17	25
1936	1	4	0	0	5	0	6	0	1	7	12
1946	2	4	0	3	9	0	3	0	0	3	12
1956	3	9	0	2	14	1	8	0	0	9	23
1966	12	13	1	2	28	2	9	1	1	13	41

TABLE 23  
PERCENTAGE OF MARRIED OR WIDOWED ST. PAUL RESIDENTS  
NOT BORN ON ST. PAUL ISLAND  
1926 - 1966

Census Year	<u>Total of All Married or Widowed Persons on St. Paul</u>	<u>Total All Married or Widowed Persons Not Born on St. Paul</u>	<u>% Born on St. George</u>	<u>% Non- Pribilof Born</u>
1926	78	25	10.2	21.8
1936	89	12	5.6	7.9
1946	110	12	8.2	2.7
1956	136	23	10.3	6.6
1966	170	41	16.5	7.6



FIGURE 5

MARRIED OR WIDOWED ST. PAUL RESIDENTS BORN ON ST. GEORGE ISLAND OR NON-PRIBILOF BORN AS A PERCENTAGE OF ALL ST. PAUL MARRIED OR WIDOWED RESIDENTS 1926-1966

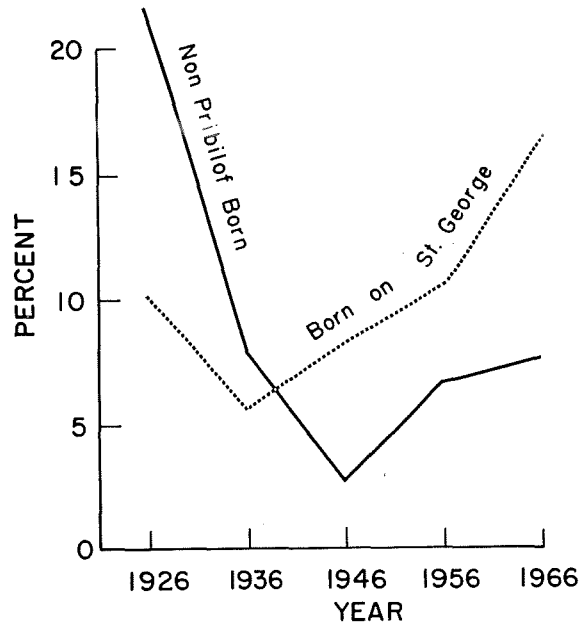


FIGURE 6

RESIDENTS ABSENT FROM ST. PAUL 1949-1966

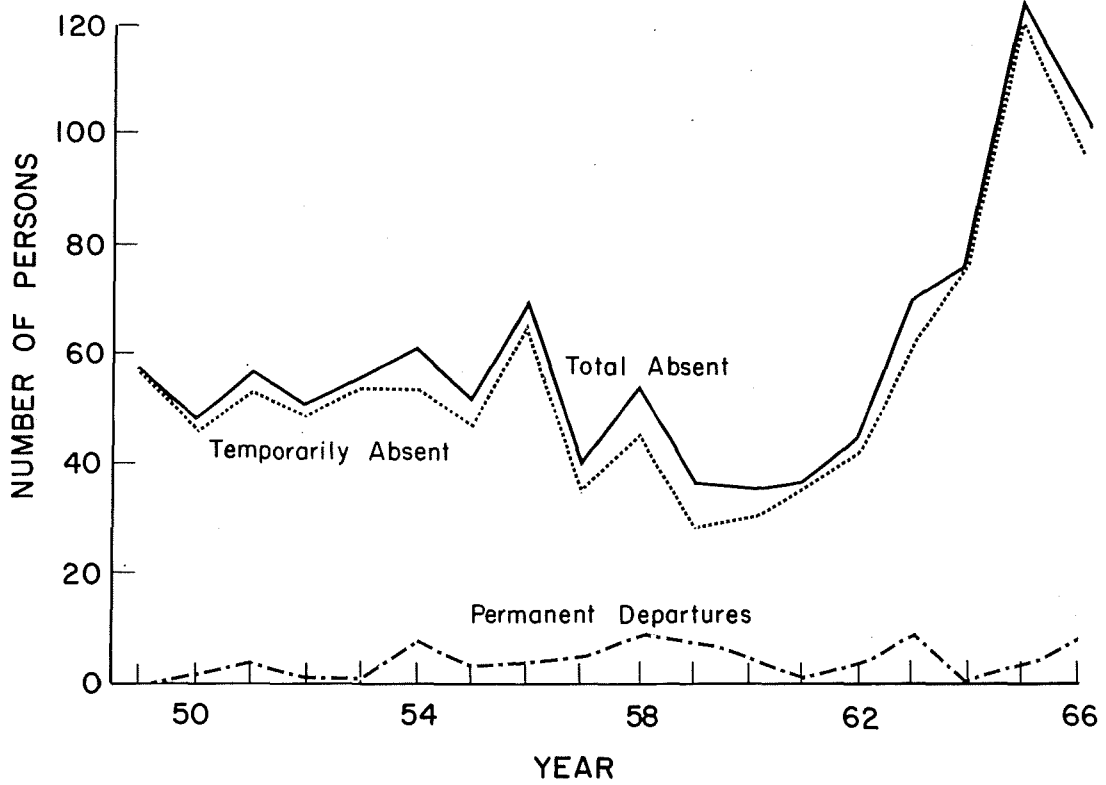


TABLE 24

## POPULATION MOVEMENT FROM ST. PAUL ISLAND

1949-1966

	To St. George Island		To Aleutian Is. & Alaska Penin.			To Alaskan Mainland					To Continental U.S.A.					Total Absent		
	Perm	Temp	Perm	Work	Other	Perm	Work*	Hosp	School	Other	Perm	Work*	Hosp	School	Other	Perm	Temp	Total
1966	-	-	-	7	-	-	9	-	22	5	-	14	1	41	-	8	100	108
1965	-	-	-	23	1	-	10	5	33	1	-	14	2	31	1	3	121	124
1964	-	2	-	1	3	-	3	7	25	5	-	10	1	19	2	-	77	77
1963	6	1	-	-	2	-	3	3	17	1	3	19	2	10	3	9	61	70
1962	1	2	-	-	4	2	3	1	12	1	-	10	1	8	-	3	42	45
1961	-	2	-	-	3	1	-	3	12	-	-	5	3	5	2	1	35	36
1960	1	4	-	-	2	3	-	3	7	-	1	8	4	2	-	5	30	35
1959	-	-	-	1	-	-	4	4	8	1	-	6	2	2	-	8	28	36
1958	-	3	3	-	7	4	1	1	7	4	2	10	-	3	9	9	45	54
1957	2	1	-	1	1	2	-	5	11	-	-	5	-	-	11	5	35	40
1956	-	10	-	-	4	-	7	-	18	3	3	21	-	1	1	4	65	69
1955	3	3	-	-	-	-	6	2	13	-	-	19	2	-	3	3	48	51
1954	2	5	2	5	1	1	11	1	11	1	1	16	1	-	2	7	54	71
1953	1	2	-	1	-	-	12	1	13	6	-	18	-	-	1	1	54	55
1952	-	4	-	1	3	-	13	3	6	1	1	15	-	-	2	1	49	50
1951	-	-	-	1	2	3	16	-	14	1	-	15	1	1	2	3	53	56
1950	-	3	-	-	1	1	4	-	17	7	-	10	1	1	3	1	47	48
1949	-	1	-	3	-	-	4	1	24	8	-	8	3	-	5	-	57	57

\*Work includes military servicemen and dependents.

TABLE 25  
GEOGRAPHICAL DISTRIBUTION OF ST. PAUL  
RESIDENTS TEMPORARILY ABSENT, 1936-1966

Census Year	St. George	Alaska*				Continental U.S.A.*		Total
		Aleutians and King Cove	Anchorage and Seward	South- east Alaska	Other Places Alaska	North- west Coast	Other States	
1936	3	10	-	-	-	3	-	16
1937	-	8	-	-	-	2	-	10
1938	8	2	-	-	-	2	-	12
1939	2	13	-	-	-	2	-	17
1940	6	7	-	-	-	-	2	15
1941	4	-	-	-	-	-	-	4
1942	-	-	-	101	2	2	1	106
1943	-	-	-	38	9	-	5	52
1944	2	-	-	16	18	-	4	40
1945	3	13	-	10	20	-	4	50
1946	3	8	-	13	8	6	1	39
1947	1	11	-	22	-	3	8	45
1948	4	6	1	24	-	6	8	49
1949	1	3	-	37	-	9	7	57
1950	3	1	-	28	-	4	11	47
1951	-	3	-	31	-	8	11	53
1952	5	4	-	23	-	5	12	49
1953	2	1	2	30	-	7	12	54
1954	5	6	2	22	-	8	11	54
1955	3	-	3	18	-	10	14	48
1956	10	4	-	27	1	9	14	65
1957	1	2	5	11	-	13	3	35
1958	3	7	4	8	1	16	6	45
1959	-	1	6	10	1	4	6	28
1960	4	2	3	7	-	6	8	30
1961	2	3	3	12	-	6	9	35
1962	2	4	2	11	4	7	12	42
1963	1	2	5	18	4	7	24	61
1964	2	3	16	21	4	21	10	77
1965	-	24	17	29	3	27	21	121
1966	-	8	14	20	2	38	18	100

\*Includes military.

TABLE 26

## OCCUPATIONS OF ST. PAUL RESIDENTS TEMPORARILY ABSENT IN ALASKA 1936-1966

Census Year	Working	Workers' Dependents	Hospital	School	University	Military	Prison	Visiting	Total
1936	-	-	-	-	-	-	-	13	13
1937	-	-	-	-	-	-	-	8	8
1938	-	-	-	-	-	-	-	10	10
1939	-	-	-	-	-	-	-	15	15
1940	-	-	-	-	-	-	-	13	13
1941	-	-	-	-	-	-	-	4	4
1942	84	-	-	19	-	-	-	-	103
1943	19	-	1	14	-	9	-	4	47
1944	7	5	-	3	-	18	-	3	36
1945	5	1	-	6	-	20	-	14	46
1946	3	1	-	11	-	8	-	9	32
1947	4	1	1	14	-	-	-	14	34
1948	4	1	1	17	-	-	-	12	35
1949	5	1	1	26	-	-	-	8	41
1950	3	1	-	18	-	-	-	10	32
1951	13	4	-	14	-	-	-	3	34
1952	14	4	3	6	-	-	-	5	32
1953	10	4	1	13	-	-	-	7	35
1954	12	4	1	11	-	-	-	7	35
1955	4	2	2	13	-	-	-	3	24
1956	5	2	-	18	-	-	-	17	42
1957	1	-	5	11	-	-	-	2	19
1958	1	-	1	6	1	-	-	14	23
1959	4	-	4	7	1	-	1	1	18
1960	-	-	3	7	-	-	-	6	16
1961	-	-	3	12	-	-	-	5	20
1962	1	2	1	11	1	-	-	7	23
1963	1	2	3	19	1	-	-	4	30
1964	3	6	7	23	2	-	-	5	46
1965	23	10	5	32	1	-	-	2	73
1966	13	3	-	21	1	-	1	5	44

TABLE 27

## OCCUPATION OF ST. PAUL RESIDENTS TEMPORARILY ABSENT IN CONTINENTAL U.S.A. 1936-1966

Census Year	Working	Workers' Dependents	Hospital	School	University	Military	Prison	Visiting	Total
1936	-	-	-	-	-	-	-	3	3
1937	-	-	1	-	-	-	-	1	2
1938	-	-	1	-	-	-	-	1	2
1939	-	-	1	-	-	-	-	1	2
1940	-	-	1	1	-	-	-	-	2
1941	-	-	-	-	-	-	-	-	0
1942	-	-	2	1	-	-	-	-	3
1943	1	-	3	-	-	-	-	1	5
1944	2	-	2	-	-	-	-	-	4
1945	1	-	2	-	-	-	-	1	4
1946	1	-	5	1	-	-	-	-	7
1947	1	-	2	1	-	7	-	-	11
1948	1	-	3	1	-	7	-	2	14
1949	1	-	3	-	-	7	-	5	16
1950	2	-	1	1	-	8	1	2	15
1951	5	-	1	1	-	10	1	1	19
1952	5	-	-	-	-	10	1	1	17
1953	7	-	-	-	-	11	1	-	19
1954	6	-	1	-	-	10	1	1	19
1955	7	-	2	-	-	12	1	2	24
1956	8	-	-	1	-	12	1	1	23
1957	1	2	-	-	-	2	-	11	16
1958	2	2	-	3	-	6	-	9	22
1959	2	-	2	2	-	4	-	-	10
1960	4	2	4	2	-	2	-	-	14
1961	3	2	3	5	-	-	-	2	15
1962	5	3	1	8	-	2	-	-	19
1963	8	8	2	7	-	3	-	3	31
1964	5	-	1	19	-	4	-	2	31
1965	7	2	2	31	-	5	-	1	48
1966	7	2	1	39	2	5	-	-	56

Second in importance to marriage as reasons for permanent movement from St. Paul (Table 12) were dependents who accompanied or joined their families away from the island and workmen who took jobs in Alaska or the continental United States. Data presented in Table 24 and Figure 6 show that since 1949 there has been no striking trend in the total number of permanent departures for any reason. On the average, about four persons per year have left St. Paul permanently since 1926. From 1949 to 1966, permanent movement from the island showed the same average.

Temporary movement to and from St. Paul is a tradition established early in the history of the settlement. As seen in Table 24 and Figure 6, most of the people absent from the island are away on a temporary basis, usually for less than a year. Until World War II, most temporary absentees were visiting on St. George Island (Tables 25 and 27). After 1942, the number of persons temporarily absent on the Alaskan mainland for purposes of employment, schooling and military service suddenly increased.

During the 15 year period after the war, there were usually 40 to 50 individuals absent each year. Most of these people were either working or at school in Alaska. The number of St. Paul residents in the continental United States during the same period ranged from about 10 to 20. A majority of these temporary out-migrants were either working, in a hospital or serving in the armed forces.

The most significant changes in temporary movement from St. Paul have occurred since 1964. In the past three years, twice as many students have been sent to boarding school in Alaska and the continental United States as in previous years. Furthermore, the number of seasonal workers and their dependents absent from the island has increased rapidly. Although data are lacking which might show a strong correlation between schooling away from

the island and a tendency to migrate permanently to the Alaskan mainland or continental United States, it is probable that the experience of schooling away from home will influence some young people to leave St. Paul.

As can be seen from Table 27, there has been no significant change since 1953 in the annual number of St. Paul residents temporarily employed in the continental United States. Seasonal off-island employment within Alaska, however, has undergone important fluctuations. No St. Paul residents were reported as temporarily absent workers before 1942, when 84 persons took jobs in Alaska. Off-island employment fell sharply in 1943, increased slightly in the early 1950's, declined to zero in 1960-1961 and increased rapidly again in 1965. Seasonal off-island employment for the winter months of 1965-1966 and 1966-67 involved 33 and 26 persons respectively.

Apparently, St. Paul residents have been more willing to migrate on a temporary basis, particularly to places within Alaska, than on a permanent basis. The information given in Table 25 suggests that lack of employment opportunities on the island, coupled with relatively attractive jobs in Alaska, will result in a seasonal migration of wage labor from St. Paul.





## CHAPTER V. THE ECONOMY OF ST. PAUL

The economy of the St. Paul community as defined in this study has always been based on the fur seal industry, or, more specifically, on the income from the harvesting and processing of fur seal pelts and by-products. Employment and income of the community are, therefore, tied directly to federal government policies. It is stated federal policy that the government shall employ Pribilof Islanders for the taking and curing of fur seal skins and shall compensate them at rates to be determined by the Secretary of the Interior, currently acting through the Bureau of Commercial Fisheries.

### Patterns of Compensation

In 1926, compensation took the form of a standard wage, based on \$0.75 per seal skin produced, divided among the resident native workers according to five job classifications. The gross cash wage paid in 1926 was \$12,273. Additional compensation was given the native residents in the form of housing, clothing and food rations, education and medical services. Gross cash wages paid in 1936, at a rate of \$0.60 per seal skin, amounted to \$26,293. By 1946, the gross wage had increased to \$47,375, paid at a rate of \$0.90 per skin. The village's net wage, after taxes, was then about \$45,000, most of which was spent in the "canteen," a retail store operated in St. Paul.

In December 1949, the Department of the Interior approved a new cash compensation plan for the Aleut workmen of the Pribilof Islands to be effective January 1950. Under the new plan, each worker was paid an annual wage according to one of 13 job classifications. In addition, workers shared a bonus of \$0.35 per seal skin taken, thus allowing the local economy

TABLE 28  
ESTIMATED GROSS INCOME OF  
ST. PAUL RESIDENTS  
1945-1955

<u>Year</u>	<u>Gross Wage</u>	<u>Sealing Bonus</u>	<u>Additional</u> <sup>*</sup> <u>Income</u>	<u>Total</u> <u>Income</u>
1955	217,220	20,320	3,761	248,150
1954	199,380	20,095	7,680	227,155
1953	127,427	21,997	39,217	188,640
1952	120,726	20,624	39,079	180,429
1951	98,889	20,231	37,149	156,269
1950	81,619	17,042	unk	unk
1949	69,134	-	unk	unk
1948	70,136	-	49,010	119,146
1947	55,229	-	49,986	105,215
1946	48,695	-	35,797	84,492
1945	35,384	-	27,442	62,826

\* Estimated direct subsistence, fuel, food, clothing, unemployment insurance, old age benefits.

to be in some way directly linked to levels of production. As in the period before 1950, St. Paul residents also received housing, basic food and household supplies, many clothing items, medical and dental care, and education and recreational facilities. It was estimated that the average annual cost of these supplies and facilities was about \$917 per worker in 1949.

The 1950 pay plan represented the first step in a gradual transition from partial cash payment, plus supplies and facilities, to full cash payment for all labor and services, with reduced compensation in the form of free

TABLE 29  
ESTIMATED GROSS EARNINGS BY ST. PAUL RESIDENTS  
1956 - 1966

<u>Year</u>	<u>BCF Wages</u>	<u>Other on-island Wages</u>	<u>Off-island Wages</u>	<u>Unearned<sup>1</sup> Income</u>	<u>TOTAL</u>
1966	586,141	25,800	65,645	51,400	729,986
1965	528,313	22,800	43,000	39,600	633,713
1964	575,000	22,300	7,200	52,800	657,300
1963	452,000	22,000	2,500	36,800	513,300
1962	222,300	7,000	2,500	21,800	253,600
1961	263,457	6,500	-	12,700	282,657
1960	250,694	6,500	-	13,900	271,094
1959	245,201	6,000	8,000	5,600	264,801
1958	240,150	6,000	2,500	5,650	254,300
1957	247,930	5,500	2,500	6,100	262,030
1956	246,901	5,500	10,000	5,300	267,701

<sup>1</sup>Old Age Asst., AFDC, retirement pensions, unemployment insurance.

supplies and facilities. Gross wages, sealing bonus payments and additional compensations for the periods 1945-1955 and 1956-1966 are given in Tables 28 and 29.

Initially, as expenditures remained relatively unchanged, the result of the 1950 pay plan was to increase the cash income of the St. Paul residents. In addition to receiving a basic clothing and food issue and rent free housing, residents were able to purchase groceries, clothing and other items on the island at prices only 10 per cent above f.o.b. costs in Seattle.

The first costs transferred to the residents were for fuel. This amounted to about \$175 per household per year in 1948. In 1952, wages were

increased by 8 per cent and the basic clothing issue was eliminated; at that time, this item was costing the government about \$27 per household per year. Wages were again increased in 1954, and the government food issue, which had cost about \$600 per household per year, was stopped. St. Paul residents still received rent free housing and free electricity for the first 150 KWH every four weeks. By 1955, therefore, direct living costs for St. Paul inhabitants had increased by at least \$45,000 per year over 1949 costs. Income on the other hand, had increased by \$175,000, or nearly four times the amount of the added costs.

In 1962, the Bureau of Commercial Fisheries initiated a second new pay plan under which the island residents were paid the standard government wages for Alaska during periods of actual employment. At the same time, the villagers were required to pay nominal rental fees. Prices in the government store increased from a 10 per cent surcharge to 35 per cent to cover increased handling costs.

Until 1962, all able-bodied adult men in St. Paul employed in the fur seal industry were considered to be year-round employees. Winter work projects and fox trapping occupied many of the months when seals were not harvested. Although the pre-1950 job classification system and the 1950-1962 plan created some disparities between the incomes of various workers, the difference was small.

As can be seen in Table 29, the 1963 gross wage earnings of St. Paul were double those of 1962. Under the new pay plan, however, workers were classified not only according to jobs, but also according to whether they were permanent, year-round employees or temporary, seasonal employees. It can be seen from Table 30 that the number of permanent workers fell sharply between 1962 and 1963 and then slowly decreased to the 1967 level. Table 31 and Figure 7 clearly show how the phasing out process is reflected in the

TABLE 30

COMPOSITION OF BCF WORK FORCE ON ST. PAUL,  
1956-1967

Year	St. Paul Residents		Total	Estimated Total Non-Residents	Total Force
	Permanent	Temporary			
1967	42	83	125	34	159
1966	44	102	146	36	182
1965	42	86	128	46	174
1964	50	76	126	57	183
1963	53	DM	-	69	-
1962	96	DM	-	77	-
1961	94	37	131	69	200
1960	91	40	131	103	234
1959	98	31	129	94	223
1958	94	17	111	81	191
1957	93	35	128	95	223
1956	97	21	118	109	227

FIGURE 7  
BUREAU OF COMMERCIAL FISHERIES WORK FORCE  
ON ST. PAUL RESIDENTS 1945 - 1975

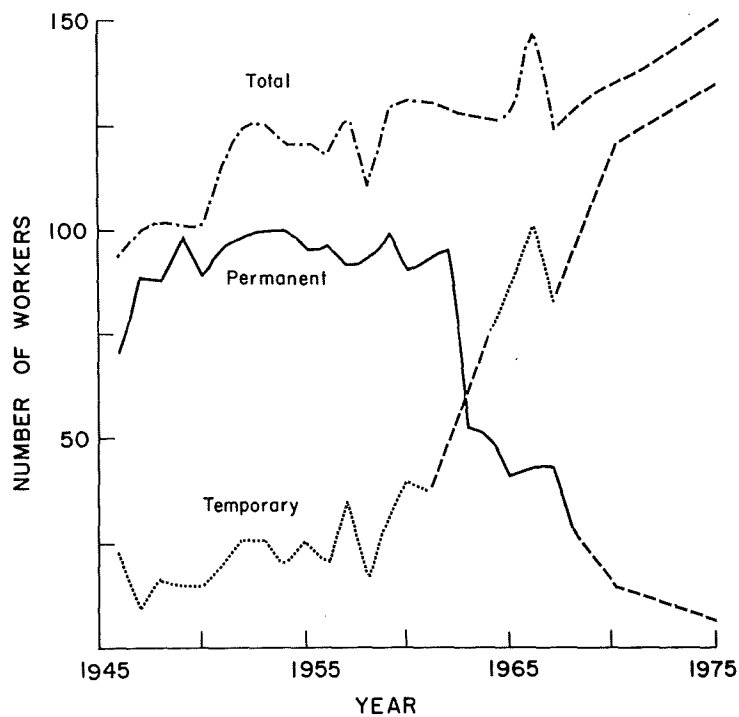


TABLE 31

PERMANENT B.C.F. EMPLOYMENT OF ST. PAUL RESIDENTS -  
 BY CATEGORIES, NUMBER AND INCOME, 1962-1968  
 (income in thousands of dollars)

Fiscal Year	Management and Facilities		Powerhouse		Stores and Warehouse		Maintenance and Equipment	
	No. Pers.	Total Wage	No. Pers.	Total Wage	No. Pers.	Total Wage	No. Pers.	Total Wage
1968	4	26.0	5	44.2	0	-	4	38.7
1967	4	26.0	5	44.2	6	45.7	8	73.1
1966	4	26.0	5	42.0	6	43.1	8	73.0
1965	4	26.7	4	38.6	6	43.1	6	50.5
1964	5	29.1	5	39.9	7	48.7	4	40.0
1963	0	-	5	39.9	7	48.7	4	30.8
1962	-	-	5	14.1	7	18.1	4	10.8

Fiscal Year	Government Mess		Territorial Service		Hospital		Construction Maintenance and Sealing		Total Perm. Empl.	Total Annual Wages
	No. Pers.	Total Wage	No. Pers.	Total Wage	No. Pers.	Total Wage	No. Pers.	Total Wage		
1968	0	-	1	6.6	0	-	11	91.9	25	207.4
1967	1	8.5	1	6.6	0	-	19	154.2	44	358.3
1966	1	8.5	1	6.6	0	-	17	136.0	42	335.2
1965	2	14.9	0	-	0	-	21	185.9	43	359.7
1964	2	14.0	0	-	0	-	28	198.8	51	370.5
1963	2	14.0	3	19.2	2	7.5	30	212.8	53	372.8
1962	2	5.8	3	6.9	2	2.3	73	164.3	96	222.3

various categories of permanent B.C.F. employment. The reduction in work force program reflects the government policy under which the fur seal industry is to be eventually operated on a seasonal basis only.

Several different sets of statistical data have been used in the analysis of earned income for St. Paul during the past few years. The figures shown in Table 29 represent the estimated gross earnings for the village during the calendar years 1956 to 1966. These incomes reflect those earnings from sources which originate outside the community. They do not include secondary income represented by earnings from the exchange of money within St. Paul from such supporting (i.e., non-basic) activities as community employed workers and private business enterprises.

In order to obtain a detailed picture of the sources and uses of income, the community was studied for two periods, calendar year 1966 and fiscal year 1967 (July 1, 1966, to June 30, 1967). In both cases, attempts were made to study incomes by source, individual worker and household. Because complete statistical data could not be developed for every household, a sample of 47 households out of a total of 72 was selected for a careful analysis of income sources and expenditures.

During 1966, B.C.F. employed 44 St. Paul residents full-time at an average wage of \$8,500. An additional 76 residents had long-term seasonal employment at an average wage of \$2,600, and 25 people, mostly students, found short-term seasonal jobs with B.C.F. at an average wage of \$630. The detailed description of St. Paul income given in Table 32 indicates that in calendar 1966, 89.3 per cent of the island's wage earners received some employment with the Bureau. In fiscal 1967, the figure had declined to 86.3 per cent. During calendar 1966, 142 residents earned a gross wage of \$580,456 from B.C.F., while in fiscal 1967, 126 St. Paul inhabitants received a gross wage of \$469,147.

TABLE 32

## INCOME OF ST. PAUL HOUSEHOLDS BY EMPLOYMENT CATEGORY

1966-67

<u>Job Classification</u>	Calendar Year 1966			Fiscal Year 1967		
	<u>Number Employed</u>		<u>Gross Earnings</u>	<u>Number Employed</u>		<u>Gross Earnings</u>
	<u>Males</u>	<u>Females</u>		<u>Males</u>	<u>Females</u>	
1. BCF Permanent	42	0	\$361,925	34	0	\$286,488
2. BCF Temporary	55	11	134,535	56	6	131,877
3. Other Govt. Agencies Full-Time	2	1	17,400	2	1	17,400
4. Other Govt. Agencies Part-Time	0	2	4,400	0	2	4,400
5. BCF Temporary Plus Seasonal Off-Island	19	1	87,329	18	1	74,326
6. Off-Island Seasonal	0	2	2,000	1	2	4,500
7. St. Paul Community	2	2	9,673	3	2	17,473
8. Private Business	0	1	800	0	1	800
9. Retired	7	1	6,520	7	1	6,520
10. Private Business and BCF Temporary	0	0	-	0	0	-
11. Retirement and BCF Temporary	5	0	22,300	5	0	11,022
12. BCF Temporary and St. Paul Community	6	0	34,533	5	0	27,576
TOTAL	138	21	\$681,415	131	16	\$582,382



It can also be seen from Table 29 that since 1956 there has been a marked change in the dominant position of B.C.F. wage earnings within the total St. Paul economy. Prior to 1963, about 93 per cent of all income came from B.C.F. wages, and only 7 per cent came from other earned and unearned incomes. In 1966, just over 80 per cent of the total village income came from B.C.F. wages, while nearly 20 per cent was from other sources. Despite these changes, it is clear that the St. Paul economy continued to depend primarily on direct wage earnings from the Bureau.

Several other government agencies operate on St. Paul island, namely the Alaska State Department of Education, the United States Public Health Service, the United States Coast Guard, the United States Weather Bureau and the United States Postal Department. In 1966, only three St. Paul residents held wage earning positions with these agencies, earning a total of \$17,400. Two other residents received some part-time employment at a total gross wage of about \$4,400.

The number of positions and the gross earnings of migrant laborers leaving St. Paul during the winter seasons of 1965-1966 and 1966-1965 are presented in Table 33. It can be seen from these data that the developing king crab industry on the Aleutian Islands has offered excellent opportunities for seasonal wage employment away from St. Paul. In 1965-66, nearly 30 per cent of the workers were involved in the construction of processing plants and other shore based facilities. All workers during this period averaged over six months employment. In 1966-67, however, only 4 per cent of the migrants were employed in construction. Nearly 80 per cent of the workers took jobs on board the king crab boats. It is reported that some men who successfully undertook construction jobs away from St. Paul did not like shipboard work and returned to the island. As a result, the average working

TABLE 33  
OFF-ISLAND SEASONAL EMPLOYMENT OF  
ST. PAUL RESIDENTS  
1965 - 1967

	<u>Employment Type</u>	<u>Employment Place</u>	<u>Number of Workers</u>	<u>Estimated Work Period (months)</u>	<u>Estimated Gross Wage</u>
1966-67	King crab ship-board Work	Adak	20	4.5	\$35,000
	King crab shore plants	King Cove Unalaska	3	4.0	4,800
	Sheep Herding	Umanak	2	4.3	2,150
	General Labor	Anchorage	<u>1</u>	<u>6.0</u>	<u>2,400</u>
	Total		26		45,350
1965-66	King crab ship-board work	Adak	21	6.1	51,240
	King crab shore plants	Unalaska	2	6.5	5,200
	Construction	Unalaska	<u>10</u>	<u>5.9</u>	<u>29,500</u>
	Total		33		\$85,940

season in 1966-67 was considerably shorter than the previous year. Nevertheless, as indicated in Table 29, the contribution of off-island seasonal employment has increased significantly since 1964 and can be expected to play a vital role in the future of St. Paul.

The development of tourism has until recently been hindered by the dominant orientation of the St. Paul economy toward the fur seal industry. As indicated in Table 34, income from tourism and handicrafts probably amounted to about \$3,000 in 1966, or less than one half of one per cent of

TABLE 34  
ESTIMATED GROSS INCOMES OF ST. PAUL RESIDENTS  
1966

<u>EARNED INCOME</u>		<u>UNEARNED INCOME</u>	
<u>On-Island Employment</u>			
B.C.F. Wages	\$586,144	Retirement Benefits	\$10,600
Other Govt. Wages	21,800	Social Welfare	5,800
Non-Govt Wages	1,000	Unemployment insurance	35,000
Tourism and Handicrafts	3,000		
<u>Off-Island Employment</u>	65,645		
TOTAL	\$675,586	TOTAL	\$51,400
ALL INCOME GRAND TOTAL \$729,986			

the gross earned income of the village. Most of this income was received from tourists who visit the island via Reeve Aleutian Airways. During the first month of the 1967 summer season, however, gross village earnings from tourists and other visitors had already reached \$5,000.

Some St. Paul residents are the recipients of unearned incomes administered through standard social welfare programs, namely, Aid to Families with Dependent Children (AFDC), Old Age Assistance (OAA), Civil Service Retirement and Unemployment Insurance. Welfare payments under AFDC and OAA began in 1962 and are detailed in Table 35. In terms of the overall gross village earnings these welfare incomes are not significant. The fact that several individuals qualify for AFDC payments, however, indicates that some families are not able to maintain satisfactory living standards under present economic conditions.

TABLE 35  
SOCIAL WELFARE PAYMENTS TO  
ST. PAUL RESIDENTS

<u>Year</u>	Approximate Number of Recipients		<u>Total Payments</u>
	<u>AFDC</u>	<u>OAA</u>	
1967	3	5	3873*
1966	3	5	5851
1965	1	2	2060
1964	4	1	2402
1963	2	1	2522
1962	1	1	122
Total Received for AFDC since 1962		\$10,160	
Total Received for OAA since 1962		<u>7,097</u>	
TOTAL WELFARE		\$17,257	

\* Current to August 1, 1967.

AFDC = Aid to Families with Dependent Children

OAA = Old Age Assistance

At least 12 St. Paul residents received benefits under the Civil Service Retirement program in 1966. The number increased to over 30 in 1967 and will probably reach 35 by 1975. Total retirement payments in 1966 amounted to about \$10,600. In 1967, retirement payments should be about \$46,000 and should reach approximately \$100,000 in 1968.

Complete data are not available on unemployment insurance payments to St. Paul residents. Records kept by the State of Alaska indicate that no payments were made before 1962. Since that date, the number of Pribilof Islanders receiving unemployment compensation has varied from eight in 1962

to 108 during the first six months of 1967. From 1962 to 1966, the average number of Pribilof Island residents receiving unemployment payments has been 33 per year. Based on an annual wage of about \$2,600 earned in less than five months, and assuming two dependents per worker, each St. Paul resident working part-time in summer would be eligible for about \$40 per week in unemployment insurance. If it is further assumed that off-island winter employment and the receipt of retirement benefits limit the number of seasonal workers qualified for unemployment payments, then in 1966-67 about 45 men probably received a total of about \$35,000 paid over a 20-week period.

The community of St. Paul has traditionally met the expenses of one employee--its resident priest. In recent years, however, the number of individuals working full-or part-time for the community has increased rapidly. During fiscal year 1967, the community paid the salaries of the priest, the canteen manager, two canteen clerks, a policeman, the recreational hall janitor, two bartenders and a janitor for the village tavern, and a cook and his assistant, three part-time waitresses, and a maid and janitor in the Company House (the village hotel). During fiscal year 1967, salaries paid by the village amounted to about \$30,000.

Little exact economic data are available on the rather limited activities of private entrepreneurs in St. Paul. During 1966, the village supported two movie theatres, four cafes or refreshment stands, several taxis or rental cars, and one intermittent barber shop. At least one local businessman stated that the volume of sales had declined during the past years, and, in 1965, one movie theatre closed in winter because of poor attendance.

A summary of gross earnings of St. Paul households in calendar year 1966 and fiscal year 1967 is given in Table 36. When averaged, these data

TABLE 36  
ST. PAUL HOUSEHOLDS CLASSED BY GROSS INCOME  
1966-1967

<u>Gross Income</u>	<u>Calendar Year 1966</u>	<u>Fiscal Year 1967</u>
0 - 999	1	6
1,000-1,999	0	2
2,000-2,999	4	3
3,000-3,999	5	6
4,000-4,999	3	6
5,000-5,999	1	1
6,000-6,999	7	5
7,000-7,999	5	5
8,000-8,999	5	7
9,000-9,999	6	5
10,000-10,999	7	7
11,000-11,999	9	5
12,000-12,999	3	4
13,000-13,999	4	2
14,000-14,999	4	3
15,000-15,999	3	2
16,000-16,999	0	0
17,000-17,999	0	1
18,000 - over	4	2

indicate that nearly 20 per cent of all present households earned less than \$4,000 per year; about 22 per cent received between \$4,000 and \$8,000; 35 per cent earn from \$8,000 to \$12,000; 17 per cent from \$12,000 to \$16,000; and 6 per cent earned more than \$16,000.

#### The Pattern of Expenditures

Before the new pay plans were initiated in 1950 and 1962, most St. Paul households apparently spent their annual earnings on food and clothing. Little money was available for mail order purchases, household goods, luxury

TABLE 37  
 POSTAL MONEY ORDERS SOLD AT ST. PAUL  
 1956 - 1966

<u>Year</u>	<u>QUARTERS</u>				<u>TOTAL</u>
	<u>Jan-Mar</u>	<u>Apr-June</u>	<u>June-Oct</u>	<u>Oct-Dec</u>	
1967	17,163	34,929	-	-	52,092
1966	30,132	41,878	42,774	34,050	148,834
1965	28,962	46,732	53,015	42,094	170,803
1964	29,678	47,600	70,271	44,849	192,398
1963	26,732	35,486	64,677	52,564	179,459
1962	17,402	19,977	53,599	36,604	127,582
1961	11,830	24,190	45,130	23,142	102,292
1960	9,338	13,547	33,293	17,746	73,924
1959	6,841	11,163	36,705	13,704	68,413
1958	10,427	9,351	29,692	10,045	59,515
1957	9,303	10,633	24,105	9,815	53,856
1956	6,364	11,623	25,474	12,857	56,318

items and recreation. After 1950, expenditures on mail orders, as measured by the sale of postal money orders (Table 37), and purchases at the village canteen (Table 38) increased steadily. The decline in money orders after 1964 can be attributed to increased spending at the community canteen and tavern. Village expenditures for the years 1964 to 1966, given in Table 39, show that nearly all net earnings, after taxes, can be accounted for by sales in the village canteen, mail orders and normal living expenses. Although at least 13 St. Paul residents maintain bank accounts in Alaska or Seattle and about \$27,600 worth of United States Savings Bonds were purchased by villagers in fiscal year 1967, there is little money saved from one year to the next.

TABLE 38  
 SALES AND EARNINGS OF THE ST. PAUL COMMUNITY CANTEEN  
 1956-1966

<u>Year</u>	<u>Gross Sales</u>	<u>Net Profit</u>	<u>Net Worth</u>	<u>Added to Capital</u>
1966	202,376	29,179	211,703	-
1965	323,092	61,626	180,629	43,048
1964	177,319	19,092	132,581	13,801
1963	159,537	34,111	119,053	29,640
1962	86,120	5,061	89,413	433
1961	92,244	4,795	88,980	-1,333
1960	83,145	10,657	90,313	6,176
1959	78,266	5,828	84,137	1,750
1958	79,629	12,486	82,387	7,287
1957	70,790	10,563	75,101	7,654
1956	71,954	10,157	67,447	5,514

NOTE: Until 1965, canteen books were audited as of March 31. The 1965 audit covers period 4/1/64 to 9/30/65. The 1966 audit covers period 10/1/65 to 9/30/66.

In order to obtain an accurate picture of average household expenditures, the economic data gathered for calendar year 1966 and fiscal year 1967 were combined with demographic data current to July 1967. A sample of 47 households, for which relatively complete economic data were available, was compared with information for the whole village. As shown in Table 40, the households appear to represent an unbiased sample. The employment classifications and gross earnings for the sample households in fiscal year 1967 are given in Table 41. These data, compared to Table 32, suggest that the sample is slightly biased toward the relatively high income households with permanent B.C.F. wage positions.



TABLE 39  
TOTAL EXPENDITURES BY ST. PAUL HOUSEHOLDS  
1964-1966

	<u>1966</u>	<u>1965</u>	<u>1964</u>
Canteen Sales <sup>1</sup>	\$202,376	\$205,104 <sup>2</sup>	\$177,319
Government Store			
Groceries	136,989	103,065	97,411
Fuel <sup>3</sup>	38,914	29,893	29,673
Rent and Electricity	60,460 <sup>2</sup>	51,090	52,884
Mail Orders	148,834	170,803	192,398
	-----	-----	-----
TOTAL EXPENDITURES	\$587,573	\$559,955	\$549,685
Gross Basic Income	\$729,986	\$633,713	\$657,300
Total Expenditures as Percentage of Gross Income	80.5%	87.7%	83.6%
Mail Orders as Percentage of Gross Income	20.3%	26.9%	29.2%

<sup>1</sup>Includes community tavern and bulk beer sales.

<sup>2</sup>Estimated

<sup>3</sup>Includes heating fuel and gasoline.

The expenditures of the sample households, given in Table 42, show that nearly 90 per cent of the gross earned income can be accounted for through the purchases of household necessities, mail orders, sales at the village canteen and recreation. The unaccounted for funds are most probably expended on federal and state taxes. There is little or no evidence that the sample households saved any appreciable amount during the fiscal year 1967.

TABLE 40  
POPULATION DATA FROM SAMPLE HOUSEHOLD STUDY  
JULY, 1967

	<u>Total Village</u>	<u>Sample Households</u>
Number of Households	72	47
Total Population	453	305
Average Persons/Household	6.3	6.5
Total Male Population	249	169
Percent Males	55	55.4
Total Female Population	204	136
Males Age 20 to 55	116	80
Percent Males Age 20 to 55	25.6	25.2
Females Age 20 to 55	77	48
Children Under 19	227	157
Percent Children Under 19	50.3	51.4
Number Nuclear Families	88	57
Average Families Per Household	1.2	1.2
Bachelor Non-Nuclear Family Members over 19	41	31
Maiden Non-Nuclear Family Members	11	6

Summary of Incomes and Expenditures

Income of the village of St. Paul is of two forms: first, money which originates outside the community; and, second, earnings within the community that depend upon the redistribution of the original money inflow. At present, the inflow of outside money amounts to about \$730,000 per year. Perhaps as much as \$30,000 of this income is recycled within the community, resulting in a total gross income for all households of about \$760,000.

TABLE 41  
EMPLOYMENT CLASSIFICATIONS AND GROSS EARNINGS OF  
PERSONS IN SAMPLE HOUSEHOLDS, JULY, 1967

<u>Job Classification</u>	<u>Number of Workers</u>	<u>Gross Income</u>
BCF Permanent	34	\$286,491
BCF Seasonal	39	83,906
Other Government Permanent	2	10,900
Other Government Temporary	1	2,200
BCF Seasonal and Off-Island Seasonal	16	62,031
Off-Island Seasonal	1	2,500
St. Paul Community	1	1,190
Private Business	1	800
Retirement Benefits and BCF Seasonal	4	8,557
Retirement Benefits	3	2,445
TOTAL	101*	\$461,014
<hr style="border-top: 1px dashed black;"/>		
Average per worker gross income		\$ 4,564
Average household gross income		\$ 9,830
Average nuclear family gross income		\$ 8,100

\* Nine individuals are women.

Although this total income gives an average gross income of \$10,560 per household, the distribution of household earnings is uneven. About 30 per cent of all households earn more than the average, and 60 per cent earn less than the average.

One measure of the economic strength of a community is the degree to which income exceeds necessary expenditures. The study of 47 sample

TABLE 42  
EXPENDITURES BY SAMPLE HOUSEHOLDS DURING FISCAL  
YEAR 1967

<u>Expenditure</u>	<u>Range</u>	<u>Average</u>	<u>Percentage of Average Income</u>
Rent	\$332 to 806	\$ 587	5.8%
Electricity	112 to 413	234	2.4
Fuel Oil	218 to 731	448	4.8
Gasoline	0 to 325	84	0.9
Groceries	978 to 4,936	2,805	28.5
Mail Orders	Unknown	1,800*	18.2
Canteen	Unknown	1,180*	12.0
Tavern and Beer	Unknown	1,670*	17.0
			89.6
Total Household Expenditures		\$4,158	42.3%
Total Recreational Expenditures		4,650	47.3
Total All Expenditures		8,808	89.6
Average House Gross Income		9,830	

\* Estimated as average from total community expenditures.

households showed that basic living costs amounted to somewhat less than \$4,200 per year. At present it would seem that nearly 20 per cent of all households in St. Paul receive less than this minimum income.

The information and analyses of the above chapters provide the foundation for the development of models forecasting St. Paul's economy. However, it is first necessary to define the community services components of such models to assure that the viability analysis is properly related to adequate municipal services.

PART THREE. COMMUNITY ADMINISTRATION AND SERVICES

The present study has its origins in federal policies and expressed local desires to achieve a greater degree of self-government on St. Paul. While some steps in this direction have been taken in the past, the transfer of authority from the federal government and the assumption of responsibility at the local level remain to be attained. Now, however, the Fur Seal Act of 1966 provides the basis for major transfers of property and broad jurisdiction to the community and its residents. Further progress is predicated on economic viability and on the establishment of an incorporated municipality that can and will provide adequate local services.

In this part, therefore, the study begins to bridge from the past and present into the future. The following chapter examines the evolving administrative structure of St. Paul and explores implications of municipal incorporation. Next, community facilities and services are reviewed from the standpoint of existing and future patterns and requirements, and in terms of management responsibilities and future cost components. These then provide inputs for the forecasting model.



Administrative Responsibility

The original native residents of St. Paul were Aleut people brought by the Russians from the islands of Atka and Unalaska in the late 1780's. Since that time, the community has remained intact except during closures of the sealing industry (principally from 1806 to 1810 and 1910 to 1918) and the evacuation of all World War II inhabitants to Funter Bay in Southeastern Alaska (1942 to 1944).

Until 1867, responsibility for the welfare of the St. Paul residents rested with the Russian fur traders. Compensation for labor in the sealing industry was in the form of basic foodstuffs and living essentials. The companies leasing sealing rights from the U.S. Government in 1870 and 1909 were obliged to annually furnish, at no cost, the people of St. Paul with "25,000 dried salmon, 60 cords fire wood and a sufficient quantity of salt and barrels for the preservation of a necessary seal meat supply."

After 1910, the federal government took direct responsibility for the health and welfare of the community. Responsibility was ultimately vested in the Secretary of the Interior. By delegations of authority, Pribilof operations have in recent years been administered by the Bureau of Commercial Fisheries.

Congress provided for the employment, as well as the welfare, of the local people. The Fur Seal Act of 1944 was very specific in this matter:

SEC. 7 Whenever seals are killed and sealskins taken on any of the Pribilof Islands, the native inhabitants of the islands shall be employed in such killing and in curing the skins taken, and shall receive for their labor fair compensation to be fixed from time to time by the Secretary,

who shall have the authority to prescribe the manner in which such compensation shall be paid to the natives or expended or otherwise used on their behalf and for their benefit.

With the local employment policy firmly established in practice and with a continuing need for outside seasonal labor, the Fur Seal Act of 1966 provides in Sec. 104.(a) that:

The Secretary shall ... employ natives of the Pribilof Islands and, when necessary, other persons for taking and curing fur seal skins ... and compensate them at rates to be determined by the Secretary.

The authority of Secretary of the Interior to provide for the local inhabitants has always been extensive. Thus, the 1944 act stated in Sec. 8.:

The Secretary shall have authority to establish and maintain depots for provisions and supplies on the Pribilof Islands and to provide for the transportation of such provisions and supplies from the mainland of the United States to the islands by the charter of private vessels or by the use of public vessels of the United States which may be under his control or which may be placed at his disposal by the President; and he likewise shall have authority to furnish food, shelter, fuel, clothing, and other necessities of life to the native inhabitants of the Pribilof Islands and to provide for their comfort, maintenance, education, and protection.

These authorities are greatly expanded and amplified in the Fur Seal Act of 1966. While continuing Interior's prime responsibility for the welfare of the local people, the new law reflects changing policies and developments: transfer of community responsibility to the people of St. Paul; alteration of federal operations from a year-round to a seasonal pattern; establishment of a townsite; and, interestingly, the promotion of economic potentials other than sealing, e.g., tourism. Above all, the 1966 law provides the authority and flexibility to follow these directions and accommodate to future requirements and conditions. In particular, broad



authority is granted not only to provide directly for local, federal and other needs, but also to arrange with others (e.g., the municipality of St. Paul) for the provision of services and the use of federal properties:

SEC. 202. The Secretary, in carrying out the provisions of this title, is authorized to enter into contracts or agreements or leases with, or to issue permits to, public or private agencies or persons, including the natives of said islands, in accordance with such terms and conditions as he deems desirable for the use of any Government-owned real or personal property located on the Pribilof Islands, for the furnishing of accommodations for tourists and other visitors, for educational, recreational, residential, or commercial purposes, for the operation, maintenance, and repair of Government-owned facilities and utilities, for the transportation and storage of food and other supplies, and for such other purposes as the Secretary deems desirable.

In carrying out the provisions of this title, the Secretary is also authorized by Sec. 203.(a).---

(1) to provide, with or without reimbursement, the natives of the Pribilof Islands with such facilities, services, and equipment as he deems necessary, including but not limited to, food, fuel, shelter, transportation, and education.

(2) to provide the employees of the Department of the Interior and other Federal agencies and their dependents, and tourists and other persons, at reasonable rates to be determined by the Secretary, with such facilities, services, and equipment as he deems necessary, including, but not limited to, food, fuel, shelter, transportation, and education.

(3) to purchase, transport, store, and distribute such supplies and equipment to carry out the provisions of this section as the Secretary deems necessary, and

(4) to purchase, construct, operate, and maintain such facilities as may be necessary to carry out the provisions of this section.

Section 204 grants authority to the Secretary to arrange with the State of Alaska for the furnishing of education to the natives of the

Pribilof Islands. Responsibility for medical and dental care of the local population is transferred, under Sec. 205, from the Department of Interior to the Department of Health, Education and Welfare.

Sec. 206 of the 1966 act provides the foundation for community development:

SEC. 206.(a). For the purpose of fostering self-sufficiency among the natives of the Pribilof Islands, and in order that they may enjoy local self-government, and to facilitate the establishment by such natives of a municipal corporation under the laws of the State of Alaska, the Secretary is authorized to set apart so much of the land on St. Paul Island as he determines necessary to establish a townsite. The Secretary shall survey the townsite into lots, blocks, streets, and alleys and he may issue a patent therefor to a trustee appointed by him, when he is satisfied that a viable self-governing community which is capable of providing adequate municipal services is established or will be established prior to the conveyance by the trustee of title to any property to the natives of the Pribilof Islands.

This section goes on to make further provisions for the transfer of property to individuals and the community; these are discussed below in the chapter on the townsite trusteeship.

It is clear from the language and the legislative history of Sec. 206 that a municipal corporation must exist to make the transfer provisions fully operative. It is, furthermore, clear from public statements and agency files that the Bureau of Commercial Fisheries stands ready to facilitate the transfer of property and of community facilities and services to the people and the municipality of St. Paul, once the city is established.

#### Local Government

During the last two decades, the community has taken an ever increasing responsibility for the administration of the affairs of St.

Paul. Traditionally, the native inhabitants supported and maintained the local church, church functions and certain recreational activities of the community from profits earned in the local canteen.

A major step toward self-government was taken on July 17, 1950, when a constitution and charter were adopted, under the Indian Reorganization Act of 1934, for the "Aleut Community of St. Paul Island." For the first time, an elected community council was formed. The following year, the community filed a claim for native land rights with the Indian Claims Commission in Washington, D.C.

In October 1965, the council took over trusteeship of the community canteen funds, thus making that store wholly owned and operated by St. Paul. Less than a year later, the community opened its own tavern and equipped a St. Paul-operated maintenance and repair workshop. About the same time, the council accepted more responsibility for police activities.

By late summer of 1967, the community had taken over all retail outlets in St. Paul, including the previously federally owned and operated store. In addition, the council managed the local hotel on an experimental basis, contracted to construct and lease a new post office, owned and operated two motor vehicles for community services, was responsible for police and fire protection, supported the church and all its functions, maintained the community repair shop, and carried on other community improvement activities.

The community and the council have thus shown an ability to assume ever greater responsibility for local affairs, and the matter of incorporating St. Paul as a municipality has already been discussed by the community.

The council and other residents have indicated a preliminary preference for incorporation as a fourth-class city. Under Alaska law, a city of the fourth class may assume the following responsibilities:

- Water, electricity, sewerage, fire protection.
- Liquor control, dog control.
- Establishment and regulation of public utility rates, granting of franchises.
- Maintenance of jail and prescription of limited fines and sentences.
- Setting of curfew, action necessary to protect and preserve the life, the health, the safety and the well being of its citizens.
- Prohibition of drunkenness, gambling, houses of ill fame, disorderly conduct.
- Zoning and control of land use.
- Making of and performance of contracts.
- Construction, maintenance, operation of community buildings, roads, trails.
- Governance of motor vehicles, fireworks.

These powers appear sufficient for the initial incorporation of St. Paul, particularly if the community maintains its Indian Reorganization Act charter for economic and business purposes.

Cities of the first, second and third classes have generally the same powers as fourth class cities. The prime difference between the categories is that only a fourth class city is not responsible for the operation and maintenance of local schools. While assumption of school responsibility would not be a major fiscal burden on St. Paul (due to

federal and state aids), there will be sufficient other more important problems to meet upon incorporation without taking over the state-operated school system. Fourth class status would thus appear appropriate for St. Paul.

A further difference between the classes of municipalities is that fourth class cities may not levy a property tax. Until land is transferred into private ownership, virtually no taxable property will exist in St. Paul. Since the period of transition will extend over about five years, it will be some time before the levying of a property tax would be feasible. Even then, it is unlikely that the assessed valuation of taxable property would be high enough to produce even \$1,000 per mill of property tax rate. So long as all industrial and most business properties are publicly owned, the property tax will not be a significant revenue source for the community. Fourth class status will, therefore, not materially affect the initial fiscal position of the city.

A fourth class city may, upon voter approval, levy a sales tax not to exceed three per cent. Based upon economic projections made later in the report, such a levy would produce approximately \$10,000. Virtually all of this amount would be collected from sales by community establishments, such as the store, canteen and tavern. The same general result as levying a sales tax could, therefore, obtain from increasing profit margins on goods and services sold by the community.

The state refunds 60 per cent of business license monies to incorporated municipalities in which they are collected. Since publicly owned businesses do not pay this license fee, no significant amounts would be obtainable from this source upon incorporation. (Even if the main retail businesses were privately owned, total refunds would be less than \$1,000.) The city

would be eligible to receive a 60 per cent business license refund on payments made by the by-products plant if it is included within the corporate boundaries.

One hundred per cent of retail liquor license monies are also returned to incorporated municipalities in which collected if all laws and regulations concerning liquor are being actively enforced by the city. The community now holds two licenses--one for the tavern, the other for off-premises consumption. Since the sales of both categories are over \$20,000 per year, the total payment and refund would amount to \$1,200.

In addition to the above revenues, a fourth class city may receive a variety of state and federal grants, and may gain revenue from incidental sources such as fines, certain license fees, payments for municipal services, etc.

Several minor tax sharing sources are not available to fourth class cities. The fish processors tax, amusement and gaming tax and punchboard license refunds are made only to cities of the first three classes. The aviation fuel tax is refundable in part only where airports are municipally operated; since fourth class cities do not have authority for airport management, this refund provision is not applicable.

A potential problem that may accrue from fourth class status is the lack of adequate bonding authority. In part, this will be mitigated through community-operated business enterprises and possible availability of Indian loan funds. Eventually, however, this and other revenue limitations may militate in favor of a change in municipal classification.

The class of municipal incorporation also governs the territorial extent of the city. A first class municipality has no area restrictions, while a fourth class city is restricted to an area not extending beyond

six miles from the center of the community. (Third class corporations are limited to 50 square miles in area.)

The incorporated area of St. Paul should cover the townsite and adjacent areas of existing and potential industrial or commercial development. Inclusion of these areas within the city will facilitate the provision of public services, provide a potential source of revenues to the community and further the planned development of St. Paul. Incorporation of areas under federal ownership is common in other places and will not adversely affect the activities or jurisdiction of the government.

All factors considered, incorporation as a fourth class city would be adequate during the initial stages of the municipality of St. Paul. Adequate provision exists for higher reclassification if desired later. Furthermore, a change in basic municipal legislation by the state may act to eliminate some of the problems and limitations of present fourth class cities.

Work has been underway for several years on a new municipal code for Alaska. The draft code would, among other changes, reduce to two the present four classes of cities. The major distinctions between the new first and second class cities would be (1) population requirements--400 or more permanent residents for first class cities, 50 or more permanent residents for second class cities; (2) no school responsibility for second class cities; and (3) no property tax powers for second class cities. Thus, the school responsibility and property tax restrictions now applicable to fourth class cities would apply to the new second class cities.

Under the proposed code, an unincorporated community having 400 or more permanent residents and lying outside an organized borough--and this would include St. Paul--would automatically be a first class city. In the

case of cities already incorporated at the time the new code went into effect and which did not meet the specific incorporation criteria of the code, the state Local Boundary Commission would have discretion to recommend to the state legislature whether such cities now incorporated should be reclassified in accordance with the classification requirements of the proposed code. Thus, if St. Paul were an incorporated fourth class city at the time the proposed municipal code were adopted, it could, at the discretion of the local Boundary Commission and the legislature, be reclassified as a second class city rather than first class. If, however, St. Paul were at that time not yet incorporated, it would automatically become a city of the first class with full school responsibility and the power of property taxation.

Additionally, the proposed municipal code revision would clarify the powers of cities, and it is likely that the new second class city would generally be able to operate more effectively than a fourth class city under existing law.

#### Steps Toward Incorporation

The procedure to incorporate a fourth class city is relatively simple: an incorporation petition signed by at least ten qualified voters, and majority voter approval of municipal incorporation at an election. The city council is elected at the time of the incorporation election and takes office if municipal status is approved.

Community leadership is fully aware of the need to incorporate St. Paul as a city, both to meet the needs of increasing self-government and to permit the community to obtain the benefits of the townsite provisions of the Fur Seal Act of 1966. However, enough uncertainty exists as to



details of the latter issue to make questionable the desirability of an incorporation election at too early a date. (This point is further discussed in a later chapter.) Suffice here to point out the predisposition toward self government existing in St. Paul. Since municipal incorporation is a key step in furthering this objective, it can be expected that the majority of the residents will vote in its favor--if the election is properly timed. As will be shown, the best timing may be after the townsite trustee has been able to resolve some of the existing uncertainties. In the meantime, every effort should be made to broaden the civic education of the St. Paul population. The state Local Affairs Agency can provide important leadership and assistance toward this end.

#### Municipal Management

Upon incorporation, the government of St. Paul will be an enterprise with a substantial capital plant and annual operations of over one-half million dollars. The community will, therefore, require efficient and effective management. Experience in small Alaskan communities has shown that this is obtainable, either in the form of a city manager, an administrative assistant to the mayor or other qualified executive officer.

Given the diversity of potential community operations--municipal services, utilities, proprietary functions, industry, etc., the costs of qualified management personnel are well justified and can readily be borne by the locality. Single management, bookkeeping and billing, secretarial and other support services for the various operations will permit the spreading of administrative overhead and other costs to as many accounts as possible, keeping duplication and costs to a minimum, without sacrifice in quality of service. The concept of unified administration is reflected in the calculations of community expenditures in Chapter VIII.



## CHAPTER VII. COMMUNITY SERVICES AND FACILITIES

The Fur Seal Act of 1966 provides for the transfer of St. Paul town-site to the community. Additionally, the legislation (Sec. 202 and 203 quoted in Chapter VI) permits the Secretary of the Interior (in fact, the Bureau of Commercial Fisheries) to provide needed facilities and services or to arrange with others, such as a municipality or individuals, for their provision. It is the clear intention of the government that the future municipality take over as many facilities and services as possible, and, as discussed earlier, this process of transfer has already commenced.

This chapter reviews the status and operations of local services and facilities. It includes housing as well as businesses, since these have also been provided by the government and are largely viewed by the locality as public sector or community functions. The community of St. Paul today largely reflects the degree to which the U.S. Government has fulfilled its stated obligations to the native residents (and these obligations derived, of course, from the government's need for the services of the natives in the fur seal industry).

From World War I to 1934, the government carried on a steady program of planning and building. Investment in St. Paul declined during the decade 1935 to 1945, when few houses and community facilities were constructed (Table 43). After World War II, the need for improved water, sewerage and electrical systems, as well as residential housing and recreation facilities, stimulated a new building program beginning in 1947. Although construction of all basic community facilities is not complete, and a shortage of adequate housing exists, the net result of

TABLE 43  
BUILDING CONSTRUCTION IN ST. PAUL

<u>Construction Dates</u>	<u>Number of Residences</u>	<u>Storage and Service Bldgs.</u>	<u>Industrial and Community Bldgs.</u>
before 1918	1	1	3
1919 - 1924	5	2	4
1925 - 1929	39	4	3
1930 - 1934	7	4	2
1935 - 1939	0	1	1
1940 - 1944	4	4	2
1945 - 1949	4	0	1
1950 - 1954	9	5	4
1955 - 1959	1	1	3
1960 - 1964	4	2	6
1965 -	<u>6</u>	<u>0</u>	<u>2</u>
TOTAL	80	24	31

government expenditures has made St. Paul one of the best serviced native communities in Alaska (Table 44 and Map 3).

Water Supply and Distribution

St. Paul has a good water supply and distribution system. Water is supplied from two deep wells. Three 200,000 gallon capacity tanks are located on a hill above the community.

An average of 60-80,000 gallons is pumped per day. Pumps are powered by two 70 h.p. gasoline engines. Well capacity is adequate at this time.

TABLE 44

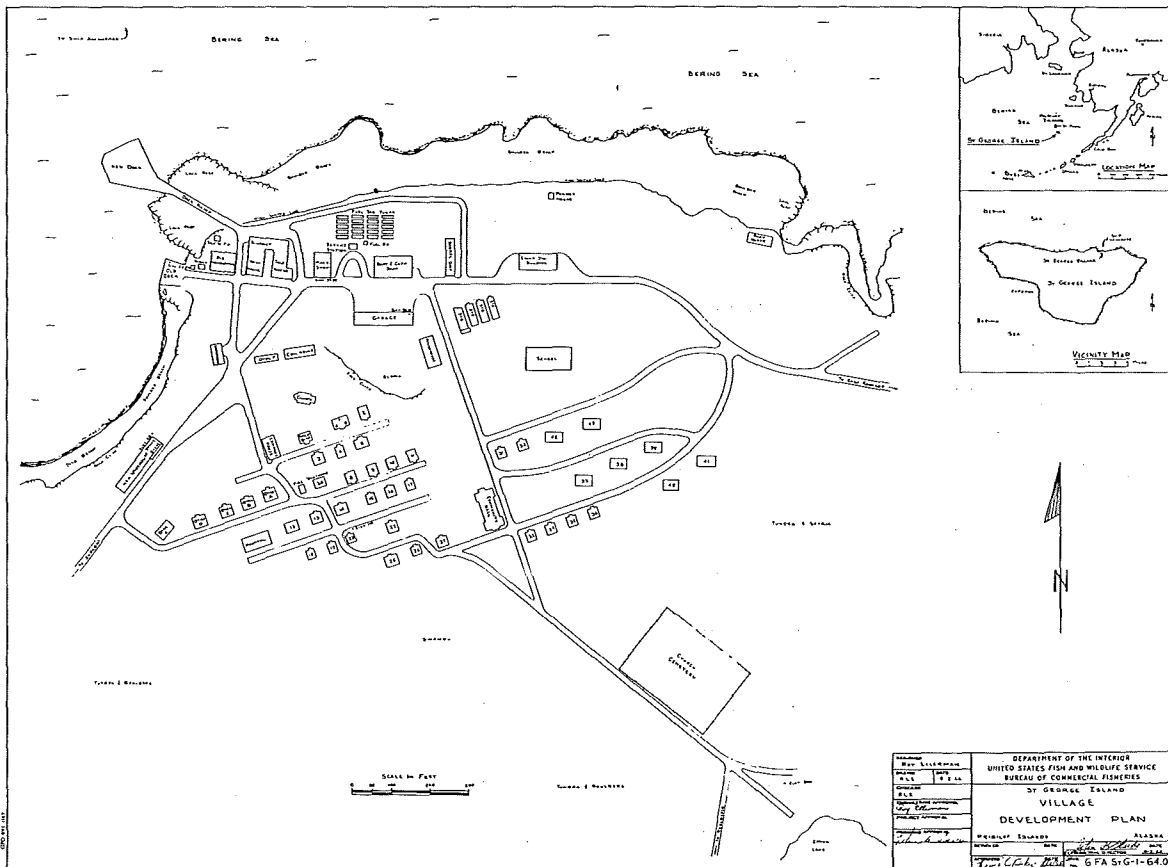
## PRIMARY COMMUNITY IMPROVEMENTS OF ST. PAUL

<u>Function</u>	<u>Construction Type</u>	<u>Date Acquired</u>	<u>Approximate Cost</u>
Service Station	Concrete	1966	\$ 7,500
School	Frame	1929	30,000
Hospital	Frame	1929	8,000
Powerhouse	Concrete	1959-60	213,800
Electric System	Underground	1961-66	84,900
Transformer Stations	Concrete	1963	3,000
Powerhouse Pumphouse	Concrete	1959	4,300
Fresh Water System	Underground	1950-1966	54,500
Pumphouse Ice House Lake	Frame	1925	600
Pumphouse Stoney Lake	Frame	1949	1,000
Pumphouse Fresh Water	Frame	1954	1,500
Pumphouse Fresh Water	Concrete	1960	3,000
Water Storage Tanks (3)	Concrete	1955-66	118,700
Pumphouse Salt Water	Concrete	1963	17,600
Pumphouse Salt Water	Concrete	1923	2,000
Pumphouse Salt Water	Frame	1955	1,700
Fuel Distn. System	4" pipe	1961	78,200
Salt Water Supply System	6" pipe	1930	8,000
Diesel valve House	Concrete	1961	10,700
Fuel Pump House	Concrete	1961	12,200

Table 44 (continued)

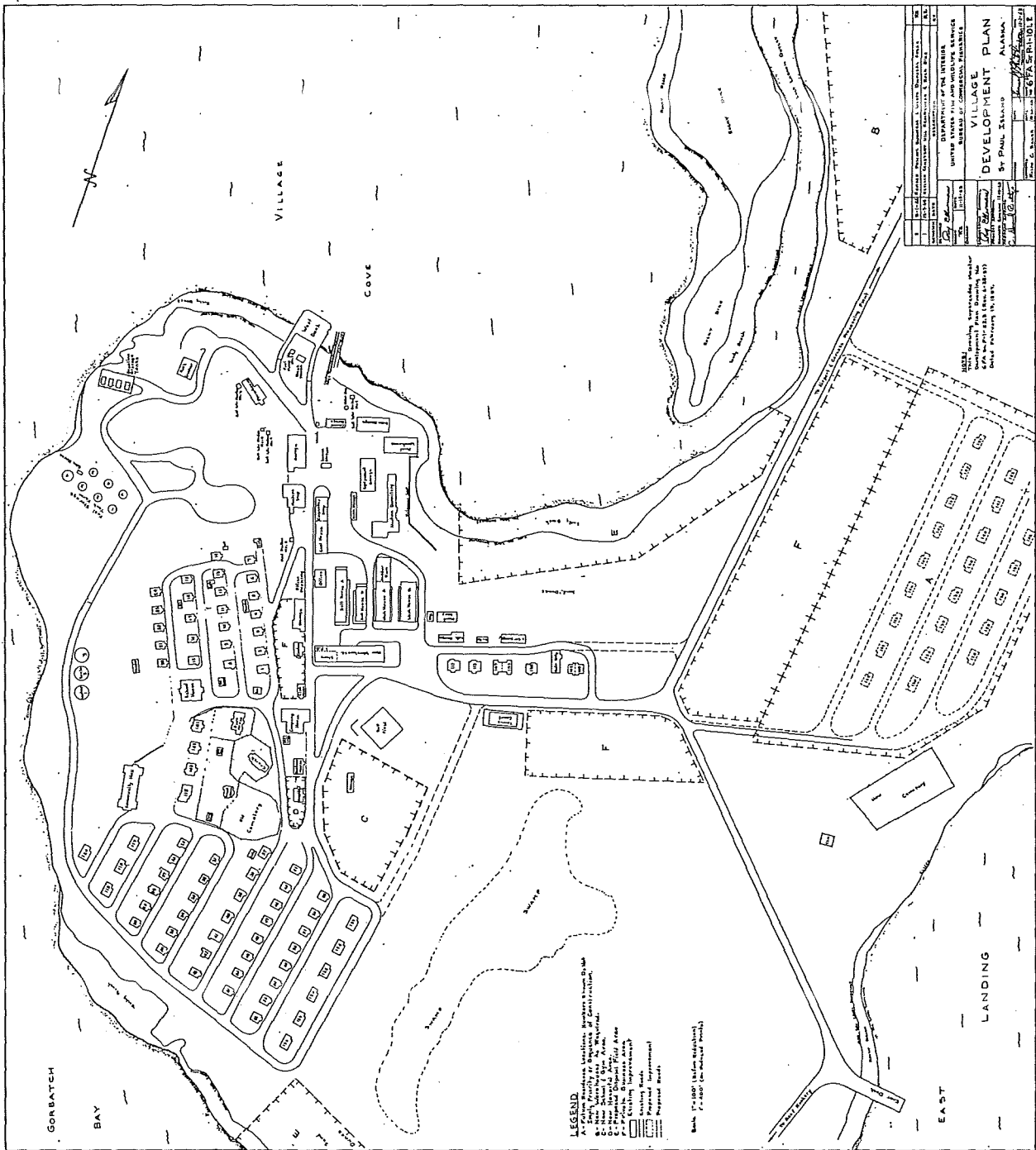
Function	Construction Type	Date Acquired	Approximate Cost
Oil Loading House	Frame	1940	\$ 500
Sewer System	Pipe	1949	19,900
Telephone System	-	1962	3,100
Radio Equipment	-	-	4,100
Roads	57.9 miles	1929	65,200
Airstrip (BCF)	5,200 feet	1942-1965	167,600
Airstrip (FAA)	5,200 feet	1950-1965	144,000
Docks (2)	Concrete	1930-64	24,000
Rock Crusher	Concrete	1946	5,300
Water Treatment Building	Frame	1965	2,800
Gasoline Storage	Metal	1959-66	27,600
Diesel Fuel Storage Tanks (7)	Metal	1962	<u>115,900</u>
TOTAL			\$1,241,200

MAP 3



Map 3 (corrected)

St. Paul Community







The distribution system has six-inch and eight-inch cast iron mains. House services are by one-inch mains. Hydrants are located in accordance with fire protection standards. The distribution system is adequate and has additional service capacity.

Water supply maintenance responsibility currently rests with the machine shop crew, since the pumps are powered by gasoline engines. Engines are started daily in the morning and shut off at night. It is estimated that one man hour per day is required for starting and stopping engines and pumps. An additional one hour per week is estimated for maintenance, though no specific data are available. Replacements of engines and other parts is estimated at \$2,500-\$3,000 per year.

Installation and maintenance of mains and services are now handled by the village maintenance crew as a part of regular operations. No major breakages or other significant problems have occurred. No estimate is available of current annual cost, personnel and materials for operating the distribution system; cost in fiscal 1964 was \$6,882.67.

Water is a basic municipal utility. It is assumed (1) that it will be operated by the city, (2) that the B.C.F. will transfer facilities to the municipality without compensation, and (3) that the B.C.F. will contribute to operation of the system through payments for water services it receives.

The system would be operated as a utility, with costs borne by water users. Rates should be calculated on basic use, demand requirements and value of fire protection. (While a charge for hydrant rentals is sometimes assigned to a fire department budget, this would be an unnecessary complication in the case of St. Paul.) Income should be sufficient to cover operation and maintenance, fuel or electricity for pumping, vehicle expenses

and other costs. The utility should bear its appropriate share of the administrative expenses of the municipality.

In future planning for the water system, the possibility of electrifying pumps and operating them from the power plant with the aid of telemetering devices needs to be considered. If a conversion is made, efficient operation would also require installation of automatic controls for chlorinators and fluoridators with step rate controls. Cost of conversion to electric and automatic operation would be approximately \$30,000. Actual changeover should be considered only if net savings and better operations result.

It is estimated that with telemetering the equivalent of one-half man-year will be sufficient to operate and maintain the entire water supply and distribution system; actual requirements may be as much as 40 per cent less. Chemicals and other supplies will range in cost between \$200 and \$500 per annum. Amortization of the entire cost of electrifying and automating the supply system would be roughly \$3,000 per year; if federal assistance were available for this capital improvement, annual operating costs would be substantially reduced.

Provision of other water system improvements and extensions is considered below as part of the general discussion of capital improvements and their financing.

#### Sewer System

The entire community is served by the existing sewer system. The system generally consists of clay and transite sewers, with some concrete pipe. Pumping is required for part of the system. The sewerage system is in generally good operating order and presents few operational problems.

The present state of sewage disposal on St. Paul is, however, not adequate. Wastes are discharged without treatment onto the beaches. This practice is not in compliance with either federal or state laws and regulations.

Plans have been prepared for construction of primary waste treatment facilities. A waiver of secondary treatment for industrial wastes has been obtained from the Federal Water Pollution Control Administration. This determination is consistent with decisions made for other communities in Alaska and requires only that industrial wastes be screened and discharged far enough away so they will not wash back onto shore or otherwise affect the community. Septic tank treatment of domestic waste is required.

The design of domestic waste treatment facilities is based on a peak sewage discharge of 50,000 gallons per day. Of this amount, close to 40,000 gallons per day is accounted for by non-B.C.F. generated flow, including private residences, hospital, school, recreation hall and other community facilities. An additional 12,000 gallons per day is estimated from future residences in the new subdivision east of the village.

B.C.F. funds have been programmed for the construction of waste disposal facilities in the Pribilof Islands. An allocation of \$100,000 has been made out of fiscal year 1968 funds to begin construction. Additional funds are to be made available out of appropriations over the next two fiscal years. While both criteria and construction costs have changed since estimates were developed in 1965, sufficient funds are anticipated to cover the capital costs of needed waste disposal facilities. The total cost of building waste treatment facilities was estimated in 1965 at close to \$225,000. The cost of serving the St. Paul community, including the proposed new residential area, would amount to approximately \$85,000.

It is assumed that all sewage disposal facilities will be operated as part of general municipal operations, with costs recoverable from residential, commercial, industrial and public users of the sewerage system.

The 1965 estimates project annual operating costs for the St. Paul sewerage system as follows:

Power	\$ 2,865
Operating Labor	4,720
Maintenance	6,795
Materials and Supplies	2,200
Administration and Supervision	<u>1,960</u>
	\$18,540
15% contingency	<u>2,780</u>
TOTAL	\$21,320

No direct basis was provided for breaking down annual operating costs among the different users. However, based on the proposed system, less than 10 per cent of peak waste flow will be generated by residential users. Since domestic sewer use continues throughout the year and a greater amount of treatment will be required as compared to industrial waste, it is expected that the cost chargeable to residential sewerage would amount to about \$5,000 per year. Even this amount will be a major burden for the community. Every effort needs to be made to keep annual operating costs to a minimum. Since initial construction is the key element in continuing maintenance requirements, designs should be thoroughly reviewed to assure a minimum continuing burden on the community and the government.

The full burden of sewage treatment facilities operating costs will not be felt until after 1970. A cost allocation study will be required to provide the basis for proper distribution of service charges.

## Road Maintenance

There are approximately 60 miles of road on St. Paul Island. The roads are graded as needed during the year. In addition, the airport is dragged once a year.

Road maintenance throughout the island and village is accomplished with the aid of one road grader and other rolling stock. Maintenance operations require an annual average of 45 man-days for all roads, including village streets.

Snow removal operations are carried out as required. Clearing is done only along the road to the airport and within the village. In addition to the grader, a bulldozer is used to clear fire lanes. Activity varies with the amount of snow: in the winter of 1966-67, no significant snow clearing was necessary, while during the winter 1965-66, heavy snow removal operations were required. Similarly, winter maintenance at the airport depends both on snow fall and wind conditions. It is estimated that a total of six man-days was required for snow removal last winter; in some years, several man-weeks were required.

All road construction is done by force account by the village maintenance crew. The scoria pit is used as required.

Upon incorporation, the city would take over road construction and maintenance functions as part of its general government responsibilities. It will be desirable both from the standpoint of the community and the federal government to have B.C.F. contract with the city for the upkeep of roads outside the village, as well as for the maintenance of the airport. This will eliminate the necessity for B.C.F. duplication of manpower and equipment, while permitting the city to spread its costs over larger scale operations.

### Garbage Disposal

Garbage collection and disposal is currently provided by B.C.F. This is an appropriate municipal function.

Collections are made twice weekly by a two-man crew and require a full day. Garbage collection duties are performed by regular laborers of the village maintenance crew.

One compaction truck is used for garbage collection. It is in poor condition and should be replaced. A new truck would cost up to \$25,000. It should be possible to obtain an adequate used truck through surplus property disposal. A dump truck is also used on occasion to collect garbage and to make special pick-ups. Disposal is at a sanitary fill located three miles from the community near the Coast Guard installation. Trash is burned almost daily, and covering is carried out every month or two. A bulldozer is used at the fill as required.

Garbage operations utilize the equivalent of almost one man-year. This cost is higher than needs to be borne by the residents of the community. Given adequate garbage cans, once a week collection would be adequate for residences. Businesses and public buildings may still require twice weekly collections.

### Fire Protection

Fire protection is currently provided by a volunteer fire department. B.C.F. has sponsored two visits and training sessions by the state fire marshal, who helped organize the volunteer department.

Two fire trucks and all equipment were recently turned over to the community by the B.C.F. This equipment is currently housed by the government,

although the B.C.F. is urging the community to provide quarters for one of the fire trucks preliminary to future construction of a general municipal building.

Operating needs of the department are presently met by about \$1,000 raised at a firemen's ball in 1966. The village has provided some initial equipment, such as badges, and B.C.F. has furnished most truck accessories and personal gear. While fire protection expenditures may increase somewhat, this service will not be a major economic burden for the community.

#### Street Lighting

The entire community, including industrial areas, has street lights. A few fixtures are modern, but most are obsolete. A complete new street lighting installation could be financed in several ways, e.g., as part of electrical utility operations, once these are taken over by the city.

In fiscal year 1965, it was estimated that St. Paul required 26,280 KWH per year for street lighting.

#### Electric Power

Electricity is now provided by the B.C.F. for residential, commercial and industrial purposes. A complete electric distribution system exists in the community, with all power lines located under ground. Power is obtained from five 150 kw diesel-driven generators. At peak load, all are utilized; only two are required during off-peak periods. Consideration has been given to installation of one 300 kw or larger generator capable of handling the basic nighttime load singly. The power plant is new and has modern equipment; space exists for an additional generator.

Future status of the power plant and distribution system is a prime issue that must be faced by the government and the community. It is generally agreed that continued generation by B.C.F. would have but two rationales: (1) assurance that required power is available for its sealing operations, and (2) availability of fuel for generation at a price that may be lower than that to the municipality. With respect to the first point, it is evident from the investigation that guaranteed power could be provided for industrial purposes if the plant were locally operated.

Fuel is, of course, an important component of generated power cost, and private purchasing may affect power costs by as much as 1¢ per KWH. There appears to be no reason, however, to expect that continued delivery under U.S. Navy contract, with appropriately lower costs, could not be assured for power plant fuel, even if a transfer to local operation were effected. The authorities under Sec. 202 and Sec. 203 of the Fur Seal Act of 1966 are broad enough to permit the Secretary of the Interior to assure the community a lower priced fuel supply.

Assuming that power will be available to meet B.C.F. requirements and that fuel costs can be held to a minimum, then all important considerations weigh in favor of local operation. From the government's standpoint, it permits further disengagement from what is basically a year-round community function. In terms of local interest, community operation provides an important revenue source and places in local hands the opportunity for accommodating the electricity supply to future, non-sealing-related, industrial and commercial power requirements.

For purposes of further analysis, it is, therefore, assumed that all power generation and distribution facilities will be transferred to the



community of St. Paul. As the subsequent economic model shows, the transfer can be carried out by 1970.

Electricity rates are bound to increase, regardless of who has future responsibility for the system. Current rates are:

First 50 KWH per month @ 6.0¢ per KWH

Next 200 KWH per month @ 3.4¢ per KWH

Next 750 KWH per month @ 1.8¢ per KWH

Over 1,000 KWH per month @ 1.2¢ per KWH

According to the Ellerman report, "Analysis of Electric Power Sales--Pribilof Islands," of March 10, 1966, the direct cost to the government of generating power for St. Paul is 7.0¢ per KWH. Including overhead and administration plus an allowance for amortization, the cost is computed at 8.8¢ per KWH. Ellerman further projects a cost of 10.0¢ per KWH if fuel had to be purchased through private sources. Assuming a community profit of 15 per cent, Ellerman projects a possible cost of 11.5¢ per KWH under community operation.

A review of production cost estimates and comparisons with other remote communities leads to the conclusion that, while rates higher than those that exist are justified, new rates should fall well below 10¢ per KWH. As a matter of fact, a rate of not much above 6¢ per KWH may be reasonable, given uncompensated transfer of the power plant to the community, appropriate reductions in production cost and continuing increases in power consumption. (Basic incremental power rates in Kotzebue and Naknek are 7.25 - 8.0¢ and 7.5¢ per KWH, respectively. Both systems are new and are financed with Rural Electrification Administration loans.)

A thorough, professional rate analysis will need to be made before an appropriate rate is established. Such an analysis will have to be geared

closely to an intensive study of system operation and continued financing. Pending these, a highly conservative figure of 8.8¢ per KWH is used in the economic viability analysis. This figure will most likely exceed actual costs in the long run, with the result that either households will have greater amounts available for other expenditures than has been calculated, or municipal revenues will show a greater margin over municipal operating costs, or both adjustments may occur. Since electricity accounts for between 8 and 9 per cent of projected household expenditures and for around 15 per cent of community income and expenditures, a 30 per cent reduction from projected electric rates would have a significant favorable impact on economic viability.

Gross income from power sales is computed on the basis of existing consumption patterns: domestic users--706,000 KWH, by-product plant--150,000 KWH, other industrial users (primarily B.C.F.)--308,000 KWH, a total of 1,164,000 KWH per year. A reliable basis does not exist for projecting St. Paul power requirements into the future. Even though the economic forecast is based on present consumption (again, largely to assure a conservative bias), it is quite likely that annual power requirements will grow at an average rate of 5 to 10 per cent to accommodate increased household consumption and community growth. Future plant modernization by B.C.F. would lead directly to increased power consumption for seal skin curing purposes. Any further industrial or commercial expansion will likewise increase power demand, with the result that rates for all could be additionally reduced.

Experience in Alaska and elsewhere indicates that any electric utility can readily be a self-supporting operation, particularly when, as in St. Paul, industrial power users are available. Toward this end, as well as to assure

B.C.F. of reliable power, careful attention will need to be given to the organization and management of electrical operation.

The community will have the choice of operating its electric utility as part of its municipal government or as a cooperative organized under the Rural Electrification Administration program. Both alternatives have advantages, although the latter may be preferable for St. Paul. The primary disadvantage to the community of the REA approach is that the utility would not provide a direct profit available for general municipal expenditures. This could be partly offset by arranging for joint management and administration of the city and the cooperative, thus helping spread the cost of municipal overhead and administration. The key advantage, and one of concern to B.C.F., would be the availability of professional assistance for supervision of the organization, management, operation and financing of the utility, including establishment of power rates, planning to meet future power requirements, auditing, training, etc. Whichever course is taken will depend on future decisions. But local operation does appear feasible and desirable.

#### Law Enforcement

Adequate law enforcement is a primary community need, and the police function will be a basic responsibility of the municipality. Until now, the community has been employing the chief of police, a local resident. He was paid \$600 a month, plus uniform and equipment, and provided with the village's panel truck. The jail facility has been provided by B.C.F. in the warehouse building, scheduled to be turned over to the community. A resident night guard has been hired by B.C.F. to protect property and when requested, to cooperate with the village chief of police.

A contract has now been entered into with the Alaska Department of Public Safety for the provision of adequate professional law enforcement services. Under the police contract program, a trained and qualified state trooper becomes the local policing authority. The trooper is supervised and assisted by the state police district commander and his staff, a competent criminal investigator when necessary, and continued inspections. All services provided by the Department of Public Safety are available to the community under the system. These include scientific enforcement aid and services of the records and identification sections, the training section, the driver license and safety responsibility section, the Alaska Disaster Office, and the Division of Fire Prevention.

The state trooper assigned to contract service in a local government area is responsible to the supervisor for provision of safety, protection and assistance to the people within the assigned area. While troopers may attend public meetings and discuss the police problems, their responsibility is to avoid entanglement in local controversies and matters of a non-police nature. While in local service, the trooper remains a member of the state merit system.

The initial contract covers one year. The cost of providing contract police service for St. Paul has been calculated by the Department of Public Safety at close to \$48,000 for the first year. As the initial equipment, training and transportation costs are high during the first year, lower costs can be anticipated in the future.

Under the current program, the community and B.C.F. provide \$34,200. Of this amount, \$18,000 is in cash and \$12,200 in services and equipment furnished as "in kind" contributions. The cash payment covers direct outlays of the Department of Public Safety for stationing and servicing a

trooper at St. Paul. In addition, the department assumes \$13,600 of the total cost, covering supervision, technical support, in-service training and transportation of prisoners.

The future of the contract program remains to be determined. Some thought has been given to utilizing the initial year to develop local personnel to carry out the necessary law enforcement function in St. Paul. However, there are many advantages to continuing with the contract system, utilizing local police aids as required.

The burden of carrying total professional policing would be too great for the community to assume by itself. It is therefore considered desirable to have B.C.F. participate in sharing law enforcement costs on the basis of benefits it will receive. This is a justifiable government expense, since the services provided can cover protection of B.C.F. properties, thus eliminating need for a separate guard, and because of the importance of preserving law and order during the sealing season. It is anticipated that the St. Paul trooper will also have law enforcement responsibility for St. George.

The long range allocation of costs under the police contract program remains to be determined. For interim municipal budgeting purposes, an allocation of \$12,000 is made for 1970; this is more than the current cash payment by the community. It is possible for additional service contributions to be made by the community.

#### Judicial Services

A deputy magistrate of the Alaska court system is located in St. Paul. His criminal jurisdiction is limited and includes only alleged violations of municipal ordinances and some state cases (misdemeanors only). Civil

judisdiction applies to cases involving up to \$500. Occasional temporary jurisdiction is provided over juveniles, primarily to get them out of undesirable circumstances. The magistrate has traffic jurisdiction and handles vital statistics--birth certificates, death certificates, etc. As necessary, he acts as coroner and conducts inquests. These services are provided without governmental cost to the community.

The St. Paul magistrate does not function as recorder, the nearest being at Cold Bay. Should the townsite be formally established at St. Paul, it would be extremely desirable to designate St. Paul as a recording headquarters. This would permit the development of complete and good records with respect to all property and transactions. Establishment of a recording headquarters is done by order of the State Supreme Court. The court can act on its own initiative, or a request could be made by the village council, the court administrator or other interested party.

#### Education

Elementary education is provided to St. Paul residents by the state school located in the community. Pupils who complete the eighth grade are eligible to continue their education at high schools located in Alaska and the continental United States. School attendance for the period 1960-1966 is given in Table 45.

The St. Paul school is operated by the state Department of Education under agreement with the Bureau of Commercial Fisheries. The cost of the educational program is borne by the Pribilof Islands Fund. The community is not responsible for covering any schooling costs, nor would it have to if incorporated as a fourth class city (see Chapter VI).

TABLE 45  
NUMBER OF ST. PAUL RESIDENTS  
ENROLLED IN SCHOOL  
1960-1966

<u>Year</u>	<u>St. Paul Elementary</u>	<u>Alaska High School</u>	<u>Alaska Univ.</u>	<u>Cont. U.S.A. High School</u>	<u>Univ.</u>
1960-61	100	7	0	2	0
1961-62	107	12	0	5	0
1962-63	106	11	1	8	0
1963-64	101	19	1	7	0
1964-65	86	23	2	19	0
1965-66	83	32	1	31	0
1966-67	103	21	1	39	2

Health Services

Unlike most small communities in Alaska, St. Paul is provided with resident medical facilities. The full responsibility for medical and dental services was recently transferred to the U.S. Public Health Service. The agency usually staffs the small St. Paul hospital with a doctor, a nurse and at least two nurses aides. Dental attention is provided by periodic visits of a dentist, who uses facilities permanently established at St. Paul. It is expected that the physical plant, to include a new hospital and doctors' quarters, will be improved in the immediate future. All patients are treated without charge to themselves or the community.

Communications

Except for a small network of telephones operated between some B.C.F. buildings, the only means of voice communications on or to St. Paul island

is by radio. High powered radios, capable of reaching the Aleutian chain or Alaskan mainland, are operated by B.C.F., U.S. Public Health Service, Coast Guard and Weather Bureau. Communication from the St. Paul community to the two last mentioned stations and to St. George Island is by voice radio. The Coast Guard LORAN beacon and an aircraft beacon provide electronic navigational aid to ships and planes. Small battery-operated or AC current powered home transmitters are owned by a number of St. Paul residents who communicate with friends and relatives on St. George Island. The entire island population is serviced by the United States Post Office of St. Paul Island, Alaska 99660.

Provision of a telephone system would be of benefit to the economic and social life of the community, and a system could readily be constructed to serve the community and industrial areas. When built, appropriate ties could be provided to the Coast Guard and Weather Bureau. The most appropriate and expeditious way of providing a complete, good telephone system for St. Paul, including buried lines, would be through the organization of a telephone cooperative, with REA funding obtainable at 2 per cent interest. With such financing, monthly rates should fall in the range of \$5 to \$7 per dwelling. As desired, individual security could be provided through equity money by individuals or could be underwritten by the community. There would, however, be no need for direct capital or operating outlays by the community or municipality.

#### Transportation

Adequate transportation is vital to any community. In the case of St. Paul, it is critical. Lying in the Bering Sea 300 miles from Cold Bay, 800 from Anchorage and 3,300 miles northwest of Seattle, the community is



TABLE 46  
NUMBER OF SHIPS VISITS TO ST. PAUL,  
1956, 1961 AND 1966

<u>Year</u>	<u>Ships' Visits</u>			<u>TOTAL</u>
	<u>FWS</u>	<u>USCG</u>	<u>Other</u>	
1956	21	1	2	24
1961	26	9	2	37
1966	22	6	7	35

FWS = Fish and Wildlife Service (B.C.F.)

USCG = U.S. Coast Guard

separated by long distances from points significant to its existence. In addition, frequent inclement weather and lack of harbor facilities make access difficult and occasionally hazardous.

#### Water Transport

Historically, the community of St. Paul has been supplied from the sea. It was not until after 1942, when the military built a small airstrip on the island, that an alternate means of access and egress became available.

The degree to which St. Paul depends on ocean transport can be seen from sample data on ship visits to St. Paul (Table 46). These figures, however, present an overbalanced view, since about half of the visits are accounted for by trips from neighboring St. George Island.

The majority of all trips to and from St. Paul are made by the U.S. Fish and Wildlife Service vessel, M/V Pribilof. In addition to being occasionally utilized as a research ship, the vessel is used as an inter-island

TABLE 47  
CARGO CARRIED TO PRIBILOF ISLANDS  
ON M/V PRIBILOF, 1966

<u>Shipping Date</u>	<u>Cargo Type in Tons</u>			<u>TOTAL</u>	<u>Total to St. Paul</u>
	<u>Government Dry Goods</u>	<u>Government Groceries</u>	<u>Community Canteen &amp; Personal</u>		
April 1966	485.2	140.2	234.5	859.9	473.2
July	583.0	85.2	115.7	783.9	489.1
October	<u>475.4</u>	<u>127.5</u>	<u>138.2</u>	<u>741.1</u>	<u>302.5</u>
TOTAL	1,543.6	352.9	488.4	2,384.9	1,264.8

shuttle between St. Paul and St. George. The Pribilof, with a displacement of 1,000 tons and draft of 15 feet, makes an average of four round trips per year between Seattle and St. Paul carrying freight. As St. George has no airport facilities, sea transportation provides the sole means for moving goods and people to and from the island.

Sea borne freight delivered to St. Paul on the Pribilof in 1966 amounted to about 1,260 deadweight tons; the breakdown of freight by categories is shown in Table 47. Other vessels calling at St. Paul include Coast Guard cutters, ships delivering unusually heavy freight or picking up "sealburger" from the by-products plant, barges with gasoline and diesel supplies, and research vessels. Weather frequently causes landing problems, and it is estimated that average annual delays encountered by ships serving St. Paul total 30 days. While delay is costly in all cases, it is particularly so when standby demurrage must be paid (e.g., \$2,500 per day for the Alaska Steamship Company).

Freight rates for ocean transport to St. Paul have steadily risen in the past two decades. At present, cargo is hauled on the Pribilof at \$75 per ton (\$3.75 per cwt), including all handling charges and lighterage to shore. Perishables or other goods requiring refrigeration are carried at a rate of \$8 per cwt. Private shipping vessels generally apply Nomen tariffs to freight shipped to the Pribilofs.

A preliminary analysis of serving the Pribilofs with commercial transportation was completed by B.C.F. in January, 1968. The study concluded that annual savings of \$100,000 could be achieved by the government through the utilization of commercial carriers. Little change in transportation costs to the community is anticipated. The savings to B.C.F. would be at the expense of losing the convenience of having a vessel for inter-island transportation available throughout the sealing season.

#### Boat Harbor

Investigations have been made to determine the feasibility of constructing a boat harbor at St. Paul. An April, 1966, harbor reconnaissance report prepared by the Corps of Engineers delineates a plan for a \$4 million project. Authority to proceed with a detailed engineering study of harbor possibilities on St. Paul has been granted under a resolution enacted by the U.S. Senate Committee on Public Works at the request of Senator E. L. Bartlett. The Corps is now awaiting funding of the study. The period from the initiation of a study to the start of construction is normally six years--one year for the study, one year for required hearings and reviews, and the balance for the usual waiting period to obtain construction funding.

A major question yet to be determined is the effect of a harbor and related shipping activity on Pribilof seals. Since the sealing industry is

of paramount importance, any decision as to developing a harbor will have to be related to its potential impact on seals.

The potential new harbor would be in Village Cove, site of an existing ship landing pier. This site is unprotected to the southwest, yet provides good anchorage during the winter's prevailing northeasterly winds. The existing inadequate landing is a concrete pier with a face length of approximately 100 feet and adjacent water depths of 3 to 4 feet at low tide. The landing is located on the south side of the cove and has a shoal approach. Incoming swells frequently break across the entire approach, making a landing extremely dangerous and usually impossible. The pier is served by a self-propelled crane used to load and unload lighters. As a result of existing conditions, supplies are lightered ashore by barge or bidars (native skin boats), resulting in costly delays, some as long as 20 days, in unloading ships.

Local craft consist of 20 privately-owned outboard skiffs between 14 and 22 feet in length, two inboard boats about 24 feet long, three government landing barges about 30 feet long, and three bidars. As a result of inadequate harbor refuge, boat operators must beach their craft above the reach of waves between periods of use. Such practice causes considerable damage to hulls and equipment.

#### Aviation

The original airstrip on St. Paul was constructed during World War II. Since that time, three major improvements have been made, with assistance provided under the Federal-aid Airport Program (FAAP). In each case, the work was done by force account, with FAAP grants matched by the Bureau of Commercial Fisheries through transportation, local labor and equipment rental. The three improvement phases to date are:

Stage 1 - Extension of runway to 3,750 ft. x 150 ft., drainage, etc. This permitted use of the strip by DC-3. FAAP contribution \$60,000 (75 per cent of total cost). Project completed in September 1954.

Stage 2 - Extension of runway to 5,050 ft., drainage, embankment, marking etc. FAAP share \$60,828 (75 per cent). Completed April 1961. Permitted use by DC-4 and DC-6.

Stage 3 - Lighting of runway, construction of taxiway and beacon. FAAP share \$23,206 (62.5 percent) from discretionary fund. Completed May 1965.

Doing the airport improvement work by force account kept construction costs relatively low. The total Federal Aviation Agency investment in the St. Paul airfield is \$144,034.

The National Airport Plan for fiscal year 1968/72 recommends increasing the St. Paul runway to 6,700 ft., enlarging the apron and taxiway, and installing (and/or extending) M.I.R.L. and M.I.T.L. In a current revision of the National Airport Plan, the Federal Aviation Agency will propose that the extended runway be paved. Runway paving is required for jet and prop jet use of the St. Paul airfield. Tests have determined the suitability of scoria for paving aggregate. While the natural scoria is adequate surfacing for propellor planes, it is extremely light and abrasive and can damage jet engines.

The immediate need for paving is to provide adequate facilities for Coast Guard fisheries patrol planes (C-130 Hercules) now flying out of Kodiak. The proposed runway length would be sufficient for a fully loaded Hercules. (At this time, the Coast Guard installation on St. Paul is serviced by a SA16 Albatross, a turbo-prop plane requiring no pavement.)

It is estimated that, if the paving is done by force account and a local road mix can be utilized, the entire extension and paving job could be done for under \$300,000. A major problem of utilizing road mix is the need for good weather. Hot paving can be applied in more inclement weather, but, if the latter is to be utilized, special paving equipment will have to be brought to St. Paul, and the project could cost about \$500,000.

The Bureau of Commercial Fisheries has recently had discussions with the Coast Guard and Federal Aviation Agency toward a cooperative program to accomplish the runway extension and paving project. Funding may be through direct Coast Guard appropriation, FAAP discretionary funds and B.C.F. contributions from the Pribilof Islands Fund. Since the state considers that St. Paul's civil needs are not of sufficient relative statewide priority, use of regular state FAAP apportionments is not anticipated.

Scheduled commercial air service from Anchorage to St. Paul is maintained by Reeve Aleutian Airways. Reeve has served the island since 1946 and currently provides at least weekly mail and passenger service. Tables 48, 49 and 50 present data illustrating the patterns of service being rendered.

Air freight rates from Anchorage to St. Paul are 35¢ per pound for the first 500 pounds of cargo and 30¢ per pound thereafter. Perishables are carried at 20¢ per pound. Air cargo backhauled to Anchorage is taken at 10¢ per pound. (Reeve offers a special tariff of 8¢ per pound for mutton, crab, hairseal, beef, and the like, carried from the Aleutian Islands or the Alaska Peninsula. Similar rates would be available for bulk freight from the Pribilofs and even lower rates can be arranged.)

TABLE 48  
 WEIGHT OF AIR MAIL DELIVERED TO  
 ST. PAUL POST OFFICE  
 1962-1966

<u>Year</u>	<u>Total Weight of Air Mail</u>	<u>Number of Flights</u>	<u>Average Weight Per Flight</u>
1962	75,659 lbs	62	1220.3 lbs
1963	101,581	62	1638.4
1964	112,961	63	1793.0
1965	101,720	73	1393.4
1966	120,229	70	1717.6

SOURCE: U. S. Post Office

TABLE 49  
 PASSENGERS, AIR MAIL AND AIR FREIGHT CARRIED TO  
 AND FROM ST. PAUL, 1965-67

<u>Year</u>	<u>Passengers</u>		<u>Air Mail (tons)</u>		<u>Air Freight (tons)</u>	
	<u>To</u>	<u>From</u>	<u>To</u>	<u>From</u>	<u>To</u>	<u>From</u>
1965	686	693	73.6	23.1	44.8	23.5
1966	821	830	66.4	19.2	71.6	47.9
1967 (1st half)	388	275	31.3	10.6	33.3	17.8

SOURCE: Reeve Aleutian Airways

TABLE 50  
MONTHLY PASSENGERS AND MAIL ARRIVING AT  
ST. PAUL ON SCHEDULED AIR FLIGHTS  
1966

<u>Month</u>	<u>Passengers</u>		<u>Air Post Arrived</u>	<u>Number of Passenger Flights</u>
	<u>Arrived</u>	<u>Departed</u>		
January	28	34	5,860 lbs	7
February	28	35	8,136	5
March	33	15	9,249	6
April	54	37	6,562	5
May	105	33	11,890	7
June	72	57	10,492	10
July	120	89	11,342	9
August	89	195	12,533	9
September	29	103	8,805	5
October	25	29	9,889	7
November	32	33	10,766	7
December	<u>26</u>	<u>22</u>	<u>14,705</u>	<u>5</u>
TOTAL	641	682	120,229 lbs	82

#### Housing

All residences in St. Paul have been constructed by the government. In addition to payments for fuel and electricity, occupants pay bi-weekly rents at rates ranging from \$18.00 to \$28.50. As can be seen from Table 51, most of the homes presently in use were built before World War II; the largest number contain two bedrooms.

A serious housing shortage exists in the community. Overcrowding is widespread. Based on current needs and expected requirements, a total of 100 houses will be needed by 1975.



TABLE 51  
SUMMARY OF RESIDENT HOUSING OCCUPIED  
ON ST. PAUL, 1967

Date of Construction	Number of Homes	Number of Bedrooms			
		1	2	3	4
Before 1918	1	-	-	1	-
1919-1924	3	-	2	1	-
1925-1929	35	2	29	2	2
1930-1934	2	0	2	-	-
1935-1939	0	-	-	-	-
1940-1944	2	-	-	2	-
1945-1949	7	-	1	2	4
1950-1954	12	-	1	1	10
1955-1959	0	-	-	-	-
1960-1964	4	-	-	-	4
1965-	6	-	-	-	6
TOTAL	72	2	35	9	26

The current shortage is largely due to recent curtailments in housing construction expenditures, coupled with the policy of encouraging St. George residents to move to St. Paul. As of 1965, the B.C.F. was planning to construct about 25 additional residences on St. Paul by 1970-71 in order to "complete the transfer of all St. George families who are willing to move to St. Paul Island." Concurrently, a policy was established for making newly built homes available in equal numbers to immigrating St. George families and to St. Paul families wishing to improve the quality of their housing. Limited funds have held up any significant residential construction program. B.C.F. indicates that houses may still be built on

St. Paul for St. George families to aid in community consolidation, but the government does not plan to provide further housing assistance for the St. Paul community.

The St. Paul village council and others have already been exploring alternate means of providing additional new housing. However, the required increase of over 30 per cent in St. Paul's housing stock will be difficult to accommodate within the anticipated scope of household incomes over the next few years. While every community effort needs to be made to deal with the housing problem, the possibility of using the Pribilof Islands Fund to meet requirements for more dwellings and for additional units to replace obsolete and substandard houses should be thoroughly pursued. Adequate authority exists for B.C.F. to provide housing assistance, whether or not St. Paul incorporates, and the overall welfare of the community and future availability of required manpower may well depend how successfully this social problem, the most serious on St. Paul, is resolved.

#### Fuel

Traditionally, St. Paul homes were heated by coal fired furnaces. In recent years, however, all heating units have been converted to fuel oil.

St. Paul is presently supplied from a tank farm situated above the community containing seven storage tanks of about 116,000 gallons capacity each. Gasoline is also stored in the same area. The fuel oil now used by the community is purchased by B.C.F. through a U.S. Navy contract and sold at cost (including an amortization allowance for the tank farm) to local residents. In 1966, fuel oil cost 22¢ per gallon delivered and gasoline 40¢ per gallon at the pump. To equalize the heating costs for

oil and coal-fired furnaces, B.C.F. charged an adjusted price of \$38 per ton for delivered coal. Propane gas is sold at \$14 per 100 pound cylinder.

It is projected that the government will divest itself of responsibility for fuel, gasoline and liquid gas services to the community. However, purchasing of bulk supplies through B.C.F. needs to be continued at least through 1975 to keep the cost and income structure of the community in balance. This can be done under authority of Sec. 203 of the 1966 Fur Seal Act.

#### Retail Establishments and Services

Until mid-1967, St. Paul was served by two retail outlets: the government owned and operated store, and the community canteen. The former primarily sold groceries, both preserved and perishable, including frozen meats, while the latter dealt mostly in hardware, drygoods and luxury items. On October 1, 1967, the two stores were amalgamated to form one community owned and managed retail outlet. Packaged goods (beer only) are retailed by the community, both in case lots sold once a week and in individual bottles during tavern hours in the evening. St. Paul residents who cannot find items stocked and sold on the island have ready access to mail order outlets, which reply to air freight orders in relatively short time, and to surface freight orders, which arrive with the scheduled B.C.F. ship.

A number of private businesses also have been established by local residents since World War II, particularly over the past ten years. These businesses presently include two movie theaters, four cafes or refreshment stands, several taxis or rental cars, and several part-time barbers and hair dressers. (More information on private business operations is given in the economic analysis portions of this report.)

The community council has emphasized a policy of encouraging private enterprise in St. Paul. As will be seen below, a number of good opportunities for private business development will be available over the next years.

#### PART FOUR. ST. PAUL'S FUTURE

So far, the report has dealt primarily with the past and present status of St. Paul. This section is devoted to what lies ahead for St. Paul, what problems need to be resolved, and how additional opportunities can be developed.

Chapter VIII, which follows, projects St. Paul's population, economy, costs of government, household income and expenditure patterns, and other data to the years 1970 and 1975. This forecast is based primarily upon the assumption of a general continuation of existing trends.

Based upon those projections, Chapter IX concludes that the St. Paul community can afford to incorporate as a city and provide basic municipal services.

Chapter X deals with the establishment of the townsite and the carrying out of the trusteeship. (It has become clear in the process of the study that the manner in which the townsite trust is discharged may be critical to achieving a workable transition and creating a sound community.)

Statistical projections of the forecasting model are further analyzed in Chapter XI. Implications of some of the data are presented, and possible alternative courses of action are set forth. In particular, emphasis is placed on steps that can lead toward a more stable basic economy and more effective community development.



## CHAPTER VIII. FORECAST 1968-1975

Any general model forecasting the St. Paul economy during the next seven years must incorporate a set of assumptions concerning population size and structure, employment opportunities, and probable income and expenditures. The following sections present basic models of the community economy for the years 1968 and 1970-75. Although events assumed to take place in 1970 may not occur until 1975, and those forecast for 1968 might continue well past 1970, the two basic economic models are considered applicable to the general period. They are not dependent upon the exact time of implementation, except insofar as phased and interrelated development projects require careful planning with regard to manpower needs and technological change.

### Population 1970 and 1975

The 1970 and 1975 population forecast for St. Paul, presented in Tables 52 and 53, are based on the following assumptions:

1. That permanent emigration will be balanced by permanent immigration.
2. That the rate of natural population growth will be 1.9 per cent per year.
3. That the relative number of individuals in the age group 1 to 19 will remain about the same as during the period 1929-66.
4. That the relative number of individuals in the age group 20 to 39 will decline slightly from the 1966 level.

TABLE 52

## POPULATION FORECAST, ST. PAUL 1970

Age Group	Percent Total		Resident On-Island <sup>1</sup>		Total Residents <sup>2</sup>	
	Males	Females	Males	Females	Males	Females
0-9	27.0	30.0	62	59	75	71
10-19	24.0	24.0	55	47	67	57
20-29	13.5	14.0	31	27	38	33
30-39	10.5	7.5	24	15	29	18
40-49	13.0	12.0	30	23	36	28
50-59	7.0	8.0	16	16	20	19
60-over	5.0	4.5	<u>12</u>	<u>9</u>	<u>14</u>	<u>11</u>
Total			<u>230</u>	<u>196</u>	<u>279</u>	<u>237</u>
			Total 426		Total 516	

<sup>1</sup> Estimated number of on-island residents not temporarily absent for more than six months.

<sup>2</sup> Total number of residents not temporarily absent for more than three years.

TABLE 53

## POPULATION FORECAST, ST. PAUL 1975

Age Group	Percent Total		Resident On-Island <sup>1</sup>		Total Residents <sup>2</sup>	
	Males	Females	Males	Females	Males	Females
0-9	27.0	30.0	63	66	83	78
10-19	24.0	24.0	60	53	74	62
20-29	13.0	14.0	32	31	40	36
30-39	10.0	7.5	25	17	31	19
40-49	13.0	12.0	32	26	40	31
50-59	7.5	8.5	19	19	23	22
60-over	5.5	4.0	<u>14</u>	<u>9</u>	<u>17</u>	<u>11</u>
Total			<u>250</u>	<u>221</u>	<u>308</u>	<u>259</u>
			Total 471		Total 567	

<sup>1</sup> Estimated number of on-island residents not temporarily absent for more than six months.

<sup>2</sup> Total number of residents not temporarily absent for more than three years.



TABLE 54  
 PREDICTED ST. PAUL WORK FORCE\*  
 SUMMER AND WINTER, 1970 AND 1975

Season	Age Group	1970		1975	
		Male	Female	Male	Female
Summer	17-19	33	28	35	30
	20-59	$\frac{113}{146}$	$\frac{18}{46}$	$\frac{125}{160}$	$\frac{20}{50}$
Winter	17-19	5	5	5	5
	20-59	$\frac{85}{90}$	$\frac{10}{15}$	$\frac{90}{95}$	$\frac{15}{20}$

\* Workers available for full-time daily employment. These figures do not include workers available for part-time employment or cottage type industrial work.

5. That the relative number of individuals in the age group 40 to over 60 will increase slightly from the 1966 level.

Labor Force 1970 and 1975

From the population projection for 1970, it is assumed that St. Paul will have a maximum potential labor force of 123 males between the ages of 20 and 59, and a maximum potential female labor force of 98 in the same age range. For 1975, the projected labor force figures are 134 males and 109 females, ages 20 to 59. The composition of the work force will vary from season to season because of school attendance, hospitalization, military service and visits elsewhere (excepting off-island seasonal employment). Labor force projections, including assumed probable seasonal variations, are given in Table 54.

Models of the St. Paul Economy 1968, 1970 and 1975

In order to forecast levels of economic activity that may be expected in St. Paul during the coming seven years, two basic models dependent upon an assumed minimum change in the present economy have been constructed. These models are modified in Chapter XI, where other possible levels of activity based on technological innovations and planned economic development schemes are examined. For the purpose of the basic models, the following assumptions have been made:

1. That the Bureau of Commercial Fisheries will continue with its policy of converting its activities on St. Paul from a permanent, year-round to a seasonal operation.
2. That the number of St. Paul residents permanently employed by the B.C.F. will probably be 25 in 1968, 9 in 1970, and 7 in 1975.
3. That B.C.F. will remain in need of a summer seasonal work force which does not exceed 150 persons in 1975.
4. That B.C.F. will give maximum seasonal employment to adults for about 22 weeks and to students for about eight weeks.
5. That the U.S. Public Health Service will continue to operate a hospital on St. Paul and provide full-time employment to two resident nurses aides and one clerk.
6. That the State of Alaska will continue to operate an elementary school at St. Paul and give full-time employment to one janitor for the period 1968-75 and one teacher's aide and one maintenance man for the period 1970 to 1975.
7. That the U.S. Post Office Department will continue to maintain a post office at St. Paul and give full-time employment to one local resident.

8. That the U.S. Weather Bureau will continue to operate a station at St. Paul and, by 1975, will employ at least one adequately trained local resident on a full-time basis.
9. That continued development of the king crab industry of the Aleutian Islands and commercial activities on the Alaskan mainland will provide seasonal winter work for a majority of the seasonally unemployed St. Paul workers. It is assumed that 30 workers will migrate during the winter of 1967-68, 40 in 1970-71 and 50 in 1975-76.
10. That the tourist and handicraft industry of St. Paul is underdeveloped and will continue to expand. It is assumed that the village hotel (Company House) will give seasonal employment to at least seven persons in 1968 and to at least 10 persons after 1970, when food catering at the hotel also services non-Pribilof residents seasonally employed by the Bureau of Commercial Fisheries. It is further assumed that at least 10 other residents will find seasonal employment in the tourist industry,
11. That the sources and trends in unearned income payments will not change from the pattern established between 1962 and 1966.
12. That St. Paul residents will continue to find wage employment in the fur seal by-products industry, one person to be employed between 1968 and 1970 and five residents to be employed by 1975.
13. That the need for commercial laundry service in the village will give part-time employment to one person by 1970.

14. That the increasing need for a centralized communication center will give part-time employment to one person by 1970 and full-time employment to a second person by 1975.

Given the above mentioned assumptions, two models can be constructed to provide a first approximation of those portions of the 1968 and 1970-75 St. Paul economies that are based on income flowing directly into the community from outside sources and involving non-municipal activities. The labor force requirements and employment classifications for the models are given in Table 55 and the estimated gross basic income in Table 56.

#### Community-Generated Income

In addition to basic employment and income available to St. Paul from outside sources, economic activity will be generated within the community from municipal services and private entrepreneurs. This secondary source of income represents direct earnings from, or a redistribution of, gross income obtained from sources outside the community. In order to estimate the magnitude of community-generated economic activity, the following assumptions have been made:

1. The community of St. Paul will incorporate as a city and continue to assume increasing responsibilities for municipal services between 1968 and 1975.
2. By 1970, the city will be responsible for all services provided in 1967, and, in addition, will own and operate the power plant, water supply and distribution, sewer and waste treatment system, street maintenance, street lights, garbage disposal, fuel delivery and other functions discussed in Chapter VII.

TABLE 55  
 ASSUMED BASIC EMPLOYMENT STRUCTURE  
 1968, 1970, 1975

Position	<u>Number of Workers</u>		
	1968	1970	1975
<u>BCF Permanent</u>			
Management and Facilities	4	2	2
Powerhouse	5	0	0
Maintenance and Equipment	4	1	1
Janitorial Service	1	1	0
Construction, Maintenance & Sealing	<u>11</u>	<u>5</u>	<u>4</u>
Total	25	9	7
<u>BCF Temporary</u>			
Full Season	80	90	100
Part Season (students)	<u>25</u>	<u>30</u>	<u>35</u>
Total	105	120	135
<u>By-Products Plant</u>			
Seasonal	<u>1</u>	<u>1</u>	<u>5</u>
<u>Post Office</u>			
Permanent	<u>1</u>	<u>1</u>	<u>1</u>
<u>U. S. Public Health, Permanent</u>			
Nurses Aides	2	2	2
Clerk	<u>1</u>	<u>1</u>	<u>1</u>
Total	3	3	3
<u>State of Alaska School</u>			
Janitor, Full Time	1	1	1
Maintenanceman, Full Time	0	1	1
Teachers Aide, Part Time	<u>0</u>	<u>1</u>	<u>1</u>
Total	<u>1</u>	<u>3</u>	<u>3</u>
<u>U. S. Weather Bureau</u>			
Observer, Full Time	<u>0</u>	<u>0</u>	<u>1</u>
<u>Freight and Passenger Service</u>			
Agent, Full Time	1	1	1
Bus Driver, Seasonal	<u>0</u>	<u>1</u>	<u>1</u>
Total	<u>1</u>	<u>2</u>	<u>2</u>
<u>Communication Center</u>			
Clerk, Seasonal	0	1	1
Clerk, Full Time	<u>0</u>	<u>0</u>	<u>1</u>
Total	<u>0</u>	<u>1</u>	<u>2</u>
<u>Commercial Laundry</u>			
Seasonal	<u>0</u>	<u>1</u>	<u>1</u>
<u>Magistrate, Part Time</u>			
	<u>1</u>	<u>1</u>	<u>1</u>

TABLE 56

ESTIMATED BASIC, NON-MUNICIPAL EMPLOYMENT AND GROSS ANNUAL BASIC INCOME  
1968, 1970 AND 1975

(in thousands of dollars)

## Earned Income

Year	Bureau of Commercial Fisheries		Other On-Island Employment		Tourism, Arts, Crafts		Off-Island Employment		TOTAL INCOME				
	Permanent		Seasonal		Permanent and Seasonal		Seasonal						
	No. Pers	Tot. Wage	No. Pers	Tot. Wage	No. Pers	Tot. Wage	No. Pers	Tot. Wage					
1968	25	208	80	280	5	26.3	2	4.0	10	3.0	30	72.0	618.3
1970	9	83	90	315	7	39.0	6	9.0	15	3.5	40	96.0	575.5
1975	7	68	100	350	9	49.0	10	20.0	20	6.0	50	120.0	648.0

## Unearned Income

Year	Unemployment Insurance		Retirement and Old Age		Other Welfare
	No. Pers	Total	No. Pers	Total	Total
1968	50	40.0	30	56.0	6.0
1970	45	36.0	33	70.0	8.0
1975	45	36.0	35	105.0	10.0

3. By 1970 the municipality will own and maintain a minimum amount of rolling stock to include fire trucks, small service vehicles, road maintenance equipment, and fuel and garbage hauling trucks.
4. By 1970, the community will own and maintain a number of municipal buildings, including the store, tavern, church and rectory, recreation hall, vehicle repair shop, post office and fire station. In addition, the community government will own or lease office space for administration.
5. By 1970, the community will own and operate a hotel and restaurant and will contract to provide services in the government mess hall.
6. By 1970 the community will support all private entrepreneurs in business during 1967 and, in addition, will support one bakery, one gasoline service station, one repair shop and a beauty parlor.
7. By 1968 the community government will employ one bookkeeper and city clerk and one senior groceryman, in addition to all other community employment positions filled during 1966. By 1970, the community government will also have hired one city manager, five power plant employees, one mechanic, and three general workmen responsible for road, sewer, water and building maintenance, and fuel and garbage services.

Based on these assumptions, the work force and employment classifications of persons working for or within the St. Paul community have been projected as shown in Table 57.

TABLE 57  
 ASSUMED COMMUNITY GENERATED EMPLOYMENT STRUCTURE  
 1968, 1970, 1975

PERMANENT	1968	1970	1975
<u>St. Paul Community</u>			
City Manager	0	1	1
Store Manager	1	1	1
Bookkeeper	1	1	1
Groceryman	1	1	1
Store Clerks	2	2	2
Policeman	1	1	1
Priest	1	1	1
Fuel Oil Service	0	1	1
Garbage Service	0	1	1
Power Plant	0	5	5
General Maintenance Man	0	1	1
Mechanic	<u>0</u>	<u>1</u>	<u>1</u>
Total	7	17	17
TEMPORARY (Part-Time)			
<u>General Services</u>			
Tavern Keeper	1	1	1
Assistant Barman	1	1	1
Fire Chief	0	1	1
Recreational Hall Manager	1	1	1
Tavern Janitor	<u>1</u>	<u>1</u>	<u>1</u>
Total	4	5	5
<u>Village Hotel and Government Mess</u>			
Cook (Seasonal)	1	1	1
Cook's Helper	1	1	1
Waitresses	3	5	5
Maid	1	1	1
Janitor and Clerk	1	1	1
Manager	<u>0</u>	<u>1</u>	<u>1</u>
Total	7	10	10
<u>Private Business</u>			
General Repairman	0	1	1
Movie Theaters	2	2	2
Cafes	4	4	4
Barber	1	1	1
Bakery	0	1	1
Gasoline Service Station	0	1	1
Beauty Parlor	<u>0</u>	<u>1</u>	<u>1</u>
Total	7	11	11



TABLE 58  
ESTIMATED COMMUNITY GOVERNMENT EXPENDITURES  
1968 and 1970

Item of Expenditure	Thousands of Dollars	
	1968	1970
Operating Labor	\$ 30.4	\$105.7
Administration and Supervision	21.0	31.5
Public Safety	10.0	12.0
Supplies and Material	235.0	274.7
Maintenance	1.5	32.7
Power	3.6	21.6
Fuel	1.7	25.9
Water, Waste and Garbage	-	2.0
Transport	63.0	80.5
Losses (pilferage, spoilage)	<u>4.0</u>	<u>4.5</u>
TOTAL	\$370.2	\$591.1

Community Government Expenditures, 1968 and 1970

It is assumed that in 1968 the community of St. Paul will have the same responsibilities for municipal services as undertaken in the autumn of 1967, with the exception of public safety. Community expenditures in 1968 will be increased from the 1967 level by additional costs associated with management of the store, cost-sharing arrangements for the employment of a state trooper, and the addition of a bookkeeper to the community government. Total community expenditures in 1968, shown in Table 58, are estimated at \$370,200.

By 1970 it is assumed that the community will have taken over all major municipal services and will operate the hotel and government mess

TABLE 59  
ESTIMATED EXPENDITURES BY ST. PAUL COMMUNITY GOVERNMENT  
1970

(thousands of dollars)

Service Cost Factor	Water	Waste Disp.	Power Plant	Stores	Bldg.	Roads	Fuel Del.	Grbg. Disp.	St. Lts.	Hotel & Mess	TOTAL
Operat. Labor	5.0	1.5	45.0	20.0	5.6	4.5	5.6	4.5	-	14.0	105.7
Admin. & Supervis.	2.0	1.5	13.0	12.0	1.5	4.0	4.0	1.0	-	4.5	43.5
Supplies & Mater.	2.2	3.0	-	245.0	2.5	2.0	0.5	0.5	-	19.0	274.7
Mainten.	6.8	1.0	11.4	1.0	2.5	6.0	1.5	1.5	-	1.0	32.7
Power	2.8	-	-	5.0	10.1	-	-	-	2.7	1.0	21.6
Fuel	-	-	14.6	2.0	7.2	1.0	0.1	0.2	-	0.8	25.9
Water & Waste	-	-	-	-	2.0	-	-	-	-	-	2.0
Trans- port	-	-	10.5	70.0	-	-	-	-	-	-	80.5
Losses	-	-	-	4.5	-	-	-	-	-	-	4.5
<b>TOTAL</b>	<b>18.8</b>	<b>7.8</b>	<b>94.5</b>	<b>359.5</b>	<b>31.4</b>	<b>17.5</b>	<b>11.7</b>	<b>7.7</b>	<b>2.7</b>	<b>40.3</b>	<b>591.1</b>

on a seasonal basis (see assumptions in preceding section). Total community expenditures in 1970, as shown in Table 58, are expected to reach \$591,100. Primary cost factors are the increased labor and administrative personnel required to operate municipal services, increased inventory in the store, acquisition of community owned buildings, and management of the hotel and government mess. A detailed breakdown of the estimated 1970 costs is given in Table 59.

TABLE 60

## ESTIMATED COMMUNITY GROSS INCOME 1968 AND 1970

Income Source	Thousands of Dollars	
	1968	1970
Stores and Tavern	\$352.5	\$375.0
Fuel Oil	-	75.0
Gasoline	-	1.0
Electricity	-	102.4
Post Office	4.8	4.8
Hotel and Government Mess	15.0	43.9
Garbage, Water and Sewage Service	-	25.8
Road Maintenance	-	17.5
Fire Protection	<u>1.0</u>	<u>2.0</u>
TOTAL	\$373.3	\$647.4

All cost projections are based on general transportation costs of \$75 per ton, including purchasing, stevedoring, shipment, and lighterage in St. Paul. Any change in shipping charges will affect total transportation costs and will, therefore, also be reflected in costs to the community.

Community Government Income, 1968 and 1970

It is assumed that community government income in 1968 will be little changed from the 1967 pattern. The primary income sources will be the community store, tavern and bulk beer sales. Additional funds should be received from the community operated hotel, post office rent and contributions to the volunteer fire department. Gross income received by the St. Paul government in 1968 will probably be in the order of \$373,300 (Table 60).

Transfer of municipal service responsibilities to the community in 1970 should increase local government revenues by at least 40 per cent, based on the following factors:

1. The store and tavern will continue to be important sources of community income.
2. An estimated 2¢ per gallon increase in the price of delivered fuel oil, plus the existing 3¢ per gallon delivered charge, should result in a gross income of about \$75,000.
3. Of the present 15¢ per gallon service charge on gasoline, it is assumed the community will receive 5¢ and the private gasoline station owner about 10¢.
4. During the initial operations of a community owned power plant, it is assumed that power will be sold at a flat rate of 8.8¢ per KWH. Based on power consumption of 1,164,000 KWH divided among domestic users (706,000) and the by-products plant (150,000), the power plant should produce a gross income of about \$102,400. (As explained in Chapter VII, actual consumption will probably substantially exceed these amounts. However, coupled with a lower rate, the gross income need not be much greater than forecast. Incidentally, a flat rate charge for electricity would be advantageous to the community.)
5. Rental charges on the post office will remain unchanged from the 1968 level.
6. Expansion of food catering services to include the government mess should result in gross community earnings from hotel and mess of about \$43,900.

7. A per house utilities charge of \$10 per month for garbage, water and sewer service and stand-by water reserve for fire protection plus contractual agreements with other users, based on service costs, should produce gross revenues of about \$25,800. The residential utilities charge amounting to about \$10,800 is assumed to be included in present rental rates. Non-domestic users would pay a utilities charge as follows: USPH \$2,500, State of Alaska \$3,000, B.C.F. \$6,500, by-products plant \$1,000, and St. Paul community government \$2,000.
8. Road maintenance costs of about \$17,500 should be met in part by contractual agreements with B.C.F.
9. Fire protection costs, in part absorbed in the utilities charge, would be minimal; community contributions would amount to about \$1,000 and charges to other users about \$1,000.

Total gross earnings to the community, in 1970, are estimated to be about \$647,400 (Table 60).

#### Income and Expenditures of St. Paul Residents

An analysis of Tables 56 and 61 shows that monies will flow into the community both as earned and unearned income from outside sources, in addition to earnings from the municipality's contractual agreements with non-community agencies. This gross basic income to St. Paul residents is estimated to reach \$859,500 in 1975. Earnings as secondary income from activities within the community, such as local government and business, are estimated to be about \$143,500 in 1975.

Per capita gross income from all sources, shown in Table 62, is estimated to increase from about \$1,767 in 1966 to about \$1,933 in 1975. A

TABLE 61

## ESTIMATED TOTAL GROSS INCOME OF ST. PAUL RESIDENTS

1966, 1968, 1970 and 1975

(thousands of dollars)

Year	Non-Municipal Earned Income	Municipal Earned Income <sup>1</sup>	Unearned Income	Total Gross Basic Income	Total Gross Second. Income <sup>2</sup>	Total Income
1966	675.6	-0-	51.4	729.9	37.6	772.5
1968	618.3	9.2	102.0	729.5	67.2	796.7
1970	575.5	55.0	114.0	744.5	123.0	867.5
1975	648.0	60.5	151.0	859.5	143.5	1003.5

<sup>1</sup>Income generated from sales of municipal services to non-local agencies.

<sup>2</sup>Income generated within the community.

TABLE 62

## AVERAGE PER CAPITA TOTAL GROSS ANNUAL INCOME

1966, 1968, 1970 AND 1975

Year	Total Gross Income	Avg. Pop.	Avg. Per Capita Income	Probable No. of Houses	Avg. Per Household Income
1966	\$ 772,500	437	\$1,767	72	\$10,729
1968	796,700	453	1,758	75	10,622
1970	867,500	471	1,841	80	10,843
1975	1,003,500	519	1,933	100	10,035

TABLE 63

ESTIMATED PRIMARY EXPENDITURES OF ST. PAUL RESIDENTS  
1966, 1968, 1970 AND 1975  
(thousands of dollars)

Year	Canteen, Tavern Store	Fuel	Electricity	Housing*	Mail Orders	Total
1966	339.4	38.9	20.5	40.0	148.8	587.6
1968	352.5	45.0	30.0	40.0	150.0	617.5
1970	365.0	75.0	62.0	40.0	160.0	702.0
1975	400.0	82.0	64.0	40.0	175.0	761.0

\* Currently, payments for rent; after townsite sale, covers payments for acquired property and for utilities.

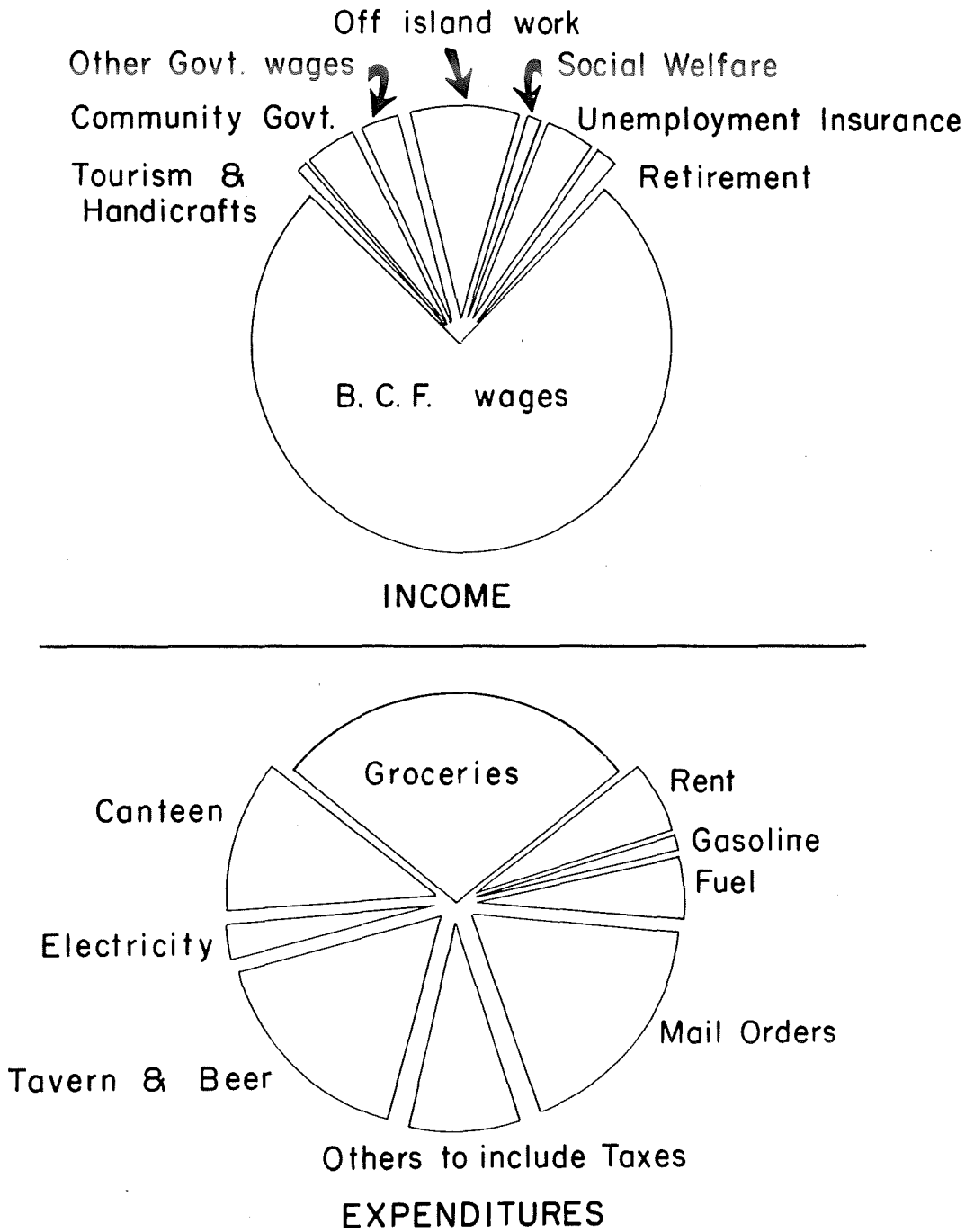
TABLE 64

ESTIMATED NUMBER OF JOBS FOR ST. PAUL RESIDENTS  
DURING PERIOD OF MAXIMUM SUMMER EMPLOYMENT  
1968, 1970, 1975

Year	Permanent Employment			Seasonal Employment			Total		Total All Workers
	Males	Females	Total	Males	Females	Total	Males	Females	
1968	32	5	37	106	10	116	138	15	153
1970	27	6	33	122	21	143	149	27	176
1975	26	7	33	141	21	162	167	28	195

FIGURE 8

PERCENTAGE DISTRIBUTION  
OF ST. PAUL INCOME AND EXPENDITURES 1966





slight decline in per capita earnings is expected during the transition period in 1968, when the permanent B.C.F. labor force is reduced. Thereafter, per capita income rises significantly. Per household earnings drop with an increased number of housing units, but this does not reflect the status of individual welfare. However, if it is assumed that the distribution between households of workers employed permanently and seasonally will be about the same as in 1966-67, then the probable number of households earning less than the minimum amount needed to meet primary expenditures will be about the same as recorded in 1966.

The expected total primary expenditures by St. Paul residents for food, clothing, shelter and recreation are shown in Table 63 and Figure 8. In 1966, about 77.8 per cent of the total gross income of the residents went to these items. In 1968 it is estimated that these expenditures will amount to about 77.3 per cent of the total gross income, in 1970 about 80.8 per cent, and in 1975 about 75.5 per cent. These figures demonstrate that the community can bear the increased costs of municipal services.

#### Employment Balance

The expected total number of jobs required to meet seasonal peak employment demand (see Table 64) will equal or slightly exceed the predicted number of available St. Paul male workers in 1970 and 1975; this excludes jobs such as blubbering, traditionally filled by off-islanders. Thus, even without additional sources of economic activity, the community may face a possible labor shortage. This can be overcome by technological improvements and through transfer of traditionally male jobs to females. In general, however, the total employment outlook appears to be in balance, at least for the summer season. The basic labor problem is one of annual underemployment rather than unemployment.



CHAPTER IX. CONCLUSIONS--ECONOMIC VIABILITY AND MUNICIPAL SERVICES

The forecasts and analyses of the preceding chapter provide the basis for the conclusion that St. Paul's economy is adequate to support its population. Furthermore, previous chapters of the report show that the community can afford to incorporate as a city and can provide basic municipal services.

Thus, the basis exists for the findings necessary to establish the townsite and dispose of lots in accordance with Sec. 206 of the Fur Seal Act of 1966. Assuming the analyses of this report are upheld, all that would be required prior to issuance of townsite patent is assurance that St. Paul will incorporate as a municipality before the actual conveyance of lots.

Whether the community chooses the path of self-government will depend at least to some extent on the manner in which the Bureau of Commercial Fisheries proceeds toward establishing the townsite and effecting a proper transition to local governance. This problem is discussed in the following chapter.

Should the proper steps occur, St. Paul will be in a position to direct the course of its own development. This, however, does not mean that the task will be easy or that the government should assume that it can withdraw immediately and completely from concern for the community and its people.

The next chapters take a further view of St. Paul's future in terms of continuing local needs and possible ways of dealing with them.



## CHAPTER X. ESTABLISHMENT OF TOWNSITE AND DISPOSAL OF PROPERTY

The process by which the federal government moves toward disposal of improved and unimproved lots in the St. Paul townsite and the terms of sale are likely to have a profound effect on St. Paul's future. As mentioned above, the decision to establish a self-governing community and to incorporate St. Paul as a municipality hinges largely on how this entire process is handled by the government over the next few years. The economic and social welfare of all individual household units will be directly affected by terms and conditions of lot and house sales. And the economic viability of the entire community will to a significant extent depend on the amount of money that may flow out of the community in rentals or other payments for property.

The current problem is that, while the practicality and cost of taking over and providing adequate municipal services affects all residents, it is the personal considerations--such as who receives what property and how much it will cost--that will weigh more importantly with the individual. It is clear that the residents of St. Paul have some very real concerns about their future and may not wish to give up their relatively secure present for the unknown future that may result by voting for incorporation as a city. Unless the government takes these factors into account in its policies and actions, the establishment of an independent community may be long delayed.

There are no quick and easy answers to many of the questions that will need to be dealt with over the forthcoming months and years. Many aspects of the St. Paul trusteeship and townsite disposal are without precedent, and some complicated legal points and major policy issues will have to be

resolved. Throughout, those responsible for the program will have to keep in mind the importance of these issues for the implementation of Title II of the Fur Seal Act of 1966 and for the long-term success of the community.

#### Townsite Trusteeship

The character of the trusteeship is largely a matter of basic policy. Under one approach, the trustee's role is a perfunctory one, tantamount to that of an escrow agent. The Bureau of Commercial Fisheries would continue to manage land and properties until sold or the five-year trusteeship period expires and land is transferred to the municipality of St. Paul. The trustee then simply acts to reconvey properties from the government to individual residents of the community under terms established by B.C.F. It is the considered judgement of this report that this approach is not in the interest of either the government or the St. Paul community.

Another approach, and the one considered more desirable for St. Paul, is to view the five-year trusteeship as a means of achieving an orderly and effective transition from federal jurisdiction to municipal government and private ownership. This could be accomplished in an orderly manner by appointing as trustee a "neutral" or third party who could assure that the basic laws and federal requirements were met while furthering the transfer of lands and assumption of responsibility by the community.

A key ingredient in making such a transition workable and successful will be the continuing withdrawal of B.C.F. from community affairs. It has been the objective of B.C.F., and was the clearly stated intent of Congress, that St. Paul become a self-governing community at the earliest possible date. Increasingly, B.C.F. has been moving in the direction of divesting itself of community functions and responsibilities. The trust

period provides an opportunity to strengthen this process. Continuing control or even benevolent guidance is likely to retard community progress.

Viewing the trusteeship as a creative element of the community development process, and not just as the mechanical exercise of delegate functions, could have a direct impact on the decision of the people whether to incorporate St. Paul as a city. The assurance that independent judgment will be exercised in matters directly affecting the community and its residents may help develop the positive attitudes with respect to self-government that are to a substantial degree still lacking today. Since the character of the trust and all aspects of property transfer will be key considerations in the municipal incorporation decision, appointment of a trustee should be made as soon as possible after the required viability determination by the Secretary of the Interior.

#### Sale of Property

A prime concern to many residents is the price they will have to pay for property. Conveyance of improved and unimproved lots will be in accordance with prices, terms and conditions approved by the Secretary of the Interior. Section 206(b) specifies:

In determining the amount to be paid for the purchase of lots or tracts...the Secretary shall consider the economic status of the natives of the Pribilof Islands, including the factor of isolation, the restrictive nature of the title to be conveyed, the improvements, if any, placed on the property by the purchaser and such other factors as he deems pertinent... .

Under the circumstances, this provision is, of course, most proper and desirable.

Congress has, in effect, provided that pricing and disposal terms should reflect social and economic criteria rather than just physical

conditions. No effort is made to relate price exclusively to such concepts as "fair market value," cost to the government, or the like. Rather, the question of price is left open and becomes one of policy as well as valuation. It creates a situation where the routine real estate appraisal provides the basis for, but not the direct determinant of, the sale prices of properties.

There appears to be no direct precedent for this approach to lot evaluation in other townsite programs applicable to Alaska. In Trustee Townsites, properties are sold for the prorated cost of surveying, plus an administrative fee of \$17.50. In a remote community, resultant prices will average \$100 per lot. Improvements in these cases are already owned by the occupants, and the sale covers land only.

In Native Townsites, where the occupant also owns his improvements, lots are transferred without any payment whatsoever. In most cases, transfers are made by restricted deed. In the case of Presidential, Reclamation and Railroad Townsites, a minimum price is set in accordance with fair value appraisals; preference right purchases are authorized in Railroad Townsites on the basis of such appraisals. While there have been surplus town disposals by the government, none have had the type of legislative provisions as those for St. Paul.

It is thus clear that conventional appraisal techniques are not fully applicable to St. Paul. Special approaches will have to be developed both to the appraisal process and to the valuations themselves.

Under existing delegation of authority, the Director of the Bureau of Commercial Fisheries can act in behalf of the Secretary of the Interior in the setting of lot prices. Accordingly, B.C.F. has engaged the services of a realty officer to appraise townsite properties. If the trustee concept



set forth in this chapter is followed, it would be highly desirable for the trustee to participate in the setting of final prices, terms and conditions for the sale of individual lots.

The prices for which lots are sold will, as mentioned before, have a direct bearing on the welfare of the community. As was seen in Chapter VIII, there is virtually no surplus disposable household income forecast for 1970 and 75; capability to pay for property may in many instances be limited to the amount of current rental payments. Proceeds from property sales will, under law, revert to the municipality. Since the sale of lots will take money from individuals and transfer it to the community, consideration should also be given to community participation with B.C.F. and the trustee in establishing policies and guidelines with respect to disposal prices.

#### Rental of Properties

When townsite patent issues to the trustee, he will hold title to all improved and unimproved land in the townsite not reserved for federal use. B.C.F. would no longer have ownership of improvements. Upon receipt of patent, therefore, the trustee succeeds as lessor of individual properties. Arrangements could probably be made for the trustee to contract with B.C.F. or the community for management of rental properties.

The disposition of lease revenues, unlike those from sales, is not prescribed by law. The amount of rental receipts that would be collected during the five year trust period cannot be determined, since it will depend on the rate at which individual properties are sold. Assuming that existing rental schedules will be maintained, total revenues could well exceed \$100,000. The bulk of these funds would be required for maintenance, which could be

carried out for the trustee on a compensable basis by B.C.F., the community, private businesses or individuals, or persons employed by the trustee for this purpose. Any excess funds could be spent by the trustee in behalf of the community; possibly they could be transferred to the municipality, though no statutory provision exists on this matter.

## CHAPTER XI. FUTURE COMMUNITY DEVELOPMENT

The projected characteristics of St. Paul as brought out in Chapter VIII indicate that the community of 1970 and 1975 should be a better place than today. Even with the generally conservative assumptions that have been used, it is clear that average per capita income will be higher, that more key jobs will be filled by local residents, that a more self-governing community will emerge, and that the private sector will continue to develop. None of these factors should, however, lead to a lack of active concern for St. Paul's future. The limited basic economy, seasonality of employment and distribution of income remain as critical economic problems that will require positive action on the part of the community, the federal government and the state.

The changeover from year-round to seasonal operations by the Bureau of Commercial Fisheries does not, of itself, make the community less dependent on B.C.F.; rather, it simply decreases the amount of available employment for the local residents. However, important steps toward true community viability can occur as the B.C.F. withdraws its control over the local economy and the almost complete direct reliance on B.C.F. is abandoned. It will be critical that the B.C.F. withdrawal be gradual and not constitute a sudden abandonment of responsibility toward assisting the community to stand on its own.

Some of the requirements for establishing an effective self-governing community have been discussed earlier (e.g., assumption of utilities operations by the municipality, cost sharing by B.C.F. and other agencies). A number of additional topics need to be dealt with: population, training and employment; expansion of the economic base; the future of B.C.F.; and,

most important, the cooperative planning and programming for St. Paul's future development. These matters are discussed in the following pages.

### Population and Employment

The extent to which the assumptions about the projected 1970 and 1975 St. Paul populations are correct will depend, in large part, on the degree to which the young adult population of the community chooses to seek a permanent future on the island. It appears that the probable out-migration of young St. Paul residents will for some time be balanced by in-migration from St. George. Nevertheless, careful consideration should be given to factors influencing decisions by young people, many or most of whom will be away from the island for several winter seasons while going to high school. The most important factors to be considered are:

1. Availability of eligible unmarried women, not restricted from marriage by kinship ties.
2. Suitable employment at wage and activity levels commensurate with the education and expectations of the young adults.
3. Adequate single family housing.

It can be seen from data given in Chapter IV that the present population exhibits a significant imbalance between marriageable males and females. This can only be overcome by a steady inflow of young women in a position to marry St. Paul men; these women should preferably not be from St. George, since kinship ties would decrease the probability of marriage. Care should be taken to watch marriage patterns over the next years to determine trends among young men seeking to establish homes on the

island with wives not born on the Pribilofs. Schooling off the island should contribute to this trend, since it increases the probability of young men establishing relationships with non-Pribilovian women.

At the moment, the single bachelor appears to play an important economic role within the community. Households which might otherwise not obtain enough income to meet basic needs are able to increase their annual gross income by boarding unmarried males. Changes in marriage patterns and provision of additional housing would, of course, change this situation. In view of the impact of household incomes, any major changes should be carefully analyzed in the future.

The importance of suitable employment for young people cannot be over-emphasized. Several young men now seeking university level education are preparing themselves for professional careers in such fields as law or advanced naval engineering. Such specialties preclude their future residence on the island under present circumstances. A careful program of economic development should identify skills and professional training which allow young people to realize a worthwhile future on the island. Special incentive programs for skilled labor and supervisors already working on the island should be devised. Competence in industrial leadership should be rewarded by wage scales high enough to induce skilled labor to remain on the island. This applies particularly to sealing industry foremen, who need to receive seasonal wages high enough to meet their annual needs. Should a high rate of turnover develop among the skilled labor section of the local population, efficiency in the fur seal industry could decline rapidly. Young people needed for skilled labor and leadership positions should be shown that advancement is possible on St. Paul and that acquisition of skills can mean job security.

Generally, education and special training should be geared to the following:

1. Skilled positions on the island, especially in the sealing industry and new municipal functions.
2. Development of management skills, both for public and private enterprises.
3. Skilled positions in seasonal employment off the island, especially in the fisheries of the Bering Sea region.

Careful consideration should also be given to the education of young women and their desires within the community. There will be an increasing number of jobs that could be filled by women. Employment of females could relieve men for other jobs and would help supplement family incomes.

Inadequate single family housing is a critical factor leading to intra-household conflicts and motivation to leave the island. It is estimated that by 1975 the community could contain as many as 110 families. A building program is necessary to relieve the present overcrowding and meet new demands. At a building rate of about four single family housing units per year, from 1968 to 1975, a significant part of the housing shortage could be alleviated. In addition to the construction of new units, however, recognition must be given to the fact that most houses now in use were built before 1930. An adequate supply of good residential housing, therefore, should be a major goal in maintaining the viability of the community.

## Economic Expansion

The models of the St. Paul economy in 1970 and 1975 depend upon continuation of several important modifications to the previous patterns; these changes were already set in 1967. The most crucial factor is the B.C.F. policy of employing seasonal workers. The models presented earlier in this report are based on a programmed maximum work period of 22 weeks for adults. Examination of past records shows that, in practice, the seasonal work period was often much shorter. Its actual length depends in large part on the funding allocation granted B.C.F. for the Pribilof's and on spending priorities. Careful planning should be undertaken by B.C.F. during the critical transition period to municipal responsibility for local services. Unless adequate income is maintained, B.C.F. may have difficulty in retaining an adequate work force. It should also be noted that the models require a training program that will prepare local people for employment in the by-products plant, school, weather bureau, power plant management, communications, and other positions set forth in Chapter VIII.

As pointed out earlier, it must be recognized that the community may face a work force shortage among males in 1970 and 1975 even if there is little or no basic change from economic patterns existing in 1967. This trend is likely to continue. Careful consideration should therefore be given to increasing the efficiency of existing fur seal industry operations with a reduction in manpower.

At the moment, much of the sealing industry is highly labor-intensive, and many operations lend themselves to at least partial automation. For example, field operations might be improved by the introduction of portable herding and killing pens and conveyor belts feeding into especially designed

trucks and portable containers. Automated washing and blubbering techniques could reduce labor requirements in the curing plant. New types of containers could reduce the amount of labor now used to assemble barrels. Automated equipment could facilitate movement of products and supplies, etc. Any automation program should, of course, be so designed as to take into account the promotion of a proper employment balance.

While provisions are being made to sustain and develop the necessary local labor supply, efforts are also required to broaden St. Paul's economic base and, insofar as possible, provide more year-round and off-season employment. There are a number of opportunities for expanding existing minor economic activities and for developing new ones. A few are reviewed briefly, not necessarily in order of priority, practicality or economic significance. All recognize the need to protect the basic economy of the island--the fur seal industry.

### Tourism

St. Paul provides a variety of attractions that could make the island a tourist "discovery" of real significance. Seal rookeries, readily accessible sea bird rookeries, sea lions and hair seals, reindeer and foxes, singular flowers and vegetation, and a highly interesting volcanic topography constitute notable visitor drawing cards. To date, only a few hundred people a year visit the island, but these have been highly enthusiastic about their stay.

Expansion of tourism will depend on a highly professional program of tour organization and promotional advertising, improved air transportation and proper accommodations. A trained staff of guides and adequate on-island transportation, including car rentals, are essential. (These activities could provide ready employment for women.)



### Handicrafts

Virtually all arts and crafts items made on the island have been sold to non-Natives working on St. Paul and to tourists and official visitors. Service to this market could be readily expanded. Substantial potential exists or could readily be generated on St. Paul for Pribilof products, particularly those utilizing seal fur in their manufacture. Cottage type industries can be of considerable economic importance to the community, since these activities can be carried out by women on a full-year basis, thus providing a potentially significant supplement to family income. The promotion and development of specialty crafts should not be approached haphazardly. Assistance should be sought from those experienced in serving commercial markets with sewn skins, graphic arts and other Native-manufactured products; Eskimos or Alaskan Indians may be most helpful in this respect.

### Additional Fur Seal Harvest

Present sealing is restricted to young males and a limited number of females. A substantial number of male seals which escape the annual kill become "idle bulls" and are not essential in the reproduction process. Even though their fur may not be of high enough standard for the quality fur market, it may be possible to subsequently harvest these surplus seals for the Alaskan skin sewing trade. The number of seals that could be so used and the processing requirements and possibilities should be determined at the earliest possible date. Should the taking of these bulls prove feasible, it could provide an important source of post-season employment and community income.

### Sea Lion

The sea lion is a natural resource of the Bering Sea region that has been little utilized. The May 1964 report on the Feasibility of a Commercial Sea Lion Operation in Alaska, prepared by Arthur D. Little, Inc., for the Bureau of Indian Affairs, indicated that a sea lion industry may be feasible in Alaska. The facilities and know-how existing on St. Paul in connection with fur sealing operations may provide the basis for exploring the establishment of a sea lion industry. While the quantity of sea lions in the Pribilofs may be too limited for a localized operation, its establishment anywhere in the region may help extend the basic working season for St. Paul residents. This is a matter that would justify a joint-exploratory effort by the community, Bureau of Commercial Fisheries and other agencies.

### Blue Fox

Blue fox have long been part of the St. Paul fauna. Past harvests have been over 600 pelts. This resource has been little utilized in recent years, although the limited number of pelts taken recently brought as much as \$12 each. A sustained-yield harvesting of blue fox could provide an important income supplement for several families.

### Reindeer

St. Paul's reindeer population has varied from 2,000 to 200 and less. The current herd count is low. In the past, reindeer meat has been an important food source for the local population. It should be feasible to build the herd back to sustaining size (1,200-1,500 animals) and take an annual harvest in accordance with community requirements. Consideration should be given to turning the herd over to community management and having the community store contract with several men to deliver the required amount

of meat for sale throughout the year. Such substitution for imports would help the local economy, while providing direct income for several families.

### Fishing

Until a boat harbor is built on St. Paul, development of a fishery base on the island is not feasible. Should a harbor facility be constructed, a secondary fishing base may develop and provide local employment and other income.

### Research

There are other possible areas of economic activity, but the ones enumerated here indicate some of the prospects that can be derived from the particular characteristics and resources of St. Paul. There is one additional area in which St. Paul provides special opportunities--research. The opportunities are extensive, for the island, its resources and its people possess numerous physiological, biological, sociological, anthropological, governmental and other characteristics worthy of study. St. Paul is particularly fortunate to have a maximum amount of specialized data in a number of fields, and this could greatly facilitate programmed research in the geographically contained Pribilof environment. For example, family and individual records for St. Paul inhabitants extend back for many decades, making it possible to trace kinship lines, migration patterns, relationships between family, education and employment, and the like.

A program of research could be greatly facilitated by the establishment of an interdisciplinary research field station on St. Paul. With supervision by the University of Alaska or other institutions, it could be locally manned to provide a base for visiting researchers and for continuing observation.

St. Paul may be able to capitalize on another research possibility-- the transplanting of seals to islands in the Aleutian chain, to Kodiak or other places. The moving of seals from one spot to another in the Pribilofs has been successfully accomplished. The matter has been studied on a number of occasions, and the biological peculiarities of the seals have so far made major moves impractical. Further experiments and investigations of biological and economic implications appear well justified. One possible reason for withholding major transplanting attempts would be the possible effect of an increased seal population on high seas fisheries. However, from the standpoint of the State of Alaska, it is likely that a program of establishing new fur seal rookeries would be highly beneficial as a successful program would result in substantial profits to the state. For St. Paul, such a program would mean new opportunities for employment of men experienced in the fur seal industry.

Factors other than the development of a particular activity are frequently required to achieve economic expansion and diversification. For example, availability of land for new enterprises may be of critical importance in establishing a new activity. As proposed, St. Paul townsite will not include any appreciable amount of land suited to industrial use; all such areas are to be retained under B.C.F. control. Policies and practices such as these may, advertently or not, hinder community development.

Adequate transportation is one of the most critical factors affecting future economic activity on St. Paul. Separated by major distances from the mainland and the Aleutian Islands, St. Paul is completely dependent on sea and air access. As discussed earlier, neither service is fully adequate at this time. The situation will become increasingly serious if adequate service is not provided. While a comprehensive transportation study

for the Pribilof Islands is not yet complete, it is clear that most of the passenger and supply requirements of St. Paul could be met by air.

Two requirements will have to be met to obtain the benefits of good air transportation. First, an adequate volume of shipment into and out of St. Paul will have to be achieved. This may well be accomplished by programmed delivery of goods to the island and a regular backhaul of fur seal skins and other island products. Only then will it be possible to utilize aircraft capable of hauling large volumes of freight at prices far below those applicable today. The second requirement for better air transportation is improvement of the landing field and navigational aids to the point where more modern planes can land on the island on a scheduled basis. Ancillary benefits of airport improvement will be provision of a needed facility for Coast Guard jets and an emergency landing place in the eastern Bering Sea area.

The other transportation improvement that may benefit St. Paul is a boat harbor. Should adequate air shipment become available, the necessity of a better tie up for cargo ships would be somewhat lessened. However, a boat harbor would aid in expanding the community's economic base. St. Paul could possibly serve as a satellite station in conjunction with general development of marine fisheries in the Bering Sea region. To perform this function, the community would require an improved harbor with boat repair shops, supply and storage facilities, medical services, navigation aids, recreation and other facilities. Such fisheries-related development would provide for broad diversification of the community's economy and would give rise to numerous on-island jobs. This type of employment appears better suited to the local people than being part of a migrant fisheries labor force.

In considering boat harbor development, however, prime consideration would, as mentioned earlier, have to be given to any possible negative effects on the fur seals.

### The Fur Seal Industry

Throughout any efforts to strengthen St. Paul's economy, there should be constant awareness that the fur seal industry is and will remain the mainstay of the community, in addition to its function as a basic national and state resource. In this context, one fact should be clearly established-- that the fur seal industry is in fact to be run as an industry. It is probable that, through technological innovations and improvements, both the efficiency and the total net profit can be increased. Should this be the case, it is certainly appropriate that the local population share in the overall increased profit. Possibly, one long-range objective could be a program whereby the community of St. Paul contracts (at a given price per prepared skin) with the producer of the finished fur seal for delivery at dockside, at the airport, or at the processing plant. In this way, the community would be able to share in technological innovations which could improve the efficiency of the operation and cut down present costs. This type of program could operate under government biological and management controls, providing an incentive to abandon the welfare aspects of the industry and eliminating its many inefficiencies. Local profits under this arrangement could either go back to industry employees or be divided between the employees and the community for other development schemes.

The by-products plant also plays an important role in the consideration of local participation in the future of the sealing industry. The community has already indicated an interest in taking over plant operation when the

current contract expires in 1969. Government attorneys have taken the position that fur seal legislation provides no preference right to Pribilof natives for operating any part of the industry and that the future contract would have to be rebid. While a strictly legal basis may exist for this interpretation, the language of Sec. 202 of the Fur Seal Act certainly appears comprehensive enough to allow for local by-products plant operation, particularly if this is considered in the words of the Act as one of the "other purposes the Secretary (of the Interior) deems desirable." If existing law does not provide sufficient statutory authority for contracting directly with the community, then amendatory congressional legislation should be sought.

The importance of the by-products plant lies in the fact that this is a specific example of an economic development enterprise that the community has expressed a desire to operate, and it has backed its desire by helping underwrite the hiring of a local resident as a plant employee and understudy. The experience and the self confidence that the community could gain from this operation may be invaluable in pursuing some of the economic potentials outlined previously, as well as others deemed appropriate by the community. Equally important, the position taken by the government in this matter may well set the pattern for future B.C.F.-community relations.

#### Role of Bureau of Commercial Fisheries

Under present legislation, the federal government still retains an overriding responsibility to meet many of the needs of the natives of the Pribilof Islands. The Bureau of Commercial Fisheries, therefore, should be as concerned about the future economic success of St. Paul as the community itself.

So long as the primary and exclusive resource of the community is the fur seal and so long as additional development does not occur, the government will continue to be basically responsible for the community and its residents. B.C.F. will be able to attain its objective of withdrawing from non-industry involvements only if it does not now pursue a policy of total withdrawal from economic and social responsibility for the island's residents. The Bureau should follow a positive policy of directly assisting the community in its efforts to achieve municipal self-government and continuing economic vitality.

Implementation of such a policy calls for general support and, as required by local needs, direct financial assistance. It includes assurance that adequate land will be made available to the community for future economic growth and that establishment of the townsite be handled as smoothly as possible. It means providing opportunities for community participation and initiative in the development sphere. And it entails financial support for municipal services (through full compensation for services received) and for community improvements, particularly housing.

To participate in the development of St. Paul, B.C.F. must give careful thought to its own fiscal planning and management. Appropriations made available under the Pribilof Islands fund should be of such magnitude and managed in such a manner that the government can join as a full participant in a community development program. At the moment, allocations from the Pribilof Islands fund are frequently not well managed in terms of industry and community requirements. Decentralization of responsibility may be necessary, and the B.C.F. Regional Director and seasonal island manager should have major discretion in the programming and expenditure of funds.



St. Paul's viability needs to be an objective to which all government agencies, federal and state, are fully committed. If the islands are to be productive both for the people who live there and to the governments who at the moment are sharing a not inconsiderable net profit, all parties must be willing to aid in the effective transition of St. Paul to self-government status and to make the required fiscal investments over the next few years.

#### Financing Development

It has been established earlier that the cost of operating municipal services can be borne by the residents, benefitting government agencies (including B.C.F.) and the municipality. The municipality will also receive \$150,000 in federal transitional grants over the five years after its incorporation. These funds are to be used "to assist in providing adequate municipal services." In addition, the community will receive the net proceeds from the sale of lots in the townsite; there is no basis now for determining what this will amount to, but it is not likely to be a substantial amount. Further one-shot revenues may be obtained by the city from the disposal of unsold lots turned over by the trustee; again, under existing statutory provisions, this amount would be minimal.

The issue of the disposal of rents collected by the townsite trustee pending sale of improved lots remains to be resolved. Rental proceeds approximate \$40,000 per year. Of that amount, between \$10,000 and \$11,000 could, and should, be immediately turned over to the community in lieu of the \$10 monthly utility charge for each house. Any amount remaining after dwelling maintenance expenses have been met would most appropriately be turned over to the municipality for basic capital improvements.

Beyond such proceeds, the municipality will have little excess of revenues over expenditures. At this time, the community is able to tax residents by way of profit from the store and beer sales. These profits have been used to finance construction of the new post office, purchase two small service vehicles, meet a limited community payroll, provide private loans and create a savings account. These profits will continue, as projected earlier in the economic models, but the funds will not be adequate to allow the community, over the next few years, to make large scale investments in its own future. Development monies will have to come from outside sources, including the transitional grants.

The municipality, when organized, will be entitled to receive financial assistance from a number of sources, though not all can be of actual help to St. Paul. These include the Indian Revolving Loan Fund, for which the community is currently eligible; however, the fund is depleted and the existing backlog of loan applications negates the usefulness of this source at present. A proposed new Indian Resources Development Act has not yet been acted on by the Congress. Thus, Bureau of Indian Affairs programs are at this time only remote possibilities in financing the development of either governmental or proprietary functions of the community.

Other programs can assist more readily. As discussed in Chapter VII, Rural Electrification Administration assistance is available for electrical and telephone improvements; loans are made at an interest rate of 2 per cent and can be repaid from revenues of the respective utilities.

The Economic Development Administration (E.D.A.) of the U.S. Department of Commerce has a program of grants and loans for public works and development facilities and a program of business loans. Both programs are geared to the development of additional jobs. As a municipality, St. Paul would

be eligible for public works and development facilities grants and loans. As a business corporation under the Indian Reorganization Act, St. Paul could receive E.D.A. business loans; these are also available to individual businessmen.

E.D.A.'s public agency program provides assistance for water and sewage systems, harbor facilities, public tourism facilities, and other projects such as cold storage plants. Grants are generally 50 per cent of the cost, but may go up to 80 per cent if the community cannot supply the required matching share due to economic distress. Loans are available for the balance of the project cost. Low interest, long term business loans are available for projects that cannot be financed by banks or other private lending institutions. Loans may be offered directly to private enterprises or to local development companies that lease facilities to private businesses. Eligible applicants include industrial corporations, partnerships, proprietorships, local development or other community organizations, Indian tribes, public agencies, and others. Loans may be made up to 65 per cent of total project cost (including land, buildings, machinery, equipment) and may run for as long as 25 years at a relatively low interest rate.

Another source of financing for developmental enterprises is the Small Business Administration (S.B.A.). S.B.A. provides loans to construct, expand or convert facilities, to purchase buildings, equipment or materials, or to obtain working capital. Loan eligibility would extend to individual businesses as well as to the community acting as a business corporation. Direct loans may not exceed \$100,000, while bank participation loans can go up to \$150,000. Loans may be for as long as 10 years, and direct loans carry a maximum rate of 5-1/2 per cent interest. S.B.A. loans may be of possible use to the community's store operation and to some of the existing small businesses.

Other loans and grant programs are available from the Federal Department of Housing and Urban Development, the Farmers Home Administration, and other agencies. In the case of many federal programs, availability of funds is currently so limited and repayment requirements are often so strict as to provide only limited expectation that financing for St. Paul would be readily available. While all sources need to be explored thoroughly, the likelihood is that, during the initial stages of St. Paul's self-governing period, the Bureau of Commercial Fisheries will, as discussed previously, need to provide financial support for housing, basic community facilities and developmental enterprises if the community is to move to a higher level of economic achievement than can be expected under current conditions.

#### St. Paul Community Development Program

The report has so far dealt with the various components and requirements pertaining to St. Paul's economy now and in the future. While most of the requisites for success may exist, individually they do not assure success. There are two additional requirements, both of them critical to St. Paul's future: (1) a community development program and (2) a local commitment to self-governance and making the plan work.

Every community requires a development plan if it is to pursue a conscious course toward stated goals and objectives. Aimless hit-and-miss actions are not likely to see the attainment of desired purposes and fulfillment of available opportunities.

The need for a comprehensive development program is particularly great in St. Paul. The successful transition from a community governed by an outside agency, the Bureau of Commercial Fisheries, cannot be successfully

accomplished by simple transferral of responsibility, facilities and equipment to a newly-formed municipality, even if such transferral is accompanied by federal grants and a large measure of good will.

As has been repeatedly brought out in this report, the economic viability of St. Paul will depend largely upon the way in which the townsite is initially established and the transfer of properties is carried out; how certain revenues are dealt with; what financial and other assistance is provided by B.C.F. and other agencies for housing, facilities and developmental projects; which economic opportunities are pursued, etc. Many issues remain to be resolved over the next years.

One example is the new residential subdivision that was started by B.C.F. A large amount of money will be required to develop this area, and, lacking appropriate planning and financial programming, the area may either undergo haphazard development or remain uncompleted. For progress in this area and other undertakings, priorities and responsibilities will need to be set, financing arranged and development schedules established. Among the issues that will need to be worked out as part of financial planning is the disposition of one-shot revenues to the community--transitional grants, proceeds from property sales and other collections made by the trustee. The effective utilization of these funds can be best assured in the context of a development plan and a capital improvement program geared to community facility needs and to economic development.

The preparation of a community development program for St. Paul will not be a complicated task. Much of the basis for planning is contained in this report; other material is readily available. The important steps will be agreeing on goals, delineating and making choices among alternative courses of action, setting of program and project priorities, analyzing

availability of funds and programming their use, and establishing responsibilities and arrangements for carrying out the program.

A key aspect of laying the groundwork for St. Paul's future is adequate consideration of St. George's status. The Bureau of Commercial Fisheries has for some years encouraged migration and provided inducements that would lead to a consolidation of the two communities. However, St. George continues as a separate village despite the more limited services and facilities available to its residents. Even if the present status is maintained, there will continue to be close economic, social and administrative relationships between the two sister communities. Thus, any long-range planning for St. Paul must in part be based on a thorough analysis of St. George and the future interaction and possible integration of both Pribilof Island communities.

The usefulness and success of the St. Paul development program will be largely governed by the extent to which those responsible for carrying out the program are involved in its preparation. Key programming participants are, first of all, residents of the community and representatives of the Bureau of Commercial Fisheries. Other agencies operating on the island or interested in its future should also take part: state Local Affairs Agency, Coast Guard, Federal Aviation Agency, U.S. Public Health Service, state Department of Education, and others. The townsite trustee could play an important leadership role in the planning process, provided he is sufficiently qualified and not too closely tied to any federal agency.

Steps to initiate the planning process should be taken as early as possible. Even the initial work of a community development group of this type could provide valuable interim guidance in making basic townsite, community improvement and resources investment decisions. The sooner the

development program is completed and agreed upon, the sooner will those concerned with St. Paul's future be able to act effectively in its behalf. Given an adequate development program, and with appropriate support from federal and state agencies, it is likely that existing economic activities can be improved and a broader economic base be developed to a point where the community's economic strength is assured in the foreseeable future.

#### Community Attitudes

The future of St. Paul rests with the people of the community, regardless of what determinations are made by others or what development plans may be prepared. It will be up to the local people to decide whether or not to incorporate as a municipality, and, without a positive vote, the townsite-related provisions of the Fur Seal Act will not apply. Likewise, the carrying out of development programs, the broadening of the economic base, and the other potentials that exist are all dependent on support by the local population.

The long history of paternalism that has characterized St. Paul to date has not generally been conducive to encouraging an independent and self-governing spirit among the residents of the Pribilofs. Long-term governing authority has bred a spirit of dependence and, in the case of many, lack of responsibility, the latter evidenced both locally and in off-island employment.

At the same time, some high level leadership has emerged. It is not clear at this time whether the leadership evidenced among council members, several businessmen, foremen and others is indicative of the general leadership potential in the community as a whole. Nor is it fully

established whether the council, in fact, has the community's support in the exercise of its leadership, particularly in its favoring municipal incorporation.

The process of preparing a community development program may well be an effective means of testing the support of the people and achieving a greater public involvement in community affairs. Citizen participation in planning is a requirement everywhere, but it should pay particular dividends in St. Paul. Out of the planning process could emerge a thorough understanding of what the future holds for St. Paul and its people and what benefits and responsibilities will accrue.

Insofar as the planning process can emphasize involvement, understanding and the broadening of the vision of the future, it will already have served an important function. In addition, however, the development program should address itself directly to the problem of leadership, manpower and local attitudes. It needs to concern itself with establishing educational and training procedures to make sure that key future employment positions are filled and that adequate leadership will be developed for administering the community and local enterprises. The development program must also face the question of the extent to which the young people of the Pribilofs, now for the first time really being exposed through schooling to the expanded horizons of the Alaskan mainland and the Pacific Northwest, will maintain a commitment to their community.

If the present residents are willing to assume the responsibilities of municipal government, then St. Paul has the potential for emerging as a vital community. In the long run, however, the future of the Pribilofs rests to a large degree on the attitudes of the young people. How they see their future will determine the future of St. Paul.



APPENDIX

FUR SEAL ACT OF 1966 (P.L. 89-702)

TITLE II - ADMINISTRATION OF THE PRIBILOF ISLANDS



TITLE II - ADMINISTRATION OF THE PRIBILOF ISLANDS

SEC. 201. The Pribilof Islands shall continue to be administered as a special reservation by the Secretary of the Interior for the purposes of conserving, managing, and protecting the North Pacific fur seals and other wildlife, and for other purposes.

SEC. 202. The Secretary, in carrying out the provisions of this title, is authorized to enter into contracts or agreements or leases with, or to issue permits to, public or private agencies or persons, including the natives of said islands, in accordance with such terms and conditions as he deems desirable for the use of any Government-owned real or personal property located on the Pribilof Islands, for the furnishing of accommodations for tourists and other visitors, for educational, recreational, residential, or commercial purposes, for the operation, maintenance, and repair of Government-owned facilities and utilities, for the transportation and storage of food and other supplies, and for such other purposes as the Secretary deems desirable.

SEC. 203. (a) In carrying out the provisions of this title, the Secretary is also authorized--

(1) to provide, with or without reimbursement, the natives of the Pribilof Islands with such facilities, services, and equipment as he deems necessary, including, but not limited to food, fuel, shelter, transportation, and education,

(2) to provide the employees of the Department of the Interior and other Federal agencies and their dependents, and tourists and other persons, at reasonable rates to be determined by the Secretary, with such facilities, services, and equipment as he deems necessary, including, but not limited to, food, fuel, shelter, transportation, and education,

(3) to purchase, transport, store, and distribute such supplies and equipment to carry out the provisions of this section as the Secretary deems necessary, and

(4) to purchase, construct, operate, and maintain such facilities as may be necessary to carry out the provisions of this section.

(b) The proceeds from the furnishing of facilities, services, supplies, and equipment pursuant to this section shall be credited to the appropriation current at the time the proceeds are received.

SEC. 204. (a) The Secretary is authorized to enter into an agreement with the Governor of the State of Alaska pursuant to which the State shall assume full responsibility for furnishing education to the natives of the Pribilof Islands. The Secretary is also authorized to enter into agreement

with said Governor pursuant to which the State shall furnish to such natives adequate food, shelter, transportation, and such other facilities, services, and equipment as the Secretary deems necessary.

(b) Any agreement entered into pursuant to this section for the transfer to the State of the responsibility for furnishing education to the natives of the Pribilof Islands shall provide, in addition to such terms and conditions as the Secretary deems desirable, that the State of Alaska, in assuming such responsibility, shall meet the educational needs of the said natives in the same manner as the State meets the educational needs of all of its citizens, including the furnishing of necessary facilities therefor.

SEC. 205. The Secretary of Health, Education, and Welfare shall provide medical and dental care to the natives of the Pribilof Islands, with or without reimbursement, as provided by other law. He is authorized to provide such care to Federal employees and their dependents and tourists and other persons in the Pribilof Islands at reasonable rates to be determined by him. He may purchase, lease, construct, operate, and maintain such facilities, supplies, and equipment as he deems necessary to carry out the provisions of this section and the costs of such items, including medical and dental care, shall be charged to the budget of the Secretary of Health, Education, and Welfare. Nothing in this Act shall be construed as superseding or limiting the authority and responsibility of the Secretary of Health, Education, and Welfare under the Act of August 5, 1954 (42 U.S.C. 2001 et seq.), as amended, or any other law with respect to medical and dental care of natives or other persons in the Pribilof Islands.

SEC. 206. (a) For the purpose of fostering self-sufficiency among the natives of the Pribilof Islands, and in order that they may enjoy local self-government, and to facilitate the establishment by such natives of a municipal corporation under the laws of the State of Alaska, the Secretary is authorized to set apart so much of the land on St. Paul Island as he determines necessary to establish a townsite. The Secretary shall survey the townsite into lots, blocks, streets, and alleys and he may issue a patent therefor to a trustee appointed by him, when he is satisfied that a viable self-governing community which is capable of providing adequate municipal services is established or will be established prior to the conveyance by the trustee of title to any property to the natives of the Pribilof Islands. The trustee is authorized to convey to the individual natives of the Pribilof Islands title to improved or unimproved lots or tracts of land within such townsite for homesite, commercial, or other purposes not inconsistent with the purpose for which the Secretary administers said islands, upon payment of an amount to be determined by the Secretary. Any deed issued by the trustee shall provide, in addition to such terms and conditions relating to the use of said lots or tracts as the Secretary deems necessary, that the title conveyed is inalienable for a period of twenty years from the date of conveyance except upon approval of the Secretary. Any deed issued after twenty years from the date of conveyance shall not require approval of the Secretary. Any lot or tract conveyed by the trustee to said natives

shall not, except as provided in the Act of March 29, 1956 (70 Stat. 62; 25 U.S.C. 483a), be subject to levy and sale in satisfaction of the debts, contracts, or liabilities of the purchaser or to any claims of adverse possession or to claims of prescription, except that such lot or tract shall be subject to taxation and to levy and sale in satisfaction thereof under the laws of the State of Alaska.

(b) In determining the amount to be paid for the purchase of lots or tracts under subsection (a) of this section, the Secretary shall consider the economic status of the natives of the Pribilof Islands, including the factor of isolation, if any, placed on the property by the purchaser and such other factors as he deems pertinent: Provided, that payment shall be made in accordance with such terms and conditions as the Secretary deems desirable.

(c) The net proceeds from the sale, pursuant to this section, of improved or unimproved lots or tracts shall be made available to the established local governing body to be used with other proceeds available to such body for the purpose of providing adequate municipal services to persons inhabiting the islands. In addition, at the close of the first fiscal year in which there is established a municipal corporation as provided in this section, the Secretary of the Interior shall certify to the Secretary of the Treasury for payment from the gross receipts of the Pribilof Islands fund, after deducting from such fund all costs to the United States in carrying out the provisions of this Act, the sum of \$50,000 to such community to assist it in providing adequate municipal services, and, at the close of each succeeding four fiscal years, he shall pay from such fund the sums of \$40,000, \$30,000, \$20,000, and \$10,000, respectively.

(d) Upon approval by the Secretary, the trustee shall convey, with or without reimbursement, any improved or unimproved land which was authorized to be sold under subsection (a), and which is unsold five years after incorporation, and which is not needed in connection with the Federal activities on said islands, to the municipality for the purposes of this section: Provided, that conveyance pursuant to this subsection shall be subject to such terms and conditions as the Secretary deems necessary to enable him to administer the Pribilof Islands as provided in this title.

(e) The trustee shall convey to the municipality at the time of incorporation all surveyed streets and alleys of the townsite. All deeds issued by the trustee shall contain a reservation to the trustee of rights-of-way for streets and alleys to be surveyed and established upon and across land conveyed to the natives of the Pribilof Islands whenever he determines that it would be in the interest of the native owner to establish such streets and alleys. Such reservation shall be for a term not to exceed ten years. In addition the Secretary may convey without reimbursement to the municipality such lands or interests therein outside the townsite boundaries for any purpose subject to such conditions as the Secretary deems desirable to carry out the purposes of this Act.

(f) The provisions of this section shall not affect any valid existing rights.

SEC. 207. Any person who violates or fails to comply with any regulation issued by the Secretary of the Interior under this title relating to the use and management of the Pribilof Islands or to the conservation and protection of the fur seals or wildlife or other natural resources located thereon shall be fined not more than \$500 or be imprisoned not more than six months, or both.

SEC. 208. (a) Service by natives of the Pribilof Islands engaged in the taking and curing of fur seal skins and other activities in connection with the administration of such islands prior to January 1, 1950, as determined by the Secretary of the Interior based on records available to him, shall be considered for purposes of credit under the Civil Service Retirement Act, as amended (5 U.S.C. 2251-2267), as civilian service performed by an employee, as defined in said Act.

(b) The annuity of any person or the annuity of the survivor of any person who shall have performed service described in subsection (a), and who prior to the date of enactment of this Act died or shall have been retired on annuity payable from the civil service retirement and disability fund, shall, upon application filed by the annuitant within one year after the date of enactment of this Act, be adjusted, effective as of the first day of the month immediately following the date of enactment of this Act, so that the amount of the annuity will be the same as if such subsection had been in effect at the time of such person's retirement or death.

(c) Section 4(g) of the Civil Service Retirement Act (5 U.S.C. 2254(g)) is amended by inserting after the words "military service" a comma and the following: "for service performed prior to January 1, 1950, by natives of the Pribilof Islands in the taking and curing of fur seal skins and other activities in connection with the administration of such islands,".

(d) In no case shall credit for the service described in subsection (a) entitle a person to the benefits of section 11(h) of the Civil Service Retirement Act (5 U.S.C. 2261(h)).

(e) Notwithstanding any other provision of this Act or any other law, benefits under the Civil Service Retirement Act made available by reason of the provisions of this section shall be paid from the civil service retirement and disability fund subject to reimbursement to such fund from the gross receipts of the Pribilof Islands fund, established in section 407 of this Act, for the purpose of compensating said retirement fund for the cost, as determined by the Civil Service Commission during each fiscal year, of benefits provided by this section. This reimbursement to the civil service retirement fund shall be considered a cost of administering the fur seal program.