Technical Report
Number 75

Alaska OCS Socioeconomic Studies Program

Sponsor: Bureau of Land Management
Alaska Outer Continental Shelf Office

North Aleutian Shelf
Non-OCS Forecast Analysis

Volume II
The United States Department of the Interior was designated by the Outer Continental Shelf (OCS) Lands Act of 1953 to carry out the majority of the Act's provisions for administering the mineral leasing and development of offshore areas of the United States under federal jurisdiction. Within the Department, the Bureau of Land Management (BLM) has the responsibility to meet requirements of the National Environmental Policy Act of 1969 (NEPA) as well as other legislation and regulations dealing with the effects of offshore development. In Alaska, unique cultural differences and climatic conditions create a need for developing additional socioeconomic and environmental information to improve OCS decision making at all governmental levels. In fulfillment of its federal responsibilities and with an awareness of these additional information needs, the BLM has initiated several investigative programs, one of which is the Alaska OCS Socioeconomic Studies Program (SESP).

The Alaska OCS Socioeconomic Studies Program is a multi-year research effort which attempts to predict and evaluate the effects of Alaska OCS Petroleum Development upon the physical, social, and economic environments within the state. The overall methodology is divided into three broad research components. The first component identifies an alternative set of assumptions regarding the location, the nature, and the timing of future petroleum events and related activities. In this component, the program takes into account the particular needs of the petroleum industry and projects the human, technological, economic, and environmental offshore and onshore development requirements of the regional petroleum industry.

The second component focuses on data gathering that identifies those quantifiable and qualifiable facts by which OCS-induced changes can be assessed. The critical community and regional components are identified and evaluated. Current endogenous and exogenous sources of change and functional organization among different sectors of community and regional life are analyzed. Susceptible community relationships, values, activities, and processes also are included.

The third research component focuses on an evaluation of the changes that could occur due to the potential oil and gas development. Impact evaluation concentrates on an analysis of the impacts at the statewide, regional, and local level.

In general, program products are sequentially arranged in accordance with BLM's proposed OCS lease sale schedule, so that information is timely to decision making. Reports are available through the National Technical Information Service, and the BLM has a limited number of copies available through the Alaska OCS Office. Inquiries for information should be directed to: Program Coordinator (COAR), Socioeconomic Studies Program, Alaska OCS Office, P. O. Box 1159, Anchorage, Alaska 99510.
ALASKA OCS SOCIOECONOMIC STUDIES PROGRAM
NORTH ALEUTIAN SHELF
NON-OCS FORECAST ANALYSIS

VOLUME II

PREPARED FOR
MINERALS MANAGEMENT SERVICE
ALASKA OUTER CONTINENTAL SHELF OFFICE

AUGUST 1982
NOTICE

This document is disseminated under the sponsorship of the U.S. Department of the Interior, Bureau of Land Management, Alaska Outer Continental Shelf Office, in the interest of information exchange. The United States Government assumes no liability for its content or use thereof.

ALASKA OCS SOCIOECONOMIC STUDIES PROGRAM

NORTH ALEUTIAN SHELF
NON-OCS FORECAST ANALYSIS

VOLUME II

Prepared by
John S. Petterson, Ph.D.
Lawrence A. Palinkas, Ph.D.
and
Bruce M. Harris, Ph.D.
Impact Assessment, Inc.
Abstract

This report discusses projected changes in the North Aleutian Shelf Region of Alaska over the next twenty years based on a scenario of non-development of Outer Continental Shelf resources. Volume I examines social change at the regional and village-cluster level. Volume II (this volume) presents a community-by-community examination of those features of change which particularly apply at that level. Projected changes are discussed along the dimensions of ecology, demography, economics, politics, social networks, education, health care, and religion. In each of these areas there are certain general trends which will characterize the region as a whole, while at the sub-regional and local level there are instances in which the peculiar structure of the local system leads to projections at variance with these overall regional projections.

At the regional level, and in general for the sub-regional and local systems as well, the dominant factor of the last decade has been the increased income generated from the commercial fisheries and the resultant closer integration of local with state and federal systems with attendant consequences in all areas of social and cultural life. Ecologically we project two major trends. First, the crab resource may suffer a steady decline as it becomes overexploited. Second, the salmon resource will continue to be abundant as a result of mild winters, the reduction in high seas interception of the resource (the imposition of
the 200-mile limit) and as a result of altered migratory routes. This abundant salmon resource will continue to be the basis of economic and social changes which will deeply affect the region. Demographically we project a gradual shift in favor of non-indigenous populations, though less rapidly than most other projections assume. The passage of ANCSA has had, and will continue to have, a retarding effect on the speed of migration of "outsiders" to the smaller villages since the lack of access to local land will make establishment of residence more difficult in the future. ANCSA will also promote demographic stability at the local level by encouraging the maintenance of residence by the indigenous population. Limited Entry will have a similar retarding effect on local growth since it precludes entry to the fishery of any but those who have established a pattern of historical use. We foresee a gradual move toward parity in the sex ratio of most communities in the region as increased incomes allow local individuals to comfortably marry and raise a family.

Economically the dominant consideration is the greatly increased incomes generated from the fisheries as a result of Limited Entry, increased abundance of the resource, technological advances in the exploitation of the resource, and the resultant growth in rates of participation in the larger, more formalized cash economy of the state and nation. Both the canned and frozen salmon markets are projected to remain strong during this period, both undergoing gradual growth and thereby providing a stable demand for local products. The fishermen of the Northeast Peninsula are in a more difficult position than those in the south and west of the region because they participate in the Bristol Bay fishery in which harvests are poorer, permits valued at less than half those of
other peninsular fisheries, and outside participation rates are much higher. Nonetheless, in general the major distinction between this region and the rest of Alaska is in the fact that the greatly increased incomes have come as a result of the expansion of a traditional resource utilization pattern, and therefore have been more easily accepted here than have other, more disjunctive changes in other parts of the state. Further, the enhanced incomes have allowed the people of this region to selectively involve themselves in the larger cash economy, purchasing what they want or need, and they have not been subject to the relative deprivation which has affected other areas in which knowledge of, and desire for, western industrial goods has outstripped the ability to purchase such articles. Increased incomes, as a result of Limited Entry in particular, have also resulted in a dichotomization of the population into those who have access to the fishery, and thereby to greater incomes and the manufactured goods and technology which can be purchased with such incomes, and those who do not, and in all probability never will, have access to the fishery and are thereby eliminated from participation and the associated high earning levels. Finally, traditional means of subsistence have been declining in importance with increased availability of imported goods, and we expect this trend to continue.

Politically the dominant consideration is the increasing interaction with supra-local agencies and bodies and the resultant pressure at the local level toward increased bureaucratization and formalized political structures. In the light of this we note five major trends. First, increased interaction with and dependence on external economic and political structures will result in the shift of local political structure and organization in the direction of increased formalization, including
boards and councils meeting in formal sessions, voting, and the concept of majority rule. Informal political structures will correspondingly decline in importance. Second, there will be an increased correlation among income, economic wealth, and political power. Third, there will be an increased awareness of, and interaction with, supra-regional political structures and processes. Fourth, these trends will result in an increased inflexibility of leadership roles in the community. Finally, these processes of formalization and bureaucratization will result in increased perceptions of alienation between the management and administration of the community and the desires of the local population.

Socially the dominant trend is away from informal social structures (such as sharing networks, kinship reciprocity, and kin-based social groups) and informal social sanctions (such as gossip, censure, and ostracism) and toward formal mechanisms of social interaction (such as wage-labor or formal contract) and sanction (such as dependence on the formal court system and an organized police force). In these terms we see at least six major trends over the next two decades. First, we project the continued evolution of more formal bases of social cohesion, such as wage-labor relations and the use of formal contracts, at the expense of traditional structures revolving around kinship and the interdependence of nuclear family organizations. Second, the elimination of some from the commercial fisheries will result in an accelerated development of social class and status relations around the concept of economic wealth. Third, local social and economic networks will rapidly broaden to include non-local individuals, products, and values. Fourth, there will be an accelerated adoption of western material and social values at the expense of traditional orientations. Fifth, in spite of
the adoption of western values there will be a reversal of trends toward the amalgamation of ethnic identities and a renewal of the strength of ethnic identity and concomitant potentials for ethnic schism resulting primarily from the increased utility of such identification under the terms of ANCSA. Finally, we project an emergent schism socially at the local level between permanent and part-time residents as income levels allow many to spend most of the year out of the local community.

Educationally we see three major trends. First, there will be increasing importance assigned to the completion of high school, partly as a result of the Molly Hootch Decision which insured access to such education for all children of the region. Second, teachers will become increasingly committed to the region as locally produced teachers come to gradually equal outside teachers. Third, post-secondary education will increase in importance, particularly as communities come to see the wisdom of educating local children in the professions in order to better direct changes emanating from the state and federal levels, with particular emphasis on law, engineering, and medicine. Health care will also increase steadily in availability throughout this period with increased funds available and increased need for such care, particularly in the areas of alcoholism, drug abuse, suicide, accidental injury and death, and other stress-related disorders. Recreationally, patterns of activity will change to include hunting as a form of recreation rather than a means of subsistence, increased use of advanced recreational technologies (snowmobiles, four wheel drive vehicles, three wheelers, and so on), and extended vacations in other parts of the state and nation. In terms of religion, we expect a general movement toward secularization, though some individual communities may experience a relative religious revival ultimately dependent on the activities of individual priests.
# Table of Contents

## VOLUME II

### SAND POINT

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Input</td>
<td>2</td>
</tr>
<tr>
<td>Ecological</td>
<td>4</td>
</tr>
<tr>
<td>Extrasocietal</td>
<td>4</td>
</tr>
<tr>
<td>External Government</td>
<td>4</td>
</tr>
<tr>
<td>Commerce</td>
<td>5</td>
</tr>
<tr>
<td>Larger Sociocultural System</td>
<td>8</td>
</tr>
<tr>
<td>Intrasocietal</td>
<td>9</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>9</td>
</tr>
<tr>
<td>Demography</td>
<td>9</td>
</tr>
<tr>
<td>Structure</td>
<td>10</td>
</tr>
<tr>
<td>Values</td>
<td>11</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>13</td>
</tr>
<tr>
<td>Commercial</td>
<td>13</td>
</tr>
<tr>
<td>Non-Labor Force</td>
<td>19</td>
</tr>
<tr>
<td>Social Networks</td>
<td>21</td>
</tr>
<tr>
<td>Political Organization</td>
<td>21</td>
</tr>
<tr>
<td>Social Control</td>
<td>25</td>
</tr>
<tr>
<td>External Relations</td>
<td>26</td>
</tr>
<tr>
<td>Religious Organization</td>
<td>26</td>
</tr>
<tr>
<td>Educational Organization</td>
<td>27</td>
</tr>
<tr>
<td>Health Care Organization</td>
<td>28</td>
</tr>
<tr>
<td>Recreational Organization</td>
<td>30</td>
</tr>
<tr>
<td>Output</td>
<td>31</td>
</tr>
<tr>
<td>Economic</td>
<td>32</td>
</tr>
<tr>
<td>Social</td>
<td>34</td>
</tr>
<tr>
<td>Political</td>
<td>37</td>
</tr>
</tbody>
</table>

### KING COVE

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>39</td>
</tr>
<tr>
<td>Input</td>
<td>41</td>
</tr>
<tr>
<td>Ecological</td>
<td>41</td>
</tr>
<tr>
<td>Extrasocietal</td>
<td>41</td>
</tr>
<tr>
<td>External Government</td>
<td>41</td>
</tr>
<tr>
<td>Commerce</td>
<td>44</td>
</tr>
<tr>
<td>Larger Sociocultural System</td>
<td>44</td>
</tr>
<tr>
<td>Intrasocietal</td>
<td>46</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>46</td>
</tr>
<tr>
<td>Demography</td>
<td>48</td>
</tr>
<tr>
<td>Structure</td>
<td>50</td>
</tr>
<tr>
<td>Values</td>
<td>50</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>52</td>
</tr>
<tr>
<td>Commercial</td>
<td>52</td>
</tr>
</tbody>
</table>

---

X
<table>
<thead>
<tr>
<th>Social Networks</th>
<th>53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Organization</td>
<td>54</td>
</tr>
<tr>
<td>Local Affairs</td>
<td>54</td>
</tr>
<tr>
<td>External Relations</td>
<td>88</td>
</tr>
<tr>
<td>Social Control</td>
<td>55</td>
</tr>
<tr>
<td>Religious Organization</td>
<td>55</td>
</tr>
<tr>
<td>Educational Organization</td>
<td>56</td>
</tr>
<tr>
<td>Health Care Organization</td>
<td>56</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>59</td>
</tr>
<tr>
<td>Social</td>
<td>63</td>
</tr>
<tr>
<td>Political</td>
<td>66</td>
</tr>
</tbody>
</table>

**NELSON LAGOON**

<table>
<thead>
<tr>
<th>Introduction</th>
<th>69</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td></td>
</tr>
<tr>
<td>Ecological</td>
<td>72</td>
</tr>
<tr>
<td>Extrasocietal</td>
<td>72</td>
</tr>
<tr>
<td>External Government</td>
<td>74</td>
</tr>
<tr>
<td>Intrasisocietal</td>
<td>74</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>75</td>
</tr>
<tr>
<td>Demography</td>
<td>78</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>80</td>
</tr>
<tr>
<td>Organization</td>
<td>81</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>81</td>
</tr>
<tr>
<td>Social Networks</td>
<td>85</td>
</tr>
<tr>
<td>Political Organization</td>
<td>87</td>
</tr>
<tr>
<td>Local Activities</td>
<td>87</td>
</tr>
<tr>
<td>Religious Organization</td>
<td>88</td>
</tr>
<tr>
<td>Educational Organization</td>
<td>88</td>
</tr>
<tr>
<td>Health Care Organization</td>
<td>89</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>89</td>
</tr>
<tr>
<td>Social</td>
<td>90</td>
</tr>
<tr>
<td>Political</td>
<td>92</td>
</tr>
<tr>
<td>Religion</td>
<td>95</td>
</tr>
<tr>
<td>Education</td>
<td>96</td>
</tr>
<tr>
<td>Health Care</td>
<td>97</td>
</tr>
<tr>
<td>FALSE PASS</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>99</td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td></td>
</tr>
<tr>
<td>Ecological</td>
<td>103</td>
</tr>
<tr>
<td>Extrasocietal</td>
<td>103</td>
</tr>
<tr>
<td>External Government</td>
<td>105</td>
</tr>
<tr>
<td>Intrasisocietal</td>
<td>105</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>106</td>
</tr>
<tr>
<td>Demography</td>
<td>108</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>110</td>
</tr>
<tr>
<td>Organization</td>
<td>110</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>111</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Commercial</td>
<td>111</td>
</tr>
<tr>
<td>Subsistence</td>
<td>113</td>
</tr>
<tr>
<td>Social Networks</td>
<td>114</td>
</tr>
<tr>
<td>Political Organization</td>
<td>115</td>
</tr>
<tr>
<td>Local Activities</td>
<td>115</td>
</tr>
<tr>
<td>Educational Organization</td>
<td>116</td>
</tr>
<tr>
<td>Health Care Organization</td>
<td>117</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output</th>
<th>118</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>118</td>
</tr>
<tr>
<td>Social</td>
<td>120</td>
</tr>
<tr>
<td>Political</td>
<td>121</td>
</tr>
<tr>
<td>Education</td>
<td>123</td>
</tr>
<tr>
<td>Health Care</td>
<td>123</td>
</tr>
</tbody>
</table>

**CHIGNIK BAY**

<table>
<thead>
<tr>
<th>Introduction</th>
<th>125</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>127</td>
</tr>
<tr>
<td>Ecological</td>
<td>127</td>
</tr>
<tr>
<td>Extrasocietal</td>
<td>127</td>
</tr>
<tr>
<td>External Government</td>
<td>127</td>
</tr>
<tr>
<td>Commerce</td>
<td>128</td>
</tr>
<tr>
<td>Intrasocietal</td>
<td>132</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>132</td>
</tr>
<tr>
<td>Demography</td>
<td>134</td>
</tr>
<tr>
<td>Structure</td>
<td>136</td>
</tr>
<tr>
<td>Values</td>
<td>136</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>136</td>
</tr>
<tr>
<td>Commercial</td>
<td>136</td>
</tr>
<tr>
<td>Subsistence</td>
<td>140</td>
</tr>
<tr>
<td>Non-Labor Force</td>
<td>141</td>
</tr>
<tr>
<td>Social Networks</td>
<td>141</td>
</tr>
<tr>
<td>Political Organization</td>
<td>142</td>
</tr>
<tr>
<td>Local Activities</td>
<td>142</td>
</tr>
<tr>
<td>External Relations</td>
<td>145</td>
</tr>
<tr>
<td>Religious Organization</td>
<td>146</td>
</tr>
<tr>
<td>Educational Organization</td>
<td>146</td>
</tr>
<tr>
<td>Health Care Organization</td>
<td>147</td>
</tr>
<tr>
<td>Recreational Organization</td>
<td>148</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output</th>
<th>149</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>149</td>
</tr>
<tr>
<td>Social</td>
<td>154</td>
</tr>
<tr>
<td>Political</td>
<td>157</td>
</tr>
<tr>
<td>Religion</td>
<td>159</td>
</tr>
<tr>
<td>Education</td>
<td>160</td>
</tr>
<tr>
<td>Health Care</td>
<td>161</td>
</tr>
</tbody>
</table>

**CHIGNIK LAKE**

<table>
<thead>
<tr>
<th>Introduction</th>
<th>162</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>165</td>
</tr>
<tr>
<td>Ecological</td>
<td>165</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Extrasocietal</td>
<td>167</td>
</tr>
<tr>
<td>External Government</td>
<td>167</td>
</tr>
<tr>
<td>Commerce</td>
<td>169</td>
</tr>
<tr>
<td>Larger Sociocultural System</td>
<td>170</td>
</tr>
<tr>
<td>Intrasocietal</td>
<td>173</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>173</td>
</tr>
<tr>
<td>Demography</td>
<td>175</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>177</td>
</tr>
<tr>
<td>Organization</td>
<td>179</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>179</td>
</tr>
<tr>
<td>Commercial</td>
<td>179</td>
</tr>
<tr>
<td>Subsistence</td>
<td>179</td>
</tr>
<tr>
<td>Non-labor Force</td>
<td>180</td>
</tr>
<tr>
<td>Social Networks</td>
<td>180</td>
</tr>
<tr>
<td>Political Organization</td>
<td>181</td>
</tr>
<tr>
<td>Local Activities</td>
<td>181</td>
</tr>
<tr>
<td>Social Control</td>
<td>182</td>
</tr>
<tr>
<td>External Relations</td>
<td>182</td>
</tr>
<tr>
<td>Religious Organization</td>
<td>183</td>
</tr>
<tr>
<td>Educational Organization</td>
<td>184</td>
</tr>
<tr>
<td>Health Care Organization</td>
<td>185</td>
</tr>
<tr>
<td>Recreational Organization</td>
<td>186</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>188</td>
</tr>
<tr>
<td>Social</td>
<td>189</td>
</tr>
<tr>
<td>Political</td>
<td>190</td>
</tr>
<tr>
<td>Education</td>
<td>191</td>
</tr>
<tr>
<td>Health Care</td>
<td>191</td>
</tr>
<tr>
<td>Personality</td>
<td>192</td>
</tr>
</tbody>
</table>

**IVANOF BAY**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>193</td>
</tr>
<tr>
<td><strong>Input</strong></td>
<td></td>
</tr>
<tr>
<td>Ecological</td>
<td>194</td>
</tr>
<tr>
<td>Extrasocietal</td>
<td>195</td>
</tr>
<tr>
<td>Intrasocietal</td>
<td>196</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>196</td>
</tr>
<tr>
<td>Demography</td>
<td>197</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>198</td>
</tr>
<tr>
<td>Organization</td>
<td>199</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>200</td>
</tr>
<tr>
<td>Social Networks</td>
<td>200</td>
</tr>
<tr>
<td>Political Organization</td>
<td>200</td>
</tr>
<tr>
<td>Local Affairs</td>
<td>200</td>
</tr>
<tr>
<td>Social Control</td>
<td>201</td>
</tr>
<tr>
<td>Religious Organization</td>
<td>202</td>
</tr>
<tr>
<td>Educational Organization</td>
<td>202</td>
</tr>
<tr>
<td>Health Care Organization</td>
<td>202</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td></td>
</tr>
<tr>
<td>Economic</td>
<td>204</td>
</tr>
<tr>
<td>Social</td>
<td>205</td>
</tr>
</tbody>
</table>
### PORT HEIDEN

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>206</td>
</tr>
<tr>
<td>Input</td>
<td>207</td>
</tr>
<tr>
<td>Ecological</td>
<td>207</td>
</tr>
<tr>
<td>Extrasocietal</td>
<td>208</td>
</tr>
<tr>
<td>External Government</td>
<td>208</td>
</tr>
<tr>
<td>Commerce</td>
<td>209</td>
</tr>
<tr>
<td>Larger Sociocultural System</td>
<td>210</td>
</tr>
<tr>
<td>Intrasocietal</td>
<td>210</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>210</td>
</tr>
<tr>
<td>Demography</td>
<td>211</td>
</tr>
<tr>
<td>Structure</td>
<td>212</td>
</tr>
<tr>
<td>Values</td>
<td>212</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>212</td>
</tr>
<tr>
<td>Commercial</td>
<td>212</td>
</tr>
<tr>
<td>Subsistence</td>
<td>216</td>
</tr>
<tr>
<td>Non-labor Force</td>
<td>217</td>
</tr>
<tr>
<td>Social Networks</td>
<td>217</td>
</tr>
<tr>
<td>Political Organization</td>
<td>219</td>
</tr>
<tr>
<td>Local Affairs</td>
<td>219</td>
</tr>
<tr>
<td>Social Control</td>
<td>223</td>
</tr>
<tr>
<td>External Relations</td>
<td>223</td>
</tr>
<tr>
<td>Religious Organization</td>
<td>224</td>
</tr>
<tr>
<td>Educational Organization</td>
<td>224</td>
</tr>
<tr>
<td>Health Care Organization</td>
<td>225</td>
</tr>
<tr>
<td>Recreational Organization</td>
<td>226</td>
</tr>
<tr>
<td>Output</td>
<td>228</td>
</tr>
<tr>
<td>Economic</td>
<td>228</td>
</tr>
<tr>
<td>Social</td>
<td>231</td>
</tr>
<tr>
<td>Political</td>
<td>235</td>
</tr>
<tr>
<td>Religion</td>
<td>238</td>
</tr>
<tr>
<td>Education</td>
<td>238</td>
</tr>
<tr>
<td>Health Care</td>
<td>239</td>
</tr>
<tr>
<td>Recreation</td>
<td>240</td>
</tr>
</tbody>
</table>

### PILOT POINT/UGASHIK

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>241</td>
</tr>
<tr>
<td>Input</td>
<td>243</td>
</tr>
<tr>
<td>Ecological</td>
<td>243</td>
</tr>
<tr>
<td>Extrasocietal</td>
<td>244</td>
</tr>
<tr>
<td>Commerce</td>
<td>244</td>
</tr>
<tr>
<td>Larger Sociocultural System</td>
<td>247</td>
</tr>
<tr>
<td>Intrasocietal</td>
<td>248</td>
</tr>
<tr>
<td>Community Facilities</td>
<td>248</td>
</tr>
<tr>
<td>Demography</td>
<td>249</td>
</tr>
<tr>
<td>Structure</td>
<td>250</td>
</tr>
<tr>
<td>Values</td>
<td>250</td>
</tr>
<tr>
<td>Organization</td>
<td>250</td>
</tr>
<tr>
<td>Economic Organization</td>
<td>251</td>
</tr>
<tr>
<td>Output</td>
<td>Page</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Economic</td>
<td>266</td>
</tr>
<tr>
<td>Social</td>
<td>266</td>
</tr>
<tr>
<td>Political</td>
<td>268</td>
</tr>
<tr>
<td>Religion</td>
<td>270</td>
</tr>
<tr>
<td>Education</td>
<td>271</td>
</tr>
<tr>
<td>Health Care</td>
<td>272</td>
</tr>
<tr>
<td>Recreation</td>
<td>273</td>
</tr>
</tbody>
</table>

CHIGNIK LAGOON AND PERRYVILLE

Discussion .............................................. 274
SAND POINT

Introduction

The major consequences of change in the social system of Sand Point are projected to occur in the economic, political, social and educational subsystems. Unusually rapid social and economic changes are projected for the forecast period. The increase in economic opportunities and income level is expected to produce significant expansion of the commercial sector as well as an increase in population due to immigration. Political activities will be directed towards the consolidation of recent economic gains as well as control of local resources through incorporation as a first class city. Significant changes in social relations, including a deemphasis on kin-group and the emergence of formal organizations is expected to occur. The educational subsystem will also experience significant change as the school system becomes a focus of local autonomy and self-sufficiency.

The historical and current sociocultural systems of both Sand Point and King Cove have been documented in detail in the reports of Jones (1969), Langdon (1981), Brelsford (1981), and in the SG-14 (Kish Tu) documents and others. We will present here only data and analyses not covered in these materials.

Social change in Sand Point has occurred, and is expected to occur, at a faster pace than anywhere else in the region. Accelerated population growth and propitious location do not provide adequate explanation of
this phenomena. We suggest that this community, by virtue of a more recent and extensive interaction with Scandanavian fishermen, possesses a more assertive, competitive and entrepreneurial cultural tradition than Russian Aleut populations or where less intense or lengthy Scandanavian influence was felt. The more recent character and direct linkage with commercial fishery activity (with the Norwegian cod fishermen in this area) would provide the most logical explanation of this relationship. This will be examined later when we discuss ethnicity and identity under output below.

Input

Ecological

The geographical location and topological conditions surrounding the Shumagin Island group can be found elsewhere. No radical shift in climate is expected during the projection period. Food resource availability will fluctuate from season to season, year to year and on longer cycles as well. We project only two general trends that will have continuing effects on this community through the forecast period: A gradual decline in harvestable crab species, and an increasing utilization of presently abundant bottomfish species. Halibut, as is common for the entire Peninsula, are an abundant and currently underutilized resource that can be readily exploited in case of significant change in the abundance of, or market conditions for, salmon. Herring, in commercial quantities, are also available along the southern coast of the Peninsula and could be harvested with little technological change. Clams, and other varieties of shell food, are available in abundance and might also
be harvested in the event of a serious decline of salmon.

The current level of salmon runs are assumed to continue into the future within a narrower range of variability than had been common during the 1960's and early 1970's. Market demand, as noted in the regional projections, are assumed to continue at currently high levels. Subsistence resources are expected, even though local per capita demand will slowly decline, to diminish over the next five to ten years. Around the turn of the decade we expect political action to be taken by Peninsular residents to stem this decline and the perceived over-utilization by "outside" residents.

Mineral resources will play a greater role in the future of Sand Point than for any other community of the region. The Unga mining operation (Apollo Mines, Ltd.) is now estimated at approximately twenty individuals, four major partners (one U.S. and four Canadians) and about 16 employees. Very optimistic projections call for as many as seven or eight hundred mine workers and nearly as many support personnel. It should be recognized that world market conditions—the price of gold—directly affects the profitability of this operation and could force a closure as quickly as a major expansion. At current market price—about $400 an ounce (Dec. 1981)—a major expansion could not be expected. If the price were to double in the next two years one could expect the number of employees to reach approximately 200 during that period. A gradual, but slower growth can be forecast at current rates to about 100 employees by 1984.

Energy resources are primarily imported and no significant efforts are
being made to substitute locally obtained products for these expensive 
external supplies. The prospects of refining Bering Sea crude oil 
within the region, or Alaska, so that the cost of fuel would fall, are 
considered remote at best.

Extrasocietal

External Government

The role of external governmental agencies and decisions, particularly 
state agencies, have increased dramatically over the last decade and 
promise continued significant impact on this community. Unlike the 
regional trend, the federal government could increase its local presence 
and role over the next 10 years. This increased presence would be in 
the form of more federal agents concerned with implementing and monitor-
ing bottomfishery-related regulations. It is clear that Sand Point, 
even more so than Cold Bay, is in the most likely place to station par-
ticular state agencies. As a way station, for fishery-related develop-
ment, for access to land, for available facilities, largest population, 
excellent school, etc., Sand Point would be the most attractive and most 
logical place in this subregion to establish a branch office.

Limited Entry, ANCSA, and other federal and state programs and effects 
follow fairly closely those presented in the regional forecast. Subtle 
variations from projections in the regional analysis will be discussed 
under structure and output below.

The federal and state governments maintain several field offices in this 
community. While this does not represent a major component of the
economic environment, it does reflect a growing focus on Sand Point as a center of future regulatory and administrative activity. As a percentage of the impending population growth in this community, however, such growth will not be considered a significant feature.

**Commerce**

For the most part the wider economic environment of Sand Point has been characterized in the regional projection. It varies in the degree to which it is tied to multiple economic markets and how the system is organized and broken down into different economic adaptations with social and political implications. These will be discussed below under structure and output.

The relation of this community to other subregional and regional communities is documented in the above reports. The issue of relations with Japanese or other non-domestic producers is a subject of some controversy. As stated in our regional analysis, the Japanese role in this subregion is expected to increase rather than decrease during the next five to ten year period. This is predicated on the assumption that expansion into the groundfish fishery will have to be accomplished at substantial risk—in an already well developed and refined market—and that the only enterprises likely to enter this market will be those companies with extensive capital backing, those with Japanese economic infrastructure. Japanese pressure has been constant over the last 10 years. In times of economic plenty Japanese commitment increases, in times of depressed markets, Japanese commitment also increases. Whenever the economic margin exists the Japanese are quick to capitalize.
Nordic entrepreneurs should also be considered but only in the specific context of bottomfish. They are the standard-setters in this fishery—their products are of the highest quality and their prices are among the lowest in the world. They have expressed an interest in establishing plants in both King Cove and Sand Point within the last year or two. While commitments were not made, it remains clear that these two communities are very favorable to this idea and that in time such operations will be established. The current economic climate for bottomfish products is still considered far too low to generate a vital fishery but that within the next 5-10 years significant earnings and increased population may be accounted for by such developments. A word of caution is in order. Local economic growth, except in peripheral enterprises, will not be heavily indicated in such change. Vessels capable of efficiently competing for this resource will be substantially larger than any presently located in the subregion. Most will be owned by major companies or investors from Seattle, or Ballard, and will employ a predominantly non-local crew. Moreover, in accord with our own assumptions, the future economic feasibility and profitability of shore-based processing facilities as opposed to floating processing facilities is in serious question. The likelihood of local fishermen significantly altering current resource patterns is considered very remote during the forecast period.

Sand Point is unquestionably the most commercially advanced community in the study region. The local store is well and regularly supplied with virtually all the standard supermarket fare. The general material aspects of a western life style are all available in Sand Point. Items not available locally may be ordered through the store or as individuals
since sea and air delivery services are excellent. Inter- and intra-regional transportation is excellent as well. Communication facilities are also excellent. Television service is provided via satellite, phone communications are regular (an ALASCOM representative resides in the community) and the sense of isolation common to less well-situated communities is absent here. Several informants noted that they felt as close to Anchorage as they did to Cold Bay.

Land, as will be discussed at length below, may well be the most potent issue in the community. There is very little land available for purchase. Housing is scarce, expensive, and of poor quality. This situation is expected to change within the next 24 months when the local ANCSA corporation opens land on the outskirts of the community to bid. The political undercurrents involved in this potential decision are complex and of a personal nature and will not be detailed in this report. The oppositions and likely course of events will be characterized in general terms only.

Private investment is unusually high given the relative scarcity of available land. Such investment betrays a strong entrepreneurial attitude emerging out of this community, one that is strongly pro-development, and one that is likely eventually to come into opposition with conservative factions within the community that are currently on the political and economic rise. Again, we wish to avoid controversy and will only intimate that strong forces of opposition are brewing in this community and that issues around which conflict will occur fill the future environment of Sand Point.
Larger Sociocultural System

Westernizing trends are evident in varying degree throughout the community. The above cultural predispositions as well as very favorable economic conditions, superior communication, transportation and social opportunities provide an opportune context within which social change can occur. Certain seeming anomalies will be noted, but, on the whole, this community is on the crest of accelerated economic development, of social differentiation, and of political diversification. These trends suggest a wider variety of development objectives, of political machinations, and of social conflicts in this community than will be found elsewhere in the region. The implications of present trends and conditions will be discussed below under output.

Technological change has played a role in these changes, but not so much as precipitating forces as implements of advance for a particular class of fisherman--the seiner. The technological superiority of seines over gillnets, originally a seemingly minor economic differentiation, has grown steadily the last decade or two to the point where it is possible to distinguish two distinct fisherman classes (and possibly a third in the set net fisherman). The implications of this social dichotomization will be discussed below under output.

It is clear that what we commonly assume are "traditional" values have endured substantial change in the last decade and are continuing to change at a rapid pace. Again, under our discussion of identity below we will detail how changes occurring in connection with ANCSA implementation have acted to reinstitute an "Aleut" identity where the positive utility of such an identity had lain idle for nearly a generation. Some
would argue that there must be behavioral correlates of identity shifts. Again, we feel this is a very nebulous area but that the revalidation of traditional values mandated by the assumption of a now valuable identity has had its effects felt throughout the community. We suggest that, even though little formal support is given to "traditional cultural patterns," that such support had at no recent period been salient in the first place. That the current concern with 'native' values is an outgrowth of ANCSA implementation and as such is 'induced' rather than merely facilitated.

Intrasocietal

Community Facilities

A detailed discussion of current public facilities is presented in other reports. We will note only those developments which are likely to produce significant public interest or that are critical to understanding options make available or unavailable by presence or absence of such facilities.

Demography

Utilization of ethnic identity will likely not play a significant role in our forecast with the possible exception of this community. For this reason the issue will be given detailed consideration in the output section of this appendix.

Population growth for this community is expected to be greater than anywhere else on the Peninsula. Numerous factors lend support to this projection: First, far more economic opportunities are currently available
in this community than in any other community of the region. Second, planned production expansion in Sand Point promise even greater options in the short-term future. Third, only in Sand Point will the option of owning land with access to sewage lines, to water supply, to electrical, phone, and modern educational facilities, soon become available. And fourth, access to commercial products, and communication and transportation facilities, are superior to all but Cold Bay in this region.

Immigration and natural fertility will both play profound roles in this growth projection. As opposed to other communities (excepting possibly Chignik Bay) of the region, most of the population will be a product of immigration. Natural factors will contribute substantially but the bulk of the increase will result from individuals entering the community from Seattle, Ballard, Anchorage and Kodiak. Most of this population will be male in the 20-30 age bracket and this will accentuate a population distribution curve already heavily biased in favor of this age group. Ethnic balance is bound to shift in favor of non-natives and non-locals. Sex distribution will continue its drift in favor of male residents—the ratio of males versus females entering the community is expected to exceed the already skewed ratio of males to females in this community. The increase in permanent population will be matched by a major increase in seasonal migration into the community. The presence of year-round fishery operations is expected to be the spur that generates general economic development and population growth.

Structure
Values

The value systems of this community have gradually shifted with the changes that have taken place in the economic system. While fishing skills and prowess still serve important prestige and status functions, economic success has come to serve as the dominant hierarchical mechanism. A few white non-indigenous individuals control a disproportionate part of the economic wealth of the community. The major commercial enterprises and almost all the multi-unit housing and rental properties are owned by a very restricted number of individuals. A second emerging economic group includes owner/captains of limit salmon seiners or multi-species vessels. A third group includes drift gillnet fishermen. A fourth category would include set gillnet fishermen though the distinctions begin to narrow between these last two economic groups. Another socioeconomic category centers around cannery and local service workers. A last group would include the seasonal employees of the cannery, construction and contract workers, and non-resident fishermen and crew that establish very temporary residence in the local community or live on their fishing vessels in the boat harbor.

A traditional, in a narrow sense, form of social status remains active, though subdued, in Sand Point. Specific families, connected with a recent political patron, with a prestigious historical figure, with a particularly extensive kinship network, or with notable traditional fishing knowledge or skills are still regarded as socially distinguished. The growing dominance of strictly economic measures of success is having a gradually disintegrative effect on these traditional social structures.
The current belief system of this population cannot be considered traditional. While the level of formal education, especially among the indigenous residents, is not high, this population is unusually well-versed in modern values and shares a general world view very closely associated with the dominant western model. Traditional redistribution and reciprocity networks, while the forms remain essentially the same, have lost many of their functional characteristics--much of the value of the commonly exchanged products has been lost with inordinate earning levels. As noted in the regional projections, whether or not these networks can be reanimated in the event of a major shift in the economic or social environment is primarily a function of time over which they are not utilized. Again, many factors can be argued to have contributed to the difference between this community and small villages in the Chigniks or further out along the Peninsula.

If a Sand Point world view could be specified, it would clearly reflect the perspective of Anchorage or Seattle more than it would the image of the traditional Aleut.

Paradoxically, of communities within the study region, ethnic identity plays its strongest role here in Sand Point. But the role is one of contrast not cohesion. While few individuals would claim that a true social schism exists between native or indigenous residents on the one hand and non-indigenous residents on the other, it is clear that the lines of cleavage and of political perspective have been solidly formed. A second such cleavage has emerged with respect to the two categories of gear employed in the dominant salmon fishery; drift gillnet and seine. This emergent schism is expected to widen over time and eventually to be
formalized in separate and distinct economic and political organizations. The relationship between the local cannery and the community, as is the case in all communities of the region, are fraught with conflict. Taxes, zoning, municipal standards, facilities, services, etc., are all issues of conflict between the two centers of political and economic power. Greater competition and expanding economic and political infrastructure of the city, however, support our contention that in time the balance of power will shift in the direction of the city at the expense of the processors.

Organization

Economic Organization

Commercial

Conforming with our regional and subregional discussions, the economy of Sand Point is dominated by the salmon and crab fisheries. Of the two, the salmon fishing and canning season predominates. From a wider economic view this is not as profound a difference as it is among the fishermen and residents--this is because much of the economic returns of the crab fishery are collected by larger Seattle owned crabbing vessels and the money moves directly out of the local area.

Various practices encouraged by a traditional security-mindedness of the fisherman have introjected substantial inaccuracy into fishery management records and projections and for this reason we will avoid any concrete statistical demonstration of the eminent decline of the various species in different ecological zones. These include the practice of
automatically dumping tagged crabs (on which resources estimates of various types are made) over board, of purposefully specifying a catch location other than the one in which the catch was made (a very effective way of preventing opposition from discovering fishing locations but one which also sets the biologist on the wrong track in estimating migration, catch effort in particular management zones, and in setting future limits by zones). Other practices include the pressures at sea to just leave undersized crabs laying on the deck while they process live legal catches—then dumping these dead or dying crab overboard. We suggest only a significant decline in crab harvests over the next five years (already evidenced in 1981): Major declines in crab quotas for the luxury species, larger and larger size limitations to protect species abundance, a notable decline in average weight, and an absence of adequate biological understanding of the species itself all tend to support this projection.

Shrimp were once harvested in abundance in local fishery zones. Their precipitous decline as a result of over-fishing may be taken as an omen of potential decline in the crab fishery. However, they have not been utilized extensively in several years and biologists agree that in the event of a major decline of salmon, regulatory conditions allowing, that shrimp might profitably be harvested again.

Herring is an expanding fishery locally but is very subject to technological sophistication—air spotters, seiners and fish detectors—and is not likely to be a major long-term option open to local fishermen.

Halibut remain a viable future option. This fish is of the highest quality and is present in abundance in the waters of the gulf and in the
Bering Sea. Conversion costs for vessels and gear are minor and the technology and skill required to profit from this fishery are already accessible. The fishing collapse of the local salmon fishery in 1973-1974 sharply accentuated the potential of this fishery--fishermen shifted quickly and economically to halibut and, in several cases, turned a disaster year into a boon year. This remains a constant source of economic and personal security to the fishermen of this region. Unless the species is put under entry limitation in the near future, this option should remain an important alternative. The abundance in the halibut fishery is also a potent measure of the economic potential of a salmon fishery that totally dwarfs participation in any other fishery. The overlap in seasons between halibut and salmon should protect this resource for the next five or so years but the likelihood of restrictive fishery regulations on this species grows higher each year--we suspect that tight restrictions will be enacted by 1985.

Cod and other bottomfish are even more plentiful than salmon. As discussed in detail in the regional projections, the per pound return in this fishery is well below acceptable limits to draw significant participation. Fishermen and processors now involved in the fishery are NOT attempting to reap dramatic profits but to minimize economic loss. Cannery operations with expensive and idle equipment, inactive contract crews, and very large crab vessels with few other fishing options available, are all grateful for the opportunity to keep the plant or vessel in operation--even if it just minimizes down-time and expenses. We cannot reasonably project its emergence as a dominant fishery within the forecast period. As an option taken by local fishermen or vessels we would have to construct a scenario that implied a major decline of
currently dominant crab, and salmon and the over-utilization of halibut and shrimp before a tolerable level of likelihood could be achieved.

We believe that any decline in the crab fishery, as is projected in our assumptions section, will tend to slow this rate of growth. However, our population projection for this community is still unusually optimistic--this is because we expect that economic diversification and a continued, if lower harvest level, crab fishery will be adequate to support such projections.

Between 15% and 20% of the local families own their own boats--but many of these own more than one vessel and hold more than one fishing permit. Earnings among fishermen are distributed in a relatively standard way for this fishery: The boat (which assumes ownership of a permit as well) receives between 45% and 50% of the gross returns. The captain and crew each receive an equal share of the remaining 50%, minus expenses, or approximately 8-9% of the earnings of the vessel. Again, assuming a harvest of 70,000 fish (a conservative estimate), the per crew share would amount to about $50,000 for the season while the captain/owner would gross two-hundred and fifty to three hundred thousand dollars before expenses. The social and economic status of permit holder/vessel owners has increased radically over the last six years to the point where it is meaningful to use terms such as socioeconomic class and social schism. We will examine this emergent class structure under output below.

Other local enterprises include a new bank office, a liquor store (both in the same complex as the grocery/hardware store), a restaurant and a large bar--a bar roughly three times the square footage of the
restaurant. Amway sales persons, a local gun smithing operation, and a few other home enterprises fill out the employment picture.

The mining operation in Unga on the other side of the island is expected to produce significant growth. Current operations include only 15 employees but this is expected to increase with the value of gold as noted in the input section.

Two or three big game hunting guides operate out of Sand Point.

Non-local government employment includes the State Trooper, F.A.A. and ADF&G personnel.

Per Capita (not familial) income was estimated at $23,000 in 1980. This astronomical earning level justifiably places Sand Point among the richest communities in Alaska (or the U.S. for that matter). Recent visits by IRS ("revenuers") bear testimony to the fact that very sizeable incomes have been earned here in the last few years especially.

The dominant commercial enterprise, and raison d'etre of the community, is the local cannery, Aleutian Cold Storage. Virtually all of the salmon and crab passing through Sand Point is handled by this processor. In earlier days electricity, fuel, and all other necessary supplies had to be obtained through this cannery. Fuel continues to be handled by the cannery—fifty-five gallon drums of heating oil and gasoline for vehicles—must still be purchased down at the ACS docks. The economic power of this company is very strong but relations between the community and this processor are on a more complimentary basis than in other communities in the region. A senior administrator of the company is a local resident who is well respected in the community and serves as an
important interface between the two poles of power. Ocean Beauty and Peter Pan have, at different periods, operated out of Sand Point but current operations include only fish camps at this time.

The evolution of a year-round processing operation in connection with the growth of the crab industry has been an important spur to development and increased population. Several varieties of crab are processed locally: King (Red) Crab (ex.vessel price of $1.61-$1.80 per pound late 1981), Tanner (both opelio and bairdai at $.52 and $.26 a pound, respectively), Korean Hair Crab (at $.86 a pound) and others including Blue (or Pribilof King) and Deep Sea King were mentioned as well.

The processor, while still the most profound influence on community organization, has nevertheless lost much of its former control. Several prospective processing concerns are considering establishing a facility in Sand Point, and the diversified economic base that has evolved over the last six or seven years have generated a wider range of community input into local decision-making processes. There are many more alternative employment opportunities now than there were just five years ago. As noted elsewhere, many fishermen are now in a position to consider not working crab or other off-season fishery because they feel they have earned enough on salmon--this has fostered greater economic risk-taking and promoted a rapid diversification of economic infrastructure of the community. These trends are expected to continue over the next ten years.

Entrepreneurial activity is booming. Businesses are growing or being created at an accelerated pace. Once land is opened to the market, this activity is bound to increase even more rapidly. Some of the impending
major construction projects include a new $7,000,000 school--new roads, sewers, water connections, etc., are also planned for the forthcoming housing expansion. External agencies, such as ALASCOM, F.A.A., ADF&G, and U.S. Fish and Wildlife, will also increase their presence and operations out of Sand Point during the next decade. The economic support infrastructure for the fishery, with the opening of land, will quickly respond. Electronics repair, diesel and gas mechanics, vessel repair facilities of all sorts will develop in direct response to the present unmet local need--outside of cannery control or dictate.

The local store/supermarket is exceptionally well stocked. The owner, who once worked for the cannery, began a small community store in the mid-1970's which he was gradually able to expand into the present facility. It is unlikely another such operation will attempt to locate in this community in competition with such opposition. However, other support enterprises noted above, will be encouraged by the presence of such an operation because it means more rapid access to parts or other necessary supplies for their own businesses.

**Non-labor Force**

The "non-labor" force of Sand Point follows the common pattern of willful selection of non-employment options over employment options. Legitimate demand for social services such as welfare, unemployment or AFDC, in this community is particularly low--especially during the fishing season when well-paying cannery and fishing positions have gone wanting. Where demand increases after the winter crab season, unemployed cannery personnel serve as the dominant category of recipients.
As noted in the environment section, substantial utilization of indigenous food supplies continues today. Several caribou may be taken each year from the mainland per family of five—other families, however, may rely on friends or relatives for gifts or excess harvest and may not hunt at all. Most indigenous families put up sizeable quantities of salmon and crab during their respective seasons and this supply is seen as a standard, assumed and meaningful, part of their adaptation to the environment. The economic role of this pattern of preserving excess fishery products for later consumption is significant though not major. The economic role of hunting larger game animals and saving or redistributing excess harvest, however, is debatable. It is difficult to harvest caribou and even more difficult to hunt and pack out a moose. If the animal is harvested incidental to other fishing activities (while out crabbing, for example) the return is eminently profitable. If, on the other hand, one must set out in a large fishing vessel, cross the channel to the mainland, and hunt for a herd of caribou, the expense of the process can be higher than the economic value of the product. Again, one method of justifying such ventures is to drop as many animals as possible and then return and redistribute the excess—this is a standard procedure in Sand Point. Trapping has declined to insignificant levels during the last decade and we cannot foresee economic changes that could rekindle sufficient interest to reactivate this pattern. Game birds are also hunted locally, though by no means as actively as in Cold Bay, Nelson Lagoon, or False Pass of the southern Peninsula area. As a food resource they supply less than 5% of local nutrition needs.
Social Networks

The current social system of Sand Point can aptly be described as transitional. Kinship, while it is still perhaps the most profound organizing principle in the community, has continued to give ground to occupational association, neighborhood, friendship and certain formal relations. As a rather universal trend this is not remarkable, however, for a community that would certainly have claimed to be organized very intimately around kinship less than 10 years ago, this change has been abrupt.

More formal social organizations such as the local Lion's Club and Women's Club have been unusually active the last few years and are seen as expanding their influence throughout the community. The recent 4th of July celebration put on by the Lion's Club was seen by many informants as both successful and as unusual. The Women's Club, over the last few years, has routinely generated between 10 and 15 thousand dollars for community and educational objectives--their auctions are well attended and much appreciated.

Political Organization

Sand Point became a first class city in 1978. In four years the government of this city has evolved to become a well-defined entity, to have formalized its role in the city in a very effective way. Political representation is seen to reflect the ordering of the community. An unusually high percentage of the community turns out to vote--though the issues are commonly buried in personality, ethnic, or economic orientations of the candidates. To date, the leading edge of this organization
has been favored economic and material development for Sand Point. Zoning, school and housing issues are generally resolved in support of the "boomers" in the community. We are not, however, suggesting that this is an irreversible trend--it may well shift within the next few years. What we are forecasting is that over the next five to ten years the number and political weight of those in favor of accelerated economic development will hold sway in the decision-making context of the Sand Point city government.

The few years immediately preceding incorporation as a first class city in 1978 and the last four years have been unusually active ones for this community. Education was probably the focal issue leading to this move. Having achieved relatively remarkable success on this issue--first forming an independent school system, and now in funding and planning the new facility on the edge of the community in the midst of a planned residential expansion--local government has begun to branch out in diverse political and economic arenas. Local road repair and new construction is evident throughout the city: New zoning actions designed to prevent random growth, inaccessible sewage or water lines or other problems with right-of-way, and to provide general community planning are already well advanced.

The Community and Regional Affairs Office out of Anchorage has had considerable input into present management and organization of fiscal operations of the community. Revenue sharing, local government advisory assistance, planning documents, coastal zone management, and other
assistance is handled through this office. Much of the financial support for the community is funneled through this organization and as such has substantial organizational and expenditure oversight responsibilities. The other organization of direct impact on the community--although on a demand basis--is the Department of Transportation which operates on the basis of legislative priority lists. But evidence indicates that the standard appropriations procedures are often avoided if sufficient political clout is applied in the appropriations process. This clout, until recently, was available and effectively utilized by the community of Sand Point. Airports, new school buildings, swimming pools, etc., are examples of projects that are commonly funded on a line item basis through the legislature.

Economic policy is set by the city council and the City Manager in Anchorage (who is shared with King Cove). Projects are suggested by the Council and the manager attempts to obtain funding or authorization for the projects. His role in the future prospects for the community is considerable. The council is composed of seven elected members of the community--only so many are up for election each year. The planning council, school and health boards are separate entities with distinct areas of responsibility. The planning council and city council share several male members and lean predominantly in favor of development and economic diversification. The health board is composed of women of the community and a mandatory representative from the cannery whose attendance is irregular. While women predominate on the school board as well, several males attend regularly and hold quasi-leadership positions. Probably the most important, from an economic point of view, formal organization in the community is the Peninsula Marketing
Association. It is composed of local vessel owners and permit holders—both seiners and gill net fishermen are members of this organization. This is a very powerful organization—one which has had substantial impact on the organization of the fishery. Each year this group meets to discuss how they will negotiate with the processors, what prices seem reasonable under current market conditions, tactics, etc. There exists significant differences in the views and orientations of the different categories of fishermen discussed above—as will be noted in the discussion of output, the difference in objectives and values of these two classes of fishermen is expected to result in fission at some time in the next two or three years.

Three village corporations are located in Sand Point: These include Shumagin Corporation, Unga Village Corporation and Senak Village Corporation. Shumagin consists of 409 shareholders, Unga about 50 and Senak about 25. The fact of three corporations operating out of Sand Point must be understood in its historical context. At the time of organization virtually everyone in the area had established permanent residence in Sand Point—several families decided that in order to protect their traditional home territories they should form their own corporation and lay claim to those sites. Those who claimed Unga, did so to protect the mine while those laying claim to Senak wanted to protect the land for their children—with minor contemporary return from land leased to a cattle herder. Most all of the original population of Sand Point was originally from these two areas: The Senak and the Unga-Squaw Harbor sites. Sand Point grew at the expense of these other communities to the point where today little remains of Senak, Squaw Harbor (a single canning facility) or Unga (the mine and about 16 employees). It can be
said in fact that, at this point in time, Unga and Senak Corporations are little more than holding organizations designed solely for the purpose of protecting future options—an objective they have effectively accomplished.

**Social Control**

Problems of social control in this community are minor for a city of this size. A few years ago a policeman was hired. He purchased an array of safety equipment, a patrol vehicle, and started a local safety program. Several community members wanted him to stop the wild three-wheelers from roaring through town but the council was unwilling to enact appropriate regulations. A few months later he resigned his position stating that not only did he feel there was not enough work for him but that he recommended that no one be hired to replace him. No one has been. The state trooper assigned to the area and stationed in Sand Point concurred with this assessment. Violence, drugs and roudy behavior are usually associated with the fishing season and the immigration of non-local Seattle fishermen, contract cannery workers and other non-residents. No recent homicides or suicides were noted but several informants suggested that such incidents had occurred earlier in the 1970's. Some female informants noted wife-beating as a significant problem. A well-informed individual reported that the frequency of this type of problem was high in this community and that it normally went unreported—"what can the trooper do about it?" This type of report is virtually impossible to verify or discredit and is noted here only because several independent sources coincided on this point.
Petty theft, again mostly during the salmon fishing season, was a problem for the local store owner in particular. Video cameras and multidirectional mirrors were installed and have reduced the problem considerably but this problem still accounts for many thousands of dollars of losses each year.

Informal social mechanisms such as ostracism and gossip have lost much of their former strength. This is consistent with the larger population size of the community and the decreased sense of moral community attendant to this increase.

**External Relations**

The linkages between Sand Point and wider non-governmental agencies or organizations is tenuous. Since going independent, the school system has had little to do with other education-related organizations in the state (excepting intra- and inter-regional athletics). Linkages with the Aleutian Pribilof Islands Association are at a relatively low level of activity. Each main social service element of this Association has a counterpart in the local community (with the exception of housing which does play a local role). Health facilities are maintained locally (on a strict fee for service basis regardless of ethnicity), and there is little enthusiasm for CETA positions, or other such programs.

**Religious Organization**

This community is very nominally Russian Orthodox. However, fewer than a dozen or so residents attend services regularly. Non-denominational church activity has increased but no major segment of the community can
be included under this banner. On the other hand, the growth of the Baptist Church in the community has been significant. Attendance is regular and members are very active in community social affairs. The church is strongly associated with anti-alcohol attitudes and has exerted pressure to establish a dry community of Sand Point. This effort, while unsuccessful, has brought fruit in the form of a generalized caution regarding alcoholism, open alcohol abuse and an intolerance of alcohol-related social incidents. Some low level friction exists between these two religious factions--the balance between a wider population of nominal Russian Orthodoxy and a cohesive and active Baptist community has made for some confrontations that eventually came to have religious overtones. The long-term implications of this schism and the growing sentiment regarding non-denominational churches, will be discussed below under output.

Educational Organization

Education, and local control of education, was a prominent factor in the original move to incorporate as a first class city in 1978. Many individuals voted in favor of this action only to acquire local control of the schools. By all accounts the shift to local control has been very successful in achieving other objectives as well. Almost everyone in the community views the shift as positive--the last three or four years are seen as the most productive and cohesive in the history of the community. The school superintendent has over a decade of experience in the region, relates well to the demands of the community, and is well integrated into the community. Several other unusual characteristics may also be noted: First, the return rate for teachers is very high--
almost all the teachers are returning, many already have more than five years in the community. Second, the number of students receiving merit scholarships and academic awards is very high. Third, the number of post-secondary students is very high and the number of successful college graduates, if current trends continue, will be remarkable for a rural community of this size in Alaska. Fourth, extracurricular activities, sporting events, travel, music and art, are extraordinary for such a small community. This community places an unusually high value on education, and the school system has been able to provide the means of obtaining that education.

The school receives funding through the state, through local initiative, and through Johnson O'Malley and Indian Education funding.

Current plans call for construction of a new high school just to the north of the community. The projected cost of this new facility is estimated at between seven and eight million dollars. The school will be located within the projected housing expansion of the community. Land surrounding the school will be put up for bid by the Shumagin Corporation. Plans are complete and once final funding is authorized construction will begin. The facility itself should be completed within the next two years.

Health Care Organization

Local health care is provided by a municipally-funded health clinic. The nurse is a city employee. It is provided on a straight fee-for-service basis. Anyone, any native, wishing free service must travel to Anchorage. This service was voted in by the entire population. Again,
as is the case throughout the region, service is adequate for minor injuries or illnesses but can only provide interim assistance to those with more serious problems and who must be shipped to larger facilities in Anchorage. The possibility of eventually contracting or encouraging a doctor to set up residence in the community is frequently raised but it seems likely that without a wide array of support equipment--X-Ray, laboratory equipment, and surgical facilities--the doctor would be in a position similar to that of the nurse--knowing what was wrong but not being able to help.

Health issues appear to be standard to the region. There is a surge of minor cuts, abrasions, and few severed fingers, broken bones, etc., during the crab and salmon season. Alcohol-related problems are of generally two varieties, depending on the season--first, drunkenness during the season, brawls, and threats. Second, the lingering alcoholism of the mid-winter season, when there is less to do and less outside activity. The second issue is seen as a local problem, the first is seen as a product of the normal sequence of events linked to the fishing activities--and as inevitable. Psychological problems are notoriously difficult to classify or verify. As noted earlier, we have the sense that there is a slightly higher incidence of physical abuse of wives but this could well be a product of a skew in those interviewed. Our data do not allow us to venture other suggestions or projections on this topic. No psychological services or counciling facilities are available locally nor are they planned for the future.

As is common to this region and other fishing regions of Alaska, the number of accidental deaths associated with the occupation of fishing is
very high.

Recreational Organization

The standard regional recreational facilities are available and utilized in Sand Point. Three-wheel motorcycles, off-road vehicles, cars and trucks are driven with recreational objectives. Few local residents own aircraft. Snowmobiles are in less evidence in this community than in others of the region.

Fishing and hunting are the dominant out-of-doors recreational activities. Fishing from a skiff is the standard--few fish from the shore. Hunting involves taking a fishing vessel/skiff over to the mainland, scouting the shore until caribou are sighted, going ashore and felling a few animals, packing them back to the vessel and returning home. Trips lasting more than a day or two are very rare in this type of hunt. Trapping does not appear to be practiced by local residents of Sand Point.

Indoor recreation includes television--probably the dominant form--video taped programs, and social visiting and drinking. Two satellite television stations are monitored in Sand Point, the reception is exceptional (with more transmission problems originating in Anchorage than in the local system). The local bar is active with transient fishermen during the season and with local residents during the off-season, but the pattern of drinking during the off-season is usually for couples to go to the bar rather than large numbers of single adult males as is common during the season. Very few local women spend much time in the bar dur-
ing the fishing season.

The local movie theater/teen recreation center closed with access to television. The shift was clear and unambiguous by local reckoning. This facility offered pinball machines, coke and candy machines. Now there also appears to be greater interest in athletics and the local gym is very active almost every night. The local campfire organization, through the Girl Scouts, has an active program that has been very successful.

Church activity is another gradually increasing source of local recreation. The Baptist meetings and functions dominate in this category--the Russian Orthodox Church has not been active here.

Travel is a favorite vacation activity. Almost everyone "gets out" at the close of the fishing season. Anchorage, Kodiak, Seattle, California and Hawaii are favorite locations but Mexico and Europe are high on the list as well. Intra- and inter-regional travel is not high and is usually associated with business or specific meetings in Anchorage, Unalaska, or King Cove.

For adolescents, drinking appears to be very popular. Marijuana and cocaine consumption do not appear high but high incomes and ready availability during the season do tend to encourage usage and some families have contended with this issue.

Output
Economic

The following analyses are based on an assumption of continuity in current economic conditions. We are not forecasting any major increase or decrease in earning levels during the projection period. The assumption of continuity can always be argued but it is felt that each change in assumed income levels would require a distinct scenario of sociocultural change—and this would be beyond the scope of our report.

Earning levels in the community have increased dramatically over the last six or seven years. This increase, however, has been disproportionately in favor of the seine fishermen and less favorable for the drift permit holders. This is an inevitable trend. Those with the highest incomes, over time, are forced by various tax structures and incentives to reinvest excess earnings in the fishery or in other profit making ventures. These investments, in turn, generate even higher earnings and the circle continues. This process can only begin in earnest once a certain earning plateau is reached. Drift gillnet fishermen have only been able to capitalize on these incentives in minor ways compared with seine fishermen. This growing difference in wealth between groups of fishermen is expected to have notable long-term effects on social interaction in this community.

This community is organized around the fishery. The salmon fishery probably accounts for 65-70% of the income earned each year in Sand Point while crab-related employment and profits account for most of the remainder. Income categories can be usefully divided, from highest to lowest returns, into five separate groups: First, the income of those
multi-vessel, multi-permit, seine fishermen who reap unusually large profits from the fishery each year and a few very successful local entrepreneurs. A second category includes most single permit seine fishermen and some successful drift gillnet fishermen. The third category includes the rest of the drift gillnet fishermen, some set gillnet fishermen and several smaller entrepreneurs. A fourth income category would include crewmen and many set gillnet fishermen. The last category includes cannery workers and employees in local establishments. While many of these categories occur within single families, the emergence of a class structure can be noted in several dimensions of community organization and will be discussed under political and social change below.

Construction employment is normally considered a transient occupation in small Alaskan communities. While it is likely that the construction that originally draws individuals into Sand Point will occur in spurts and starts over the next ten years, we see this construction phase of development as an important period of population growth as well. Once the initial project is complete, the attractiveness of the community, of other employment opportunities, or personal relationships will tend to hold many of these individuals in the community. This group of individuals is even more likely to remain locally than seasonal migratory fishermen or cannery workers (even though there is more chance of the occurring with year-round operations). Teachers are another group in this category. Many of the current high school staff have already logged five or more years in the community—some are considering permanent residence. Another group seriously considering establishing at least a
partial-year residence in Sand Point are purse seine permit/vessel owners from Seattle. They would like to build a home in Sand Point and live in the community at least during the dominant salmon and crab fishing seasons.

As this community grows the likelihood of increased representation of state and federal agencies in this community grows as well. Several current appointees in Sand Point of various government agencies related how working conditions in this community were superior to those of other places they had worked. More than in most other communities, Sand Point seems to have accepted these agents as part of the moral community. The FAA and ADF&G representatives, the trooper, the teachers, all interact well with other residents of the community.

Social

Sand Point cannot be considered a kin-based community. There are several very closely organized family networks, but on the whole, kinship does not play the role it plays in the rest of the communities of the study region (excepting Cold Bay). Size is an important variable. Sand Point is far larger than any other community on the chain or peninsula except Unalaska/Dutch Harbor and has evolved out of three separate village populations. Family interaction and values are largely organized around dominant western patterns. High income levels seem to have accelerated this process. Marital patterns, though largely endogamous, have departed substantially from traditional patterns. Some schism can still be detected between the Unga, Senak and Shumagin contingents of the community. Groups of individuals are casually grouped as drinkers,
as 'pushy' people, or as elitists on the basis of family or community of origin. Church affiliation appears to support these lines of schism—Senak people are seen as Baptists and anti-alcohol, Unga people as Russian Orthodox and Shumagin people as less religiously enthusiastic. These gross categories are less accurate reflections of real differences than in the established tendency to lump individuals according to area of family origin. This social schism can also be demonstrated by neighborhood—Senak, Unga and Shumagin shareholders appear to reside in definable areas of the community. Little Senak is a category recognized by most residents to mean the place where many ex-Senak residents currently live.

Divorce rates in this city are considered normal for the region although several informants noted a rising incidence of wives leaving their husbands.

Family organization, especially where offspring are capable of earning as much as $70,000 during the summer, has shifted significantly over the last five or six years and has been noted by local residents. The query, "What can you do if the kid has $50,000 in his own bank account?" accurately reflects a sense of impotence in opposition to adolescent affluence. Cars and skiffs are routinely purchased by local teenagers—wrecked intentionally on a whim or, in one case, driven recklessly off the end of the airstrip into the harbor. Many older residents complained bitterly of such disregard for property and of the implied lack of respect for money. We reiterate, however, that this wealth has apparently not affected local adolescent esteem for education as it has elsewhere in the region.
Ethnic relations in this community are less intimately organized than in the rest of the region. While ethnic category is not often easily recognized on the basis of physical appearance, a social schism can still be detected in this community. The evidence noted above in the political arena, a marital schism, and what appears to be an economic schism based on 'degree' of nativeness can all be adduced in noting emergent differences. That is, seiner captains, their behavior, values and perspectives, appear to be more westernized than their drift and set gillnet counterparts. Whether this is a product simply of increased incomes or wealth is open to question but they are seen by other residents as somehow less native than other fishermen. Several captains freely suggested they saw themselves as less native as well.

Concomitant to growth resulting predominantly from immigration, the ethnic ratio of this community is expected to shift in favor of non-indigenous residents. This will affect the distribution of political authority in the community in favor of the development and growth constituency. The positive utility of ethnic identity, paradoxealically, is expected to increase over this period as well. Leadership positions and employment opportunities predicated on shareholder status will contribute to this value. Corporate membership may prove exceedingly important in giving individuals a say in future development priorities--a say they would otherwise not be able to voice or act upon.

This community is relatively balanced in the distribution of personality traits and we feel it is not possible to assign general characteristics to this population. Self-esteem and other measures of sense of self
worth are certain, however, to register very high. Socialization techniques appear to vary little from the dominant cultural pattern of the U.S. and will not be examined in detail. Levels of stress and anxiety, on a very subjective appraisal, appear higher than that of residents of False Pass, Nelson Lagoon or Ivanof Bay, for example. But no real attempts were made to examine this variable in this community.

Political

The Shumagin Corporation is one of two village corporations in the Aleutian Chain and Alaska Peninsula that has had to create its role in the community largely in opposition to established interests. The other community being Unalaska (Oonalashka Corporation). Confrontation over land, right-of-way, subsurface estate, gravel, zoning, taxes, and other issues have already occurred and future disagreement between the city and the corporation is expected. This interaction has, because of the significant differences between the constituency of the corporation and that of the city leadership, been more abrasive than is common to situations where the village council and village corporation are largely synonomous. There has, however, evolved a balance that is acceptable to both organizations—a compromise between an unabashed development ideology and ultra-conservativism. This 'balance' is not a static one, however. While non-indigenous residents are slightly favored, compared to their numbers, on the city council and various boards, an increasing awareness of the power of the vote is beginning to have its effects felt on political representation and interaction. A recent election saw a leading member of the growth and development faction ousted by a local native representative—nativeness, in fact, was used an important issue
in this campaign. If any trend can be generated from these events it is the latent power of an indigenous population that still outnumbers non-shareholders by about five to one—unlike Unalaskan natives who are in a distinct minority.

Shumagin's control over land around Sand Point will have a telling impact on the future of this corporation and on city growth and development. To date this influence has overlapped significantly with city leadership objectives. If perspectives shift in the future, the corporation may be in a position to prevent what they consider to be excessive growth. Long-term projections of the relationship between the city and the corporation are difficult to found on trends which themselves vary from one year to the next. For this reason we are suggesting only that both the city government and the Shumagin Corporation will continue their efforts to secure their political foothold and that the potential intensity of confrontation between these two power poles must increase.
KING COVE

Introduction

A discussion of the location, climate and history of King Cove and Sand Point is presented in the APSS Community Profiles appendix prepared by Langdon and Brelsford and presented in the Combs (1981) report. Demographic, socioeconomic, sociocultural and political organization are also discussed in this report and the reader is referred to the appropriate sections for more detailed coverage of pertinent issues. A discussion of the historical development and commercial organization of these communities is contained in the report and in the March, 1981, OCS Draft Technical Report No. SG-14.

We wish to reiterate here that population and economic growth is unlikely to occur in constant increments over the projection period. As noted in the body of this report, we see population growth rates varying from year to year in response to local and external economic forces herein noted. Local construction efforts, new commercial opportunities, expanded fishery options (out of Lenard Harbor, for example) will result in spurts of rapid growth mixed with years of little or no growth. Moreover, at a certain point, population growth will be hampered by inherent geographic and social limitations noted in the regional projections, and the rate will begin to decline.
What change does occur in the social system of the community will be principally within the social subsystems. Formal social networks will gradually replace the informal, kin-based networks and the accumulation of wealth from commercial fishing activities will lead to increased social stratification. Given the current lack of stratification, such a phenomenon will be the most visible form of change in the community.

Significant political and economic changes have already occurred, leading to greater complexity of organization and intensification of effort. Changes in these subsystems will include increased technological sophistication and bureaucratization. The educational subsystem will also undergo significant changes in the short-run and then stabilize in terms of new facilities and student enrollments over the course of the projection period.

One further note is in order. In setting forth those features of the individual communities likely to occur on an ideosyncratic basis we must inevitably restate issues, problems, or materials presented or cited in the body of this report. The reader is urged to bear with this redundancy in order that we may present the most coherent picture of the local level social system possible.
Ecological

The physical environment, as stated in the regional projections, is expected to remain constant over the projection period (through the year 2000). While natural shifts in the biological productivity of the resource base, changes in their migratory patterns, shifting market conditions or unusually harsh fishing seasons would dramatically disrupt existing resource utilization patterns, for each such change an entirely different projection would have to be generated. We thus assume continuity of present conditions.

The economic organization of the community is expected to change only slightly as a result of mining operations in Unga (to the south of Sand Point). As gold increases in value on the international market, this operation will expand, as this price declines so will the number of miners involved. Most of those involved in this process, however, will be located in Sand Point and not in King Cove proper. Increased activity associated with Lenard Harbor fishing operations, to the north of King Cove, is expected to result in minor permanent population increase.

Extrasocietal

External Government

The general decline in federal revenue sources projected at the region-wide level holds for this community as does the expectation of continued
or increased state funding for local projects. The likelihood of an overall decline in external governmental assistance programs toward the end of this decade, however, does not bear omen of significant local-level changes in this community. Returns to the community of King Cove from their share of the raw fish tax, a direct sales tax of one percent, property taxes, and the general economic abundance of the local fisheries should more than offset any projected decline in these external sources of economic revenue and government assistance.

Two very powerful recent changes in the regulatory environment, however, are expected to have increasing impact on King Cove over the period of this projection. These are ANCSA-related social and economic change and the consequences of implementation of Limited Entry. The effects or ANCSA, the creation of regional level organizations (profit and to a lesser degree, non-profit), and, in particular, the formation of community-level village corporations are expected to increase gradually until 1991 and then to accelerate dramatically. While it is true that the community already has full title to their land holdings, the actual awareness of the power and potential economic implications of these holdings has yet to be grasped. We suggest three factors which will alter this perception: First, with full title to individual allotments passing to community members in 1991, this new, inherent, sense of ownership and control will affect the larger community's perception of the value and importance of its land holdings throughout the area (for example, in Cold Bay). Second, the actual value of the land, since it would automatically become subject to external market demands and conditions, would become concrete, rather than theoretical. This would influence
directly the value of the Village Corporation lands. Third, the mere accessibility of this land to the open market would draw outside interest, capital investment, and wider economic development. The unavailability of land on the Peninsula (as well as throughout Alaska) is well known and is commonly seen as the major impediment to economic diversification and development. In turn, the more development that occurs in the local area, the more valuable the Village Corporation lands—and the more power in the hands of this organization. This applies as well to the entire region and to wider Alaska as well.

Limited Entry, for King Cove residents, will not have the dire consequences associated with implementation in other areas of Alaska, notably in Bristol Bay. The average number of permits held by each permit holder is above 2.0 per person. The figure for Bristol Bay cannot be higher than 1.1. In other words, adult fishermen wishing to pass their permits on to their offspring are faced with the dilemma of giving one son a $200,000 permit and the other son (or daughter) nothing. This is, of course, of substantial concern in Bristol Bay. Secondly, the fact that the fishery has been unusually prosperous, the last half decade at least, means that apprentice fishermen, kinsmen, and friends have access to relatively well paying crewmen's wages. Thus, the issue of entry limitation—and its virtual exclusion of anyone who had not fished in the late 1960's, has generated very little hostility in this region of Alaska. In fact, we can say that the vast proportion of King Cove residents are steadfastly in support of the program and are very concerned about the recent challenge to its constitutionality (resulting from the recent Carlson decision). For this fishery, it is clear that the major impact of entry limitation has been to reduce competition,
increase returns to the fishermen, and, to some extent, limit the overall effort applied to the fishery by holding the number of permits relatively constant (though significant increase in effort per permit holder is in clear evidence). The tendency to sell or lease unused permits, however, is growing and will have to be taken into consideration is assessing the long-term, as opposed to direct short-term, economic impacts on King Cove and this subregion. The relationship between increased number of vessels, more fishermen, fewer fish and lower economic returns appears strong.

Commerce

The community is serviced by several small air taxi services and is almost on a direct route to Cold Bay from the larger community of Sand Point--service is frequent and relatively inexpensive. The community, however, is relatively isolated from its 4300 foot airstrip and this has had a retarding effect on local growth. However, the geographic location of the community precludes siting of a strip any closer to the village. No changes in this relationship are expected during the forecast period.

Communication facilities have expanded dramatically the last four or five years to the point where almost everyone has a phone and television in their homes. The impact of these two devices should not be minimized and will be discussed below under 'output.'

Larger Sociocultural System
The impact of non-indigenous cultural traditions on the residents of King Cove has been significant and continues to increase. Economic objectives adapted from non-local models have probably had the greatest impact on the community. The effort expended to achieve higher and higher earnings, to purchase new vessels, gear, vehicles or homes has increased notably within this community. "I know that ten years ago no one would have tried to buy a brand new boat. Now, lots of people have them."

The impact of sophisticated technology made possible by extraordinary earning levels has also been notable. Fish finders, sonar, radar, Loran, etc., can be found on a majority of the vessels owned by King Cove residents. These, in turn, facilitate larger and larger catches and higher earnings. Larger vessels, improved handling techniques, and gear have also improved the quality of the product delivered with the consequence that fish landed by seiners in King Cove, Sand Point and the Chigniks bring the highest return per pound of salmon landed in all of Alaska.

King Cove, as a community, is little concerned with maintaining an ethnic identity. Most will assert their identity as Aleut even though many could just as easily lay claim to Norwegian heritage. Traditional Aleut customs, if we exclude dietary considerations, are not a pronounced feature of community interaction. The population is sophisticated, in the western sense, is familiar with political and social developments throughout the world and is aware of its place in the broader picture of social change. Virtually no effort is expended to encourage use of the Aleut language—a recent school program designed to teach it drew only
non-native students. It is notable that general lifestyle patterns have changed little as a result of a sizeable increase in economic wealth. Homes continue to be framed and constructed in the same fashion as a decade or two previously, little attention is paid to superficial appearance--concession is made to the importance of insulation and most are now well protected from inclement weather. We must admit to a seeming paradox; while they are clearly among the well-to-do of Alaska, they have altered but little the superficial appearance of their traditional lifestyle. Individuals who are willing to claim earnings in excess of $500,000 in one season are reluctant to expend $200 to repair obvious deficiencies in their homes. The presence in the community of individuals with over $100,000 in non-interest-bearing accounts bear witness to a sizeable local variation in the perception of money.

Intrasocietal

Community Facilities

A wide range of community facilities exist in King Cove. They have an adequate supply of water that is piped from Ram Creek into the community. A minimal charge of approximately $15 per month is charged each family. Electrical power is provided through a village electrical generation system but this system is not considered adequate and some families feel they pay more than their share of the costs. Sewage facilities are inadequate. Many claim the cannery discharges its waste directly into the lagoon and some friction between residents and cannery officials on this point are in evidence. Trash is collected several times a week and dumped in a landfill area inland from the village where
it is burned--this is a community service and no additional charge is levied against community residents.

A local health nurse is in permanent residence in the community and is paid in part by the cannery and in part by the community. This facility is considered adequate for minor health problems and well-child clinics but is not considered sufficient to handle more major problems which have to transhipped through Cold Bay to Dillingham or via Sand Point to Anchorage.

The local school facility is currently perceived as inadequate. However, plans to construct a second facility of roughly the same dimensions as the present structure have been formalized and funding is not expected to be a problem. This new structure should alleviate any inadequacies resulting from lack of space. The teaching core has been remarkably constant in comparison with communities in other parts of the region and in Alaska in general. Several teachers have resided in the community over five years and the problem of rapid turnover of new teachers has not affected this community. These teachers have been able to establish their position in the system as educators, do not get directly involved in local politics, and appear well liked by the community. Many plan to continue teaching in this community for several more years.

A recent land lottery has precipitated rapid movement of properties from one family or individual to another. It has also established the pace and direction of residential development for the community. Lots were distributed to all eligible residents in a broad tract of land ranging up Rams Creek basin. Many families have already begun planning future
construction, parcels are being purchased, exchanged and traded for other items. HUD housing restrictions require applicants for financing to have legal title to their own land and this had effectively halted local construction. As a result of this lottery, many individuals will be able to apply for HUD housing and government financing and this will mean accelerated construction and allow for substantial population growth.

**Demography**

The present pattern of seasonal migration of cannery crews is expected to continue through the projection period. No major immigration is expected to result from bottomfishery development, in particular, and little direct growth to result from fishery activities in Lenard Harbor. Thus, growth projected under the assumptions of this report is expected to occur predominantly as a result of natural fertility and not immigration. This being the case, little change in the native/non-native resident ratio is expected. One change intimated by the Langdon appendix is that the age structure of King Cove will gradual shift in favor of younger residents. The impact of current oil-related exploration has been negligible and is not expected to increase within the next five years at least.

The seasonality of population movements is expected to continue in the current pattern--large summer influx, moderate fall population and minor winter cannery crews. Fertility rates have been increasing and should continue in that direction as long as earnings are high--mortality rates
have declined over the last decade—these two factors should result in gradual population increase over the projection period. Given the constraints noted in our regional projection, we feel the Langdon population projections, given current trends, are reasonably accurate.

Residence trends fairly approximate those of Sand Point. Anchorage, Seattle, and Kodiak are the favorite locations for establishing a second residence. The trend, however, as opposed to the Chignik Lagoon pattern for example, is for fewer and fewer families to hold dual residences, even though earnings are increasing. The excellent, and improving, school systems in both these communities are important factors in this trend.
Structure

Values

King Cove has an extensive history as a fishing community. Special status has always been accorded to the most successful fishermen. Much of this status system remains intact today. However, other value structures have come to usurp some of the prestige attributed to fishing prowess. Strongest among these new structures is a system of wealth. Some fishermen still expend their earnings in relatively customary fashion—with little concern given for amassing permanent wealth. Others are very conscious of other powers inherent in money. Many have purchased new homes, others newer vessels, superior gear or technology and have intentionally protected future earning levels. Over a period of several years—since about 1975—the distribution of wealth in this community has developed to the point where reference to such wealth is publicly made. This would not have been the case ten years earlier. "I don't think he would be so popular in those days if he had so money."

In any case, it is clear that the distinction between fishing and non-fishing families (of which there are but a few) is open to observation.

Traditional, as interpreted by local residents, belief systems have not been strong in this community for several decades. Thus, it is difficult to specify in what ways they have changed. We can say that the direction of change is increased westernization. This can be seen in clothing, conversation topics, television viewing patterns, consumption items purchased, leisure activities and a host of other readily apparent behavioral patterns. The place of King Cove in the context of Alaska
and the wider U.S. has broadened with the advent of increased earnings. Visits to Seattle, Anchorage, California, and Hawaii are not seen as extravagant and are planned and embarked upon in rather casual fashion. Very many residents have been to Europe and a few have visited Japan and the Far East as well.

Ethnic identity has been a complex issue throughout this report. For the city of King Cove, we can say that where ethnicity has become a factor it has become so only as an implement in achieving some sort of objective. For the most part, the categories "Aleut", "white", or "Norwegian" are not employed by local residents--it is, in fact, often difficult to even extract this type of data, "I really don't know if he is a native, I never thought about it." This can fairly be said for the community as a whole. Where ethnic friction has become an issue is between locals and non-locals, more specifically, between Filipino canner workers and local teenagers. This problem will likely persist at a low level as long as outside crews must be imported to operate the canning lines--i.e., as long as local earnings continue to be high.

Traditional exchange and redistribution systems continue but often with altered meaning--sometimes the forms are different, sometimes the content and sometimes the network within which they operate are different. Clearly the material importance of these networks have declined significantly in just the last five or ten years but so much cannot be said of the social forms. Visiting, giving or exchanging smoked, dried or salted salmon or other subsistence product is still very highly valued.

Formal social networks, tied to resource utilization patterns, employment patterns, etc., appear to be gradually replacing informal networks
as the dominant form in economic affairs. This is a generally universal pattern and is noted in the Regional Projection.

Organization

Economic Organization

Commercial

Recent extraordinary earning levels have resulted in a rash of major economic investments—new vessels, new homes, new gear, etc., are in clear evidence. This new level of economic income has led to wealth formation, economic diversification and a rapidly accelerated grasp of entrepreneurial options. However, money has meant much more than economic independence. It has had a notable effect on individual's sense of power and has acted as a strong incentive to acquire a broader education and an awareness of even wider economic opportunities. In the near future fishermen will increasingly see the utility of economic diversification, which, in turn, will facilitate local economic development. Federal tax incentives—as well as disincentives—have become apparent to all local fishermen and they have reacted accordingly. The importance of reinvesting excess profits in new vessels or gear is evidenced in the rash of new vessels registered since 1979. As one fisherman put it, "either I buy myself a new boat or I give it (the money) to the government."

While it is true that this simple, but accurate, logic is applied, to greater or lesser extent, throughout the region, it is in King Cove, Sand Point, Chignik Bay and Chignik Lake that its implications are car-
ried the furthest. Only in these communities is the prospect of general economic development a realistic option within the next decade. Perryville, Ivanof Bay, Chignik Lagoon, Pilot Point/Ugashik, Port Heiden, False Pass and Nelson Lagoon cannot be expected to substantially broaden their economic base within this period.

The general economic activities of this community are aptly described by Langdon in the Combs report and the subregional projections in the body of the present report adequately cover expectations of economic and commercial development. Subsistence patterns are expected to range from a high utilization during periods of economic scarcity to a low usage during periods of economic plenty. In that major improvements or declines in the primary fishery resource are not expected, we are not projecting any major shift from currently dominant 'preferential subsistence' use of game animals for this community.

**Social Networks**

Social relationships continue to be largely defined by kinship. However, there is a clear trend in the direction of diversification of social networks. Leaders of the community have established close personal relationships with village leaders from other areas of the Peninsula and from wider Alaska. Personal associations formed on the fishing grounds, at the cannery, and in Anchorage and Seattle have a gradually diminishing effect on traditional social bonds—though this change has not been noticed as significant for local residents. The longer-term impact will be a gradual sense of distance from one's relatives, less and less frequent visiting, and a general decline of community elan. The gradual growth of more formal voluntary organization, of organized
community activities, sports programs, etc., is expected to continue throughout the projection period.

**Political Organization**

**Local Affairs**

Political interaction has perhaps changed as much as any other pattern during the last decade--as is expected to show the greatest change during our forecast time period. Current leaders of the community must frequently interact with leaders of other communities and regions of Alaska. They must be versed in a wide range of subjects that bear on their community. Only a few members of the community are able to adequately handle these tasks--and fewer still have the time or interest in doing the job. The positions do not carry significant earnings--and earnings from the fishery actually reduce the likelihood of individuals holding the positions for the pay. The expertise gleaned from this experience, furthermore, make these individuals more or less indispensable--no one else has the necessary information or knowledge to hold the positions. This inevitably leads to a pyramiding of authority in the community. This has been mitigated, for the most part, by a voting population well aware of this potential and many of these positions have changed hands in the last few years. However, key figures of 1975 remain so today.

The local native corporation appears to be in a particularly favorable position. Its land holdings have been selected with the stockholder's immediate and short-term interests in mind and the general feeling is that everyone is getting a fair share. Long-term options available to
the corporation, especially regarding their holdings in Cold Bay, indicate a prosperous and increasingly powerful future for this organization. A conflict between the City Council and King Cove Corporation, however, concerning land distribution appears likely.

Social Control

Issues of social control are not significant in this community. The local police officer, although a relatively recent arrival, does not believe police needs will exceed his capacity in the near future. Very few crimes have been brought to his attention and only a couple of arrests for violent crimes have been recorded for the community. Informal censure and ostracism remain the most powerful forces of social control in this community. Everyone is aware of costs to their "reputation" and are cautious to protect their image. Some informants, however, felt that gossip played too powerful a role in determining the course of community life.

Religious Organization

Formal religion plays a relatively minor role in the organization and behavior of King Cove residents. While nominally Russian Orthodox, most residents, with the exception of Christmas and Easter, do not regularly attend any formal religious service. Non-denominational churches, consistent with the regional pattern, have grown in importance in this community.
King Cove is poised for rapid expansion of their educational facilities. The present Elementary/Secondary School is considered inadequate for the needs of the community. Funding, in the amount of seven or eight million dollars has been secured for a second facility which will serve as the high school leaving the present structure to serve as a primary school only. Planning for this facility is complete and construction is expected within the next year or two. Educational attainment, at least through high school, is highly valued in this community and seems to be one of the points of most pride for residents. The staff of the school system is particularly stable and they appear committed to the community for a few more years at least. This makes for superior educational achievement as well as a firmer sense of identity for the youth of the community in that teachers, once they establish some rapport do not depart for some other community as is the common practice.

The school system is unusually well organized and administered. This is due in large part to the commitment of the previous school principal who is now the superintendent, and in part to the generally high value placed on education in this community.

Health Care Organization

Facilities for general medical attention are considered adequate as noted above. Many in the community, however, are concerned about medical problems that require greater expertise than is available locally. Facilities for major injuries or illnesses are not available. Improved equipment and increased staffing of the local clinic appears high on the
local political agenda. The have been no notable mental illness problems in the last few years and, while a few incidents of wife abuse may have occurred, psychological problems are not considered significant. Alcoholism is probably the principal problem cited by King Cove residents. However, as is the case throughout the Peninsula, most drinking is contained in individual households and rarely results in personal or property damage. Binge drinking is the dominant pattern—individuals who have not had a drink in one or two weeks will begin to drink on one day and continue through the next, and then just as quickly stop altogether. Teenage alcohol consumption and marijuana (and minor cocaine) use is considered an issue of some import to a few local families, but on the whole these issues are not seen as community "problems."

External social assistance programs have not been extensively utilized during the last five years. A few legal problems with LE permits, with allotments, etc., have been referred out of the community. This does not indicate a major trend however as most of these cases have collapsed with the demise of Alaska Legal Services this year. This reduction in staffing has had substantial impact on Bristol Bay residents in particular and, to a much lesser extent, on residents of the Peninsula and Shumagin Islands.

Recreational facilities include social visiting, athletics at the school gymnasium, social drinking at the bar, speed boat rides, three-wheeled motorcycle riding, snowmobiling, "targeting" (shooting at targets), fishing and hunting (subsistence/recreational), and, more infrequently, trapping. Driving out to the airstrip is a favorite pastime for
teenagers, they can get away from the village and be free to drink and make noise without fear of disrupting adults or being arrested. There is tacit acceptance of this pattern. Video tape recorders had been very popular until recently when satellite television was introduced to the community. Travel is a major recreational activity. Trips to Sand Point, Anchorage, Kodiak and Seattle are standard. No planes are owned locally (to our knowledge), and recreational use of aircraft, per se, is minor.
Economic

Income levels have been very high the last five years at least. Income utilization patterns in King Cove do not show the skew common to some other communities of the Peninsula. Except for several homes toward the periphery of the community, most dwellings are of similar construction and repair. Several individuals have new pickup trucks, slightly newer fishing vessels, and other superficial expressions of high income but, on the whole, the economic schism in the community is minor.

Local residents tend to attribute this lack of social differentiation to the fact that there is no class, as opposed to shifting group, of "high-liners" in this community as is common in other fishing areas. Each year the high boat belongs to a different individual. From an etic view, however, it is clear that material and social values in the community are shared to a greater extent than in Sand Point, for example. Conspicuous consumption would not be readily tolerated in this community. Nevertheless, incipient forms of such differentiation, if not on the basis of income or catch per se, then on techniques of wealth aggregation, are increasing rapidly. Investment strategy, a less public form of behavior, ranges widely among this population. Some individuals merely deposit their earnings in a checking account on which they draw throughout the year for expenses, taxes and maintenance, while others are satisfied with a savings certificate and a little cash for necessities. Still others have begun to economically diversify, larger vessels, new technology, new fisheries, and small business investments.
Some are involved in the stock market and in commodities. With earnings continuing high these differences are slow to emerge as significant. If economic conditions were to change, if the resource declines, if the market fails, then those who have made propitious investments will gradually become set apart as a separate class in the community.

Income, following our assumptions, will continue to increase over the next 10 years. The range of economic options, already well advanced, will continue to increase through 1990. The more prosperous or industrious fishermen will probably be the first to diversify. This diversification will generate more local employment, more income and accelerate the development of socioeconomic classes.

The need to manipulate taxes has been a constant pressure to reinvest and diversify. Earnings of over $200,000 in a four month period are difficult to protect from taxes. Relative to earlier years, radically new investments, and purchases had to be made. The advantage of high interest payments, of vessel depreciation, of income or rental property, had to be accepted and acted upon. Some made this adjustment more easily than others and they are now in a more favorable economic position.

Given the modest twenty-year population projection above, we are not projecting a rapid expansion of the employment base of the community. If minor secondary cannery operations commence within the next five years it is still unlikely they will generate significant direct employment opportunities. As is most common, outside cannery employees will be brought in to run the canning lines and only the fishermen will bene-
fit directly from the enhanced market. Several local families are dependent upon cannery employment during the fishing season. The difference in income between the two groups is large. Cannery employment, however, can produce substantial income over the entire fishing season. The work is hard, monotonous and long. Twelve, fourteen and sixteen hour work days are not unusual during the height of the season. Line workers earn straight time for the first forty hours of the work week and then time and a half thereafter--this is usually computed on the basis of an eight hour work day, anything after eight hours is paid at time and a half. Bi-weekly checks of fifteen hundred to two thousand dollars are fairly common. Thus, families with more than one cannery employee are able to live comfortable lives during the remainder of the year. Their income is not, however, remotely comparable to that of the fisherman. The genesis of strict lines of socioeconomic class is evident.

Non-fishery related employment is not likely to expand rapidly over the next 10-year period. State or federal positions, not now a prominent part of local employment, are not expected to increase significantly during this period. Local government employment, service and maintenance positions, will grow rapidly, however, and a local firefighting force will also be established. The number of teachers required to meet educational needs will grow at the same rate as the population. All these changes will occur in minor incremental stages which will not be met with significant resistance on the part of the wider population.

Unemployment has yet to become a problem in this community. For the bulk of the year the dominant pattern is elective non-employment in any
case. In discussing unemployment we must first specify that the most significant period of employment for the indigenous residents of this community is the summer fishing season. Almost everyone works or can work during this season in some capacity. During the rest of the year there is little or no employment opportunities for those who would want to work, but again, this has always been the case and is accepted as normal. While very few people may actually be employed in February of any year, to say there was high unemployment would distort the picture. Understanding this historical pattern, we are nevertheless projecting an increase in both unemployment and in the sense of lack of perceived alternatives during the next ten years. There is a growing entrepreneurial sentiment in this community. People seem no longer satisfied with "kicking back and waiting for the next season." Many have developed new interests and hobbies from which they are also deriving supplemental income. This constructive sentiment is expected to grow, to create more productive leisure time, and ultimately increase enthusiasm for off-season employment—even though the objective need for income is not present. This is a very subtle type of trend, one that will occur very gradually over long periods of time, and will not be noted as significant by the population.

The economic objectives of the local regional corporation are certain to advance during the next five to ten years, and to accelerate rapidly during the 1990's. Land held by this corporation is very valuable and the corporate management and officers are committed to efficient profit operations. Employment generated by these operations will gradually increase, first in the administrative sector and then in the service and maintenance sectors. Most of this will be direct local employment—
mostly fishermen's wives.

Housing starts, property value, home improvements, and consumer purchases will all increase through 1990. The quality and quantity of goods and services acquired will also increase. Such consumer behavior need be predicated only on an increased earning level, but further support comes from the fact that the initial level of consumer awareness from which this population has emerged indicates that many so-called household conveniences will have to be purchased before the full battery of standard items is acquired. Once these "necessities" are purchased, consumers can begin to diversify.

Social

Kinship is still the dominant unifying force of the community. Its role, however, given new environmental conditions, has changed with the times. Other networks and structures have usurped authority that was once the sole purview of kinship connections. The selection and training of crew, associational networks, hunting and subsistence partners, working relationships, etc., have all had a disintegrative effect on traditional kinship functions.

Part of this change is a product of wider experiences and personal friendships, but most has been a result of economic forces. Greater earnings have allowed greater alternative behavior patterns. The rapid influx of a wide range of options constantly set up situations where one value is judged against another and the medium used to weight these alternatives is commonly money. Over time this medium becomes the authoritative value--whatever is highest on this scale is the superior
option. Many values are lost entirely to this medium of material exchange.

King Cove has a mixed marital pattern. Many spouses are obtained locally while many others are found in other communities of the lower Peninsula, in Seattle, in Kodiak, or in Anchorage. The trend will continue mixed through about 1990. If a trend must be noted, it is in the direction of village exogamy—but the larger population expected during this decade, improved city facilities, etc., may minimize this trend. People who might otherwise have emigrated may now marry and remain in the community.

As Langdon notes, there is an increased acceptance of unmarried mothers in the community. This may be generalized even further. The range of acceptable marital and personal behavior is increasing rapidly. A concomitant of this change is the decreasing effectiveness of social sanctions such as gossip, reprimand, ostracism, etc. This, in turn, allows an even wider range of behavior. A gradual increase in the general sense of social alienation should be expected as well.

The discussion of value homogeneity toward value heterogeneity in the Chignik Bay appendix also applies well to this community.

Ethnicity is not a profound local organizing principal. No one uses the term native to distinguish one local individual or group of individuals from another. Share-holder and non-share-holder are valid, if little used, distinctions. "Nativeness" is a murky concept to this population. While some families can claim a strong hereditary linkage to Russian Aleut forebearers, most can equally claim Scandinavian ancestry and cul-
tural traditions. This long existing pattern in this city, and in most other peninsular communities, has allowed a wide range of ethnic and cultural patterns to be accepted as "local" while other patterns are seen as "outsider." Local and non-local are definite social categories which serve to differentiate people. For certain purposes individuals from Belcovski will be classed as outside, for other purposes fishermen from Sand Point, False Pass and even Nelson Lagoon are seen as 'locals.' Thus, the definition and utilization of the term is normally determined by context or setting.

The Langdon data indicate a gradually increasing proportion of the community under the age of 20. This is also a pervasive trend for the region as a whole. One meaning of this statistic is that economic options open to the younger generation will have to be sought outside the community. Education will play an increasingly important role in determining economic alternatives.

Fishing, as an occupation, will not be a viable option for the entire upcoming generation. Only so many permits will be available for use and there will be a tendency for current holders to continue fishing long after they might normally have retired without entry restrictions. Fishery specialization will increase rapidly within the next five years. Captains will soon pass second, third and forth permits to crewmen, offspring and outsiders. As the average number of permits held by each fisherman declines, the number of fishermen on the grounds will increase, and the option of entering the local fishery will decline.
Political

The dominant political and structural changes destined to occur in this community have already occurred. That is, the community has already incorporated, their city corporation has already assumed a leading role in determining the course of economic development in the community, and the leadership and management (out of Anchorage) has already achieved a high level of professionalism. They have evolved to a level of political awareness where they must consider larger political arenas and objectives. In this they have already made significant initial progress. Local representatives from King Cove have already demonstrated their effectiveness in representing their community on the boards of regional and state organizations. What we project here is a gradual refinement of political technique, of working current organizations into their most useful form, and of expanding their interests and expertise on local, regional and statewide issues of concern to King Cove.

The question of how changes in the environment have affected the personality structure of this community is difficult and many faceted. That the impact of recent economic abundance has had a marked on the self-perception of local residents cannot be doubted. For most, we are willing to claim a beneficial change. This evaluation is based on the degree of self-reliant behavior, of general political assertiveness, of enthusiasm and bravado of the population, and on the characterization of life before the economic efflorescence. "The late sixties and early seventies were mostly bad fishing years, after that things got a lot better--in seventy-nine I caught over 100,000 fish." Owning a $250,000 vessel, having in excess of $100,000 in the bank and being able to claim
that the year's total personal expenses for his family are less than $10,000, certainly provides a secure foundation for a healthy self-concept. Measures of such nebulous concepts are bound to be untidy but we feel the almost universal use of the "before" and "after" contrastive set is sufficient evidence of the beneficial impact of economic success on general personality structure in this community—and others in the region.

Socialization techniques have, according to several informants, shifted radically. Many other sources claim patterns identical to their own childhood prevail. Our own assessment is that significant, though largely imperceptible, changes have occurred over the last ten years in socialization practices. The advent of television, of preschool education, of diminished use of physical punishment, of economic abundance and well-being, all support this contention. Early childhood rearing practices have been changed in numerous subtle ways. Toilet training, while rather laissez-faire, is now handled by pampers, feeding has become structured around Gerber's baby food, and the increase in available time and leisure has been reflected in the care and affect levied on children. While these are admittedly subjective indices, we feel confident that they reflect generalizable trends in socialization patterns. These trends and their effects on growth patterns, on familial relations, on future marital and social relations, are expected to continue as a subtle undercurrent in King Cove.

Levels of stress in King Cove are difficult to assess. We do not have access to the appropriate historical indicators of mental illness,
accidents, suicides, and violent crimes for this community. If local reportage is accepted at face value, then there are more stress causing factors in today's environment than their were in the past. In a phrase very similar to one used in Chignik Lake, one King Cove resident responded that "in those days (in this case before Limited Entry) no one made much money but it seemed like things were easier...I really can't explain it." Clearly, the organization of stress causing factors is radically different from those of the past. The means of survival are readily available to everyone—survival is no longer at issue, the effort to 'get ahead,' economically, politically, or interpersonally has replaced ecological stress with social stress.
NELSON LAGOON

Introduction

Nelson Lagoon is an Aleut village of about 55 people located on a narrow sand spit on the northern side of the Alaskan Peninsula approximately thirty air miles west of Port Moller. The village has been in existence as a permanent residence for only fifteen years, but the area in which it is located has seen a long history of interaction among Native Alaskan and Euroamerican groups.

The village derives its name from the lagoon on which it is situated which was named in 1882 for Edward Nelson of the United States Signal Corps. Nelson was an explorer in the Yukon delta region between 1877 and 1920, and spent time in many regions of the Alaskan Peninsula.

The area was the location of fishing and trapping activity for most of the nineteenth century. There seem to have been three groups operating in the region in the late 19th century, one in Port Moller, one at Bear River, and one at Herendeen Bay. Between 1890 and 1920 a group of Eskimo from the Teller region of the Seward Peninsula relocated to the Nelson Lagoon area, but animosity arose between them and the indigenous Aleuts and most of the Northern Eskimo moved on to the Pilot Point Ugashik area.

Nelson Lagoon was thus the site of considerable fishing activity during the late nineteenth century, and this is reflected in the fact that the lagoon was a native fish camp for years until it was settled per-
manently. Permanent settlement began in 1906 when a salmon saltery was established, and in 1915 a salmon cannery was built which, however, operated for only two years until 1917. The cannery was actually on Egg Island, located in the lagoon itself.

These first attempts at establishment of salmon processing were uniformly unsuccessful, with the result that the area reverted to only seasonal activity following the closing of the cannery in 1917. It was not until the middle of the century that permanent settlement was again attempted. However, though permanent settlement of Nelson Lagoon did not occur until the 1950s, the forebears of these settlers were in the region from as early as the first part of the century. The present population of Nelson Lagoon is derived from the mixture of Scandinavian fishermen active in the area in the 1920s and Aleut women with whom they mated. The founding of Nelson Lagoon as a community in its own right can be traced directly to the efforts of one man, Charles Franz. In the mid fifties Franz convinced three separate segments of the population of Herenden Bay to relocate at the site of modern day Nelson Lagoon. The population of the community has grown steadily since this time to 43 in 1970 and a reported 59 in 1980.

The key variable in projecting change in the community lies in its degree of social cohesion and kin-based social relations. As with the other communities in the region, Nelson Lagoon is expected to undergo an increase in income levels and productivity in the commercial sector of its economy. However, many of the consequences of this economic activity, including social stratification, community conflict and expansion of political organization, are not expected to occur to any signi-
Significant degree in Nelson Lagoon. This is because of the intensity of the kin-based social relations operating in conjunction with its small size and low population. These kinship affiliations appear stronger than in most other communities of the region and seem to have adapted well to recently accelerated economic change. Political activities will be directed towards preserving existing resources from outside exploitation, rather than expanding the local governmental framework or seeking new resources from regional, federal and state agencies. Changes in the educational patterns will also be influenced by the desire for self-sufficiency and the high degree of community cohesiveness. Social networks, religious organizations, and health care are expected to remain relatively constant.
Ecological

Nelson Lagoon is situated on a narrow sand spit extending to the east and fronted on the north by the Bering Sea. The lagoon itself is located between the spit and the mainland of the Alaskan Peninsula to the south. The area is a complex of marshy lowlands along the coastline of the peninsula, interspersed with tidal flats, coastal inlets, and lagoons. The spit itself is composed primarily of volcanic sands and gravels. The community is built on former beach ridges now partially stabilized by the growth of lowlying vegetation. The beaches in the area are composed of dark sands and rounded cobbles, backed by sandy berms partially stabilized by vegetation. The Hudu (or Hoodoo) River flows from the south into the lagoon and provides a major source of salmon which is exploited by the local population. Water and wind erosion are significant ecological factors, and the southern face of the spit (facing the lagoon) has been estimated to be experiencing an erosion rate of one to two feet per year.

Nelson Lagoon is located within the maritime climate zone of Alaska, which is characterized by relatively mild winters and cool summers. The warmest month of the year is August, and the coolest is February. The area is on the path of west to east storm tracks of the North Pacific, and therefore has periods of strong wind, especially in winter. The mean average annual wind speed is 9 knots, though winds of hurricane force have been recorded. Precipitation averages 37 inches per year, and is heaviest from July through October. Snowfall averages 99 inches
per year from October through May. During severe winters Bering Sea pack ice may block navigation, and the shallower parts of the lagoon freeze easily.

Nelson Lagoon shares with other communities of the Alaskan Peninsula access to a great variety of land and marine resources. Marine resources include several varieties of salmon (most important are red and silver salmon, with modest numbers of king and dog salmon), crab (king, with smaller numbers of dungeness), herring, halibut, and cod. Most of these marine resources are unexploited, with the exception of salmon, primarily a commercial activity, and crab, primarily a subsistence resource.

Nelson Lagoon is in a somewhat disadvantageous position in terms of exploitation of land resources. This is because the village is located some distance from the caribou and moose resources on which many other villages of the north peninsula depend for a portion of their subsistence needs. The Alaska Peninsula caribou herd is usually at least forty miles from the village and if it is to be exploited a journey to Port Moller or up the Hudu River is necessitated. The same is true of moose, since the major population available is located east of the mountains near Herendeen Bay. As a result, local exploitation of land resources is probably lower than any other village on the peninsula and, by extension, dependence on imports is correspondingly higher.
External Government

As with most communities of the Alaskan Peninsula and Aleutian Islands, the major external forces impacting on Nelson Lagoon can be divided into political and economic factors, and ultimately revolve around the impact of legislation promulgated at the state and federal levels during the last ten years and the economic impact of that legislation. Central are the Alaska Native Claims Settlement Act of 1971 and the Limited Entry Act of 1973.

Under the terms of ANCSA the village corporation has selected all unpatented lands in the township plus land amounting to approximately two townships from areas adjacent to the township which will be transferred to local inhabitants once the village incorporates as a municipality. The net result of ANCSA has, therefore, been minimal so far, although it has introduced a certain xenophobia in which the motives of outsiders in coming into the area and settling permanently have been called into question.

Limited Entry has had the greatest impact of any outside piece of legislation. The effects have been both political and economic. Politically, limited entry has encouraged greater participation of local inhabitants on regional and state boards, a point covered more extensively below. Economically, the implementation of limited entry has resulted in vastly increased economic returns from the fishery, particularly the salmon fishery, with resultant impacts in the areas of recreational activities, capital investment and nature of capital equipment, off season activity patterns, housing, community services, and so on.
Intrasocietal

Community Facilities

Since the foundation of the village in the mid fifties Nelson Lagoon has developed most of the amenities necessary for community survival, communication, and transportation. The village now has electric power generated by a central electricity plant which was funded primarily through a state grant received in the late seventies. The plant consists of two 60 kw generators, along with a 10 kw backup generator for the school. Previous to this each household depended on private generators, and the latter have been connected into the central system, although they were not yet operating at last report. Power is also being generated through a wind generator system. This system was installed as a demonstration project in 1976, and finally became operational this year (1981). The generator has a 20 kw capacity, and is intended to test the feasibility of expanding dependence on wind power not only in Nelson Lagoon, but in the entire peninsula.

Most homes in the village are heated by oil cook stoves, and three have oil furnaces. Oil is imported to the village and stored in eight fuel tanks located on the sandspit east of the village. The village has two tank trucks, one for oil and one for water, and most homes have 55 gallon drums for storage. Some also use propane for some appliances, and those who do import gas from Port Moller.

Water presents the most serious problem for Nelson Lagoon. The water available from local wells is heavily contaminated by salt and is very brackish. Local water is therefore unsuitable for human consumption,
although it is used for toilet facilities and washing clothes. In order to obtain drinking water villagers must travel approximately sixteen miles to the southwest to a lake and transport the water back to the village where it is stored. The Public Health Service has, in the last few years, drilled three different wells in an attempt to provide a central drinking water source, but saltwater has seeped into them as well and rendered the water undrinkable. The most recent suggestion for overcoming this problem has been the development of a reverse osmosis desalination plant in which salt water would be processed into suitable drinking water. There is no local sewer system with the exception of cesspools, and there is no local garbage disposal system with the exception of burning or leaving garbage in the open to decompose or blow away.

Communication facilities are still fairly rudimentary, and include a single community telephone located in the city hall. There is no television transmission into the village, although most households have televisions on which they play video tapes which are circulated from home to home. As yet there is no satellite television hookup available.

Transportation is primarily by pickup truck, three-wheeler, or snowmobile, and nearly every household has a vehicle of some sort. There are approximately three miles of road around the village, including a stretch to the airport. Transportation to the outside is primarily by airplane, and there are three airstrips, all small and suitable only for small planes. However, the State Division of Aviation has plans to construct a 2,600 ft. airstrip east of the village able to accommodate larger planes as well. Since the village has no navigational aids all
flights operate under Visual Flight Rules (VFR), which effectively limits flights to those periods of good visibility and low winds. Weather permitting VFR navigation occurs about three quarters (75%) of the time.

Nelson Lagoon has gone through two periods in which housing construction was particularly high. In the late sixties there was a spurt of new housing, with another surge in the last three years. In 1979 four new homes were built, in 1980 three more, and in 1981, thus far, one house has been constructed. Houses in the area were traditionally built into the sand dunes for protection from the wind, snow, and rain. Off to one side of the main structure a smaller structure was built which usually included a shed and perhaps a shop in which to work on gear and repairs. The modern houses now being built in the village combine this traditional approach with factors reflecting the increased level of affluence of the community. Houses are now often two stories, with the first story occupied by the shed, shop, and related rooms, and the second designed in the pattern of a modern ranch style house. Houses are thus specifically adapted to life in Nelson Lagoon, while additionally providing the amenities associated with a modern home.

There are now thirteen separate houses in Nelson Lagoon, and several more will probably be constructed in the next few years. Each house has most of the modern appliances found in any home in the "lower forty-eight" such as dishwashers, washers, dryers, color television, stereos, and so on.

Other structures in the village include a school, storage sheds, a community building (this includes the village health station, tribal coun-
cil, and village corporation offices), and bulk fuel tanks to the east of the village. There are also two summer fish camps located to the east of the village. Both the community building and the Public Health Service clinic were opened in 1978.

Demography

Nelson Lagoon is a relatively new village, for all intents and purposes less than twenty years old. Overall population trends for the village in the last forty years have varied nearly inversely with trends for the two nearest villages, Port Moller and Herendeen Bay, reflecting the growth of Nelson Lagoon at the expense of the other two. According to the Alaskan Peninsula Socioeconomic and Sociocultural Community Profile for Nelson Lagoon the population of these three villages have been as follows for the last forty years:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nelson Lagoon</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>43</td>
<td>59</td>
</tr>
<tr>
<td>Herendeen Bay</td>
<td>13</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Port Moller</td>
<td>45</td>
<td>33</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

These figures are only approximate, and one problem is the definition of permanent population, which explains the assessment of the population of Nelson Lagoon in 1960 as zero. It was during this period that the population of the village was stabilizing for the first time, and for this reason the extremely large jump from 1960 to 1970 is more apparent than real. Nonetheless, the growth from 1970 to 1980 is a measure of real growth and represents a healthy 37% increase in population during the
decade. It should be noted that the total for 1980 is not firm, and that through much of this report we will use a figure of 54 which is our most accurate estimate of the total population.

The age and sex structure of the village reveals some interesting facets. First, the sex structure is unusual in the presence of more women than men. There were, in 1980, 26 males (47.3%) and 29 females (52.7%). Among the females probably the most important group for the future of the village is a cohort of several women in their twenties who have, as of yet, been unable to find marriage partners. If this situation continues it may have serious consequences for the pattern of future growth of the village. On the other hand, the age structure of the village points in the opposite direction, that is towards continued growth. Almost half the population is under 19 (47%), and only 13% of the population is aged 40 or above. Of these latter several are women since five households in the community are headed by women, also a relatively high figure in comparison to other peninsula villages.

The village members identify themselves as Aleut. In fact, however, all families but one can ultimately be traced to a union of Scandinavian or Euroamerican men and Aleut women. The single exception to this rule is derived from a Russian-Aleut mixture.

Structure

Values
The value system of Nelson Lagoon may be viewed as modelled on the syn-
cretic mixture of traditional Scandinavian and Aleut norms, values, and
guidelines for behavior. The community places greatest emphasis on kin-
ship and family responsibility, egalitarianism, mutual aid and coopera-
tion. Industry and self-sufficiency are also highly valued, but do not
appear to be as dominant in the value hierarchy of Nelson Lagoon as in
other communities. Ethnic identity has increasingly become a more
important component of the value system as the community searches for
unifying factors which distinguish local residents from outsiders.

While the values of the larger sociocultural system are gradually
replacing traditional values, and displays of wealth, economic, social
and political competition play an increasingly more important role in
local life, this process does not appear to be as rapid or as widespread
in Nelson Lagoon as it is in other communities in the region. Wealth,
education, and socioeconomic status are viewed as important, but these
values remain at lower, more pragmatic levels.

Organization

Economic Organization

The economic structure of the village is totally dependent on the salmon
fishery. Though there are several other marine resources available for
exploitation in the region, including crab, herring, and bottomfish,
very little exploitation of resources other than salmon occurs. Over
the last decade the Alaska Peninsula gill net fishery has been the most
profitable of all such fisheries in the state of Alaska. Nelson Lagoon
itself is recognized as the most important red and silver fishery in the

80
entire North Peninsula region. The fishermen of Nelson Lagoon have specialized in certain types of fishing strategies, and have, through informal agreements among themselves, taken maximum advantage of the richness of the fisheries adjacent to the village.

The fishing cycle of the village begins in late May or early June with runs of reds in the Hudu River fishery. Some Nelson Lagoon fishermen also fish for reds from the Bear or Sandy Rivers near Port Moller, and a few will go to the False Pass fishery in June as well. After the run of reds has finished the Nelson Lagoon fishermen have two choices. First, many take a few weeks off to repair gear and prepare themselves for the run of silvers which begins around August 20 and goes until the middle of September. Second, some will take this time to fish for dogs (chum salmon) which run from late July until early or mid August. In recent years the economic return realized from reds and silvers has meant that fewer people feel the need to take advantage of the dog runs, especially as dogs bring a smaller return than either reds or silvers.

The Nelson Lagoon fishermen are unusual in their informal agreement to pursue certain fishing strategies. The fishermen of the community have come to an understanding that one must drift only directly offshore from where one has established his set net site. This minimizes conflict among fishermen for sites, effectively excludes outsiders from the fishery as the prime spots have been allocated by tradition to fishermen from the community itself, and tends to equalize earnings among local fishermen. Seven, or about half, of the households in the village practice this strategy. Other strategies include a combination of purse seineing and drift gillnetting, practiced by two households, exclusive
drift gillnetting, and exclusive set gillnetting. It may also be the case that while a family practices primarily one strategy, certain family members may be involved in pursuing other strategies.

These informally organized fishing strategies have been augmented by legislative and management measures which have operated to strengthen the position of the Nelson Lagoon fishermen vis-a-vis outside fishermen. Particularly important here are two measures. First, in the late sixties a regulatory management measure was introduced designed to increase escapement from the Hudu River. Effectively this measure closed the ocean side of Nelson Lagoon to fishing from the mouth of the lagoon to the Caribou Flats area, thereby eliminating that pressure on the resource. For the local fishermen, this has meant that it is much more difficult for outside fishermen to come into the fishery since a major portion has been closed and the locals have pre-parceled the remaining fishing areas.

Another measure which increased local control over the fishery has to do with the distance mandated between the set nets in the Nelson Lagoon fishery. In the Hudu River fishery the distance established between set net sites is 1800 feet, by far the longest of any North Peninsula fishery. By way of contrast, the set net distance in Bristol Bay is only 300 feet. Effectively this means that only one-third as many fishermen can exploit a given area of the Hudu River fishery as of the Bristol Bay fishery, and this has again worked to the advantage of local fishermen and to the detriment of outsiders.

The result of these factors in combination has been an extremely productive fishery almost totally under local control. Moreover, the fishery
has been consistently productive, unlike other fisheries in the state. Although there was a slight downturn in the early 1970's it was not nearly as bad as the downturn which affected, for example, the Bristol Bay fishery during the same period. Although this period saw many Bristol Bay fishermen take outside jobs, primarily in canneries, none of the Nelson Lagoon fishermen were forced to abandon the fishery even temporarily.

The Nelson Lagoon fishing fleet consists of three major classes of ship. First, and most important, are a group of 32 foot fiberglass vessels designed for the drift gillnet fishery. Second is a group of 12 to 16 foot aluminum, wooden, or fiberglass skiffs for set gillnetting, primarily at the mouth of the Hudu River. Finally, a recent introduction has been jet boats of which there are now six ranging from 22 to 28 feet. The Nelson Lagoon fishermen are more heavily committed to drift gillnetting than any other area in the region, and this fact is reflected in the nature of the fishing gear. There are basically two sets of gear which most households own, one for drift gillnetting and one for set gillnetting. The fishermen have been involved in an active upgrading of this equipment in the last five years, with most improving their set gillnet gear during the period from 1976 to 1979 and their drift gillnet gear during the last two years, particularly with the introduction of the jet boats.

Nelson Lagoon fishermen also hold a fairly high number of permits. For sixteen families in 1981 the permits held included 2 purse seine, 15 drift gillnet, and 18 set gillnet, for a total of 35 permits. This comes to an average of 2.2 permits per family or, for a total of 23 per-
mit holders, 1.5 permits per permit holder. One interesting aspect of the distribution of permits among Nelson Lagoon fishermen is the inordinate number held by women, some 35% of the total. This distinguishes Nelson Lagoon from most other communities on the peninsula although such a pattern is apparent in Port Heiden and Ugashik.

The Nelson Lagoon catch is marketed through the Peninsula Marketing Association. The Association has a dual responsibility. First, it negotiates prices per pound in the spring for the fishermen. Second, it represents the fishermen to the Board of Fisheries which holds hearing on the Peninsula-Aleutians Salmon Regulations, which are of critical importance to all fishermen in the region. The Association is a seven man board which has responsibility for the protection and representation of fishermen all along the peninsula. Of these seven members two are from Nelson Lagoon, which means that the village is heavily over-represented on a very important regional agency.

**Social Networks**

Kinship is an extremely important organizational matrix for social, economic, and political activity in the community. Only three lineages account for over 80% of the households in Nelson Lagoon. Each of the three major lineages of the village, all of which originated with Aleut-Euroamerican unions in the early part of this century, remains strong today. In addition two of the three households not tracing descent directly from one of these lineages are nonetheless related through affinal links to at least one of those major lineages. Two of these lineages are headed by matriarchs, while the third is headed by a male
who has outlived his spouse. These three lineages are also interrelated through many affinal links which have developed over the last forty years, with the result that the village is an intensely interlinked kinship group characterized by strong informal behavioral sanctions that characterize multiplex societies.

While the village itself is united through kinship, there are also important kinship links to other villages in the region. Most important here are links to False Pass, on the eastern end of Unimak Island. There are nine households in Nelson Lagoon which have both spouses in the household. Out of these nine, four represent unions between males and females who are both from Nelson Lagoon while almost as many (three) represent unions between males from Nelson Lagoon and females from False Pass. The remaining two unions are between a Nelson Lagoon male and a female from California, and between a Nelson Lagoon female and a male from King Cove. Outmarriage shows a similar pattern, but with King Cove assuming a position equal to that of False Pass.

Social cohesion is very high, and has resulted in a unified approach in many areas which go far beyond kinship. There has, for example, been a traditional pattern of mutual aid in such activities as housebuilding which, though diminished with greatly increased earnings, has persisted. Another effect has already been noted, that is the ability of the villagers to informally agree to certain fishing strategies which have the effect of increasing the income of local fishermen at the expense of outside fishermen. None of this would be possible without consensus at the local level. Finally, local inhabitants are capable of uniting to prevent outsiders from exploiting local resources. An example of this
occurred recently when an outsider entered the community and "overstaked" his property and then tried to register it, which would have given him a foothold in the community and, eventually, a claim to land under the "traditional use" provisions of ANCSA. However, local community members banded together and made life generally uncomfortable for the individual, prevented him from fishing in the most productive areas, and, ultimately, forced him out of the village and purchased his permit.

Social patterns over the course of the year approach transhumance. That is, most are in the village itself during the fishing season but, once most of the runs are over, move on to other places for the off-season. The most popular locations for the off season are urban areas, including Anchorage, Seattle, San Francisco, and other west coast cities. Many spend only a month or two in these urban areas and, when they tire of the city, move back to Nelson Lagoon for the remainder of the year.

Political Organization

Local Activities

Nelson Lagoon is governed by a tribal council consisting of five members. As in all other aspects of village organization, kinship is a particularly important organizing principle. All five members of the council are male, and all five are from one of the three major village lineages. These males are the most important males from the lineages, and are also among the most important and large-scale fishermen in the village. The tribal council has been involved in several aspects of application for and receipt of outside funding for various projects in the community. Recently the council began receiving state revenue
sharing funds of $25,000 per year. In 1980 the council applied for and received a $40,000 RDA loan to establish a centralized electricity generating plant. The council also received funds in 1976 for the establishment of an experimental wind generating plant which became operational this year (1981). Finally, the council applied in 1980 for self-determination funds from the Bureau of Indian Affairs. However, the council has since decided that the extensive filing schedule demanded by the Aleut-Pribilof Islands Association for such self-determination funds is too complicated to justify re-application.

The village is unincorporated, so the political decisions regarding distribution of land under ANCSA have yet to be made. There is, however, a village corporation which has selected lands to be included under the ANCSA allocation and this corporation has laid out plots to the southwest, along the peninsula, for shareholders. The corporation is known as the Nelson Lagoon Corporation, and has 54 stockholders essentially isomorphic with village residents. Thus far the major activity of the corporation has been the establishment and operation of a small fuel company which services the community. The board of directors of the corporation consists of the same men who make up the tribal council, reinforcing the perception of the importance of kinship as an organizing principle in the village.

**External Relations**

Local political figures are well represented on regional bodies. The Peninsula Marketing Association, which negotiates prices for fish for many of the villages in the region, has two members, out of a total of seven, from Nelson Lagoon. One of these two is also the chairman of the
REAA. Thus, the input from the village to regional affairs and decisions is substantial.

Religious Organization

The villagers are nominally Russian Orthodox, though there is no church in the community. There appear to be some generational differences, with the older cohort, especially the Aleut women, clinging to a certain extent to Russian Orthodox religious beliefs, while the younger generation(s) have become more secularized. Religion does not appear to be an important sector of life in the village.

Educational Organization

Nelson Lagoon has a single school which covers primary to secondary education. Most of the local children go on to complete their high school education, though this is not always the case. In an economic environment in which high levels of income are available to those who are part of the community it is often the case that an individual will forego educational attainment in the service of making a living. Nonetheless, the problem of drop-outs is minimal. Indeed, there have been several students in recent years who have not only completed high school, but have gone on to take at least some college courses, usually in Anchorage.

Health Care Organization
Health care is available in Nelson Lagoon through the presence of a community health aide, trained under the Public Health Service Native Health Service Program. This aide worked originally out of a house, but has recently been relocated to a health station in the new community center. The aide has access to the Native Medical Center in Anchorage by means of the Public Health Service telephone. In addition the Public Health Service provides what amounts to itinerant medical and dental service once or twice a year through visits by personnel to the village.

Output

The structure of the village of Nelson Lagoon has undergone significant change over the last decade, especially as related to the introduction of external regulatory and legislative measures. Most important are the enactment of Limited Entry and the Alaska Native Claims Settlement Act, both introduced in 1971. The combination of these measures and local reaction to them will result in several important directions of change for the future. These changes will revolve especially around increases in social cohesion, the further mobilization of local political resources in order to deal with external forces as well as for protectionist purposes (with attendant increases in animosity towards outsiders attempting to exploit the village and its resources), continued increases in local wealth and levels of income, changes in educational patterns, and continued stabilization of the community as a permanent village site.
**Economic**

Two processes have been occurring in concert which together hint at the future direction of economic change. First, there has been a quantum increase in earning levels with the introduction of limited entry regulations. This has resulted in the introduction of modern equipment and gear as well as an expansion of travel and recreational possibilities. Second, along with this vast increase in income levels has come a narrowing of the economic base on which such income depends. That is, since limited entry regulations greatly inflated the value and return of a particular resource, salmon, the villagers have become more specialized than was previously the case.

The result has been a decreased dependence on local subsistence resources as a cash economy has been introduced and come to dominate the village economy. Whereas the villagers traditionally depended on several varieties of local resource, both marine and terrestrial, for survival, such is no longer the case. With the increase in cash incomes it is often seen as easier to import food and other subsistence needs from outside the community than to pursue traditional subsistence activities. In fact, however, Nelson Lagoon has historically depended less on local subsistence resources than have most other villages on the Alaskan Peninsula. This was particularly true of caribou, which formed an important part of the subsistence of most peninsula villages, since Nelson Lagoon is removed by some distance from the main caribou herds. Even prior to limited entry any attempts to utilize the caribou resource involved a lengthy journey and an investment of considerably more time than was the case for other villages in the region. Even salmon is no
longer seen in terms of subsistence, but is rather treated as a "cash crop", and locals report that less salmon is consumed today than was traditionally the case.

There will also be changes in the near future with the ultimate allocation of lands under the ANCSA agreement which will further enhance the economic position of villagers. Thus, in the short term we project that income levels will remain high and perhaps increase slightly, though the period of massive increases is clearly over. Nonetheless, the important point from our perspective is that the village will, over the next ten to twenty years, be pulled firmly into the more encompassing cash economy of the region, state, and nation. Dependence on local subsistence resources will decline even further as villagers become accustomed to the possibilities of the cash economy.

A further outside influence concerns cutbacks in state and federal assistance programs. AFDC, CETA, and other federal programs will be vastly reduced over the next decade. However, Nelson Lagoon residents have never depended heavily on any of these federal programs, so their reduction or termination should have minimal impact in the village. State funds and revenue sharing, on the other hand, have become more important in the village in the last five years. We project that such state funding should not undergo the cutbacks experienced by the federal programs for at least another decade. Nonetheless, beginning in the second decade of our projection period we see state funding undergoing a reduction, and if the villagers become dependent on these programs this could cause some inconvenience.
The most important aspect of this scenario, however, revolves around the success or lack of success of the villagers in maintaining the economic advantages they have managed to accrue in the last two decades. These include the distance between set nets, which is now 1800 feet, and the maintenance of the prohibition on fishing on the seaward side of the spit of land on which the village is located. These two measures, originally introduced in the sixties, have given the local population a distinct competitive advantage over outside fishermen, and any change in them would alter significantly the economic outlook for the community.

Social

There are two factors of considerable importance with respect to social cohesion for the foreseeable future. The first has to do with the nature of ethnic identification, and the second concerns levels of social solidarity. With the changes in the environment which we have noted above, and the resultant changes in village structure, both of these aspects may be expected to undergo considerable further change in the directions already noted.

Ethnic identification is predominantly Aleut, although the genotypic composition of the population is actually Aleut with a heavy admixture of Scandinavian and lesser amounts of Russian background. With the introduction at the beginning of the twentieth century of Scandinavian men who married and mated with Aleut women a process of ethnic mixture began which has lasted to the present. This, along with modest inputs of Russian heritage, has, or will eventually, resulted in a dilution of Aleut stock and an increase in the Euroamerican contribution. It is
likely that the actual percentage of Aleut blood may have already fallen below 50%, and with this change one would expect that the identification of oneself as primarily Aleut might undergo change with a greater emphasis being given the Euroamerican component of ethnicity. Again, however, external forces have intervened to alter the situation. In the social realm the most important external force has been the ANCSA decision.

ANCSA has acted to reverse the historical trend towards the loss of Aleut identity. With the implementation of this piece of legislation the ascription of an Aleut identity has been changed from negative to positive. Whereas previous to the ANCSA decision the identity of Aleut was viewed, at least partially, as denigrative, the economic potential implied in ANCSA made the assumption of such an identity much more positive. It is now to the advantage of villagers to emphasize the Aleut component of their identity in order to reinforce their claim to a part of the land allocated under ANCSA. Thus, during the last decade, pursuant to ANCSA, there has been an efflorescence of interest in seeing oneself as Aleut, and this is a process we expect to continue into the near future.

Connected with this resurgence of interest in an Aleut identity have been the pressures brought to bear on the village from outside. With limited entry regulations the salmon resource has become much more valuable, and attempts on the part of outsiders to exploit that resource have grown apace. This renewed conflict with outsiders has also served to increase the local perception of themselves as distinct from "foreign" groups, and one of the ways in which this distinction is most
easily conceptualized is through an emphasis on the Aleut heritage. At the same time this outside threat has increased village cohesion in other ways not directly related to ethnicity. Thus, the ability of the villagers to informally agree among themselves on fishing practices, patterns, and strategies (such as the agreement to drift only directly offshore one's set nets) has increased in the last decade and has strengthened the villagers hand vis-a-vis outsiders.

We expect these patterns of increased ethnic identification as Aleut and increased village cohesiveness to continue during the projection period. Again, the basic organizing principle behind such processes is the kinship system, and we have noted the extremely high level of interconnection among the lineages making up the village. We expect the pattern of intense intermarriage among local lineages to continue, and where this is unfeasible we expect marriage partners to be carefully selected from other villages in the region which share a common Aleut heritage. This combination of regional and local linkages is the most direct way in which the villagers can guarantee continued control over their local resources and continued strength in opposition to outside resources.

**Political**

Politically the most important direction of change over the next two decades will be a shift in the venue of political consensus and conflict. The village has, over the last decade, become an important voice in regional and state political bodies. As noted, several members of the village are on regional boards which are of importance both politically and economically to the future of the community. We expect this
trend to continue as the village becomes increasingly cohesive socially and is able, thereby, to present a more united front to outside regulatory, management, and legislative bodies.

We project that the next decade will see a continuation of the shift of political conflict from the local arena to the regional, state, and even federal arenas. As the local arena becomes more integrated and cohesive, and as the perceived threat from outsiders increases with the economic potential of the region, the importance of concerted action by local leaders will increase. Thus, the village, and the region of which it is a part, is embarking on a period of increased social, economic, and political integration which will serve it well in the future.

A major political factor for the next decade revolves around the implementation of the ANCSA decision. It is likely that within the next five to ten years the village will incorporate, thus becoming eligible for land to be distributed under ANCSA. Such land allocation might become the catalyst for local political infighting under other circumstances, but given the other processes of change outlined here we feel this is unlikely. The social and economic forces promoting local solidarity are of such strength that we anticipate the transfer of land to the local corporation should proceed without significant local conflict. Instead, the major arena of conflict will be between the village and outsiders who might seek to take advantage of the ANCSA decision to establish themselves as landowners in the village environs. This has already occurred on a small scale, and such attempts will probably increase in the near future. The existence of these outside threats, and the increased cohesion of the community, will conduce towards a minimization
of political conflict at the local level.

Religion

Though religion does not appear presently to be a particularly important aspect of village life we project a modest turnaround in this sphere. This is again a result of the increasing importance of traditional identity as a marker of distinction between "insider" and "outsider". Russian Orthodoxy is a potentially important component of ethnicity for this region and for the village of Nelson Lagoon. Thus, the identification of local individuals as Russian Orthodox is expected to undergo a modest increase over the next few decades as a means of increasing social cohesion and differentiating locals from outsiders. However, we do not expect that there will be a particularly strong movement towards the establishment of a church in the village, nor will there be a notable increase in adherence to Russian Orthodox practices per se.

Education

Nelson Lagoon has had a good record in terms of high school education for the children of the community. Most have gone on to complete high school, and a few have gone on to college after graduation. We expect this trend to continue and to accelerate over the projection period. This will occur for two interrelated reasons.

First, the increases in income and the evolution of a transhumant pattern in which part of the year is spent in the village and part in urban areas of the state and nation brings the population into contact with
other groups among whom education is valued very highly. This will encourage village children to continue in the educational system beyond what would normally be the case. Second, and more importantly, education itself will come increasingly to be seen as an important resource to the community itself. That is, with the increase in importance of external legislative and regulatory measures it will become more important to have local members of the community expert in interpreting and framing regulations which have a direct impact on the village, particularly economically. Thus, we expect that a certain few local children will be encouraged to continue their educations to the professional level.

This will be a result not only of the perceived needs of the community, for lawyers particularly as well as, perhaps, doctors and other professionals, but also as a result of the increased perception of the village as a cohesive unit opposed to outside forces. As the economic ability to finance higher education dovetails with increased levels of mistrust of outsiders and increased needs for professional services we expect higher education to become correspondingly more important to the village.

Health Care

The most important area of change in health and health care over the next two decades will concern the nature of health problems facing the village population. We expect that increased contact with outside forces, increased levels of income, and resultant interaction with urban areas outside the region, increased problems of ethnic identification,
and so on, will result in a higher incidence of stress-related problems and ills. Thus, over the next two decades we project a continued increase in the rates of such disorders as alcoholism, suicide, accidental injury, and other stress-related disorders.

Health facilities have recently been upgraded in the village with the inclusion of a health station in the new community center. We expect this station to be gradually expanded to deal with the sorts of disorders outlined above, but existing facilities will be basically satisfactory for the health needs of the community over the projection period.
FALSE PASS

Introduction

False Pass is one of the most recent of many villages on Unimak Island. In the pre-Russian and Russian periods there were several Aleut settlements on the island. Sanak Island as well had several villages, and the area was once the center of the Russian otter trade. The Russians intruded into the area in 1759 with the exploratory voyages of Stepan Glotov. The initial period of Aleut-Russian contact was characterized by violence and the destruction of several Aleut villages.

Following this initial contact period Russian interest gradually shifted to the east including the Alaskan Peninsula and finally southeast Alaska. With the waning of Russian interest in the area life returned to a pattern similar to that which had obtained in the pre-contact era. Reportedly those Russians who remained became acculturated to the Aleutian way of life, usually took Aleut lives, and lived as Aleuts. The major influence from Russia remained the Russian Orthodox religion, but even this was more apparent than real as the traditional shamanistic practices and beliefs retained much of their efficacy. During several periods in the Russian era villages were moved or reconstituted in order to take better advantage of the local resource base, particularly the otter trade. Unimak Island Aleuts became concentrated at Morzhovoi, on the westernmost extension of the peninsula across Isanotski Strait from modern day False Pass, and on Sanak Island to the south. In 1823 a large number of Aleuts from Sanak Island were transferred to a new village.
site at Belkofski on the Alaskan Peninsula to reduce the strain on the otter population at Sanak and to better exploit the same resource in the Belkofski region.

The emergence of the present community of False Pass can be traced to the introduction of the salmon processing industry in the area. In 1916 Pacific American Fisheries opened a cannery at Ikatan, about fifteen miles south of the present site of False Pass. Somewhere around the same time a man named Hohn Gardiner became the first to homestead the area of False Pass. Gardiner subsequently, in 1925, sold 40 acres to P.E. Harris who opened a cannery on it two years later. Following this the village grew slowly but steadily, with several Aleuts residing in the region by 1930. The economic activities of the entire region now began to be centered around salmon and the cannery at False Pass. The dominant technique was the use of fish traps in Ikatan Bay designed to capture salmon headed north for Bristol Bay. By the 1930's the Sanak Islanders had switched to salmon fishing from otter trapping, and villagers from Morzhovoi were working in the cannery itself. During the 1930's and 1940's there was a gradual movement of people from Morzhovoi and Ikatan to the growing village of False Pass, with a particularly important move being that of the Shellikof family who purchased John Gardiner's house and began to reside in False Pass year round in the early 1950's. Evidently one or two households made the move from Ikatan to False Pass as well in the 50's.

The recent history of the community has been tied closely to the fortunes of the cannery and the salmon fishery. When the cannery was opened it spurred the founding of the village, but when it closed in
1974 it posed economic difficulties which remained unresolved until it was reopened in 1977. Currently the cannery is once again closed as it burned down in the spring of 1981 and has yet to be rebuilt. In fact, however, this has not presented insuperable difficulties to the community as they have been able to offload catches at King Cove in the meantime. This has meant a loss in fishing time and an increase in transportation cost, but it has not resulted in a major cut in earnings. These costs have been more than offset by the increased earnings from the fishery with limited entry.

The structure and activities of the village of False Pass have undergone major changes in the last decade, and most of these changes can be ascribed to the influence of external regulatory and legislative measures. As with most communities in this area the two most important measures have been the introduction of Limited Entry Regulations and the promulgation of the Alaska Native Claims Settlement Act, both in 1971. Changes have already occurred in response to these measures, and we foresee that during the projection period many of these trends will continue. The key variable in projecting the consequences of change throughout the forecast period is economic. Economic activity in the form of the commercial salmon fishing industry will dominate most of the changes in the overall social system. The most important of trends include a tendency towards a weakening of kin-based social relations, an increase in income levels and the development of class differences, increased rates of outmigration and a heightening of differences between permanent and seasonal residents. We also expect to see greater mobilization of local political forces as a means of dealing with external regulation and legislation, an increase in protectionist ideology and
practices as outsiders attempt to exploit the area, and changes in educational patterns as the local population comes to depend increasingly on local or extended-term professionals rather than the traditional high turnover of outside teachers.
Ecological

The village is located on the eastern side of Unimak Island, the easternmost island of the Aleutian chain, on the Isanotski Strait which divides the Aleutians from the westernmost section of the Alaskan Peninsula. It is located on the shoreline, on a flat beach and outwash plain of a stream which drains the steep, mountainous topography behind the village. Unimak Island is, as are all the Aleutians, a volcanically active area, and there are at least seven active volcanoes on the island, three of which are within 30 miles south south-west of False Pass. These three are Shishaldin (9,372 ft. and the highest peak in the Aleutians), Isanotski (8,025 ft.), and Roundtop Mountain (6,140 ft. and the closest of the three to the island). All three have been active in historical times, with the latter two experiencing ash eruptions in 1825 and 1845, respectively, and the former active at least 23 times since 1700, the latest in 1967. With the seismic activity which characterizes the region it is also an area threatened with tsunamis, and the village of Ikatan, approximately fifteen miles to the south, was inundated by the eastern Aleutian tsunami of 1946.

The topography of the village is low and swampy, and it forms the drainage area for the mountainous interior of the island. Most of the village is located on a small beach berm made up of a dark gray sandy gravel. Most of the drainage plain is made up of sandy gravels covered sporadically by sandy silts and clays and covered generally by six inches of topsoil. Bedrock is composed of interlayered, deformed, and
locally faulted volcanic flows, ash, and debris. The floodplain is apparently fairly active, and the stream which flows to the village has changed course several times in historical times.

The climate of the area is dominated by the maritime climate zone of Alaska which results in mild winters and cool summers. The warmest period of the year is summer, with the warmest month August which averages a high of about 55 degrees and a low of about 47 degrees. The coldest month is February which averages a low of about 23 degrees and a high of about 33 degrees. The highest temperature ever recorded was 78 degrees and the lowest was minus 13 degrees. Since False Pass is located directly on the track of North Pacific Storms moving from west to east there are frequently high winds, particularly in the winter. It is reported that the area occasionally experiences hurricane force winds, and in October of 1977 100 mph winds were recorded in the area. Rainfall averages about 33 inches per year, relatively mild considering the shoreline location of the village. Snow falls in all but the summer months and averages ten inches or more in each of the winter months. During the winter months sea-ice buildup may occur in conjunction with conditions in the Bristol Bay and Bering Sea regions to the north. Ice flows may block Bechevin Bay, which connects Isanotski Strait to the Bering Sea. Drift ice from the Bering Sea may, during severe winter conditions, block ship traffic in the entire area. In 1972 the entire bay was filled with ice, shipping was halted, and minor structural damage occurred to the cannery and its dock.
Extrasocietal

External Government

The major extrasocietal factors impinging on False Pass are, as is the case with most of the communities in the region, regulations and legislation promulgated at the state and federal levels. The most important in the last decade have been the introduction of Limited Entry fishing regulations and the Alaskan Native Claims Settlement Act.

The Limited Entry Act has had the most profound effect of any piece of legislation in recent memory. The effects of this legislation have ramified through all aspects of local life, including the political, economic, and social spheres. Limited Entry has resulted in skyrocketing income levels which have had impact in terms of equipment and gear for the fishery, recreation and expenditure patterns, resource utilization patterns, community facilities, and so on. Limited Entry has also had cultural effects in that it has caused a resurgence of interest in identification of oneself as Aleut at the same time that it has promoted social unity and cohesiveness. The future impact of this legislation will also be substantial, as we will note below.

ANCSA has had only slightly less impact than limited entry, but this is partially because the full effects of this piece of legislation are yet to be felt. Since False Pass is as yet an unincorporated village, it has not felt the brunt of the impact of ANCSA. Once the community incorporates as a municipality the allocation of land mandated under ANCSA will occur and the full effects of the legislation will be felt. Nonetheless, there have already been significant effects in terms of an
increase of community cohesiveness and an increased distrust of the motives of outsiders who come into the community. We will elaborate on these effects below.

The final area in which extrasocietal forces impact on the community revolves around levels of federal and state funding for certain programs and the possibility that such funding may be reduced in the near future. Such programs as AFDC and CETA have already been cut at the federal level, but in fact these cuts have affected the village only minimally since few took advantage of them to begin with. State revenue sharing programs, on the other hand, are becoming more important to the local economy as time passes. These programs are still being fully funded but, as we will note below, the future poses some problems in this regard.

Intrasocietal

Community Facilities

Electrical power is provided by and large by individual generators, as there is no centralized electrical capacity. Most houses have modest individual generators capable of generating 10 kw or less and which run on petroleum (diesel or gasoline). The cannery has a series of seven generators which are capable of providing over 700kw, most of which is used to run cannery machinery. All heating oil is imported to the island by Standard Oil. Most homes are equipped with videotape television systems and CB radios.
The village water supply is dependent on a steady supply of precipitation throughout the year. The water is stored in a small dam which is owned by the cannery, from which it is delivered to homes and the cannery through a gravity-feed above-ground network of plastic pipe. The water is evidently of good quality and, judging from the fact that False Pass is a popular stop for ships to take on water, in good supply. There has been little need to sink wells or to test the levels of groundwater, but given the nature of the rock and soil deposits near the shore it is likely that groundwater is abundant and accessible. The village has no system of waste disposal beyond discharging into the water. Nearly all houses have flush toilets which merely empty to the beach or into one of several small creeks. The cannery is the exception, with an underground sewer system in which waste is treated before it is discharged underwa- ter into the bay. Most solid waste is dumped at an agreed upon site on the runway to the southwest of town and there is no organized pickup of trash.

Transportation into the community is primarily by airplane. There is a small airstrip which once measured 4,300 feet but it was broken in two by heavy rains and water erosion and now accommodates only small aircraft. Flights into the village are by VFR (visual flight rules) since there are no navigational aids available. This limits flights to daylight hours when there is sufficient visibility and no major winds. Periods when VFR landings can be accommodated occur approximately 75% of the time, with the best months October and November. There are no paved roads in the community, and land transportation is primarily by three-wheeler, pickup truck, and snowmobile.
False Pass currently has 13 houses, all wood frame. Most of these are clustered in two main areas. The first is directly across a low, swampy area to the west of the cannery on the outwash plain. The second is a cluster to the north of the cannery on the beach berm. Those located on the beach, or in swampy terrain, are built on pilings, stilts, or blocks. Several permanent employees of the cannery resided in the bunkhouses on cannery property while the cannery was in operation.

Other structures include a school building, a two-room community building, which is the location of the village council and village corporation offices as well as the only telephone in the community, a post office (actually located in the store of the Peter Pan Cannery), and the cannery complex itself.

**Demography**

The population of the community of False Pass cannot be understood without reference to the surrounding villages, and in particular those of Ikatan and Sanak Island. In each decennial period in which population rose in False Pass population in Sanak Island declined, and in each period in which there was a decline in False Pass the population of Sanak Island rose. From 1930 to 1940 False Pass grew at the fastest rate in its history, going from 59 to 88 residents, and during the same period Sanak Island declined from 74 to 61 residents. From 1940 to 1950 the population of Ikatan rose, as did that of Sanak Island, while the population of False Pass was more than halved from 88 to 42. After 1960 False Pass has steadily grown from 41 (1960) to 62 (1970) to 65 (1980) while that of Ikatan and Sanak Island has declined precipitously until
Ikatan is no longer classified as a village and Sanak Island listed only 15 inhabitants in 1980.

Currently False Pass appears to be a well established community which, in spite of the difficulties with the reopening of the cannery, seems assured of continued existence in the future. In the period from 1975 to 1980 three new residences were constructed in the community showing the commitment of the younger generation to remaining in False Pass. This is also evidenced in the population structure of the village. Of a total of 65 residents in 1981 55% were male and 45% female, a pattern typical of Alaska. More importantly, of the total population some 26 or 40% are 19 years old or younger. There are a total of 18 households, and of these several represent families just making a start which promises a secure future for the village. Ethnically the population is dominated by Aleuts, with 60 of the 65 residents claiming that status.
Values

As with most of the communities in the region, the traditional value system of the inhabitants of False Pass stems from the Russian-Aleut heritage. Many of the values associated with this heritage continue to be adhered to. Family responsibility, community cooperation, mutual aid, industry and self-sufficiency, all play important roles in community life. However, the level of conflict between these traditional values and values adopted from the larger sociocultural system is high. With the rapid introduction of large amounts of wealth, conspicuous consumption and socioeconomic mobility have become a greater part of the value hierarchy. These newer values and rules for behavior increasingly come into conflict with the traditional value system.

While this conflict has yet to seriously weaken community cohesion, it has become apparent in the widening gap between the normative rules for behavior and the pragmatic rules. Local residents are quite aware that to ensure success in fishing and to enjoy the benefits provided by the larger society certain patterns of behavior and beliefs must be changed. A discrepancy, therefore, is emerging between what local residents say is important for behavior and the behavior itself. We expect this discrepancy to increase in the future.

Organization
Economic Organization

Commercial

Though historically the area has been a center for the Russian otter industry the economy today depends heavily on salmon fishing and processing. Employment depends mainly on seasonal salmon fishing and employment in the cannery. Though there are excellent crabbing grounds readily accessible to the residents little crabbing occurs, primarily due to the greater profitability of salmon fishing. There are some ten local vessels, modern and well-equipped, in the village at all times, and during the fishing season this number probably doubles to twenty when relatives move back out to fish during the summer months. A sizeable portion of the community annually migrates from Kenai, Sand Point, Seattle, Anchorage, and other areas to fish during the season and are only nominally permanent residents. All are considered legal residents and there appears to be little distinction made socially between the groups. All fish for Pan Alaska, and all used to fish for Peter Pan until the cannery burnt down. All the local fishermen fish with beach seines or purse seines, and some use their own drift net and transfer the seine permit to a crewman.

Between 15 and 20 local residents, as well as a good number of outsiders, primarily Filipinos from the west coast, have usually been employed at the cannery during the processing season, though this has been terminated as a result of the destruction of the cannery in 1981. Currently the cannery is projected to be rebuilt in 1983-84, but this must be seen as speculative at this time. Most village men depend on fishing during the summer for salmon for their major means of income,
and only two families in the community do not participate in the fishery. Outside of the cannery and fishing there are very few jobs available in the community. Among these latter are the schoolteacher, a janitor, one or two jobs at the local store, a health aide, a postmaster (only during the summer), and a maintenance man at the community building. The village is currently pursuing plans to hire a full time village coordinator and a bookkeeper.

The fishermen of False Pass hold limited entry permits for gillnet, set gillnet, and purse seine fishing. The dominant fishing strategy utilizes a combination of drift gillnetting and hand purse seining. It appears that set net strategies are ignored by most of the population, although several hold set net permits. Drift gillnetting takes place in Ikatan Bay as well as at East Anchor Cove, and is pursued by as much as 75 to 80% of the permit holders. False Pass has an unusually high concentration of permits per holder, with a distribution (according to the Alaska Peninsula Socioeconomic and Sociocultural Community Profile for False Pass) of 7 purse seine, 9 drift gillnet, and 7 set gillnet permits in the hands of 10 permit holders, or an average of 2.3 permits per holder. Fully half of the permit holders hold all three permits.

The fishing cycle of the False Pass fishermen begins with the run of reds in late May and early June at Ikatan Bay and East Anchor Cove. Following this run many remove to Port Moller to drift gillnet, after which they go back to False Pass to purse seine until September. Overall the most important species has been dog salmon, with red, pink, and silver taking a secondary role.
The False Pass fishing fleet has undergone radical modernization in the last five years, as a result of the increased incomes generated by the fishery. Most of the boats are between 34 and 42 feet and are equipped with gear designed for purse seining and drift gillnetting, the two predominant strategies in the area. Capital investment is very high, ranging from about $110,000 to $200,000 per ship.

Over half the vessels operating out of False Pass are less than three years old, an indication of the radical restructuring made possible by the increased earnings of recent years. Several False Pass fishermen have taken out low interest state loans in order to finance the purchase of new vessels, and it is a measure of the recent affluence of the community that some have been able to pay off these 15 year loans in as little as three or four years.

Subsistence

In addition to the wage-labor money economy subsistence activities have historically formed an important aspect of survival in False Pass. Almost all households in the village traditionally depended on hunting and fishing for a major portion of their subsistence. Nearby marine resources include about 30 species of fish, especially coho, pink, chum, and sockeye salmon, Dolly Varden char, as well as several varieties of crab (particularly tanner and king). Land resources are also prolific, and include some twenty five species of land mammals and a great variety of birds. These include geese, caribou, wild cattle on Sanak Island, and several other important subsistence species.
In the last decade these resources have been decreasing in importance as the villagers, as a result of vastly increased earnings, have come to depend increasingly on imported subsistence items. Nonetheless, caribou is still a favorite subsistence item and modern technology has allowed villagers to increase, rather than decrease, their exploitation of this resource.

**Social Networks**

As in most of the communities of this region, kinship is the basic matrix around which all other aspects of social and economic life are organized. However, unlike many of the other villages of the region, there is no central constellation of a few lineages which dominate the community. On the contrary there are at least nine major lineages in the village out of a total of 18 households.

False Pass is also unique in the marriage patterns of the inhabitants. There has been a strong tendency in the past for males to marry females from outside the community while, on the other hand, females in the village have often gone to other villages to marry males there. This has resulted in a social structure which is somewhat less intensely multiplex than is the case in most peninsula or Aleutian Island communities. These links with the outside are particularly strong to the village of Nelson Lagoon. At least four women have left the village of False Pass to marry and take up residence in Nelson Lagoon. Strong links also exist affinally with Sand Point and King Cove. Finally, there is a very strong historical connection with Sanak Island which, as noted earlier, was the original home of many of the current residents of False Pass.
Kinship is the basis for work relationships, political activity, and recreational activity. Crew members on the fishing boats are generally selected from among the nuclear family if possible, then from the extended family, and finally from among affines. Mutual aid, in repairs or housebuilding and so on, is also organized primarily according to kinship relations.

**Political Organization**

**Local Activities**

False Pass is an unincorporated village and lies within the unorganized borough. Though it is governed by a village council, meetings have been irregular in the past and there is little community involvement in the governing process. However, as new projects are considered and the community comes to desire such amenities as a sewer system, more telephones, a means of solid waste disposal, roads, boardwalks, and so on it is likely that the utility of civic involvement will be recognized.

With the passage of AMCSA in 1971 the False Pass Village Corporation selected all unpatented land in the township plus the equivalent of two townships from adjacent lands in the Aleutian National Wildlife Refuge (this latter under the condition that management be compatible with refuge objectives). However, since False Pass is unincorporated currently as a municipality the land will be held in trust by the Municipal Lands Trustee of the Alaska Department of Community and Regional Affairs. Once a future municipal government is formed title to the lands will be transferred to them, and such transfer must include, according to AMCSA, a minimum of 1,280 acres.
Religion

The inhabitants of False Pass are nominally Russian Orthodox, although religion per se does not seem to play a central role in social or cultural life. There is currently no church in the village, and there appear to be no immediate plans, or felt need, for the construction of one. Although religion has not as yet played an important role in the identity of the villagers, it is possible that the future holds some changes in this regard, a point we address below under projections.

Educational Organization

The school is a single building constructed in 1962 and upgraded since which includes a classroom and living quarters for the one teacher. It is of excellent quality and construction. There are about 15 students in classes ranging from kindergarten to high school (12th grade). The school is part of the Aleutian Regional School District. In 1981 there was one child in kindergarten, three in first grade, two in second, none in third, one in fourth, two in fifth, none in sixth, and six in high school. The high school only began operation in 1977, evidently in response to the Molly Hootch Decision as well as the fact that several families had, in the last twenty years, left the island because of the lack of high school facilities for their children. Enrollment at the school is variable, depending on season and on inclination of the parents.

One problem with the educational system is a low level of attendance from village children. The incentive is not high to go through school, especially as earnings in the fishery can be very high even for adoles-
cents. Additionally, with the high earnings available if one goes into the family fishing business and takes over or shares in the Limited Entry Permit education seems less necessary as preparation for a productive and profitable adult life. As a rule children are out of school and earning a significant income by the time they are 16, and pursuit of a college education is extremely rare. Finally, the seasonal nature of the parental occupation and the tendency for parents to be fairly mobile among False Pass, Anchorage, Seattle and other venues renders steady school attendance difficult.

Health Care Organization

Health care is provided by a community health aide. Such aides are trained under the auspices of the Public Health Service's Native Health Service program. The health aide is a permanent resident of the village, and has access, via the Public Health Service direct telephone, to the Native Medical Center in Anchorage. Health service is currently obtained at the aide's home, though a health station will be housed in the community building once the construction of the building is completed. Other health services available on a sporadic basis include a nurse at the cannery when it is in operation, and occasional visits by medical, dental, and nursing personnel working under the direction of the Public Health Service.
Output

It does not appear likely that the community will experience significant growth during the next decade, but it is likely, given the population distribution, that natural increase will account for some growth, perhaps on the order of 10-20% for the decade. All other things being equal, then, it would seem unlikely that the population would be any less than 70 or any more than 80 people by 1990. We do not expect a significant increase in immigration to the community, especially given the forces which are conducing toward a protectionist attitude.

Economic

False Pass has been subject to two interconnected economic processes in the last decade which together indicate the future directions of change for the village. First, earnings have increased greatly from the fishery as a result of the implementation of limited entry programs. This has meant that the population has had increased opportunities to involve themselves in the cash economy of the larger state and federal arenas. This has had several results. It has allowed the population to upgrade the equipment and gear utilized in exploiting the fishery, and we expect this process to continue unabated for the next decade at the least. Second, it has allowed the population to gain access to goods and services from external sources which had not hitherto been available to them. Thus, pickup trucks, three-wheelers, snowmobiles, and other vehicles are much more in evidence today than they were ten years ago. Third, it has allowed for increased recreational activities, including an increase in the pattern of off-season vacationing in urban areas.
removed from the village such as Anchorage, Seattle, and other west coast cities. We project that these trends will continue over the next two decades.

However, the increase in earnings has also resulted in a narrowing of the economic base on which the community depends. With the massive returns now available from the salmon fishery there is no need to exploit other marine resources, such as crab or bottomfish, since the return on these alternatives is significantly less than that on salmon. This poses a certain danger in that the community has become dependent on a single resource to the exclusion of all others. Nonetheless, we project that this process will continue since the limited entry regulations themselves tend to guarantee the continued viability of the resource. It would only be in the case of a drastic decline in the availability of salmon that local inhabitants would turn to the exploitation of crab and/or bottomfish. Therefore we project that these latter will remain the purview of outside and foreign fishermen and that they will continue to hold little attraction for the False Pass fishermen.

Another area in which the increased returns from the salmon fishery have had a major effect is subsistence activities. Traditionally False Pass residents have made use of the extensive marine and terrestrial resources available in the area. In the last few years, however, utilization of these subsistence resources has diminished significantly. Most families now see no sense in the labor involved in extensive hunting or trapping, and with the vastly increased incomes associated with Limited Entry Regulations and the fishing industry in general most
needn't depend to any significant extent on natural resources for household subsistence needs. The cannery store serves most of the needs of the community, and though individuals could, if they chose, order subsistence items in bulk or wholesale from Seattle most don't bother since prices are adequate from the cannery store. One area in which this appears not to be the case, however, is in the hunting of caribou. It appears that local residents have actually increased their exploitation of this resource since the introduction of limited entry regulations. One reason put forth for this is the increased ease of access with three wheelers, which are themselves partially a reflection of increased earnings. Therefore, it appears that we should be careful in projecting an across the board reduction in exploitation of traditional subsistence sources in that some effects of increased earnings may actually contribute to greater, rather than lesser, exploitation.

Social

False Pass is in a somewhat unusual position with regard to social cohesion when compared to other villages in the region. This is a result of the dispersed quality of lineages in the village. Rather than being characterized by three or four distinctly dominant lineages which encompass most of the inhabitants of the community there are instead at least nine lineages, each of modest size, which make up the community. Another aspect of some importance is the relatively high level of out-marriage which has characterized the village in recent years. Nonetheless, the sense of village cohesion is still high, especially given the recent need to protect village lands and resources from outsiders who would like to take advantage of limited entry and the ANCSA decision.
The lineages are closely related to one another through affinal links, and we project that this will continue into the future. Indeed, one advantage of having so many distinct lineages in a single setting is the fact that marriage possibilities will be exhausted much more slowly than in villages with only three or four major lineages. We project, therefore, that future patterns of marriage will see False Pass residents increasingly intermarrying rather than going outside the village for marriage partners as they have in the past. When they do go outside the village we project that the villages which will provide the bulk of marriage partners will be Nelson Lagoon, King Cove, and Sand Point, all of which have already established affinal links with the village.

The overall impact of external legislation will be to increase the sense of village solidarity. This will also be reflected in an increased tendency to view oneself as Aleut, an identity which, previous to the legislation of the 1970s, was seen as denigrative. The increased assumption of an Aleut identity will serve to further distinguish village residents from outsiders and will therefore serve the protectionist interests which have recently become paramount. ANCSA has been particularly important in reversing the historical tendency to deny or minimize Aleut heritage, and we project that this process will continue strongly into the future.

Political

In the past there has been a low level of political involvement on the part of community members in the governing process. However, given the changes which have occurred in the last decade, we project that this level of involvement will undergo a steady increase over the next ten
years.

The major force at work politically concerns the move towards incorporation of the village. It seems likely that such an incorporation of the municipality will occur within the next two to five years, given the additional incentive of ANCSA. Another factor encouraging incorporation is the recent tendency for outsiders to come into the community to reside, a process over which the locals have no control as an unincorporated community. Local informants state that as many as ten people are eager to move to the community from Seattle, and though this is probably an exaggeration it indicates the degree to which this is a perceived problem. Finally, incorporation would open up access to state revenue sharing funds and a portion of the raw fish tax in order to build community projects.

We also project that any tendency towards political conflict at the local level will be mitigated by the perceived threat from outside in the wake of limited entry and ANCSA. Thus, even though the community of False Pass is unusually decentralized in terms of kinship relations, this is not expected to lead to conflict since it is to the advantage of all local inhabitants to achieve consensus in the face of outside threats to their resource base and, by extension, to their prosperity. Contributing to this tendency towards elimination of local conflict is the unusually high number of permits held by the residents of False Pass. Since every family has at least one permit, and over half have three permits, there will be little felt need for intravillage competition.
Education

With one exception we see no major changes in the structure or nature of education in False Pass. There is a school which goes through the secondary grades and this has proven adequate for local needs. One problem which we project will arise in the next decade revolves around the increasing need for professional assistance in dealing with external agencies, regulations, and legislation. We project that with the increased incomes characterizing the community there will soon be a move towards encouraging certain of the local children to go beyond the secondary level and continue their education in college, and beyond to the professional level. This is a result of the increasing need for professional sophistication in dealing with the regulations and measures promulgated at the state and federal levels which have direct impact on the community. Ultimately it may prove to the community's advantage to subsidize the education of certain local children who may eventually be able to take over the role of interfacing with state and federal authorities. In the long run it may be possible to educate local students as lawyers and/or other professionals who can then take an active part not only in interpreting legislation, but as well in the drafting of the legislation in the first place. This would be of great advantage to the community in that it would insure direct local input at the state and federal levels.

Health Care

The current facilities in the community for health care appear to be adequate for the present needs of the inhabitants. There is only one area in which we project a substantial health care related change. With
increased incomes and increased contact with external sociocultural systems, as well as increased involvement in the cash economy, we expect a significant rise in the incidence of stress-related disorders. This will call for more professional help than is currently available, and such aid may be forthcoming either from the Public Health Service or from the education of local students as doctors or psychiatric workers. We project that over the next two decades False Pass will see a rise in the incidence of alcoholism, accidental injury and death, suicide attempts, and other stress induced disorders. This is a problem with which the community will be forced to come to grips in the near future.
CHIGNIK BAY

Introduction

The cannery operations have played the dominant role in the formation of this community, Chignik Lagoon and Chignik Lake. The cannery drew fishermen, both native and non-native, to the region—residents of Chignik Lake still remember living in Barabaras and relatives who could build the traditional skin boats. They remember that it was the cannery that brought the population that was to become the local villages. Perryville, however, grew from somewhat different causes that will be discussed later. This relationship has evolved to the point where the village must exert its independence of, and, ultimately, its authority over, the cannery. Relations with the cannery are still founded on mutual needs which will should continue through the next ten years. Maintenance, and other support facilities unavailable elsewhere and as the provision of a primary market for "dog" salmon when the "floaters" leave the bay are some of the major factors which favor maintaining a continued relationship with the cannery.

Residents remember the years between 1910 and 1960 as relatively stable. Wages were very low but the cannery provided many of the essential material products for survival. Hunting, trapping and fishing supplied the rest. Between 1960 and 1974 the fishing was seen as relatively depressed, no local schools for the children forced migration to Kodiak and this was the genesis of the present dual residence pattern. Residents claim the years since 1974 have been unusually productive.
records indicate that 1975 and 1976 were not particularly profitable years. There are older residents, however, who, ironically, see current conditions as "worse than the old days." Their needs are much greater and their relative ability to acquire necessary products is much reduced. "We must really depend on our children, otherwise we couldn't survive."

The major variables of change in the social system of Chignik Bay will be in the economic, social, and political subsystems. Economically, both the level of income and level of activity will rise dramatically in the community as the continued productivity and potential for diversification in marine resource utilization will allow for an extension of economic activities currently unavailable to other communities in the subregion. The accumulation of wealth, in turn, will lead to increased social stratification, consumer behavior, and further economic development. Community cohesiveness will be strained, leading to the formation of community factions. This activity will also be evident in the political arena as community members seek to preserve and promote their economic interests. Political activity will be more pronounced in this community than in other communities in the Chignik subregion. Religion and education will increasingly be placed in the role of maintaining community cohesiveness.
Ecological

For Chignik Bay, as well as for Chignik Lagoon, Chignik Lake, Perryville and Ivanof Bay, no major change in the climate, animal or plant species or quantities available are expected. However, there is a sizeable reservoir of untapped energy resources available near Mud Bay which may prove significant in the intermediate term--no major development is expected within the next five years.

As noted in the subregional analyses, a substantial potential exists in the halibut, herring, bottomfish and clam fisheries which remain essentially unutilized. Little petroleum or mineral potential is currently recognized and no local exploration, as far as local residents are aware, is contemplated.

Extrasocietal

External Government

Chignik Bay, in particular, is in a very delicate relationship with external government. The state, rather Community and Regional Affairs Office, has made it clear what is expected of the community in order to incorporate as a second class city and key individuals in the community are earnestly attempting to fulfill these requirements in order to achieve this objective. The BIA, federal CETA programs, and BLM (except for the problem of titles to be examined below) have had little impact on this village. The regional native corporation (BBNC) and associa-
tion (BBNA) have had very little impact on this, or any other, community in this subregion. The local village corporation, on the other hand, has gradually increased its role in the community—this will be examined in its impact on structure and on output below.

Limited Entry, however, has had a marked impact on the community. As noted in the Combs (1981) report, the average number of permits held by permit holders is well over two each—several individuals hold as many as four. These permits were all legitimately obtained in the early days of entry limitation because these fishermen routinely fished set gillnets, drift gillnets, beach (hand), and purse seines at different periods during the salmon run. They thus qualified for four different permits, each of which now holds a substantial value in the open market. Thus, transferability is less of an issue here than it is in Bristol Bay where transferring a permit out of the family means permanent exclusion from the fishery. Nevertheless, very few permits have been transferred to non-local residents—what does occur is a form of permit leasing in which another individual officially purchases a permit but is actually merely operating the vessel for the owner of the permit, and for which he will receive a larger part of the profit than would be the case if he were just a crew member.

Commerce

The impact of external economic forces on this community are primarily of a secondary nature. While the cannery is Japanese owned, its power to fix the fisherman's economic returns has been drastically diminished by the presence of floating processors and outside buyers who are able to pay much higher prices for the product. Their present role in the
subregion appears to be expanded control of the economic infrastructure of the fishery in order to assure long-term access to the resource itself. This is a basic, perhaps the dominant, Japanese strategy and can be observed throughout Alaska. The direct effect of this strategy has been negligible unless we consider it in conjunction with an entry limitation program which fixes the highest number of vessels who can fish the local fishery at about 90 boats, at the same time local salmon runs radically improve in productivity. The indirect effects of the Japanese market on local returns, however, is substantial. The continued decline in high-seas interception of Alaskan salmon stocks, in conjunction with a continued high demand for the product, has resulted in relatively consistent high economic returns to local fishermen.

The role of the local cannery in community affairs has declined markedly over the last two decades. Nothing has had a greater impact on this trend than the advent of the floating processing vessels. In order for local canning concerns (assuming that A.P.A. re-enters the market) to obtain sufficient product to maintain their production lines they must set their price at an attractive level for the fishermen to consider not selling to the 'floaters.' Of course, high per pound returns are not the only form of remuneration available to the canneries. Boat storage, repairs, and an unlimited market are also attractive. Non-cannery fishermen must pay a premium price for services rendered by the cannery during the fishing season--this is the case because the cannery is essentially servicing their own competitors.

Two factors can be examined as indicators of trends in the external transportation facilities available to the community: First, the Chignik
Bay airstrip is only capable of handling a limited variety of aircraft. This limitation is likely to continue into the long-term future in that the strip is located on a small peninsular area at the mouth of Anchorage Bay and cannot be extended without major costs. Second, Chignik Bay is expected to be added to the shipping route of a large commercial carrier which should reduce the costs of transporting goods from Seattle or Anchorage substantially. We should note that facilities for private aircraft are not available locally and that no aircraft are owned by local residents.

Communication facilities are on the verge of dramatic expansion for this community. Within the next year or so ALASCOM plans to install a new satellite communication system directly linking Chignik Bay to the outside world. A second system will be constructed a year or two later which will link Chignik Bay into an advanced educational support network. We discuss below how this is likely to affect local educational structure and the consequences of such change.

Private investment in this community awaits only the establishment of title to the land. Once land is transferred to individuals in the village it is fair to assume substantial development will occur. Several informants described plans to construct homes, businesses or additions to their present residences as soon as official title to individual homesites is established. Such development seems eminent for two reasons: First, economic opportunities have increased dramatically in recent years and capital is available for investment. Second, the village is likely to incorporate within the next two years which will have an immediate impact on the status of the land.
Incorporation looms as the dominant political issue for this community in the short-term. Factions are relatively set but it appears that incentives toward incorporation outweigh those opposed. Only the details remain to be worked out--taxing rates, leadership structure, directions, etc. One of the logical issues ultimately facing the community and observed in other areas of the Peninsula is the effect of incorporation--and inherent taxing authority--on community-cannery relations. The crux of the problem rests in individual community's authority to levy both property and raw fish tax on the canneries. Most communities rely on very low property tax rates because the community as a whole is opposed to high rates. What generally occurs is that the city opts to levy an independent 1% raw fish tax on fish landed at the cannery. This additional tax is in addition to the existing state raw fish tax of 3%. While the existing state tax is larger than the city tax, the state tax is uniform and unavoidable--every processor in Alaska must pay this three percent. Under current revenue sharing plans incorporated communities are eligible to receive half of the tax paid to the state. The additional 1% tax levied locally, on the other hand, is seen as unnecessary and avoidable and in most communities of the peninsula (and chain as well) the canneries are usually able to avoid paying the full official city tax levy. Even if no raw fish tax is enacted, the city must enact some form of local taxation in order to qualify for incorporation--most commonly this is in the form of a token property tax on property within the city limits. This idea alone is seen as abhorrent to some residents. In any case, with incorporation will come substantial income from state revenue sharing plans--local sales of $20,000,000 would make the community eligible for several hundred...
thousand dollars annually. For a community with a population below two hundred this is a substantial sum and is likely to enhance community facilities almost immediately.

To this point the balance of power seems to have rested in the hands of the cannery management and on decisions made in Seattle board rooms. As the political independence of the village evolves, this relationship is bound to shift in favor of community. As independent commercial development co-occurs with this political movement, this pattern of independence will accelerate. The presence of local hotels, restaurants, repair and storage facilities, cannot but reduce local dependence on the cannery. Greater numbers of floating processors in the bay will also contribute to these changes.

**Intrasocietal**

**Community Facilities**

Internal forces of change in this community are particularly salient. Little local development has taken place. There is no community water system, no common electrical generation system, no shared sewage system, no satellite television system, no organized fire protection, inadequate health facilities, no local police protection, no aircraft owned locally, and a single, undependable, phone for the entire community. Communication with other communities, aircraft, and Anchorage depends on a short wave radio at the cannery or through the school system's communication network through Naknek--local communication is by citizen band radios. Mail delivery is erratic, and weather conditions often prohibit
transportation in and out of the community.

A local boat harbor is seen as a necessity. As it is, local residents must put their boats up in Sand Point, Cordova or Kodiak. This is yet another factor supporting the current dual residence pattern—one that will eventually be eliminated. Road maintenance, and the construction of a road linking Chignik Lagoon with Chignik Bay are also seen as high priorities. Other minor or temporary problems include necessary repairs to the local tank farm, greater legal assistance to the community, and greater effort to solicit social service applications for those of the community that would qualify.

Two factors are seen in this report as indicative of dramatic change impending in this community. First, local residents have logged earnings several factors greater than just five years earlier. Second, the movement toward incorporation has taken on new meaning to local residents. These two developments, when taken together, provide tremendous impetus to local economic development. Capital for entrepreneurial activity is available as well as the incentive to pursue attractive options. For example, there is no local restaurant or hotel; visitors must either eat and stay at the cannery or in individual homes. Once the village incorporates, many of the obstructing land issues will be quickly settled and local or external entrepreneurial activity will be drawn to the community. As one resident put it, "Almost anything would be profitable here, a restaurant, a bar, a hotel, storage facilities, repair, etc., all we need is to know the land is really ours."

The following scenario is projected for internal change. Within the next twelve months the village will incorporate as a second class city.
One of the first articles of business will be establishing the limits and organization of the city--this will necessitate the determination of who owns what land, what land is available to the city, zoning preferences, and objectives. Then, income derived from community's portion of the raw fish tax will provide the means to construct a common sewage system, water system, electrical generation system, and to begin to remedy other perceived inadequacies in local public facilities.

Private development--the construction of new or improvement of old homes will proceed apace, and is already well advanced. New loan programs available through Anchorage, Juneau and Dillingham will facilitate this growth.

Our conclusion is that Chignik Bay, of this subregion, appears most likely to develop its community political and economic infrastructure at an accelerated pace over the next five to ten years.

**Demography**

We must note, however, at variance with the general projection for the region, that much of the growth projected will also tend to draw immigrants from other regions of Alaska. For many members of the village, this is not an altogether unattractive consideration as long as incoming residents demonstrate a commitment to the community and establish positive ties with other residents.

The current age and sex skew of the population is not expected to shift dramatically over the next ten years--the present ratio of slightly more males than females will continue with a very gradual improvement in the ratio as the community establishes itself as a city. The number of
school-age children should also increase gradually, dropping the average age of local residents somewhat. However, the relatively low number of elderly local residents should minimize this expected shift in age structure.

As many as 40% of the local residents hold dual residency in Kodiak (predominantly) and Chignik Bay. This has major implications for the community. In essence, there are two distinct communities: One exists during the fishing season when fishermen return to Chignik Bay from Seattle, Kodiak and Anchorage to fish the salmon runs, lasting four or five months during the summer. The other exists during the remainder of the year when only the permanent residents are present.

This presents several very cumbersome political and social problems. Over time, it should be clear that decision-making must ultimately devolve into the hands of permanent residents to the expense of dual residents. Friction over tax rates, zoning, and community development are inevitable and will be discussed below under 'output.'
Structure

Values

Status and prestige systems have endured significant changes over the last decade. High incomes and the increase in material wealth have played a dominant role in these changes.

Ethnic relations conform to the general pattern noted for the region as a whole. There is little internal differentiation between native and nonnative; these terms, in fact, are not operable in this community. Some distinction can be extracted on the basis of share-holder/non-share-holder but this often refers simply to original versus non-locally born residents. This community appears little threatened by the possibility of significant immigration.

Organization

Economic Organization

Commercial

This community is predominantly a salmon fishing community. Several fishermen have purchased new vessels and entered the crab fishery, and while this appears to be a gradual trend, the economic organization of the community is arranged around the summer salmon season. The local fishery has been unusually productive the last half decade, the product is of the highest quality, and the per pound return the highest in Alaska. Limited Entry has effectively controlled the influx of non-
local fishermen who would normally have been expected to be drawn to such a bonanza. Thus, earnings of fishermen fishing the 'Chigniks' are justifiably seen as extraordinary.

Limited Entry, in an indirect way, has both enhanced local economic earnings while at the same time minimizing the chance of large scale horizontal economic diversification. The source of large earnings is the fishery—under normal conditions the recent salmon runs would certainly have drawn two or three times the number of fishermen and vessels into the area. Many might have established permanent residence locally as well. However, under present conditions, only direct support facilities (radar or radio repair, mechanical repair, fiberglass or structural repair operations) are likely to find an adequate market for their services, though only seasonally, and the likelihood of substantial economic return from these enterprises is minimal when compared with the fishery. On the other hand, fishermen who earn as much as $250,000 a year by fishing four to six weeks of the year are not likely to be drawn into businesses which demand substantial additional effort and might interfere with established fishing activities. As we have already noted, this is one of the reasons why so few salmon fishermen have moved into the crab fishery in a major fashion. It is just not worth their while to earn money on which the tax can exceed 90% of the returns.

Fishermen here, as elsewhere in the region, are well aware of the incentives to reinvest their earnings in business related ways—new skiffs, gear and vessels are everywhere in evidence. New construction has been hampered by land status problems (discussed below) and should be resolved within the next five year period. Once the community incor-
porates, construction of homes, roads, pathways, etc., will proceed at a rapid pace.

The wider market for fish products is assumed to be at a constant and elevated level. Recent indicators (Nov. 1981) of a decline in the value of the Japanese Yen versus the U.S. Dollar, however, bodes an ill omen of potential future relations with non-domestic markets. On the other hand, the effort to develop domestic and European markets for salmon is brisk and has already shown substantial indication of success.

According to local reports, the Chignik fish are the highest quality salmon in the world. They are seine-caught, which means they are not damaged as is case with gillnets which operate by enmeshing the fish behind the gills where they fight to get free and in the process become bruised. They have the highest oil content of any Alaskan salmon. They are also considered to have the firmest flesh of any Alaskan red salmon. Some attribute these qualities to the fact that the earliest major salmon runs are in the Chigniks and thus the quality of the flesh is higher.

The processing sector is composed of an Alaska Packers Association (APA) cannery in Chignik Bay itself and, just adjacent to the community, a Peter Pan (now owned by Chignik Coastal Fisheries) facility that is expected to resume operations within the next two or three years, assuming a successful resolution of a law suit now pending. The recent growth of the floating processing fleet that annually set up operations out in the bay, however, form a significant component of the subregion's economic infrastructure. A Columbia Ward Fishery (CWF) cannery located across from Chignik Lagoon, which suffered a major fire several years
earlier, has not been active recently and is not expected to resume operations in the near future. It serves as a very active fish camp during the season, has a small landing strip, and is the site of several permanent residences.

The change to year-round processing brought about by the crabbing industry has been significant. Communication facilities (mail services), transportation, supply, etc., have improved noticeably. New business opportunities (discussed in this appendix) have been created which are drawing local entrepreneurial interest. The state ferry system has recently added Chignik Bay to its circuit which, in turn, will facilitate growth.

Year-round employment opportunities in Chignik Bay are superior to those in other communities of the subregion but are relatively few in absolute terms. A few cannery positions, a local retail store, support staff for the local school, and a few leadership positions provide the range of employment opportunities available.

The relationship between local fishermen and the processing sector throughout Alaska is fraught with tension. While Chignik Bay is no exception to the general rule, it is clear that local fishermen are in a far superior bargaining position relative to the canneries than are fishermen in Bristol Bay, for example. As examined below under political organization, these fishermen are unusually well organized and cohesive. If anyone must be seen as holding the upper hand in this subregion it must be the fishermen.
Subsistence

Salmon is the primary subsistence product. Toward the close of the fishing season, almost everyone in the community put up salmon; some are canned, some smoke, dried and frozen. Quite a few residents have begun to go out specifically to catch halibut for winter consumption. Several families suggested that one moose per year was about average for a household of five. They also mentioned that the number of moose available had diminished considerably over the last few years from increased outside hunting. Caribou are still relatively abundant and from four to five are harvested each year per family of five. Geese, ptarmigan, ducks, and other birds, to a total of about 35 per family are also harvested. Berries of several varieties are also collected in late summer and canned, made into jams and jellies, or consumed immediately in various forms. Most families mentioned preference for locally harvested game but also noted an increased tendency to buy store products because of "laziness." Sharing of these products continues but not in a form normally associated with kinship systems and reciprocal distribution systems. A crab pot may be set out in the bay which is open to anyone in the village who wishes to collect the crabs. A hunter will normally kill as many game birds as he can and leave the excess on the beach for collection via a CB radio announcement.

Activities commonly subsumed under a subsistence heading are less essential to the perceived lifestyle of this community than is the case for Chignik Lake, Perryville and Ivanof Bay. Subsistence products, as defined here as locally obtained and consumed food items, do not make up a profound part of the diet of Chignik Bay residents. Some claim less

140
than 5% of their food consumption is made up of these resources—it is
certain that few if any residents literally depend upon subsistence pro-
ducts for survival. That they make a useful contribution to the
economic and psychological well-being of the community, on the other
hand, is just as certain. "Well, it's not so much that we need the cari-
bou or moose for food as it is knowing they are out there if we do need
them" (emphasis in original speech). This has been the case in virtu-
ally all the communities of this subregion and of the Peninsula in gen-
eral. Recreational hunting for geese, duck, caribou, moose and, more
infrequently, for bear, as well as fishing for salmon, setting out pots
for crab, etc., is popular but reliance on the products of these 'ven-
tures' is not high.

Non-labor Force

The need to rely on external social services during the last few years
has been minimal. However, local leaders do note that several individu-
als had unusually poor years (due to major vessel failures, illness,
etc.,) and would probably have qualified for assistance but that access
to government agencies is difficult and is often seen as "not worth the
bother." If there are welfare, AFDC, or unemployment recipients in the
community, their presence is unknown to the general population.

Social Networks

The nuclear family is still paramount but extended kinship relations
have become attenuated. Families are more mobile and more wide ranging.
The dual residence pattern described above promotes the development of
competing social networks and behavioral patterns.
Social values are also affected by these changes. Friendship and crew associational networks are gradually making inroads into once fixed kinship occupational networks. Increased earnings have diminished the importance and value of products distributed in traditional reciprocity and redistribution systems—and to some extent, the longer these systems are left to fallow, the less effective and valued they will become. Implications of these changes are elaborated in our discussion of output below.

Formal, contractual-type, relationships are increasingly seen as acceptable to this community. The idea of "gentlemen's agreement" is still strongly held but has been subject to gradual modification.

**Political Organization**

**Local Activities**

The current political organization of the community is the Chignik Village Council. The current village council president is an unusually capable and devoted leader. She has played a very active role in pursuing incorporation and has a keen sense of organization. This role is seen as essential to political development. While the likelihood of incorporation seems high, this does not mean that there is no opposition to this move. Several individuals reported their view that "now we run the village, once we become a city, the city will run us." This, again, is a common response noted in almost every community contemplating incorporation. Opposition, however, does not seem adequate to prevent eventual incorporation.
The local native corporation, Far West Incorporated, has not been as active in the local community as its counterparts to the south. By the same token, however, the objectives of this corporation do not seem so much at variance with other quasi-political organizations in the community as is the case elsewhere. This could merely be the product of the unincorporated status of the community, but we feel that the overlap in leadership and organizational objectives of these two political entities is more extensive than in other communities.

The Chignik Advisory Board has recently evolved as an unusually successful political organization. We have related the incident of the last fishing season in which this board effectively closed the fishery--against official fishery management directives--to enable adequate escapement to reach the spawning area. Both the objectives and the effectiveness of this political manipulation are extraordinary and are, we feel, indicative of political trends in the future.

As implied above in our discussion of permanent versus dual residents, we feel decision-making must ultimately devolve into the hands of permanent residents at the expense of dual residents. Friction over tax rates, zoning decisions, and community objectives are inevitable and will be discussed below under 'output.'

The Chignik Boat Owner's Association is the bargaining arm of the Chignik fishermen. Its success as a tool of these fishermen has been notable and is recognized throughout Alaska as exemplary. Several structural considerations have contributed substantially to this success. First, only 90 or so fishermen are eligible to fish this region of Alaska--this is a very small number of fishermen. All these fishermen
are known to each other, they work together on the fishing grounds, they meet to discuss price settlements, they drink and socialize with each other throughout the fishing season, and share almost identical technological approaches to the fishery. Other than minor ego objectives in competing for "high boat honors" they are unusually courteous on the fishing grounds and work hard to maintain their reputations as good and fair fishermen. This is, more than anything else, very much a social fishery. Thus, they are able to hold relatively stable and similar political positions versus opposition (such as the canneries or fishery management personnel). This has contributed to their economic success directly, and to the success of other Alaskan fishermen (particularly Bristol Bay fishermen) indirectly by increasing the per pound sales price of salmon. Second, they are in a particularly propitious position to take advantage of world market demand for salmon. By the end of each year, once the frozen supplies of salmon in Japan are exhausted, the demand for salmon reaches its highest point. The Chignik region of Alaska's fisheries are blessed with the first major commercial runs which pass in from the Gulf of Alaska, up along the coast of the northern peninsular area and into Chignik Lake and Bear Lake. Third, Chignik fishermen employ large commercial seines to harvest the product. This is by far the superior method of harvesting salmon because the fine mesh of these nets do not damage the fish and because large quantities of fish can be harvested in short periods of time and delivered to the cannery or floating processor with the shortest period between catching and processing the fish. This is especially critical for product destined for the highly sophisticated Japanese market. These three factors have placed the Chignik fishermen, and this organization in particular, in a
position of power--one which has been parlayed to their benefit.

Several other standing committees can also be mentioned as quasi-political entities: the Chignik School Advisory Board, the Johnson O'Malley and Indian Education Committee. These organizations serve particular objectives of the community and are active on a periodic basis. Many individuals hold positions on more than one of these committees and the similar nature of their objectives make overlap and shared responsibility inevitable. Little conflict, outside of personal preferences, are reported for these organizations.

**External Relations**

Relations with Bristol Bay Native Association (BBNA) and Bristol Bay Native Corporation (BBNC) are relatively distended. From BBNA's perspective, distance plays an important role in this perceived isolation. But other factors are also involved. First, relatively few demands have been made on the BBNA Dillingham staff since ANCSA implementation. This is simply because there has been very few significant unmet demands. The Chigniks have prospered. The vast majority of established fishermen obtained more than one permit--some as many as four--unlike many native Bristol Bay fishermen who failed to apply, applied late, misunderstood the procedure, or felt the fishery was not worth the bother, etc. Thus, the major backlog of Bristol Bay legal claims still pending in the Alaska Legal Services office in Dillingham present a ratio of 30 to each one from the Chignik subregion. Social service assistance agencies (welfare, AFDC, social security applications, etc.), government home and vessel loan statistics, and other assistance organizations of BBNA, tend
to strongly reflect this difference.

Religious Organization

There is relatively little formal religious activity in this community. While nominally Russian Orthodox, very few families appear to be interested in obtaining a local priest or in more regular religious activity. Christmas and Easter serve a largely superficial and ceremonial function. But it also provides a chance to reinforce associated beliefs and to rekindle relationships and for this reason should be seen important. There is a growing, and seemingly pervasive, interest in non-denominational beliefs but as this interest has yet to draw formal organization.

Educational Organization

A note on the local school is in order here. This community has been subject to an unusually high rate of teacher turn-over in recent years and may reflect only previous differences between individual teachers and Lake and Peninsula administration requirements or objectives, or it may reflect differences between local political or social conditions and teachers themselves. We hesitate to project a more or less stable educational staff because the new teachers have had little time to adjust to the local population—and vice versa. We are willing to forecast that once the community becomes a city, once land becomes available to teachers to establish local residence, and once teachers feel inclined, are encouraged or are allowed, to become members of the community, that the teaching core will stabilize, that curriculum will better accord with
community needs and that a superior education will be provided.

The impact of REAA decisions and standards on the local community are inevitably subject to suspicion. This is also a standard regional pattern reflected in the question: "How can they know what is best for our kids?" For the most part, after a rather rocky, authoritarian beginning, the Lake and Peninsula REAA has tended to give local preferences substantial consideration. In their defense, however, it must be understood that 'enrollment statistics,' 'standardized test scores,' and other 'objective' measures of progress are seen as important by both the regional and state educational establishment. For funding levels to continue at their present high level, adequate progress on these objective indices of success must be demonstrated. As more and more qualified and experienced administrative and teaching staff are attracted to the region—a clear trend at present—so the quality of the relationship between the community and the REAA administration will improve.

Health Care Organization

Local health care is provided by a local health aide and the cannery nurse when the plant is in operation. Conforming to the regional pattern, this service is not seen as adequate. Many residents are justifiably concerned about more serious physical injuries, the need to transport injured individuals to Dillingham or Anchorage, of getting the Coast Guard to respond, the time required to reach help, and the often impossibility of landing at the local strip. All these factors serve as major incentives behind the drive to obtain a local doctor. It is questionable, however, given the low population, whether a doctor could suc-
cessfully establish a practice in this area.

Current health care costs are low, the staff is qualified and experienced, and the incidence of injury and illness is no greater than other communities of the subregion. No known problems of mental illness, suicide, or homicide exist in this community. Alcoholism, in the sense of incessant consumption, is not a problem except for a few individuals. The issue of binge drinking is a problem, but it tends to center on the fishing season and immediately after the season. Mid-winter seems to be a period of frequent episodes as well.

Recreational Organization

Local recreation is limited to social visiting, drinking, school sporting activities, and hunting/fishing. The recent construction of an activities center for the school is expected to prompt more adult athletic activities and social gatherings. Three wheel motorcycles provide another, if perilous, recreational activity for young and old alike. They are sometimes driven for several hours at a time, round and round the village--'wheel-stands,' and two-wheeled turns are common practice. The local nurse suggests that these vehicles are responsible for more than their share of injuries. Subsistence/recreational hunting is a major form of leisure activity. Traditional redistribution and distribution systems, however, appear to have given way to more generalized "CB-distribution" noted in the regional discussion.

Residents of Chignik Bay travel widely throughout the United States, Europe and the Far East. This travel and experience have given the population a sophisticated perception of the world.
Economic change has been radical over the past half decade at least. While this community has not suffered to the same extent as their neighbors to the north from disastrous seasons, they have endured a number of very poor fishing seasons. Through 1975, in general, fishing seasons were not particularly lucrative and fishermen had adjusted to relatively low earning levels. Since that time, however, with the exception of a single poor year, the Chignik fishery has produced large, some say unusually large, profits. Record vessel earnings have been recorded. Claimed catches of seventy thousand fish are not unusual. Average per fish weight has been approximately 7 pounds. Payments have ranged to around $1.50 per pound landed. A rough approximation of gross vessel earnings would total more than $500,000 of a span of two or three months fishing.

Clearly, not every fisherman has such a boon season, but those who have have been forced to consider the most advantageous way of protecting these earnings from loss to taxes. Though we do not presently have access to official data, we are sure statistical evidence would support our contention that a rash of vessel purchases occurred during the era since about 1978 when extraordinary earnings began to accumulate. New vessels, gear and technology seem to be the most effective way of protecting major portions of the fisherman's earnings. Some fishermen of these communities have become advisors to others less adept in the rather nebulous area of tax law.
We are projecting a gradually increasing rate of population growth over the next ten-year period. However, we are also suggesting that this growth will not be solely the product of natural fertility as is the case in False Pass, Pilot Point/Ugashik, Nelson Lagoon, Perryville, Ivanof Bay and Chignik Lagoon. Immigration will play a notable role in the growth of this community if current perceptions and values continue.

We expect the commercial sector of Chignik Bay to begin to grow at an accelerated pace once the community incorporates and land is officially transferred to residents and to the city. The need for a hotel, restaurant, and well-stocked store has grown perceptibly over the last three or four years. Support facilities for the fishermen are seen as essential--many claim that a diesel mechanic could easily gross $100,000 in a single season, that a half acre of storage facilities would also do well. We suspect that such demand will soon draw entrepreneurs into the area or provide sufficient incentive to draw local investment, always with the caveat that land becomes available. One area of need is for a locally operated or stationed passenger service thought the landing area and strip would require substantial improvement to make this a viable option.

The processing sector of this community is expected to remain stable or improve over the next five-year period. Once the Peter Pan plant resumes operation the fishermen will have an even greater competitive position vis-a-vis the APA cannery and floating processors. If CWF were to resume local production, a rather remote possibility, this set of options would be even further enhanced.
Local construction awaits access to the land. Once this occurs a period of accelerated growth should ensue. Year-round employment opportunities in Chignik Bay are expected to expand rapidly during the next ten-year period. State assistance and support programs are expected to improve delivery and distribution of benefits to this community whether or not economic need occurs. That is, for the few in this community that have need of such services, access will improve. We do not foresee any growth in state and federal employment in this community.

The current income skew in this community is not as severe or notable as it is in other communities of this subregion. Nevertheless, one would expect that with the size of the crew component and the relatively small available labor force, that every local resident could find work on a local fishing vessel. This does not, at least on the surface, appear to be the case. Several individuals reported that they were not able to find work on local fishing boats this year. The fact that many outside fishermen had crewed aboard local vessels during the season and that these local individuals were not among those hired, indicates at least an incipient economic maximization effort or else a growing social schism in the community which allows some local residents to go unemployed during the most lucrative season of the year. A second, more plausible, argument is that these individuals had elected not to 'hustle' a crewman's position during the preseason preparations as is the standard practice and ultimately waited too long to press for a job. These factors probably combine to explain the occurrence.

It is evident, however, that the recognition of social class associated with economic wealth is growing. "He's a captain" is used freely to
point out not only why a certain individual owns a very nice house, a new car, or a new vessel but as a device for explaining which an individual holds a high political or social position in the community. This is still an incipient trend in Chignik Bay.

The local salmon fishery is controlled almost exclusively by local residents. This is highly unusually for an Alaskan fishery. Eighty-five percent of local earnings come from the relatively brief salmon runs during the early months of summer. Resource abundance has been high since 1977 (except for a poor year in 1980). Prices have also been high and thus earnings have been unusually high.

The local, relatively cohesive fisherman groups will seek to protect the fishery, perceiving the resource as their own. The Chignik Advisory Board action and lengthy history of the Chignik Boat Owners' Association action supports this contention.

Crab fishing in the area around the Chigniks has been productive as well during the latter part of the 1970's. This, combined with high earnings which had to be quickly reinvested from the salmon fishery, led to diversification of the local fleet. However, this fishery is pursued primarily by large crab vessels out of Seattle. The fishery is not controlled at the present time by entry limitation and thus is subject to a great deal of pressure. Some of these fishermen are also interested in keeping their options open in case the fishery is put under Limited Entry some time in the future. Local residents have only lately been drawn into this fishery--partially because of the attractiveness of the profits and partially as a means of protecting unusually high salmon earnings. Recent years have seen a rather precipitous decline in crab
harvests and this decline is expected to continue.

The ill effects of this decline, however, have not been felt sharply by local residents because salmon catches and profits have been very high. A few individuals can be considered economically overextended in terms of capital investment in crab gear and equipment, but, on the whole, local dependence on this resource is minor. The potential for dungeness and tanner crab fishing is high, however, and provides a significant option in the event of a major decline in the salmon fishery.

Halibut is another unutilized alternative that remains in reserve if conditions dictate. Local vessels can be easily adapted to harvesting this species. Current seasonal restrictions, however, overlap with the salmon season and therefore none of the local captains is currently committed to this fishery.

The local village corporation, Far West Incorporated, and the association of all five village corporations in the Chignik Coastal Fisheries, Incorporated, have been very active and are expected to show substantial economic development within the next five to ten years. The current negotiation concerning the Peter Pan cannery, if it is favorably resolved, will have substantial impact on the course of economic change in this area.

The local view of Limited Entry, even in the face of bonanza fishing seasons, is that it has not prevented the growth of the fleet. According to local sources there were seventy fishing vessels in 1973—the year LE was enacted. Today there are 105 vessels and several more entering with interim permits this next year. However, not a single
fisherman with a permit favored the idea of ending entry limitation. Most were unconcerned about the cash value of the permit itself since, as one fisherman put it "if someone offered me $500,000 today I wouldn't sell it."

These permits are seen as invaluable. As such, however, they have created a new and exclusive class of fisherman. This social differentiation will continue to have repercussions throughout the projection period as the distance between those who have permits and those who do not widens until there are only these two social classes.

Social

Kinship is still a profound organizing principle in Chignik Bay. But as noted throughout this report, its role in communities of the Peninsula is slowly giving way to other forms of social relationship. Contractual, associational, crewman-captain, employer-employee, club membership, etc., relations are gradually performing functions once served by kinship. Other diversification trends have been noted as well. Marriage networks are gradually extending beyond the village and multivillage systems of a decade or two ago. More and more spouses are obtained from Anchorage, Seattle or Kodiak than was common in 1970. Divorce rates are not available for these communities and it would seem that the virtual universal increase in this statistic has not been strongly felt in this region of Alaska. However, this will increasingly be the case over a longer span of time. As Langdon notes for King Cove, the number of single parent families, of unmarried mothers, has begun to increase and to be accepted by the community. While we do not have corresponding
data for this community, this trend can be generalized and expected to occur within the next ten year period. Some strong interrelationships with Port Heiden families and some with Pilot Point/Ugashik have been noted elsewhere but they seem, in the aggregate, to play less of a role in Chignik Bay than they do in Chignik Lake. They are, in any case, less significant to the Chigniks than they are to the communities on the north side of the peninsula. However, marital relations have a very long-term, and binding effect on the two communities from which the spouses originate. Thus, this kinship network will continue to influence travel, social relations, and marriage partner selection into the future.

The rapid growth of economic class distinctions has been one of the more significant changes occurring in the region and has been of direct impact on the communities of the Chignik subregion. These changes, however, occur in very gradual increments--out of several prosperous captains only a few will make the necessary investments to aggregate wealth. This occurs with full knowledge of the community and is not seen as particularly aggressive or competitive. Thus, the development of this present social structure is not seen as unusual and is accepted as the 'way things are.' Our interest in projecting future development is only to note this transition from an egalitarian social system into an economic class or status system is self perpetuating. We are forecasting an increasing formalization of this system over then next ten-year period.

Consistent with these changes is the shift from value homogeneity toward value heterogeneity. Over the last decade this community has been sub-
ject to a wide range of value alternatives. Video tape, travel alternatives, and material products are but a few of the impacting agents and increased options available. These wider experiences and exposure to non-local values cannot but have a gradual disintegrative effect on traditional values.

It should be noted that the community has never viewed itself as a "Native" village. There has always been a mixture of racial and ethnic groups in this community and no one can really remember there being a strong line drawn between native and non-native identity—until ANCSA, of course. This is clearly at variance with patterns found in other parts of Alaska.

The schism between partial and permanent residents is probably the most overt area of conflict for the community. "The Kodiakers come in, make their money and leave...they don't spend a penny here. "Their houses are collapsing, they don't even patch up the holes." In fact, some of the partial residences are in particularly good condition and some are among the most modern in the region. However, these ideas accurately reflect the fact that two separate social groups have been created and that, as the community proceeds toward incorporation and formal organization, such differences will emerge in friction between the two groups.

Village exogamy is recognized. The Kodiak marital connection is the dominant extra-local link. There is virtually no interaction between residents of Chignik Bay and King Cove, Sand Point or other points to the south and west. The residents of Chignik Lagoon are even more closely affiliated with Kodiak than Chignik Bay while the population of Chignik Lake is linked more intimately with Port Heiden and Pilot Point.
Political

Relations with the regional native corporation in Anchorage and with the regional native association in Dillingham are expected to remain attenuated. The value of pressing these higher level native organizations to some particular end, is not perceived as high by local residents. As long as the current context of the relationship continues, the regional organizations will continue to appear distant and aloof.

Community demand for improved facilities and a greater awareness of options is one of the driving forces behind political organization. The second impetus is an awareness of available tax revenues. This tax base is relatively secure in the form of APA and Peter Pan canneries and the firmly established raw fish tax. Chignik Bay, of this subregion, is the only community with access to this source of revenue. Thus, the environmental input and the organization and the advantage available by changing the structure of the local political system combine to set this community off as distinct. It appears poised for radical change. The incentives to incorporation are substantial and the local enthusiasm for this action indicate that within the next twelve months Chignik Bay will become a city. Once this status is assumed, title to land will rapidly pass into the hands of local residents, the community will have title to other lands, and zoning and community planning will become first order of business for the newly formed organization.

Those who are set against incorporation, if a minority, still have several valid points to make in opposition: First, the egalitarian decision-making process must inevitably give way to leadership structure
and "representation." Second, several individuals noted that what has happened in Kodiak is that the community literally "got out of their hands," after incorporation. Outsiders are now seen as controlling the community. Professional managers, superintendents, principals, appraisers, and accountants, etc., are seen as inextractable bureaucrats who ultimately tell the community what to do. In any case, there remain many questions about incorporation that will slow the process; taxation, village trust land designation, council election, etc., remain ambiguous issues. Conflict with the 40% of the 'official' residents of the community who live outside Chignik Bay—who return each year to reassert their authority—will also inhibit formal organization.

Therefore, we foresee conflict and a gradual schism developing around the issue of incorporation, around zoning, tax bases and other community objectives. This is a standard process and should not be cause for unusual stress. Social friction in this community is not significant. Crime is not a problem and alcohol consumption is not considered unusual. Following the pattern of most communities of the peninsula, conflict rarely follows ethnic lines. If a social problem is to occur as a result of ANCSA it is likely to be between share-holders and non-share-holders in the local village corporation activities—this is an artificial structure based solely on village of origin and may not continue to reflect real local status. This has not been a problem to date in this community but has occurred in other communities where an even larger percentage of the quasi-local residents maintain homes in other communities as well.

A central focus of frustration in the community has been the local
effort to operate an electric company. Original plans and projections estimated a cost to residents of about $100 a month ended up costing about $300 a month in summer, the lowest consumption period of the year. Many feel they were deceived into participating in the decision to have this company set up operations in the village. This issue will continue to plague the community until they can fund their own operation.

Satisfaction with life in Chignik Bay is very high. Those who choose to remain year-round are secure in the community and want to see the community develop.

Some sentiment favors the hiring of a local police officer. With a year-round population of around 132 individuals, it does not seem like this will be seriously considered for several more years. This sentiment, however, reflect concern over petty juvenile delinquency, strike problems, and large populations of non-local residents who annually migrate to Chignik Bay for the fishing season. Some individuals see alcohol as a significant problem, a few remarked on the presence of cocaine and marijuana during the season itself, but these do not seem to be characteristic issues among the permanent residents.

Religion

Again, the direction of change throughout the region is secularization. The traditionally dominant Russian Orthodox Church is strong in very few communities. The popularity of non-denominational churches has increased at the expense of Russian Orthodoxy--but the combination of attendance levels in both religious services is not high. Christmas and
Easter services are held and well attended each year but religion cannot be seen as a central feature of community life in this village.

Education

The Molly Hootch decision has had a very significant impact on all the communities of this subregion. A major reason underlying the present dual residence pattern was the desire to live where the children could go to school. Thus, at the close of the fishing season many families moved to the nearest place where there was a school. Those who remained locally did so at the expense of having to send their children to boarding school. The Molly Hootch decision affirmed the right of school age children to be educated in their own village or town. This decision will have particularly strong long-term impact on the Chigniks. While it is true that the presently established residence pattern will be difficult to alter, it is also true that the expense and extra effort required to maintain separate households is very high—especially in view of the fact that it is now possible to educate their children locally. Thus, we project increased attendance levels and an increased number of nominal residents who actually establish permanent residence in Chignik Bay.

Achievement levels have gradually increased since the inception of the facility. There has been a relatively high turnover of teachers and principals during this period which tends to reflect dissatisfaction with local teaching conditions. If the general trend holds true, we should see a gradual improvement of teacher stability and in educational achievement over the next ten years.
Health Care

We have described the health care delivery service available to this community above. We feel improvement or decline in service is probably not likely within the next ten years. A population level above about 240 residents seems to be necessary before a permanent clinic and staff are required. No surge in demand for such services are expected during the next five years at least, no increase in accidents, illness or serious health problems are projected.
CHIGNIK LAKE

Introduction

No previous studies have been attempted on this community. Thus, this projection relies entirely on data collected by the Principal Investigator in four days of informal discussions in that community.

The major source of social change in Chignik Lake, as is the case for the Chignik subregion is economic. Projected increases in salmon harvests and the potential for diversification will mean that the income level in the community will increase and the population will not experience any significant decline due to outmigration. In fact, rather the opposite is likely to occur as a result of gradual immigration. The aggregation of wealth will result in an increase in social stratification and conspicuous consumption to the detriment of traditional values such as responsibility to extended kin, mutual aid, and egalitarianism. Greater and greater wealth will accumulate in the hands of fewer and fewer people. Social relations will increasingly become more simplex and contractual in nature. Political activity is expected to continue at a relatively high activity level.

The community has its earliest origins as a trapping cabin for Dora Lind (now Dora Andre) and her family in the early 1920's at the mouth of Chignik Lake. She and her first husband had six children, she and her second husband (Andre) had eleven more children and these children and their offspring form the core of the population of the community. Virtually everyone one in the community is related by marriage or birth to
individuals of this family. Social, political and economic relations continue to be organized around this family. She remembers there always having been a cannery in Anchorage Bay which puts a facility at that location in the early 1900's at least. She also remembers using skin bidarkis (kayaks), oilskin gear, and that some people still lived in Barabaras.

She recalls that

Things have been changing a lot in the last five or six years. Now they don't use those traps any more. They use the seines now. When they had traps though, those people, the fishermen used to give the natives all they want when they would brail out the fish. That's how they used to treat the people around here. They used to call them down when they would start brailing and give them all they want for smoking or salting. The natives would only gaff the fish down at the creek. They were treated good before, but now you have to pay. Now the fishermen can't even give fish away. They used to before. It's changing a lot.

It is evident from this longer perspective that changes have been great over the long run but even more notable in the last decade. Her sense of the increasing cost of consumer goods, the difficulty of earning money independently, etc., is very strong. Her view that things "in general" are much harder for people today than in her days is a sharp evaluation of the changes that have occurred, especially recently.

Others place the origin of the present community in the early 1960's when several families moved up to the lake from Chignik lagoon because residents felt it was less convenient and comfortable there during the winters. This pattern, for the most part, continues today. Residents from Chignik Lake have permanent fish camps/homesites on the CWF side of the Lagoon where they reside during the fishing season--returning to the
lake at the close of the season. (The CWF site is the original location of the community of Chignik Lagoon which ultimately evolved on the other side of the lagoon.)

The general pattern of dual residence, according to Andre, had its origin during the war when many fishermen took their vessels over to Kodiak and were not allowed to return to the Chignik area. They established homes and families there and this pattern continues to this day.
Input

Ecological

The community Chignik Lake is located on the outlet of Chignik Lake, Chignik Lagoon is located on the Lagoon of the same name and Chignik Bay is located on the bay of the same name. It is almost due west from the village of Chignik Bay and just south of west from the village Chignik Lagoon. The local ecological setting of Chignik Lake is substantially different from that of Chignik Bay or Chignik Lagoon and for this reason will be discussed at some length.

Chignik Lake is located right on the shore of the lake. Surrounding the community are two steep mountain ranges which act to funnel wind down the valley and over the village. The lake curves west and north away from the village—-at the head of the lake is a small channel which leads to Black Lake some seven miles to the north. These lakes and adjoining streams serve as the spawning ground for the abundant runs of salmon that pass through the fishing grounds in Chignik Lagoon.

Climate has played a significant role in the abundance of this fishery. The last six or seven years have produced very mild winters but many residents can remember long periods of snow and heavy wind—-weather that resulted in heavy spawn and fingerling mortality and a long series of poor harvests. This possibility is a constant threat to the local fishery. Any sustained period of cold must be examined for its impact on the fishery and local economy.
The abundance of subsistence resources in the area immediately adjoining this community and the lake is unusually high. Moose are frequently seen on the outskirts of the village, several have been shot passing through the community itself. Several caribou are harvested annually by almost every family. Those that do not hunt are commonly the recipients of caribou from friends or relatives. Bear also frequently enter the community and many are shot each year and used as food. Chignik Lake is the only village in the region in which bear are routinely hunted, salted and consumed as a subsistence item. Duck and other fowl are harvested in large numbers each year in and around the community itself, but geese very rarely pass through this area in their annual migration. The lake supports silver and red salmon but does not contain char, greyling or trout which are common to many other lakes of the region. Several informants estimated that as much as 75% of the food consumed in the community items is obtained locally. While our observations would indicate that less than 50% is so obtained, it is certain that local resources play a much greater part in the lifestyle of this community than they do in other communities of this size in the region. Several informants noted that in 1980, a very poor fishing year for this subregion, subsistence harvests served to tide the community over into the following season.

Commercial fishery resources are identical to those of Chignik Bay and will not be reiterated here. No known mineral resources are being exploited nor planned for the future.
**Extrasocietal**

**External Government**

This community stands out as unusual on several counts. Its members are seriously considering incorporation and yet they have access to a very limited tax base. Unlike the cities of King Cove and Sand Point, or Chignik Bay which soon expects to incorporate, Chignik Lake has access to no state revenues resulting from the riches of the fishery. While they will have access to federal and state revenue sharing funds, these do not compare with the portion of the fish tax going to the city in which the fish are landed. This can amount to several hundred thousand dollars over the course of the year.

External government has had virtually no effect on this community. Until the Molly Hootch decision was reached in 1976, the impact of external government in this community was negligible.

The recent growth in government concern with rural communities tied with the growing local sentiment in favor of organizing the community (at least by the leading families) has led to a surge of activity between the two levels of government. At present, external economic support for the community comes in the form of several different government grants and contracts. Federal Revenue Sharing, State Revenue Sharing, Indian Self Determination moneys (#638), CETA, and Johnson O'Malley are the dominant sources of income for community government. Prospects related to a state ruling the village status could result in a substantial bonus in State Revenue Sharing-- but this is still open to question.
ANCSA implementation has given control over the area surrounding the community to the village itself. In this sense, it has been a major boon to the leading elements of the community. In another sense, the land issue has now become a nebulous area in terms of actual ownership. Prior to ANCSA anyone could build anything anywhere in the community and not fear losing that property. Now, individuals who have recently constructed new homes, on both sides of the lake, are uncertain as to the eventual disposition of the land. Not that they fear someone else taking the land, but in its current status no one is certain about the limits of their property, of someone else's property, of access, of rights of way, and all the other implications of formal title to land. This is a major frustration in the community and will remain so until ANCSA-related issues are settled in the village.

Limited Entry, while it is not perceived as a political or social issue in and of itself, has had marked repercussions in this community. Permit holders, of which there are about 10 in the community, are a class of individuals apart from the rest of the community. They have earned very handsome profits during the last six or seven years, constructed very modern and luxurious homes, own their own fishing vessels, and are, in general, a separate economic class in the village. The economic activity of the community is organized around these individual heads of households. These individuals have control over crew positions and thus hold the key to the gainful employment of many other community members. This has had its effects felt even within families. The organizations of the village are directed by these few individuals--effectively, by a single lineage. The impact of this organizational form will be discussed in the output section.
Chignik Lake is included among those communities technically serviced by the Bristol Bay Native Association (and is part of the larger Bristol Bay Native Corporation). The impact of BBNA policies has been negligible in this community. Part of the problem is the remote location of the Chigniks from the center of power in Dillingham. Part is due to the fact that the local community is little interested in the resources available to them via this political avenue. Again, much depends on how valuable the resource is (with varies closely with general income levels), and how difficult it appears obtaining the resources will be. In any case, relations with the Regional Corporation are very tenuous and are rarely activated.

The ties with Seattle, even more so than Anchorage, have increased over time. Almost everyone in the community has kinship ties with someone in Seattle. This link, however, is far weaker than the one between Chignik Lagoon and Seattle or between Chignik Bay and Seattle. The community has no direct interaction with foreign processors.

**Commerce**

External communication for this community consists of a single, relatively undependable, satellite phone system. Service is expensive but maintenance is provided by the state. The population is not satisfied with this system and is now pressing for individual household phones and for satellite television. Unlike their counterparts throughout the region, Chignik Lake is attempting to finance and construct their own television system and appears to be progressing steadily toward this goal. By one means or another they are expected to have acquired such a
system within the next two or three years. The school also has a short-wave radio with which they communicate daily with Port Heiden and with the Lake and Peninsula REAA administrative center in Naknek.

Local transportation facilities are anomalous by almost any standard. For a population of around 130 individuals there are eight privately owned planes located in Chignik Lake. Access to Chignik Lake is open almost year round, unlike Chignik Bay, Chignik Lagoon, Perryville and Ivanof Bay. Even relatively strong winds can be handled at the lake because prevailing winds, channel along the valley, are in direct line with the runway and can be managed by the well trained and highly experienced pilots of the region. A commercial pilot and his plane are also located at Chignik Lake which makes general mail delivery and external travel readily available.

**Larger Sociocultural System**

This community, unlike its counterparts on the lagoon and bay, is not closely linked with Kodiak or other non-local community. The lake, in fact, is a winter residence for almost the entire population. During the fishing season the village is virtually abandoned--fully 100% of the community is tied to this annual migration. The reverse applies to the CWF site which is virtually abandoned during the off-season. In contrast, for Chignik Lagoon, which is essentially a fish camp for Kodiak and several Seattle residents, the permanent population is minor when compared to the summer population--as much as 80% of the population is involved in the migration each year. For Chignik Bay the ratio is about
50% permanent and 50% dual residents.

The community of Chignik Lake may be described as more traditional than Chignik Lagoon or Chignik Bay but less than Ivanof Bay or Perryville. As one of the richest per capita communities in Alaska—at least statistically—they have access to material resources, technology, leisure, and other products such high incomes can provide. It is readily apparent, however, that conspicuous consumption is not held to be acceptable. Very few homes in the community could be considered extravagant—even the very recently constructed homes are designed to conserve energy and, except for one or two, fit very neatly into the village setting.

With a population of around 139 at the time of this research, and with most of these residents linked by kinship to others in the community, this village can fairly be considered a kin-based community. Again, a core set of families dominate the social, economic and political organization of the community but on the whole there is a high degree of satisfaction with life in this village.

On the whole, the community is animated by a drive to acquire the valued products of the wider sociocultural system while at the same time maintaining their established lifestyle.

This lifestyle can be described as a brief summer period of intense fishing activity, producing large incomes, and then returning home to enjoy these profits. By enjoying we do not mean just sitting around. Their year is very active. They may help friends or relatives build a home, repair plumbing, repair structural defects in their homes, hunt
caribou or bear, visit with one another, work on village paperwork and business, travel to Chignik Bay for groceries, or in the evenings play volleyball or basketball. The pace of most of these activities, however, is relaxed in most cases. Serious planning of work days is not contemplated and interruptions are positively valued. Residents may decide at noon to go hunting and be out on the path by 12:30.

Technology has directly affected the community in the form of video equipment, three wheelers and a telephone. These videotape programs and the established network of exchange and distribution within the village, has come to play an important role in true leisure activity. Libraries of fifty to one hundred tapes are not uncommon and everyone considers everyone else's libraries open to their use. But in a sense, they are thus not tied to these devices as is the case where programs are broadcast from Anchorage. They can simply interrupt their viewing for some other objective and return later to resume the program. With the eminent advent of satellite television the structuring of social interaction may be more strongly affected. Three wheeled motorcycles are both a boon and a curse to the community. These all terrain vehicles allow hunters rapid access to remote valleys and grazing areas of caribou and facilitate packing the animal out. They are also used to go anywhere in the village--even for trips of 100 yards they are mounted and driven. On the other hand, in the hands of children from age six and above they wreak havoc in the community. They are driven from morning into night--as fast as they can be driven. The teenager able to hold his motorcycle on its two back wheels the longest is highly respected among his peers. The sound of these vehicles has become a part of the background noise of the community--moments of stillness are
recognized as noteworthy. But since few villagers complained of these things, these remarks should be seen as etic observations only.

Social behavior is definitely mixed in the community. Some families are decidedly western in their orientation, home furnishings, and treat guests in a more formal way while others have very traditional orientations, are very casual, open and friendly. This also reflects the wide range of different behavioral and value orientations of the village itself. Some live in homes, consume products, and spend their time in pursuit of values unchanged in the last ten years at least while their neighbors are among the more wealthy and more western oriented in the region. This will be seen as well in our discussion of education below.

_Intrasocietal_

**Community Facilities**

We will begin this discussion with a description of facilities available to local residents in 1976—just five years ago. At that time there was no phone, no water system, no school gymnasium, no school shop, no village office, no new homes, and no planes owned locally. This has all changed. They are now connected to the outside world via a satellite telephone system, have individualized sewer and water connections provided by PHS, and almost every family has its own electrical generation plant. A gymnasium and workshop were recently added to the local school. A dozen or more new homes have been erected since that time and eight planes are owned by members of this community. A new Russian Orthodox church, the first in the region in over a decade, was con-
structured last year. Change has occurred, and continues to occur, at a rapid pace.

Local development, spurred by recent high income levels, has occurred at a rapid pace. Informants claimed that as many as 13 new homes had been constructed since 1978 in this community--8 in the last two years. Several individuals discussed the possibilities of starting small businesses in the near future.

Fuel is one of the major problems for the community. For example, in addition to the straight cost of large quantities of fuel needed to maintain the school, there is an additional charge levied to transport that fuel up from Chignik Bay of $.67 a gallon.

Transportation in and out of the community is relatively frequent because the local strip is arranged to take advantage of prevailing winds--in most cases even if a plane cannot land at the lagoon or bay it can land at the lake. It is well constructed and maintained. The fact of eight privately owned aircraft located in the community has made travel to Port Heiden or Chignik Bay a casual affair.

The most salient perceived needs of the community include a bulk fuel storage facility and improved delivery system, and the need for title to land. These issues will be dealt with below.

Private development in the village, especially considering it size, is remarkable. A backhoe is owned locally, many new homes have been constructed (many without the use of outside contractors), plumbing and electrical expertise are also available locally, and local entrepreneurs are quick to take advantage of every opportunity. If the school needs
some minor work done, a local individual will run his backhoe for $35 an hour. If transport is needed he will use his truck to move generators or equipment from place to place—all at specified fees. If hunters come into the village in search of bear, a local individual will assist them in getting from place to place. There is much entrepreneurial enthusiasm in this community.

This community is also expecting access to hydropower within the five to ten years but short-term planning for this possibility has yet to begin. At the current time the village depends solely on imported fuel oil brought up from Chignik Bay via individual fishing boats. The expense and difficulty of maintaining the local school and the communities electrical plants is seen as one of the biggest problems of the community.

It should be remembered that all the construction accomplished during the last few years was achieved at extraordinary expense. Materials, already expensive in Anchorage and Dillingham, had to be transhipped by small aircraft from their point of origin to Chignik Lake or be transported by vessel to Chignik Bay and then be loaded on local vessels for transhipment to the lake where they are off-loaded by hand. This should accentuate both the fact of extraordinary income levels and an unusual enthusiasm for improved housing and facilities.

Demography

Most of the growth in population of this community must be attributed to indigenous growth. Only a few unattached non-indigenous individuals reside in Chignik Lake. Most outsiders have either married into local
families or are teachers. Natural fertility has been high and is a source of great pride. Seven children were born in this community in 1980 alone. Most of the growth, however, resulted from individuals electing not to migrate out of the community in search of jobs. With earning potential high in the local area there has been little incentive to move to Anchorage or Kodiak to find employment.

The ethnic ratio of the community still strongly favors indigenous residents. This ratio should remain relatively constant as long as the birth rate continues at its present level. And since ethnicity is only of significance as a contrastive category, any children born locally must be considered among the same ethnic category. Local/non-local is a much more powerful descriptive categorization than native and non-native in this community, as it is in most smaller communities of the region.

The age distribution of the village increasingly favors the younger age groups. While we do not have complete data, it is clear that the number of residents under the age of 30 has increased markedly during the last decade and appears on the increase at this time. The sex balance of the community is clearly less biased in favor of males than other fishing communities of the region. Our rough estimates show only a very slight edge in favor of males. We find it difficult to project any increase in single, unattached, males in the community and forecast here a continuing improvement of the balance of males to females in the community--unlike most other villages of the region.
Structure

Values

Measurement of status in this community is very strongly influenced by earning level and the aggregation of wealth. But more than most other villages, this community is tightly organized around kinship and a few dominant lineages--thus, the effects of status ascription based on affiliation or non-affiliation must be considered. Certain families control the political organization of the community and this is recognized by the community at large. Among the population of school-age the differences are not notable, however, within the adolescent and young adult population lines of social affiliation can be observed.

It is our observation that differences in wealth in the community is probably the dominant factor separating one group of residents from another. This social schism is growing rapidly and is based primarily on vessel and limited entry permit ownership. There are approximately 11 LE permits owned by residents of Chignik Lake--there are eight vessels owned by residents. Those without boats lease or hold partnerships with non-local residents during the fishing season. These permits are seine permits and have generated unusually high earnings over the last five or six years. The rest of the population must be content with employment on the vessels of these permit holders, with other friends or relatives, or with work in the canneries. The difference in income between the two categories of employment is dramatic and has resulted in two distinct groups of residents, those of families with permits and vessels and those without. Those without access to high earnings are
seen as lazy or as drinkers. While it is probably true that the reasons why some individuals did not receive permits are the same reasons these individuals are perceived in such unfavorable light, it is also true that Limited Entry tended to rigidify existing schisms that were originally perceived as minor.

Traditional systems of reciprocity and redistribution are more in evidence in this community than in many others--this is primarily a result of more intense kinship linkages and the ready availability of subsistence resources on which it depends. It is invariably assumed that anyone obtaining more caribou or moose than needed for his immediate family will redistribute among his wider family and friends the remainder. Older relatives are high on the list of recipients. There is a notable preference to distribute such products to families with low earning potential.

There is such wide variety of value systems and world views among this population that it may be meaningless to try and describe shared features of these systems. We can suggest only that the drive to acquire the valued products of an externally defined cultural system while at the same time maintaining the most attractive features of their established lifestyle is very strong and is shared by most residents.

Teachers, who are normally thought of in Alaska as among the more well-to-do residents of rural communities, are among the underclass in communities of this region. This is the case in this community. More than in other communities, teachers are thought of and dealt with as employees--and as temporary employees at that.
Economic Organization

Commercial

The economic organization of Chignik Lake is suggested by the distribution of permits in the community. In that only 11 residents hold fishing permits and only 8 vessels are registered to local owners, the means of acquiring significant earnings are strictly circumscribed. Furthermore, the means of achieving even acceptable standards of living are controlled by these individuals. A monopoly of sorts exists with regard to access to the employment. This economic idiom overwrites political and social interaction in this community. Social relations must conform to expectations of potential employers and captains—and potential employees must bend where necessary. Entrepreneurial activity is weighted by this distinction as is alternative local employment options.

No federal or state employment occurs in this community nor is it expected to occur within the next five to ten year period. If a government agent is eventually stationed here his concern would be primarily with wildlife biology or management.

Subsistence

Subsistence resource utilization patterns are described in the preceding section. We note here that the structure of subsistence activities is more strongly influenced by recreational objectives, and preferential consumption patterns, than it is by nutritional necessity.
Non-labor Force

Unemployment, in community terms, does not exist. Work, for those interested, can be obtained. But few individuals feel inclined to pursue employment and the need for supplemental earnings applies to only a few families in the community. The number of individuals on AFDC, welfare, unemployment, etc., is unknown but we suspect that fewer than four residents receive any form of social assistance (other than social security).

Social Networks

For this community, social organization is defined by kinship and resource access. The dominant lineage is dominant not only in numbers but in terms of economic wealth--and access to the resource base. Crew membership is organized around kinship and friendship. Thus, both forms of organization work together to set one group of individuals as distinct from the rest. Captains are a social class apart. Neighborhood is emerging as a reflection of these differences. One section of the shoreline houses a group of less successful families, a group further along the beach includes some of the more affluent fishermen while those on "the hill" are some of the younger, successful but less strongly affiliated families of the community.

Informal social organizations like Lion's Clubs or Women's Clubs do not exist to date in Chignik Lake. The local basketball team, when it is ultimately organized, will be a focus for village cohesivity. High school trips are another important event on which the community focuses during the year. Evening sports at the local gym are very popular but
few adults regularly attend.

Relations with communities outside the local area have grown increasingly tenuous over time. As the community gains an increasing sense of its own independence and integrity it seems to rely less on external associations, travel, and dual residence patterns. The local high school eliminated the need to move to Kodiak, Sitka, Anchorage, Seattle, or Chemewa, Oregon (an old BIA school connection) for the school year.

**Political Organization**

**Local Activities**

The political, social and economic structure of this community overlaps in significant ways. The local Village Corporation, under ANCSA, is "Chignik River, Ltd." Its leaders, again, emerge from the same lineage. Positions within the local village council, the village administrator, the Chignik Fisheries Board representative, the president, the vice-president, etc., are held by members of this kin group as well. All decisions regarding internal development, land titles, contractual arrangements with outside, or governmental interactions are fixed by the same group of individuals. Input from other groups, families or factions in the community is rarely sought. Some concern over this situation was voiced by several families but, in general, no one felt it was likely to change in the near future.

ANCSA has had, to date, little or no impact on this community. The difference between shareholder and non-shareholder, between native and non-native, or even between immigrant and long-term resident has not
emerged as significant. The fact of very few people in these second categories has had much to do with this lack of schism on the grounds of ethnicity or indigenous status. Once title is passed, however, we expect this perception to change. Already many families have become concerned over where their land will begin and others end, about access, right-of-way, and limitations of various sorts on their freedom to live anywhere they want. To date, there exists no legal obstacle to constructing a residence anywhere in the community and this is of current concern to the community. The risk of outsiders taking advantage of this situation is minimal, however. Residents would not tolerate unwanted individuals constructing homes in or near the village. The internal freedom to live anywhere one chooses in the village would be obstructed and this is of significant concern to several families.

**Social Control**

With the exception of minor teenage alcohol consumption and very minor marijuana and cocaine consumption by older youths, minor pilfering of gasoline and wild three wheelers careening through the village, there are no social control issues in this community. The effectiveness of social sanctions such as parental reprimand, ostracism and general gossip remains strong in this community.

**External Relations**

Relations with Bristol Bay Native Corporation and Bristol Bay Native Association are discussed above. The link between Chignik Lake and the Lake and Peninsula REAA has increased in intensity and in compatibility over the last few years. The community has acceded to the fact that
certain national standards must be achieved while the REAA has taken a much more tolerant position regarding curriculum variations deemed appropriate to the local community. This is not a static balance and continued friction on particular issues is expected.

The Community and Regional Affairs Office out of Anchorage has had major influence on the current organization of local political representation. Agents of this department have visited the community on several occasions and have provided documents and personal assistance in pursuing formal entity status and, ultimately, incorporation. This agency also acts as the channel through which revenue sharing funds are distributed to the local political leadership for use in the community. Advice and assistance with the multitude of forms required to conduct the affairs of the village is also provided by members of this agency. The CRAO has provided the bulk of the information and positive assistance received by the community.

**Religious Organization**

Evidence indicates that Chignik Lake is perhaps one of the two strongest Russian Orthodox communities of the Alaska Peninsula and early chain islands. They have just constructed a new, very modern and expensive Russian Orthodox church. Father Harry, of Perryville (the other very strongly Russian Orthodox Community), is a frequent, if irregular, visitor to the community. There is a sense, however, that attendance is irregular at services as well and that long periods without readers or priests visiting the community are not exceptional. We can say that for a few individuals the Church plays an important role in everyday life.
but for the majority of the population nominal belief and participation is the rule.

**Educational Organization**

The impact of the Molly Hootch decision on Chignik Lake has been significant. Before the local high school, mandated by this decision, was established, children had to attend school outside the community. For this they either had to enter a boarding school, live with relatives, or move with their entire families to a community with a high school. This pattern strongly affected social relations and kinship. Families that left the community would often not return. Marriage, especially during this critical developmental stage for the youths, often took place around the time of graduation and nuclear families would develop in that community. There continues to be a strong tie with such places as Chemewa, and Seattle, Oregon and Kodiak where many families established residence during the bulk of the year.

With the establishment of a local high school this pattern swiftly changed. Now there are very few families that maintain residences outside the community. Almost all residents have elected to claim only Chignik Lake as their home and the commitment accompanying this decision has had beneficial effects on community solidarity.

In addition to the high school the community has a long established elementary school and a growing preschool program currently managed by the school staff. Funding levels for these schools is very high. This is in keeping with state priorities placed on rural education. All the most modern equipment is available to students in this program. Computer
technology, photography equipment, very advanced mechanical and shop equipment, and funds for world travel are readily available. Teacher salaries are among the highest in the nation and just slightly below that of the Aleutian REAA. Salaries between thirty and forty thousand dollars are not unusual. Living expenses are highly subsidized, especially for the more experienced teachers who live in school provided housing.

For this community in particular, however, friction between the ruling lineage and the school system seems to be perennial. Last year four teachers quit and this year five new teachers were appointed.

All of the teachers are certified and well experienced in rural education. All have found this population vastly different from their previous teaching situations. The wealth and sophistication of these children is seen as quite unusual for "bush" communities. The school has one bilingual instructor and one preschool teacher (and several aides). Approximately 23 students are able to understand Aleutic (Sucestun) though very few use the language in school. The school administers a subsidized lunch program in which children of families unable to afford lunches can be assured of a hot lunch at mealtime. Many students, paradoxically, are enrolled in this program.

Health Care Organization

The community has a village health aide—a very competent woman. She reports that the incidence of childhood illnesses, occupational accidents and injuries is about standard for a community of this size. Emergency facilities, as usual, are not considered adequate and if
anything is feared it is an accident which might require rapid treatment in a major medical facility. Several hours of transport time is seen as a threat to the security of the community. There is no provision for social services in this community and the distance and difficulty of obtaining support from Dillingham or Anchorage has led many to simply disregard these options.

Alcoholism is a problem among a specific set of families and individuals. Economic, social and political variables easily define the group of people most susceptible to this problem.

Recreational Organization

Chignik Lake is the only community on the Peninsula or Aleutian Chain in which aircraft are seen as recreational vehicles. They are used to go out and hunt caribou and to transport goods from Port Heiden or Chignik Bay or Anchorage to the village. But they are also used to take joy rides—purely for the fun of it. They can be seen flying low over the village or doing minor acrobatic stunts high over the lake. Snowmobiles, three-wheelers and skiffs fill out the range of recreational vehicles used in the village. Hunting and fishing are the dominant out-of-doors recreation for the village. Social visiting, television (videotape) and the local gymnasium are the dominant indoor forms of recreation. Television is expected to gain in popularity soon with the introduction of satellite broadcasts. Church activities play an insignificant role in community relations while formal athletic competitions have yet to generate the enthusiasm common to communities such as Sand Point and King Cove. The promise of significant interaction centered on
this activity is strong.

Visiting between communities occurs relatively infrequently and then mostly as ancillary to other concrete objectives. The link with Port Heiden appears almost as strong as the one with Chignik Bay. Kinship affiliation between Port Heiden and Chignik Lake accounts for some of the intensity and geographical contiguity explains the remainder.
While individual economic activities are not expected to change radically over the next decade, we are projecting an increasing skew in income distribution in the community—-the now wealthy individuals will increase their wealth while those that are now poor will become relatively poorer. As tax incentives and local entrepreneurial temperament continue to operate on the local economy greater and greater wealth will accumulate in the hands of fewer and fewer individuals. Even among those whose earnings have been very high, only the more prudent or determined individuals will fully capitalize on options available to them. A trend in the direction of contractual rather than kin-based hiring of crewmen has been observed. Several individuals noted a preference to simply hire a crewman, pay him the minimum going rate, and not have to contend with all the problems and confrontations involved in fishing with relatives. The detrimental consequences of this trend on community cohesivity are obvious.

The long-term effects of an increasing skew in income include rigidification of current social schisms, increased hostility levels, stress, conflict and out-migration. These changes can be seen in incipient forms in today's social relations.

Community income sources are expected to expand dramatically once the community incorporates. The activities in which the local governing individuals are involved have increased markedly in just the last year. The next two or three years should see increased communication with
higher level government authorities—we expect more completed grant applications, more requests for government assistance and more petitions for services than have occurred during the previous five years.

During the short-term (less than five years) we do not foresee any significant decline in employment opportunities in the fishery. Over the intermediate- and long-term, however, we expect to see an increasing tendency to contract for services and a decreased reliance on traditional/kinship networks to provide assistance in constructing a house, installing plumbing, electrical repair or in selecting crewmen.

Social

The above projections dovetail with forecasts of change in social relationships. Kinship, once the sole determinant of residence patterns and social relations, though stronger in this community than in others, is expected to lose ground to economic determinants of behavior. Secondary education will also tend to contribute to this end. Traditional values of redistribution and reciprocity are also expected to give ground to the dictates of the dominant economic form. We note, as an example, how subsistence items are still freely exchanged while, at the same time, families very rarely part with money within this system. The cash economy is seen as a separate and distinct system that does not interface with traditional values. An individual might loan you his snowmobile, his motor cycle, or his car but the chances of him loaning you $100 are remote at best—the risks are greater in the initial situations. Money is different and dictates a radically different way of gauging social relationships.
**Political**

The political arena of this community will not change radically over the next five years. The leadership structure will remain relatively constant. The leading lineage is so well entrenched that we do not foresee representative government or generalized decision-making becoming a major factor during the next five to ten years. Relations with outside government will be of substantial concern to local leadership. Government assistance will be increasingly utilized and the effectiveness of local leadership in achieving objectives of value to the community will enhance their position in the community. The role of this leadership in promoting ANCSA distributions is seen as crucial. Transfer of land into residents' hands will have a very strong impact on development objectives of this leadership. This move will tend to enhance local construction efforts and secondary economic diversification.

While the political arena will be dominated by a certain lineage, other figures in this community will feel their voices should be heard. As the community grows this concern will increase and the potential for conflict between factions will increase as well.

Social control does not appear to be a current problem. Some concern over truancy, and alcohol has been expressed but most residents see this as a standard problem. If this should increase over the next five or so years it will be a product of the communities generally increased range of acceptable behavior. However, the village is of a size and intimacy that most events and problems are brought to the attention of the wider population long before they can become serious.
Education

No college graduates have yet emerged from this community. We are projecting a clear change in number of local high school graduates pursuing post-secondary education. Many informants observed that those graduating today are more interested in college than their predecessors. Several students could specify their field of specialization, the particular school they would attend and the degree they expected to receive within the next four years. The majority, however, still dismiss the idea of college with a casual "why bother" and with incomes ranging into the fifty and sixty thousand dollar range, it is difficult to argue the point on economic grounds.

Extracurricular, but school-related, activities are expected to increase dramatically in the near future. Inter-school sporting activities will be an important key in this change. Interest in volleyball and basketball is strong--an enthusiastic coach or group of high school students will have a very strong impact in creating a viable program.

Health Care

Health care facilities are considered adequate to meet needs relative to other communities. The prospect of improved medical facilities is remote and the utility of a resident doctor would not justify the increased expense to the community. No greater incidence of accidents or physical illnesses can be projected. Increased stress levels are expected but the gradual nature of their emergence make it unlikely the population will note this trend.
Personality

Changes in self-perception are already notable in this community. It is difficult to imagine a small community of more self-reliant and independent individuals. Only indirect measures of a prior state of mutual interdependence could be elicited from residents but from their perspective "everybody just thinks of himself now" and only incidentally of others. From a personality perspective, this has meant greater self-esteem and a greater sense of personal power to manipulate the world. For a population reputed to be highly tolerant of hardship, to be socially withdrawn, supportive evidence from the more successful fishermen of Chignik Lake is absent. They are progressive, active, assertive and very competitive. The shared identity of seiner captain, the security of very large yearly earnings, have allowed several individuals in the community to assume very positive self-images. For others, the contrast has meant assuming a second-class social identity—the effects of which apply as well to personality itself.

Socialization practices have changed with the availability of modern conveniences, television, and high incomes. The youths of the community are unusually independent—some own their own planes. Some have been able and have elected to establish their own household. The use of physical punishment, observes one resident, "has really gone down, except for a few families where alcohol is a problem." Details on toilet training and intra-familial behavior were not obtained in this community.
INTRODUCTION

While the Principal Investigator spent several days in this community collecting data (weather preventing departure), it is felt that the small population size, below the official preliminary census figure of 41 (which is below the 1970 figure of 48), and the intimate nature of this material preclude detailed discussion of this community. We present here only a capsule summary and generalized projection for this community.

Although subject to the same environmental forces as the other communities in the Chignik subregion, Ivanof Bay is expected to experience more severe social schisms and more marked class development than these other communities. The potential for economic expansion and increase in local income is limited to very few individuals and changes in the political and educational subsystems are likewise foreseen to be minimal. The existing pattern of social relations, health care, religion and recreation could remain relatively constant throughout the projection period. This state of affairs is due primarily to 1) the lack of entry limitation permits necessary to secure a high income through commercial fishing activities, 2) the small and stable (even potentially declining) population size, 3) the lack of administrative expertise or incentive and 4) the declining emphasis on mutual aid, egalitarianism and increased emphasis on nuclear family relationships.
Ecological

The climate of this community is identical to Chignik Lake and Perryville. The village is located on the shore of Ivanof Bay, a very attractive natural harbor. This harbor affords excellent protection from the open sea. Steep foothills abut the community, strictly limiting potential expansion of the village. A small creek enters the bay immediately to the east of the village.

Natural resources available to the community include caribou, moose, geese, ducks, trout and late running salmon available during the non-commercial season. Marine mammals are available on an incidental basis as well. Seal, sea lion, and walrus are occasionally consumed. Techniques vary according to what is available--seines, gaffs, pistols and rifles are used on different occasions. Some trapping occurs during the late fall and winter. Wolverine, land otters, mink and other fur bearers are relatively abundant within range of this community though this is not a major source of livelihood for residents. Berries occur in great abundance from the middle of summer until early fall and are collected and stored as jams or jellies or frozen whole.

The sole source of energy is imported fuel oil. Each family unit runs their own electrical generation system and heat is produced by fuel oil stoves. This is one of the major costs of living in this community and several families viewed adequate earnings from the fishery to mean enough money for fuel and a "little more" for other needs.
Local fishermen depend on the abundant salmon runs of the last few years. Halibut, bottomfish, crab, herring, shrimp or other species are not considered as important alternatives by these individuals. Little or no mineral potential is recognized--several individuals suggested, however, that they felt that an exploratory well struck oil not far from the community on land owned by Father Harry of Perryville though this is more rumor than data.

Extrasocietal

Ivanof Bay is one of the smallest communities of the study area. As such the direct impact of larger governmental decisions and agencies on the village have been minimal. The community does not appear to interact with BBNA, with the state or federal government and no BIA, CETA or JO funds are distributed locally.

ANCSA has yet to have measurable impact on the community. It has, however, considering the small population and relatively narrowly defined set of political actors, prompted some individuals to see title to several thousand acres someday passing into their own hands. This possibility is not seriously considered by most residents.

Limited Entry, of course, has had a profound impact. Only two residents own a permit and vessel. Holding the entire earning potential of the community in their hands has led to a rather sharp social, economic and political differentiation within the village.

The difference in housing and in standard household consumer products, however, is not highly significant. Everyone seems to have the rudi-
ments of a standard set of technological items. Some individuals are fully emersed in the cash economy while others live in a more transitional economic environment. A major difference in resource utilization patterns emerges, however. Those without vessels or permits must rely to a greater extent on subsistence resource harvests and spend much more time in their pursuit. It is, nevertheless, a very casual and pleasant sort of pursuit. Little planning is involved and little effort spent in physical preparation. If the decision is made to go hunting, one merely picks up a rifle, says good-bye, and leaves.

Intrasocietal

Community Facilities

Homes are comfortable, if somewhat smaller than those of other communities in the region. They are, with a few exceptions, owned by their occupants. There has been no new construction in the community (excepting the one room community hall) in several years.

Except for the recent construction of the community center and erection of a satellite dish, there has been no new construction of homes or buildings in the last few years. Local homes are individually constructed and owned. No one rents housing in this community.

The community has no sewer system, no water system and no shared community electrical generation system. Located in the community hall is a satellite phone system that rarely functions--but no one seems to feel inconvenienced. The community hall also has two pool tables, one of
which received nightly use. It is also the mail room. Some pressure exists to acquire a community television relay system through the present disc system. We expect these needs to be met within the next five-year period.

Several three wheelers are owned in the community and are used for transporting trash, groceries, or for hunting and pleasure. No automobiles or trucks are owned locally and no roads exist. Several skiffs are owned locally and these are used mostly for pleasure, for sport fishing, for going on picnics, or other recreational use.

Demography

The population of Ivanof Bay has dropped from 48 residents in 1970 to approximately 41 in 1980. This estimate, moreover, appears high. While the number of children in the local school has increased recently, it is very difficult to generate trends for small populations that vary widely from year to year. One family recently established residence in the community but this evolved out of a strong kinship link and should not be considered in-migration. We cannot foresee any significant increase in immigration into this community and see very limited natural increase occurring within this decade. The age distribution of this community appears to be relatively constant, in accord with the fact of little immigration and few local births. The sex distribution of the community is fairly balanced—only one single female head of household resides in Ivanof Bay.
Values

While some of the material values of the larger sociocultural environment have been adopted by residents of this community, by and large, traditional values still predominate. Sharing is still an important value especially within specific sets of families. Interaction in the community can be seen to occur mostly among families of similar socioeconomic category.

Material values, in the form of common household conveniences, are fairly evenly distributed throughout the community. Housing, while relatively less spacious than many others of the region, is comfortable and adequate. Little conspicuous consumption occurs. Almost every family owns a three wheel motorcycle. These are used to transport trash, move groceries, for pleasure and for subsistence purposes.

Dependence on the local resource base is skewed according to income category. Those with the lowest earnings rely to a greater extent on subsistence products and spend more time in their pursuit. This pursuit, however, occurs at a very relaxed pace and, were it not for the clear economic and nutritional importance of the product, would probably be considered more a recreational than a subsistence endeavor.

As could be expected from the distribution of income and wealth in the community, the distribution of social status is skewed in well-defined ways. Linkages to the two economic poles of the community are critical—superior status must be accorded individuals who hold such
economic power. Other measures of status, however, apply as well and social groupings even within this small community have special significance. Local belief systems and world views range from more westernized material and profit orientations to more traditional intimacy and social interaction. Those holding one or the other view can be predicted on the basis of the present distribution of wealth.

The community is of strong Russian Aleut descent. The teacher is the only non-indigenous resident of the community. One older resident still speaks fluent Russian. While many individuals have some comprehension of Aleut words, this language is not in use by residents of Ivanof Bay.

As a uniformly Russian Aleut community there is little basis for ethnic differentiation. However, we think it fair to say that it is unlikely that uninvited individuals would be allowed to establish residence in this community.

Organization

Economic Organization

Earnings from the commercial fishery account for over 90% of the income of members of this village. Two permit holders, each with a vessel, are the dominant social, economic and political forces in the community. Money generated by their vessels account for at least 80% of the earnings of the entire population. Economic organization is divided simply into those individuals who own vessels and permits and those who do not. A strong dependency relationship exists between those without independent access to the commercial resource base and those who do. The local
store, occupying part of a residence, is the only independent local enterprise and its operation is considered more of a service than a profit-making venture. The local school, in addition to the single teacher, pays a part time maintenance man who, with the local health aide, are the only employed members of the community outside of the fishery.

We suspect, but have no concrete evidence, that several families could qualify for social assistance of some sort--yet we also believe that very little such support is requested.

**Social Networks**

The structure of social relationships appears constrained by economic status. More social interaction occurs among economic equals than across economic status. The nuclear family is the standard social unit--excepting trapping and others major subsistence pursuits--the family is the principal acting entity. Friendship, among cohorts of social equals, is the second operative social force and links unrelated families to each other in bonds more active than some kin relationships. There are no formal social organizations. Crewman/captain relationships appear to continue in roughly similar form throughout the year.

**Political Organization**

**Local Affairs**

Local political affairs are managed primarily by two or three central figures in the village. The village council, village corporation,
school board and all other political or quasi-political units are composed of the same individuals. Meetings are held with the assumption that any decision reached will be acceptable to the community at large. There is little overt discontent regarding this arrangement.

There appears to be little concern regarding ANCSA distribution of land. The leading figures of the community see their control over the entire acreage as being complete and are not concerned about specific apportionment at this time.

There seems to be little interest in economic diversification, population growth or major construction projects for this community. Leaders of the community have even entertained the idea of moving the entire community to a location further along the coast. Whether or not this is a serious consideration is unknown. It does, however, reflect a reluctance to encourage immigration and, in general, an anti-development sentiment dominates the community.

**Social Control**

There appear to be no problems of social control. Once and a while an incident of drunkenness will result in threats but little violence is attributed to individuals in this community. Theft is not an issue and social sanctions are considered sufficient for any problems likely to occur in the village. No one foresees a need for formal police protection.
Religious Organization

Religious activity, as noted above, serves as a very important unifying force for this village. While still nominally Russian Orthodox, most residents find that participation in non-denominational church activity does not contradict their traditional belief system. Attendance is relatively high and this enthusiasm and religious sentiment has served to integrate this community more than any other factor.

Educational Organization

The local school and teachers residence is considered adequate both for educational objectives and for teacher accommodation. A recent increase in school-age children has meant increased pressure on the teacher and some enthusiasm for hiring a second teacher for the younger students and preschool group. This may be postponed indefinitely by the Lake and Peninsula REAA, however, as such appointments usually require a larger enrollment in order to justify hiring a new teacher. There does not seem to be significant interest in post-secondary education but the number of students is small, average age is quite young and substantial change remains a possibility.

Health Care Organization

The local health aide is considered adequate to local needs. Her training and willingness to provide service to the community has been important to the community's sense of well-being. Emergency medical problems must await transport to Anchorage and this delay alone creates a sense of insecurity for residents. Alcoholism, in its enduring rather than
binge form, is not a problem for this community.
Economic

The structure of the local economy cannot change as long as Limited Entry continues in its present form. The non-permit fishermen of this community have no hope of inheriting or purchasing the $200,000 permits required to enter the fishery. Their social and political status, as tied intimately to this economic system, is also rigidly structured by this regulatory system. However, while in other communities high incomes have generated secondary investments which ultimately generate supplemental sources of income, this does not seem to be the case in this community. The wealth of the vessel owners has remained relatively constant over the last few years. Utilization of this income has not resulted in an increased skew, though the skew generated by income differences has always been severe. Taxes are handled in a relatively straightforward way—as a basic percentage of income less vessel and equipment depreciation. One of the local fishing vessels was recently purchased and this reflects a recent recognition of the implications of tax incentives.

The standard resource utilization pattern involves moving to the CWF side of Chignik Lagoon early in May where the fishermen reside in their summer homes during the fishing season. In middle or late August they return to their homes in Ivanof Bay. They vacation for several weeks and then return to the village. Extended vacations are not unusual among the vessel owners but occur rarely among the crewmen. This pattern is expected to continue unchanged throughout the projection period.
Social

The issue of social cohesion, and its implication for the continuity of this community, is likely to be very significant. Other than the inherent lifestyle and the impetus of long residence, there are few supports for long-term commitment to the community among the non-vessel owners. Economic incentives are, in fact, decreasing. This is in keeping with a downward trend in the size of crew shares.

Political

In such a small-scale social system, it is not uncommon for individuals to be directly affected by the decisions of leadership and yet have little input into the decision-making process. Frustration and disenchantment with this situation can often exceed the actual significance of the decisions themselves. We expect an increase, over time, in the level of frustration caused by lack of representation. We are, however, not secure in this assessment because outmigration, re-location of the community, or movement of particular individuals may radically rearrange the social, economic and political organization of the community.

No projections regarding changes in socialization patterns, health care, religion or personality will be attempted for this community.
Introduction

Port Heiden represents the mean case for development in the region. It stands at a point midway between the cases of rapid growth such as Chignik Bay, Sand Point, King Cove, and Chignik Lake and cases of slow or no growth such as Pilot Point, Ugashik, Ivanof Bay, and Perryville. Commitment to future growth and development is high and the community stands in stark contrast to the other two communities (Ugashik, Pilot Point) in the subregion. The bases for these distinctions and the prospects for growth in the next twenty years will be outlined in the following projection.

Port Heiden is located on the southwest edge of Bristol Bay and the northwest side of the Alaska Peninsula. The community borders Meshik Bay. The baseline description of the community may be found in the the Combs (1981) volume in the section written by Taylor Brelsford. As many of the following projections are prefaced on this study, the reader should be thoroughly acquainted with it.

Although subject to many of the same forces of change as the other communities in the subregion, Port Heiden differs from the rest of the subregion in the projected consequences of these changes. The rate of outmigration is not expected to be significant allowing for less disruption of social relations than is projected for other communities in the subregion and region. These social relations will continue to be multiplex in nature even though economic and political activities will
undergo greater intensification of effort with the potential consequence of greater subsystem compartmentalization. Class distinctions and social stratification will become significant aspects of community life but are not expected to generate serious social conflict throughout the projection period. The political subsystem will see a greater level of managerial expertise and organizational complexity. The educational subsystem will also play a greater role in community life, both in terms of the acquisition of values from the larger sociocultural system and in the establishment of intercommunity ties.

Input

Ecological

Changes in the local ecology are expected to be minimal throughout the next twenty years and conform to subregional projections. Local sources of subsistence and supplies of energy are expected to remain at constant levels (with the exception of geese, which have declined in numbers in recent years due to an alteration of the flyway and increased activity by sports hunters and moose which have also declined with the influx of sport hunters).

Port Heiden, however, is currently subject to a major ecological change occurring along the coastline of Meshik Bay. Erosion of the beach bordering the community is occurring at a rate of 50 feet per year. This has already necessitated removal of part of the city further inland. While plans are being formulated to slow the rate of erosion, it is expected that this ecological variable will continue to have a
significant impact on community development throughout the next twenty years.

**Extrasocietal**

**External Government**

Changes in external government variables are in accordance with subregional projections. Federal government involvement is expected to decline in the next five years as funding sources such as CETA dry up. In its place, the state will become more involved in local activities, particularly since the community is incorporated as a second class city and is thus eligible for revenue sharing funds. This increased state involvement, however, will be in accordance with regional projections—i.e., after a period of increasing state involvement throughout the next ten years, the state will begin to decline in importance as an environmental variable.

Port Heiden lies within the Bristol Bay Native Corporation. However, as with the other two communities in the subregion, the involvement in corporate activities has been minimal and confined primarily to the Bristol Bay Area Health Corporation. Port Heiden is involved in a subregional corporation, however, the Alaska Peninsula Corporation. It is projected that this corporate body will play a greater role in community affairs in the future; it fact, it may come to constitute the dominant non-local government variable in the extrasocietal environment in the next twenty years.
External economic forces which affect the community are comparable to those affecting the region as a whole. The city has not been singled out by outside commercial interests for specific investment or development processes and local commercial ventures have precluded the necessity to encourage outside processors or developers to enter the community itself. Arrangements with floating processors in Ugashik Bay, which purchase a large percentage of the harvests of red salmon made by Port Heiden fishermen, and canneries such as the Diamond E, are expected to remain in accordance with subregional projections.

Three external economic forces which are projected to play a larger role in the Port Heiden area in the near future are the Alaska Peninsula Corporation, sports hunters, and air transportation. The community has already become heavily involved in the economic investments of the APC and is part owner of a 125 foot processor vessel. While this particular economic venture was not a particularly profitable one, the community may come to rely upon the investments of the APC as a growing source of income. Sports hunters have entered the area in increasing numbers in recent years and, given the abundance of local fish and game, this trend is expected to continue, at least until efforts are made by city officials to protect local resources from external exploitation. The increase in both sports hunters and annual salmon harvests will necessitate increased air service between Port Heiden and other parts of Alaska. Reeve Aleutian Airlines already provides service to the community with three flights per week to Anchorage as well as other communities (Brelsford, 1981).
Larger Sociocultural System

The impact of the larger sociocultural system on the community of Port Heiden will be along the lines of the regional projections. This projected impact is expected to be greater than that of other communities in the subregion but not as great as the projected impact on such communities as Sand Point and King Cove.

One significant aspect uniting the residents of Port Heiden with Pilot Point and Ugashik is an increased subregional identification. This is the result from both a minimal involvement in the BBNC and greater involvement in the Alaska Peninsula Corporation. It also stems from intercommunity ties by virtue of kinship, education, and economic activities. More will be said about each of these ties below.

Intrasocietal

Community Facilities

With the projected increases in population and economic productivity (see below) plans are underway for expansion of existing community facilities. Part of this expansion calls for relocating the city away from the Meshik Bay to prevent further damage caused by beach erosion. Utilities will be assumed by the local government and expanded to provide efficient and cost-effective service to all residents. A more efficient system of electric power will also be developed in the next twenty years. Generation of electricity will be transferred from private to public sources. External funds will also be sought to
improve local water and sewage systems and such improvement is in accordance with subregional and regional projections.

**Demography**

The population of Port Heiden in 1980 included 62 males and 47 females for a total of 109. It is believed that this figure will grow in the next twenty years at a rate significantly higher than the two other communities in the subregion. This assessment is based on three specific factors. First, the trend in the past ten years has been towards rapid growth, displaying a 36.4% increase from 1970 to 1980. Second, the age structure favors continued growth by virtue of implied future reproduction. The mean age of residents in 1980 was 25 which is significantly lower than other communities in the subregion. Third, the rate of outmigration is much lower than other communities in the subregion. An estimated 89% of village corporation shareholders still live in the area, as compared with 39% for Ugashik and 37% for Pilot Point. The seasonal variation in the population also appears to be very low. It appears that even though local residents may leave for periods of time to pursue education and/or outside employment, that the degree of commitment to the community is very high and, given the potential for economic growth, is expected to remain so.

One significant factor with respect to population growth in Port Heiden which differs from growth in other communities in the region is that the bulk of the projected increase will come from reproduction and not immigration. The age structure will gradually change to reflect the growing proportion of children and adolescents in the community.
Values

Changes in the value system of the residents of Port Heiden is expected to conform more to the regional than the subregional projection. The current system of values of local residents is based on their Russian-Scandinavian-Aleut heritage which places importance on ethnic identity and local identification. This creates a world view which focuses on the city itself, with decreasing concern as one proceeds outward. As population and commercial fishing activities are both expected to grow in size, contact with the outside world will increase. This contact will be dominated by local interests, but a gradual infusion of the values, attitudes and behavior of the larger sociocultural system will be apparent. Existing trends in this direction include: political and administrative expertise, urban orientation, purchase and use of consumer items, interest and expertise in entrepreneurial endeavors, and increasing value of education. Status will be assessed more in terms of wealth than family membership and reciprocity and redistribution will become more formalized. Ethnic identity and ethnic relations are expected to remain constant, however, as no great influx of non-natives is projected and as relations between natives (80% of the population) and non-natives (20%) are currently stable.

Organization

Economic Organization
Commercial

The cash economy of Port Heiden is based, directly or indirectly, on the exploitation of local salmon resources. Almost every adult in the community is involved in this activity in one form or another. There are currently 23 Limited Entry permits held by residents of Port Heiden, 11 of which are drift gill net and 12 of which are set gill net permits. Drift gill net fishing is conducted either on the Meshik River or the Ugashik River. Set net fishing is usually done on the beach adjacent to Port Heiden. Two thirds of the set net permits are held by women. No one individual holds more than one permit but permits are concentrated in one of the three major lineages making up the bulk of the local population. This pattern of permit ownership is expected to continue throughout the next twenty years. Unlike other communities in the subregion, the concentration of permits in certain lineages implies a concentration of wealth, and hence a greater ability to purchase additional equipment. These permits will undoubtedly remain in the hands of local residents as residents expressed a strong aversion toward the thought of selling permits to nonlocals.

There are currently 14 drift gillnet boats in the community, some of which are the old, wooden variety and some of which are modern, fiberglass vessels. Within the next five years, however, this distinction will disappear as the trend already is to replace the wooden boats with fiberglass ones as quickly as possible. This trend is spurred by the increase in profit margins of local fishermen and the need for vessels with bigger holds. The number of vessels, however, will remain constant (or grow very slowly) for the next five to ten years at least.
Commercial fishing activity is currently restricted to salmon harvests. The annual harvest of king salmon during the Meshik River run, of red salmon during the Ugashik River run, and of silver salmon during the Meshik River run in late August provide the primary sources of income. It is expected that this system of resource utilization will continue throughout the projection period. This assessment is informed by the following variables. First, the exploitation of other species is limited by the 32-foot boat size. Efforts to commercially exploit other marine species in other areas of Bristol Bay will require larger vessels. The community is part owner of a vessel which has such a capacity but it has not been commercially successful thus far. Second, the income obtained from local salmon harvests has been substantial enough in recent years to discourage exploitation of other species elsewhere. For example, a few boats from Port Heiden will occasionally venture north to harvest herring. However, this harvest conflicts with the king salmon run on the Meshik river in late May. Local fishermen would sooner harvest the local resource than to travel across Bristol Bay to catch herring.

The growth in commercial fishing, therefore, will more likely come in the form of an intensification of existing structure rather than an extension of structure. With a constant fleet size and carrying capacity, greater effort will be made to increase the size of the annual catch per vessel.

The labor force of the commercial fishing industry is predominately local. Boat crews are usually related by kinship to the owner-operator. Only 29% of the crewmen come from outside the village and half of these come from the region. As long as Limited Entry permits are restricted,
the labor force will continue to be dominated by local residents, thus limiting the influx of outsider workers.

In addition to the projected growth in the commercial fishing industry by virtue of greater intensification, Port Heiden will also see changes in the marketing structure. At present, fish are marketed in one of three ways. First, boat owners make arrangements to sell their catch to cash-buyers on Swiftsure Fish Company tenders. Second, catches from the Ugashik river red salmon run are sold to floating processors located in Ugashik Bay. In 1981, there were 39 such floating processors on hand for the Ugashik River run. Third, the fish are sold to a local company which processes the fish for the fresh-frozen market. The catch is then flown to Anchorage for sale.

Projections for changes in the marketing structure are based on 1) the competition between floating processors and the resultant loss of income, and 2) the increasing diversification of the local fish company. In 1981, this company leased a landing craft to transfer fish from set net sites as well as gill net vessels for shipment (Combs, 1981). While this is not expected to continue because it was not deemed to be cost-effective, it does represent a commitment to diversification and expansion which will result is an increase in market capacity and perhaps employment of outsiders in the next five to ten years.

Alternative sources of employment currently in existence in the community include air transportation, big game guiding, and public sector jobs. Eleven percent of the population is currently employed in non-fishery related jobs and this percentage is expected to remain relatively constant throughout the projection period, although there may be
a slight increase in the numbers of people employed in these sectors.

Subsistence

The structure of subsistence activities is expected to remain in accordance with subregional projections. Although Port Heiden has experienced an influx of cash income in recent years, an estimated 90% of all protein in the diet of Port Heiden residents is believed to be obtained from local subsistence resources. Subsistence is very important to local residents and will remain so throughout the projection period for several reasons. First, commercial profits have been concentrated in the hands of one family and/or devoted to such expenditures as fuel, capital improvements on fishing vessels, or luxury consumer items. Second, subsistence is viewed to be a form of insurance against the prospect of poor fishing years; thus the community retains an interest at "keeping in their hand" in subsistence activities. Third, subsistence is tied to social roles in the community. Resources are shared, both within the village and between residents of the village and those from other villages who come to hunt. The social status of local women is tied to subsistence fishing of salmon by set nets. To alter the structure of subsistence activities, therefore, would have a significant impact on the social structure of the community.

In addition to the constant demand for subsistence resources, a second factor contributing to the projection of a stable structure of subsistence activities is the relative abundance of local resources. Port Heiden lies directly in the path of the annual migration of the Alaska Peninsula caribou herd; caribou, therefore, constitutes the number one
subsistence item. The only resources expected to decline are geese and moose for reasons cited above. Both a constant supply and demand, therefore, will act to maintain a relatively constant structure of subsistence activities throughout the projection period.

Non-labor Force

At present, there is a very small segment of the local population who can be considered to be "unemployed." Such unemployment may increase in the future as members of certain lineages unable to successfully compete in the commercial fish market "opt out" altogether and seek public assistance, but this is not likely to become a significant part of the economic structure of Port Heiden for the next ten years at least.

Social Networks

The intensity and extension of primary relationships are usually dependent upon population size; as population increases, primary relations decline in importance while secondary relations increase. Although the population of Port Heiden is projected to continue to grow throughout the next twenty years, the size of the community will not be large enough to significantly disrupt the existing pattern of social relations. The predominate form of social interaction will be based on the primary ties of kinship, community, and friendship.

The population of Port Heiden is predominantly organized into lineages, three of which account for 67% of the resident population. Consanguinal ties exist between one of these lineages and the other two while all
three lineages are related affinally. Given the projected natural increase in population over the next twenty years, kinship will remain perhaps the dominant form of primary relationship in the community. The three major lineages will continue to be overrepresented in the population, but it is believed that other, smaller lineages will begin to be linked to one or more of these three major lineages.

In addition to ties of kinship, friendship continues to act as an important basis for primary relationships. It has slowly begun to supplant kinship in importance and also serves as an important basis for subregional ties. Normally, ties of friendship play a diminished role as population increases; however, even with the projected increase in the population of Port Heiden, social contacts will continue to be predominately face-to-face, thus preserving the status of friendship as a basis for primary relationships.

There are at present no voluntary organizations in the community of Port Heiden and none are projected for the next twenty years. Work relations constitute the major form of secondary relations, particularly between local residents and seasonal labor from outside the community. These relations are seen as stable and long-term and constitute an important variable in the stability of local/non-local relations. This stability, however, is predicated on: 1) the continued productivity of the commercial fishing industry, and 2) the relatively constant number of outside workers. A significant alteration in either or both of these two variables is bound to have a significant impact on the quality of work relations.
Kin ties are also important in establishing subregional, regional, and statewide linkages. However, the trend is towards greater distances in kin linkages, with the senior generation having kin ties with such communities such as Chignik and Pilot Point and the junior generation having ties with Dillingham, South Naknek, Anchorage, and even Seattle. We project a continuation of this trend throughout the next twenty years. The extent of this exogamy, however, will not be as severe as that projected for Pilot Point.

**Political Organization**

**Local Affairs**

Port Heiden is classified as a second class city. As such, it is governed by a city council comprising seven members, one of whom is selected as mayor. There is also a city manager and a city clerk, both of whom work of a part-time basis. The manager is responsible for submitting grant proposals and devising development programs for the city. The clerk is in charge of city accounts. This structure is expected to remain in effect throughout the next twenty years. There is a possibility, however, that the paid positions of city manager and city clerk may be raised to full-time status, but this projection cannot be made with any certainty.

The city council is responsible for: 1) providing the community with adequate public utilities such as power and water, 2) providing certain community services such as a library and health clinic (in conjunction with the regional health corporation), and protecting local economic and
subsistence resources. The revenues for these functions have in the past come from CETA funding, state revenue and other municipal funding, and city revenues. These revenues have increased steadily except for the past year. Projections for future increases in revenues are in line with regional projections. CETA funding has been all but eliminated as of 1981 and the community will be forced to rely on state, corporation, and local sources in the future. Throughout the projection period, reliance upon city revenues will increase as state funding begins to decline. Given the community's status as a second class city, the chances of obtaining significantly greater levels of outside funding beyond present levels is remote. Much of the city revenues will come from the sale of fuel and electricity.

Port Heiden also has a village council, consisting of seven members who are most senior residents of the community. The Council receives a small amount of federal funding and may continue to serve as a link with federal funding sources. Given the projected decline in revenues from these sources, however, its position in the decision-making structure of the community is expected to be minor.

The decision-making body with perhaps the greatest potential for growth is the Port Heiden Village Corporation. Established as an independent entity under ANCSA, the Corporation merged with the Corporations of four other communities to form the Alaska Peninsula Corporation. Two of the eight current directors are from Port Heiden so the community is perceived to play an important role in its affairs. The purpose of the Corporation is to administer ANCSA land distribution programs, protect local commercial and subsistence resources, and engage in profit-making
ventures. Much of the revenue available for community development in the next twenty years is expected to come from the activities of this organization.

Other local decision-making bodies include the School Committee which is the local representative of the Lake and Peninsula School District, the REAA. The School Committee is responsible for presenting the views of the community to the REAA. Recently, however, the completion of a new K-12 school in Port Heiden and the establishment of a local office of the REAA has given the committee substantial influence in the administration of the local education system. This influence is projected to increase in the next twenty years. It is possible that the School Committee may seek greater independence from the REAA, possibly establishing their own school district, provided they can obtain the revenues necessary for such a structural change. Otherwise, the structure will remain relatively constant throughout the projection period, even though the level of influence will continue to increase.

For the community to grow, therefore, an intensification and consolidation of existing efforts is required. It is projected that the city council will become more closely involved with the Alaska Peninsula Corporation in the next five to ten years as sources of revenue to replace federal and state sources are sought. The two organizations will retain their own functions but the subregional corporation will begin to play a role similar to that currently played by external federal and state agencies.

With respect the structure of leadership in Port Heiden, several observations are worthy of note. First, a wide number of individuals
participate in one capacity or another in the political structure of the village, according to Brelsford. There appears to be no monopolization of political positions by the "highliner" families as is often the case in other communities in the region. The potential for such monopolization exists, however, since one lineage appears to be overrepresented in the commercial sector and, as has been the case elsewhere, the family or lineage with control of economic resources usually becomes the most involved politically in an attempt to protect their economic power.

Second, there appears to be a bifurcation in the representation of community residents in local decision-making bodies. Brelsford notes that the city council members are usually young and well-educated while village council members are usually senior heads of the leading lineages. This leadership pattern is expected to remain in effect, especially since the prestige and power of the former is expected to grow as the prestige and power of the latter declines.

Third, the leadership structure in Port Heiden is becoming noted for its high level of professionalism. The caliber of local leadership is regarded by community members and outside observers alike as high and local programs have been competently managed. The reliance upon professionals in the capacity of city manager and city clerk reflects the interest of the community in leadership which will be able to best serve the community at a time when the demand for community services is increasing but outside sources of revenue are decreasing. This reliance may ultimately be reflected in a change of status of both city manager and city clerk positions from part- to full-time.
Social Control

The structure of the mechanisms of social control in Port Heiden are essentially the same as those of other communities in the subregion. Formally, social control and law enforcement is the responsibility of the State Police force. A trooper periodically visits the community to investigate reports of crime or accidents. Informally, the community relies on local sanctions such as ostracism and gossip to maintain social control. This system is expected to remain in effect throughout the projection period, in accordance with subregional projections.

External Relations

External relations between Port Heiden and the outside world are similar to that of the subregion as a whole. Relations with the federal government are conducted primarily through the village corporation; relations with the state are conducted primarily through the city council; relations with the regional and subregional corporations conducted through the village corporation; and relations with the REAA conducted through the local school committee. The structure of external relations is expected to change in accordance with subregional projections. Involvement with the federal government will decrease through the next ten years while involvement with the state government will increase through 1990, and then begin to decline. Relations with the Bristol Bay Native Corporation are expected to remain at a moderate level while involvement with the Alaska Peninsula Corporation will increase provided the financial incentive becomes a viable one. Involvement with the REAA will continue for the next five to ten years, but then decline as the local
school committee seeks greater independence.

Religious Organization

As with most of the communities in the region, the residents of Port Heiden are predominately Russian Orthodox. There is no church in the city, however, and residents usually attend religious services intermittently at the St. Innocent Cathedral in Anchorage. The existing religious structure, therefore, is very limited and tied to communities outside of the subregion. There is also a fundamentalist mission in Port Heiden, but the membership is very small, with only 5 to 10 individuals attending services on a regular basis. It is anticipated that this religious structure will remain constant throughout the projection period. There is no incentive to build a Russian Orthodox church in the community and the fundamentalist mission does not have enough community support to expand its structure. If anything, the fundamentalist mission may become defunct within the next ten years.

Educational Organization

The educational system of Port Heiden is centered around a recently constructed K-12 facility in the city. Until the completion of this facility in 1981, it was a common pattern for local youth to attend high school outside the community, usually in Anchorage. With the immediate presence of modern facilities and new educational technology, this pattern may diminish in importance and the two-stage educational process which characterizes the structure of the subregion may be transformed into a one-stage system (at least, though high school).
The educational system is administered by the Lake and Peninsula REAA which is represented in Port Heiden by the local School Committee. This committee, as noted above, has been very influential as of late, especially such matters as securing funds for the construction of the new school and the location of an REAA office in the city. This Committee will continue to play the major role in the local educational system, perhaps even seeking the establishment of an independent school district within the next twenty years. Its ability to transform the structure of the local educational system will depend upon: 1) the amount of local revenues used for educational purposes, 2) the ability of the School Committee to capitalize on the Molly Hootch decision which guarantees an adequate education in every community in the state, and 3) the ability of the local school system to draw on students from other communities in the subregion. It is possible that students from Pilot Point and Ugashik, although few in number, will be attracted to this school because of its proximity. The ability of the school system to increase its catchment area would give it considerably more political clout and hence increase its ability to secure additional funds.

Given the political influence of the School Committee, the projected increase in local revenues, and the potential increase in catchment area, it is very likely that the structure of the educational system of Port Heiden will undergo significant extension.

Health Care Organization

Health Care in Port Heiden is provided by a resident health aide from the Bristol Bay Area Health Corporation. The existing structure appears
to meet current needs adequately, with serious cases being flown by air to Dillingham. Projected changes in the structure of the health care system in Port Heiden are expected to remain in accordance with regional projections. Demand is expected to increase at a constant rate, necessitating some minor changes in the existing structure. The primary source of this demand, as noted below, will come from increasing problems with alcohol, particularly among the less economically successful lineages. Such an increase may facilitate greater community involvement with the regional health corporation. As with the other communities in the North Alaskan Peninsula subregion, this corporate entity is one of the few utilized to any significant degree by local residents and this level of involvement is expected to continue into the projection period.

Recreational Organization

The structure of recreational activities conforms to that of subregional and regional patterns. Subsistence constitutes a major form of recreation; as the need for local subsistence resources has diminished with the introduction of a cash-based economy, the preference for such activities remains strong and will continue to be so for the next ten years at least. The cash-based economy has also provided the residents of Port Heiden with novel forms of recreation, including consumer items such as video recorders, three-wheelers, and airplanes. The increased income of local residents has also provided them with opportunities to travel outside of the subregion and the state, either on vacation or to visit relatives and friends in other communities. We project that with the increased levels of income in the next twenty years, these novel forms of recreation will increase as well. Given the bifurcation of
income, however, a gradient of recreational activities will form, with the highliner families participating in those activities requiring substantial amounts of cash at one end, and the less economically successful families relying upon subsistence activities at the other.
Output

Economic

If the commercial fishing industry is able to intensify its productivity, as projected in the section on economic structure, we can expect to see an overall increase in the income generated by this industry. Profits will be obtained both through individual fishing efforts and through the dividends paid by the Alaska Peninsula Corporation from their investments. Income levels should average $200,000 by the year 2000.

This projected income figure, however, is misleading, for a substantial portion of the increased income level will be represented by the high-liner families in the community. These families, who already own a sizeable number of Limited Entry permits as well as the local fish marketing and trading companies, are in a position to dominate the commercial economic sector of Port Heiden. This domination will be represented in a disproportionate share of profit from salmon fishing and processing. Dividends from APC investments, however, will be more evenly distributed among the local residents.

Taxes, of course, will become a greater factor in the net income of residents as total income rises and this could potentially serve to balance the excess profit margin of the highliner families. Given the enterprising nature and political expertise of these families, however, this balancing will not be of great significance. Much of their current earnings have been reinvested into capital improvement projects, thus enabling them to claim substantial deductions. This trend is expected to
continue throughout the projection period.

The commercial fishing industry will remain the predominant source of employment throughout the next twenty years, employing perhaps as much as 75 to 80 percent of the work-age population at some point during the season. Most of these will be employed on the boats themselves, or at the set net sites. The greatest increase in employment, however, will come from the processing and marketing sector of this industry. Already, there has been a trend to employ outside help to process local catches, and local residents who have permits do not have enough financial incentive to work at this activity. However, as the marketing process becomes more sophisticated, the financial incentive will increase, thus attracting more local residents. Although the wages earned by processors are expected to remain constant relative to increased earning levels, this activity will attract more local residents who are unable to fish due to a lack of Limited Entry permits or who are unsuccessful at fishing due to outdated equipment, alcoholism, or other factors.

Alternative sources of employment in Port Heiden in the next twenty years include guiding for sports hunters and public sector jobs. Both are expected to rise above present levels during the next ten years. Local guides will be in demand as the number of outside sports hunters increase. As the city assumes greater independence in fiscal and administrative matters, the number of public employees will increase as well. Many of these jobs will be part-time, however. Positions requiring administrative expertise and greater responsibility will be assumed by members of the highliner families. Public works, janitorial, or other unskilled or semi-skilled positions will be assumed by local residents
who lack Limited Entry permits.

While the overall number of residents who are gainfully employed is expected to increase, in accordance with projected population increases, there will also be a growing sense of unemployment. Already, there are residents in Port Heiden who have sold their Limited Entry permits and receive public assistance rather than obtain alternative forms of employment. This sense of unemployment will be reinforced by: 1) increasing levels of income within the community in general, 2) the bifurcation of income, and 3) the increased reliance upon public assistance.

These three factors will also contribute to the development of economic class distinctions within Port Heiden. Essentially, three classes will develop: The upper class, consisting of members of the highliner families; the middle class, constituting the largest percentage of the population; and the lower class, consisting of isolated individuals or economically unsuccessful families. The average family income of the first group will range from $100,000 to $200,000 annually while the income of the second group will range from $50,000 to $100,000, and the income of the third group will range from $5,000 to $30,000.

Economic class distinctions will be evident in several ways. One major distinction will occur with respect to consumer items purchased and housing. The upper class will live in large, new homes while other residents will live in small, substandard housing. The highliner families are already purchasing such items as airplanes while the amount of consumer items purchased by other community members is significant less. The classes will also be distinguished by the pattern of recreational
activities, with the upper and middle classes engaging in those activities requiring money while the lower class continues to rely on subsistence activities as the primary form of recreation.

The central issue behind housing and real estate speculation in the future is the process of relocation. In order to protect the community from beach erosion, the city is being relocated to safe ground. This process has necessitated the installation of adequate facilities and utilities, and the construction of new homes. Housing will be financed either from private sources or from HUD revenues. Those houses built with private money will be better constructed, larger, and more energy efficient than those built with federal assistance.

In addition, Port Heiden may see some commercial development within the next twenty years. This development will be undertaken by the local fish buying and trading companies but may also be conducted by outside commercial interests, should the financial incentive present itself. Given the current marketing arrangements, however, outside commercial interests will be more likely to enter with floating processors than to purchase land for commercial development.

Although the projected number of immigrants is not expected to be large, those who do enter the community to reside on a permanent basis will be required to purchase land from local residents to build their homes. There will be some transfer of land, therefore, but not enough to significant inflate current market prices.
Social

Port Heiden should expect a moderate increase in the number of families residing in the community. Marriage rates are expected to increase along the lines of the projected increase in population. Half of these marriages will occur within the community and half will occur outside the community. Of those occurring outside, half will occur within the subregion and half will occur outside it. Divorce rates are expected to remain constant or rise slightly over the next twenty years as the stress and strain associated with socioeconomic change increases.

Intrafamilial relations are expected to increase in intensity throughout the projection period. This both conforms to subregional and regional projections and is heightened by the development of social class distinctions. Families will become more close-knit as they become jointly involved in economic activities and as the number of Limited Entry permits, which would normally permit greater intrafamilial independence, is not expected to rise significantly for the next ten years at least. Family unity will also become more important as a sign of solidarity in the face of economic class distinctions.

One consequence of this class distinction is the diminishing of interlineage relations. The lineages will continue to be related both affinally and consanguinely, but the extension of these bonds will not be as great as found in present levels. The tendency will be to marry within one's own class, even if it means marrying someone outside the community.

While the development of social class distinctions are bound to have
some effect on kin behavior in Port Heiden in the future, these effects are assumed to be slight to moderate and will not even appear for the next five to ten years.

Social class distinctions are bound to have an impact on nonkin behavior as well. Friendship links will be influenced by class status or by longstanding lineage ties. Conflicts may develop between highliners and other families, especially as other families begin to suspect that the motives of the highliners do not necessarily conform with those of the general community.

These distinctions are not expected to create serious disruption, however, for three reasons. First, commitment to the community by all residents is generally very high. Even among less economically successful members, there is a realization that much is to be gained by remaining in Port Heiden and participating in its growth as a city. Second, common economic interests will mitigate whatever tension is created by the bifurcation of income. The community as a whole is dependent upon the commercial fishing industry and as a whole benefits from the activities of the local government and subregional corporation. Any significant changes in either of these two areas are bound to affect all residents equally. The community as a whole rises or falls depending upon the continued viability of both economic and political systems.

Third, community conflict along class lines will be mitigated by the common sense of ethnic identity. The traditional Russian-Scandinavian-Aleut identity is expected to remain in force throughout the next twenty years. This projection is informed by several existing trends. First, while ethnic identity has undergone revision with the immigration of
whites in other communities, this has not been the case in Port Heiden. Outsiders have been incorporated into existing mutual aid, economic, and political relationships with little trouble and since the rate of immigration is not expected to increase significantly beyond present levels, this trend will continue. Second, local residents take great pride in their heritage. As Breilsford (1981) notes, residents often recite tales of the activities of early inhabitants and express a certain amount of satisfaction with being Aleut, particularly in light of recent legislative changes which have accorded a great deal of economic and political power to formerly underprivileged minorities. This pride is particularly enhanced by standing in stark contrast with the experience of discrimination by Caucasians who formerly manned the "White Alice" site nearby. Third, recent economic prosperity has fostered a sense of optimism which, in combination with ANCSA-related enhancements, has reinforced the traditional ethnic identity as Aleut. Local residents feel no sense of deprivation or economic pressure which would necessitate a change in identity. Finally, the traditional ethnic identity appears to be continuous among local youth. Young people in Port Heiden identify themselves with the community and express this identification, particularly in extracurricular school activities, such as the basketball team, which travels to play schools throughout the region. This involvement also serves to reinforce identification with locality, which in turn, acts as a force for social cohesion.

Ethnic identity, therefore, is projected to either remain constant or increase in intensity throughout the next twenty years. Along with the already high level of commitment to the community by local residents and the common economic interests, ethnic identity will mitigate social
class distinctions and preserve the cohesivity of existing social relations.

**Political**

The output of the political system of Port Heiden will be influenced by the community's commitment to development. The guiding philosophy of local government bodies is improvement of the quality of life of local residents. It is believed that this objective can only be achieved by 1) independence, 2) preservation of local resources from outside interests, 3) provision of adequate facilities, utilities, and community services for local residents, and 4) a high level of professionalism and expertise in administrative manners.

Independence is seen to come from: 1) status as a second class city, 2) control of local economic resources, and 3) utilization of the land provided by ANCSA. Status as a second class city enables the community to qualify for state revenue sharing funds, making it less dependent upon already declining federal sources of revenue. Control of local economic resources also provides the potential of local revenues to be spent of development and community improvement projects. Control of land provided under the terms of ANCSA enables the community to enjoy both city status and village status, a combination which allows them to restrict the amount of immigration as well as development by outside commercial interests.

This independence, in turn, acts to preserve local economic resources from outside exploitation. This is of particular concern in two specific areas. One is the protection of local fish and game from
overexploitation by outside sports hunters. It has already been assumed that these outsiders are responsible for the decline in local populations of geese and moose and local residents are concerned that such overutilization does not occur with other resources, even though guiding for outside sports hunters has certain economic potential. The second is protection of local salmon resources, particularly on the Meshik and Ugashik rivers, from overexploitation. Although Port Heiden is further from the Ugashik river the the villages of Pilot Point and Ugashik, it is dependent upon the annual red salmon run there for a major proportion of its annual income. The closure of this river for replenishment of stocks because of overutilization would constitute a serious blow to the welfare of the community. It is therefore believed that the local government of Port Heiden will work in conjunction with the communities of Ugashik and Pilot Point to efficiently manage the seasonal harvests on the Ugashik and work to minimize the influx of outside commercial interests.

In the third area, the local government is currently involved in four major activities. The first is the improvement of public utilities. The city has assumed the operation from private interests and purchases fuel oil in bulk quantities which it sells to individual households throughout the year. The city is also responsible for maintaining local roads and operating the electrical power plant. Second, the city has been involved in the construction and maintenance of community facilities such as the city office, community library, and the health clinic-community hall. As health needs increase in the next twenty years, it may be required to expand this facility as well as the services it provides to local residents. Third, the city has directed efforts to
relocate the community to safer ground, away from beach erosion, and to provide electrical power to all homes in the area. Finally, the city has sought to improve local fire protection by purchasing a fire-truck and modern firefighting equipment, and constructing a storage building for this equipment.

With the added responsibilities created by these activities, the local leadership will become increasingly professional, requiring the employment of professional managers or the use of consultants. This professionalism may also help to reduce the anticipated conflicts between highliners and other residents and between those residents interested in pursuing subregional investments through the Alaska Peninsula Corporation, and those who disapprove of such investments, fearing that their own interests will be abandoned in the process.

In spite of the potential for this latter form of conflict, we project an increasing involvement by the community in the Alaska Peninsula Corporation. This is because some interaction with outside economic and political interests is necessary to consolidate the gains made under ANCSA but that involvement in the Bristol Bay Native Corporation is seen by residents of Port Heiden as remote and unprofitable. There may not be universal agreement as to the merits of participation in the Alaska Peninsula Corporation, but given the increasing identification with other communities in the area as a distinct subregion and given the necessity for external relations to consolidate the potential benefits under ANCSA, it is believed that this involvement will increase in the future.
Crime is not expected to be a major problem in the future. Indices will remain fairly constant throughout the next twenty years, in accordance with subregional projections.

Religion

Religious behavior is expected to remain consistent with subregional projections. Local residents will continue to identify themselves as Russian Orthodox, particularly since this identification is tied both to ethnic and subregional loyalties, although their level of involvement in religious activities or participation in religious events is expected to diminish. Those few members of the community who attend the fundamentalist mission are also expected to decrease their level of involvement as the subregion as a whole becomes more secularized.

Education

Projected enrollments in the local education system call for an increase in the number of students over the next twenty years. This projection is informed by several factors, including: 1) the projected natural increase in population, 2) the possible expansion of the catchment area to include students from Ugashik and Pilot Point, 3) the high value placed on education by members of the community, and 4) the commitment to remain in the community. Because of the high value placed on education, it is also expected that the dropout rate will continue to be very low and that the number of students who go on to college will increase. These trends are already evident and will remain such throughout the next twenty years.
With respect to personnel, we are projecting a constant state of affairs for the next ten years. That is, the number of teachers will remain the same and the rate of teacher turnover will be high. Beyond 1990, however, the number of teachers will increase (by one or two) to accommodate the increasing numbers of students and the rate of teacher turnover will decline slightly.

A factor which will contribute to the high productivity of the educational system, both in terms of numbers of students, quality of education, and achievement levels of students, is the high level of community involvement. This involvement is evident in parents' concern for the academic success of their children, their interest in keeping their children close to home rather than requiring that they be educated elsewhere, and their participation in extracurricular activities. Residents take great pride in the athletic teams of the local school and many will travel with the team to other communities for away games and events. This commitment is expected to continue well into the future.

Health Care

Health problems in Port Heiden are expected to remain at or below levels projected for the subregion as a whole. Morbidity rates and demands for service will proceed at or below the projected rate of population increase. Alcoholism, as already noted, will become a problem. Less economically successful families have already been afflicted with problems relating to alcohol and these problems, in turn, have further weakened their economic productivity. This cycle is expected to continue, perhaps becoming even more dramatic as a sense of relative deprivation...
stemming from economic class distinctions becomes acute. There will also be an increase in stress-related chronic diseases, including cardiovascular and gastrointestinal disorders, accidents, and substance abuse. While this increase may require the services of an additional health aide on a part-time basis or improvement of the local clinic, it will not create a severe strain on the existing system of health care.

Recreation

Recreational activities will change in line with regional and subregional projections. Greater use of consumer items and travel will be made, although subsistence activities will remain a major form of recreation. The school and churches outside of the subregion (notably, the Russian Orthodox church in Chignik Lagoon and the cathedral in Anchorage) will serve as foci for recreational activities such as potluck dinners.
Introduction

This community projection actually encompasses two different communities—Pilot Point and Ugashik. However, both will be incorporated into a single community projection. This decision is based on three specific factors. First, the village of Ugashik is small, comprising only 30 residents, of which, only 8-11 reside in the village on a permanent basis. Any attempt to project the course of sociocultural change in this community, therefore, would be at the risk of violating the right to confidentiality of existing permanent residents. Second, the two communities are in close geographic proximity to each other. They share a common environment and interact with each other in economic, political, and other community activities. The two communities are also linked together by ties of kinship. Third, projections for changes in environment, structure and output for both communities are remarkably similar. All three of these factors enable us to treat the two communities as a single entity. Where differences do occur, however, we shall note them.

Pilot Point is located on the east central shore of the north-south arm of Ugashik Bay, about midway between the confluence of the Ugashik and King Salmon Rivers and the outlet of the Bay into Bristol Bay. It is on the western edge of the Alaska Peninsula and lies between the two coastal communities of Port Heiden to the south and Egegik to the north. Ugashik is located approximately 7 miles east of Pilot Point on the northeast bank of the Ugashik River.
A complete description of the two communities and the surrounding area may be found in the Brelsford appendix to the forthcoming baseline study by Coombs and Associates (1981). Many of the projections which follow are based on the information contained in that report; hence it is advised that the reader be acquainted with it.

Historically, the two communities of Pilot Point and Ugashik have experienced alternating periods of growth and decline. Pilot Point was established as a fish camp while Ugashik had served as the major community in the area. In 1919, however, when the flu epidemic wiped out the village of Ugashik, many of its residents moved to Pilot Point. While the community has witnessed substantive economic prosperity and population growth in the last sixty years, it is currently on the decline. Given recent economic and demographic trends, it is projected that the community will experience a slight decline in the population of permanent residents and a slow but fluctuating rate of economic growth throughout the projection period. The social subsystems are expected to remain relatively intact with the major variables of change being the outmigiration of community residents to larger urban centers in the state, the network of local and intraregional social relations, and the degree of exploitation of local marine resources by both community residents and outside commercial interests. In this respect, it differs from other communities in the region that will experience rapid economic and population growth during the same time period.
Ecological

The area is rich in natural resources. Food and water in particular, are in plentiful supply. With the absence of trees, energy needs are met by imported fuel, primarily coal and oil. Fuel is delivered to the community by barge each July. There are no known mineral resources in the area, although it is uncertain whether or not any significant exploration has occurred. As with the subregion as a whole, the ecological input to the sociocultural system of the two communities is not expected to undergo any major changes in the next twenty years, with two exceptions: subsistence hunting and fishing and commercial salmon fishing on the Ugashik River.

Availability of subsistence and commercial resources in the future will be determined by the following: 1. The introduction of sports hunting as a commercial activity conducted by outsiders. This has increased particularly in the last ten years and many local residents attribute the decline in the local moose population to this activity. 2. The growth in the number of commercial fishing activities conducted by boats from other communities such as Port Heiden and South Naknek. 3. The necessity to close the Ugashik River to commercial fishing, enabling local salmon stocks to replenish themselves. The last time the area was closed by the Department of Fish and Game was during the mid-1970s. As the level of commercial fishing activity increases, this may occur with increased frequency in the next twenty years, adversely affecting the local fishing industry.
External Government

The community's contact with the Federal government is currently restricted to the following:

1. Bureau of Land Management which oversees the processing of native allotment claims
2. Bureau of Indian Affairs which "manages" the allotments.
3. CETA (expected to decline) which provides funds for the general administration of the community.
4. Public Health Service which provides a resident health aide.

In other communities, the extent of input from the first two agencies is determined in part by the number of allotment claims made by the residents of each community. There are only 5 active requests by the residents of Pilot Point, however, indicating that involvement with the federal government vis-a-vis these two agencies will be minimal throughout the projected period. Ugashik may see more involvement in this respect as there are 26 active allotment claims in this village; however, a projected increase of federal involvement in this matter cannot be made with any certainty. Likewise, due to the cutoff of CETA funding for village councils in 1981, CETA will not play a significant role as part of the extra-societal environment of Pilot Point/Ugashik during the next twenty years. With no substantial population increase being projected for this time period, it is unlikely that the village will either seek or obtain increased assistance from the Public Health Service.
Interaction with state authorities is expected to conform to subregional projections in general. Due to the limited potential for growth, it is not expected that the state will be involved in local affairs through the transfer of land under ANCSA. During the next ten years, the community will receive revenues from different state agencies, but these monies will begin to diminish by 1990, as is projected for the entire region.

The community is a member of the Bristol Bay Native Corporation. However, its contact with the Corporation has been minimal. It is viewed by the natives as being a remote part of the village environment which primarily serves the interests of other communities, particularly those neighboring the headquarters of the Corporation in Anchorage. This distance is reinforced by three factors: 1) the fact that Pilot Point/Ugashik has no member on the Board of the BBNC; 2) involvement of the Pilot Point Village Corporation, the profit organization of the village in joint investment ventures with other village corporations (notably the Egegik Village Corporation); and 3) the incorporation of the Ugashik Village Council into the Alaska Peninsula Corporation, a subregional corporation encompassing the communities of Ugashik, Port Heiden, South Naknek, Newhalen, and Kokhanok. As the village declines to the status of a fish camp, the BBNC will continue to be remote, both in terms of the corporation's interest in the village as well as the village's commitment to the corporation.

There does appear to be greater involvement in the non-profit arm of the regional corporation, the Bristol Bay Native Association. As the welfare and revenue sharing sources of the federal government dry up, the BBNA
may partially supplant those services for the residents of Pilot Point/Ugashik.

Commerce

External economic activity in the Pilot Point/Ugashik area occurs in three separate, but interrelated areas. The first is the sports hunting business, conducted primarily by guides from other areas of the state and serving primarily visitors from other states. Due to the recent success of these ventures, it is projected that this commercial activity will grow, both in terms of numbers of participants and income generated, throughout the next twenty years. The only projected limit to this growth will be community opposition; however, in spite of local discontent, the local community will be unable to prevent the expansion of this business in surrounding areas and may even encourage it if some immediate economic benefit can be derived.

The second external economic activity occurs in the Ugashik River and Ugashik Bay areas and involves commercial fishing and processing. Recent record level harvests have encouraged fishermen throughout the Bristol Bay area to frequent the area during the red salmon run in late May. The participation of outside fishermen in this area is expected to increase in the future, in accordance with subregional projections. As Pilot Point/Ugashik has no locally-owned processing or cannery operations at the moment and is not expected to possess this capability in the next ten years at least, the number of outside processing vessels who purchase local catches will also increase throughout the projection period. The activities of the Oregon-Alaska Fish Company, which had leased the
APA cannery in the village, is expected to increase somewhat during the next five years, and then decline.

The third external economic activity will occur in the area of transportation. As the number of seasonal residents and visiting sports hunters increase, there will be an increasing demand for adequate and reliable air transportation, serving as an inducement for regional air carriers to provide additional service. Such air transportation will also become important as local fishermen sell their catch to outside buyers who then ship the fish by air to Anchorage or Kenai.

No significant outside construction or investment is expected to occur throughout the next twenty years.

Larger Sociocultural System

Exposure to the larger sociocultural system is expected to conform with subregional projections. Such contact will be particularly heightened by the large percentage of residents projected to live outside the community for most of the year but return each summer to participate in the local commercial fishing industry. These individuals, who for the most part, will reside in Anchorage, will begin to acquire the values, habits, and lifestyle associated with an urban environment. What innovation does occur in Pilot Point/Ugashik during the next twenty years will be introduced by this segment of the population. However, such innovation will be seasonal. Thus, those residents living throughout the year in Pilot Point/Ugashik will become more isolated from the larger system than residents in comparably-sized communities while seasonal residents will be more exposed to the larger system. Given the projected advances
in telecommunications and increase in rates of outmarriage, however, this discrepancy will be minimal, but enough to distinguish the two segments of the community.

Intrasocietal

Community Facilities

Until recently, community utilities were privately owned. In the past few years, the village council has been successful in obtaining funds from external sources to increase fuel storage capacities and generate additional supplies of electricity. Money has been obtained from the Department of Housing and Urban Development to purchase firefighting equipment and enable the construction of a storage facility for a new fire truck. The village council has also secured state funds for the purpose of upgrading local roads.

With the recent success in securing funds from external sources, local facilities will show signs of improvement during the next five years. As these sources of revenue dry up, however, the rate of expansion of community facilities and the ability to service the community through local utilities will decline, since the community is unlikely to possess the necessary economic resources to independently continue this expansionary process. Given the projected decline in the local year-round population, however, the existing facilities will not be strained by increased demand to any appreciable degree.

Private development is not expected to increase significantly in the
next twenty years, as those residents with the economic resources necessary to finance such projects and construction of new housing will more than likely be seasonal residents, preferring not to spend their money locally.

Demography

The 1980 census figures for Pilot Point list a population of 72. This represents a 5.9% increase over the 1970 figures. The population is a seasonal one, however, with a summertime population of 78 and a population of 48 in the winter. The 1980 population of Ugashik was 30, of whom 13 reside on a permanent basis. The major cause for the seasonal variation is the annual migration of families to Anchorage after the fishing season so that their children may attend high school there. The contacts which are maintained with Anchorage, both in terms of temporary residence and the permanent residence of younger members of the community, is one of the factors limiting any substantial population growth in Pilot Point/Ugashik in the future. Other factors, to be elaborated below, include: the inability of the existing community to reproduce itself, the lack of permanent commitment to the community as evidenced in the small number of allotment claims, and the relatively fixed potential for growth in commercial fishing. Due to the potential wealth of local salmon fishing, however, the community will not be abandoned entirely but will instead be reduced from the status of a village to that of a fish camp.
Values

The changes in the existing value system of Pilot Point/Ugashik is expected to conform with subregional projections. Essentially, two different systems will emerge: one with a traditional orientation, represented by the permanent residents of the community; and one with an urbanized, modern orientation, represented by the seasonal residents. There will be substantial interaction between the two orientations, but the representation of these two cultural configurations by two different segments of the population is likely to generate a certain amount of cultural conflict in the future. Given the large number of Pilot Point/Ugashik residents who live outside the community for most of the year, this conflict will be even more evident than in Port Heiden.

Similarly, the world view of Pilot Point/Ugashik residents will undergo a significant shift in structure. Traditionally, such a world view has taken the village as the focus for both internal and external relations. However, as the number of residents who marry outside the village and the number who reside only of a seasonal basis both increase, the orientation will expand to include the sub-region, the state, and possibly the west coast of the U.S. This world view will be shared by both permanent and seasonal residents, although it will be more apparent among the latter.

Organization
Economic Organization

Commercial

The sole commercial activity in the area is salmon fishing. As with other communities in the region, the commercial fishing industry in Pilot Point/Ugashik is structured around the drift gill and set net permits. There are no seiners or bottomfishers in the community. This structure is projected to remain relatively constant in the next twenty years for two reasons. First, local fishermen appear to be quite satisfied with local resources. The recent record level runs of red salmon on the Ugashik River has precluded the necessity to rely heavily on other harvests. Second, the dispersal of income among the entire community has precluded the concentration of income required to purchase vessels and/or equipment needed to fish other marine species at greater distances from the community.

Red salmon are caught in the Ugashik River or Bristol Bay and sent to Egegik where they are processed at a cannery which is owned in part by the Pilot Point Native Corporation. There are 16 boats in the village, most of which are fairly old with wooden hulls. These are gradually being replaced by modern fiberglass boats. As this occurs, there will be a greater intensification in the local fishing industry. Average catches of red salmon will increase; there will be greater effort taken in fishing nearby rivers (Meshik, Cinder) for runs of silver and King salmon; and the length of the fishing season will increase because boat owners will not be as compelled to set their wooden craft ashore so early to protect them from the elements as has traditionally been the
Several pertinent factors must be included in any attempt to project the future of the commercial salmon industry in Pilot Point/Ugashik. First, there is increasing competition with outside fishermen for the available resources. Boats from other areas of Alaska have been fishing nearby waters in increasing numbers and the community is limited in its capacity to successfully compete with these outsiders. There are currently 17 drift gill net permits owned by residents of Pilot Point and under the provisions of the Limited Entry Act, it is not expected that this number will increase by more than one or two permits during the next twenty years. Second, the number of permits per holder (1.19) is relatively low, thus precluding the manipulation of permits which in other communities would foster increased productivity. A few set net permits have recently been sold to outsiders but this trend is not expected to significantly increase in the next twenty years (although there may be a slight increase in the next five years) Third, while outsiders are employed on local fishing boats, these relationships have stabilized to the extent that the same personnel return year after year, thus discouraging outside competition for jobs in commercial fishing. Fourth, any diversification in the structure of the commercial fishing industry is dependent upon interrelated marketing operations. Fifth, as local fishermen replace the old wooden boats with modern fiberglas-hull vessels, what excess profits are obtained by the recent successful salmon harvests will go in large measure to the purchase of new equipment, thus limiting revenues for other areas of commercial expansion (i.e., processings, marketing, etc.).
Based on these relevant variables, therefore, it is expected that the commercial fishing industry in Pilot Point/Ugashik will experience some growth in the next twenty years, but substantially less than Port Heiden or other communities outside of the subregion. The structure of commercial fishing activities will remain relatively constant, with the yearly runs for red, silver, and King salmon on the Ugashik and Meshik rivers constituting the primary source of income. As this source is expected to meet the need of local fishermen, efforts to diversify commercial harvesting capacities for other species (i.e., bottomfish, herring), will not occur to any appreciable degree, if at all, within the next twenty years.

This, in turn will have significant effects in other sectors of the local social system. With a stable rate of growth, the number of immigrants will be kept to a minimum, the community will have to depend on declining sources of external revenue for development, and a rift will develop between those who remain in the community as permanent residents and those who reside only during the summer.

Related to the commercial fishing industry in Pilot Point/Ugashik is the structure of the marketing of local catches. As noted above, the two economic structures are intimately related such that changes in one will significantly affect the structure of the other. At present, there are three types of marketing arrangements with local fishermen: 1) shore-based fishing buyers for the fresh-fish market, 2) floating processors, and 3) cannery tenders. In the first category, the existing structure diverges in both location and structure. Locally, catches from the set net permits and smaller salmon runs are purchased and processed by the
Oregon-Alaska Fish Company, using the facilities of the old APA cannery. It appears, however, that operations which are based locally will not increase in size over the next twenty years. One locally owned and operated concern, the Gretchen Fish Company, halted operations in 1981, presumably because of a lack of adequate profits. The Oregon-Alaska Fish Company also had to scale down the size of its operations in 1981 due to a series of misfortunes. While it is expected to continue operating in Pilot Point in the next five years, pressures to move their operations elsewhere will increase in the next ten to fifteen years. These pressures will include: conflicts with local residents over the impact (waste, employment of outsiders, etc.) of its activities, and variability in potential sellers as the number of permits held by outsiders stabilizes.

A second marketing arrangement exists but is located outside of the village. The existing permit holders in Pilot Point signed a contract to sell their catch to the cannery in Egegik which is partly owned by the Pilot Point Native Corporation. In return, local fishermen received 35 cents a pound less than what other fishermen in the same waters were receiving for their catches. This has created some resentment among local fishermen who will either attempt to negotiate for a higher price or opt to terminate their involvement in the Egegik cannery.

As these shore-based operations remain constant or decline in significance over the next twenty years, there will be a complementary increase in the marketing arrangements made with floating processors. In 1981, there were 39 floating processors in Ugashik Bay purchasing the catches of local fishermen. While their involvement in the local harvest will
increase in the next five years, however, there may be a slight decline in their involvement because of the high interest rates involved in leasing or purchasing such a vessel.

Another commercial activity in the village is a small family-run store which supplies the community with food and certain consumer items. The store does most of its business in the summer and so its success is tied to the continuing productivity of the local commercial fishing industry. While the store will continue to prosper, particularly with the prospect of increased retail sales to outside fishermen, the local community will not grow rapidly enough either in size or in income to create a demand for additional stores or retail outlets.

A third source of employment is the local airstrip. Two air taxi pilots, one airport maintenance man and one part-time airline agent lives in the village. The local airline which serves Pilot Point is not much of a profit-making venture, however, and has little direct benefit to the community except to serve as a link to the outside world and to provide a few employment opportunities. If the sport hunting business grows in size locally, however, and as the number of residents who reside elsewhere except during the summer increases, the airport will become an important focus for contact with the outside world as well as a source of commercial profit.

Finally, the public sector also provides a source of employment for a small percentage of the community. The structure of this sector is expected to remain relatively constant over the next twenty years.
**Subsistence**

Subsistence activities in Pilot Point/Ugashik include fishing, hunting, and trapping. The major object of fishing activities is the red salmon which is in abundance in the Ugashik River. Fishing is considered to be a family affair. In 1981, there were 14 set net permits, worked mostly by women, and 17 drift gill net permits (these figures are for Pilot Point only). Drift net boat crews usually consist of a captain and two crewmen while set net boats are manned by women or single men.

In addition to red, King and silver salmon, other marine species used for subsistence include: herring, grey and beluga whale (traditional), clams, flounder, sole, halibut, crab, cod, and sea lions. Fresh-water fish include smelt, pike, trout, and dolly varden. Caribou and moose provide the dominant source of animal protein for this community. Rabbits, beaver, squirrel, porcupine and bear are also hunted for their meat. Fowl hunted for subsistence are also in plentiful supply and include ducks, geese, ptarmigan and snipe. There are also numerous varieties of local vegetation which are used for subsistence, including wild rice, wild celery, wild spinach, and many varieties of berries.

Subsistence use in the Pilot Point/Ugashik area occurs on a seasonal basis. Summertime activities are almost exclusively devoted to commercial and subsistence salmon fishing. During the fall, caribou, geese, bear, and moose are hunted. The winter months are spent primarily trapping and hunting for caribou, and moose, beaver and fishing for smelt, pike and seal. During the spring, duck and geese are hunted and fishing is devoted to catching the early runs of King salmon.
The range for subsistence activities is fairly localized. Most hunting and fishing is conducted within the outlying areas of the village. Occasionally, members of the village will travel to Chignik for berries, clams, and King Crab, and to the communities of Perryville and Ivanof for octopus and a local shellfish called "bidarki." Some exchange of subsistence products occurs between these communities and between Pilot Point and Ugashik, with Pilot Point contributing game in exchange for fruit and vegetables.

Next to commercial fishing, subsistence is the major economic activity in the area. Its continuation in the village, however, is tied to several different factors. First, even though the village population is stabilizing and will perhaps even decline during the projection period, subsistence is tied to recreation, particularly for those members of the community who reside in Pilot Point only during the summer months. Although these summer-only residents may reside in Anchorage and conduct their commercial activities elsewhere during the remainder of the year, they will continue to return to Pilot Point each summer to hunt and fish. Second, the bulk of subsistence activities during the summer is limited to salmon fishing. Therefore, two different sets of subsistence activities will emerge in the community: those conducted during the summer by summer-only residents and those conducted year round by permanent residents. The second set of activities will display greater diversity in protein source while the first set of activities will consist of salmon-related production (i.e., salting, smoking, drying or freezing red salmon) for winter consumption elsewhere.
Non-labor Force

At present, almost all of the adult residents of Pilot Point/Ugashik are employed in the commercial or public sector, either in a full-time or part-time/seasonal capacity. As the age structure of the population shifts to the older age groups, however, the number of adults who are unable to work will grow in size. These individuals will constitute the nonlabor force and will be supported either by social security or by public assistance.

Social Networks

Primary social networks in both communities are based on all four components of family, kinship, community, and friendship. In Pilot Point, the kinship system is currently effective in integrating the entire community. There are nine lineages represented with no single lineage possessing a disproportionate share of families or numbers of residents. All nine lineages are related in the middle two generations (senior and junior) in the village. This structure is expected to change, however, for two reasons. First, the number of residents belonging to the youngest generation is very small; in neither community is the population reproducing itself. Second, among those who are or will reach marriageable age, the trend is toward exogamy; marriages are sought with partners in other communities, parts of the state, or other states in the U.S. Both of these factors will serve to weaken the kin-based primary network of social relations.
Likewise, the relationships based on community and family are also expected to undergo significant changes in structure during the next twenty years. As the rate of emigration increases and more residents live in the area on a seasonal basis, families will be separated into groups of members who reside year-round and members who reside only during the summer. The structure of community affiliation will also weaken as a large component of residents in both communities will have dual residence with communities outside of the subregion.

The network of social relations based on friendship is not expected to be altered significantly within the next twenty years as these relationships usually occur within generations. The aforementioned changes in social networks based on kinship, family and community are prefaced on relationships occurring between generations.

There are currently no voluntary associations in either community, nor are any projected for exist throughout the next twenty years. What secondary social networks do develop will take the form of seasonal crew relationships and workplace relations. Both systems of social relationships will integrate: 1) seasonal workers with residents, and 2) residents and non-residents who return year after year to work in the commercial fishing industry. The extent of this integration, however, will be minimal as there exist several issues which serve to disrupt these relationships than to integrate them.

Relationships between the communities and the outside world is expected to increase. Already, an extensive network of external relations is developing as exogamy becomes the predominate mode of marriage. Both communities have extensive kin relations with communities on the south
side of the Alaska Peninsula (Chigniks, Perryville), and are in the process of developing kin relations with communities in the Bristol Bay area (especially South Naknek), Port Heiden, Anchorage, and even in other states.

**Political Organization**

**Local Activities**

Leadership in both communities is usually concentrated in the hands of a few "highliner" families. A disproportionate share of local political offices are usually held by members of these families, who have a commitment to the economic prosperity of the area. This structure of leadership is expected to remain relatively constant in the next five to ten years. As more members of these highliner families reside elsewhere for most of the year, however, leadership will be more evenly distributed among families residing in the communities on a permanent basis.

Both villages are governed by village councils. Each council is supported by revenue-sharing funds and PL 93638 funding. Both are responsible for the provision of certain local community services such as public works and utilities such as fuel and electricity. The latter function has been increasingly assumed from the private sector.

In addition to village councils, each community has a Village Corporation. These are organized under the terms of the Alaska Native Claims Settlement Act which makes them responsible for the management of lands and compensation of funds under the act. Both corporations are also responsible for certain economic development projects and investment
activities and the preservation of local commercial and subsistence resources. Each corporation is administered by a Board of Directors who are elected annually by the shareholders of the respective village.

Throughout the next twenty years, it is expected that the structure of both the village councils and village corporations will remain relatively the same. Given the purpose of their existence and the projected stabilization of population, the demands placed on these organizations throughout the projection period will not require a change in structure. Neither community is expected to be able to incorporate within the next twenty years. There may be, however, a change in function, as the native corporations become increasingly involved in subregional economic ventures and the village councils seek to both improve the quality of life for community residents and limit excessive competition with outside economic interests. Thus, for instance, the village councils will assume a larger role in the provision of local utilities and community facilities. This role will level off in the next ten years, however, as local demand begins to diminish.

Pilot Point also has a school advisory committee which is a local entity of REAA, in this instance the Lake and Peninsula School District. It is projected, however, that this board may become defunct as the local school-age population declines to a point below that required for the local school to remain open.

There is also a local representative on the board of the Bristol Bay Health Corporation but no representative on the board of the Bristol Bay Native Corporation.
Social Control

Law enforcement in the community is officially handled by a State Trooper. The village has no permanent constabulary and visits by state troopers are infrequent. The major source of social control, however, is the community itself. Social ostracism remains a major force and while the community as a whole is reluctant to apply it to any one member, it still serves to keep certain criminal or deviant behavior in check. There are exceptions to this, however, as Brelsford notes but with a declining population, there are no projections of any significant increase in crime or harmful deviant behavior and the current system of social control will undoubtedly remain in effect.

External Relations

External relations are comparable to those of other communities in the region with two exceptions. Ugashik is a member of the Alaska Peninsula Corporation. Since 1980, the Ugashik Village Corporation has ceased to exist and the APC has become the owner of its assets (including rights to the surface estate of village lands and future ANCSA distributions) as well as its liabilities. At present, Ugashik has no representative on the Board of Directors of this subregional corporation, but will continue to be involved in its activities as it perceives the APC to have more of the community's interests at heart than the larger, regional Bristol Bay Native Corporation.

Likewise, the Pilot Point Native Corporation is involved in joint economic ventures with the Egegik Native Corporation, although the former still retains its rights to village lands and ANCSA
distributions. It is more than likely that the structure of this agreement will remain in effect throughout the projection period, especially as the community realizes that there are certain economic benefits to intercommunity ventures while avoiding the perceived impersonality and distance of the BBNC.

**Religious Organization**

There is a Russian Orthodox church in the village but it is rarely used. The church has not had a reader since 1939 and is only occasionally used for funerals. Those members of the village who remain active in the church usually attend major ritual events conducted in a recently built church in Chignik Lagoon. Residents of Pilot Point who have kin ties with residents of Chignik Lagoon frequently travel there to attend religious services on major holidays such as Christmas and Easter. The religious and kin ties between the two communities are strong and are expected to remain so in the future.

Although there have significant efforts by different Protestant denominations to establish churches or missions in the area in the past, it is not expected that other religious groups or organizations will play a significant role in either community in the next twenty years.

**Educational Organization**

Education in Pilot Point is at present a two-stage process. The first stage involves attendance at the local elementary school. With one certified teacher and 5 children in 1981 (down from 12 in 1980) the school is not a large one and not expected to grow, either in numbers of
students or in facilities, in the next twenty years. The community as a whole is growing older and the need for a new building to educate diminishing numbers of children is not perceived as urgent or necessary.

The second stage of education for Pilot Point youth is attendance at high schools in Anchorage. This is the major cause of the seasonal migration of half the population of the village for entire families live and work in Anchorage while their children go to school there. Their lifestyle is, therefore, as much oriented to a city environment as it is to the village of Pilot Point. Inasmuch as this pattern has been in existence for several years, resulting in the establishment of ties to Anchorage which are expected to increase with each new generation, and as there are no plans to build a high school in Pilot Point, this two-stage pattern and attendant dual urban-rural orientation will continue to remain in effect throughout the next twenty years.

It is also possible that, given the increasing subregional identification and the recent completion of a modern school, the second stage of education may occur at Port Heiden. This, of course, would lessen the increased urbanization and facilitate the sense of subregional identity and the desire to remain in the community on a year-round basis. There is no hard evidence, however, that there are enough children in Pilot Point/Ugashik of school age to reverse existing trends.

_Health Care Organization_

With the population of the village remaining stable and perhaps even declining, there will be no significant demands for an increase in health care in the projection period of the next twenty years. Community
health needs will continue to be met primarily by the Public Health Service aide living in the village, with serious illnesses being sent to Dillingham for treatment.

Recreational Organization

The primary form of recreation in the village, especially among the summer-only residents, is subsistence hunting and fishing. Residents who spend part of the year in Anchorage have access to a wider variety of recreational opportunities than year-round residents. They are able to attend sporting events, go to bars, attend movies, visit restaurants, and purchase a wide variety of consumer items for recreational use. These activities are, for the most part, unavailable to year-round residents.

Recreational activities which are associated with the purchase of modern consumer items (video-cassettes, TV, three-wheelers) are in short supply in the village today and are expected to remain so as those individuals who continue to live year-round are financially unable to purchase these items.
Output

Economic

It is projected that within the next five years, income levels in both communities will rise substantially and then begin to stabilize. This projection is based upon the fact that local fishermen are becoming increasingly pressured by the presence of outside commercial fishing interests and because of the variability of the red salmon run on the Ugashik River, upon which local fishermen depend for the bulk of their income.

Based on current projections, income levels will tend to become evenly distributed within the next five to ten years. Beyond that, however, it is highly possible that a noticeable skew in income will develop. This assessment is based on three specific factors. First, as the productive capacity of older residents decreases, so will their income potential. Second, the income potential of the entire community will be challenged by increased competition from outside commercial interests. This challenge will be particularly acute if the Ugashik River is closed periodically to allow for replenishment of salmon stocks. Third, as the community becomes less integrated because of changes in the structure of social relations, traditional patterns of exchange will begin to erode, thus eliminating a common pattern of redistribution.

Employment patterns are expected to remain relatively constant throughout the next twenty years. The fisheries will continue to provide the primary source of employment for local residents. The number of outsiders is expected to remain constant for the next five years, and
then perhaps slowly increase as replacements will be sought for older village residents who go into retirement. Individuals employed in local marketing and processing ventures are expected to remain constant and perhaps fluctuate with the productivity of the Ugashik river runs. As much of the marketing and processing is believed to be conducted by floating processors owned and operated by outsiders, shore-based sources of employment will decline, but only after a brief period of diversification lasting throughout the next five to ten years.

Employment patterns in other sectors will also remain constant, with the exception of transportation which will display a moderate increase over the next ten years. This is based on the projected increase of demand due to the slight influx of outsiders and the increasing numbers of seasonal residents.

While the number of jobs is expected to remain constant, however, local labor force participation rates may actually decline as more local residents reach retirement age with fewer younger residents to fill their positions. Concomitant with this decrease will be an increase in the number of individuals who are unemployed and depend upon social security benefits or public assistance.

With the projected short-term increase in income levels and long-term increase in the number of retirees, it is believed that certain economic class distinctions will appear. They will be particularly noticeable between permanent and seasonal residents. As noted above, the former group will consist of older residents who are no longer economically productive and who will depend on other sources of income while the latter group will consist of younger, well-educated residents who will
earn money outside the community as well as within the local fishing industry. Within each group, however, income levels will be evenly distributed.

Economic class distinctions will also be represented in differences in consumer purchases, with seasonal residents being more consumer oriented and permanent residents being more subsistence oriented. However, distinctions will not be so evident in housing or vessels, in the former case because the seasonal residents do not reside there all the time and in the latter case because economic necessity will demand the purchase of modern equipment by both groups.

As the community is not expected to see a great influx of outsiders in the next twenty years, property values, land speculation, construction and development are projected to remain constant.

Social

With respect to family patterns, two aspects are worthy of note. Marriage rates are expected to decline in the next twenty years as the segment of the population reaching marriageable age declines precipitously. Those who are eligible to marry will do so with partners outside of the community. Divorce is practically nonexistent today, and it is expected that this trend will continue.

The frequency of interfamilial relations may also experience a decline in the next twenty years as families will be divided into groups of members who reside year-round and seasonal residents. The same can be said of intercommunity relations as distinctions develop between per-
manent and seasonal residents and as the rate of outmarriage establishes independent ties to the outside world. Interregional relations are expected to increase, however, but display a shift from the south peninsula to other communities in Bristol Bay, Anchorage, and outside Alaska.

As social class distinctions develop based on age, type of residence, and economic productivity, certain disjunctions of the social cohesivity of the local community are bound to emerge. Conflicts may erupt between young and old generations, seasonal and permanent residents, residents and non-residents, and "highliner" and other families.

One aspect of nonkin behavior which is expected to play less of a role, either for unity or division, in these communities is ethnicity. The majority of residents in Pilot Point today are natives and there appear to be no major problems in ethnic relations. The ethnic identity is primarily Aleut but there is also a strong orientation to the Scandinavian heritage of many of the residents. Very few of the residents can speak Aleut, however, and English is used almost exclusively. There is no bilingual program in the school and interest in courses on Aleut ethnic heritage appears to be minimal. However, some children often mix native syntax with English grammar (Brelsford, 1981).

The absence of ethnic friction is expected to continue into the future. For the most part, it is the white population that is on the decline and this is not likely to affect ethnic relations. Conflict between year-round and summer-only residents does offer potential for conflict in the future as does growth in the distinction between shareholder/non-shareholder.
Political

Local political activities are currently directed toward several aims, including: 1) securing funds for a firehouse, fire-truck and modern firefighting equipment, 2) establishing a sewage system in the village, 3) acquiring another source of electricity, either through village funds or through revenue-sharing funds from the state, 4) improvement of existing water supplies, 5) protecting local resources from outside exploitation or development, 6) expanding the commercial activities of the Pilot Point Village Corporation.

The primary efforts of the village council in the next five years will be directed toward accomplishing the first four goals. The last two goals are seen to require efforts extending throughout the projection period. These activities will increase as the number of outside boats entering the area to conduct commercial salmon fishing operations each year increases and as the community perceives the BBNC to be both geographically distant and indifferent to the commercial interests of the village. The village council is particularly concerned about minimizing the intrusion of outside fishermen. However, they appear to be politically powerless to prevent this intrusion as few of the local residents appear willing to apply for allotment permits or are unable to apply for Limited Entry permits.

The guiding philosophy of local government in Pilot Point is the maintenance of the status quo. They are intent on keeping out external development and minimizing outside contact. Such contact, of course, is inevitable, especially as a large percentage of the population migrates to Anchorage each winter and as the community has extensive kin ties.
with Chignik. However, these outside contacts do not bear on local politics, with the exception of the distinction between year-round residents and summer-only residents.

One significant aspect of political output in the next twenty years is believed to occur in the level of conflict between various segments of the community. Such conflict is already evident between the permanent and the seasonal residents. Seasonal residents often complain that their interests are not adequately voiced in council meetings of village corporation endeavors while permanent residents seek to minimize the ability of seasonal residents to influence administrative decisions. Both groups displayed dissatisfaction with the Pilot Point Village Corporation for having entered into a failing economic venture in the Diamond E cannery in Egegik. As both Ugashik and Pilot Point become increasingly involved with intercommunity political and economic ventures, the level of this form of conflict may increase because residents will feel that their own interests are not adequately represented.

Religion

It is conceivable that as both communities become more secularized, religion will decline as a basis for intercommunity relations. However, given the role of the church in solidifying related kin, it is also conceivable that while secularization may become a factor in other communities, the church will continue to serve as a basis for an association between the communities of Pilot Point and Chignik.
**Education**

Projections for educational output are in accordance with the subregional projections. Of particular note in Pilot Point and Ugashik is the absence of a local high school. The primary effect of this two-stage educational system, however, will be to increase the pattern of outmigration in the next twenty years. This will be particularly evident from 1990 onward, when the younger generations will have had relatively contact with Pilot Point and will be oriented to living in Anchorage. This group of outmigrants will be better educated than those who remain in the village and if the former group continues to associate itself with Pilot Point, it will be as a higher socioeconomic class.

It is also possible that outmigration will be enhanced by declining local enrollments. Within the next twenty years, the elementary school in Pilot Point may be forced to close because of an insufficient number of school. What few school-age children remain will be forced to attend school in Port Heiden or elsewhere. By that point, the two-stage educational process will become a one-stage process, with education being available only outside the community.

**Health Care**

With the population of the village remaining stable and perhaps even declining, there will be no significant demands for an increase in health care in the projection period of the next twenty years. Community health needs will continue to be met primarily by the Public Health Service aide living in the village, with serious illnesses being sent to Dillingham for treatment.
One potential health problem in the future, however, may be alcoholism. Those remaining in the village will be those who are unable or unwilling to leave the village but are also unable to compete successfully against outside fishermen. The perceived relative deprivation resulting from both exposure to the outside world and the inability to successfully compete with outside fisherman for local commercial fishing resources will result in an increasing sense of stress, alienation and anomie, manifesting itself in increasing incidence of alcoholism, stress-related diseases, and accidents.

Health problems in the future will also be related to the diseases of age. This will increase in the next twenty years as the age structure slowly shifts in favor of older age groups. The mortality rate will also display a slight increase, but not for the next five to ten years.

Recreation

In short, recreational activities not associated with subsistence are sought elsewhere. Those families who move each winter to Anchorage to allow their children to attend high school there participate in urban-oriented recreational activities. Those activities which occur in a religious context (i.e., religious festivals and holidays) usually take place with kinsmen in Chignik Lagoon at the newly constructed Russian Orthodox church.
Discussion

Field time available to the Principal Investigator allowed visits of acceptable duration to only a certain number of communities. Larger communities were given first priority, unstudied communities were second in priority. Accidents of weather played an unusually strong role in determining length of stay in each village or city. The community of Ivanof Bay is disproportionately represented because weather extended a two day visit to nearly four days. Similar circumstances lengthened the field period in Chignik Lake and in Sand Point. Unfortunately, for two communities of the study region, adequate data could not be collected. After a very brief visit, Chignik Lagoon was eliminated from the schedule on the grounds that only a few families elected to remain in the community after the fishing season. The Principal Investigator spent only one day in Perryville with the expectation that he could revisit the community on his return to Chignik Bay from Ivanof Bay. Weather and an inoperative satellite phone system prevented departure from Ivanof Bay for four days and the PI elected to leave the community when an ALASCOM pilot passed through the village en route to Sand Point.

In that no baseline data exist on these communities, and the Principal Investigator remained in these communities too short a period to collect sufficient information on which to base projections, no discussion of these communities will be included in this report.
Alaska Consultants

Alaska, Department of Commerce and Economic Development, Division of Economic Enterprise

Bailey, F.G.


Combs, Earl C. Inc.
1981 Unpublished manuscript.

Cortes, Fernando, A. Przeworski and John Sprague

Easton, David

Ellanna, Linda J.

Gurr, T.R.

Jones, D.


Lane, Knorr, and Plunkett
Payne, J. and S. Braund  

Terry, J.M., Sooles, R.G., and D.M. Larson  

Tuck, Bradford H. and Lee Huskey  

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

U.S. Department of the Interior, Bureau of Land Management  
N.D. Technical memorandum, SG-14 "Kish Tu", unpublished manuscript.

University of Alaska, Arctic Environmental Information and Data Center  