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RURAL AGING AND THE USE OF SOCIAL SUPPORTS
IN THE UPPER TANANA REGION, ALASKA

by

Terry L. Haynes

Medical Anthropology Program

University of California, San Francisco

December 1984

**Rural Aging and the Use of Social Supports
In the Upper Tanana Region, Alaska**

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by

Terry L. Haynes

ACKNOWLEDGEMENTS

Although I cannot adequately thank by name all the individuals who contributed to this study, several deserve special mention for the invaluable assistance they provided. They are entitled to share in any contributions this dissertation makes toward broadening our understanding of aging in Alaska, but are not responsible for its shortcomings.

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This dissertation is dedicated to my late great-grandmother, Alma May Bamford (1885-1984), who lived a rich and full life and was a woman I greatly admired.

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ABSTRACT

RURAL AGING AND THE USE OF SOCIAL SUPPORTS IN THE UPPER TANANA REGION, ALASKA

By

Terry L. Haynes

Designed as a contribution to our understanding of aging in rural America, this dissertation focuses on the aged residents in five Alaskan communities served by the Upper Tanana Aging Program. The study presents ethnographic data and examines the formal and informal supportive resources utilized by this ethnically-mixed aged population. The Upper Tanana Aging Program is evaluated as an institutional support during its first six years of operation, and treated as a case of directed culture change. Research was conducted over a 21-month period commencing in December 1979. Field methods included structured and unstructured interviews, case studies, and participant-observation.

The 29 white and 46 Alaskan Native elders participating in this study diverged on numerous socioeconomic and demographic indices, and adhered to different value systems. These factors influenced the sources to which members of each ethnic group turned for instrumental and affective aid. Elder whites generally lived more independently than their Native counterparts and usually had more viable informal support systems. The Native aged often had more extensive informal support systems, but found them most reliable in providing affective aid.

Reciprocal exchange was commonplace among both the white and Native aged.

The Upper Tanana Aging Program provides an array of services and is among the most comprehensive agencies of its kind in rural Alaska. Elder Natives sought program aid more often than did their white counterparts, who utilized its services more selectively and sometimes as a last resort. The aging program has increasingly gained acceptance in the region and has emerged as an important supportive resource for many elders by addressing their unmet needs for assistance and buffering them from stressors common in the rural Subarctic. Although the program has unintentionally weakened the informal helping networks of some older persons, this was not considered a serious problem.

Further research is required on the Alaskan aged and the programs serving them. Such studies will sensitize policymakers and planners to factors which influence successful aging and service delivery in ethnically-mixed rural Alaskan communities, and facilitate identification of strategies for strengthening linkages between the formal and informal supportive resources so important to older persons.

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CHAPTER I

INTRODUCTION

Introduction

Sitting at a small wooden table near the only window in his one-room cabin, Paul reminisced about his life and experiences in Alaska. A spry and well-mannered bachelor, Paul might not strike the observer as the hearty type cut out for life on the Alaskan frontier. Yet, most of his 50 years in Alaska have been spent in a remote part of the Upper Tanana region, far-removed from larger towns or urban centers, where no white person had ever been a century ago. My conversations with Paul revealed a great deal about his life and said much about this man, who resembles many other white Alaskan pioneers of his era.

Born in Wisconsin in 1896, Paul spent his youth on farms there, in Texas, and New Mexico. Of Austrian heritage, he was the youngest of seven children born to parents who immigrated to the United States in 1880. Among Paul's most vivid childhood recollections are seeing his first automobile in 1908 and witnessing a devastating hurricane in Texas in 1913 that destroyed the family farm. He joined the Army in 1917 and was stationed in France when the Armistice was signed, ending World War I. Following his military discharge, Paul returned to Wisconsin and with his brother, Jim, purchased a farm near their parents' home. Jim left in 1921, and by 1925, Paul "got fed up with it" and "was restless and wanted to get out and see the country."

And see the country he did. After visiting another brother in Texas, Paul joined a custom harvesting crew and for two years traveled throughout the Great Plains, then worked one year on a ranch in

California's San Joaquin Valley. In 1929, he moved to Oregon and for two years did odd jobs before accepting a position with the City of Salem. While there, he learned that Jim was also living in Oregon, after having spent several years in Alaska--where he worked for a gold dredging company in Nome, and prospected and trapped furs across the state in the Upper Tanana region.

Snowblindness forced Jim to seek medical treatment outside Alaska, but he yearned to return to the Upper Tanana region and urged Paul to join him. Paul needed little persuasion, for the United States was still mired in the Great Depression and job opportunities were none too plentiful. So, after pooling their resources and voting in the 1932 Presidential election, the two brothers boarded a steamship in Seattle bound for Alaska. They wintered in Fairbanks, then mushed by dogteam to a site in the Upper Tanana region not being used by other prospectors or fur trappers.

As did many other pioneer Alaskans at the time, Paul and Jim prospected in the summer months and ran traplines each winter. They either built new or refurbished existing cabins in several locations, which served over the years as permanent or seasonal dwelling places. Other routine activities included woodcutting, gardening, hunting, fishing, freighting supplies, and traveling periodically to pick up mail and socialize with friends at a nearby settlement. Musically-talented sourdoughs occasionally entertained at roadhouses to break the monotony of the long winter months or to commemorate holidays. Paul and Jim reportedly never enjoyed great success at gold mining, so relied on fur sales each spring to provide the cash necessary to purchase food staples and other supplies for the coming year.

Paul was out on the trapline when he heard on the radio of the Japanese attack on Pearl Harbor. The following summer he traveled to Fairbanks and found work as a civilian employee at the U.S. Army base for the duration of World War II. In the spring of 1946 he returned to the Upper Tanana region, where Jim had remained during the war years. The two brothers continued working together until Jim suffered a heart attack in 1953 and had to leave Alaska.

Not wanting to remain alone some 25 miles from the nearest community, Paul moved to Chicken and hired on with a gold dredging company working in the area. A truly devoted and reliable employee, Paul was invited to stay on as the caretaker of company property after dredging operations ceased in 1962. There he lived in a small cabin nestled in a hillside overlooking company property and Chicken Creek until 1980, when failing health forced him to move into the Pioneers' Home in Fairbanks.

Although I have since visited Paul at the Home on several occasions, my fondest memories date back to an overnight visit at his cabin in 1977. At that time I was finishing an autobiographical sketch of Paul for inclusion in a report on Upper Tanana history (Haynes 1977:28-49) and I wanted to fill in some gaps in my data. While sipping on what he referred to as an "Alaskan Screwdriver" (whiskey and orange drink, no ice), I asked Paul what he liked best about living in Alaska. His words embody the pioneer spirit common among so many long-time Alaskans and say a great deal about the man himself:

What have I liked best about livin' in Alaska? The fact that you can sleep under blankets every night. It's generally cool enough in the evenings to use one. For one thing, I always liked to hunt and fish and be out in the open. I never cared to be cooped up in a factory. I always felt sorry for those fellas doin' the same thing on assembly lines, day after day, month after month.

I've enjoyed my life up here. I like the country. One thing I like about it, there ain't so many rules and regulations you have to go by here, that you'd have to observe Outside¹. You're pretty much free to do what you want. And the country's been good to me--the fact is, I would say that I've got more out of the country that I really deserved. I don't think I've earned what I'm gettin' now.

You take this old timers' bonus². I've been gettin' it ever since it was enacted. Well now, I wasn't in favor of it at first; the fact is, I came darn near not applyin' for it, 'cause I figured I hadn't earned it. Just because I happened to be here before the rush was on, I don't think that qualified me to pull down a hundred dollars a month. But people as much as told me I'd be a darn fool not to accept it. You might call it, in plain language, a handout.

I doubt that people today are any better off than they were fifty years ago. For one thing, they were healthier then. All this modern stuff and hurried way of livin' causes all sorts of nervous diseases.

We were a lot better off in the Territorial days, before we became a state. We didn't have to bother with income taxes of any kind. If we needed meat, we'd go into the hills and get it. But now there are more people and we need game laws. I've heard that GIs used to use game for target practice. I never killed a game animal unless I needed meat.

* * * * *

Contrary to popular belief, Paul is typical of only a small proportion of older persons currently residing in Alaska, although he shares many values and interests in common with other long-time white residents. The notion that older Alaskans are all "sourdoughs"³ or Eskimos has no basis in fact, and is simply an image conjured up and perpetuated by the media. Looking specifically at the Upper Tanana region, for

¹ "Outside" is a term commonly used in Alaska for referring to the continental United States.

² Reference is being made to the Alaska Longevity Bonus, which is discussed in a later chapter.

³ A "sourdough" is a long-time resident of the North, and is a term frequently used to describe persons who arrived in Alaska during the gold rush era (cf. Marshall 1933:17).

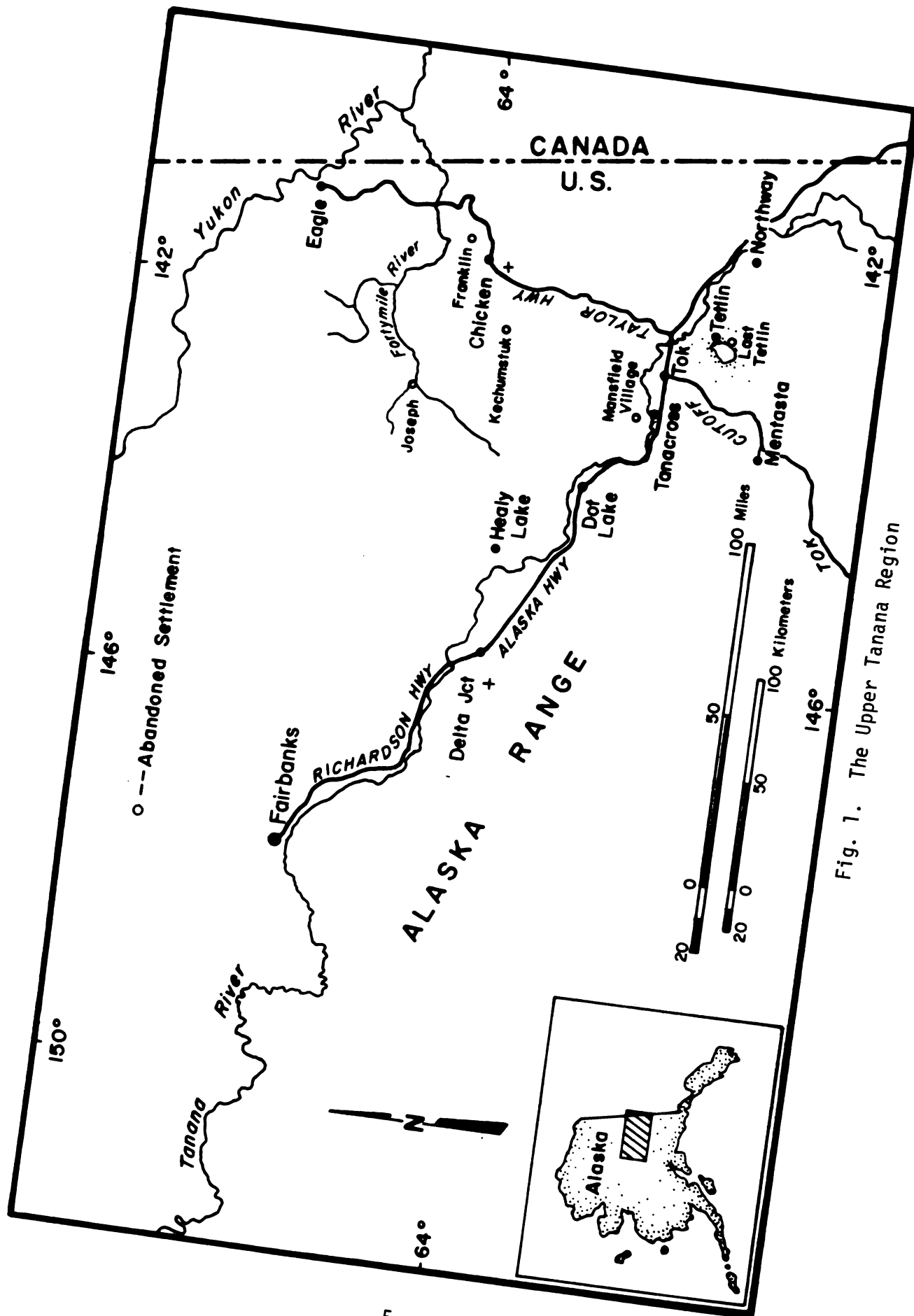


Fig. 1. The Upper Tanana Region

example, only a few of the 125 or so elderly residents living there in 1981 were white men who arrived in Alaska before World War II, searching for gold or fulfilling their pioneering aspirations. Almost half are Alaskan Natives--Northern Athabaskan Indians who have inhabited eastern interior Alaska for several thousand years, far removed from the coastal regions that are the homeland of Yup'ik- and Inupiaq-speaking Eskimos.

Research Focus

I met many of these older Alaskans while conducting summer research projects on Upper Tanana history in 1976 and 1977, and in the course of a medical services planning study in 1978. Some elder whites, including Paul, were key informants with whom I spent many enjoyable hours as they reminisced about their lives in eastern interior Alaska as long ago as the early 1920s. Time constraints prevented the inclusion of older Natives in these studies, but I met many at traditional potlatches and during periodic village visits. At the time of these summer projects, I had given little thought to conducting an aging study in the region.

When considering dissertation research topics, however, I discovered that almost no anthropological or gerontological research had been done with older Alaskans. Most studies appearing in the literature during the past 15 years had focused on the urban and institutionalized elderly, and on those residing in retirement communities. The meager rural aged literature is directed primarily to the midwestern and southern states, while brief discussions in ethnographic accounts and reports prepared by agencies serving older Alaskans constituted the bulk of references on this population cohort as recently as the late 1970s. Although Alaska has the fewest aged persons of any state (19,643 in

1980, or less than five percent of the state's population), and only a minute percentage of all aged Americans (less than .05 percent), this oversight has major implications for aging policy and service planning. The problems and needs of older Alaskans do not necessarily coincide with those of their rural, urban, and institutionalized counterparts elsewhere. If differences do exist, then they should be taken into account by policymakers, planners, and service providers.

With this in mind, I decided to conduct a study that would contribute to our knowledge of aging in Alaska. Being most familiar with the Upper Tanana region (see Fig. 1) and recognizing the opportunity for a comparative examination of white and Alaskan Native elders, the question became one of identifying a segment of this population to focus on. The geographic and ethnic diversity of Upper Tanana communities discouraged placing emphasis on a single village, if a contribution was to be made to service planning and delivery. On the other hand, to examine several communities might necessarily narrow the scope and detail of the study. For reasons explained below, I opted for the multi-community approach.

This dissertation, then, is in part an ethnographic study focusing on the population of persons 60 years of age and older who reside in five Upper Tanana communities. Sociocultural, demographic, and health status indices are presented for the white and Native aged population. When and where appropriate, comparisons are made between these ethnic cohorts for such factors as social and economic well-being, health status, social activities, problems associated with aging, and unmet needs. Special attention is given to the composition and utilization of social support systems by older persons in coping with the aging process and addressing their needs for affective and instrumental aid. The

1. The first step in the process of creating a new product is to identify a market need. This involves conducting market research to understand the preferences and behaviors of potential customers. Once a need is identified, the next step is to develop a concept that addresses this need. This concept should be innovative and differentiated from existing products in the market.

2. After developing a concept, the next step is to create a prototype. This allows the development team to visualize the product and test its functionality. Prototyping can be done using various methods, such as 3D printing or building a physical model. The prototype is used to gather feedback from potential users and make necessary adjustments to the design.

3. Once the prototype is refined, the next step is to conduct a feasibility study. This study evaluates the technical, financial, and market viability of the product. It involves assessing the resources required for production, the potential costs, and the competitive landscape. This step is crucial to ensure that the product is not only technically feasible but also economically viable.

4. Following the feasibility study, the next step is to develop a business plan. This plan outlines the overall strategy for the product, including marketing, sales, and distribution channels. It also includes financial projections and a timeline for development and launch. The business plan serves as a roadmap for the product's journey from concept to market.

5. The final step in the process is to launch the product. This involves manufacturing the product at scale and distributing it to the market. Launching a new product is a significant milestone, and it requires careful planning and execution to ensure a successful market entry. After launch, the development team should continue to monitor the product's performance and gather feedback from customers to make improvements and iterate on the design.

Upper Tanana Aging Program is examined as a formal institutional support available to but used differentially by the study population. By focusing on a geographic region that constitutes the core service area of a human services program, more attention can be given to such factors as ethnicity and residence vis-a-vis the content and use of formal and informal social supports.

Conceptual Framework

In addition to its more descriptive content, this study examines three general questions concerning the use of social support systems among older rural Americans. First, what is the relationship of formal and informal supports available to and utilized by the Upper Tanana aged? More specifically, how has the Upper Tanana Aging Program as a new institutional support affected use of the informal system in both the predominantly white and Native communities? And how have differences in the informal support systems of the white and Native elderly affected use of the aging program? These are particularly important considerations, given the attitudes and perceptions of social intervention held by many rural Americans (Coward 1979). Litwak (1965) noted that the potential is great for conflict or tension in the sharing of functions between bureaucratic institutions and family systems--in other words, between the core formal and informal support systems in the community.

A second question is determining whether differences exist in the composition and functioning of support systems among the Upper Tanana aged and elders in other rural areas of the United States. Most of our knowledge of the rural aged is derived from studies focusing, at least

in part, on agricultural settings or adjoining small towns (e.g., Kaplan and Taeitz 1958; Pihlblad 1975; Powers, Keith, and Goudy 1981; Wang 1979). Consequently, the opportunity exists to compare support systems in two very different geographic settings: rural Alaska and "mainstream" rural America.

Of particular interest in this context is the role of the family in providing support to its aged members. Interestingly, the long-term stability of the rural farm family in the continental United States may more closely resemble that of the Alaskan Native than it does of the white population in the study area. Two questions then arise: (1) What socioeconomic and cultural factors account for any observable differences in the provision of support by the farm family and that of elder Athabaskan Indians? and (2) To whom do elder whites in the Upper Tanana region turn for assistance, since their local kin networks are likely to be less extensive than those of elder Natives?

A third goal of this study is to assess the contributions made by formal and informal sources of support to the health and well-being of older rural Alaskans. Research has shown that the presence of social support may buffer or protect individuals from the negative effects of stressful situations experienced throughout the life course (Cassell 1976; Cobb 1976 and 1979; Dean and Lin 1977; Kaplan, Cassell, and Gore 1977; Kahn 1979). Susceptibility to stressors increases as individuals grow older, thereby emphasizing the importance of social supports to many elderly persons.

Older Alaskans living in the Upper Tanana region may be vulnerable to more, or at least different, stressors than their urban and rural peers elsewhere in the United States. Among these are the extremely

cold Subarctic winters, limited medical facilities, and a rapidly changing socioeconomic and cultural environment. The role of social supports in buffering the Upper Tanana aged from these and other stressors also will be assessed, although this topic alone warrants more attention than it is given in the present study.

Methodology

Although fieldwork for this dissertation was conducted primarily between December 1979 and August 1981, my involvement in the Upper Tanana region began several years earlier, as was noted previously. During the summers of 1976 and 1977, I interviewed many elderly white pioneers (many of whom resided in communities not targeted in the present study) while doing historical research for the Bureau of Land Management (Haynes 1976 and 1977). A year later, I assessed the status of medical and social services in the Upper Tanana region, looking specifically at how they might be impacted by construction of the then-proposed Alaska Natural Gas Transportation System (ANGTS), and developed recommendations for use in pipeline impact mitigation (Haynes 1978).

The impact study was conducted for the Upper Tanana Development Corporation (UTDC), a non-profit corporation providing an array of services to the Native, elderly, and low-income residents in the region. Consequently, I had the opportunity to visit several Athabaskan villages, converse with elder Natives, and learn more about services provided by UTDC's aging program. As my third summer in the region drew to a close, my thoughts turned to potential dissertation topics that might be feasible in Upper Tanana communities and which would contribute toward

the delivery of human services in rural Alaska. My professional interests in problem-oriented and applied research, coupled with the rewarding experiences I had enjoyed with elderly residents, guided my selection of a researchable topic that appeared likely to receive local support.

My desire to study elderly Alaskans did not evolve from a long-standing interest in social gerontology. Instead, since childhood I have frequently been in the company of older persons and benefitted from their wisdom. I also discovered that, despite the recent proliferation of gerontological research in the United States, almost no information was available for elderly Alaskans and especially those in rural areas. Whatever the reasons for this omission, I was not prepared to assume that elderly rural Alaskans resembled their counterparts in other states or shared similar problems. My interests focused on learning more about aging in small communities, 200 miles or more from the nearest urban center, and in one of the coldest regions of North America. Finally, I wanted to compare the composition and utilization of support systems among elder whites and Natives in Upper Tanana communities, and assess the role these resources played in the lives of older persons.

The Upper Tanana Aging Program and the UTDC Board of Directors endorsed my research plan and provided funding for a needs assessment survey conducted during the winter of 1979-80. This project provided baseline information for a majority of persons 60 years of age and older residing in seven Upper Tanana communities, who either utilized or were eligible for aging program services. Respondents also made suggestions for improving existing services and addressing their unmet needs. On the basis of this information and data derived from informal

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observations and frequent interaction with aging program staff, I prepared a final report that included a series of recommendations designed to guide program planning and development (Haynes 1980).

During the spring and summer of 1980, I continued my observations of the elderly while directing attention to ANGTS socioeconomic planning in the Upper Tanana region. While being generally concerned with potential pipeline impacts on local communities, I was especially interested in studying the consequences of an economic boom on elderly residents. For, as has been documented in other boom communities throughout the United States, older persons comprise one segment of the population having little to gain from an economic boom but are among those most vulnerable to its negative impacts (Haynes 1983).

At the request of a pipeline company official involved in socioeconomic planning, I developed a research plan designed to assess potential ANGTS impacts on the Upper Tanana aged population and to offer recommendations for socioeconomic impact mitigation. In August 1980, the State Pipeline Coordinator's Office (SPCO) hired me to conduct such a study and serve as its liaison in the Upper Tanana region. SPCO funding during the next 13 months supported completion of this research and other assignments unrelated to the study goals.

Research Strategies

This study of the Upper Tanana aged employed a combination of research techniques customarily used in ethnographic research, namely structured and unstructured interviews, intensive interviews with key informants, and participant-observation.

Structured Interviews

Initially, I administered an interview schedule to a self-selected sample of persons 60 years of age and older residing in or near seven communities served by the Upper Tanana Aging Program. Inquiries were designed to provide background information for each respondent and to assess his/her involvement in aging program and other activities, use of supportive resources, and needs for assistance. Interviews ranged from 30 to 90 minutes in length and were conducted in the respondents' homes or at the aging program office in Tok. Native interpreters accompanied me on interviews with most elderly Athabaskans and facilitated data collection with this segment of the study population.

Originally administered during the winter of 1979-80 for the needs assessment survey, the interview schedule was subsequently revised for use in the SPCO study. Some persons not contacted during the original survey were interviewed for the SPCO study. In most instances, data recorded for respondents in the aging program survey were updated and amended in the winter and spring of 1981. In keeping with the goals of the SPCO survey, the study population was limited to the five communities located along the proposed ANGTS corridor: Dot Lake, Northway, Tanacross, Tetlin, and Tok.

Unstructured and Key Informant Interviews

On the basis of information recorded in structured interviews and through involvement with elders as a participant-observer, I selected several persons for more detailed study. These individuals represented elder residents with dissimilar sociodemographic characteristics and supportive resources. At intervals during the study period, I sought

further information from these persons, focusing on their lives, activities and use of supportive resources. Although I originally planned to record detailed life histories for all these key informants, in some instances they preferred that I limit the scope of my inquiries. Consequently, some unevenness will be noted in the content of the case studies presented in Chapter VI.

Unstructured interviews conducted with agency personnel and several community residents supplemented information obtained from elder respondents and through personal observations. These discussions normally focused on key informants for whom further information was needed, but often yielded data applicable to older Upper Tanana residents more generally.

Participant-Observation

Although my objectives as a researcher remained enigmatic to some persons throughout the study period, many elders felt more at ease when I substituted for the regular aging van driver, attended congregate meals, or accepted their invitations to participate in family and community functions. In these instances, I had a well-defined role and was viewed as having interests beyond those of a researcher. As a participant-observer, I had the opportunity to verify certain responses elicited in structured interviews. Additionally, in this role I observed Upper Tanana elders as they interacted with peers, family members, agency personnel, and other community residents.

Format of Presentation

Chapters II and III provide background information on the study area and on the central themes of this dissertation. The literature

review in Chapter II focuses on the rural aged in the United States, the aged in Alaska, and on social support systems. Its purpose is to facilitate the drawing of comparisons between the rural aged in the United States and Alaska, and to demonstrate the need for further research on elderly Alaskans. Chapter III describes the study area and its history, and includes profiles of the five study communities. A brief history of the Upper Tanana Aging Program also is presented, focusing on its growth and development between 1975 and 1981.

Chapters IV and V examine the findings of a survey conducted among elder whites and Natives in the Upper Tanana region. Chapter IV describes their social, economic, and demographic characteristics, while Chapter V focuses on the health status of this aged population, the medical resources available, and on the forms of social support utilized. Particular attention is paid to the Upper Tanana Aging Program and its strengths and weaknesses as an institutional support. The program is treated as a case of directed culture change and evaluated according to criteria suggested by Foster (1969) in his important book, Applied Anthropology.

Case studies of several aged study participants are presented in Chapter VI. The goal is to illustrate the various "types" of older persons residing in the Upper Tanana region and their differential use of informal and formal supportive resources, including the aging program. The vignettes are brief but do suggest that these are resourceful elders, whatever their age, sex, or ethnic background may be.

Chapter VII reviews the study findings and concludes that the Upper Tanana aged have access to and employ a range of supportive resources in

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addressing their needs for assistance. Elder whites more often than their Native peers turn to family, friends, and neighbors for instrumental and affective support, while the Native aged as a group are more reliant on the Upper Tanana Aging Program for meeting their essential needs. The aging program is viewed as an important source of institutional support providing a range of beneficial services to its constituents, although it has realized less success in building linkages with the informal support systems of the aged. Recommendations are made for further research which will strengthen our understanding of aging in rural Alaska.

Summary

This dissertation is designed as a contribution to our knowledge of older rural Americans, their needs and supportive resources. It examines a segment of this population underrepresented in the anthropological and gerontological literature, focusing on elderly Alaskans living in the Upper Tanana region. Attention is directed to similarities and differences observed between elder whites and Athabaskan Indians residing in five communities served by the Upper Tanana Aging Program. The aging program is examined as an institutional support during the period 1975 to 1981, and its interaction with other formal and informal supports available to the aged. Study findings underscore the importance of developing human services programs that are attentive to the socioeconomic, cultural, and geographic diversity of older rural Americans.

As such, this dissertation adheres to Foster's (1969) description of applied research, whose results should be,

...ideas, insights, comprehension, and data which lend themselves to the planning and execution of programs aimed at ameliorating specific social and economic ills, or in bringing about improved practices...which will benefit individuals and their society... (Foster 1969:43).

As the aged population in the United States continues to expand numerically, applied research involving elderly Americans and programs serving this constituency will increase in importance. This study is a reminder that the human services and aged persons in sparsely-populated locales should not be overlooked or considered less important subjects of inquiry and understanding than those in urban settings.

CHAPTER II

STUDY BACKGROUND

The focus of this dissertation is on the composition and utilization of support systems among the aged in rural Alaskan communities. A review of selected literature addressing three themes is useful for putting into context research data from the Upper Tanana region, namely, (1) the rural aged in the United States; (2) the aged in Alaska; and (3) social support systems.

The Rural Aged

Standard definitions of rural and aged have not been used in research conducted with older Americans living outside major population centers and urban places. Indeed, both terms evoke images that can vary as widely as do existing definitions and the purposes for which they are used. Atchley (1975), for example, says the age at which people begin to be classified as elderly or aged ranges from 55 to 65 years, and that this range is both desirable and necessary. Elsewhere, however, he finds the definitions of rural "too varied and subjective to render research findings clear, comparable, and cumulative" (Atchley 1976:1). The United States Bureau of the Census distinguishes between "urban/rural" and "metropolitan/non-metropolitan" areas in its designations, with the latter term in each dyad used most frequently (and sometimes interchangeably) in the rural aged literature. For the 1970 Census,

- (1) The rural population consisted of all persons living outside urbanized areas and in places of 2,500 or fewer inhabitants; and

- (2) the non-metropolitan population resided outside Standard Metropolitan Statistical Areas (SMSAs), which are counties or a group of contiguous counties that contain a city of 50,000 or more inhabitants (U.S. Bureau of the Census 1973).

The rural aged population 65 years of age and older increased from five million to 5.4 million persons between 1960 and 1970, although the proportion it comprised of all aged persons dropped from 30 percent to 27 percent (Marquis Academic Media 1979). By 1978, 38 percent of all non-institutionalized Americans 65 years of age and older, totalling nearly 8.5 million persons, resided in non-metropolitan areas (U.S. Bureau of the Census 1979). While accurate comparisons cannot be drawn between rural and non-metropolitan data, these segments of the population are expanding and constitute a significant proportion of all older Americans.

The rural and non-metropolitan elderly, however, have not been accorded attention in the literature comparable to that given their urban and metropolitan counterparts. Youmans (1977:82) attributes this to two factors: (1) new fields of inquiry emerge in urban centers, then gradually spread to rural areas; and (2) most social gerontologists (and, I might add, others engaged in gerontological research) reside in urban areas and have focused their research efforts on human aging in the urban environment. This bias is reflected in Wilkinson's (1978) bibliography on the rural aged, which cites only 137 references appearing between 1975 and 1978--many of which are government documents, unpublished papers, and reports not circulated widely. An update extending coverage of this bibliography to 1981 revealed a growing interest among researchers in the rural aged (Wilkinson, Rowles, and Maxwell 1982).

Even anthropologists are relative strangers to rural aged studies in the United States, as is evidenced in reviews of their published contributions (Holmes 1976; Myerhoff 1978; Fry 1980 and 1981), although their urban research often focuses on a well-defined segment of a larger community, and their cross-cultural aging studies customarily investigate what essentially are "rural" societies. Additionally, anthropologists have routinely recorded data on the aged in their ethnographic studies of small-scale societies and employed tribal elders as key informants (Simmons 1945; Amoss and Harrell 1981). Among the best anthropological examinations of aging in mainstream rural America are Plainville, U.S.A. (West 1945) and a restudy of that Midwestern farming community fifteen years later (Gallaher 1961); both are broader ethnographic studies, however, and do not provide the detail on the aged in "Plainville" than one might hope for.

The available literature does examine the rural aged from a variety of perspectives, often concentrating on topics appearing in volumes edited by Youmans (1967) and Atchley and Byerts (1975). These two collections provide basic information on the characteristics, lifestyle, and environments of older rural Americans and delineate their most pressing needs. Comparisons with the urban aged are made or implied in discussions of housing, health care, social services, transportation, and other topics. A number of these themes are reviewed below and emphasize features that help to distinguish rural elders from their urban peers.

Sociodemographic Characteristics

Contrary to popular belief, the rural elderly are not primarily men and women who reside in agricultural regions, nor do they all resemble the couple portrayed in Grant Wood's painting, "American Gothic." Instead, older rural Americans vary as much as do the regions where they reside; in Youmans words, "a typical rural senior citizen does not exist" (Youmans 1973:69). Many ethnic and social groups are represented, including Appalachian subsistence farmers, Pennsylvania and Kentucky coal miners, Western sheep and cattle ranchers, reservation Indians, small town merchants, and wealthy retirees from urban areas. Rurality can perhaps be viewed most appropriately along a folk-urban continuum like that posited by Redfield (1941 and 1956), since small communities differ in the extent to which they are influenced by urban society. Consequently, we would expect elder Appalachians inhabiting isolated mountain hollows to differ from their age peers in the metropolitan hinterland or small New England townships.

While acknowledging this diversity, White (1977) lists several values which collectively appear more characteristic of the rural aged than of elder urbanites: independence; self-reliance; cooperation; ambition; freedom of choice; a sense of accomplishment; a "down-to-earth" approach to solving problems; political conservatism; personal honesty and integrity; and a strong sense of responsibility. A study of value orientations among aged rural and urban Kentuckians found the former to be more authoritarian in their views, more fundamentalistic in religious outlook, slightly less motivated toward achievement, more closely identified with their families, more dependent on government,

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and more pessimistic (Youmans 1973). Pihlblad's (1975) assessment of values among rural Midwesterners emphasizes another dimension:

... the values of the social system in which they were socialized are clear. They continue to maintain their independence, to rely on themselves as much as possible, to look on "the welfare" as something to be avoided at all costs, even to reject aid offered by their children, to rely on age mates for friendship and association. One is tempted to speculate that these are the last of a disappearing generation ... (Pihlblad 1975:58).

Economic Status

Census data and other statistics clearly indicate that old age and rural residence in combination place the rural elderly among the lowest income groups in the United States. The median annual incomes in 1960 of urban families with a head of household 65+ years of age greatly exceeded those of rural farm and nonfarm families, totalling \$3,382, \$2,352, and \$2,294, respectively (Kreps 1967:146). More revealing disparities were noted in the 1970 Census, which reported individual incomes by sex and place of residence for persons 65 years of age and older, and are presented in Table 2.1.

Table 2.1. Annual median incomes of Americans 65 years of age and older, by sex and place of residence, 1969.

| Sex | Place of Residence | | |
|--------|--------------------|------------|----------------|
| | Urban | Rural Farm | Rural Non-farm |
| Male | \$3,188 | \$2,514 | \$2,205 |
| Female | 1,562 | 887 | 1,104 |

Source: Youmans 1977:85.

By 1975, the median annual income of rural elderly households surpassed \$5,100, but remained \$1,300 less than that for metropolitan elderly households. One in five rural elders had incomes below the poverty

level, compared to one of seven in large cities and one of ten in the suburbs (Harbart and Wilkinson 1979:37).

In a 1962 survey, Shanas and her colleagues (1968:391) found that the 20 percent of all aged income units in the United States classified as farm owners and workers comprised one-third of all units receiving public assistance. By 1977, 17 percent of all non-metropolitan residents 60 years of age and above had incomes below the federally-defined poverty level, as compared to 10.4 percent of the metropolitan elderly and almost 40 percent of rural Black elders (Lee and Lassey 1980:64-65).

Kreps (1967:165) suggests that these demonstrably lower incomes among the rural aged are offset to some extent by their lower living costs, a higher proportion of home ownership, and the ability of the farm segment to produce some food for consumption. Marsh (1981:9) also noted a trend of declining poverty rates among the aged, such that they are no longer disproportionately poor as a group compared with all adults. He admits, however, that certain groups among the aged still are very likely to be poor.

Housing

According to 1960 Census housing data, about half of all rural homes occupied by an elderly head of household (65 years of age and older) were deficient in some way--i.e., in need of repairs or lacking plumbing facilities (Montgomery 1967:175). Census data recorded in 1970 for rural persons 60 years of age and older indicate that about one-fourth had inadequate housing, with the absence of central heating, plumbing facilities, and a telephone considered "serious and prevalent

shortcomings" (Atchley and Miller 1975:110). Deficient housing in 1970 was most common in the rural South and North Central regions, and among elder rural blacks.

A housing survey conducted in 1975-76 focused on older couples and older women living alone in low-income rural counties in eight Southern states (Montgomery, Stubbs and Day 1980). Most respondents owned their homes despite living near or below the poverty level. Objective assessments revealed many housing defects but, subjectively, the occupants cited few complaints and thought their housing sufficiently met their needs. The investigators suggest that this might be related to their backgrounds: Most poor people growing up in the early 1900s were socialized to behave in certain ways and to appreciate what they had. These attributes were reinforced by limited educational experiences.

Other factors also may be involved. Several studies conducted in the late 1950s and early 1960s found the rural aged to be relatively satisfied with their housing, and either disinclined or financially unable to make needed improvements. Additionally, most persons preferred to live independently as long as possible in their present home and community (Montgomery 1967:176-180). Certain housing characteristics that might be considered disadvantageous for older persons can in fact be conducive to social interaction. The spacious, two-story homes often occupied by rural elders serve as convenient gathering places for adult children and their families (Rose 1967:15), while the front porch characteristic of many older homes enables the elder person to maintain a public presence in the community (Lozier and Althouse 1975). One of Gallaher's elderly informants in "Plainville," for example, found her front porch the perfect vantage point from which to observe activities

in that small town (Gallaher 1961:92). Rowles (1983) refers to that area within the visual field of the home as the "surveillance zone" and considers it an increasingly significant source of support for older people.

The attachment of many older persons to their homes may discourage resettlement in "more appropriate" dwellings. Among the elderly in rural Kansas, Windley and Scheidt (1982) found that satisfaction with one's home correlated positively with psychological well-being and happiness. These authors suggest that alterations which heighten satisfaction with the immediate features of the dwelling may have a favorable influence on the morale of aged occupants and lessen the likelihood of psychiatric complaints.

Health Status

The health of older persons can be defined either in terms of the presence or absence of disease (medical model), or on the basis of how well they are functioning (functional model). Shanas and Maddox (1976:598) prefer the latter as a conceptual tool because it better predicts how pathology is translated into illness behavior and the sick role. Nevertheless, distinctions between the two models may be inappropriate when assessing the health status and problems of older rural Americans.

The rural elderly, for example, experience higher incidences of acute conditions, injuries, disabilities, and selected chronic conditions and impairments than do the urban aged (Ellenbogen 1967). This may be associated with the poor quantity and quality of rural health services, and the low incomes, transportation inadequacies, and poor

nutritional health of older ruralites (Lassey, Lassey, and Lee 1980). Mental health problems may not differ significantly in quality and quantity between and among urban elders, but rural services are less available and rural persons may be more reluctant to seek assistance for such conditions (Coward and Kerckhoff 1978:35-36). One recent study found that the low-income rural aged more often than their urban counterparts utilize nonconventional medical services and home care arrangements for treatment of chronic disorders, but noted few other differences in health service utilization patterns (McCoy and Brown 1978).

Health and Social Services

Human services in rural communities and especially those needed most often by the elderly, are less available and accessible, lower in quality, and more costly than comparable services in urban areas (Taietz 1975). For example, the rural and urban aged pay the same Medicare premiums but do not have convenient access to a similar range of medical services (Rural America 1977). Equally disconcerting, services in rural areas often are little more than scaled-down versions of urban programs, and are not particularly attentive to the diversity within and between rural communities (Coward 1979:275-277; Lohmann and Lohmann 1977).

Combined with these factors is the resistance of some rural elders toward certain human services programs, resulting from their independent spirit and negative attitudes toward "welfare" (Coward and Kerckhoff 1978:54-58). Well-intended social programs which pose threats to privacy and longstanding practices lead some rural aged to view recipients of government support as persons "sponging off public funds" (Harbart and Wilkinson 1979:38). That a stigma is attached to

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10. Compute the inverse of $\mathbf{A} = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$, if it exists.

11. Find the eigenvalues of $\mathbf{A} = \begin{bmatrix} 1 & 0 \\ 0 & 2 \end{bmatrix}$.

12. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} 5 & 6 \\ 7 & 8 \end{bmatrix}$. Find $\mathbf{A}^T \mathbf{B}$.

13. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} 10 & 11 & 12 \\ 13 & 14 & 15 \\ 16 & 17 & 18 \end{bmatrix}$. Compute $\mathbf{A} + \mathbf{B}$.

14. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find the determinant of $\mathbf{A}$.

15. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find the trace of $\mathbf{A}$.

16. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find the eigenvalues of $\mathbf{A}$.

17. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find the inverse of $\mathbf{A}$, if it exists.

18. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find $\mathbf{A}^T \mathbf{A}$.

19. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find the determinant of $\mathbf{A}$.

20. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find the trace of $\mathbf{A}$.

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24. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find the determinant of $\mathbf{A}$.

25. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find the trace of $\mathbf{A}$.

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27. Let $\mathbf{A} = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$. Find the inverse of $\mathbf{A}$, if it exists.

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government aid was observed by the anthropologist, Carl Withers, in his study of rural "Plainville" in the late 1930s. He found residents of this small Midwestern town deeply disturbed when old age assistance and other forms of financial aid became available, since they were viewed as "cash without work" and conflicted with local values. Older persons retained higher social standing if they had adequate savings to meet their needs and did not have to accept old age assistance (West 1945:204,216). The situation had not changed markedly when Gallaher (1961) conducted his restudy of "Plainville" some 15 years later, and found some recipients of old age assistance cashing their checks out of town so as to avoid ridicule in their home community.

On the basis of research conducted in rural Oregon, Moen (1978 and 1981) posits that resistance to government assistance currently is greatest among older aged cohorts and will decline with each successive cohort. She attributes this to changing social and economic conditions experienced by each throughout the life course--namely, more affluence and a more liberal social atmosphere. For example, the "old-old" were reared in an era that stressed individualism, while the "young-old" have been influenced more by the Great Depression and economic crises beyond their control. Consequently, the latter are less reluctant to admit need and accept aid. In contemporary rural Oregon and 40 years earlier in "Plainville," however, strong sentiment among the rural elderly militated against accepting aid that was viewed as being unearned.

Ward (1977) cites additional factors that affect service utilization patterns but which are not necessarily unique to the rural aged population. Individuals unwilling to label themselves as "elderly" and admit to having medical, psychological or social age-related problems

are reluctant to use services; conversely, they may consider that their conditions are a consequence of the aging process and not amenable to treatment. Another barrier consists of service providers with paternalistic attitudes toward the elderly or little experience in treating their problems, or who think older persons will benefit minimally from therapeutic intervention.

More than 80 different federal programs are designed to aid the elderly, either directly or indirectly, and have been classified in seven categories: income maintenance; employment and volunteer service; housing; health care; social service programs; transportation; and training and research programs (Lee and Estes 1979:77-78). Passage in 1965 of the Older Americans Act (OAA) signalled an attempt by the federal government to plan and coordinate services better for the aged, and to acknowledge the special needs of this steadily-growing population (Administration on Aging 1979). Unfortunately, many programs still fall short of their own goals or those set forth in the OAA. Estes (1979), for example, describes their entanglement in bureaucratic red tape and the general confusion surrounding their goals, accomplishments and measures used for program evaluation.

Estes' provocative critique focuses on broad policy issues and, therefore, says little about problems specific to rural programs for the aged. Perhaps most significant is the urban orientation of rules and regulations governing service delivery in rural areas. Noting that 40 percent or more of the aged population in 29 states inhabited rural areas in 1970, Atchley (1975:3) found this to carry major policy implications, "since so many programs are geared to serve an urban population." The predominantly urban composition of advisory and review

committees of agencies serving the elderly often is reflected in the allocation of funds (Rural America 1977:67). Finally, Kimble (1977:8) criticizes the OAA for assuming that older persons in Los Angeles are comparable to those residing in isolated rural areas.

Such obstacles complicate development of human services for the rural aged. The more basic problems can be overcome by (1) involving the rural elderly in program planning and taking into account their actual needs; (2) recognizing the diversity within and between rural communities, and tailoring programs to specific cultural and geographic settings; and (3) identifying and utilizing already established professional and naturally-occurring support networks (Jacks 1974; Powers, Keith and Goudy 1975; Oliver 1975; Coward 1979). Furthermore, the total needs of the individual must be considered and a piecemeal approach not taken in program development (Oliver 1975:177). For, as has been amply documented in the literature, the problems experienced by the rural aged are intertwined and cannot be viewed only as isolated concerns.

The Aged in Industrializing Rural Communities

Social scientists and others who conduct social impact assessment (SIA) studies are particularly interested in examining the effects of industrial development on small communities in energy-rich regions of the United States. Thus far, however, the SIA literature has directed little attention to older residents of industrializing communities. Available data from the Western states suggest that the aged, others living on fixed incomes, and American Indians head the list of those most vulnerable to the negative consequences of rapid growth (Murdock

the first of these is the fact that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The second is that the system is not a static one, but a dynamic one, in which the parts are constantly changing and evolving. The third is that the system is not a closed one, but an open one, in which the parts are constantly interacting with the environment. The fourth is that the system is not a linear one, but a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The fifth is that the system is not a deterministic one, but a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion. The sixth is that the system is not a simple one, but a complex one, in which the parts are interrelated and interdependent. The seventh is that the system is not a static one, but a dynamic one, in which the parts are constantly changing and evolving. The eighth is that the system is not a closed one, but an open one, in which the parts are constantly interacting with the environment. The ninth is that the system is not a linear one, but a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The tenth is that the system is not a deterministic one, but a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion.

and Leistriz 1979:251), and constitute a group not sharing equally in benefits derived from the economic boom (Larson 1980:34).

At the time fieldwork was conducted for this dissertation, plans were underway for construction of a natural gas pipeline through the Upper Tanana region. If the project proceeds as is tentatively scheduled, it will provide the impetus for accelerated change in the study communities and may pose important problems for elderly residents living there. On the basis of findings reported in other social impact assessment studies, this section reviews the major issues likely to confront the Upper Tanana aged if a pipeline is constructed through the region (see also Haynes 1983).

Economic Factors

Inflation in rural boomtowns greatly exceeds the national rate, consequent to increased demands for housing, goods and services generated by the population influx. The limited purchasing power of elder persons living on fixed incomes declines and places them at a distinct disadvantage on the marketplace in their own communities (Davenport and Davenport 1980). Older merchants may be unable to compete with new businesses catering to the boom economy, and as a potential labor pool the elderly often lack skills comparable to those of incoming and younger workers (Moen et al. 1981:77). Evidence from the Midwest suggests that industrialization in rural communities is directly associated with a decline in the relative economic status of the elderly, whether they are employed or retired (Clemente and Summers 1973).

Housing

Housing shortages are characteristic of boomtowns and newcomers can afford to pay higher rents than local residents (Primack 1980:8-9). Although senior citizens often own their homes and may be less directly affected than other residents, the economic boom may result in higher property taxes and increased cost of home maintenance (Davenport and Davenport 1980:30). Elder homeowners who rent rooms to younger construction workers may find that the costs outweigh the benefits of this income-producing measure, as was the case in a small Georgia town near the site of a nuclear power plant construction project. Conflicts often arose between elder landlords and their young renters--whose interests and values did not correspond--when the latter disregarded their rental agreements and were asked to leave (Fennell 1977:410).

Human Services

Increasing demands for human services in boomtowns compound the other problems with which older persons must contend. The inadequacy of medical and social services in many rural communities, especially in the field of geriatric medicine and counseling, lessens their ability to cope with a rapidly expanding population (Davenport and Davenport 1980:31). Available services frequently are redirected to the more visible younger and transient residents (Larson 1980:36).

Consideration must also be given to the reluctance of some older persons to seek assistance from formal helping programs and agencies. Moen (1978) found rural elders in Oregon very resistant to services perceived as being unearned and directed to the poor. A move to establish subsidized housing for the elderly in one Colorado boomtown failed

the first of these is the fact that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The second is that the system is not a static one, but a dynamic one, in which the various parts are constantly changing and evolving. The third is that the system is not a closed one, but an open one, in which the various parts are constantly interacting with the environment. The fourth is that the system is not a linear one, but a non-linear one, in which the various parts are constantly interacting with each other in a non-linear fashion. The fifth is that the system is not a deterministic one, but a probabilistic one, in which the various parts are constantly interacting with each other in a probabilistic fashion. The sixth is that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The seventh is that the system is not a static one, but a dynamic one, in which the various parts are constantly changing and evolving. The eighth is that the system is not a closed one, but an open one, in which the various parts are constantly interacting with the environment. The ninth is that the system is not a linear one, but a non-linear one, in which the various parts are constantly interacting with each other in a non-linear fashion. The tenth is that the system is not a deterministic one, but a probabilistic one, in which the various parts are constantly interacting with each other in a probabilistic fashion.

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because none of the target population would admit a need for financial assistance--although most elders knew someone who met the eligibility requirements (Moen et al. 1981:78).

Social Impacts

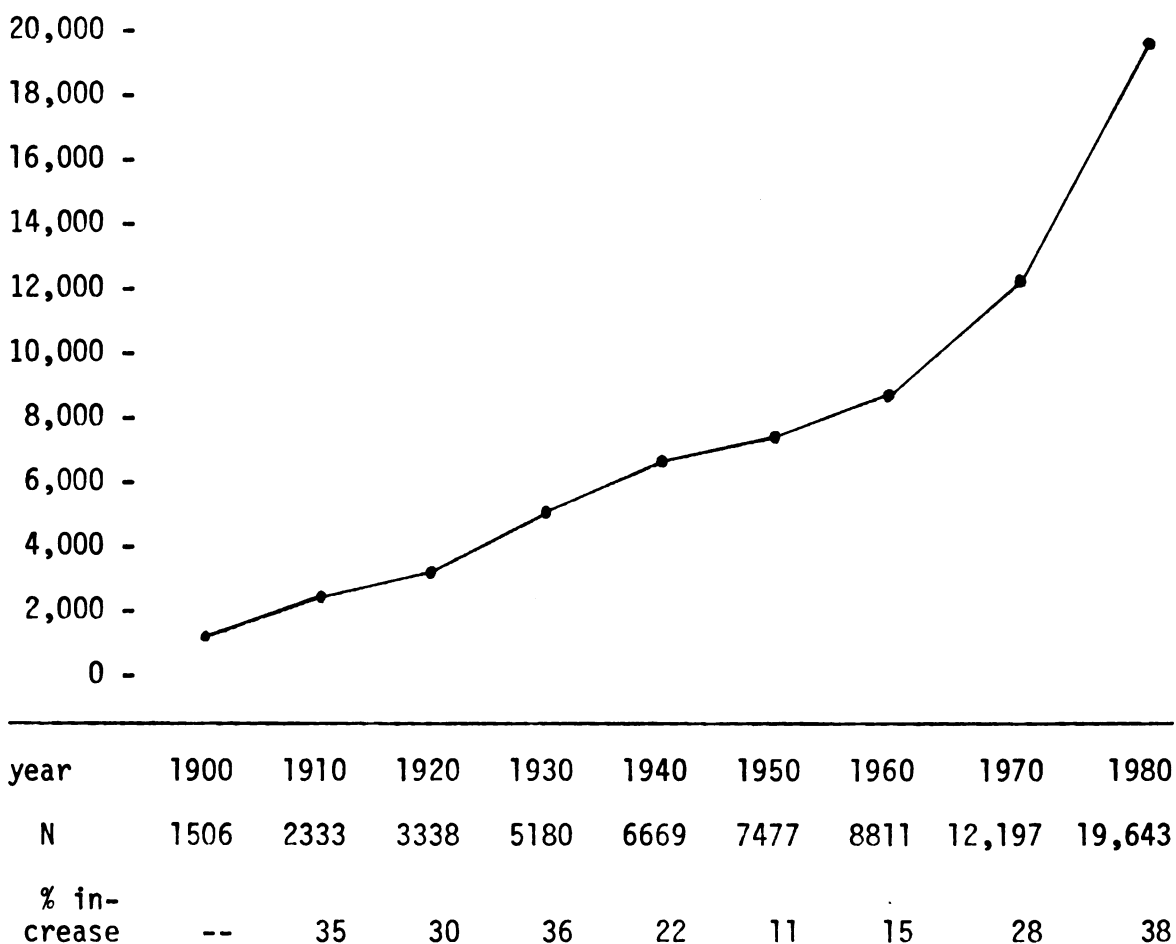
As bad as the economic impacts may be, older boomtown residents often are more concerned with the social implications of population growth and a faster pace of life. A larger population generates more traffic, noise, crime and violence--all of which pose special problems for the elderly (Primack 1980:10; Moen et al. 1981:79). Senior citizens may become more isolated and experience major disruptions in their informal networks (Brown 1977:5), as community residents who otherwise would visit and aid them become intensely involved in the economic boom and adopt new values consistent with the boom economy (Bates 1978:6). The "breakdown in the informal life-support system of the elderly" in one Montana boomtown was attributed to this phenomenon and to the immigration of construction workers and other newcomers (Gold 1979:121). This alienation can be more threatening than other kinds of impacts by causing the aged to become "strangers in their own land" (Davenport and Davenport 1980:32).

The Aged in Alaska and Canada

Little scholarly attention has been paid to older Alaskans outside the context of ethnographic accounts on Native groups, memoirs of pioneer residents, and occasional technical reports prepared by government agencies. Alaska has by far the smallest population 60 years of age and older of any state (19,643 in 1980, or about five percent of the State's population), but the paucity of gerontological studies has

important implications for aging policy and program development. It assumes, for example, some degree of correspondence between the needs, concerns and lifestyles of older Alaskans and their counterparts "Outside" (i.e., in the continental United States). Furthermore, it acknowledges neither the ethnic and cultural diversity of the aged population, the rapid growth in numbers of elderly Alaskans since 1900 (see Table 2.2), nor the fact that this population is dispersed throughout an area more than twice the size of the state of Texas. Although

Table 2.2. The Alaskan population 60 years of age and older, 1900-1980.



Sources: U.S. Bureau of the Census 1973 and 1981.

concentrated in Alaska's few cities and large towns, not an insignificant number of older persons reside in or near sparsely-populated settlements far removed from urban centers and comprehensive services, and often inaccessible by road.

This is not to imply that the 49th State has ignored its older residents. In fact, Alaska has long considered the aged as important resources and displayed sensitivity to their needs in later life. In 1913, the Territory of Alaska converted a vacant building at Sitka for use as a home for indigent prospectors and other men who had resided in Alaska for at least five years but could no longer live independently. This was the forerunner of a system of Pioneers' Homes currently operated by the State in five communities. Eligibility was extended to women in 1949 and ethnic minorities in 1959 (McKinney 1980:44-45). In 1915, the Second Territorial Legislature enacted the first old age pension system in the United States (Fischer 1975:6), thus providing those able to live independently in later life with a source of income. But perhaps the most significant legislative action came in 1973 with implementation of the Alaska Longevity Bonus Program, which pays a monthly tax-free stipend to persons 65 years and older who have resided in Alaska for 25 years commencing on or before Statehood (1959). Nearly 8,400 Alaskans participated in this program in 1981, each receiving \$250 per month as an incentive to continue residence in the state. The intent of this program is to acknowledge both the contributions made by older persons to the state's growth and development, and to help offset the higher cost of living in Alaska.

This section surveys the published literature which contains references to older Alaskans and Canadians generally, then turns

specifically to the Upper Tanana region. The discussion focuses largely upon the Native elderly, since little information for older white persons appears in the literature. Data derived from key informant interviews will supplement this discussion to provide some insights concerning aging among whites and Natives in the Upper Tanana region. A final section examines technical reports addressing aged Alaskans and reiterates the need for additional such studies to facilitate program planning and development.

Ethnographic Literature: Alaska and Canada

The extensive anthropological literature on Northern Native cultures generally accords only cursory treatment to the elderly, in which are found several recurring themes. Weyer's (1932) review of earlyday writings on the Eskimos, for example, makes passing reference to the leadership roles of older men, shamanistic powers of the elderly, the prescribed responsibilities of younger persons to elder kin, and the practice of abandoning or killing the aged and infirm when they ceased to be productive members of society. More recently, Guemple (1969 and 1980) observed changes in these traditional practices among one Canadian Inuit (Eskimo) group, in what are among the few detailed examinations of the social position of elder Natives in the North. The elderly Inuit studied by Guemple were valued for their wisdom and knowledge of traditional ways, but commanded respect only if they could contribute to the well-being of the group. Unproductive elders faced ridicule, lower social status, and until recent times, abandonment or death in extremely difficult times. The advent of government financial assistance

programs, however, has offered the elderly some degree of economic security by reducing their burden on younger family members.

Teit (1900) made these observations concerning the role of elders among the Thompson Indians in British Columbia:

Some elderly man of a household, or some chief, would often speak to the young people until late at night, admonishing and advising them, especially the young people of both sexes, how to act and live with one another; telling them the benefits of being good and the results of being evil, also giving his ideas of the future life, etc., thus teaching them and guiding them by his knowledge and experience. In winter, many nights were spent in speech-making of this kind, in relating stories of war, hunting, and other experiences, and telling mythological stories. The old people often took turns at telling myths and legends after all went to bed, and stayed up until all fell asleep (Teit 1900:367).

Jenness (1929:23) emphasized the role of older women in educating youth among the Carrier Indians. Knowledge of religious matters and social responsibilities were acquired by observing elders and listening to folk-tales "told mainly by old women at odd moments of the day or night."

Osgood (1936) reconstructed the aboriginal culture of Kutchin-speaking Athabaskan Indians in eastern Alaska and Yukon Territory, where old men and women also were acknowledged as educators and intelligent advisers. Yet, the infirm elderly faced abandonment if this might prevent a worse fate for the entire band. Among the aboriginal Peel River Kutchin, for example,

... Old people are deserted in their infirmity at their own request. It is considered an honorable way to die and apparently inevitable in the cold and semi-nomadic conditions under which the people live. Movement is often necessary for life and the feebleness of age occasionally leaves the choice of starvation for the group or the abandonment of individuals (Osgood 1936:144).

Although Osgood does not address the status of older Kutchin following the establishment of semi-permanent residences near trading posts, Slobodin (1962) offers some insights based on research conducted with the Peel River band in the late 1930s and again in 1946-47. Old age still brought hardships, physical infirmity, and increased dependence, but the elderly retained certain privileges if as younger adults they had established reputations for sagacity, industry, generosity, and success. One informant explained this to Slobodin:

"Indians don't have a bank," an old man remarked, "but the people, the Peel River people is like a bank for us. You work all your life and help other people, and when you get old everybody helps you." This statement, made in private conversation, was repeated at greater length in a meeting of the men in the band. Coming from an old man, it expresses wishful thinking, a reminder to the young of their obligations to the senior members of the community. However, the statement could hardly have been made in public if it did not appeal to an existing sentiment of collective responsibility (Slobodin 1962:68).

Sharp (1981) reports on old age among the Chipewyan Indians in Canada's Northwest Territories, based on fieldwork conducted ten years earlier. He makes two points that are given little attention by other writers. First, the Chipewyan distinguish between "old" and "elderly" persons, with the latter term being reserved for individuals who no longer can function as competent adults. "Old" persons can retain their social ranking until they are unable to perform the tasks associated with that status. "Elderly" persons, who formerly would have been abandoned by the Chipewyan during stressful times, now rely on government assistance. Oswalt (1966:58) believes this has caused young adults to revise their opinions of the aged: Although the elderly may be unwanted, scorned and ridiculed, they also represent an economic

resource to the family. Oswalt discovered, however, that exploitation by children has led some old people to establish independent households.

The second point made by Sharp involves the differing character of old age for Chipewyan men and women. Men exclusively possess magical power and are thought to have very strong supernatural capacities if they live a long time without becoming "elderly." Most men, however, lose influence and respect as they grow old and are confined to the village, after leading lives centered on food-getting activities in the bush. Women do not experience this shift in environment consequent to the aging process, and continue to pursue such important village-based activities as craftwork production, food processing, and childrearing. Seniority in kinship groups bestows on women some respect, while their learned skills (contrasting the men's reliance on magic) offer more options for economic productivity in later life. Women, therefore, are more likely than men to grow "old" and not "elderly."

Despite the important contributions made by Native elders, they were liabilities in traditional hunting and gathering societies if they could not contribute toward the economic needs of the group. Following the introduction of old age pensions by the Canadian government in 1949, Pryde (1971) found that elder Inuit then represented a financial gain to the family. Among the Yup'ik Eskimos in Alaska, Oswalt (1963) asserts that old age assistance payments enabled the elderly to elevate their social status and live in separate residences if they so desired. Hurlburt (1962) and Hara (1980), writing about the Canadian Hare Indians of the early 1960s, observed increasing dependence on government assistance by persons of all ages as fur prices declined sharply and when subsistence resources were in short supply. The elderly then became

1. The first step is to identify the problem or question that needs to be answered.

2. The second step is to gather relevant information and data.

3. The third step is to analyze the information and data.

4. The fourth step is to develop a solution or answer.

5. The fifth step is to implement the solution or answer.

6. The sixth step is to evaluate the results of the solution or answer.

7. The seventh step is to communicate the results of the solution or answer.

8. The eighth step is to reflect on the process and learn from the experience.

9. The ninth step is to apply the lessons learned to future problems.

10. The tenth step is to continue to learn and grow.

11. The eleventh step is to share the knowledge and experience with others.

12. The twelfth step is to stay up-to-date on the latest developments in the field.

13. The thirteenth step is to maintain a positive attitude and mindset.

14. The fourteenth step is to be open to feedback and criticism.

15. The fifteenth step is to be persistent and determined.

16. The sixteenth step is to be creative and innovative.

17. The seventeenth step is to be organized and efficient.

18. The eighteenth step is to be a team player.

19. The nineteenth step is to be a leader.

20. The twentieth step is to be a lifelong learner.

21. The twenty-first step is to be a problem solver.

22. The twenty-second step is to be a team player.

23. The twenty-third step is to be a leader.

24. The twenty-fourth step is to be a lifelong learner.

important economic assets to their families. In another Hare community, old age pensions emerged as one "coping technique" enabling the elderly to feel more economically and socially secure, and to maintain some respect accorded to those who were generous and self-reliant (Savishinsky 1974).

The financial impact of government assistance for elderly Natives in impoverished villages is perhaps best illustrated by Loyens' (1966) observations in a Koyukon Athabaskan village in Alaska:

Only the aged can be said to be fairly happy in their present condition. They have acquired less new tastes, they have not seen by personal contact what can be had when one has a steady job, and they receive a monthly check which gives them a security they did not independently have in former times. It has freed them from the traditional reliance on kin. With the knowledge that this assistance will be theirs until they die, they consider their future a lot more rosy than the younger members of the community see theirs and their children's (Loyens 1966:265).

The available literature says little about two important topics regarding aged Natives in the North. First, what constitutes old age? Simmons (1945) posed this question in his cross-cultural survey on the elderly in "primitive" society and concluded that,

... the only reliable criterion for the onset of old age seemed to be the social and cultural one. The simplest and safest rule to follow was to consider a person as "old" whenever he was so regarded and treated by his contemporaries... (Simmons 1945:16).

References on Circumpolar peoples cited by Simmons suggest that longevity beyond the age of 60 was rare, a consequence of the difficult conditions under which Northern peoples lived (Simmons 1945:18).

A second topic given cursory attention in the literature is an assessment of elderly Natives in a changing sociocultural context.

1. The first part of the document is a letter from the

author to the editor of the journal.

2. The second part is a letter from the editor to the

author, responding to the first letter.

3. The third part is a letter from the author to the

editor, responding to the second letter.

4. The fourth part is a letter from the editor to the

author, responding to the third letter.

5. The fifth part is a letter from the author to the

editor, responding to the fourth letter.

6. The sixth part is a letter from the editor to the

author, responding to the fifth letter.

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editor, responding to the sixth letter.

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27. The twenty-seventh part is a letter from the author to the

editor, responding to the twenty-sixth letter.

28. The twenty-eighth part is a letter from the editor to the

author, responding to the twenty-seventh letter.

About all that can be gleaned from sources cited above is that the elderly now are less financially dependent and are viewed as valuable economic resources in the community. Among the Hare Indians, for example, Hurlburt (1962) calculated that old age pensions equalled or surpassed the yearly earnings of most adult workers or fur trappers. McClellan's (1975) observations among the Southern Tutchone in Yukon Territory in the 1950s are a notable exception. The situation of the aged in this Athabaskan group, whose traditional territory borders that of the Upper Tanana Natives on the east, probably resembles that of many other Northern Native peoples:

Whether of high or low rank, the old are usually respected individuals. Their wisdom and experience are valued, especially for advice about where to hunt and for guiding important social ceremonies like the potlatch. In the old days they formally instructed the young. Now, however, an ever-widening gap separates the oldest generation from the young people, who go to school, speak English, and have often turned their backs on earlier ways. Their elders lament the strange new mores and actions of the young. Caught in an economic squeeze and a world they no longer fully understand, ignored by their children and mocked by their grandchildren, from whom, traditionally, they would have expected the greatest emotional support, their lives are often full of real tragedy (McClellan 1975:348).

A somewhat more positive assessment of contemporary intergenerational relationships is reported by Maxwell and Maxwell (1983) in a southeast Alaskan Tlingit Indian community. Elders there rely heavily on a system of reciprocal exchange with younger relatives and other persons for ensuring personal autonomy and continued residence in the community. Since the aged have a steady source of income derived from state and federal benefits, they often give money to younger relatives in exchange for needed services. According to the authors, this system of reciprocal exchange breaks down when the older person becomes

1. The first step in the process of creating a new product is to identify a market need.

2. Once a market need is identified, the next step is to develop a concept for the product.

3. The third step is to create a prototype of the product.

4. The fourth step is to conduct market research to determine if there is a demand for the product.

5. The fifth step is to develop a business plan for the product.

6. The sixth step is to secure funding for the product.

7. The seventh step is to manufacture the product.

8. The eighth step is to distribute the product.

9. The ninth step is to promote the product.

10. The tenth step is to evaluate the product's performance.

11. The eleventh step is to make improvements to the product.

12. The twelfth step is to continue to market the product.

13. The thirteenth step is to monitor the product's performance.

14. The fourteenth step is to make adjustments to the product.

15. The fifteenth step is to continue to market the product.

16. The sixteenth step is to monitor the product's performance.

17. The seventeenth step is to make adjustments to the product.

18. The eighteenth step is to continue to market the product.

19. The nineteenth step is to monitor the product's performance.

20. The twentieth step is to make adjustments to the product.

21. The twenty-first step is to continue to market the product.

22. The twenty-second step is to monitor the product's performance.

23. The twenty-third step is to make adjustments to the product.

24. The twenty-fourth step is to continue to market the product.

25. The twenty-fifth step is to monitor the product's performance.

26. The twenty-sixth step is to make adjustments to the product.

27. The twenty-seventh step is to continue to market the product.

28. The twenty-eighth step is to monitor the product's performance.

29. The twenty-ninth step is to make adjustments to the product.

30. The thirtieth step is to continue to market the product.

permanently impaired and can no longer function independently. Even then, however, "the community mobilizes in order to send [the permanently impaired] to hospitals or one of the Pioneer Homes" (Maxwell and Maxwell 1983:179).

The Upper Tanana Region

Little can be added to the material presented above for illuminating the status of elder Natives in the Upper Tanana region. Both McKennan (1959) and Guedon (1974), who conducted fieldwork there in the late 1920s and late 1960s, respectively, agree on several points: the elderly were valued as teachers and storytellers; they were treated with kindness and respect, and received assistance from kin and neighbors when unable to care for themselves; and the aged wielded some authority within the camp, although formal leadership normally was reserved for younger men. Vitt (1971) asserts that older persons often made weapons and tools and traded them for the necessities of life, but could expect economic aid and respect even if they were no longer productive.

McKennan (1959) found no evidence of the practice of abandoning or killing the aged in stressful times, and thought that Upper Tanana clan organization effectively prohibited such practices. Osgood (1971), however, cites a possible instance of abandonment recorded many years earlier by Schmitter (1910), which occurred at an unspecified site in or near the Upper Tanana region. According to Schmitter, government freighters traveling between Eagle and Tanana Crossing,

... passed a camp which the Indians had just deserted, leaving behind a sick old woman and a crying baby, but no attention was paid to them, as it was supposed the Indians would return to get the woman and child. The packers on their return trip a few

weeks later found the old woman and child dead, evidently left by the Indians to starve (Schmitter 1910:6).

On the basis of interviews with two elderly women from the Salcha band, whose territory bordered that of the Upper Tanana Athabaskans on the west, Andrews (1975) reports another exception to the rule. She learned that older band members without relatives or close friends suffered a great deal and had to procure their own food.

The status of elderly Natives certainly has changed in recent years, although my informants may have portrayed an idealistic situation in our discussions. They recall elders as having had more authority and commanding more respect from young people than they do now. Similarly, more emphasis formerly was placed on assisting older band members, as is illustrated in the advice one Native man received from his dying father:

My daddy, before he pass out, he tell me all about what I can do: "Try not to be mean. Be nice to old people. Old woman got hard time, you help her out. You gotta help." So I did.

Another man recalled receiving this advice from his father:

My dad used to teach me what was important. One time he pointed to an old man who had to walk with a stick. He said, "Don't ever laugh at people like that. Someday, maybe you have to walk with a stick, too."

These attitudes still prevail among the middle-aged and young-old Natives, who were reared in a culture not yet dramatically altered by white contact. The turning point accompanied World War II and construction of the Alaska Highway through the heart of the Upper Tanana region. Since then, traditional Native values and practices have been altered significantly, through contact with an increasingly dominant white society.

Only a few white pioneers inhabited the Upper Tanana region until the late 1880s, when the Fortymile Gold Rush lured hundreds of prospectors into the Alaskan interior. Although most eventually moved on to richer gold strikes at Dawson, Circle, Nome, and Fairbanks, others chose to remain in or near the small settlements located along gold-bearing creeks in the eastern interior region. By the time some of my informants arrived in the 1920s and 1930s, these earlyday adventurers comprised the first generation of aged white persons in the region. A few of my aged informants are second generation residents, descended from parents who accompanied the initial population influx at the turn of the century.

Most of the earlyday aging pioneers lived frugally and were involved at least peripherally in gold mining activities. A common belief is that these sourdoughs never did strike it rich, or they would have moved elsewhere; others considered the region the best home they ever had and felt no desire to readjust to the rapidly-changing world outside Alaska. A few, probably less by choice than out of necessity, entered the Pioneers' Home in Sitka or a hospital in Fairbanks when they could no longer live independently (see Burg 1984, for a glimpse of earlyday pioneers living at the Pioneers' Home in the early 1950s).

Most of the earlyday white elders were unmarried men, although a few brought spouses and some took Native wives following their arrival. Whether men or women, they had all the characteristics of pioneers everywhere: proud and stubborn, determined and independent. Old age deterred them only insofar as it slowed their pace. Elderly men continued to snipe for gold in places easily accessible, sometimes finding enough to provide a meager income. They hunted, trapped, and raised

small gardens, but otherwise led quiet lives. Some received nominal monthly pensions following the introduction of these benefits by the Territory of Alaska and managed to make ends meet. Judge James Wickersham made this entry in his diary while traveling along the Yukon River in 1901, referring to the owner of a cabin Wickersham stayed in overnight:

... [The owner] then made his way to Alaska but failed again to find the pot of gold, and is now in his old age catching fish for dog feed and cutting cordwood on the banks of the Yukon--such is the life of many prospectors--yet the star of hope alway shines overhead (Wickersham 1938:72).

Older persons known to be in poor health or who might otherwise need assistance could generally expect aid from other community residents. If an old man chose to live out in the bush, a neighbor would periodically and discretely check to see whether smoke was coming from his cabin and perhaps stop by for a brief visit. Since most old timers followed some sort of routine, any deviation would likely be noticed and lead to an investigation.

Those who died while living in the Upper Tanana region often met tragic ends. One elderly man committed suicide after lamenting that all his friends either had moved away or passed on. Another failed to prepare adequately for a routine trip to town and froze to death en-route. Still another succumbed to an internal disorder while being transported to the hospital from a remote mining community, far away from any type of medical facilities. Finally, there is the tragic and mildly humorous account of one man's death, as told by an informant who knew him well:

Old _____ never took a bath in his life. He finally got sick and was taken to the hospital in Fairbanks. They gave him a bath and he died later that same night.

Robert Marshall's Arctic Village (1933) is perhaps the best published account of life in an earlyday Alaskan bush community. Although the setting is in west-central Alaska, much of what Marshall relates concerning the white elderly there in 1930-31 probably holds true as well for the Upper Tanana region. For example, he calculated that annual living expenses ranged from \$650 for an elderly bachelor with little income, to \$1,452 for a well-to-do aged married couple, while estimating the range for a person over 55 years of age to be \$350 - \$1,200 (Marshall 1933:177-179).

Marshall's older informants were more concerned about infirmity than death, for they did not want to become a burden on others in the community and their care would "necessitate too great a drain on the altruism of this small community" (Marshall 1933:200). Yet, the strong sense of communal responsibility behooved residents to assist the ill, those in dire financial straits, or persons who had not been seen for too long a period:

... I remember one day when an old man of seventy climbed 1,000 feet up a steep hill to be sure nothing had happened to another old man, simply because when we dropped into the latter's cabin about seven in the morning there was no trace of any recent fire in the stove ... (Marshall 1933:201).

Conditions under which persons grew old in the Upper Tanana region and other parts of Alaska half a century or more ago differed in several respects from circumstances in other rural areas. The long and extremely cold winters, and the absence of medical facilities posed problems unique to frontier environments. On the other hand, residents

of the small Upper Tanana settlements were and continue to be willing to lend a hand to those needing assistance--just as occurs elsewhere in rural America.

Technical Reports on the Alaskans Aged

Although increasing attention is being paid to older Alaskans and their concerns, few studies have been directed toward systematically assessing their status and unmet needs. As recently as 1976, for example, a bibliography of documents on aging and the aged available in Alaska cited only a few references pertaining to older Alaskans (St. John 1976). At that time, the only notable report was a 1971 statewide needs assessment conducted by the Seattle Consortium (Alaska Department of Health and Social Services 1972). Despite its value in identifying the range of problems experienced by older Alaskans, this study preceded Native land claims and pipeline construction; as such, it preceded a major period of social and economic change and is of limited value today. Furthermore, as sometimes is the case in large-scale survey research projects, little attention was given to the qualitative dimensions of aging and sociocultural data essential for planning and program development.

Bolesta (1977) evaluated the health status of the Alaskan Native aged and aging (45-59 years of age) populations, utilizing United States Census and Alaska Area Native Health Service statistics. This report, too, is of limited value in identifying the needs and concerns of the aged in specific communities, but is useful as "a data base for health problem definition and prioritization of health needs" for older Alaskan Natives (Bolesta 1977:1). By including the aging population in her

study, Bolesta thoughtfully reminds planners there will be more Native aged in the years ahead and that their needs may differ from those of the elderly today.

Students at the University of Alaska conducted a needs assessment of elder Alaskan Natives residing in Anchorage (Hines et al. 1979). The 85 respondents were generally satisfied with their present circumstances and strongly desired to retain cultural ties and values. Communication problems emerged as a major obstacle in coping with the urban environment. This study suggests possible strategies for addressing the unmet needs of aged Natives living in Alaska's largest city and a rapidly changing urban environment.

Finally, a second statewide needs assessment survey was conducted in 1980 among 467 respondents 60 years of age and older from throughout Alaska (University of Alaska 1981). Designed principally to provide data for use by the state in planning services for the elderly, this study has several limitations which affect use of the data. Sampling was done on the basis of adjusted 1970 census data and interviews were conducted only in communities identified as having 20 or more aged residents. Questions remain as to the generalizability of data derived from the 22 communities included in the study to all 293 Alaskan villages, towns, and cities. In view of the budgetary and logistical constraints under which this study was conducted, however, the findings are an important contribution and provide useful planning guidelines.

The needs and concerns of older Alaskans, and especially those having Alaskan Native ancestry, often are publicized outside the context of technical reports. The Older Persons Action Group in Anchorage publishes a monthly newspaper, The Senior Voice, which presents

information of interest to older Alaskans and profiles individuals and senior citizens' programs from throughout the state. The Older Alaskans Commission, comprised of elder persons representing different regions of Alaska, reviews Older Americans Act grant applications, allocates funds, and addresses policy issues. Finally, some regional Native corporations sponsor an annual Elders Conference, at which older persons in the region convene to discuss topics of concern not only to the aged, but to their families and communities as well.

Social Support Systems

The terms social network and social support system often are used interchangeably or in combination, as in the discussion of "social support networks" by Pilisuk and Froland (1978). This metaphorical usage of "network" departs from its earlier application by British social anthropologists in their studies of social relationships in a range of geographic settings. Barnes (1954) applied the concept in his study of a Norwegian fishing village, as did Bott (1957) among middle and lower income families in London and the contributors to Mitchell (1969b) in Central African towns. Mitchell defines a social network as being,

... a specific set of linkages among a defined set of persons, with the additional property that the characteristics of these linkages as a whole may be used to interpret the social behaviours of the persons involved (Mitchell 1969a:2).

Network analysis examines the content of these linkages and the pattern they form, the relationship between the pattern and behavior, and between the pattern and other societal factors (Boissevain 1979:392). Mathematical graph theory and sociometry have been employed

as tools for network analysis, which, in Boissevain's (1979) view, unnecessarily complicates the answering of straightforward questions.

My interest in this dissertation is not in examining the structure of social networks with the aid of graphs and matrices. Instead, social networks are viewed as potential support systems which enable older rural Alaskans to remain in the community and live at least somewhat independently in familiar surroundings (cf. Cantor 1979). Distinctions are made, then, between the composition of social networks and their perceived or actual role in providing support needed by the individual.

A network consists of dyadic and multiple person relationships. In the latter,

...The individual stands at the center of concentric circles of social networks which have varying significance for him and which differentially integrate him with the broader society (Lowenthal and Robinson 1976:436).

Occupying these concentric circles are separate networks consisting of family, friends, workmates and leisure groups, voluntary associations, and formal institutions or helping networks (Lowenthal and Robinson 1976:436-450).

Following the lead of other investigators, I do not assume that the number and variety of social relationships are necessarily and positively correlated with the quality of support derived from the social network. Indeed, social relationships can be fraught with demands, constraints, and conflicts (Schaefer, Coyne, and Lazarus 1981:363); such "negative networks" can have asocial connotations for their members (Collins and Pancoast 1976:24). Additionally, whether or not the social network can respond effectively to the individual's need for support may be determined by certain network attributes: size; geographic

dispersion, member homogeneity; strength of ties; reciprocity and multiplexity; and density (Pilisuk and Minkler 1980:99-100).

Most definitions of a support system allude to the content of social relationships. Caplan, for example, characterizes a support system as,

... an enduring pattern of continuous or intermittent ties that play a significant part in maintaining the psychological and physical integrity of the individual over time (Caplan 1974:7).

Lopata offers a more detailed definition focusing on the transactions that take place:

A support system is a set of relations involving the giving and receiving of objects, services, social and emotional supports defined by the giver and receiver as necessary or at least helpful in maintaining a style of life (Lopata 1975:35).

Characteristics of the Support System

Within the social network are persons and institutions to which the individual is linked, either directly or indirectly, and can turn for aid. These entities collectively constitute the social support system. Cantor (1979:441) considers a support system to be successful if it fulfills three major needs of the individual: socialization; the carrying out of tasks of daily living; and assistance during times of illness or crisis. Distinctions are made between informal (natural) and formal (institutional) support systems, which individually or jointly address these needs (Caplan 1974; Collins and Pancoast 1976; Gurian and Cantor 1978; Froiland et al. 1981). The characteristics and functions of each type of support system are described below.

Informal Support Systems

When needs for assistance arise, the individual turns initially to "first-order contacts" (Barnes 1972:8), or persons to whom the help-seeker is directly linked within the social network. This "primary network" (Mueller 1980:147-148) of relatives, friends, and neighbors constitutes the informal support system, with ethnic associations and self-help groups often included as well (Fujii 1980:281). The help-seeker is connected to this system not only through of kinship and residential proximity, but also by such factors as age, ethnicity, religion, or shared values and interests. As such, the informal support system may be spontaneous and not necessarily designed to respond to the individual's needs (Wang 1979).

Family and kinship networks are the foundations of most informal support systems, although geographic separation and other factors can limit their immediate utility. These and other structural determinants which affect the helping functions of primary groups led Litwak and Szelenyi (1966) to conclude that neighbors can best respond to immediate emergencies, relatives are more helpful in addressing long-term needs, and friends contribute best in situations requiring agreement and positive affect. Mutual aid may also characterize the helpseeker's interactions with informal caregivers; both parties benefit from the contact, and reciprocity may be involved (Caplan 1974:15-16).

Formal Support Systems

Linking helpseekers to the formal support system, consisting of agencies, institutions, and programs which deliver services (Jenkins and Cook 1981:414) can be a gatekeeper function of the primary network.

the first of these is the fact that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The second is that the system is not a static one, but a dynamic one, in which the parts are constantly changing and evolving. The third is that the system is not a closed one, but an open one, in which the parts are constantly interacting with the environment. The fourth is that the system is not a linear one, but a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The fifth is that the system is not a deterministic one, but a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion. The sixth is that the system is not a simple one, but a complex one, in which the parts are interrelated and interdependent. The seventh is that the system is not a static one, but a dynamic one, in which the parts are constantly changing and evolving. The eighth is that the system is not a closed one, but an open one, in which the parts are constantly interacting with the environment. The ninth is that the system is not a linear one, but a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The tenth is that the system is not a deterministic one, but a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion.

Freidson's (1960) description of the "lay-referral system" is a case in point, whereby helpseekers begin their search for professional aid among members of their intimate and informal network (cf. McKinlay 1973). These secondary sources of support are functionally structural and involve formalized and depersonalized relations (Lopata 1975:35), but provide assistance not readily available in the informal support system.

Cantor, for example, includes in the formal support system of older persons, "an amalgam of basic entitlements and services provided by large-scale bureaucratic organizations, both governmental and voluntary" (Cantor 1979:435). Reciprocity is not a feature of the formal support system. Professional helpers maintain an objective point of view and are trained to provide services within the constraints of agency policy (Jenkins and Cook 1981:416). At the same time, clients must meet explicit eligibility requirements, adhere to specified procedures, and can expect problems to be addressed objectively and without regard to personal characteristics (Froland et al. 1981).

Social Support and Health

Having good health is one primary determinant of the number and nature of social relationships of older persons (Itzin 1970). Similarly, research has suggested a probable association between the presence of social support among persons ill or under stress and a resulting positive health outcome (Cassell 1976; Cobb 1976; Pilisuk and Froland 1978). In calling for improved clarity in defining social support and conceptualizing its effects on health outcomes, one recent study adds that,

There is still a great deal to learn about the various forms and functions of support and how they work to lower or raise levels of distress and to facilitate or impair physical health (Schaefer, Coyne, and Lazarus 1981:401).

House (1981) provides a framework for examining the contributions of social support to the health of older persons. He distinguishes between four kinds of social support: (1) emotional concern; (2) instrumental aid; (3) information; and (4) appraisal. For purposes of this study, "health" is viewed in its broadest form, since most transactions between elderly persons and supportive resources affect the individual's mental or physical well-being.

Emotional Concern

Emotional support leads recipients to believe that they are cared for and loved, and is transmitted in intimate situations involving mutual trust (Cobb 1979). As such, it can significantly affect the mental well-being of older people. Peers are a major source of emotional support, since they can understand one another's predicaments and share one another's concerns (Caplan 1974). Although relatives are often assumed to be important sources of emotional support, their actual contributions are highly variable (Atchley and Miller 1980). In a study of metropolitan area widows, for example, Lopata (1978) found that siblings and relatives other than parents or children were not important contributors of emotional support. Another study concluded that emotional support did not necessarily protect older people from the negative consequences of stressful life events (Fuller and Larson 1980). The authors did point out, however, that participants in their study

were "relatively healthy in both physical and psychological domains" (p. 88).

Instrumental Aid

Instrumental aid as applied to this study refers to tangible support provided in the form of direct assistance, goods, or services (cf. Schaefer, Coyne, and Lazarus 1981). Kahn (1979) simply calls this "aid," while Cobb (1979) labels it "material support." Whatever nomenclature is used, instrumental aid also is important for health maintenance among the aged. When an older person is ill, the family often provides major support in the form of regular communications, home maintenance, food preparation, transportation, physical care, and financial resources (Miller 1981). Institutional resources are used in the absence of a family support system, if the family is unable to care for the aged member, or when family resources for care are exhausted (Lindsey and Hughes 1981). Ward (1978) contends that the contemporary extended family is no longer the appropriate entity for meeting many of the needs for long-term instrumental aid among the aged.

Information

Providing information about the environment can be a major function of the support systems of older people. In time of illness, for example, the social network may determine who seeks help and where they turn for aid (Gourash 1978), and influence the way in which symptoms or life crises are defined and acted upon (McKinlay 1973). As Shanas (1979) has noted, older persons turn first to their families for help, then to neighbors and finally to the bureaucratic replacements for

families. When family members cannot offer direct aid, they may provide a linkage with formal supportive resources. Since the urban aged have access to a wider range of institutional and specialized networks than do their urban peers, (cf. Collins and Pancoast 1976), one might expect them also to have access to more information for addressing health problems.

Appraisal

House (1981) considers "appraisal" to be information relevant to self-evaluation, thus distinguishing it from information as a type of social support. Appraisal resembles the "informational support" described by Schaefer, Coyne, and Lazarus (1981), which involves providing advice that can aid in problem resolution and offering feedback about how a person is doing. The inner city aged studied by Cantor (1979) most often obtained this type of support from friends and neighbors, in the absence of children living nearby. One property of stressful situations, in Cassel's (1976) view, is the inadequate feedback individuals receive for evaluating their actions and responses to these actions. Such feedback is particularly important to the aged, who are increasingly susceptible to a range of stressor as they grow older and have correspondingly fewer sources of feedback and appraisal.

Conclusion

This brief review of the social support literature clearly illustrates the many dimensions which can be examined. The present study describes the support systems of elderly persons in the Upper Tanana region, which vary considerably in composition and in their

contributions to the well-being of the aged. A combination of socio-demographic and cultural factors may account for similarities and differences in individual support systems. Comparisons also are made with support systems found among the urban and rural aged elsewhere in the United States. This study was designed in part as a preliminary assessment of social support systems among a rural aged population in Alaska. As such, it will identify areas requiring further study before definitive statements can be made.

CHAPTER III

THE UPPER TANANA REGION

As an introduction to the Upper Tanana region, this chapter presents an overview of the prehistory and major historical events leading to establishment of permanent communities in the area. Brief descriptions are then provided for each of the five target communities. A final section summarizes the history of the Upper Tanana Aging Program, focusing on its development and contributions as an institutional support for older persons in the region.

This review provides an historical ethnographic context for material presented about the Upper Tanana aged in Chapters IV and V. For example, although the archaeological record confirms the long-term presence of Native people in the region, the contact history is more recent and part of the "memory culture" (McClellan 1975:8) of some elder Athabaskans. Similarly, several elder whites who participated in this study were among the first permanent residents of Tok and played key roles in its emergence as a regional center and as the "Gateway to Alaska."

Geographic Setting

For purposes of this study, the Upper Tanana region encompasses that geographic area intersected by the Alaska Highway and extending eastward from Dot Lake to the Canadian border, north to the Fortymile River, and south to but not including Mentasta Village (Fig. 1). The Alaska Range is a prominent feature to the southwest. These boundaries correspond with the territory inhabited for many years by Northern

the first of these is the fact that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The second is that the system is not a static one, but a dynamic one, in which the parts are constantly changing and evolving. The third is that the system is not a closed one, but an open one, in which the parts are constantly interacting with the environment. The fourth is that the system is not a linear one, but a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The fifth is that the system is not a deterministic one, but a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion. The sixth is that the system is not a simple one, but a complex one, in which the parts are interrelated and interdependent. The seventh is that the system is not a static one, but a dynamic one, in which the parts are constantly changing and evolving. The eighth is that the system is not a closed one, but an open one, in which the parts are constantly interacting with the environment. The ninth is that the system is not a linear one, but a non-linear one, in which the parts are constantly interacting with each other in a non-linear fashion. The tenth is that the system is not a deterministic one, but a probabilistic one, in which the parts are constantly interacting with each other in a probabilistic fashion.

Athabaskan Indians linked by kinship and linguistic dialect, as reported by Robert McKennan (1959) in his classic ethnography, The Upper Tanana Indians. Residents of the five communities examined in this study--Dot Lake, Northway, Tanacross, Tetlin, and Tok--comprise most of the regional population (with the remainder living in outlying areas and in or near the small settlements of Healy Lake, Chicken, Eagle, and Boundary). These five communities also receive the majority of services provided by the Upper Tanana Aging Program, although elders in other communities in the service area participate in selected program activities.

Although the Athabaskan Indians in the Upper Tanana region are bound by kinship and a common dialect, distinctions between the Upper Tanana and neighboring bands are not as obvious as this might imply. Both McKennan (1959) and Guedon (1974) portray the Athabaskan bands of interior Alaska as part of a cultural continuum "whose micro-cultures differ in only minor details from those of their immediate neighbors" (McKennan 1959:98), or as "villages related to one another and becoming more and more dissimilar as the distances or difficulties in communication increase" (Guedon 1974:21).

The Upper Tanana bands were linked to neighboring groups through kinship and/or trade relationships. Intermarriage occurred most frequently with the Copper River Indians (Ahtna) to the south; several of my informants or their parents at one time lived in Copper River villages. To the east in Yukon Territory were the Kluane Lake Indians, with whom the Upper Tanana Athabaskans engaged in warfare and commerce long before white contact in the Alaskan Interior. Finally, some trade and intermarriage occurred between the Upper Tanana and Han Indians along the Yukon River in Eagle and Dawson, and the Tanana Indians as far

west as Minto. Each of these groups retains a separate identity today, although tradition, ceremonial activities, and Native land issues often unite them into one group sharing common interests and goals.

The Upper Tanana region lies within the taiga ecozone in what is referred to as the Subarctic (Graburn and Strong 1973:1-2). Coniferous forests interspersed with stands of deciduous trees are common, as are gently rolling hills and small lakes in the flat, open expanses. Discontinuous permafrost impedes tree growth in many areas and restricts drainage in low-lying locales.

Climate

Located within a continental climate zone, the Upper Tanana region is characterized by long, cold winters and relatively warm summers. Average temperatures range from about -30 to +72 degrees Fahrenheit, with extremes of -75 and +99 degrees Fahrenheit having been recorded. Low humidity and infrequent winds reduce the severity of the harsh winter cold. Average annual precipitation is about twelve inches, occurring primarily as summer rain. The 30 to 40 inches of snowfall each year normally accumulate throughout the winter, since temperatures rarely rise above freezing between November and March.

Also characteristic of the Subarctic are the long days in summer and short days in winter; a maximum of 4-5 hours of daylight in December contrasts with almost no darkness at all late in June. The monotony of long winter nights is broken, however, by occasional displays of the aurora borealis, which are luminous bands of light that sometimes appear in the night sky of the Northern Hemisphere. Although the "Northern

Lights" (as they are commonly called) normally are yellowish green in color, sometimes they appear in red, orange, and violet.

Plant and Animal Resources

The various ecosystems present in the Upper Tanana region (see Shinkwin and Aigner 1979:12-20) support a variety of wildlife resources that were vital to the traditional Native economy and remain important today. Numbers of moose have diminished because of increasing hunting pressures, vulnerability to predators (wolves and bears), and poor habitat, but they have replaced caribou as the primary big game resource sought by hunters. Grizzly, brown, and black bear are found throughout the region, while Dall sheep inhabit the mountainous areas. Various small mammal species are hunted and trapped seasonally, serving as both a source of food and income to local residents.

Waterfowl and freshwater fish have increased in importance as food resources in recent years and, along with small mammals, have always been mainstays in the Native subsistence-based economies. Salmon are not available locally, but are obtained during the summer months in Eagle and the Copper River area. Many area residents fish for salmon in the Copper River area, while others receive salmon in exchange for whitefish, muskrat, or other locally-available resources.

Edible plants include mushrooms, wild rhubarb, roots, and a variety of berries. A prized delicacy among elder Natives consists of roots collected by muskrats and stored in their winter dwelling places. Gardens thrive because of the long days in summer and are common throughout the region.

Prehistory and History

Detailed descriptions of the Upper Tanana archaeological record have been provided by Shinkwin and Aigner (1979) and Andrews (1977), and will not be discussed at length here. Excavations in the 1960s at Healy Lake, a small Native village northwest of Dot Lake, revealed evidence of at least five occupation periods beginning more than 10,000 years ago and extending into the historical period, including about 3,000 years of Athabaskan presence (Cook and McKennan 1970a and 1970b). Materials from the Dixthada Site near Mansfield Village yielded radiocarbon dates of 470 ± 60 B.C. [late prehistoric occupation], and A.D. 1180 ± 40 /A.D. 1560 ± 50 [late prehistoric/early historic occupation]. The latter dates represent Upper Tanana Athabaskan occupation (Shinkwin 1971) and, in conjunction with the Healy Lake dates, confirm the long-term continuous residence of Athabaskan Indians in the Upper Tanana region.

Prior to the contact period, Upper Tanana Athabaskans obtained European trade goods through Native intermediaries--primarily the Chilkat in nearby Yukon Territory, and probably the Ahtna, Han and Kutchin. These groups inhabited areas where white traders had established small outposts in coastal Alaska and along major rivers, prior to their eventual penetration of the Upper Tanana region. The earliest direct contacts between Upper Tanana Athabaskans and white traders may date to the mid-1800s, following establishment of a Hudson's Bay Company post at Fort Yukon in 1847, and a post at Fort Reliance near Dawson, Yukon Territory, in 1874 (McKennan 1959; Osgood 1971; Pitts 1972).

The earliest white exploration of the Upper Tanana region is thought to have occurred around 1874, when Natives accompanied the traders Harper and Bates on an overland journey from a village near

Eagle to a point on the Tanana River near present-day Tanacross, from which the travelers rafted downstream to the river's mouth (Pitts 1972). On the North Fork of the Fortymile River, Bates reportedly found gold ore samples that later were assayed at \$20,000/ton (Wharton 1972). Although documentation is lacking, this appears to have been the first intrusion of white explorers into the region and initial reporting of gold in the area. By 1880, Francoise Mercier had opened a post near present-day Eagle, which operated intermittently until 1886 (Grauman 1977).

By this time, prospectors from the Juneau gold field began arriving in interior Alaska in search of richer diggings. Gold was discovered on the Fortymile River in 1882 (Grauman 1977), but not in sufficient quantities to warrant full-scale mining operations. Then, in 1886, two prospectors discovered a rich deposit at Franklin Gulch (named after one of the finders), and a year later the Fortymile Gold Rush was underway (Buteau 1967). Hundreds of miners raced to stake claims along the Fortymile River and its tributaries, a region previously inhabited only by Upper Tanana Indians. By 1896 and prior to the more prominent Klondike Stampede in neighboring Yukon Territory, activities had spread to other nearby creeks and small communities had emerged at Chicken, Jack Wade, Franklin, Steel Creek, American Creek, and Mission Creek (Haynes 1976).

Farther south in the Upper Tanana region, Lieutenant Henry T. Allen's military expedition descended the Tanana River in 1885 and spent several days there at seasonal Native camps. Allen reported that some Natives were suffering from severe coughs and exhibited signs of pulmonary ailments. He surmised that Upper Tanana Natives had been in

contact with white traders, as evidenced by their European-style clothing and discussion of overland routes to trading posts along the Yukon River. Much to Allen's surprise, some young men at Tetlin demonstrated proficiency with the alphabet, which he presumed to have resulted from instruction by an English missionary on the Yukon who had passed away in 1884 (Allen 1887).

Almost simultaneously, then, Euroamericans infiltrated the Upper Tanana region from different routes and initiated the first of several population influxes. Natives in the now-abandoned village of Kechumstuk were affected most directly by the Fortymile Gold Rush, but mining activities brought about many other changes:

With the advent of the Gold Rush period, villagers from small upstream communities (such as Joseph and Kechumstuk) gradually migrated downstream to participate in the cash/barter economy offered them by supplying wood for the thousands of prospectors, servicing steamboat requirements, and the expanding need for more fur.

During the Gold Rush period changes in lifestyle took place. The impact of feeding up to 700 prospectors and miners in the Fortymile area made wildlife resources hard to find. Big game animals were harvested to the extent that populations were almost extirpated. The indiscriminate use of fire also severely affected wildlife numbers and distribution. Fish became the mainstay of the Native diet. Stream valleys and hillsides were dug up, new settlements made and formal transportation routes evolved for the movement of men, mail, and supplies.

The Fortymile River and its gold occupied a pivotal place in these events (Alaska Planning Group 1973:41).

Many Fortymile prospectors abandoned their claims upon learning of a major gold discovery at Dawson, Yukon Territory, and joined thousands of other miners to the Klondike Gold Rush in 1896. Others remained and more returned to Alaska, however, including some who grew disenchanted with Canadian regulations and founded Eagle City in 1898. That same

year, the population of Eagle City rose to nearly 1,700 persons and government geologists counted more than 500 cabins in the young community. By the time Eagle became the first incorporated city in interior Alaska, many other small settlements had been established along the Yukon River and its major tributaries (Grauman 1977; Haynes 1977).

This flurry of activity immediately north of the Upper Tanana region led to establishment of the Fort Egbert Military Reservation outside Eagle in 1899, which remained in operation until 1911. Soldiers from the fort constructed portions of the Washington-Alaska Military Cable and Telegraph System (WAMCATS), extending from Fort Egbert to Valdez, between 1900 and 1903. WAMCATS provided Alaska with its first direct communication link with the United States; the most historically significant message to cross its wires occurred in 1905, when the Arctic explorer, Roald Amundsen, rushed to Eagle to announce his successful negotiation of the Northwest Passage. By 1910 the WAMCATS line was abandoned in favor of a wireless communication system.

WAMCATS also is prominent for having initiated contact between soldiers and Upper Tanana Natives during survey of the route and actual construction. Small telegraph stations at Kechumstuk and Tanana Crossing (near present-day Tanacross) were staffed by soldiers until 1910. One elder Native informant recalls interacting with soldiers when he operated a small store at Kechumstuk. A small post at Tanana Crossing reportedly supplied soldiers stationed there, but whether it was staffed by soldiers or a private trader is unknown (Griffith 1900; Rice 1900; McKennan 1959; Strong 1976; Grauman 1977; Shinkwin et al. 1978).

In 1909, a Captain Northway freighted trade goods up the Tanana River from Fairbanks to the mouth of the Tetlin River, and is thought to have been the first established trader in that part of the Upper Tanana region. A year later the then-abandoned post re-opened at Tanana Crossing. W.H. Newton began a second post there in 1912, while establishing supply caches at Tetlin and near Northway at the mouth of the Nabesna River. That same year, Bishop Rowe started St. Timothy's Episcopal Mission at Tanana Crossing, which closed in 1921, then re-opened in 1931 (Guedon 1974; McKennan 1959).

The short-lived Chisana Stampede in 1913 lured many prospectors into the territory inhabited by Natives in the vicinity of what now is Northway. One observer estimated that 2,000 mountain sheep were killed within 20 miles of the mining camp during the winter of 1913-14, almost exterminating the species in that area (Capps 1916; Guedon 1974).

By the mid-1930s, a handful of whites and more than 200 Natives resided in the Upper Tanana region (see Table 3.1.). Traders were well-established throughout the region and had enticed many Natives into the fur trade with promises of such European trade goods as tea, flour, sugar, rifles and clothing. In conjunction with the mission at Tanana Crossing and schools in Tetlin and Tanana Crossing, the traders pressed the Natives to establish permanent villages; their semi-nomadic way of life was not conducive either to the traders' self-interests or the acculturation process, and the newcomers needed a captive audience--a scene repeated countless times across Native North America. The Natives responded by gradually abandoning at least certain of their time-tested practices to set out traplines, freight supplies, and cut wood for the mission and school. Others were less eager participants but made

Table 3.1. Population figures for Upper Tanana communities, 1885-1981.

| Community* | 1885 ^a | 1890 ^b | 1899 ^c | 1929 ^c | 1930 ^d | 1938 ^e | 1940 ^f | 1950 ^g | 1960 ^h | 1970 ^h | 1980 ⁱ | 1981 ^j |
|------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Dot Lake and Vicinity | NA | NA | NA | NA | 16 | 55 | NA | NA | 56 | 42 | 79 | 105 |
| Northway and Vicinity | NA | NA | NA | 100 | 71 | 83 | 108 | 196 | 196 | 230 | 356 | 393 |
| Tanacross and Vicinity | 50 | NA | 115 | NA | 119 | 132 | 135 | 137 | 102 | 84 | 127 | 118 |
| Tetlin and Vicinity | 103 | NA | NA | 62 | NA | 81 | 85 | 73 | 122 | 114 | 127 | 121 |
| Tok and Vicinity | NA | NA | NA | NA | NA | NA | NA | 104 | 305 | 577 | 811 | 881 |
| TOTAL | 153 | 203 | 115 | 152 | 206 | 361 | 328 | 510 | 781 | 1,047 | 1,500 | 1,618 |

NA: no population data available or community not yet in existence

*In some cases and when available, population data are presented for the community and/or adjoining areas

^aCited in Guedon 1974

^bU.S. Department of Interior 1893. The 1890 Census figures were recorded only for "unspecified Upper Tanana river settlements" and not for individual communities

^cMcKenna 1959

^dU.S. Bureau of the Census 1932

^eCited in Pitts 1982

^fU.S. Department of Commerce 1942

^gU.S. Department of Commerce 1952

^hCited in Haynes 1978

ⁱCompiled by Tok Public Health Center, 6/30/80

^jCompiled by Tok Public Health Center, 6/30/81

allowances so as to derive some material benefits from the whites. Whatever good can be attributed to white settlement in the Upper Tanana region by the mid-1930s was offset by the devastating infectious diseases that at one time or another have afflicted Natives throughout Alaska.

The pace of change was more gradual during the late 1930s and early 1940s, with a few mining operations and the fur trade being the most visible forms of commerce in eastern interior Alaska. Then came World War II, which thrust the Upper Tanana region into the mainstream of U.S. military efforts and forever altered Native culture. In the span of only a few years, airfields were built at Northway and Tanacross, and the Alaska Highway bisected the heart of the Upper Tanana region. The war effort lured thousands of new people to Alaska to work on these and other defense projects and defend a territory considered most vulnerable to attack. Among my informants are several Natives who worked on these projects and, not surprisingly, have mixed views regarding their impact. Concern for national security apparently precluded attention being given to the potential implications of a road system on the Upper Tanana region.

Probably no land route has had a more substantial role in the acculturation of a native group than the Alaska Highway constructed in 1943. As this strip of pavement bisected the territory of the Upper Tanana Indians, it provided them with a mobility and economic base which spelled the finish of the Upper Tanana bands as a social unit, and the end of sedentary seasonal settlement patterns as well.... By 1953, the bands had become for all intents and purposes mixed sedentary groups partially incorporated into non-native townships, with the notable exception of Tetlin, which had no road connection to the Alcan [Alaska Highway] (Pitts 1972:194).

Cruikshank's elderly Native female informants in Yukon Territory described impacts felt there consequent to Alaska Highway construction and the military buildup during World War II. Her assessment probably holds true as well for the Upper Tanana region:

People express considerable ambivalence about the effects of the Alaska Highway. Problems of alcohol abuse increased, animals were needlessly slaughtered; but there were more possibilities for earning money and some positive relationships developed between Indian families and soldiers (Cruikshank 1979:53).

The Army (during Alaska Highway construction) also brought major flu epidemics; Indian people who had no immunity to influenza, diphtheria, measles and other diseases became seriously ill and some died (Cruikshank 1979:55).

By the early 1950s, the Upper Tanana population exceeded 500 persons, about 40 percent of whom were non-Native. Construction of the Tok Cutoff to the Glenn Highway and the 162-mile Taylor Highway from Tetlin Junction to Eagle intensified the impact of roads in the region. An Alaska Road Commission camp near the intersection of the Alaska Highway and Tok Cutoff employed enough people to stimulate establishment of the community of Tok, which was oriented to serving the steadily increasing flow of highway travelers. Roads facilitated access to big game animals; long-time residents recall many caribou being killed or wounded along the Taylor Highway by non-local residents, reminiscent on a much smaller scale of the larger buffalo hunts on the Great Plains (see Haynes 1976:53-56).

Construction of the Haines to Fairbanks, Alaska Military Fuel Line (8-inch pipe) between 1953 and 1955 paralleled the Alaska Highway and disturbed little territory that had not already been affected by road construction. Yet, it lured more new people into the Upper Tanana

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region, some of whom worked at a pump station near Tanacross until it closed in 1979.

The 1950s and 1960s saw further population growth in the already established communities in the Upper Tanana region. Alaska became the 49th State in 1959 and increasingly was influenced by activities occurring "Outside" (as the Lower 48 is commonly referred to by Alaskans). Discovery of a major oil field on Alaska's North Slope in 1968 and construction of the Trans-Alaska Oil Pipeline in the early 1970s triggered a flurry of activity that attracted international attention. Although the Upper Tanana region was not along the pipeline corridor, traffic on the Alaska Highway increased dramatically--on this, the only land route connecting Alaska to the "Outside." Many area residents secured jobs on the construction project or experienced the impacts on interior Alaskan communities of this massive energy development project. By 1970, more than half the 1000+ residents in the region were non-Native.

Today the Upper Tanana region faces new challenges as it awaits possible (but now uncertain) construction of the Alaska Natural Gas Transportation System (ANGTS), which would run parallel to the Alaska Highway into Canada from Delta Junction. Area residents acknowledge the positive economic benefits to be derived from this project, and most either endorse or express little opposition to what has been labeled the most expensive, privately-financed construction project in the world. Whites and Natives alike, however, recognize the consequences of rapid growth and are concerned about the long-term impacts on game resources, local services, and their chosen way of life.

Spiraling gold prices in the late 1970s attracted a new generation of prospectors and adventurers to the region. Native corporations also have begun actively assessing the mineral wealth of their lands in the area, and at least one major mining operation may begin in the late 1980s near the Fortymile River. Since this is an asbestos mine, the operation poses health risks to those involved in the project, in addition to the social and economic impacts associated with large-scale industrial development. Finally, consideration is being given to possible expansion of the Alaska Railroad from Fairbanks and into Canada sometime during the next decade.

Summary

The history of development-related activities in the Upper Tanana region, might lead one to conclude that further changes would not pose new or unusual problems to area residents--who, by virtue of their continued presence in the region, have been able to cope with difficult circumstances and change. To be sure, the population appears to have adapted reasonably well to past changes, but history does not always record the negative consequences of gold rushes, highway construction and related activities. To do so detracts from the glamour and mystique of "The Alaskan Frontier" often concocted by the media.

The Upper Tanana elderly who experienced these earlier development endeavors were younger at the times of these major events and more capable of coping with the attendant changes. They are older now and content to spend their latter years in a more stable and familiar environment. The previous chapter identified numerous ways in which elderly rural Americans have been affected by boom-and-bust economies.

A later chapter will examine in greater detail the social support systems of the Upper Tanana elderly, which are important contributors to the continued well-being of this segment of the population but also are institutions vulnerable to impacts accompanying the kinds of changes projected in the Upper Tanana region.

The remainder of this chapter traces the development of the five major Upper Tanana communities on which this study is focused. More detailed information on each is available in community profiles and maps prepared in 1980 as one phase of ANGTS socioeconomic impact planning activities in the region (Darbyshire and Associates 1980). A final section provides a brief history of the Upper Tanana Aging Program.

Community Profiles

Tok

As stated earlier, Tok originated as a road camp during construction of the Alaska Highway in the early 1940s, and lies 205 miles east of Fairbanks. The Alaska Road Commission (ARC) assumed responsibility for highway construction and maintenance activities in the region in 1944, and provided the impetus for establishment of a permanent settlement. Tok was formally established in 1946 as a presidential townsite, and by 1950 several businesses and private residences dotted the landscape north of the road camp and near the intersection of the Alaska Highway and Tok Cutoff to the Glenn Highway. As early as 1947 a school operated from a room in an ARC building.

Tok was and continues to be oriented to tourism and highway traffic, although it also serves as the regional center for surrounding villages and bush communities. Appropriately referred to as the

"Gateway to Alaska," by virtue of being the first major community on the Alaska Highway after the Canadian border, Tok houses state agencies and administrative offices for private and government-funded programs. From 1947 to 1971, the U.S. Customs offices were located in Tok, but then moved to a site at the border. Figures compiled in 1980 provide a reasonably accurate employment profile for Tok during the summer and (winter) of 1979: Government 34% (40%); non-profit organizations 10% (12%); and private enterprise 56% (48%).

Tok is not incorporated as a municipality under state law, and local sentiment toward forming a local or regional government remains sharply divided. Property and sales taxes are not levied in Tok, and the community turns to the State for services that might otherwise be provided by a municipality. In the absence of local government, input from local residents is often obtained at community meetings and public hearings. A host of committees and membership organizations sometimes perform quasi-governmental functions in order to accomplish tasks important to the community at large.

A central power plant in Tok provides electricity to residences and businesses in the community and surrounding area. There is no central water and sewage disposal system in Tok, in part because the community is laid out somewhat randomly over a large area; consequently, most residents have private wells and individual septic tank systems (or haul water and use outdoor privvies). Telephone service is fair in quality and provided by a small company headquartered in Washington state with an office in Tok.

The U.S. Coast Guard established a LORAN-C (Long Range Aids to Navigation) station near Tok in 1976. Four 700-foot towers at the site

transmit radio navigation signals for air and marine traffic, primarily in the Gulf of Alaska. The Coast Guard's presence in the area also resulted in the Armed Forces Radio Network extending its broadcast range and providing the only local radio station.

Tok's consistent growth in recent years has encouraged ongoing expansion of the business community and reaffirmed the town's economic importance in eastern interior Alaska. State land disposals are attracting increasing numbers of people to Tok, although employment opportunities have not kept pace and may prevent this growth from going unchecked.

Tok area residents have a longstanding interest in dogsled racing, an outgrowth of the use of dogteams and sleds as a primary transportation method in the region as recently as the 1950s. Weekend races are held during the winter months, with the "Race of Champions" normally being the final race of the season and attracting many competitors and spectators from throughout interior Alaska.

Dot Lake

This small and predominantly Native community adjoins the Alaska Highway about 50 miles northwest of Tok. Prior to its establishment as a permanent community in 1946, Dot Lake served as a temporary seasonal hunting camp for Natives traversing the surrounding region; an Indian freight trail between Northway, Tetlin, Tanacross, and communities to the north along the Yukon River passed through what is now known as Dot Lake. Native occupancy of the region dates back many years, with the previously mentioned 10,000-year old archaeological site at Healy Lake (40 miles away) a case in point.

Major contact with outsiders began during construction of the Alaska Highway in the early 1940s, when a construction camp known as Sears City occupied Dot Lake's present location. Several local Natives worked on the project and eventually moved their families to the young community. By the late 1940s, Dot Lake boasted a post office, school and church. The Dot Lake Lodge opened in 1973 and caters both to highway travelers and a gradually expanding population in the surrounding area. Its services include a motel, gas station, restaurant, grocery store and the post office.

Electricity and water are available to most homes in the village. Limited medical services are provided to Natives by a community health aide from a small clinic, with white residents often traveling to a clinic some 60 miles away in Delta Junction or Tok. Telephone service in the village is provided by a utility company based in Tok.

Tanacross

Formerly referred to as Tanana Crossing, Tanacross lies 12 miles northwest of Tok and one mile north of the Alaska Highway, near the south bank of the Tanana River. This Athabaskan village consists primarily of Natives and their descendants who formerly resided in the now-abandoned villages of Kechumstuk and Mansfield, and utilized resources along the Tanana and Fortymile rivers and their drainages. In 1900 the mail carriers, Oscar and James Fish, erected a small post at the "Crossing of the Tanana," along their route from Valdez to Circle City, which may have been near the present day community. Soldiers involved in construction and maintenance of the WAMCATS telegraph line

built another small post at the Tanana Crossing, which operated from 1902 until the line was abandoned in 1910.

Some Native families moved to Tanana Crossing in 1912 when Bishop Rowe established St. Timothy's Episcopal Mission on the north bank of the Tanana River near the abandoned military buildings. A trading post opened the same year, and St. Timothy's Post Office began mail distribution in 1920. More Natives moved from the surrounding area when a formal school opened in 1932, although classes had been held previously at the mission. The name of the community eventually was shortened to Tanacross.

An airfield built across the river from the village in the mid-1930s served as an emergency airport during World War II. After the village council authorized military use of the grounds in 1941, the field was blacktopped, temporary camps established, and thousands of troops deployed from the airfield. Village residents served as volunteer scouts and backup support for the army.

The original village was located on a floodplain and experienced recurring problems with water contamination. For these reasons and because villagers sought access to better educational facilities, a new village was established across the river near the airfield in the early 1970s. The current and road-accessible village consists of frame and log homes laid out in a rectangular grid pattern, some of which are connected to a central water and sewage disposal system. A fire in the old village in 1979 destroyed most buildings and many possessions families had stored in their previous residences.

Today a small elementary school operates in the village, as do a post office, clinic, and laundromat. Most residents obtain goods and

services in Tok, although one elderly resident sells some popular items from his home. The village governing body, recognized by the federal government, is a 7-member Indian Reorganization Act Council established in 1942. Like all other Upper Tanana communities, Tanacross is part of the Unorganized Borough, is not incorporated as a municipality, and cannot levy property and sales taxes in the community.

Tetlin

Tetlin is located 20 miles southeast of Tok, along the Tetlin River between Tetlin Lake and the Tanana River. It is the only community discussed in this section not connected by public road to the Alaska Highway (some residents use a service road built for transporting materials to the village from the Alaska Highway in 1981, although this road is not maintained throughout the year). This isolation enables the predominantly Native population to pursue a somewhat more traditional lifestyle than is characteristic of the highway villages.

Athabaskan settlements at Tetlin and nearby Last Tetlin originally were semipermanent hunting and fishing camps occupied seasonally. An influx of white people to the region during the Chisana Gold Stampede in 1913 led to the establishment of a trading post near Tetlin before 1920, and as early as 1921, a fur buyer from Dawson conversant in the Native language was making periodic trips to Tetlin. After the traders Newton and Hajdukovich opened small posts in Tetlin in the 1920s, Natives from nearby Last Tetlin relocated to the village. More or less permanent settlement followed the establishment of a school at Tetlin in 1923; the first school building was built in 1929 and since 1931, the Bureau of Indian Affairs has administered education in the community. Upon

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completion of elementary school, students from Tetlin often go either to Tok or to a BIA school in Sitka for grades 9-12. The State of Alaska is scheduled to assume responsibility for the school in 1984.

Monthly mail delivery by boat from Big Delta began about 1926, with the schoolteacher serving as postmaster until a post office was erected in 1932. Construction of an airstrip in 1946 facilitated weekly mail delivery by airplane from Fairbanks. Mail currently is delivered twice weekly by plane from Tok.

In 1930, the 786,000-acre Tetlin Indian Reserve was established by Federal Executive Order. Tetlin chose to acquire surface and subsurface rights to its property when reserve status was revoked following passage of the Alaska Native Claims Settlement Act (ANCSA) in 1971. Consequently, several major provisions of ANCSA do not apply to the village corporation, as they do to others in the region. For example, the Tetlin Native Corporation does not share in monetary distributions made from the ANCSA Native fund, nor can its stockholders receive stock in the regional Native Corporation (Doyon, Limited). The village does participate in programs sponsored by Tanana Chiefs Conference, the non-profit arm of Doyon.

Both frame and log houses are found in Tetlin, none of which currently have running water. The BIA school provides power from its generator for the clinic/well house, post office, and grocery store. A village electrification project was completed in 1981 and provides power to private residences. Water is obtained from a centrally-located well, while the single telephone in the village is located in the laundromat.

Northway

Northway lies 50 miles southeast of Tok on the Alaska Highway and 42 miles from the Canadian border, and actually consists of four population concentrations: one near the junction at Milepost 1264 on the Alaska Highway, a second at the predominantly white airport community seven miles southwest of the highway, a third in the area between the junction and airport community, and the fourth at the Native village two miles beyond the airport. The region historically was the homeland of Athabaskan Indians pursuing seasonal subsistence activities near Scottie and Gardiner creeks, and the Chisana, Nabesna and Tanana rivers. Their first direct contacts with white people probably occurred in the late 1800s during periodic trading trips to the Yukon River or nearby Yukon Territory. Traders entered the region as early as 1909, and by the 1920s had established posts at Gardiner Creek and along the Tanana River.

Nabesna Village, located across the Nabesna River from the site now occupied by Northway Native village, was the first settlement in the area. Flooding problems led to its abandonment in the early 1940s. Residence at the new site provided easier access for villagers to construction jobs during World War II on the Alaska Highway and at the airfield a few miles away. The Northway Army Airfield was one of a series of landing strips along a staging route used for ferrying aircraft to Russia under the Lend-Lease Program. Today, the airport serves as a point of entry for air traffic into Alaska, and provides refueling and flight support services, as well as customs services. The Federal Aviation Agency (FAA) has for many years been a major employer in the community.

A post office first opened in the area in 1941 and later was relocated to the airport community. Nabesna Village changed its name to Northway in 1942, to honor the village chief who had adopted the name from a riverboat captain who freighted goods on the Tanana and Nabesna Rivers in the early 1900s. Since 1977, the Walter Northway School has provided education to students from pre-school through the 12th grades.

Phone service and electricity are available in both the airport community and Native village. The school and most homes near the airport have private wells, while villagers obtain their water from a well near the laundromat. The FAA maintains a fire station at the airport, primarily to respond to fires involving its facilities or the runway, but does serve the surrounding area on a voluntary basis. An Alaska State Trooper and constable are stationed in Northway. Medical care is provided to the Native population from a clinic in the village, with white residents often using facilities available in Tok. The airport community is taking the lead in establishing ambulance and emergency medical services for Northway and the surrounding region.

A Short History of the Upper Tanana Aging Program

Passage of the Alaska Native Claims Settlement Act in 1971 and subsequent construction of the Trans-Alaska Oil Pipeline from Prudhoe Bay to Valdez reinforced the widespread image of Alaska as "the last frontier" and a "land of opportunity," with a history punctuated by boom-and-bust cycles. These perspectives focus on the exotic and romantic, and ignore the problems facing a young state with an abundance of natural resources, a rapidly increasing population, and a poorly developed human services infrastructure.

The absence of organized local government recognized by state law in all but one community (Eagle City) in the greater Upper Tanana region, for example, left local communities without a unifying force for addressing socioeconomic issues likely to confront area residents during the next decade. As a step toward filling this void, local Native leaders and a VISTA volunteer late in 1974 began to organize the Upper Tanana Development Corporation (UTDC). Initial funding from the Rural Alaska Community Action Program, Inc. (RurAL CAP) established UTDC as one of twelve RurAL CAP regional nonprofit development corporations extending throughout Alaska. UTDC incorporated in March 1975, and later obtained tax-exempt status. According to Article III of the Corporation By-Law, the purpose of UTDC is,

... to promote the overall economic, social, and educational development of the people of the region, and in doing so the corporation will apply for, receive and disburse, federal, state, and private funds for these purposes...

UTDC activities are managed by a Board of Directors, consisting of one elected representative from each member community (Dot Lake, Eagle Village, Healy Lake, Northway, Tanacross, Tetlin, and Tok). The primary target groups include but are not restricted to the low-income, elderly, and Alaskan Native residents of the Upper Tanana region. During the first six years of operation, UTDC activities have included home weatherization projects, extensive involvement in monitoring and heightening local awareness of the proposed Alaska Natural Gas Transportation System project, and sponsorship of aging, parent-child, and summer youth recreation programs. This section focuses specifically on the Upper Tanana Aging Program which, since its inception in 1975,

has emerged as one of the most comprehensive programs of its kind in rural Alaska.

Year 1: 1975-76

UTDC began its services to the elderly by participating in an Administration on Aging-sponsored "SSI Alert" in Alaska in 1975. This project essentially explained to senior citizens how the existing state-sponsored Old Age Assistance would be converted into a federal Supplemental Security Income program. As one of several Rural CAP offices participating in this project, UTDC went a step further than most and conducted a needs assessment survey of elders living in Upper Tanana villages in conjunction with the SSI Alert. This brief survey revealed isolation as a common problem among those persons contacted. Few village respondents had telephones, while most lacked transportation and often paid exorbitant fees for trips to Tok for medical appointments and grocery shopping. UTDC concluded that transportation services and an information and referral (I&R) program would be a first step in alleviating these problems.

Also in 1975, UTDC received a Model Projects grant from the State Office on Aging for developing an I&R program that included provision of transportation services. As the first such program in rural Alaska, the inappropriateness of urban I&R models was emphasized. For example, few elders in the target communities had telephones, and mobility was emphasized as being essential for combatting isolation and improving access to services. UTDC purchased a 12-passenger van with Model Projects funds, and hired a van driver and project director (essentially an outreach worker fluent in the local Native dialect). UTDC's

executive director and part-time secretary provided supervision and technical support. All staff received training from the Easter Seal Information and Referral Service, while the program itself joined the Easter Seal statewide data collection system. Services were provided year-round in Tok and nearby villages, and in Eagle Village on a seasonal basis. UTDC provided substantial in-kind support to the aging program in the form of office space and equipment. Volunteers from local villages contributed their services as van aides and by providing assistance to elders in their homes.

The State Office on Aging praised the success of this new program in a February 1976 project review, noting that most elders in the Upper Tanana region had been served in some way. About 90 percent of those assisted were low-income ethnic minorities. The outreach program also had provided shopping assistance, home visits, telephone reassurance (primarily in Tok), and access to recreational activities.

Early in 1976, with funds nearly depleted and most staff in layoff status, the program received an extension on its Model Projects grant and was awarded a small grant from the Department of Community and Regional Affairs for continued provision at a reduced level of I&R and transportation services through June 1976.

Year 2: 1976-77

The State Office on Aging awarded the aging program its first program funding through an Older Americans Act (OAA) Title III grant for transportation services in state fiscal year 1977 (July 1976 - June 1977). A supplemental Title III grant received in November 1976 funded purchase of a second 12-passenger van, implementation of a homemaker

services program, and the hiring of two homemakers. The latter services were designed to prevent premature institutionalization of the frail elderly through provision of in-home assistance to those otherwise unable to live independently.

The initial draft of an Alaska State Plan on Aging completed in 1976 identified as a major objective the provision of increased services to rural areas and ethnic minorities. UTDC's executive director testified at the only public hearing held regarding the State Plan, and expressed concern for the urban orientation of OAA nutrition program guidelines. For example, assembling a specified number of persons at a congregate meals site in the sparsely-populated Upper Tanana region was an unrealistic expectation. Administration on Aging officials apparently agreed, and later stated that this particular guideline had been waived for Alaska. This cleared the path for UTDC to establish a nutrition program.

Such was not an easy task. Attempts to subcontract with other food service providers for hot lunches were rejected as being too expensive or unacceptable for other reasons. Few buildings in the villages near Tok conformed to the sanitation and other requirements set forth in federal regulations. The aging program finally opted to contract for meals with restaurants in local communities. The first contract with the Dot Lake Lodge specified that meals be provided five days per week at a per unit cost of \$6.00, beginning late in November. Tok and Tanacross seniors dined at a lodge in Tok, while Northway elders were served lunches at a cafe in that community. Once each week a van from Tok transported Northway seniors to Tok for lunch, grocery shopping, and other personal business. Eagle residents expressed too little interest

in a lunch program to warrant establishment of one there. Finally, the school cafeteria in Tetlin served as the congregate meals site in that isolated village, since no other building there had electricity and running water. The aging program purchased food in bulk, transported it by boat to Tetlin, and hired a local resident to prepare meals. By April 1977, the nutrition program had been established in all communities except Eagle.

Year 3: 1977-78

For the year beginning July 1, 1977, the aging program received OAA grants under Title III (transportation and escort services, outreach, I&R and homemaker services), Title VII (congregate meals), and Title IX (eight positions under the Senior Community Service Employment Program). The latter funds enabled the program to hire persons 55 years of age and older as homemakers, van aides, and chore service workers, thereby expanding the economic benefits accruing to aging and aged persons in the region. Increased awareness led more Native and white elders to participate in congregate meals, although the program continued to focus on and be perceived as a service for Alaskan Natives and the needy. For example, the vans were used for transporting Native elders to traditional potlatches held in local villages and in the neighboring Copper River region during the summer of 1977; no comparable uses of this service were made by aged whites. On the other hand, home-delivered meals were available upon request to any senior unable to attend the congregate meals for health reasons.

Late in 1977, the nutrition director assumed responsibility for transportation services and was promoted to directorship of the aging

program. She then began developing social and recreational activities for program participants, assisted in evaluating homemaker and other service needs in each community, and attended training workshops designed to broaden her skills. One of the vans was transferred to Northway as a means of decentralizing services. Finally, a new priority was identified for implementation beginning in calendar year 1978: To assist senior citizens in preparing for the socioeconomic and other impacts expected to accompany construction of a natural gas pipeline through the heart of the Upper Tanana region, scheduled to begin in the early 1980s.

Year 4: 1978-79

OAA grant awards for the year beginning July 1, 1978, increased by 16 percent over the previous year, with most of the gain coming in Title IX funds for senior citizen employment. Two problems threatening program stability temporarily overshadowed this increased funding. First, OAA Titles III and VII grant recipients are required to match a certain percentage of their grant award with non-federal funds or in-kind support. Some local match took the form of donated labor, space for recreation activities at meal sites, and cash donations from program participants. A fiscal audit for the preceding two grant years, however, revealed a shortage of allowable match for the program. Ironically, the success of the aging program in obtaining federal funds created part of the problem: Some services formerly provided by volunteers (thereby qualifying as local match) now were performed by Title IX or CETA employees. Another limitation was attributed to the absence of local or regional government from which the aging program could seek

revenue sharing funds or other aid commonly available to nonprofit programs in municipalities. The shortfall in match eventually was waived and a state legislative appropriation made "to the Upper Tanana Aging Program for use as matching funds" in the current grant year.

Program expansion and budgetary constraints added to the dilemma. A new van had been purchased and one of the used vehicles relocated to Eagle Village in June 1978. This and increasing participation in the program led to a funding shortfall and cutbacks in services for the remainder of the fiscal year. A direct legislative appropriation once again prevented discontinuation of service late in the year.

Year 5: 1979-80

For the year beginning July 1, 1979, the aging program welcomed OAA amendments that simplified administration of grant funds and reporting procedures, and liberalized the local match requirements. The changes involved merging Titles III and VII into a new Title III program, while Title IX became Title V. OAA grant funds again were supplemented by another state legislative appropriation, but did not allow program expansion during the year, with inflation causing significant increases in program operating costs.

Now entering its fourth full year of operation as an OAA grantee, the aging program continued to broaden its scope, respond to the identified needs of its constituency, and gain wider approval in the region. Generous food donations by Tok residents and local restaurants allowed the program to schedule weekly potluck dinners at the community recreation center. Seniors from Dot Lake, Northway, and Tetlin were invited to these meals. With Tok and Tanacross elders also in attendance, the

aging program director began scheduling other activities to coincide with the weekly potlucks. These included presentations on home safety and nutrition, blood pressure exams, entertainment by local musicians and high school students, and movies.

The State Office on Aging recommended formation of a senior citizens' advisory council midway through the grant year, its purpose being to more actively involve local elders in program planning and development. Logistical problems attributable to winter weather and an ethnically-diverse service population dispersed over a large geographic area delayed startup of the council until the spring of 1980.

UTDC's executive director also approved my proposal to conduct a needs assessment of senior citizens in the aging program service area, beginning in December 1979 (Haynes 1980). Attention was also directed to the projected impacts on the aged of gas pipeline construction and potential mitigation measures. Equally important was the value in having baseline data and consumer input in report form and available for use in preparing grant applications. The State Office on Aging commended the program for voluntarily conducting a needs assessment and informal program evaluation, and for its continued efforts to improve service delivery.

Year 6: 1980-81

The aging program substantially increased its funding request for the year beginning July 1, 1980. This was a direct response to increasing participation in the program by area residents and a desire by the staff to gain more control over costs and expenditures. A summer lunch program was established in Eagle, as was a program-operated meals

site in Tok. Van service to Mentasta was provided periodically to accommodate the needs of several aged persons living there. The Tok aging van transported seniors to Delta Junction each week for grocery shopping and dental appointments, after stopping for lunch in Dot Lake. Elders and community volunteers constructed a senior citizens' float that captured first prize in the Fourth of July parade in Tok. Late in the summer, a group of white and Native seniors traveled to Dawson City, Yukon Territory, to visit friends and tour that historical community.

By July of 1981, the aging program was operating from the recreation center in Tok and was well-established in the community. Local residents continued to donate food and furniture, while others provided technical assistance, labor, or entertainment. Portrait photographs were taken of aged residents from throughout the Upper Tanana region and prominently displayed at the congregate meals site in Tok. The senior citizens' float won another trophy at the Fourth of July parade in Tok and also participated in the Golden Days parade in Fairbanks. Seniors traveled to Whitehorse, Yukon Territory, later in the year.

Summary

During its first six years of operation, the Upper Tanana Aging Program contributed significantly to the well-being of older persons in the region. Beginning as a grass roots organization focusing on Native and low-income elders, and relying largely on volunteers, the program has since grown and provides a range of services to its diverse and expanding clientele. Most area residents 60 years of age and older have at one time participated in aging program activities, utilized its I & R services or contributed something to the program. Local sentiments

toward the program have continually improved, with even the most vocal and fiscally conservative area residents acknowledging the positive contributions made by the aging program. A critical assessment of the aging program as an institutional support and its effect on the informal support systems of Upper Tanana elders is presented in Chapter V. Preceding this examination in the next chapter is a presentation of the social, economic, and demographic characteristics of the Upper Tanana aged participating in this study.

CHAPTER IV

SOCIAL, ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

Who are the Upper Tanana elderly and what are their characteristics? Chapter IV summarizes findings derived from structured interviews with 75 persons 60+ years of age residing in or near seven study communities. Tables 4.1 to 4.4 present general characteristics of the survey population, comprised of 46 Alaskan Natives and 29 Caucasians who reside permanently or seasonally in the Upper Tanana region. In order to preserve the anonymity of the two Alaskan Eskimo and American Indian respondents, data for these individuals are grouped with those recorded for the 44 Northern Athabaskan Indians. The terms "Natives" and "whites" will be used when ethnic distinctions are made in this chapter.

Demography

A wide range of ages (61-105 years) is represented in the study population, with Natives being an average of seven years older than their white counterparts (Table 4.1). Alaskan Natives rarely possess birth certificates and have used other measures for establishing their approximate ages, as is required for enrollment in Native corporations and to qualify for old age benefits. Consequently, I cannot attest to the accuracy of some Natives' ages and I believe some may be inflated. When possible, however, the ages recorded in personal interviews were compared with those entered in medical or other records as a step toward consistency.

Striking differences are observed in the ethnic composition of persons under and above 75 years of age, corresponding to Neugarten's

1. The first step in the process of creating a new product is to identify a market need.

2. The next step is to develop a concept that addresses the market need.

3. The third step is to create a prototype of the product.

4. The fourth step is to conduct market research to determine if there is a demand for the product.

5. The fifth step is to develop a business plan for the product.

6. The sixth step is to secure funding for the product.

7. The seventh step is to manufacture the product.

8. The eighth step is to distribute the product.

9. The ninth step is to monitor the product's performance in the market.

10. The tenth step is to make adjustments to the product as needed.

11. The eleventh step is to continue to develop new products.

12. The twelfth step is to evaluate the overall success of the product.

13. The thirteenth step is to determine if the product should be continued or discontinued.

14. The fourteenth step is to make final decisions regarding the product.

15. The fifteenth step is to implement the final decisions.

16. The sixteenth step is to monitor the product's performance over time.

17. The seventeenth step is to make adjustments as needed.

18. The eighteenth step is to continue to develop new products.

19. The nineteenth step is to evaluate the overall success of the product.

20. The twentieth step is to determine if the product should be continued or discontinued.

21. The twenty-first step is to make final decisions regarding the product.

22. The twenty-second step is to implement the final decisions.

23. The twenty-third step is to monitor the product's performance over time.

Table 4.1. Age and sex of Upper Tanana white and Native survey respondents (N=75).

| Age | Native
(n=46) | | White
(n=29) | |
|----------|------------------|--------|-----------------|--------|
| | Male | Female | Male | Female |
| 60 - 64 | 2 | 4 | 4 | 1 |
| 65 - 69 | 3 | 8 | 8 | 5 |
| 70 - 74 | 3 | 4 | 3 | 4 |
| 75 - 79 | 4 | 6 | 0 | 1 |
| 80 - 89 | 4 | 3 | 3 | 0 |
| 90 - up | 3 | 2 | 0 | 0 |
| | <hr/> | | <hr/> | |
| Totals | 19 | 27 | 18 | 11 |
| Range | 64-105 | 62-99 | 61-86 | 62-78 |
| Mean Age | 78.5 | 70.6 | 68.8 | 68.3 |

Table 4.2. Residence of Upper Tanana white and Native survey respondents (N=75).

| Residence | Native
(n=46) | White
(n=29) |
|------------|------------------|-----------------|
| Dot Lake | 5 | 1 |
| Healy Lake | 0 | 1 |
| Mentasta | 1 | 0 |
| Northway | 13 | 0 |
| Tanacross | 12 | 1 |
| Tetlin | 8 | 0 |
| Tok | 7 | 26 |
| | <hr/> | |
| Totals | 46 | 29 |

(1974) "young-old" and "old-old" categories. Natives comprise only 47% of the "young-old" but fully 85% of the "old-old," suggesting that as a group they may be more vulnerable than whites to many problems accompanying advanced age.

Males and females are represented equally in this sample, although they comprise somewhat different proportions of the ethnic categories: 62% of all white and 41% of Native respondents are males. Most respondents reside in one of the five Upper Tanana communities examined in this study; two individuals who live near outlying villages (Healy Lake and Mentasta) are included because they routinely spend time in Tok and interact frequently with persons in the target communities. Only three whites, all males, live outside of Tok, while the seven Natives residing in the regional center retain close ties with the local villages where they once lived (Table 4.2).

Only one respondent, a Native male, has never been married, as is shown in Table 4.3. One Native female and all six unmarried white men are divorced. The remaining unmarried individuals--three white females, 14 Native females, and eight Native males--are widowers. Almost half the Natives are widowers, attributable in part to their higher overall ages, the lower life expectancy of Native Americans, and because of their susceptibility to European-introduced infectious diseases, to which many fell victim and some still bear scars.

Not unexpectedly, significant differences in educational levels set apart the two ethnic groups (Table 4.4). Whites average about ten years of schooling, compared to less than two years for Native elders. Older Natives rarely had such opportunities during their youth and, even if schools had been present, the traditional subsistence cycle necessitated seasonal population movements and precluded extended residence in any single place. Several Natives can read and write, but most rely on outside assistance for reading correspondence, filling out forms and paying bills. As will be shown later, Natives more often than whites

Table 4.3. Marital status of Upper Tanana aged survey respondents, by sex and ethnicity (N=75).

| Marital Status | Native
(n=46) | | White
(n=29) | |
|--------------------|------------------|--------|-----------------|--------|
| | Male | Female | Male | Female |
| Never married | 1 | 0 | 0 | 0 |
| Married* | 10 | 12 | 12 | 8 |
| Widowed | 8 | 14 | 0 | 3 |
| Separated/Divorced | 0 | 1 | 6 | 0 |
| | — | — | — | — |
| Totals | 19 | 27 | 18 | 11 |

* In 15 households both spouses were interviewed

Table 4.4 Years of formal education completed by Upper Tanana aged white and Native survey respondents (N=75).

| Years of Education | Native
(n=46) | White
(n=29) |
|--------------------|------------------|-----------------|
| None | 27 | 0 |
| 1 - 7 | 12 | 3 |
| 8 | 2 | 8 |
| 9 - 11 | 1 | 7 |
| 12 | 1 | 7 |
| 13 - 16 | 0 | 3 |
| No response | 3 | 1 |
| | — | — |
| Totals | 46 | 29 |
| Mean years | 1.6 | 9.7 |

find their independence limited because of this more frequent need for aid.

Most respondents have resided in Alaska for ten or more years, with whites averaging more than 30 years in the State and 22 in the Upper

Tanana region (see Tables 4.5 and 4.6). Only three of the Natives surveyed were not born in or near the Upper Tanana region, and only one other has spent an extended period away from eastern interior Alaska (due to illness). All other Natives have spent their entire lives in the area except for travel associated with the seasonal round of traditional subsistence activities and contemporary village affairs. Four white respondents arrived in Alaska more than 50 years ago and carved out livelihoods in the then sparsely-populated Interior region, working as prospectors, freighters, trappers, and merchants. Several of their contemporaries still reside at least seasonally in Upper Tanana communities not focused on in this study (Chicken, Jack Wade and Eagle City--see Haynes 1976 and 1977).

Represented in this survey are members of eight households (five women and seven men) who settled in the Tok area in the late 1940s and early 1950s. From homes in the Lower 48 they brought to Alaska a range of skills essential to the growth of embryonic highway communities. Several are skilled artisans and most operated family businesses catering to road travelers; all are relatively secure financially and living comfortably in their retirement years.

In view of their long-term residence in Alaska and the Upper Tanana region, one would expect the elderly to have strong ties to their homeland. Table 4.7 lists the factors that 61 respondents find most attractive about the region and/or their community of residence. Evident in these responses are affinities to family, friends, and the rural environment:

What do I like about this community? I think its the recreation--hunting, fishing, and the like. And it's not crowded yet. I have lots of friends here I'd hate to leave.
(white male)

We were born around here. This is our place. Our kids and grandkids are here. I always think about them when I go away. I have no reason to go away [permanently] with them here. (Native male)

Table 4.5. Length of residence in Alaska, Upper Tanana white and Native aged survey respondents (N=75).

| Years in Alaska | Whites
(n=29) | Natives
(n=46) |
|-----------------|------------------|-------------------|
| 1 - 9 | 0 | 0 |
| 10 - 19 | 8 | 0 |
| 20 - 29 | 5 | 1 |
| 30 - 39 | 10 | 0 |
| 40 - 49 | 2 | 0 |
| 50 - up | <u>4</u> | <u>45</u> |
| Totals | 29 | 46 |
| Range | 10 - 61 | 20 - 105 |
| Mean Years | 30.2 | 73.1 |

Table 4.6. Length of residence in the Upper Tanana region, white and Native aged survey respondents (N=75).

| Years in
Upper Tanana Region | Whites
(n=29) | Natives
(n=46) |
|---------------------------------|------------------|-------------------|
| 1 - 9 | 6 | 0 |
| 10 - 19 | 7 | 1 |
| 20 - 29 | 6 | 1 |
| 30 - 39 | 7 | 3 |
| 40 - 49 | 2 | 1 |
| 50 - up | <u>1</u> | <u>40</u> |
| Totals | 29 | 45 |
| Range | 1 - 58 | 14 - 105 |
| Mean years | 22.4 | 68.3 |

Table 4.7. What Upper Tanana elders find attractive about their community of residence (N=61, some multiple responses).

| Characteristic | N | % |
|----------------------------------|----|----|
| Privacy/small community | 20 | 33 |
| This is home | 18 | 29 |
| The people/long time friendships | 15 | 25 |
| Relatives/family live here | 13 | 21 |
| Recreation and subsistence | 12 | 20 |
| Freedom and independence | 9 | 15 |
| Peace and solitude | 9 | 15 |
| It is just a good place to live | 7 | 11 |
| Geography | 4 | 6 |
| Low crime rate | 2 | 3 |
| Modern conveniences available | 2 | 3 |
| Other | 5 | 8 |

Constrasting these positive features of life in the Upper Tanana region are several factors considered unfavorable by some older persons. Those having chronic medical conditions (especially arthritis) and living on fixed incomes dislike the cold winters, high cost of living, and the limited range of goods and services available locally. Others are concerned about personal safety and security in a region growing steadily and attracting new "types" of people. As one man explained, "We never used to have to lock things up, but now that's changing." Some of the more liberal elders are anxious about what they perceive as an increasingly conservative political climate, while others enthusiastically greeted the arrival in the White House of a Republican administration in 1981, and look for it to crack down on the "government give-away programs" they view with dismay.

Housing and Land Ownership

Land has special meaning to most elder whites and Natives in the Upper Tanana region, but not always for the same reasons. The former

often commented on the security they feel at this stage of their lives as a consequence of owning land and a home, and not being burdened with property taxes; the latter cling to a value system based on an intimate relationship with the land and its resources--one that has persevered throughout their lives and symbolizes important aspects of traditional Athabaskan culture.

Most white respondents own some land, normally small acreages at or near their homesites. One man subdivided his homestead and over a period of years supplemented his income by selling residential lots. Several persons operate businesses located on their property or derive income from rental housing. Others have gardens, greenhouses, and a ready supply of firewood, which reduces cash expenditures for food and fuel, and serve as healthy avocations. The few individuals who own land outside Alaska view their holdings primarily as investments, although one couple has considered relocating to land they own in a state having a more temperate climate. Some elder whites routinely travel outside Alaska during the winter months.

Long-time Alaskan residents have had a decided advantage in certain State land disposals in recent years. Several Upper Tanana elders are building or have already erected dwellings on homestead or lottery land, and currently are fulfilling occupancy requirements. At least eight retirees from Alaskan communities outside the Upper Tanana region were building homes on lottery land in Tok during the summer of 1981. Although they arrived too late for inclusion in this study, most are from urban Alaskan locales and few plan to relocate permanently; instead, they view their land as an investment and a place to spend the summer months.

The status of elderly Natives' land holdings is more diverse and complicated. Most own homes or live rent-free in their respective communities, which are laid out on a grid pattern or less systematically, often near the residences of extended family members. Several have "sweathouses" near their homes, where small groups of age and sex peers assemble periodically to take steam baths. A few Natives reside outside the village proper, on land to which they have or hope eventually to obtain restricted title, but most also maintain residences in the village. These individuals either prefer a more solitary life or are able to remain more independent by virtue of having good health, their own automobiles, and/or strong supportive networks.

As one might expect, older Natives have strong emotional and physical ties to the land that for so many years has sustained them. All but the most infirm pursue seasonal subsistence activities in areas utilized traditionally by their family group or community. Although most lack the stamina for big game hunting or furbearer trapping (two of several notable exceptions are the 83-year old Traditional Chief, who shot a moose in the fall of 1981, and a man in his late 70s who runs an extensive trapline each winter), many pick berries, set out snares, or spend time at fish camps catching and drying fish for winter consumption. The land also provides raw materials for craftwork, such as spruce roots and birch bark. The extent to which plants other than berries are gathered for consumption, medicinal purposes, or other uses requires further study. The use of plants and other materials is clearly important to those who have access to such resources and desire to continue traditional practices.

Many Native elders have or are seeking title to land they have utilized during their adult lives, and on which some have small cabins used seasonally. For many, this has been a difficult and prolonged process. I examined Native allotment files in 1981 for 20 respondents and discovered that only seven had patented allotments--i.e., land to which they have restricted title (meaning that the allottee owns the parcel but cannot make any further conveyances without Bureau of Indian Affairs approval). In ten cases, protests filed by the State of Alaska or Native corporations have delayed conveyance. Several persons applied for allotments in the late 1950s or early 1960s and provided evidence of occupancy, but have since experienced a myriad of problems in obtaining title. This is partially a consequence of complications arising from the Alaska Native Claims Settlement Act of 1971 (ANCSA).

Tables 4.8, 4.9 and 4.10 summarize housing characteristics for the study population, most of whom own their homes and reside in frame or log structures. The homes range from small, modestly furnished one-room cabins with few amenities, to larger and more elegantly decorated frame houses resembling those common in upper middle class urban neighborhoods. Although most homes I visited were comfortable dwellings, several are poorly insulated, structurally unsound, or overcrowded.

White households more often have electricity, indoor plumbing and running water, in some cases because these amenities are not readily available in all Athabaskan villages and outlying areas. Some Natives and whites are accustomed to living without these "luxuries," while others simply cannot afford them. One drawback of having running water, for example, is that above-freezing temperatures must be maintained in the house during the long winter months. This restricts mobility unless

Table 4.8. Housing characteristics of the Upper Tanana aged (N=75).

| Characteristic | n | % |
|-------------------------------|----|-----|
| Housing Type: | | |
| Frame | 45 | 60% |
| Log | 22 | 30% |
| Trailer | 4 | 5% |
| Apartment | 4 | 5% |
| | — | — |
| Ownership Status: | | |
| Owned by respondent or spouse | 60 | 80% |
| Rented | 9 | 12% |
| Making payments now | 2 | 3% |
| Other | 4 | 5% |
| | — | — |
| Source of Heat: | | |
| Wood | 43 | 58% |
| Oil | 19 | 26% |
| Gas | 2 | 3% |
| Oil/gas & wood | 11 | 14% |
| | — | — |

Table 4.9 Housing amenities of Upper Tanana white and Native aged households (N=75).

| Housing Amenity | % Native Homes | % White Homes |
|-----------------|----------------|---------------|
| Electricity | 60 | 83 |
| Running water | 38 | 76 |
| Indoor plumbing | 33 | 72 |
| Refrigerator | 51 | 86 |
| Telephone | 24 | 72 |
| Television | 68 | 83 |
| | — | — |

the occupants can count on someone to look after the house while they are out of town. Most persons not having a telephone live near someone who does. Since its introduction to the Upper Tanana region in the early 1970s, television has become a popular form of entertainment,

Table 4.10. Utility costs in selected Upper Tanana aged households 1980-81.

| Utility Cost | Electricity
summer month
(N=16) | Electricity,
winter month
(N=19) | Heating fuel,
winter month
(N=23) |
|-------------------|---------------------------------------|--|---|
| Under \$50 | 11 | 8 | 8 |
| \$50-99 | 4 | 8 | 3 |
| \$100-149 | 1 | 2 | 7 |
| \$150-up | 0 | 1 | 5 |
| | — | — | — |
| Range | \$10-100 | \$20-170 | \$86-300 |
| Mean monthly cost | \$43.20 | \$64.26 | \$166.88 |

although reception often is poor and the range of programs quite limited. Televisions used in Tetlin at the time of this study were powered by automobile batteries (recharged on the village-owned generator) before the village electrification project was completed.

Wood is a popular and comparatively inexpensive heat source in the Upper Tanana region (\$65 - \$80 per cord in 1980), and alone or in combination with oil is used by 72 percent of all respondents. Many persons utilizing wood fires set an open pan of water on the stove, which acts as a humidifier to counteract the dry heat. White households generally incur higher utility costs, since they often live in larger dwellings and frequently use oil heat and a wider range of electrical appliances. Escalating fuel prices pose particular problems for the elderly living on fixed incomes; many households qualified for up to \$400 in Energy Assistance payments during the winter of 1980-81.

Household composition of those surveyed varies a great deal, as noted in Table 4.11. Nearly half live alone or with a spouse, while

Table 4.11. Household characteristics of the Upper Tanana aged population (N=75).

| Characteristic | Native | White |
|---|--------|-------|
| Number in Household: | | |
| 1 | 8 | 9 |
| 2 | 10 | 16 |
| 3-4 | 19 | 3 |
| 5-up | 9 | 1 |
| | <hr/> | <hr/> |
| Totals | 46 | 29 |
| Household Composition: | | |
| Respondent (R) | 8 | 9 |
| R + spouse | 4 | 15 |
| R + spouse & children/
grandchildren | 18 | 3 |
| R + children/
grandchildren | 14 | 0 |
| R + unrelated person | 0 | 1 |
| Other | 2 | 1 |
| | <hr/> | <hr/> |
| | 46 | 29 |

most others accomodate other family members in their homes. Younger relatives are present more often in Native homes and in several cases grandparents have legal custody of one or more grandchildren. Most elderly reside in homes they own or rent, and only a few have found it necessary to live with other family members. The inavailability of local low-cost rental housing forced one woman in Tok to move to an urban center, when she grew tired of living with her son and his family. At the time of this study, two married men were living alone temporarily while their spouses maintained second residences outside Alaska.

Income

Many respondents preferred not to divulge their precise income levels and sources, and this emerged as a particularly sensitive topic

1. The first part of the document is a letter from the author to the reader, explaining the purpose of the study and the methods used. The author states that the study is a qualitative research project aimed at understanding the experiences of young adults with mental health issues. The methods used are semi-structured interviews and focus groups.

2. The second part of the document is a literature review, which discusses the current state of research on mental health in young adults. The author identifies gaps in the literature and highlights the need for further research.

3. The third part of the document is the data collection and analysis section. The author describes the process of conducting interviews and focus groups, and how the data was analyzed using thematic analysis.

4. The fourth part of the document is the results section, which presents the findings of the study. The author identifies several themes that emerged from the data, including the impact of mental health on daily life, the importance of social support, and the need for mental health services.

5. The fifth part of the document is the conclusion, which summarizes the findings and discusses the implications for practice and policy. The author suggests that mental health services should be tailored to the needs of young adults and that social support should be a key component of any intervention.

6. The final part of the document is a list of references, which includes the books, articles, and other sources used in the study.

in personal interviews. Available information on income levels will be presented but this section instead focuses on income sources, which provide interesting comparisons along ethnic lines. Income levels in June 1981 for 20 white and 21 Native elders are shown in Table 4.12; some are only approximations and reflect what respondents were willing to report. Other persons did not recall the exact amounts of monthly checks and a few chose not to discuss income derived from savings and investments. More difficult to ascertain in dollar figures is net income from the sale of craftwork and aid from relatives, which in some cases may not be insignificant amounts. Furthermore, these figures do not account for nominal increases in Social Security, Supplemental Security Income, pensions, and the Alaska Longevity Bonus, to be described below, which were scheduled to take effect (or actually did) after June 1981. Bear in mind also that these are individual income figures and do not represent household incomes in cases where both spouses were interviewed.

Table 4.12. Monthly incomes of the Upper Tanana aged population, June 1981 (N=41).

| Monthly Income | Total | Native | White |
|---------------------|-------------|-----------|-------------|
| \$ 200-499 | 9 | 3 | 6 |
| 500-749 | 21 | 16 | 5 |
| 750-999 | 5 | 2 | 3 |
| 1,000-1,999 | 4 | 0 | 4 |
| 2,000-up | 2 | 0 | 2 |
| | | | |
| Range | \$200-3,000 | \$200-930 | \$200-3,000 |
| Mean monthly income | \$729.68 | \$571.38 | \$895.90 |

That the Upper Tanana elderly derive income from a variety of sources is evident in Table 4.13, which also illustrates distinct differences based upon ethnicity. Each income source is discussed briefly below.

Wages: Eleven persons have full- or part-time jobs, or are employed on a seasonal basis. The list includes four women and one man who work for the Upper Tanana Aging Program, a village postmistress, a seasonal fur buyer, a part-time storekeeper, two handymen, and a seasonal cook. Not included here are elder Natives who sporadically earn some income as teachers of traditional ways or as key informants for research projects.

Self-employment: 25 respondents reported self-employment as a source of income, and this probably is a low figure. Several white elders operate businesses in Tok, from which most of their cash income is derived. One white man is a published author (as are two others outside the study communities) and another sells ice to local merchants during the summer months. Several Natives and whites are accomplished craftspersons whose finished works are eagerly sought by local residents and visitors. Self-employment for some is valued more as a constructive activity than a reliable source of income, although few deny its economic importance.

Pensions: Seven white respondents retired from jobs that offered some type of pension plan. Six accrued enough time in government (federal, state and/or Territorial) service in Alaska to qualify for at least some retirement income and benefits. The one exception is a man receiving 100 percent disability pension from a job he held outside Alaska.

the first of these is the fact that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The second is the fact that the system is not a static one, but a dynamic one, in which the various parts are constantly changing and evolving. The third is the fact that the system is not a closed one, but an open one, in which the various parts are constantly interacting with the environment. The fourth is the fact that the system is not a linear one, but a non-linear one, in which the various parts are constantly interacting with each other in a non-linear fashion. The fifth is the fact that the system is not a deterministic one, but a probabilistic one, in which the various parts are constantly interacting with each other in a probabilistic fashion. The sixth is the fact that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The seventh is the fact that the system is not a static one, but a dynamic one, in which the various parts are constantly changing and evolving. The eighth is the fact that the system is not a closed one, but an open one, in which the various parts are constantly interacting with the environment. The ninth is the fact that the system is not a linear one, but a non-linear one, in which the various parts are constantly interacting with each other in a non-linear fashion. The tenth is the fact that the system is not a deterministic one, but a probabilistic one, in which the various parts are constantly interacting with each other in a probabilistic fashion.

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Social Security: All but one of the 22 Social Security recipients are white elders who made the necessary contributions as wage earners or as owners of private businesses. Just as very few Alaskan Native elders are pension recipients, only rarely do those in the Upper Tanana region qualify for Social Security payments. Although some worked periodically for wages as carpenters, freighters and laborers in mining camps, they either were paid in cash or did not have social security taxes deducted. Congress approved a ten percent increase in Social Security benefits in July 1981.

Supplemental Security Income (SSI): Federal SSI payments are made to persons 65+ years of age ineligible for Social Security and who have limited incomes. All 37 SSI recipients in this study are Natives. Following a 11 percent cost of living increase in July 1981, maximum monthly SSI payments to persons having no other income range from \$264.70 for individuals to \$397.00 for couples living in the same household.

State Old Age Assistance (OAA): At least 35 of the 37 Natives queried supplement their SSI payments with State OAA; collectively, these income sources are designed to provide recipients with an income level commensurate with federal guidelines. For example, an individual paying rent is calculated to need \$526/month and a non-rent payer \$426/month. OAA recipients automatically qualify for Medicaid and in some instances are eligible for food stamps.

Alaska Longevity Bonus (ALB): This unique program provides long-time Alaskan residents able to manage their own affairs with an incentive to continue uninterrupted residency in the State after age 65. To qualify for the ALB, applicants must be at least 65 years of age and

Table 4.13. Reported income sources of the Upper Tanana elderly, 1980-81.

| Income Source | N | Total | Native | White |
|------------------------------|-------|-------|--------|-------|
| Wages | 11/72 | 15% | 14% | 18% |
| Self-employment | 25/70 | 36% | 39% | 31% |
| Pension | 7/73 | 9% | -- | 25% |
| Social Security | 23/71 | 32% | 2% | 78% |
| Supplemental Security Income | 37/68 | 54% | 92% | -- |
| State Old Age Assistance | 35/67 | 52% | 90% | -- |
| Alaska Longevity Bonus | 56/74 | 76% | 89% | 55% |
| Disability/Veterans Benefits | 2/70 | 3% | -- | 7% |
| Savings/Investments | 20/71 | 28% | --* | 71% |
| Energy Assistance | 22/60 | 37% | 69% | -- |
| Aid from relatives | 27/71 | 38% | 44% | 28% |
| AFDC | 7/66 | 11% | 18% | -- |

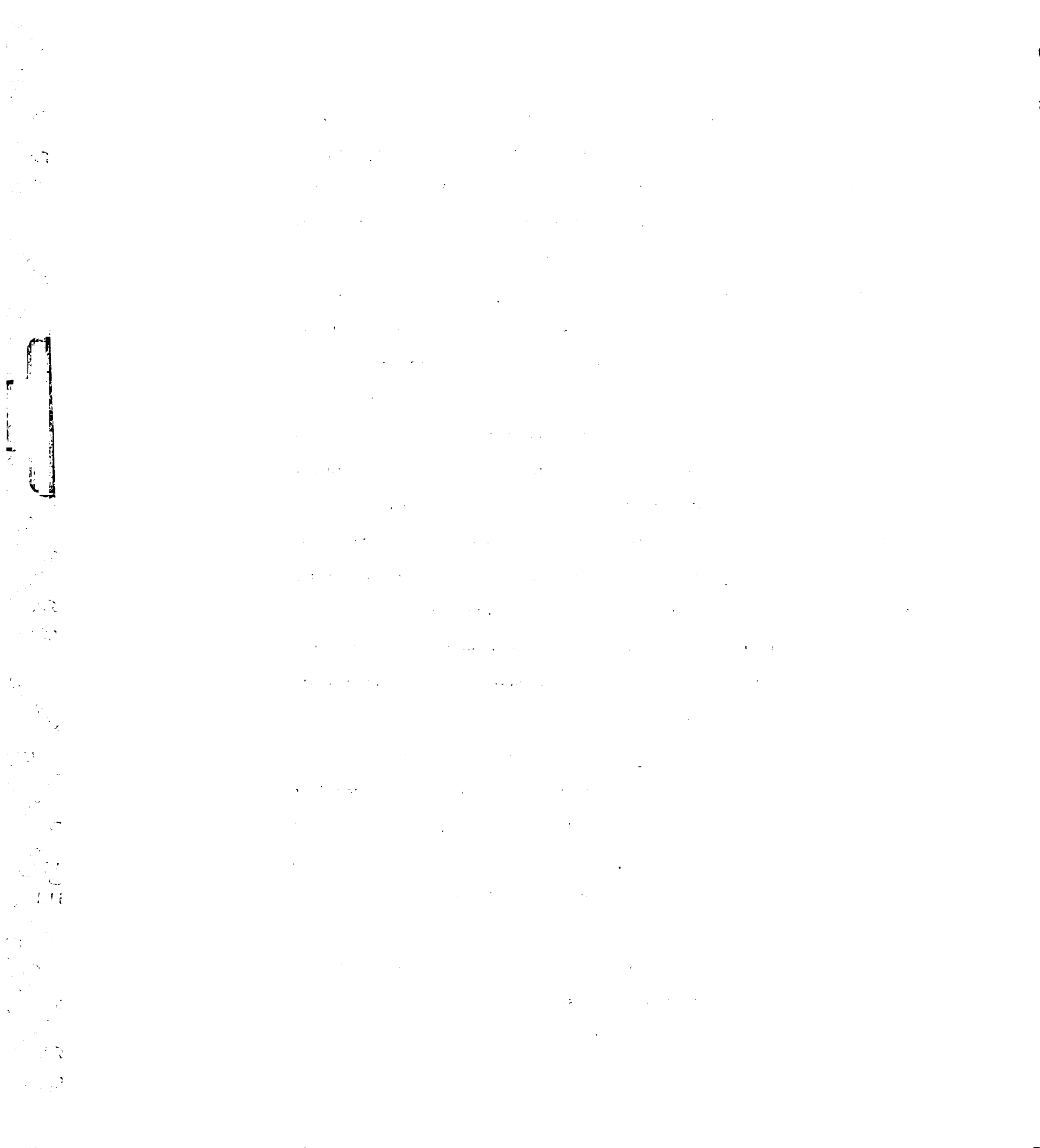
*Many Natives do in fact have savings in the form of cash or goods set aside for use as gifts in potlatches, so this must be taken into account.

have maintained continuous residence in Alaska for 25 years commencing on or before January 3, 1959 (the date of Alaska Statehood). Three-fourths of the respondents (40 Natives and 16 whites) receive monthly ALB payments, which increased from \$200 to \$250 in August 1981. This revenue does not affect eligibility for SSI or OAA, but is counted as income if the recipient applies for food stamps. The ALB is an important resource for many of the 8,400 recipients in Alaska, and can comprise perhaps as much as 40 percent of a couple's monthly income.

For excluding older persons who have not resided in Alaska for 25 years, however, the ALB program was challenged in court in 1983-84 as being discriminatory by an elder who did not meet the residency requirement. The court ruled in favor of the plaintiff, thus requiring the State Legislature either to disband the program or alter its residency requirements. The 1984 Legislature responded by requiring only one year residency in the state prior to application for the ALB. It is estimated that 6,000 new persons may now qualify for the ALB. However, the legislature also enacted procedures that may ultimately phase out this beneficial program.

Disability/veterans benefits: Only two white men reported disability or veterans benefits as a source of income. One receives disability income from the State, while the second, a World War I veteran, draws a small VA pension. The extent to which military veterans utilize veterans benefits other than medical care was not examined in this study.

Savings and Investments: Twenty white respondents mentioned having savings or investments, which provide income or serve as a financial cushion. Some sold successful businesses upon retiring and others

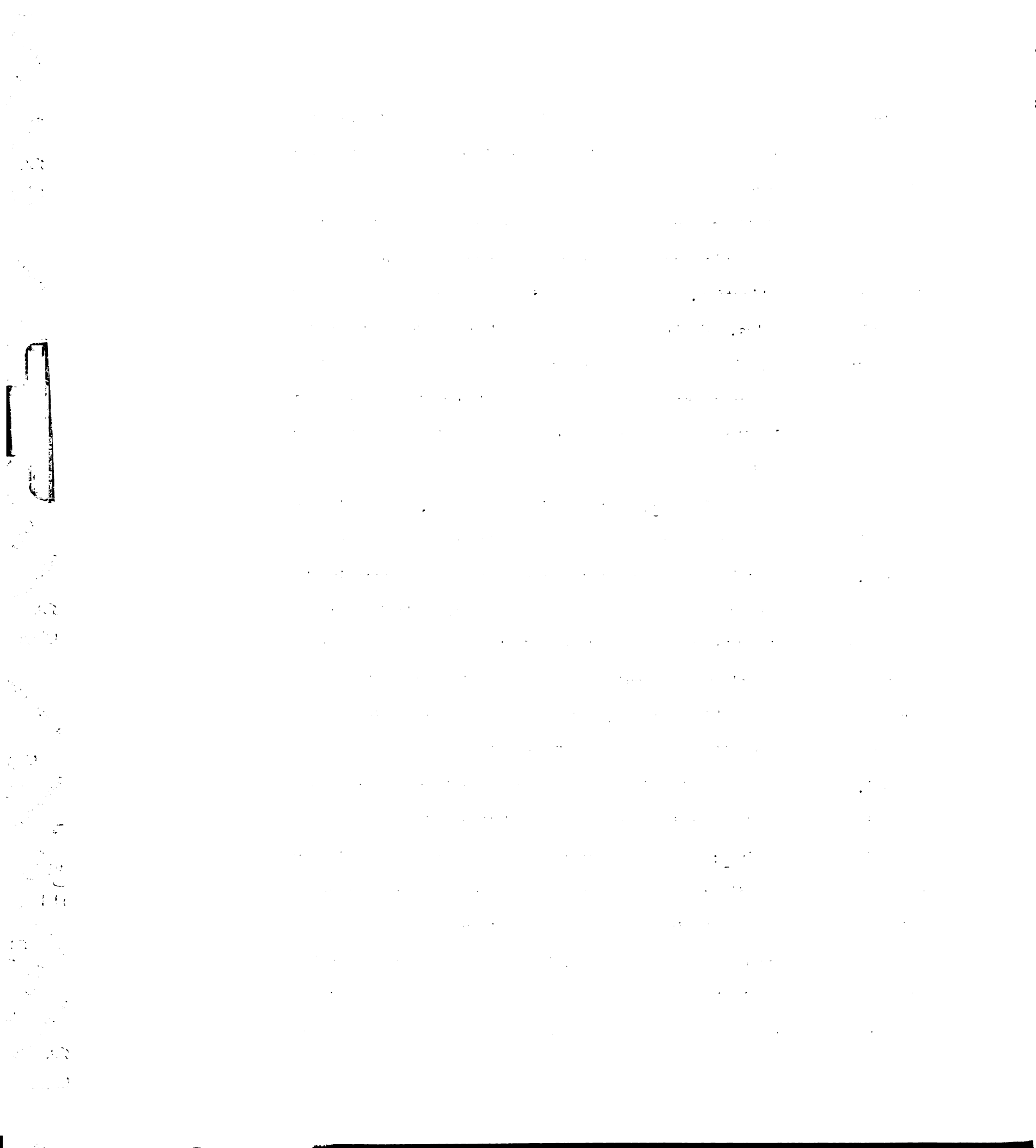


simply earned more than they needed to live comfortably in earlier years. All are reaping the financial benefits from having worked and planned for the future.

To say that Natives have no savings or investments is misleading, although few, for example, own rental property or have savings accounts in a financial institution. Many invest their excess cash in goods used in potlatches--rifles, blankets, craftwork--or keep cash on hand for emergency purposes. The concept of "saving" thus differs between whites and Natives; the former are more oriented toward wealth for personal consumption, while the latter are mindful of their kinship ties and traditional obligations.

Energy Assistance Program: As mentioned earlier, many elderly households qualified for Energy Assistance payments during the winter of 1980-81. This federally-funded program provided cash assistance in the form of vendor payments for home heating expenses. Eligibility is limited to cases in which the head of household has a gross income at or below 125% of federal poverty guidelines for Alaska (the ALB is not counted as income for this purpose). At least twenty-two Native elders received as much as \$400/household in Energy Assistance payments in 1980-81. This figure probably is low, since some Natives may have been interviewed before they applied for and received this aid.

Aid from relatives: The monetary value of assistance provided by relatives is not easily calculated but is not an unimportant resource. Only eight white and 19 Native respondents said they received financial or in-kind aid from other family members, but this undoubtedly is a low figure. Aid from relatives in many cases is balanced somewhat by aid to relatives: One older woman resides rent-free with younger relatives,



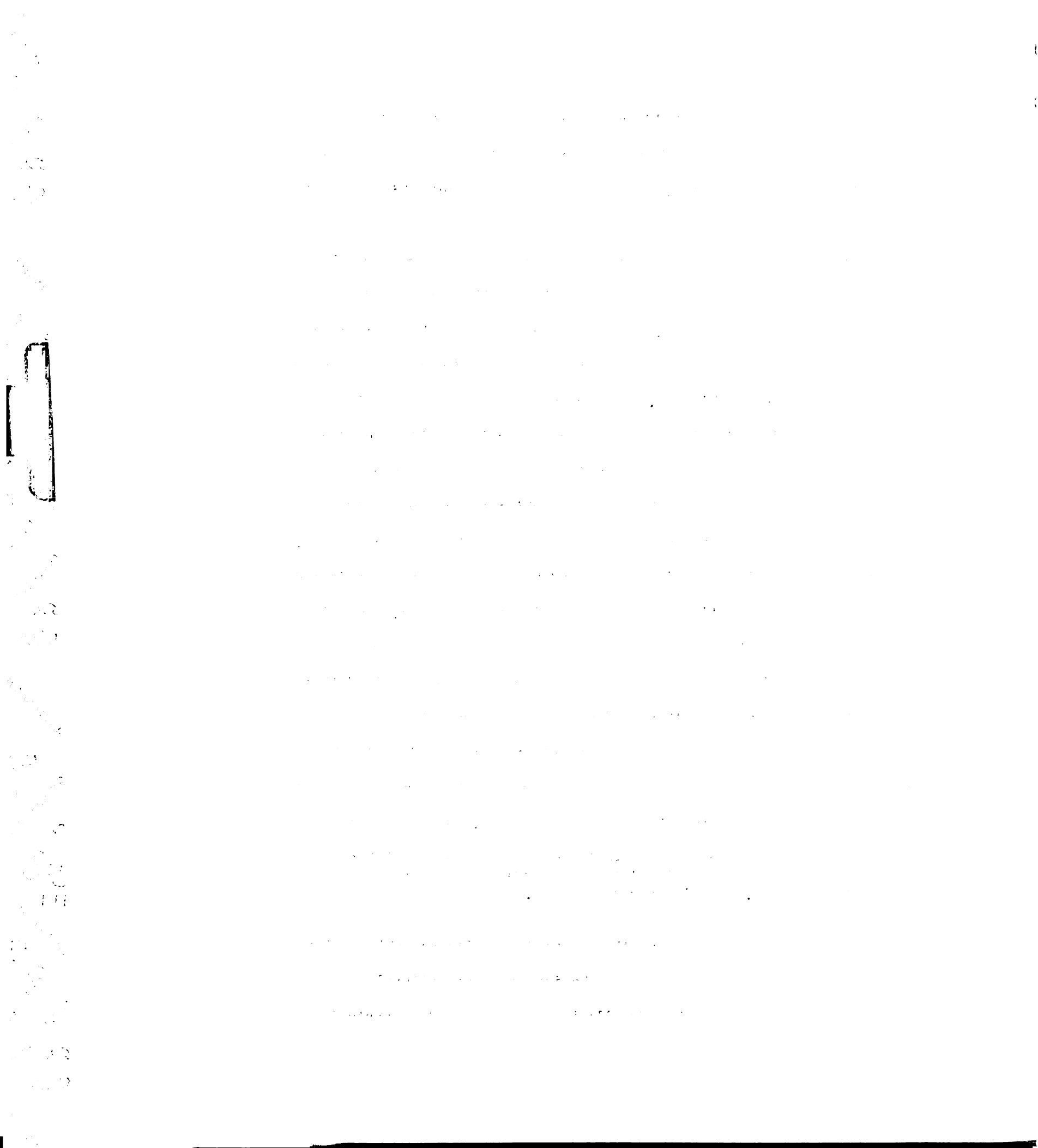
but contributes toward household expenditures and assists with domestic duties; children residing with their parents cut firewood and provide transportation in some cases. More will be said about this topic in Chapter V.

AFDC: Elders in at least seven Native households have legal custody of grandchildren and receive monthly AFDC payments that help offset the costs of their care. At least four of these households used food stamps. Native elders commonly contribute toward the living expenses of their grandchildren, whether or not they receive AFDC.

Other: Not included in Table 4.13 are several miscellaneous income sources that either affect only a few households or are not considered major resources. Two elderly whites have working spouses under 60 years of age who contribute a substantial portion of the family income. Natives who are stockholders in village and regional corporations formed consequent to ANCSA sometimes receive nominal cash dividends. Two elder Natives received cash compensation for granting access privileges to companies engaged in economic development activities that involved their land holdings. Finally, although they are not actual income sources, congregate meals and transportation services provided by the Upper Tanana Aging Program are available to all persons 60 years of age and older, and help many to stretch their fixed incomes. As one man said,

The food and bus program--without it how would a lot of people get around and afford to eat? It's a good supplement to their income. It also saves me money.

On the surface it appears that most Upper Tanana elderly have adequate incomes, but that does not take into account cultural patterns and the high cost of living in Alaska. Limited job opportunities



sometimes result in elder Natives having the only regular source of income in their extended families, or being obligated to support grandchildren whose parents are seeking work or are employed away from home. Some children living with their parents assist minimally with expenditures for food and fuel.

Food and utility costs in Tok are substantially higher than those in urban Alaska and the Lower 48. Cost of food at home for one week in June 1981 for an elderly couple in Tok was calculated to be \$64.51, compared to \$48.35 in Fairbanks and a U.S. average of \$37.70 (reported in the Mukluk News, Tok, Alaska, 9/17/81). Effective in March 1981, electricity for residential use in Tok cost nearly 18¢/kilowatt hour for the first 100 kilowatts, plus a 3.48¢ surcharge/kwh, totalling almost 21.5¢/kwh. This is more than five times the kwh rate in San Francisco, about five times the charge in Anchorage, and more than twice the rate in Fairbanks. Despite these comparatively high costs in Tok, they remain considerably below those found in more remote and road-inaccessible villages in northern and western Alaska.

Activities

The Upper Tanana aged pursue an array of activities as diverse as they are themselves. These range from leisurely pastimes to more economically oriented pursuits, most of which are constructive and symbolic of the older persons' efforts to remain active and productive community members. Table 4.14 illustrates the extent to which survey pursue activities having economic implications. Nearly 80 percent engage in some type of subsistence or food production, which serves the dual function of providing a product for household consumption and a

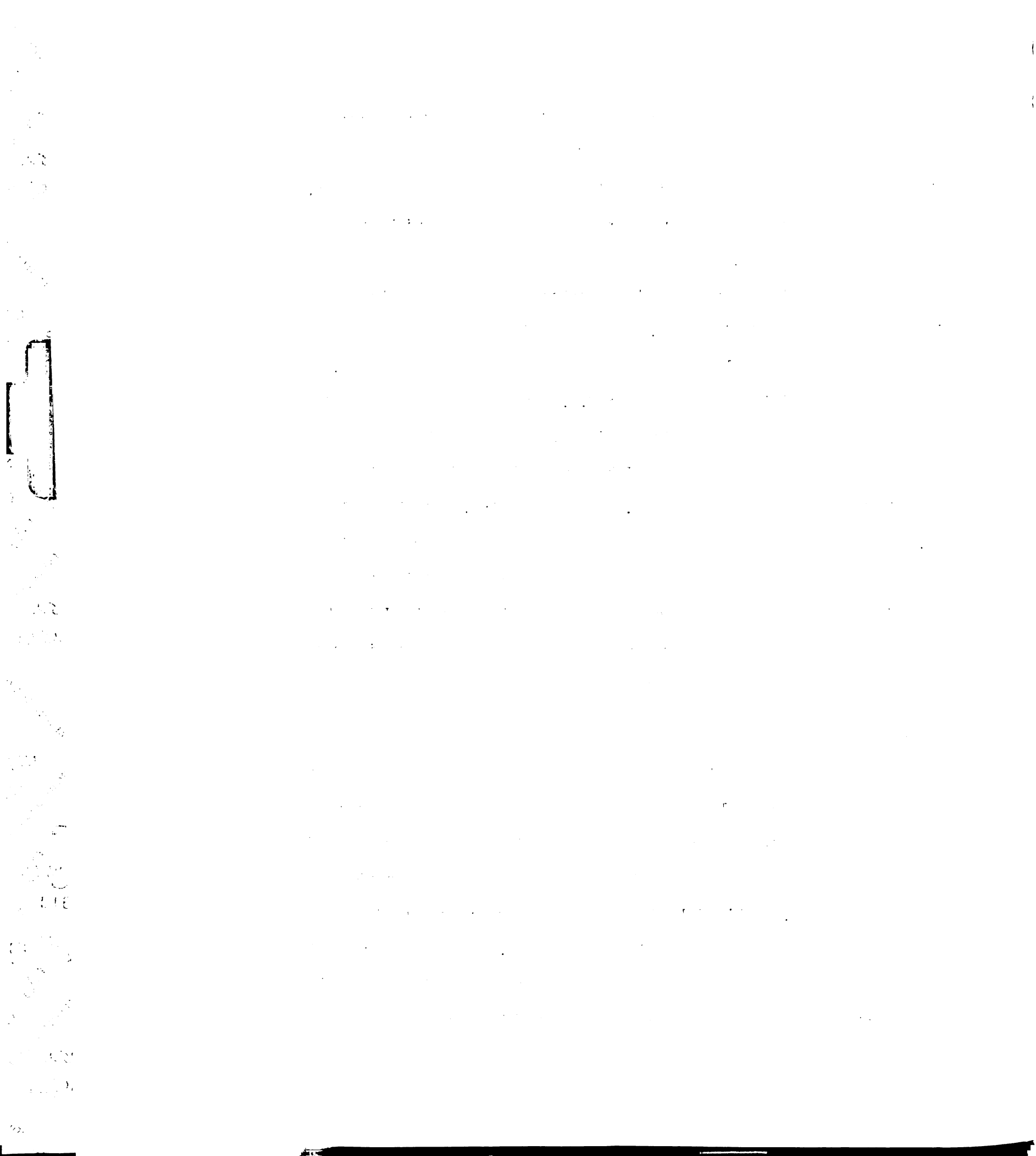


Table 4.14. Economically-oriented activities of the Upper Tanana elderly.

| Activity | # involved | % of total |
|--------------------------------|------------|------------|
| Food production/subsistence* | 58/73 | 79% |
| Craftwork** | 32/69 | 46% |
| Uses other technical skills*** | 26/71 | 37% |

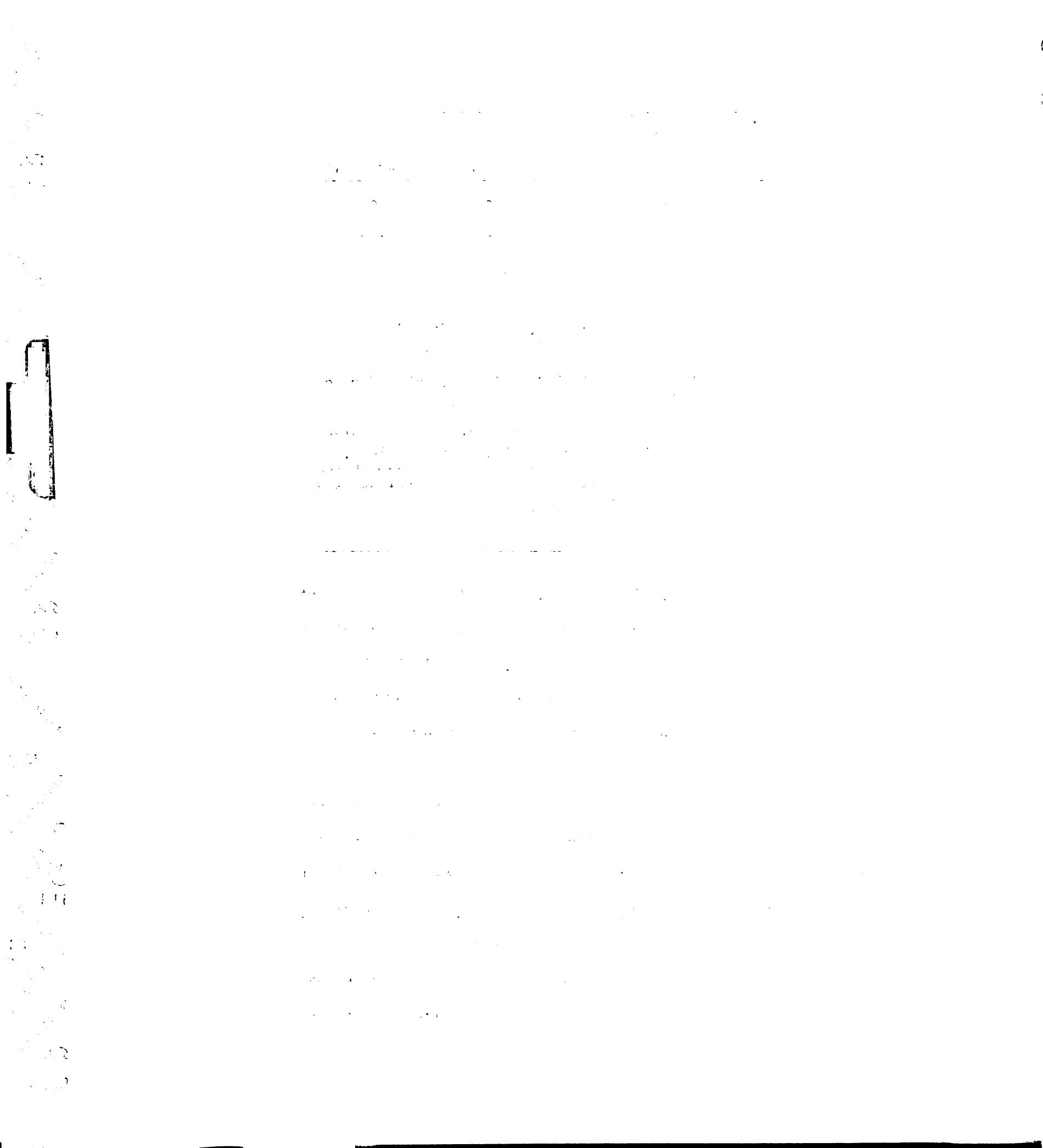
*This category includes fishing, hunting, trapping/snaring, berrypicking, woodcutting, gardening and greenhouses.

**Examples of craftwork mentioned include knitting, embroidering, woodcutting, and production of Native craft items.

***The skills mentioned in personal interviews include carpentry, welding, retail sales, writing (poetry, books, news articles), leadership in organizations, advocacy, storytelling, shopwork and teaching. These often are not sources of cash income but can and frequently do have economic implications.

healthy, constructive activity. For example, two white men are frequent companions on fishing trips during the summer months, and many Natives spend some time at family or village fish camps. Several elderly white couples have gardens and/or greenhouses, while Native and white women eagerly anticipate the late summer months when wild berries ripen and can be harvested.

Almost half those queried engage in some type of craftwork production, either for sale or personal/family use. Most are Natives noted for their skill at making moosehide footwear and mittens, birchbark baskets and cradleboards, beadwork, snowshoes, drums, and other items. Regrettably, many traditional Athabaskan craft skills seem destined to extinction, since few younger Natives are learning them (much to the dismay of their elders). For example, of the two Native men in the



Upper Tanana region make snowshoes, only one produced any in 1981 and his failing eyesight made this a difficult task. Some elder whites are accomplished woodworkers, several women knit or embroider in their free time, and others are "jacks of all trades".

Thirty-seven percent utilize other technical skills on at least a periodic basis. Older persons may be called upon to assist with a construction project or to teach traditional practices to school-age youth. Several elder whites are active in the political arena and one formerly held a key leadership role in the state Democratic Party. The Traditional Chief of the Doyon Region resides in Dot Lake and travels frequently and widely to speak on behalf of Northern Athabaskans at social and political functions. All but the most infirm use their skills to reduce household expenditures when possible, or to contribute in some way to their community; one must attend a potlatch, for example, to fully appreciate how even the older and ailing Natives come to life when renewing their ties with lifelong friends at this important social and ceremonial activity.

Some elders, particularly white men, resist suggestions that they are aging by leading active and productive lives. One man in his 60s commented several times about "those old people," and excluded himself from that categorization; another, at age 70, talked about slowing down "when I get old." A third intentionally avoids associating any more than necessary with age peers, preferring instead to mingle with much younger friends. In short, some respondents apparently adhere to the adage, "you're only as old as you feel," and do not yet feel very old.

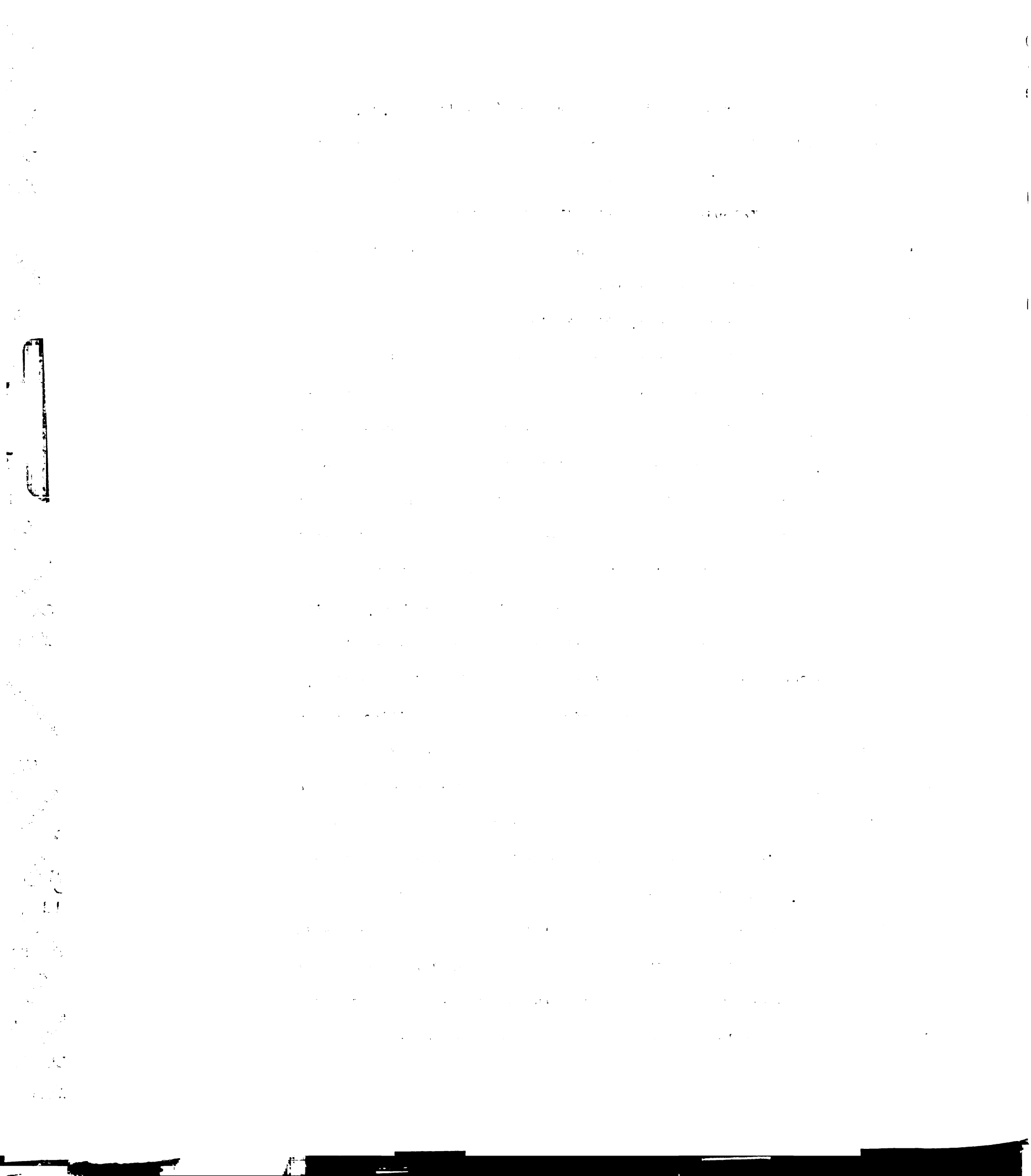
The increasing popularity of television in the Upper Tanana region is reflected in its being a more common amenity of respondents'



households than telephones and indoor plumbing (see Table 4.9). Some elders watch television primarily to combat loneliness or to pass the time, while others routinely follow soap operas, news programs, or sporting events. Television undoubtedly has influenced visiting patterns and social interaction throughout the region, and whether those are positive or negative factors when the elderly are concerned is subject to varying interpretations. The topic merits further attention.

Group-oriented activities play important roles in the lives of the Upper Tanana elderly, although some participate less frequently than in previous years. Many elder Natives and some whites attend church on a regular basis. Religious pictures and biblical verses often decorate the homes of those older Natives who openly adhere to fundamentalist Christian principles. Hippler's (1974) suggestion that the fundamental dogma has aided many adult Athabaskan men to overcome alcohol abuse seems to hold true among some older Upper Tanana Natives. White churchgoers were more reserved in discussing religion but several hinted that attending Sunday services was an important social outlet for them.

Excluding several white elders active in a major political party and the Traditional Chief from Dot Lake, few wield much political power in the region. The opinions of Native elders generally carry far less weight in village affairs than they did a generation ago, and very few are members of their respective village councils or corporation boards of directors (cf. Reckord 1979 for a similar finding in the Copper River region). Much of their power is exerted within the family or in traditionally oriented activities. The absence of organized local government in Tok and the surrounding region limits the political role of white elders to that available in formal organizations and special interest



groups--but they can be and have been effective lobbyists on local issues, by virtue of their intimate knowledge of the political process in Alaska and acquaintance with leading power brokers.

Whites play more active roles than Natives in local membership organizations, including womens' clubs, the Veterans of Foreign Wars, and Chamber of Commerce. This is not at all surprising, since few Natives meet the eligibility requirements or have a vested interest in these groups. Beyond this, membership organizations are a somewhat alien concept to elderly Athabaskans.

Social activities pursued more informally span the spectrum. Small groups of older white men convene at local restaurants for coffee or in the taverns to play pool and visit. Several whites with automobiles routinely "make the rounds" and visit with friends at their homes, places of employment, or post office. White widowers are regular meal guests of younger friends. Native elders look forward to traditional holiday celebrations and party potlatches (as opposed to funeral potlatches) held during the summer months in the Upper Tanana and neighboring regions. Village bingo and poker games regularly attract some older Native men and women.

In the mid-1950s dogsled racing emerged as a major form of winter recreation in the Upper Tanana region, following formation of the Tok Dogmushers Association (TDMA). Two long-time and now elderly Tok residents were instrumental in organizing the TDMA, and many older Natives and whites remain members. During the winter of 1980-81, one of the co-founders spearheaded a revival of dogsled racing for area youth. Several age peers worked with him or operated a concession stand during the youth and regular adult races, while many other elders cheered on

their favorites from the sidelines (and a few offered sound advice to younger dogmushers). This action conveyed a clear message to the community and region: The elderly want to participate in constructive activities involving local youth and utilize their skills in meaningful ways. Adults and young people alike have responded enthusiastically.

The Upper Tanana Aging Program is partially responsible for the resounding success of this intergenerational activity, by providing a forum for and encouraging the development of activities by and for older persons. Established in 1975 to serve the low-income and isolated elderly in the Upper Tanana region, the program now provides a broad range of services to persons over 60 years of age and their spouses, as was discussed in Chapter III. The program has overcome many of the problems inherent in service provision to ethnically-diverse and sparsely-populated villages scattered across a vast area, some road-accessible and others not, and today is one of the most comprehensive programs of its kind in rural Alaska.

The extent to which respondents use aging services in the Upper Tanana region is shown in Table 4-15. These figures reveal more active participation by elder Natives in congregate meals, transportation services, and other program-sponsored services. This appears to have resulted from several factors: Natives are generally less affluent, more oriented toward informal and traditional group activities, and only a few have reliable alternative forms of transportation. Additionally, the lack of formal education limits their ability to deal independently with certain problems affecting older persons--e.g., reading and writing letters, and making inquiries to state and federal agencies.

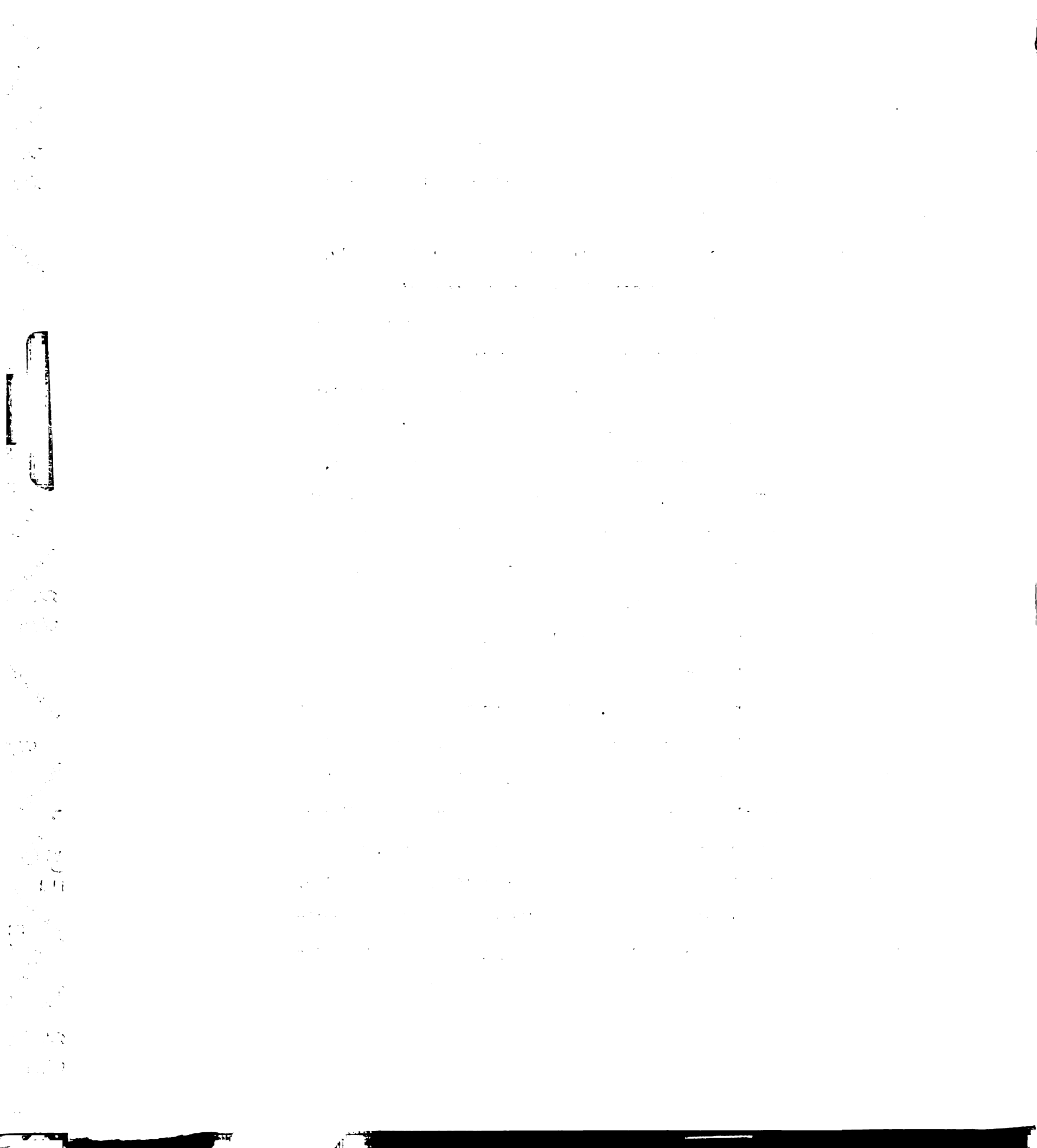
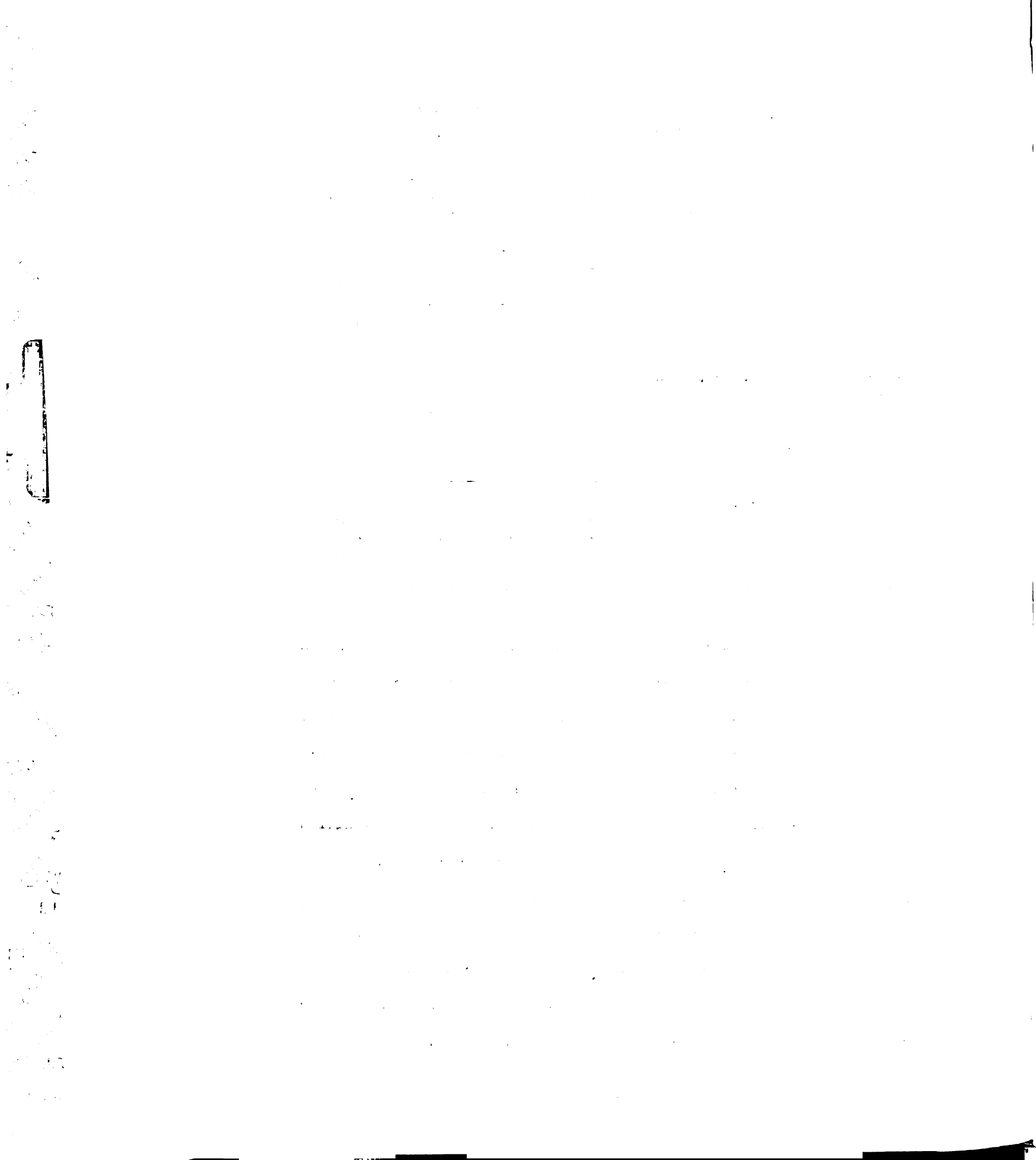


Table 4.15. Utilization by the elderly of Upper Tanana Aging Program services spring 1981.

| Activity | Natives
n=46 | Whites
n=29 | Total
N | % of
total |
|---|-----------------|----------------|------------|---------------|
| Attends congregate meals: | | | | |
| Regularly | 30 | 7 | 37 | 49% |
| Occasionally | 5 | 8 | 13 | 17% |
| Rarely | 6 | 7 | 13 | 17% |
| Home-deliveries only | 2 | 1 | 3 | 4% |
| Not at all | 3 | 6 | 9 | 12% |
| Utilizes transportation services: | | | | |
| Yes | 28 | 5 | 33 | 44% |
| No | 9 | 24 | 33 | 44% |
| When in community where
service is available | 9 | 0 | 9 | 12% |
| Receives other aid: | | | | |
| Yes | 35 | 10 | 45 | 60% |
| No | 6 | 19 | 25 | 33% |
| No Response | 5 | 0 | 5 | 7% |

Nearly all persons polled (60 of 65, or 92 percent) spoke favorably of aging program services, whether or not they actually utilized them. The few non-participants generally agreed that the program provides beneficial services and is less wasteful of tax dollars than certain other social programs (or, in their terms, "giveaway programs"). The program attracted few white elders in its formative years and targeted Natives for its services. This resulted in it label being branded as a "program for the Natives" by more vocal conservative white residents. Divesting itself of this label has not been easy. As the program matured and broadened its horizons, however, older whites began attending congregate meals and some now are avid supporters of and participants in the program. Staff members encourage input from program



participants and strive to develop activities that meet the diverse interests and needs of elderly persons in the region.

Problems and Needs

What are the concerns of older Upper Tanana whites and Natives, and what do they view as being their most serious problems? The final section of this chapter examines problems affecting the Upper Tanana elderly and suggests potential solutions to these problems, as perceived by 60 survey respondents. Since these were open-ended inquiries, the responses should be viewed as indicators of major concerns and not necessarily the only problems or most realistic solutions.

The problems identified in Table 4.16 resemble those experienced by many older Americans in rural areas, especially in cross-cultural settings where aging services are sometimes limited. Most problems cited in the table are more prevalent among Natives--at least this viewpoint was expressed by both Native and white respondents, and is supported by data presented earlier in the chapter. Yet, consideration must be given to the proclivity of older Natives to vocalize their problems and more readily accept aid from institutional resources, which sometimes are geared more to Natives than to whites in similar circumstances. Many white elders in the Upper Tanana region, for example, are not accustomed to asking for assistance and construe this as a sign of weakness or a threat to one's independence. In-home assistance is one illustration of this attitude: Homemaker services are available in several Upper Tanana communities but currently used only by Natives. The Upper Tanana Aging Program has found whites generally unresponsive to this service. As one man said,

1. The first part of the report is a general statement of the purpose of the study and the scope of the work.

2. The second part of the report is a description of the methods used in the study.

3. The third part of the report is a description of the results of the study.

4. The fourth part of the report is a discussion of the results of the study.

5. The fifth part of the report is a conclusion of the study.

6. The sixth part of the report is a list of references.

7. The seventh part of the report is a list of appendices.

8. The eighth part of the report is a list of figures.

9. The ninth part of the report is a list of tables.

10. The tenth part of the report is a list of footnotes.

11. The eleventh part of the report is a list of acknowledgments.

12. The twelfth part of the report is a list of abbreviations.

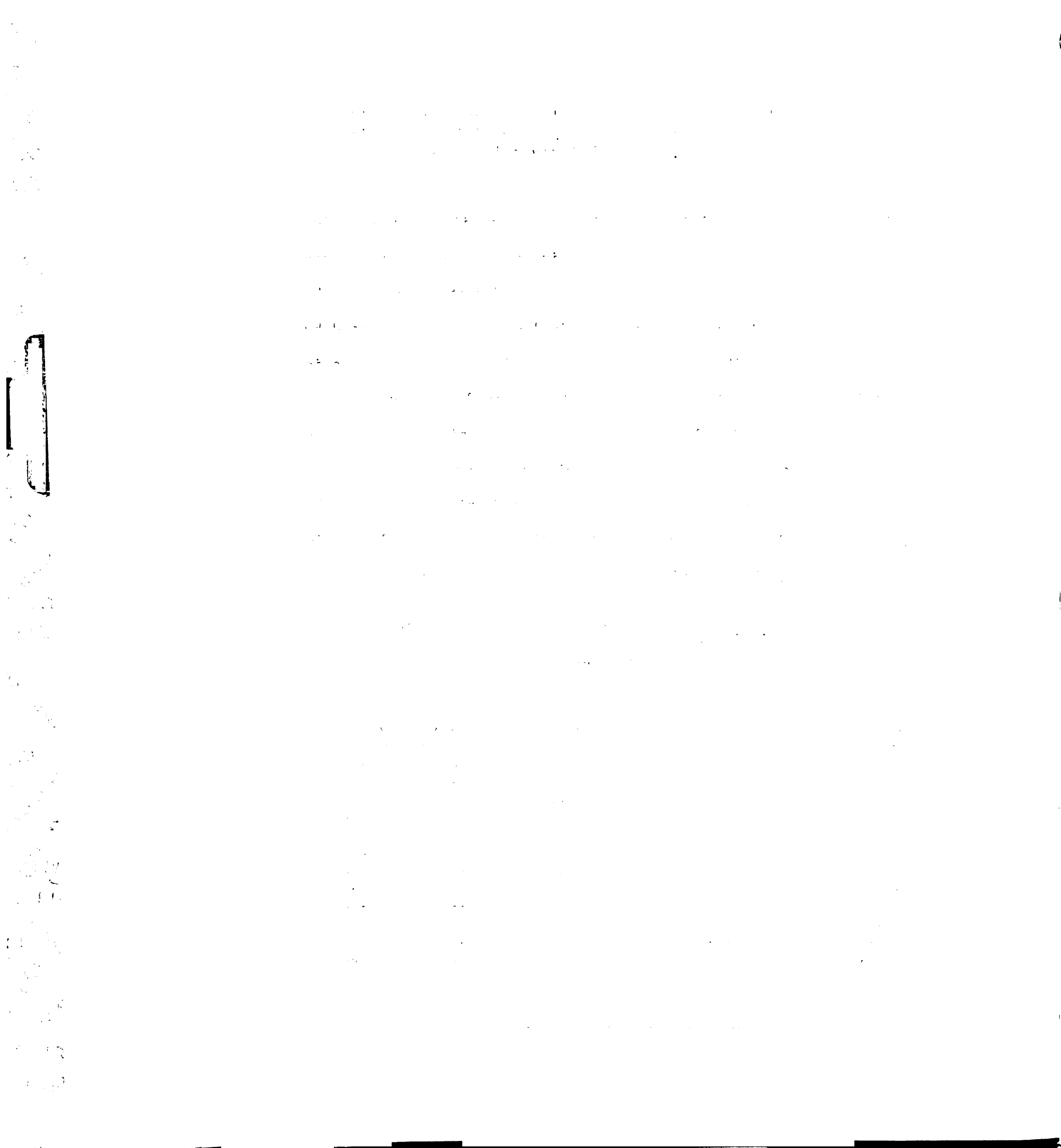
13. The thirteenth part of the report is a list of symbols.

Hell, I don't want some woman nosin' around my house. I'd have to stay around while she was there, and probably clean it up a bit before she came. Then I'd never be able to find anything when she got done.

Older whites did complain about the limited availability and high cost of medical and legal services. In their view, Natives have access to reasonably comprehensive medical services provided at minimal cost by the federal government, and can have certain legal matters addressed by Native organizations. The next chapter will examine medical services in more detail and address this disparity. As far as legal services are concerned, the Alaska Legal Services Corporation assisted some elder Natives and whites in preparing wills during the course of fieldwork, and was actively involved in Native land issues affecting Natives of all ages, but technically could not offer the additional kinds of legal aid some whites needed. Two examples are a dispute over book royalties and

Table 4.16. Problems of the Upper Tanana elderly cited by study participants. (N=60, some multiple responses)

| Problem | Total %
(N=60) | % Native
(n=35) | % White
(n=25) |
|------------------------------|-------------------|--------------------|-------------------|
| Financial | 48% | 48% | 48% |
| Transportation | 42% | 43% | 40% |
| Housing | 35% | 37% | 32% |
| In-home assistance | 35% | 57% | 4% |
| Medical care | 30% | 20% | 44% |
| Legal aid | 17% | 3% | 36% |
| Alcohol abuse | 13% | 17% | 8% |
| Communication | 13% | 6% | 24% |
| Too few activities | 12% | 11% | 12% |
| Cold weather | 10% | 6% | 16% |
| Neglect/abuse/discrimination | 8% | 11% | 4% |
| Loneliness/isolation | 7% | 6% | 8% |
| Nutrition | 3% | 3% | 4% |



a case in which an organization had defaulted on its payments for property purchased from an elderly couple.

Some elders do have problems like those mentioned in Table 4.16 and other perceive their peers to have such difficulties, but this does not imply that their needs are not being addressed. Indeed, a variety of services and programs available to the Upper Tanana elderly are geared toward meeting their most pressing needs. Beyond providing direct services, as do all recipients of Older Americans Act grant funds, the Upper Tanana Aging Program makes referrals to other agencies and regularly apprises its constituents of services and benefits for which they qualify or may be eligible. Additionally, program staff advocate on behalf of the elderly in situations calling for such action. Organizations, businesses, and community residents generally try to accommodate to the special needs of the elderly, especially in their dealings with the infirm and those living on fixed incomes.

The extent to which planned construction through the Upper Tanana region of a natural gas pipeline during the 1980s may exacerbate existing problems and introduce new difficulties warrants more attention than it can be given in this study (see Reckord 1979; Haynes 1983). Here it is important to note that respondents generally expressed more concern for the impacts of a population influx and boom-like growth on the community at large than on older persons specifically. This may stem from their lack of recent direct experience with a major development activity, uncertainty as to how their problems might differ from those of other community residents, and a certain feeling of helplessness to prevent disruption in their lives caused by a national interest project.

Generally speaking, Native elders oppose the pipeline project and fear irreparable harm would be done to plant and animal resources important in their household and community economies. Those with relatives or friends who worked on the oil pipeline project in the early 1970s recalled the detrimental effects of short-term affluence--namely, increased alcohol use, family disruption and further erosion of traditional values. Older whites had mixed feelings, believing that at least some problems inherent in rapid growth would be offset by the economic uplift to the region created by business expansion and increased employment opportunities. They did express concern for the inevitable inflation and faster pace of life which accompany a boom economy. Perhaps most striking is the fact that nearly 40 percent of those queried were undecided as to what positive or negative impacts might result from pipeline construction and related activities, and 66 percent could not suggest ways of minimizing negative impacts on the elderly.

Interethnic Relations

Interactions between white and Native elders in the Upper Tanana region occur infrequently outside the context of aging program activities and other formal gatherings. Five primary factors account for this phenomenon:

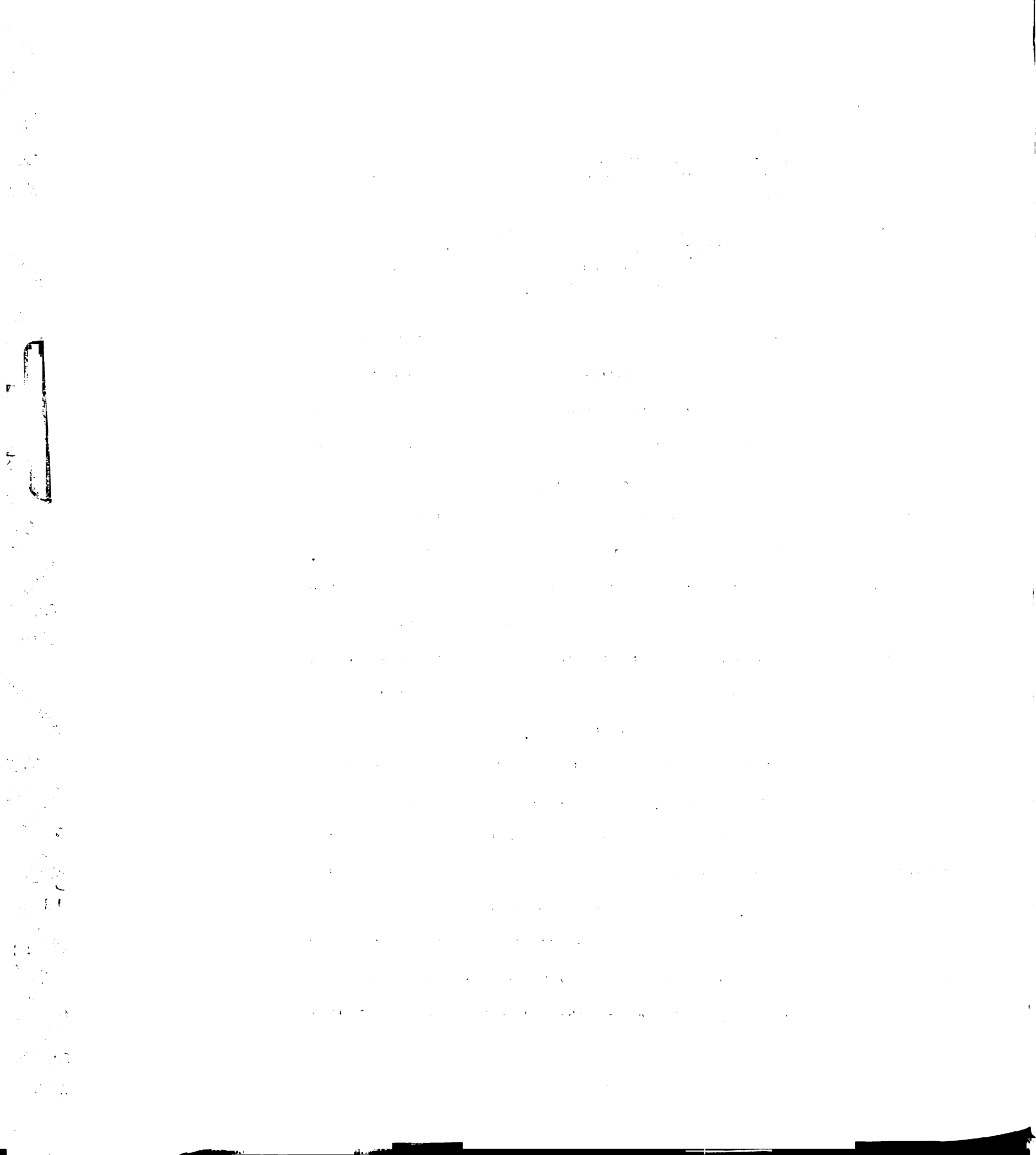
- (1) Residential Separation: Most elder whites contacted for this study reside in Tok, while all but a few Natives live in outlying villages.
- (2) Mobility: Few Natives own or drive automobiles, and rely on the aging program, relatives, or other village residents for transportation.
- (3) Short-term Acquaintances: Only a few white elders have long-term friendships with their Native peers, and their interactions over time often have taken the form of

business transactions (merchant-customer or employer-employee).

- (4) Differing Interests: Elder whites pursue different social and recreational activities than do their Native counterparts.
- (5) Communication Styles: Many older Natives do not speak fluent English and, being more reserved, find it uncomfortable to talk at length with more loquacious white elders (see Scollon and Scollon 1980).

There are notable exceptions to this trend, most involving Natives who have interacted regularly with whites for many years and whites who are long-time residents of the Upper Tanana region. A Native woman visits her white neighbors (husband and wife) almost daily and often uses their telephone or accepts rides to town. Another Native woman not originally from the Upper Tanana region has values and interests which coincide more closely with those of elder whites than local Athabaskans. Several white men established friendships with elder Natives when they worked together as young adults, and occasionally they reminisce about "the old days." By virtue of their involvement in regional organizations and political affairs, a few elder whites and Natives find another basis for discussing matters of common interest.

Seldom is racial prejudice a basis for limiting interactions between the Upper Tanana aged. Disparaging comments normally are reserved for younger Natives or white bureaucrats, whose interests, behaviors, and actions are poorly understood by and often conflict with those of older persons. Some whites complain about real or perceived inequities in the services and benefits available to older Natives and themselves, or grow weary of the seemingly Native orientation of many aging program activities. Natives, on the other hand, may feel that



their concerns are addressed slowly or inadequately by a system they do not fully understand and place the blame on white politicians or agency personnel (both in and outside of the Upper Tanana region).

Several participants in this study, white and Native, rarely or never participate in the congregate meals sponsored by the Upper Tanana Aging Program. Some say they prefer not to take "handouts," while others do not want to socialize "with a bunch of old people." These individuals would interpret their attendance as a sign of financial need, an admission of being "old," and a threat to their independence. This is reflected in comments made by program non-participants:

I don't go to the lunches because there's old people there.

My dad frowns on federal programs. He says people would treat you kind of funny if you go.

I want to reserve my right to bitch (about federal programs), and I couldn't do that if I ate free meals.

They don't serve the meals when I'm ready to eat lunch, and I get tired of waiting to eat and then waiting for my wife to get done talking so we can go home.

Conclusion

This chapter has presented sociodemographic information for 75 elderly whites and Natives residing in the Upper Tanana region, based on data derived from personal interviews conducted in 1980 and 1981. Most Native respondents have lived in the region all their lives, while most white elders are long-time Alaskan residents with strong attachments to the way of life in the North. Whites generally are younger, better educated in terms of formal schooling, and most have higher incomes than their Native counterparts. These factors allow older whites to lead more independent lives and rely less on formal programs available to the

elderly, although many do participate at least occasionally in activities sponsored by the Upper Tanana Aging Program.

Older Natives, on the other hand, are witnessing a continual erosion of traditional Athabaskan culture and increasingly have difficulties in coping with the contemporary world. Their needs and interests often differ from those of elder whites, and the two groups do not interact frequently outside the context of congregate meals and formal aging program activities. As their influence in the village outside the family declines, older Natives still play important roles as ceremonial leaders, skilled artisans, and historians, and provide some stability in a changing culture.

Chapter V looks specifically at health and social supports, and makes further comparisons between elder Natives and whites in the Upper Tanana region. Special consideration is given to the Upper Tanana Aging Program as a source of institutional support available to elderly residents since 1975. This serves as additional background for the case studies presented in Chapter VI, which describe and compare several "types" of older persons in the Upper Tanana region, and illustrate the variety of supportive resources used by the aged.



CHAPTER V

HEALTH STATUS AND SUPPORTIVE RESOURCES

Among the major concerns of most older persons are health problems associated with aging or that are more debilitating in later life, the loss of independence, and the resulting reliance on formal and informal support systems for assistance with what formerly had been routine activities. These are matters of importance to both rural and urban elderly, but can be a more central concern to residents of sparsely-populated areas where human services are limited. This chapter examines the health status of the Upper Tanana elderly and their medical service utilization patterns, then looks briefly at causes of mortality in the past decade. Attention then turns to the supportive resources available to and used by the elderly for meeting their needs. Comparisons are made between aged whites and Natives when significant differences were observed. The final section of this chapter examines the Upper Tanana Aging Program as a case of directed culture change, and identifies stimulants and barriers to use of the program as an institutional support.

Health Status

Table 5.1 presents general health status characteristics for the study population. Since these are self-assessments, they may differ from professional medical evaluations and should be viewed only as indicators of how respondents were feeling at the time they were interviewed. Articles in a recent special issue of the International Journal of Aging and Human Development (Volume 19(2), 1984), however, do suggest

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Table 5.1. Health status of the Upper Tanana elderly (N=64).

| | n | Excellent | Good | Fair | Poor |
|-----------------|----|-----------|------|------|------|
| All respondents | 64 | 14% | 41% | 39% | 6% |
| Native female | 22 | 4% | 23% | 54% | 18% |
| White female | 10 | 30% | 50% | 20% | -- |
| Native male | 14 | -- | 43% | 57% | -- |
| White male | 18 | 28% | 55% | 17% | -- |
| Ages: 60-69 | 30 | 13% | 57% | 27% | 3% |
| 70-79 | 22 | 18% | 32% | 41% | 9% |
| 80-89 | 8 | 12% | 25% | 50% | 12% |
| 90-up | 4 | -- | -- | 100% | -- |

a strong correlation between subjective well-being and health status. More than half of the survey respondents rated their health as "excellent" or "good," with 39 percent considering themselves to be in "fair" and six percent in "poor" health. Natives generally rated their health status lower than did whites, and assessments tended to decline as age increased. Mobility and the presence or absence of debilitating chronic conditions appeared to be important criteria in these self-assessments, although there were notable exceptions. One man, badly crippled with arthritis in his lower limbs, rated his health as "excellent" and commented, "I've got some of the best health there is."

Health problems of the Upper Tanana elderly resemble those found among older persons more generally, and may restrict physical activities or require periodic medical attention. The conditions listed in Table 5.2 represent problems volunteered by respondents in personal interviews and do not comprise a complete inventory. Some persons may have preferred not to discuss certain problems during personal interviews, while others were inclined to accept their maladies as facts of life and concomitants of the aging process. For example, only one Native

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respondent mentioned having respiratory problems, although many have been afflicted with tuberculosis and today remain highly susceptible to respiratory ailments. Elder whites and Natives alike may have interpreted my inquiries regarding health problems to include only those that were troublesome or debilitating at the time of the interview.

Table 5.2. Self-reported health problems of Upper Tanana elder whites and Natives (N=60, some multiple responses).

| Condition | n | % |
|---------------------------|----|-----|
| Arthritis | 25 | 42% |
| Visual/hearing impairment | 13 | 22% |
| Cardiovascular condition | 8 | 13% |
| Lingering injury | 7 | 12% |
| High blood pressure | 6 | 10% |
| Other internal disorders | 6 | 10% |
| Overweight/obesity | 4 | 7% |
| Alcohol-related | 4 | 7% |
| Losing sense of balance | 4 | 7% |
| Impaired mental capacity | 4 | 7% |
| Back problem, unspecified | 4 | 7% |
| "Old age" | 4 | 7% |
| Diabetes | 3 | 5% |
| Hernia/rupture | 3 | 5% |
| Other | 16 | 27% |
| None mentioned | 14 | 23% |

Arthritis, cited as a problem by 42 percent of all respondents, is not uncommon among older Alaskans who have led arduous lives in the often harsh and demanding Subarctic environment. Other prevalent conditions include visual and hearing impairments, cardiovascular disease, high blood pressure, lingering effects of old injuries, other internal disorders, and unspecified problems attributed to "old age." Most respondents have adjusted their lives as necessitated by such

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conditions. Only the very old and those with disabling chronic ailments complained openly about their declining health status.

Natives vocalized their health problems more openly than did elder whites, and often placed the blame on old age and infectious diseases introduced during the contact period. One Native man recalled his experience upon learning that he had contracted tuberculosis some years ago:

In 1959 I go to hospital 'cause I got TB. My boy go, too. My boy have surgery two times, he way 'head of me. I go to Juneau on big plane. Before I get to airport, plastic bag almost full of blood I spit in it. In hospital in Mt. Edgecumbe, when I get there, he (physician) tell me, "I don't think you have any hope." I tell him, I not come here to die, I come to get well. Now you give me no hope. I say, you probably got the medicine to cure me, so cure me.

This man recuperated, despite the physician's pessimism, and returned home after being hospitalized for nearly one year. Many others stricken with tuberculosis were less fortunate, and many elder Athabaskans living today (indeed, Alaskan Natives generally) saw loved ones go to a hospital or sanitarium and never return. This has led many to fear hospitalization and view hospitals as a place where one goes to die rather than be cured. Compounding this mistrust is the absence of hospitals in the Upper Tanana region, which means that one must travel at least 140 miles (to Glennallen) and probably farther for inpatient care, since medical facilities in Fairbanks or Anchorage offer more comprehensive services and are used most often. One can speculate as to the effect this has on elder Natives' reluctance to report symptoms.

Visual, hearing, and dental problems are commonplace among the Upper Tanana elderly. Nearly all (96 percent) wear glasses at least part of the time, and of those queried, 38 percent had experienced

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recent problems with corrective lenses and 43 percent mentioned having some other visual difficulties. Frequent complaints included cataracts and confusion when using bifocals. The expense of eye examinations and replacing faulty eyeglasses has led some persons to delay taking needed action for visual problems.

Almost half of those responding (31 of 63) had some type of hearing deficiency, and many had noticed a gradual decline in their hearing ability in recent years. Several men attributed such difficulties to having worked for many years as heavy equipment operators or in other noisy surroundings without adequate ear protection. Only three respondents currently use hearing aids and three others have in the past; all disliked the devices and were dissatisfied with their performance.

Twenty persons had lost all their natural teeth, while 25 wore partial plates or complete dentures. More than half of those with at least some teeth reported them to be in fair condition. Common complaints included a general deterioration of the teeth, gum infections, and sensitivity to cold weather and liquids. Of those wearing dentures, 43 percent cited problems associated with their use but most were happy to have the ability to chew once again. Although reported dental problems were most severe among elder Natives, some, including the oldest, had the soundest teeth of all persons interviewed. This may be related to the low proportion of processed sugars in the traditional Native diet.

The elderly voiced most frustration toward health conditions that interfere with their longstanding established routines and increase their reliance on outside assistance. Those with hernias and back problems are unable to split wood or haul water, or must exercise

caution when doing so. Periodic dizzy spells prevent one man from driving and one woman takes walks less frequently. A few individuals are heavy drinkers, despite receiving repeated warnings from health care professionals about the dangers of alcohol and its aggravation of existing health conditions. Elders with whom I spoke generally responded to their declining health in one of three ways: They either (1) made the necessary adjustments in their lifestyle; (2) ignored the presence of symptoms and carried on as if they were not troubled at all; or (3) resisted making any changes unless and until matters worsened.

Payment for Services

All but two respondents had medical insurance or alternative coverage for medical care. Table 5.3 lists the various types and combinations of coverage held by 71 persons. All Alaskan Natives are eligible for reasonably comprehensive medical care at little or no cost from the Alaska Area Native Health Service (AANHS) in Anchorage or Fairbanks, or from providers under contract to AANHS in Tok and Delta Junction. This includes certain visual and dental services, although funds often are earmarked for younger clients and patients sometimes encounter long delays for non-emergency assistance. Additionally, community health aides in the four villages and the public health nurse in Tok provide care in the villages for routine ailments at no cost to the patient.

Although Medicare and private insurance programs assist many white elders with medical expenses, this coverage is generally less comprehensive than that available to Natives through AANHS. Some white respondents were annoyed that Medicare does not cover services they



Table 5.3. Types of medical insurance or alternative coverage used by the Upper Tanana elderly (N=71).

| Type of Coverage | n | % of Total |
|------------------------------------|----|------------|
| Alaska Area Native Health Service | 42 | 59% |
| Medicare (Plan B) + private policy | 10 | 14% |
| Medicare (Plan B) | 9 | 13% |
| Private policy | 4 | 6% |
| AANHS + private policy | 2 | 3% |
| Medicare (Plan A) | 2 | 3% |
| Medicare (Plan A) + private policy | 1 | 1% |
| AANHS + Medicare (Plan B) | 1 | 1% |

needed most often, including visual and dental care, and routine office calls. Both whites and Natives complained about the high cost of travel associated with obtaining medical care outside the Upper Tanana region.

Even if the elderly have adequate financial resources for meeting their medical expenditures, this does not ensure their well-being in the Upper Tanana region. Extremely cold weather conditions during the winter months can bring travel to a standstill; a victim of a cardiac arrest in -60° F temperatures could not be transported to emergency medical facilities without additional risk to emergency personnel and vehicles. Another factor is the presence in the region of only a few skilled health care professionals and emergency medical technicians, most of whom reside in or near Tok, and the very limited medical facilities needed most often by older persons. The elderly are, of course, well aware of these circumstances, but most would consider relocating to an urban area where comprehensive services are more accessible only in extreme circumstances.

One such person residing in a remote Upper Tanana community not focused upon in this presentation faced a life-threatening situation for an unusual reason. The man used prescription drugs for a heart

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condition and at regular intervals mailed his containers to a Fairbanks pharmacist for refilling. Mail service to this community is limited to one delivery each week, weather conditions permitting. One time the man inadvertently transposed the mailing labels and, in effect, mailed the empty containers to himself. A week later the package came back and two more weeks passed before he received the medication, during which time he used all his remaining supply. This man fortunately suffered no long-term ill effects, but experienced some anxious moments. A related problem for this same man was not knowing that some of his medical expenses were reimbursable through Medicare--a factor related in part to his residence in a community without social or medical services.

Preventive Health Practices

Fifty-one respondents were asked to identify what they do to improve or maintain their health. These health-promoting practices, presented in Table 5.4, may in some cases represent what are perceived as healthy activities (and, thus, what the interviewer wants to hear), rather than those actually utilized. A majority of aged respondents, however, are conscious of the value in being active and most do pursue meaningful endeavors in their free time. Interestingly, several practices cited most often relate more to mental health than physical well-being, although distinguishing between the two may be inappropriate in this context. Excepting a few homebound elderly with incapacitating health conditions and a few others who use alcohol to excess, most older Upper Tanana whites and Natives enjoy activities that give a sense of satisfaction or accomplishment.

the first of these is the fact that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The second is that the system is not a static one, but a dynamic one, in which the various parts are constantly changing and evolving. The third is that the system is not a closed one, but an open one, in which the various parts are constantly interacting with the environment. The fourth is that the system is not a linear one, but a non-linear one, in which the various parts are constantly interacting with each other in a non-linear fashion. The fifth is that the system is not a deterministic one, but a probabilistic one, in which the various parts are constantly interacting with each other in a probabilistic fashion. The sixth is that the system is not a simple one, but a complex one, in which the various parts are interrelated and interdependent. The seventh is that the system is not a static one, but a dynamic one, in which the various parts are constantly changing and evolving. The eighth is that the system is not a closed one, but an open one, in which the various parts are constantly interacting with the environment. The ninth is that the system is not a linear one, but a non-linear one, in which the various parts are constantly interacting with each other in a non-linear fashion. The tenth is that the system is not a deterministic one, but a probabilistic one, in which the various parts are constantly interacting with each other in a probabilistic fashion.

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For example, most have by necessity been active throughout their lives and are not accustomed to having extended periods of idle time. Many now have more latitude in determining how to use this time and continue to pursue meaningful activities. A slogan suggested by one woman at an organizational meeting of a senior citizens' advisory council to the Upper Tanana Aging Program sums up the attitude of many older persons in the region. This woman urged the group to adopt a motto that captured the spirit of older people. "Throw away your crutches," she said, "and let's show everyone that we're not helpless." Such an attitude resembles a comment made by an earlyday pioneer who did not let old age and declining health deter his continuing search for rich gold-bearing deposits. On one particularly difficult trip in rugged country, a younger companion (now a senior citizen residing in Tok) asked the old timer why he did not take life a bit easier, to which he replied, "I'd rather wear out than rust out."

Most of the elders I visited in the Upper Tanana region seem to share this attitude and will "wear out" before they "rust out." Elder whites can often be found tackling a home improvement project or assisting a community organization with a worthwhile endeavor. One man jogs daily and another rides a bicycle regularly. Several are self-employed, operate businesses, or work seasonally or part-time, and no fewer than three long-time residents have written books. Older Natives are sometimes less visible but several have custody of grandchildren, which leaves little time for regular activities outside the home. Many pursue seasonal subsistence activities or produce exquisite Athabaskan craft-work, both requiring skill, patience, and stamina. Some regularly

Table 5.4. Health-promoting practices of the Upper Tanana elderly (N=51, some multiple responses).

| Practice | # Adherents | % |
|--|-------------|-----|
| Work/keep busy | 24 | 47% |
| Walking/hiking | 22 | 43% |
| Other outdoor activities (gardening, fishing, woodcutting, etc.) | 17 | 33% |
| Proper diet | 8 | 16% |
| Exercise | 6 | 12% |
| Work toward a goal/keep mind occupied/positive mental attitude | 5 | 10% |
| Take vitamins | 4 | 8% |
| Moderation/lead normal life | 4 | 8% |
| Craftwork/sewing/etc. | 3 | 6% |
| Don't smoke | 2 | 4% |
| Get adequate rest | 1 | 2% |
| Take steambaths | 1 | 2% |

travel to neighboring communities to assist with preparations for potlatches and visit with friends and relatives.

Medical Resources

Practices like those listed in Table 5.4 are important for health maintenance and illness prevention, but obviously do not serve as treatment modalities for all problems afflicting the aged. Upper Tanana elders respond in a variety of ways to health conditions which disrupt their normal routines, as will be illustrated in this section. Initially, however, the institutional resources available in the Upper Tanana region are identified and the extent to which they address service needs of the aged is discussed.

Medical Services in the Upper Tanana Region

Despite living in a sparsely-populated rural area, far removed from a major urban center, Upper Tanana residents enjoy access to a

relatively wide range of health and human services. Although most services are located in Tok, their catchment areas normally include outlying villages and bush communities. These include a public health clinic, community mental health center, alcohol and drug abuse counseling program, social services, and the aging program. A physician assistant and registered nurse provide services in the community-owned clinic, which operates under contract with a medical center in Fairbanks. A small corps of emergency medical technicians (EMTs) works voluntarily with the Tok Ambulance Service and responds to medical emergencies; residents of Northway currently are developing a similar program that will improve emergency response capabilities nearer to the Canadian border. Finally, resident community health aides provide care commensurate with their level of training to inhabitants of the four Athabaskan villages.

Physicians and other specialists travel periodically to the Upper Tanana region to offer medical services not routinely available. These include dental, visual, and OB-GYN clinics held in Tok, and visits by AANHS medical and public health staff to Tok and surrounding villages. Additionally, military personnel and equipment from Fort Greely (near Delta Junction, about 100 miles west of Tok) are sometimes available for emergency medical evacuations by helicopter from the Upper Tanana region to hospitals in Anchorage or Fairbanks.

Although providers direct few services specifically to the elderly, the special needs of this group are acknowledged and accommodated to the extent possible. The public health clinic administers influenza injections each year to persons 55 years of age and older, and conducts audiometric testing to screen clients for hearing deficiencies. An

1. The first step in the process of the scientific method is to make an observation or ask a question.

2. The second step is to do background research to learn what is already known about the topic.

3. The third step is to form a hypothesis, which is a prediction or an educated guess about the outcome of the experiment.

4. The fourth step is to design and conduct an experiment to test the hypothesis.

5. The fifth step is to analyze the data and draw a conclusion based on the results of the experiment.

6. The sixth step is to communicate the results of the experiment to others in the scientific community.

7. The seventh step is to repeat the experiment to verify the results and to make any necessary adjustments.

8. The eighth step is to use the results of the experiment to make a prediction about the outcome of a future experiment.

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28. The twenty-eighth step is to use the results of the experiment to make a prediction about the outcome of a future experiment.

outreach worker from the Tanana Chiefs Conference (the non-profit arm of Doyon, Limited, the regional Native corporation encompassing much of interior Alaska) gives blood pressure exams twice monthly at the senior citizen's congregate meals site in Tok. Several older persons have been clients at the alcoholism counseling program and community mental health center. Beyond these specific instances, human services providers influence the well-being of older persons as cornerstones of their formal support systems. This will be discussed in more detail later in the chapter.

Response to Illness

Although systematic examination of health-seeking behavior (cf. Chrisman 1977) among the Upper Tanana aged is not a focus of this study, sufficient data were recorded to illustrate the diverse responses of older persons to illness episodes and chronic conditions. The variety of actions taken can be attributed to age, ethnic, and economic differences, and experience with institutionalized medicine. Additionally, long-time residents of the region are not accustomed to having convenient access to medical services that often are taken for granted in many rural American communities. I identified several different responses to illness during my field research, some of which occur in combination as a medical problem runs its course.

Resigned Acceptance

Certain ailments either are seen as symptomatic of the aging process or for other reasons not considered serious problems. Although action might eventually be taken to alleviate chronic, persistent, or debilitating symptoms, the initial response of some elders is to accept

the problem as a fact of life. Several persons have experienced gradual hearing loss in recent years, for example, and so far elected not to pursue corrective action. These were "young-old" persons who felt the problem was not serious enough to warrant consideration of a hearing aid--which, in their view, symbolizes old age and dependence. As long as the problem can be alleviated somewhat through alterations in their personal environment (e.g., increasing the volume on the radio or maintaining careful eye contact during conversations), these individuals seem to cope satisfactorily with their impairment.

Some elders do not seek aid for economic reasons, fearing that hospitalization or other special treatment would exhaust their meager financial reserves. They hope the problem will go away or that eventually they can afford the necessary treatment. For reasons stated previously, elder Natives often are reluctant to reveal symptoms that might require treatment or hospitalization outside the Upper Tanana region. Furthermore, communication problems between Natives and white health care professionals serve as deterrents to the health-seeking process. One Native woman who has bridged the communication gap better than many of her peers nevertheless offered this rationale for avoiding physicians:

Whenever I sick, I just suffer out. My grandfather never went to see doctor, so why should I?

Folk Practices

Folk medical practices and alternatives to mainstream Western medicine are not uncommon in the Upper Tanana region. Although elder Natives are increasingly inclined to enlist professional assistance if they seek aid at all, some turn to time-tested traditional practices for

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treating routine ailments. Teas made from a variety of local plants are valued in the treatment of respiratory illnesses, sore throats, and the common cold. When heated and applied to open wounds, spruce pitch is said to be effective in drawing out infection. Men and some women find that steam baths provide temporary relief for arthritis, sinus problems, and respiratory ailments. A few of the "old-old" Natives possess shamanistic powers, but their use for healing purposes was not examined in this study--primarily because informants were reluctant to discuss the topic and face possible repercussions from shamans.

Older whites also rely on home remedies for treatment of some illnesses. To treat a burn, one woman applied vitamin E to the wound and wrapped it with gauze. An elderly man recommended to a peer a "sure-fire" treatment for influenza: drink a tea made from cayenne pepper and garlic; whether or not this had the desired effect, it might at least divert one's attention! Epsom salts are effective for treating open wounds and burns, according to earlyday pioneers who used this remedy.

During a recent influenza outbreak in the region, one couple dispensed a clear liquid medicine obtained outside the United States to friends dissatisfied with treatment provided at the local clinic. This illustrates the "I'll do whatever it takes to get better" attitude of some white elders. Another example involves a woman diagnosed as having cancer. Physicians in Alaska were unable to treat her symptoms, but a nurse at an Anchorage hospital suggested that the woman consider seeing a faith healer in the Phillipines. The woman and her husband (suffering from cataracts and glaucoma) were not the first Upper Tanana residents to seek such treatment, and reported satisfaction with the outcome.

Inspired by their success, other friends and family members have since followed in their footsteps.

Professional Medicine

Nearly all respondents had sought professional treatment for a medical problem within the past year or had undergone a physical examination. The resources consulted ranged from the village health aide, physician assistant or public health nurse in Tok, to specialists elsewhere in Alaska and the continental U.S. A few had been hospitalized at private or AANHS facilities in Anchorage and Fairbanks. The reasons for seeking aid varied widely: Routine maladies were treated by health aides or the physician assistant; more serious acute conditions required the hospitalization of several elder Natives, two of whom died during the course of fieldwork. One man obtained new dentures during a winter trip to Arizona, since prices there were significantly lower than in Alaska.

An examination of cases treated at the Tok Community Clinic during a seven-month period in 1981 illustrates the kinds of problems taken there for disposition. Between February and August, 41 persons 55 years of age and older made a total of 139 visits to the clinic. Nearly one-third were 55 to 59 years old, 59 percent were females, and 66 percent had Native ancestry. Table 5.5 denotes the reasons for these visits, with respiratory, circulatory, musculoskeletal and ill-defined ailments heading the list. Prominent among these are both acute and chronic conditions, including upper respiratory infections, bronchitis, heart disease, hypertension, and osteoarthritis. Four persons sought treatment or underwent a checkup for diabetes mellitus and three others

1. The first step in the process is to identify the problem or issue that needs to be addressed.

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2. The next step is to gather information and data related to the problem.

3. Once the information is gathered, the next step is to analyze the data and identify the root cause of the problem.

4. After analyzing the data, the next step is to develop a plan of action to address the problem.

5. The final step is to implement the plan and monitor the results to ensure the problem is resolved.

6. Once the problem is resolved, the next step is to evaluate the process and make any necessary adjustments.

7. The final step is to document the process and results for future reference.

8. The final step is to communicate the results of the process to the relevant stakeholders.

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Table 5.5. Patient diagnoses at the Tok Community Clinic for persons 55 years of age and older, February-August 1981 (N=41 clients).*

| Diagnosis | n | % of all visits |
|--|-----|-----------------|
| Diseases of respiratory system | 19 | 17.1 |
| Symptoms and ill-defined conditions | 19 | 17.1 |
| Diseases of circulatory system | 14 | 12.6 |
| Diseases of musculoskeletal system and skeletal system | 11 | 9.9 |
| Medical and special examinations | 9 | 8.1 |
| Diseases of genito-urinary system | 8 | 7.2 |
| Endocrine, nutritional, and metabolic diseases | 6 | 5.4 |
| Diseases of nervous system and sense organs | 5 | 4.5 |
| Accidents, poisoning, and violence | 4 | 3.6 |
| Diseases of digestive system | 4 | 3.6 |
| Adverse effects of medical agents | 3 | 2.7 |
| Infective and parasitic diseases | 3 | 2.7 |
| Diseases of skin and subcutaneous tissues | 3 | 2.7 |
| Medical and surgical aftercare | 2 | 1.8 |
| Diseases of blood and blood-forming organs | 1 | 0.9 |
| TOTAL | 111 | 100.0 |

*Not tabulated are follow-up visits or multiple visits by the same client for a previously reported diagnosis (N=86).

had reacted adversely to prescription medicines they were taking. Some elders made multiple visits for the same condition, with the extreme being one client seen 18 times for chronic renal failure.

Only four clients were referred for medical care outside the Upper Tanana region, according to information derived from patient charts and provided by clinic staff. This, of course, does not reflect actual use patterns of other facilities, and only suggests that most clients may have obtained satisfactory treatment for problems taken to the Tok Community Clinic.

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Table 5.6. Causes of death among Upper Tanana residents 60 years of age and older, January 1973 - February 1982 (N=24).

| Cause of Death | n | Native | White | % of Total |
|---------------------|----|--------|-------|------------|
| Heart attack | 5 | 1 | 4 | 21% |
| Heart disease | 4 | 3 | 1 | 17% |
| Cancer | 4 | - | 4 | 17% |
| Cause unspecified | 3 | 3 | - | 12% |
| Stroke | 2 | - | 2 | 8% |
| Pneumonia | 1 | 1 | - | 4% |
| Hypothermia | 1 | 1 | - | 4% |
| Renal failure | 1 | 1 | - | 4% |
| Brain hemorrhage | 1 | 1 | - | 4% |
| Alcoholism-related | 1 | 1 | - | 4% |
| Automobile accident | 1 | - | 1 | 4% |
| TOTALS | 24 | 12 | 12 | 100% |

Death and Dying

A total of 24 deaths among elderly residents of the five study communities were recorded during the nine-year period ending in February 1982. The causes of death are listed in Table 5.6, while the age, sex, and ethnicity of the deceased appear in Table 5.7. Interpretation of these tables is difficult, although the causes of death resemble those resulting in mortality among older persons throughout the United States. For example, elder whites in the Upper Tanana region appear to die at much younger ages than do their Native counterparts. This may be attributable, in part, to the questionable accuracy of Natives' ages and the absence of information on elder white outmigration patterns.

A few elderly persons died during my residence in the region and several more since my departure. Their passing is a loss shared by family, friends and the community, but normally attracted less attention and for a shorter period than did the death of younger persons (the

Table 5.7. Age at time of death, Upper Tanana Native and white elders, January 1973 - February 1982 (N=24).

| Age at death | Female | | Male | | Total |
|--------------|--------|-------|--------|-------|-----------|
| | Native | White | Native | White | |
| 60-69 | 1 | 4 | 2 | 6 | 13 (54%) |
| 70-79 | 2 | 1 | - | 1 | 4 (17%) |
| 80-89 | - | - | 5 | - | 5 (21%) |
| 90-up | 1 | - | 1 | - | 2 (8%) |
| TOTALS | 4 | 5 | 8 | 7 | 24 (100%) |
| Range | 61-93 | 65-77 | 62-92 | 63-78 | 61-93 |
| Mean Age | 75.2 | 68.0 | 79.6 | 66.0 | 72.5 |

immediate family and close friends, obviously, are excluded from this generalization), unless death occurred unexpectedly or as a result of an accident or violence. As typically is the case in rural communities, however, nothing is spared to aid close relatives of the deceased during their bereavement.

Following the death of a person in the Upper Tanana region, the body usually is transported to a mortuary in Fairbanks and prepared for burial, then returned for the funeral and interment to the decedent's home community. Services sometimes attract so many mourners that they are held in the school gymnasium or community, rather than in a local church. Each community has a small cemetery in which long-time residents normally are buried. Relatives of a deceased Native must give a small potlatch in conjunction with the funeral, which serves to thank visitors and compensate other kin who attended to the deceased and matters pertaining to burial. Although the official "funeral potlatch" for that individual may not occur for several years, this potlatch may

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involve several days of feasting and dancing, culminated by the giving of gifts by the host clan to the guests (cf. Guedon 1981).

Supportive Resources

Changes occurring in an individual's social environment are perhaps most dramatic in later life. Retirement, lower economic productivity, declining health status, and the death of a spouse or age peers can, collectively or individually, weaken older persons' self-esteem and isolate them from the mainstream of society. The detrimental effects of such changes can be reduced if the aged have reliable support systems to which they can turn for solace and aid. This section examines the supportive resources available to and utilized by the Upper Tanana elderly, and assesses their effectiveness in meeting the needs of this population.

A useful framework for this examination is presented by Shanas (1979), in summarizing selected findings from a national survey of non-institutionalized persons 65 years of age and older:

... Older persons turn first to their families for help, then to neighbors, and finally, to the bureaucratic replacements for families, social workers, ministers, community agencies and others because they expect families to help in case of need. Family members respond to the needs of the elderly as best they can, either directly or by providing a linkage with bureaucratic institutions ... (Shanas 1979:174).

Data from the Upper Tanana study correspond generally with this assessment, although some variations prevail for reasons like those identified by Weeks and Cuellar (1981), in their multiethnic study of the aged in San Diego County, California. These authors attributed variations in the family support networks of the elderly to ethnic and cultural factors that either discouraged or encouraged using specific sources of

aid. Attitudes toward self-reliance, for example, may dissuade the aged from seeking aid from relatives, just as language barriers can complicate the quest for assistance from public agencies.

Family members comprise the first line of support for most Upper Tanana elders who participated in this study. Excluded from this generalization are the few white persons who live alone and either have no close blood relatives or none with whom they maintain regular contact. Only 23 percent of all respondents live alone (refer to Table 4.11 in Chapter IV), while most other households include one or more persons who can provide varying kinds of aid or emotional support to the elder occupants. There are isolated instances, however, in which older Natives bear an inordinate share of the responsibility in households that include unemployed adult children and/or dependent grandchildren for whom the elders have custody. This situation must be viewed in the context of a culture in transition, with senior members offering vital economic aid and parental guidance in exchange for the opportunity to retain the close kin ties they value so highly. Additionally, the family is one institution in which elder Natives can assert authority, at a time when their formal leadership status in the community is waning.

Table 5.8 shows that most respondents have living children and/or siblings, although their importance as supportive resources is dependent upon such factors as residence, age, ethnicity, and economic status. Only one elder white has a sibling who lives in Alaska, as compared to more than half of all Native respondents, but this does not imply major differences in their respective importance to the Upper Tanana aged.

Table 5.8. Presence of siblings and children in the family networks of the Upper Tanana aged (N=75).

| Respondent has: | White | | | Native | | |
|-------------------------------------|-------|------|-------|--------|------|-------|
| | % | Mean | Range | % | Mean | Range |
| Living siblings ¹ | 89% | 2.8 | 0-10 | 53% | 1.3 | 0-8 |
| Siblings in Alaska | 4% | 0.3 | 0-1 | 51% | 1.2 | 0-8 |
| Siblings in the Upper Tanana region | 0 | 0 | 0 | 51% | 1.1 | 0-8 |
| Living children ² | 86% | 3.0 | 0-10 | 93% | 4.5 | 0-12 |
| Children in Alaska | 72% | 2.3 | 0-10 | 93% | 4.4 | 0-12 |
| Children in the Upper Tanana region | 54% | 1.1 | 0- 7 | 91% | 3.4 | 0-12 |

¹Three white and 21 Native elders had no living siblings.

²Four white and 3 Native elders had no living children.

Native elders may interact in person more frequently with their siblings, yet many whites maintain contact with brothers and sisters through letters, telephone conversations, and periodic visits. Whether the interactions are face-to-face or indirect, they are valued and important sources of emotional support.

All but four white and three Native elders have living children, many of whom reside in Alaska and in or near the Upper Tanana region. Some white elders moved to the Upper Tanana region after their children had left home, while some children reared there relocated as a result of marriage or employment opportunities. Children of Native elders rarely have lived outside the region for extended periods, and some share housing with their aged parent(s) for at least part of the year.

Whether or not they live in the Upper Tanana region, white adult children generally appear more capable than their Native peers of providing a wider range of support to aged parents. White children more

often have year-round employment, comparatively high economic security, and separate residences--and thus live independently of their parents. Furthermore, they often have better formal educations and more experience in dealing with the business world and the bureaucracy than do their Native counterparts. Finally, white adult children are less likely to be struggling with broader cultural issues that might transcend the attention they can give to their parents.

This is not to suggest negligence or disinterest on the part of Native adult children, for they are important resources to their parents and are more likely to live nearby. Elder Natives adhere to traditional values, which emphasize cooperation within the family unit, and in some instances may actually give more than they receive from adult children. The elders have a regular source of income, which is not the case for many adults in Alaskan villages. In exchange for cash, food, or lodging, the elder may receive transportation and assistance with shopping and household chores. Or the elder might reside with an adult child and contribute toward overall household expenditures. What the aged Natives and outside observers perceive as exploitation might differ significantly, and some Natives seemingly condone situations that their white peers would not. The former appear willing to make sacrifices if doing so will facilitate their continued residence in the village setting.

Respondents were queried about the frequency of visits to and by relatives and friends, as a means of assessing the extent of their social interactions. Most visit or are visited by kinfolk regularly or occasionally if they have relatives living nearby. The same holds true for interactions with friends, although the elderly are more likely to

receive visitors than they are to pay social calls. Natives attribute this to transportation difficulties and health problems, while whites sometimes find little reason to pursue social contacts outside the household. The point is that most Upper Tanana elders are not socially isolated unless by choice, although this says nothing about the quality of these interactions.

Most respondents were asked to identify resources outside their immediate household to which they would turn for assistance with various needs, including transportation to the clinic or hospital, replacing a broken window, in-home services when ill, filling out a form, and obtaining a small cash loan. Table 5.9 summarizes the resources that the Upper Tanana aged have used or said they would enlist for such aid. Several trends are apparent in this table. Native elders rely predominantly on relatives, friends and aging program personnel; white elders exhibit greater diversity in their sources of support but turn most often to children or friends. Their more frequent use of age peers, banks, agencies and businesses suggests that white elders are

Table 5.9. Sources of aid mentioned by the Upper Tanana aged for addressing specific needs or problems.

| Source of Aid | Native | White | Total |
|---------------------------------|--------|-------|-------|
| Children outside household | 90% | 65% | 80% |
| Other relatives/in-laws | 77% | 33% | 59% |
| Friends or neighbors | 68% | 80% | 73% |
| Age peers | 16% | 37% | 25% |
| Upper Tanana Aging Program | 81% | 30% | 59% |
| Other agency/business | 32% | 50% | 40% |
| Bank | -- | 23% | 10% |
| One or more other sources cited | 21% | 13% | 18% |

more aware of the wide range of resources available for dealing with specific problems, or that such support is more accessible to them.

As was noted previously, elder Natives more often than whites have children in the region from whom they can request or expect assistance, although this depends upon the individual's ability to lend the aid requested. It is not unusual for other members of the extended family to offer aid if adult children cannot, thus illustrating the functional importance of traditional kinship bonds to older Athabaskans.

Friends and neighbors are important resources for many elderly persons. The close proximity of village homes facilitates daily interaction between Natives of all ages, and elder Natives frequently hosted other guests during my visits. White elders exhibit different visiting patterns with friends and neighbors, since most have their own transportation and the attendant option of socializing in a variety of settings. Even those who do not drive regularly or at all can expect callers several times during the week. Whether friends and neighbors provide substantial material aid to Upper Tanana elders or simply check on them periodically, they are visible and important supportive resources.

Natives claim not to seek assistance very often from age peers, primarily because they usually cannot provide the kind(s) of instrumental aid needed. Yet, their regular interaction as passengers on the aging vans, at congregate meals, and during community activities is an important form of companionship that curbs the flow of problems associated with isolation and loneliness. White elders again have more flexibility because more have automobiles and telephones, which allows them more control over whom they visit and the frequency of these

interactions. Face-to-face encounters generally are most numerous between age peers in the context of aging program activities.

Exceptions to this include Athabaskan potlatches, which bring together elder Natives from the Upper Tanana and surrounding regions for several days to renew ties and ensure the smooth functioning of an important ceremonial activity. Two older white men are constant fishing companions during the summer months. Several other elders interact with age peers regularly as they "make the rounds" of local businesses, agencies and restaurants, although persons of all ages are seen. Finally, three households consisting of five elder whites, telephone one another regularly as a means of ascertaining the well-being of their friends.

More formal linkages exist between many elders and service providers or businesses in the region. Although the Upper Tanana Aging Program originally targeted its services to elder Natives, in part because their needs appeared more critical at the time, the white aged now participate regularly in selected program activities. Since some whites perceive helping programs as being "handouts" or geared primarily for Natives, however, they choose to maintain a low profile and seek out other avenues of assistance. These elder whites prefer to consider requests for aid as economic transactions and often will turn to friends in the business community. This illustrates one prominent difference in the helpseeking orientations of many older Natives and whites: The latter are uncomfortable in accepting aid without feeling compelled to reciprocate in some way, while the former are more inclined to ask for assistance for critical problems with no strings attached.

Most respondents did cite the availability of multiple resources on which they could rely in times of need. One important characteristic of small communities like those in the Upper Tanana region is the concern shown when residents of any age experience a crisis. Churches, women's clubs, local businesses, and community residents will join the individual's normal support system in offering assistance. News of a crisis spreads quickly and efforts are soon mounted to help a person who has a serious illness, lost a home by fire, or experienced a death in the immediate family. These obviously are not routine matters and the elderly often require aid for less serious problems, but the presence of a larger community support system is vital and should not be overlooked.

If supportive resources are defined to include any source of companionship, then pets can be added to this inventory. Of the 60 persons for whom data are available, six have cats and 33 own dogs (ranging from the smaller household species to larger sled dogs common in Alaskan communities). Whether the owners have an obvious close attachment to their indoor pets or simply care for dogs tethered to trees in the backyard, they normally take special pains to ensure the well-being of these four-legged companions.

During the course of fieldwork, some elders with whom I interacted most frequently and felt a special affinity considered me as a source of support. It can be argued that the actions leading to this were no more than expected behavior for anthropological fieldworkers: I reciprocated to those who were key informants or who contributed significantly in other ways to my research and understanding of aging in the Upper Tanana region. To be sure, my rapport was enhanced and data collection facilitated through such actions as providing technical assistance to the

aging program, transporting the aged to congregate meals, shopping facilities, and potlatches, taking portrait photographs for display at the senior center in Tok, and assisting in senior citizens' projects. This involvement also sharpened awareness of my own feelings toward older persons and understanding of the aging process, and made it very difficult to separate my role as a researcher from that as a friend and source of emotional or instrumental support.

The Aging Program as Directed Culture Change

The final section of Chapter III described the growth and development of the Upper Tanana Aging Program during its first six years of operation. Material presented earlier in this chapter examined uses of the aging program and other formal and informal supports by elder whites and Natives in the target population. The discussion now turns to a critical assessment of the aging program as a formal, or institutional, support and helps to account for its differential reception in Upper Tanana communities. Foster's (1969) framework for directed culture change programs guides the organization of this section, with the aging program (innovating organization), elder whites and Natives (target or recipient group), and five Upper Tanana communities (interaction setting) serving as the focus of discussion.

Stimulants to Change

By initially targeting Native and low-income elders for transportation and I&R services, the aging program was responding to (1) problems identified in a needs assessment survey; (2) the presence in 1975 of a poorly-developed human services infrastructure in the Upper Tanana region; and (3) socioeconomic changes attributable largely to Native

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land claims and the oil pipeline construction boom. At about the same time, similar problems and needs were being identified among elder Natives in nearby Copper Center (Reckord 1979) and in the urban aged population in Fairbanks (Dixon 1978). Although these two communities were affected more directly by the pipeline boom and bust, the neighboring Upper Tanana region incurred many secondary impacts. Available evidence suggests that elderly Alaskans in general enjoyed little of the economic prosperity prevalent during the pipeline era and were more directly affected by pipeline-induced inflation.

Another factor which at least implicitly fostered establishment of aging services in 1975 was passage of the Older Americans Comprehensive Services Amendments of 1973, which created Area Agencies on Aging and specified that low income and minority elders should receive special consideration for services (Taietz 1975:152). Although rural areas were not specifically targeted, these focal groups in Alaska largely resided outside the state's few urban centers, where aging programs already were in place. And, as often is the case with directed change programs, they originate or are designed in urban places and then branch out to rural areas.

Finally, available evidence indicates that the aging program did not intend to undermine or displace informal support systems already in place in the Upper Tanana region. Instead, it focused initially on the aged identified as having unmet needs or inadequate supportive resources. Active involvement by local volunteers in the Native villages during the first year of operation suggests that program staff had identified and were working in concert with existing informal community support systems. Tok was not a focal community in 1975, in part because

most elders there were not particularly responsive to or thought to need the services being introduced in this grass roots program. Some elders in Tok viewed their Native counterparts as having more serious unmet needs, while others resisted being labelled as "needy" persons requiring "government handouts."

The aging program expanded both its range of services and target population during the next five years. This was a response to the generally favorable reception of transportation and I&R services by village elders and the few white participants. Congregate meals, employment, and homemaker services programs addressed nutritional and economic needs, and linked the program more directly to the statewide network of aging services. Receptivity to the aging program remained highest among the Native aged, although white elders increasingly participated in selected program activities that did not conflict with their personal values and perceptions of what they considered "handouts." This was largely attributable to involvement as staff and participants by several white elders in Tok who endorsed the program and subscribed to its goals and objectives. As a result of this participation, the aging program became more aware of and sensitive to the diverse interests and needs of the white elders.

Two additional factors affected response to the aging program during the late 1970s and early 1980s. First, the human services infrastructure in the Upper Tanana region (primarily in Tok) was expanding, attributable in part to population growth and higher expectations of this changing and expanding population. Although this deepened the resentment of some residents toward "give-away programs" and the "wasteful" use of federal tax dollars, many former skeptics increasingly found

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the aging program "acceptable." In their view, the program was aiding "old people" who had paid their dues or could no longer work--in contrast to unemployed younger people thought to be lazy or unwilling to work, and "living off the public dole."

A second factor was the changing character of the growing aged population in Tok. The newcomers often had higher expectations than did long-time residents and many did not have an informal support system to rely on in the area. Similarly, some had participated in aging program activities elsewhere in Alaska or outside the state, and desired to continue this involvement. Interactions between aging program staff and these newcomers also were influenced less by circumstances affecting dealings between persons who had been acquainted for many years. For example, one elder disliked the thought of seeking assistance from younger persons he had known since they were youngsters, and used this as rationale for not actively taking part in aging program activities.

Barriers to Change

Foster (1969:120-121) classifies barriers to change in cultural, social, and psychological categories, and provides a useful framework for assessing the forces opposing changes brought about by the aging program. A major cultural barrier, for example, was the belief by many white elders and other white residents of Tok that there was no need to change the status quo. Older persons had gotten along for many years without an aging program, in their view, so why was one needed now? To participate in the program might be construed (by the elder and his or her social network) as a sign of personal weakness and cause one to lose face among family and friends. This did not surface as a deterrent

among most Native elders, whose orientation toward receiving outside assistance was tempered by the custom of accepting aid from extended kin.

The resulting social barriers include the traditional obligations and expectations involving reciprocity among family, fictive kin, and friendship groups. This concern was particularly strong among white elders, who resisted participation in a program that, in their view, did not involve reciprocity. Most were accustomed to dealing with family or friends for needed assistance, and then to treat it much like an economic transaction, whereby something was given in exchange for something received. Equally important to these elders was not accepting aid from a government agency. This could be interpreted as a sign that their informal support system was ineffective. Similarly, such action might place a strain on long-term relationships and lead the elders' family and friends to believe that they were not honoring their obligations.

A major psychological barrier to aging program participation by many white elders was a perception that government was becoming too involved in their lives and providing unneeded assistance. For some, this continues to discourage their involvement. They did not want to participate in a program that, in their opinion, was like most social programs with which they were familiar and oriented toward the Native aged. In contrast, aging program personnel viewed their services as addressing unmet needs among a constituency that was primarily but not exclusively Native-based, but that also would enrich the social well-being of older residents in the Upper Tanana region. These perceptual differences have declined over time but continue to influence the orientation of and local participation in the aging program.

The Consequences of Change

Just as there are stimulants and barriers to change, Foster (1969:76) emphasizes that changes do not occur in isolation, and that any single change produces secondary and tertiary changes. During the period 1975 to 1981, the Upper Tanana Aging Program either directly or indirectly influenced the use of other supportive resources by elder whites and Natives. Although the program still is evolving and attempting to address the diverse needs of a growing and changing constituency, its major positive (+) and negative (-) consequences for the aged and their supportive resources can be assessed.

Improved Access to Human Services (+)

Establishment of the aging program occurred at a time when the human services infrastructure was expanding in the Upper Tanana region. Aging program staff have aided in sensitizing other local service providers to the special needs of older persons and streamlining access to these resources. For example, appointments for dental and medical care can be made, the necessary paperwork completed, and transportation provided by the aging program staff. Additionally, an interpreter normally is available to facilitate communication between elder Natives and service providers. These are tasks that elders often cannot do themselves or that their informal supports can accomplish only with some difficulty.

Increased Visibility of the Aged (+)

The aging program has reduced the isolation of older persons and increased their visibility in the region. Area residents eagerly provide entertainment or educational sessions at the congregate meals

site in Tok. Donations of salmon, caribou, and moose meat are made by individuals and agencies to the program and elders no longer able to obtain these resources themselves. An older person has for several years served as Grand Marshal at the Fourth of July Parade in Tok and, as was mentioned previously, senior citizens floats won first place trophies in the 1980 and 1981 parades. Local merchants sometimes offer discounts or make special efforts to accommodate the special needs of older customers. Examples like these suggest that many aged persons have expanded their potential sources of support through participation in the aging program; in my view, non-participants also benefit from this heightened awareness of older persons in the community.

Expanding Peer Support (+)

An important outgrowth of participation in the aging program has been expanded opportunities for social interaction among age peers. This is not to imply that all elders enjoy group activities or suffer hardships if they do not take part in aging program functions. Instead, older persons who choose to do so can become better acquainted with one another at congregate meals, and possibly exchange useful information about problems, resources, and life experiences. Regular participants in aging program activities appeared over time to become more aware of and concerned about the well-being of their peers. Similarly, elders new to the community or region had the opportunity to make new friends and ease the transition.

Declining Voluntarism (-)

After relying heavily on local volunteers during its first year of operation, contributions by unpaid personnel to direct delivery of aging

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1861. It is a very important document, as it contains the President's message to the Congress at the beginning of his first term.

2. The second part of the document is a report from the Secretary of the Treasury, dated January 1, 1861. It contains information about the state of the Treasury and the country's finances.

3. The third part of the document is a report from the Secretary of the Interior, dated January 1, 1861. It contains information about the state of the Interior and the country's resources.

4. The fourth part of the document is a report from the Secretary of the Navy, dated January 1, 1861. It contains information about the state of the Navy and the country's naval power.

5. The fifth part of the document is a report from the Secretary of the War, dated January 1, 1861. It contains information about the state of the War and the country's military power.

6. The sixth part of the document is a report from the Secretary of the State, dated January 1, 1861. It contains information about the state of the State and the country's foreign relations.

7. The seventh part of the document is a report from the Secretary of the Agriculture, dated January 1, 1861. It contains information about the state of the Agriculture and the country's food supply.

8. The eighth part of the document is a report from the Secretary of the Commerce, dated January 1, 1861. It contains information about the state of the Commerce and the country's trade.

9. The ninth part of the document is a report from the Secretary of the Education, dated January 1, 1861. It contains information about the state of the Education and the country's schools.

10. The tenth part of the document is a report from the Secretary of the Public Works, dated January 1, 1861. It contains information about the state of the Public Works and the country's infrastructure.

11. The eleventh part of the document is a report from the Secretary of the Public Health, dated January 1, 1861. It contains information about the state of the Public Health and the country's medical services.

12. The twelfth part of the document is a report from the Secretary of the Public Safety, dated January 1, 1861. It contains information about the state of the Public Safety and the country's law enforcement.

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14. The fourteenth part of the document is a report from the Secretary of the Public Administration, dated January 1, 1861. It contains information about the state of the Public Administration and the country's government.

15. The fifteenth part of the document is a report from the Secretary of the Public Opinion, dated January 1, 1861. It contains information about the state of the Public Opinion and the country's politics.

program services declined markedly. This can be attributed primarily to the employment opportunities created through the OAA Senior Community Service Employment Program and with other government funds. Former volunteers were among those who secured employment as van aides, homemakers, and in other capacities. Since few job opportunities are available in the villages and for older persons in the region, the aging program also was interested in creating jobs for qualified low-income residents. Thus, at the same time that economic benefits derived from the aging program were reaching more area residents, the pool of volunteers and opportunities for voluntarism declined.

Displacement of Informal Supports (-)

As the aging program became better established and provided a wider range of services throughout the year, some elders increasingly depended on it for aid rendered previously by family and friends. For example, program staff provided directly to participants information that normally would have been channelled through an intermediary. Elders who desired homemaker services or assistance with woodcutting and water hauling received this aid, if staff were available and a demonstrated "need" shown. In many instances, this assistance had been provided by others in the community--but perhaps less regularly or reliably--and still could provided be if necessary.

Creation of Dependency Relationships (-)

A consequence of declining voluntarism and displacement of informal supports particularly evident among Native elders was increasing reliance on the aging program for many forms of assistance. The success of the program in providing services had fostered a dependency relationship

between it and some elders. Relatives and friends felt less compelled to offer assistance previously provided, because the aging program was paying someone to do it. In some extreme instances, younger relatives would not assist with in-home services or provide transportation to town because these services were perceived to be available for the asking.

Summary

Data presented in this chapter illustrate the wide range of supportive resources available to and utilized by older persons in the Upper Tanana region. Although the Upper Tanana Aging Program has had both positive and negative influences on the support systems of older whites and Natives, on balance it has complemented existing informal resources and facilitated access to institutional supports needed by its constituents. The program has, in all probability, undermined the personal resources of some persons and fostered a dependency relationship that might be detrimental over time. On the other hand, the demands placed on those with limited resources or who have little experience in dealing with agencies and the problems common among older persons have declined, and perhaps eased tensions between some elders and their family and friends. The next chapter illustrates the diversity of supportive resources used by several elder persons in the study area, through a series of brief case studies.

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CHAPTER VI

CASE STUDIES

Sometimes I wish I was a hundred miles from here, maybe up in the Middle Fork country. I'd build a cabin, say sixteen by sixteen, near a stream with a sloping hill behind me. That way I'd be able to get wood easy and just slide it down the hill. Then all I'd need is a moose now and then and I'd be all set.

(80 year old white man)

Introduction

The preceding chapters have provided historical background and a contemporary overview of the Upper Tanana aged population, and examined the role of social support systems among the rural elderly. My objective has been to identify the attributes the Upper Tanana elderly share in common, as well as the differences resulting from such factors as age and ethnicity. The case studies in this chapter portray different "types" of older persons for whom additional data were recorded through unstructured interviews and observations. Vignettes, of course, offer insufficient detail for evaluating all aspects of an informant's life. However, they do allow some comparisons to be made between Natives and whites, men and women, the married and unmarried, and the young-old and old-old. These case studies first present general background information for several key informants, then examine the composition and functioning of their support systems. Particular attention is paid to the contributions made by the Upper Tanana Aging Program, if any, as a supportive resource.

The individuals portrayed in these vignettes do not depict all "types" of older persons residing in the Upper Tanana region. They

include unmarried men and women, residents of Tok and other communities, persons ranging in age from under 65 to more than 90 years, Natives and whites. Included are persons very active in aging program activities, others who are occasional or infrequent participants, and one who does not take part at all. These individuals also illustrate the range of supportive resources available to and used by older persons in the Upper Tanana region. Finally, they are persons who did not oppose my queries and visits to their homes--although some were more conversant than others, and some preferred not to divulge certain details of their lives that would have added to the content of these vignettes.

Pseudonyms are used and in some instances specific details have been omitted in order to conceal personal identities. Persons acquainted with the study population may recognize the individuals portrayed and consider the presentations lacking in substance and detail. Hopefully, they also will acknowledge my desire to treat informants fairly and withhold information that might unnecessarily cause embarrassment or generate animosity.

Unlike many ethnographic studies which focus on a single community, well-defined neighborhood, age cohort, or ethnic group, this research took place in five communities as far apart as 100 miles. Not all communities are depicted in the case studies, nor are those communities represented here necessarily typical of all others. Similarly, aged persons who guard their privacy, do not yet perceive themselves as being old, and expressed little interest in this study, are underrepresented.

Jim

Old people, they never used to lose their minds before they die. Now sometimes they do. I don't know why that is.

I spent many enjoyable afternoons and evenings sitting next to Jim on a well-worn sofa in his house, listening carefully as he reminisced about his long life in the Upper Tanana region and patiently answered my questions. As a young boy, Jim accompanied his parents and older siblings to the region from a bordering area and today is one of the oldest Natives still living there. Younger Natives respectfully address Jim as "Grandpa," as befits a 90+ year-old man and follows a traditional practice recorded by McKennan in the late 1920s: "... the terms tse (grandfather) and ton (grandmother) are applied indiscriminately to all distant relatives in the older generations" (McKennan 1959:121). Jim is highly regarded as having been a skillful hunter with a remarkable knowledge of the geography of the Upper Tanana and surrounding regions. I recall taking Jim and two elder Native women to a potlatch at Copper Center (about 150 miles south of Tok) in 1981 and being just as impressed as were the women when Jim named rivers and pointed out other geographic landmarks we passed along the way with amazing accuracy.

Jim first encountered white people as a young boy, when he and his father camped overnight with a party of soldiers, who introduced Jim to what were becoming highly desired Western trade goods: sugar, tobacco, tea, salt, and flour. As a young man Jim worked seasonally in the gold mining camps or at other jobs associated with the influx of white people to the Alaskan interior. For a time, Jim also operated a small store in a now-abandoned Native village, obtaining his goods from entrepreneurs in the area to supply the scattered population nearby. On several occasions he even prospected for gold, but never found it in paying quantities. Jim's dealings with white people were not restricted to

business; he recalls attending square dances and holiday celebrations that brought whites and Natives together to share in the festivities.

This involvement with white people and the cash economy did not curtail Jim's pursuit of seasonal subsistence activities so important to Natives in the area. From his father and uncle, Jim learned the hunting and other technical skills on which survival in the Subarctic depended. For many years he traveled throughout the Upper Tanana region on hunting and trading trips and ran extensive traplines in quest of furbearing animals.

Jim married his wife in the early 1920s and has four living children. Jim's wife passed away in the 1940s and today his oldest son resides with him. Although contacts are limited with his other children and they contribute minimally to his support, Jim speaks highly of them. With the exception of an elderly female cousin, Jim has no other close living relatives.

Jim's house is a frame structure that resembles many others in the small Athabaskan village where he lives. It has electricity and running water, and is adequately heated by a wood stove fashioned from a 55-gallon oil drum. It is a comfortable dwelling, now that long overdue renovations have been completed, and is sparsely furnished as are some other village homes. A few treasured photographs decorate the walls. Jim sleeps on a cot and keeps his few valuable possessions carefully wrapped and stored in a duffle bag.

On a typical weekday, Jim rises early and stokes the wood fire while making coffee on a Coleman stove for himself and his small dog, who is a loyal and affectionate companion. The village homemaker routinely stops by to wash dishes and do other housecleaning chores, and

a neighbor might drop in to report on any noteworthy events that occurred the previous night. Late in the morning, Jim joins other senior citizens from the community on the aging van, which transports them to the congregate meals site in Tok, then to shopping and medical facilities in the community. Jim normally does his grocery shopping early in the month after his checks arrive, but occasionally he must replace staples more often. Jim returns home by mid-afternoon unless the van has made one of its periodic trips to Mentasta or Delta Junction, in which case he may not arrive until evening. At night, Jim may have visitors, join in a village card game, or watch television at a neighbor's house; sometimes he remains at home and plays a few hands of solitaire before retiring. The extent to which he interacts with his son is unclear; during my visits his son either was not at home or elected not to join in our conversations.

Considering his age, Jim is in reasonably good health and leads as active a life as he can. He tires easily, however, and this in combination with arthritis and failing eyesight limits his mobility and ability to perform essential household tasks with ease. His son occasionally provides some aid, like splitting wood and preparing meals but, like Jim, does not drive an automobile or read English. The same is true for some of Jim's closest friends. Consequently, the aging program has become a vital supportive resource and Jim relies on it for numerous kinds of aid: Homemaker and transportation services, a hot meal on weekdays, assistance with shopping and correspondence, companionship, and other kinds of assistance as needed. When other efforts failed, for example, the aging program found a state agency that provided the

1. The first step in the process of the scientific method is to ask a question. This question should be based on observation and should be specific and measurable. For example, "Does the amount of sunlight affect the growth of a plant?"

2. The second step is to do background research. This involves looking up information about the topic to see what is already known and to find out what methods have been used in previous studies.

3. The third step is to form a hypothesis. A hypothesis is a statement that can be tested. It should be based on the background research and should be specific and measurable. For example, "If a plant receives more sunlight, then it will grow taller." This hypothesis can be tested by growing two plants under different conditions of sunlight and measuring their heights.

4. The fourth step is to test the hypothesis. This involves designing an experiment that will allow you to collect data that will either support or refute your hypothesis. In this case, you would grow two plants under different conditions of sunlight and measure their heights over a period of time.

5. The fifth step is to analyze the data. This involves looking at the data you have collected and seeing if it supports or refutes your hypothesis. In this case, you would compare the heights of the two plants and see if the one that received more sunlight grew taller.

6. The sixth step is to draw a conclusion. This is where you state whether your hypothesis was supported or refuted by the data. In this case, you would state whether the plant that received more sunlight grew taller than the one that received less sunlight.

7. The seventh step is to communicate the results. This involves sharing your findings with others, either through a presentation or by writing a paper. This allows others to see your work and to see if they can replicate your results.

materials and labor for making the much-needed improvements to Jim's home at no cost to him.

Jim expresses his gratitude for such assistance by donating generously to the aging program at congregate meals and when the aging van is used for special trips to potlatches. Although Jim is no more affluent than other Native elders, he manages his money well and has few relatives to whom he offers financial support. His money, in fact, poses a major problem--in the form of younger village residents who may hound Jim for cash "loans" that he assumes would be used to purchase liquor and never repaid. On more than one occasion, Jim has reported the theft of money or personal items from his house during his absence. It is not unusual for one or more villagers out on a party, sometimes with Jim's son, to continue their "celebrating" late at night at his house or sleep there, whether or not Jim has extended an invitation.

As do others of his generation, Jim laments the decline of traditional Athabaskan mores and practices that governed Native life for so many generations. He attributes this cultural decay to the dominating influence of western society in the region since the World War II era. Before then, the isolation of the Upper Tanana region discouraged all but the hardiest and most adventurous white persons, and most who remained for any length of time learned from and maintained reasonably good relationships with the Native people. Henceforth, the Alaska Highway lured thousands of "Outsiders" to Alaska, including many who had little regard for the Natives, their customs or their resources. Today, Jim looks with chagrin at the devastating effects of alcohol on the Native people and the rejection by the younger generation of elders as

role models and responsible voices in contemporary village affairs. Elders like Jim often feel helpless to do anything about it.

Jim talks at length about the past, when the Native people and villages helped one another and worked cooperatively. Before his father died, he told Jim to assist people in need and to be especially courteous to older persons. He and many other elders adhere to these traditional values, which set them apart from an increasing number of younger Natives who find their loyalties divided between two vastly different cultures.

Despite his sadness and distress regarding the changing Athabaskan culture, Jim is generally in good spirits and as active as some persons much younger. His attire often provokes good-natured ribbing at congregate meals, for one day he wears a large western hat and the next day a red bow tie. He frequently (and jokingly) accused me of running off with his girlfriends and I, of course, responded by acknowledging his prowess with women. Jim participates actively in potlatches held in the Upper Tanana and nearby regions, singing with emotion and enjoying the festive atmosphere. Two other cherished and long-time practices he still maintains are taking steam baths and using "ashes chew" (plug tobacco mixed with ashes from a birch fungus--not for those with weak stomachs).

Jim is typical of a growing number of Native elders who must rely on professional supportive resources, since his informal support system is reliable only in emergency situations. Jim and his peers prefer to remain with their families and in the village setting, despite the difficulties this sometimes poses. Without the aging program and other social services to fill gaps in their support networks, elders like Jim

would live in isolation or far away in a long-term care facility. For some, this would not be living at all.

Carl

Carl is among the few of "young-old" Upper Tanana elders who do not participate in aging program activities. A white male not yet 65 years of age, Carl is politically conservative and a staunch supporter of the current (Republican) administration in the White House. While expressing opposition to many government-sponsored social programs, however, he endorses services for the elderly who need assistance and might otherwise be isolated or neglected. Carl's comments regarding the congregate meals for "the old fogies" are worth noting:

I think it is the greatest thing in the world for 'em. Two-thirds of 'em don't have anything else to do. But I want to reserve my right to complain (about social spending) and I couldn't if I ate free meals.

The youngest of seven children in a Southern farm family, Carl completed the sixth grade before leaving home following his mother's death in the latter stages of the Great Depression. For three years he hustled jobs in Texas oil boom communities, then enlisted in the U.S. Army in 1936. His tour of duty included a four-year stint in Alaska, part of which was spent in the Aleutian Islands during World War II. Following his discharge from the army in 1945, Carl worked a few months in the construction field before returning to Alaska with two friends. The companions toured Alaska then established a small business in Tok which, at the time, was a very young community. By the mid-1950s, Carl had married, grown dissatisfied with jobs held in Tok and Fairbanks, and moved back to the Lower 48 states.

He spent about ten years in the construction field before returning alone to Alaska, his marriage having failed. Although Carl was very enterprising from the day he left home, not until the late 1960s did he finally stop working for wages and concentrate solely on personal business ventures. A shrewd businessman with an eye for the future, Carl has prospered financially by taking risks, working diligently, and not being deterred by skeptics doubting his chances for success. Recently he completed a business transaction several years in the making that will provide a comfortable retirement income.

Living in a frame house on the small acreage he still owns at the edge of town, Carl has no living relatives with whom he maintains regular contact. Three siblings live "Outside" but they rarely interact. Two cats, one a fiesty young kitten, made their presence known during my numerous visits and provide companionship to their caring owner. Carl's only health complaint is a hearing deficiency which he attributes to having had inadequate ear protection when working on heavy equipment and in other noisy surroundings as a young man. For several years he used a hearing aid but considered it too much of an aggravation; now he compensates by raising the volume on his television and stereo, and by asking visitors to speak loudly when they converse.

Carl pursues a range of other activities when not working in his shop or at one of his business enterprises. He is an avid pilot and owns a small airplane, enjoys dancing, and reads a great deal during the long winter months. His reading material ranges from news magazines and Playboy, to books about aviation, Marxism, probate, and history. Carl is constantly planning new ventures or aiding friends in the community who ask for his advice. As might be expected of a man with his

background, Carl strongly endorses private enterprise and minimal government interference.

People are important to Carl and, perhaps more consciously than some, he openly distinguishes between those he does and does not like. He interacts with friends regularly, many of whom are younger adults with children and other persons with whom he shares a common interest. Some friends visit Carl at his home, but more often he is invited out for dinner or sees his intimates at church, in a cafe or bar, or at their place of business. When he is in town and has free time during the day, Carl literally "makes the rounds" and may see as many as a half dozen friends--and more if he has an exceptionally bad case of "cabin fever."

By counting some human services personnel and business merchants among his friends, Carl can approach them for aid without feeling that he is accepting a handout or signing on as a regular client. He cites friends and neighbors as persons to whom he would turn for assistance most often in times of need. Yet, he joins some other peers in hoping he would never have to rely excessively on these resources, unless he felt capable of reciprocating and not becoming a burden.

John and Lena

John and Lena represent one of the few instances of an inter-ethnic marriage examined in this study, although their lifestyle resembles that of several elder white and Native couples. What sets John and Lena apart from many of their married peers is the strength of their informal support system and its importance in their daily lives. Married more

than fifty years and the parents of ten children, John and Lena reside in a spacious log home near one of the Athabaskan villages.

John followed an older brother to the Upper Tanana region from the Northwest Coast in the 1920s and until World War II was one of the few white men residing there outside the gold mining settlements. His occupations included freighting supplies for traders, delivering the mail, woodcutting, trapping, airport maintenance, and road construction. John worked at a military base in interior Alaska from 1948 to 1965, then retired to devote more time to his family and to fur trapping during the winter months.

A few years following his arrival in Alaska, John met and married Lena, a Native woman born in the Upper Tanana region and firmly rooted in traditional Athabaskan ways. The responsibilities of raising the couple's large family rested largely with Lena during John's job-related absences, but the strong positive influences of both parents are evident in their children--whose indoctrination in both Native and conservative non-Native practices prepared them well for adulthood in a rapidly changing society.

About eight years younger than her 82-year old spouse, Lena suffers from arthritis in her legs and a digestive disorder that has required dietary changes and periodic medical care at a major Alaskan hospital. Lena wears glasses, is missing only one tooth, and recently has noticed a slight loss of hearing in one ear. John had prostate surgery and one kidney removed at an Alaskan hospital in 1981 and sometimes walks with a cane. Recurring dizzy spells forced him to stop driving and to exercise caution when taking walks. John uses a hearing aid but often complains

about its performance and having to constantly readjust the volume as noise levels change.

These health problems notwithstanding, John and Lena are mentally alert and reasonably active individuals. John splits wood for exercise, is an avid reader, and always eager to discuss current events affecting the Upper Tanana region, Alaska and the United States. Lena busies herself in the kitchen and often has several Native craft projects underway simultaneously. The couple rarely participates in aging program functions, although meals are delivered to their home each weekday and they are advised of activities that might be of interest.

Friends visit the couple at their home several times each month, and more frequently in the summer months or during the holiday season. Although John prefers reading or watching television to making social calls, Lena visits relatives and friends in the nearby village several times each week, and often attends potlatches, holiday celebrations, and other social functions occurring regularly in the region.

As was mentioned earlier, this couple has a very strong informal support system consisting primarily of several children and adult grandchildren who live nearby. These relatives provide assistance with household chores, transportation, and other needs that may arise. At the time of my study, two children resided at home and at least one other visited the household every day. One daughter living outside the Upper Tanana region supplies her parents with freshly-canned salmon each summer and a son from Fairbanks brings groceries whenever he and his family pay a visit. Each summer another son accompanies John on periodic boat trips to a small family cabin located far away from "civilization," while Lena enjoys occasional fishing and berrypicking trips

with other family members. Perhaps Lena best sums up the relationship of her family in her statement, "All my family is close. Just like one."

John's nominal retirement earnings and the couple's Longevity Bonus checks provide sufficient income to meet their routine needs, although inflation and escalating prices for consumer goods have had some effect. Aid provided by family members, however, enables John and Lena to live comfortably in their own home in the style to which they are accustomed. Few elders in the region have as extensive and reliable family support system as does this couple.

Elsie

Gatekeepers are individuals who have the authority to make decisions that will affect the mobility of others. They work in institutions, deciding daily whether to open the "gate" and let people through, or keep them out (Scollon and Scollon 1980:25).

The difficulties of conducting fieldwork among Northern Athabaskan Indians reported by earlyday Subarctic ethnographers (e.g., Osgood 1937; Honigsmann 1946) sometimes are critical factors in contemporary anthropological field studies. This is especially true when Native elders are the focus of inquiry and if the fieldworker is not fluent in the Native language. Developing rapport with and gaining the trust of the reserved and sometimes suspicious older Natives can require weeks or months of concerted effort. The process often is facilitated by identifying "gatekeepers" who can communicate effectively with both the fieldworker and his informants.

Elsie emerged as one such gatekeeper, although several months passed before I recognized her instrumental role in my having been

accepted by some of her Native peers. A widow in her mid-60s, Elsie works for a local human services program and interacts daily with elder whites and Natives. In this capacity, she maintains regular contact with aging program staff and disseminates information to and from Native elders. Although she neither reads nor writes English, Elsie has reasonably effective verbal skills in both Athabaskan and English; hence, she is often called upon to translate the concerns of Native elders to service providers, and to disseminate information back to her peers.

Elsie moved to the Upper Tanana from an adjoining region as a young girl, following the death of her parents and her adoption by a local Native family residing in a remote area. As did all females of her generation, Elsie learned the skills expected of Athabaskan women in a hunting and gathering society, including food-gathering, preparation and preservation; craft construction, skin sewing, and other routine household and camp maintenance tasks. Additionally, she was expected to adhere to the customs and mores which guided Athabaskans in their day-to-day and ceremonial lives. Although hers was not an easy childhood, Elsie says that it taught her the skills and responsibilities she has since relied on.

Elsie married a Native man from her village as a young woman and gave birth to several children before the family moved in the mid-1940s to a village located near the Alaska Highway. Her husband passed away while the children were still young, thus requiring Elsie to assume added responsibilities for the family. Elsie remarried after her children were grown but this marriage also ended with the death of her second husband in the early 1970s. By this time, however, Elsie had

successfully blended her traditional values with skills learned working in businesses serving the growing number of highway travelers passing through the Upper Tanana region. While this could in no way compensate fully for the loss of two spouses, it facilitated Elsie's adaptation to the wage economy and increasingly dominant white society. One previous employer spoke fondly of Elsie and considered her a "good, loyal worker who has had a very hard life."

Elsie currently shares her rented apartment near Tok with two teenage grandchildren for whom she has had custody for about ten years. Her earned income and AFDC payments are adequate for covering normal household expenditures but provide little cushion for unexpected emergencies. Elsie wisely purchases food in bulk whenever possible and carefully monitors her expenses. She makes Native crafts in her free time and supplements her income by selling or trading those items not earmarked as gifts.

A capable household manager who considers arthritis her only health problem of any consequence, Elsie nonetheless lives independently by regularly using an array of supportive resources. Since she does not read, write, or drive, even the most routine tasks can require outside assistance. Such problems are alleviated to some degree through her active involvement in aging program activities. Elsie's three children and an adult granddaughter sometimes provide transportation and are sources of emotional and instrumental support. Elsie is especially fond of her grandchildren and eagerly anticipates their occasional visits. She routinely exchanges visits with an elderly white woman living nearby and uses her telephone when the need arises. Another close friend in the community is a middle-aged Native woman who, like Elsie, has

successfully adjusted to the dominant white society without compromising fundamental Native norms and customs.

One problem for which Elsie had found no solution at the time of this study involves a parcel of land she obtained several years ago through a state program, which requires the recipient to build and reside in a dwelling before being granted title to the land. If this is not accomplished within a specified time, the land reverts back to the state. Elsie has been unable to save enough money to purchase cabin logs and her efforts to obtain a bank loan or aid from a Native organization were unsuccessful. Her most recent inquiry was to a white man related through marriage, whom Elsie thought might be able to provide advice or financial assistance. Thus far this has been a frustrating experience for a woman who looks forward to having her own home.

Elsie is best characterized as a responsible woman devoted to her family and dedicated to helping others. She adheres to a blending of traditional Athabaskan values and Christian precepts, and rarely places her own problems above those of persons who are older or thought to be in more dire circumstances. Consequently, she is a welcome member of the support systems of some older Native peers, and can count as members of her own network friends, neighbors, relatives, and agency personnel. Elsie enjoys helping the "old people" who need assistance and sincerely appreciates the aid she receives in return. Elsie instills in her grandchildren and other young people pride in Athabaskan culture. One regret she has is not having taught her grandchildren to speak the Native language--which, regrettably is declining in use. This demise is symbolic of the far-reaching impacts of Western society in the Upper Tanana region during the past two generations.

Audrey and Esther

Audrey and Esther both are white women approaching their mid-70s and very active members of the community--one as an outreach worker for the aging program and the other through her involvement in voluntary organizations and other community-oriented activities. Short synopses of each woman are presented here to illustrate how two individuals with otherwise very different personal characteristics can develop and maintain strong support systems.

Audrey

Categorizing Audrey as almost being an "old-old" woman is necessary only because of her age, since her energy and enthusiasm have not waned in these years. A relative newcomer to Alaska, Audrey spent a year in Tok in the mid-1960s, then worked in Fairbanks and Anchorage before returning to stay in 1975. For several years she has traveled extensively throughout the Upper Tanana region as a van driver and outreach worker for the aging program, to inform elders about the services available and encourage their participation in program activities.

Audrey attended several years of college before marrying a university professor in the 1930s and is one of the few elders in the Upper Tanana region with more than a high school education. Her husband and only child passed away before Audrey, who had lived in southeastern and northwestern states, decided to come to Alaska. Today she resides with an unrelated younger man in a small rented cabin on the outskirts of Tok. They do not have the conveniences of electricity, indoor plumbing, or a telephone. The two friends do not pool their incomes but do share nominal household expenditures. Audrey drives her own automobile and

considers it essential for her job and the frequent traveling she does throughout the region.

Audrey rates her health as being excellent and better than that of other persons her age. Beyond needing major dental work, she cited no other medical complaints of consequence and attributes her well-being to the active and productive life she leads:

I really think to be busy and feel necessary are the most stimulating things an older person can do. Senior citizens have to have something to do. Don't you think so?

In channeling so much energy to other people whom she believes are in poorer health or less fortunate than herself, however, it is possible that Audrey diverts attention from health problems that bother her at least on occasion. At the same time, some might construe this as a positive adaptation to the aging process.

A normal day finds Audrey interacting with persons of all ages, which reflects her interest in people and devotion to her job. In her words, "my social life is my job." Since most Native elders in the region take part in aging program activities, she spends more time informing older whites of the congregate meals and other sources available, and encouraging their participation. Audrey and the aging program director schedule entertainment and educational sessions in conjunction with the meals, ranging from musical performances by youth groups and local musicians, to low-key presentations by attorneys, public officials, nutritionists, safety officers, and others. Audrey also encourages local merchants to offer discounts to the elderly, assists in organizing fundraising events, and prepares articles about the aging program for the local newspaper. Furthermore, she occasionally provides

transportation for those elders who either do not ride on the aging van or need a ride at a time when the van is not available.

In being an active community resident, Audrey has developed a strong informal support system which compensates for the absence of relatives in the region. Additionally, through her work with the elderly and interactions with human services personnel, Audrey knows which formal resources to consult if her male companion or other friends cannot provide certain kinds of aid. In a sense, then, by helping others Audrey helps herself. Like many of her white peers, however, she might be disinclined to ask for aid except in emergency situations, unless she could determine some way to reciprocate. Two younger sisters living in the northwestern U.S. with whom Audrey corresponds regularly and maintains close relationships are exceptions, although their affective ties do involve mutual support.

Esther

While Audrey channels her energies to the elderly and their affairs, Esther enjoys a reputation as an advocate and political activist on a wider range of issues. A retired businesswoman married to a pioneer Alaskan like herself, Esther was born in the Midwest and has lived in the Upper Tanana region for most of her 50+ years in Alaska. She and her husband reside a short distance away from their only child and his family, in a comfortable frame dwelling with electricity, running water, and a telephone. The couple has one vehicle that Esther uses regularly for business and to make social calls.

Alert and in good physical health, Esther divides her time between her family and a range of community activities. Although she no longer

1. *What is the main purpose of this document?*

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3. *What are the implications of these findings for practice?*

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6. *What are the recommendations for future research?*

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is active in many formal organizations, she continues to study and take stands on a range of local, state, and national issues--for which she is at once admired and criticized by various factions in the Upper Tanana region. Esther carefully examines issues before stating a position; the same cannot always be said for her critics.

Esther can draw from as wide a range of supportive resources as any elder in the region. She and her husband have enjoyed many years together and maintain a close relationship with their son and his family. Her grandson often stops by after school and stays until his parents return home from work. Esther visits or telephones friends daily, and often drives her husband or a female friend to the senior citizens' lunches. She is in regular contact with public officials and organization leaders who seek her counsel on local and regional affairs--a consequence of her longstanding involvement with one of the major political parties in the state and the absence of formal local government in Upper Tanana communities. Consequently, Esther is a very resourceful person who can turn several directions for assistance.

For example, Esther says she would rely on relatives and friends for assistance with domestic or health-related matters, and would turn to formal organizations for financial and technical aid. Another resource takes the form of a statewide network of individuals she has befriended over the years. Given the nature of her relationships with friends and relatives, Esther might only rely on others for assistance in dire circumstances but probably would find them eager to lend aid to one who has so freely and frequently assisted them.

Despite being more outgoing than most of their white female peers, Audrey and Esther direct their energies both to the community and those

close to them, while others devote the majority of their time only to their homes and families. These two women thrive on extensive social interaction, which some others seem not to want or need. The end result for Audrey and Esther has been the development of extensive friendship networks to which they can turn for aid, since they have been more than generous in helping others who asked for or needed assistance.

Neither woman expects her friends to lend assistance nor has had that as an ulterior motive of her public-spirited activities, but this is often the result and serves to reinforce and strengthen their formal and informal support systems.

Peter and Ada

Lending credence to the importance of supportive resources among the Upper Tanana aged are the experiences of two elder Natives who died during the course of my fieldwork. These examples illustrate both the strengths and limitations of the family as a supportive resource at a time when such aid is particularly important. Both individuals were in their early 70s when they died.

Peter

Peter lived quietly in a small rented home in Tok with his second wife, a daughter, and two grandchildren, having moved there several years earlier from a nearby village. Another adult child resides in the Upper Tanana region, as do a younger brother and older sister. Peter occasionally participated in aging program activities, often relying on the aging van for transportation to shopping facilities and for obtaining water used in the household. Chronic arthritis prevented Peter from leading an active life in his later years, and was the primary reason he

gave for moving to Tok. He seemed content to spend time at home with his family and entertaining occasional visitors. In the fall of 1980 he entered the hospital in Anchorage for treatment of an internal disorder later diagnosed as cancer.

Logistic and financial problems prevented other family members from making regular 600-mile round trips to Anchorage to visit Peter. Consequently, I made a special point of stopping by the hospital while in Anchorage for business, about two weeks following his admission. Upon entering his room, I observed what resembled a mummy on the bed; actually, it was Peter with a sheet wrapped tightly around his body that left only his head exposed. From a distance I did not recognize him but immediately felt the cold, sterile emptiness of the room. Peter greeted me warmly, though we were not well-acquainted, and commented on how few visitors he had. I relayed messages from his wife and brother, which seemed inadequate substitutions for their physical presence at his bedside. Peter was lonely and I doubt that my brief visit did much to boost his spirits.

Peter's wife paid a visit one month later and the following week spoke with her husband on the telephone. A day later, the hospital called to report Peter's death, apparently from cancer. The family coped as well as could be expected, but I sensed a great deal of confusion in Peter's household the following day. To his family, death had occurred unexpectedly, despite Peter having shown little improvement during his two months in the hospital. Preparations now had to be made for a funeral and potlatch. More distressing was the fact that no family members had witnessed the death and the body had not yet been

returned home for burial. In a sense, then, the family had a difficult time accepting Peter's death at that point in time.

Native elders often commented on their fears of being hospitalized far from home and family, but I did not fully appreciate their concerns until having observed the situation involving Peter. Peter was alone in an unfamiliar environment, at a time when the presence of family and friends would have meant so much.

Ada

Contrasting the loneliness and isolation that Peter experienced during his final weeks is the case of Ada, a resident of one of the Athabaskan villages in the Upper Tanana region. Ada had been in poor health for several months before being hospitalized in Anchorage for a renal disorder. Medical specialists finally determined that her survival required regular dialysis treatments at the hospital. This posed a major dilemma for Ada and her husband: Relocating to Alaska's major urban center from a small village would be expensive and remove the couple from their support network and the environment in which they had spent their entire lives. For Ada to either move alone or make the long trips regularly was out of the question, given her poor health.

After being apprised of the gravity of her situation--that her life depended upon regular dialysis treatments--and evaluating the options, Ada elected to spend her final days in the Upper Tanana region. I do not know specifically how this decision was made, but it generated considerable discussion in the local Native and medical communities. Ada's husband and son apparently honored her wish to die at home, and not prolong her life if it meant being far away from family and friends.

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Ada and her husband moved in with their son and his family in Tok, where they were more accessible to the medical clinic and visitors. In the days preceding her death, the local physician assistant examined Ada regularly, did all he could to ease her suffering, and counseled the family. A daughter living outside Alaska was contacted and funds raised by the Native community to pay her travel expenses. Friends came from throughout the region to comfort Ada and offer their prayers to the family. I visited Ada two days before her death. She clearly was experiencing considerable physical discomfort but was emotionally at ease by virtue of being surrounded and consoled by family and friends.

Here are two cases illustrating the importance of family supports to elder Natives in failing health. Peter died alone, separated from those who were most important in his life, while Ada chose to remain in familiar surroundings and accept her fate. As do many elder Natives, Peter and Ada had strong Christian religious convictions and intimate relationships with their families. Peter had only the former to comfort him as he died and no one close with whom he could share his feelings and concerns.

Discussion

Variations in the composition and functioning of social support systems among the Upper Tanana elderly are illustrated in the vignettes presented above and in the content of Figure 6.1. This diversity cannot be attributed to any single factor; instead, the support systems differ according to the characteristics of the individuals involved. These include personal history and individual personality, ethnicity, cultural norms, kinship patterns, and socioeconomic status. Some individuals,

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1862. It is a very important document, as it contains the President's annual message to Congress.

2. The second part of the document is a report from the Secretary of the Interior, dated January 10, 1862. It contains information about the land and mineral resources of the United States.

3. The third part of the document is a report from the Secretary of the Treasury, dated January 10, 1862. It contains information about the financial condition of the United States.

4. The fourth part of the document is a report from the Secretary of the War, dated January 10, 1862. It contains information about the military condition of the United States.

5. The fifth part of the document is a report from the Secretary of the Navy, dated January 10, 1862. It contains information about the naval condition of the United States.

6. The sixth part of the document is a report from the Secretary of the Department of the Interior, dated January 10, 1862. It contains information about the land and mineral resources of the United States.

7. The seventh part of the document is a report from the Secretary of the Department of the Treasury, dated January 10, 1862. It contains information about the financial condition of the United States.

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14. The fourteenth part of the document is a report from the Secretary of the Department of the Interior, dated January 10, 1862. It contains information about the land and mineral resources of the United States.

| Need for Assistance | Jim | Carl | John | Lena | Elsie | Audrey | Esther |
|----------------------------|-------------------------|--------------------|----------------------|----------------------|--------------------|--------------------|--------------------|
| Sudden illness | friend or aging program | friend or neighbor | relatives or friends | relatives or friends | relative | friend | relative or friend |
| In-home assistance | neighbor | undecided | relatives | relatives | relative or friend | aging program | relative |
| Ride to clinic or hospital | aging program | friend or neighbor | relatives or friends | relatives or friends | relative | friend | relative |
| Financial loan | undecided | bank | relatives | relatives | relative or friend | employer or friend | bank |
| Replace broken window | aging program | friend | relatives | relatives | landlord | merchant | relative |
| Watch home during absence | neighbor | neighbor | relatives | relatives | neighbor | friend | relative |
| Filling out a form | aging program | agency | relatives | relatives | daughter or agency | court magistrate | appropriate agency |
| To discuss family problems | undecided | undecided | undecided | undecided | undecided | undecided | friend |

Table 6-1. Sources of support cited by key informants for dealing with specific needs for assistance.

like John and Lena, rely almost entirely for support on relatives--a consequence of having an extensive kinship network and a few intimate friends. Carl and Audrey, on the other hand, have no relatives in the area to whom they can turn. In their place is an array of equally important resources that function as effectively as would the extended family in most instances. Elsie and Esther ordinarily utilize a wider range of resources in the community, while Jim turns primarily to the aging program for assistance with his needs.

Elder whites are more inclined than their Native counterparts to seek help from friends and relatives, since such requests are considered less threatening to the helpseeker's independence. The healthy and affluent whites often try to reciprocate in some way or may consider the assistance requested (or offered) as mutual aid or payment in kind for a service they once rendered. Most whites retain the pioneering spirit that attracted them to Alaska and the Upper Tanana region, whether they came 5 or 50 years ago, and do not relish the thought of having to seek assistance from government programs designed primarily for that very purpose.

Conversely, older Natives are more intricately enmeshed in the professional support system, since friends and relatives often cannot provide the needed instrumental aid. It is not unusual, however, for a younger relative or other concerned community resident to initiate the helpseeking process on behalf of older Natives. These younger adults often are better aware of what services are available, although whites and Natives alike sometimes incorrectly assume that all human service programs and other helping agencies are designed to provide such aid to the elderly. Nevertheless, friends and relatives of the Native elderly

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are essential members of their social support systems, although they may not always provide direct aid.

The strength of social support systems among the Upper Tanana aged often correspond closely to the individual's actual or perceived status in the community. Those who are very old, in failing health, or held in high regard normally encounter less difficulty in enlisting aid than do the habitual complainers, those who repeatedly request assistance for minor problems, and others who have lower social status in the community.

Chapter VII reviews the major findings of the study that add to an understanding of social support systems among the rural aged in Alaska. Comparisons are made along ethnic lines when and where appropriate. Particular attention focuses on the Upper Tanana Aging Program and its emergence as a major form of institutional support for elder white and Natives in the Upper Tanana region.

CHAPTER VII

SUMMARY AND CONCLUSIONS

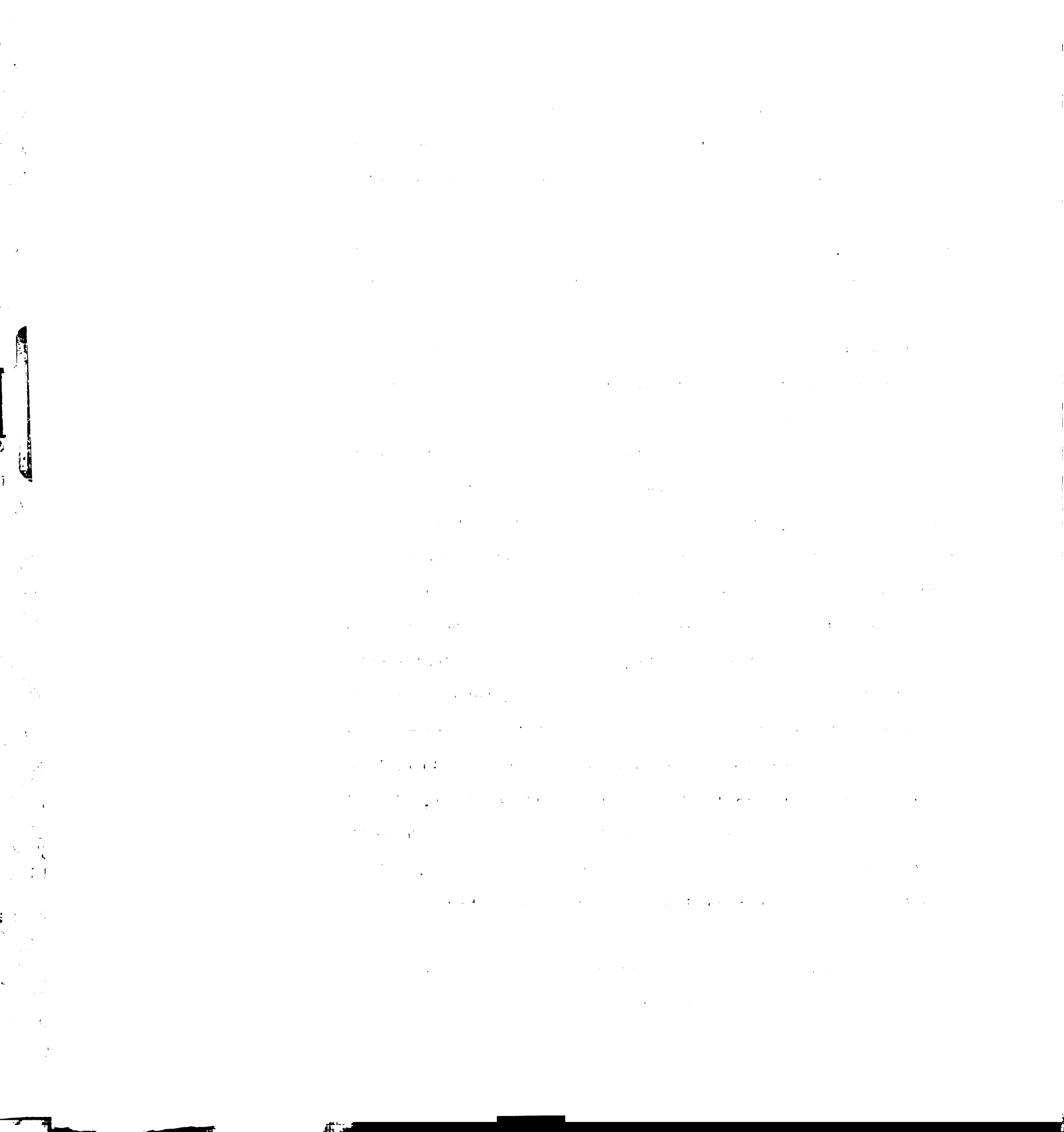
Older Americans are living longer and as a group constitute a growing proportion of the total population. These and other socio-demographic trends are contributing to changes in the sources of social support available to and used by the elderly. Formal or institutional supports increasingly are being utilized for assistance formerly provided by family and friends. Even in many rural communities, where extended family ties have long been considered very strong, such factors as the declining birthrate, outmigration of children, and the changing expectations of elders, are contributing to the expanding availability of and reliance on formal aging services. Human services programs in rural areas, however, are governed by urban-oriented rules and regulations that may not always be appropriate in rural settings.

This ethnographic study has examined these and other considerations in an ethnically-mixed aged population in rural Alaska. Attention is focused on white and Native Alaskans residing in five communities in the Upper Tanana region, and on their sources of instrumental and affective support. Although the geographic and ethnic diversity of the Alaskan aged population may limit the applicability of these study findings to other communities, the data are useful for drawing comparisons with other older rural Americans, and suggesting ideas for how best to provide services to an ethnically-mixed aged population. This study also is a response to the paucity in the anthropological and gerontological literature of data on aged Alaskans.

Fieldwork was conducted primarily during the period December 1979 through August 1981 in five Upper Tanana communities constituting the core service area of the Upper Tanana Aging Program. Survey questionnaires were administered to 46 Natives and 29 white persons 60 years of age and older, and supplemented with in-depth interviews and observations of the aged in a variety of settings. Specific attention focused on assessing the status and needs of survey respondents, and exploring their use of informal and formal supports. The aging program was examined as an institutional support introduced in 1975 and as a case of directed culture change.

Little information about aging in the Upper Tanana region can be gleaned from the published literature. The few available ethnographic sources suggest that, historically, Athabaskan Indian elders relied on the extended family and clan members for assistance when they no longer could provide for themselves. The aged were respected for their knowledge and contributed as teachers and to the care of children when they ceased to be economically productive. Most of the early-day white elders in the region did not have families in Alaska, but were aided by friends and neighbors if they chose to spend their final years in or near the few remote settlements in the area. Generally speaking, later life was a difficult time for both Native and white elders, although those who spent many years in the region adapted to the Subarctic climate, isolation, and limited service infrastructure. Self-sufficiency certainly was an important attribute of these early-day elders.

More recently, but prior to establishment of the aging program in the mid-1970s, circumstances for the aged probably had not changed



significantly. Most resided in small communities, received nominal old age pensions or other financial assistance, and had easier access to the few human services present in eastern interior Alaska than was historically the case. Elder whites generally were economically active or already financially secure, or moved away to live near relatives or in a more temperate climate. The Native aged were witnessing dramatic changes in their culture, some of which had weakened the formerly strong extended family structure characteristic of traditional Athabaskan society (cf. Pitts 1972). The short-lived oil pipeline prosperity that reached some Upper Tanana households gave way to widespread unemployment during the pipeline "bust" and limited the level of support that younger family members were able to provide their elders (cf. Reckord 1979).

On the basis of data presented in this study, several important points can be made about the current structure and functioning of social support systems among the white and Native aged in the Upper Tanana region. First, both groups have reasonable extensive informal support networks of family, friends, and neighbors, as typically is the case in rural communities. Differences are noted, however, in the nature of support provided by informal resources and in the rules governing provision of aid.

The informal networks of elder whites generally are stronger and more reliable for meeting a variety of needs. For many, they also are the preferred resource, since informal ties offer the most flexibility and are guided by principles to which the elder whites and many of their rural peers elsewhere have long adhered. They value independence, privacy, self-reliance, and reciprocity, and prefer to seek assistance outside the household (if at all) from persons who share these

attributes. These informal networks provide both instrumental and affective support, either voluntarily or in the form of mutual aid. In comparison to the informal networks of rural white elders outside Alaska, those found among the Upper Tanana aged less often include relatives who live nearby. In their place, however, are unrelated persons who often are treated as surrogate kin and function in similar ways.

Native elders often have numerically more extensive informal networks, comprised primarily of extended family members and other village residents, but find them most dependable as sources of affective support. The provision of instrumental aid often is contingent upon the abilities of and resources available to members of the informal network. Elder Natives may want or be expected to compensate friends or relatives for assistance rendered, since the aged have a regular source of income and many younger village residents do not. This form of economic redistribution or reciprocal exchange is commonplace and is an important factor governing the nature of support provision in many Alaskan villages.

A second point is that elder whites are less reliant on their informal supports and more able to lead independent lives than are their Native counterparts. All of the aged whites contacted for this study can read and write, most drive their own cars, and all live alone or only with a spouse. In contrast, few elder Natives have these skills, and many reside in extended family households. No value judgment is implied in distinguishing between residence patterns, for they often conform to personal preferences and longstanding cultural practices. However, studies of the rural aged normally treat dependency as being

associated with poor health and low economic status, and not as a product of literacy and mobility (cf. Lassey, Lassey, and Lee 1980).

Third, and not unexpectedly, elder whites as a group are much less reliant than the Native aged on the aging program as a formal or institutional support. Most white elders who utilize aging program services do so very selectively and often as a last resort. They distinguish between attendance at congregate meals or educational sessions, and requests for assistance with a problem. Few ride in the aging vans, preferring instead to ride with friends or use personal vehicles for transportation to and from their homes. Conversely, the Native aged more often use the entire range of aging services available, and do not distinguish between those more social in orientation and others designed to address problems more directly. The meals are inexpensive and the transportation dependable. Aging program staff are responsive to requests for assistance with paperwork and grocery shopping, scheduling medical appointments, and providing translator and referral services. To Native elders, the program offers a continuum of services they need or find helpful, ranging from opportunities for social interaction to the provision of aid essential for preventing or delaying institutionalization.

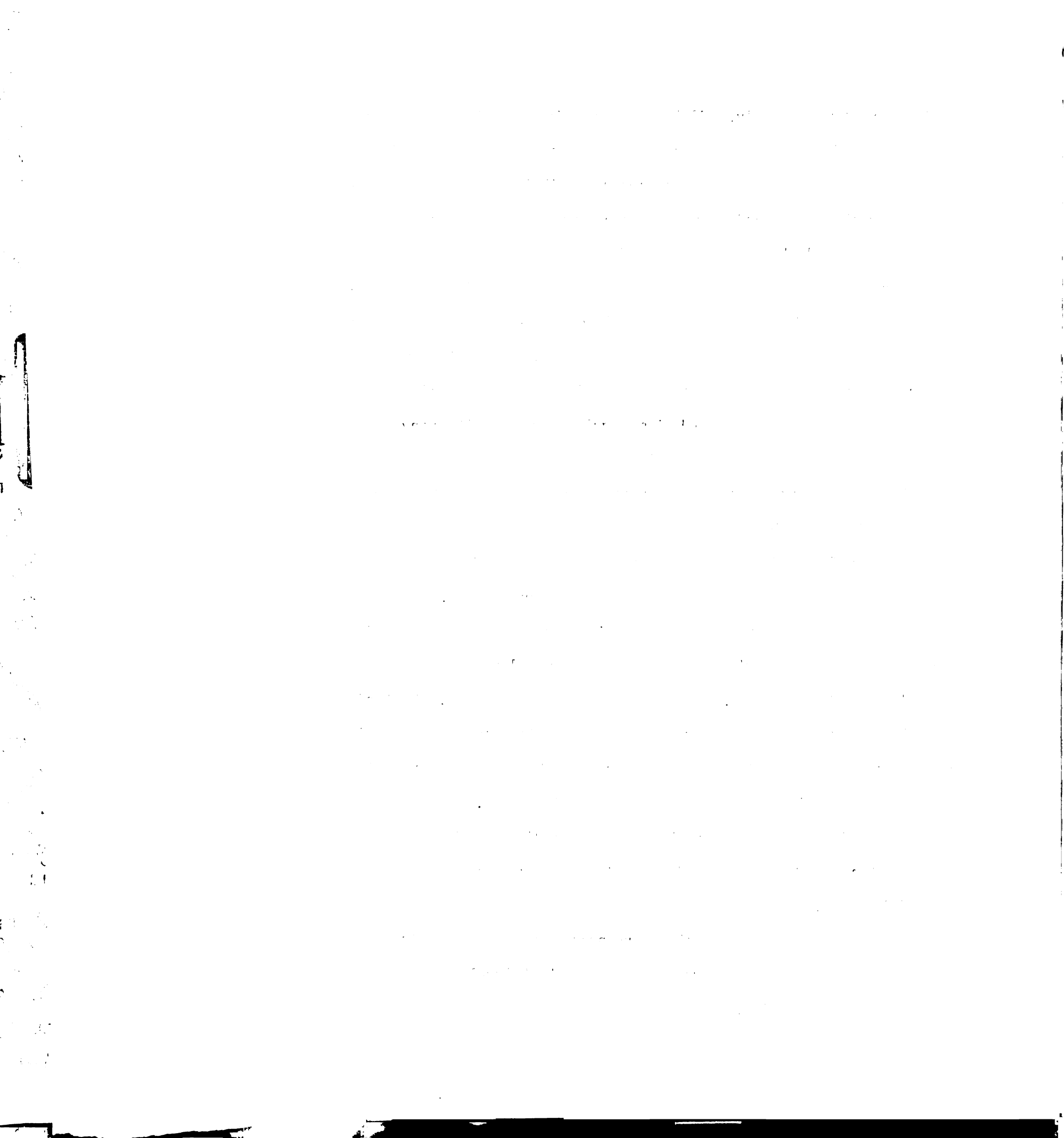
Finally, the health and well-being of the Upper Tanana aged have been enhanced through their use of social supports. Elderly persons generally are susceptible to such stressors as vocational loss, death of a spouse, illness, and poor health (Pilisuk and Minkler 1980; Lassey, Lassey, and Lee 1980). Compounding these problems in rural Subarctic communities are the long, dark, and extremely cold winters, which are conducive to isolation and depression, and the limited range of medical

services available locally. Although population growth in the Upper Tanana region is facilitating expansion of the human services infrastructure, it also has attracted people with different values, interests, and backgrounds, and results in more traffic, less privacy, and other environmental changes not desired by all older persons.

Informal and formal supports minimize the impacts of these stressors by buffering the aged from their deleterious effects. Change may actually serve to strengthen some informal ties, either by promoting expansion of personal networks or bonding elders even more closely to their existing supports. Through its regular contact with many older persons, and especially those at risk to the stressors mentioned above, the aging program provides an alternate source of support oriented toward promoting well-being.

The Upper Tanana Aging Program has been treated in this study as an innovation, or as a case study of directed culture change. As such, criteria developed by applied anthropologists are useful in evaluating program strengths and weaknesses, and its general level of acceptance among the target population. According to Foster (1969:76), the basic research strategy is to ascertain the relationship between the institutions or elements central to the proposed changes, and the total cultural pattern in the setting under consideration. Adoption or rejection of the innovation depends largely upon the techniques used by the innovator and the reaction by the target group to these actions (Niehoff 1966:40).

At the time of this study, the aging program was entering its sixth year of operation and had achieved a reasonably high level of acceptance in the Upper Tanana region. Not only were most elder residents aware of



the services available or taking part in at least some program activities, but younger persons and non-participants were consistently distinguishing the aging program from other forms of public aid and giving it a favorable rating. Although services were intended for both white and Native elders, the latter used more of them on a more regular basis. Non-participants were primarily elder whites who either did not need the services available, declined to consider themselves as being "old," or for other reasons were uninterested in program activities.

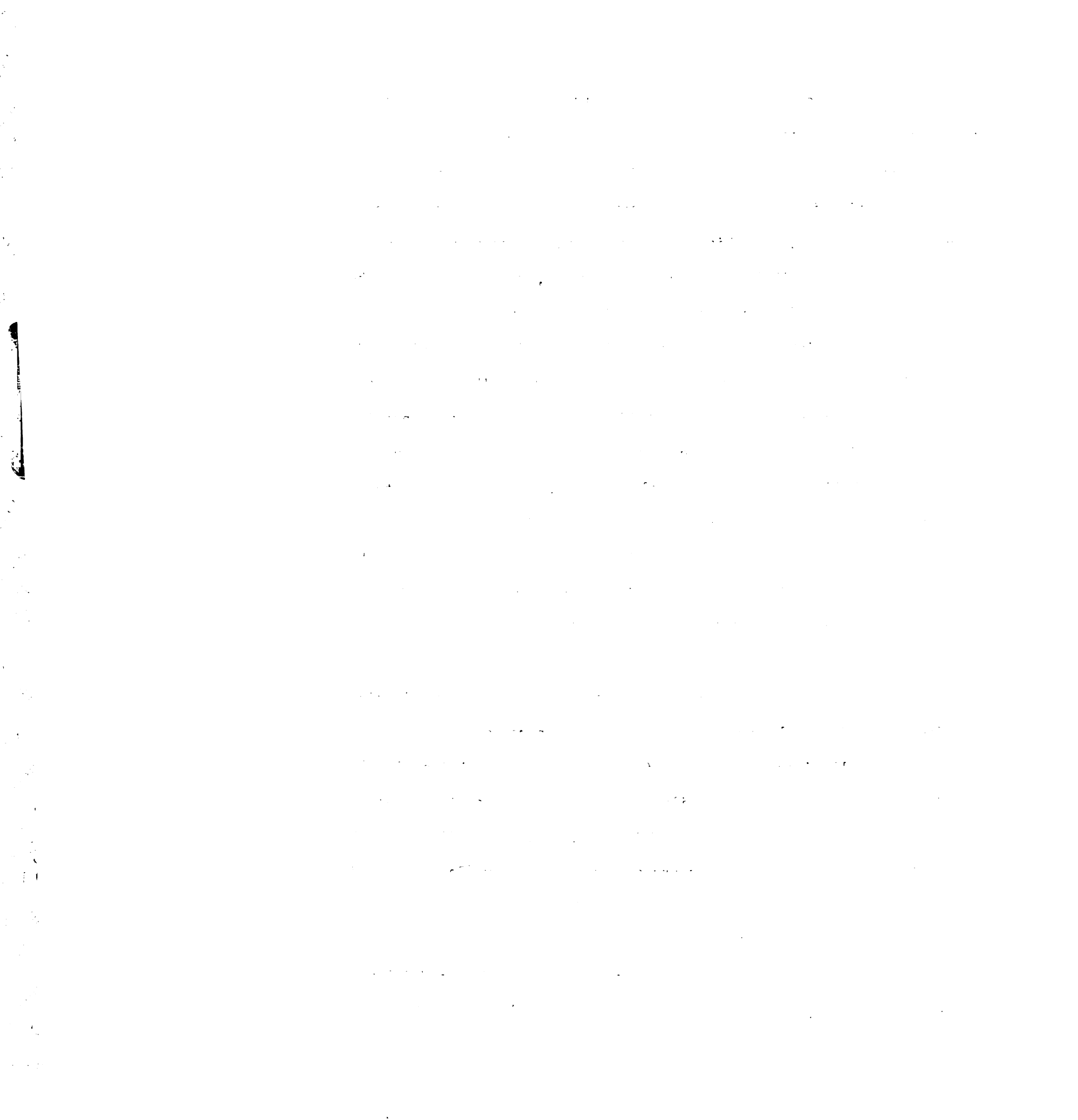
Acceptance of an innovation depends primarily on the actions taken for convincing recipients to adopt the idea, the reaction of these recipients toward the proposed innovation, and manner of presentation by the innovator. In this case, the aging program initially defined its target population as the low-income and Native aged who were isolated and without adequate sources of social support. The early focus on elder Natives and their positive response led to selective acceptance of program services among the aged. Older Natives and other village residents greeted the aging program enthusiastically, while their white peers and (primarily) Tok residents often were less receptive. Thus, the extent and manner of communication affected program acceptance in its first year of operation. In fairness to the program, acknowledgment should be given to its limited staff and resources, and the resulting need to assign higher priority to those identified as having crucial unmet needs. Program expansion necessarily was delayed.

In part because the aging program subsequently operated with Older Americans Act funding, staff expanded their outreach efforts to include all aged persons residing in the service area. Participation increased after services were better established and more visible in the target

communities, and after several key elder whites became more actively involved and essentially endorsed the program to their peers.

The major shortcomings of the aging program as an institutional support operating in concert with informal support systems are in part situationally defined. As this study has shown, the program serves two ethnic cohorts with differing values, interests, and needs, and who reside in small rural communities located as far apart as 100 miles. The comparatively high cost of service delivery and increasing statewide competition for program operating funds have compounded these logistical constraints. Consequently, program staff may be more intent on providing basic services to an expanding constituency than on seeking further development of linkages with informal supports. Since these natural helpers often function spontaneously and differ in the types of aid provided, concerted attempts at their formalization might be ill-advised. The decline in voluntarism resulting from creation of salaried positions for providing similar services in the villages is a case in point.

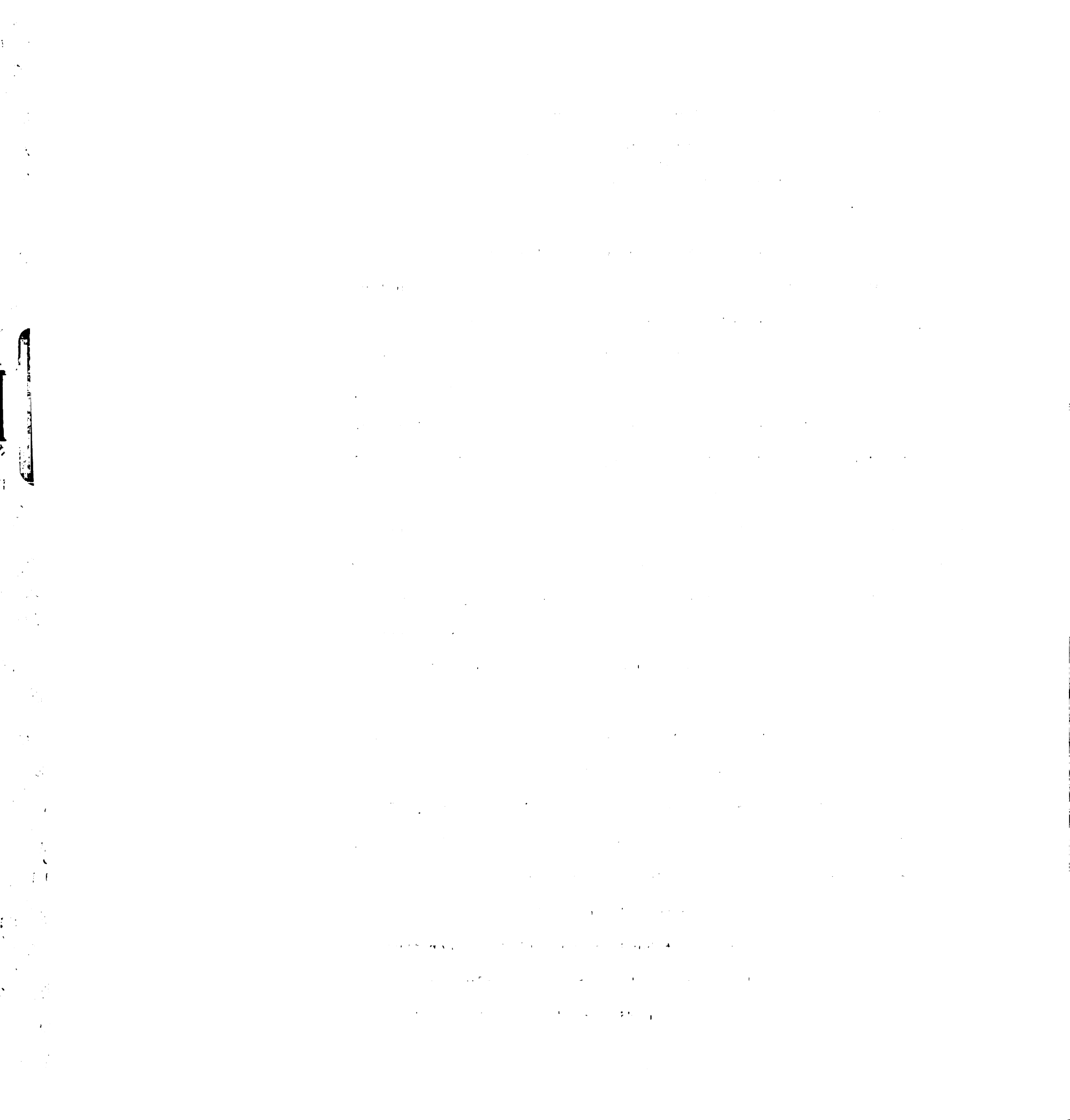
The gerontological literature stresses the importance of linking the formal and informal support systems of older persons, as a response to the continually increasing costs of service provision (Nelson 1982), the decreasing ability of the family to provide assistance to its older members (Treas 1977; Ward 1978; Gottlieb 1983), and, especially in rural areas, in order to use scarce resources most effectively (Davenport and Davenport 1982). The senior center often is viewed as a potential bridge between formal and informal support networks, and as a means of forming and strengthening informal support networks (Gelfand and Gelfand 1982; Guttman 1982). On the other hand, Coward (1979) asserts that,



The overwhelming majority of human services, and programs for the elderly are no exception, are developed and delivered for individuals as if they lived in isolation. That is, the programs fail to recognize that the recipients of their services are embedded in a social context.... (Coward 1979:281).

All these factors must be taken into account when evaluating the success of the Upper Tanana Aging Program as a case of directed culture change. The program is providing a range of services essential to the well-being of some elders, including nutritious hot lunches, transportation, in-home assistance, and information and referral services. Thus, it has been instrumental in reducing isolation, preventing premature institutionalization, improving access to other institutional supports, and providing opportunities for development of peer support. Other program participants benefit from the social interaction occurring at congregate meals, but less often utilize other services that they define as being for the older and more needy elders. Most non-participants are economically secure and have viable informal support systems in place, but continue to endorse and speak favorably of the program.

The aging program has been less successful in building linkages with the informal support systems of the Upper Tanana aged, and has unintentionally displaced the resources of some older persons. These shortcomings are attributable to the nature of these informal supports. Relatives and friends of elder Natives and some whites cannot always provide the instrumental support required, but perhaps are more successful in giving affective aid when not burdened with what are construed as economic demands. In other cases, the extended family and friends function more effectively if left undisturbed. As its constituency



continues to grow and request different services, however, the aging program must identify strategies for addressing these concerns. Given its record of service expansion and increasing acceptance in the region, the program seems capable of meeting the challenge and strengthening its ties with informal supports.

Further gerontological research in Alaska is needed for sensitizing policy makers and program planners to the socioeconomic and cultural conditions which influence successful aging in Arctic and Subarctic settings. This study has identified factors that affect the delivery of services to white and Native elders in one rural locale, some of which merit attention at the state and national level. How can services be provided most effectively and at an acceptable cost to the ethnically-diverse aged in rural communities? Can their expectations and desires be accommodated within a single program? If not, how are locally-acceptable priorities to be assigned that do not threaten the viability of aging services in small rural communities?

The calls for other specific research inquiries among older rural Americans generally are particularly important in Alaska. Lee and Lassey (1980) urge that more research be conducted on the economics of aging in rural areas and on the nature of kinship and friendship ties among the rural elderly. Interesting linkages between these two phenomena might be observed in rural Alaska, given the importance of economic redistribution and reciprocity in rural communities.

Powers, Keith, and Goudy (1981) emphasize the importance of studies that include inter-regional and rural-urban samples, and favor comprehensive longitudinal studies of the rural family as having the greatest overall utility (cf. Atchley and Miller 1980). Although such research

may be expensive and difficult logistically in Alaska, it is essential for assessing both the influence of residence on social support systems and the strength of intergenerational family ties. These are particularly promising areas of inquiry, given the accelerating pace of change occurring throughout Alaska and the association of residence and kinship bonds with social support.

Whatever topics are addressed in future studies, we must identify what the elderly can do for themselves (cf. Moe 1980), and not undermine their capabilities through establishment of unwanted or unneeded aging services. At the same time, however, we must recognize the diversity characterizing older rural Americans and realistically appraise the viability of the supportive resources available to them. Similarly, policy makers and program planners must recognize the constraints under which aging programs operate in isolated rural areas, and move forward with new ideas for strengthening the linkages between rural aging services and other formal and informal supports present in the community.

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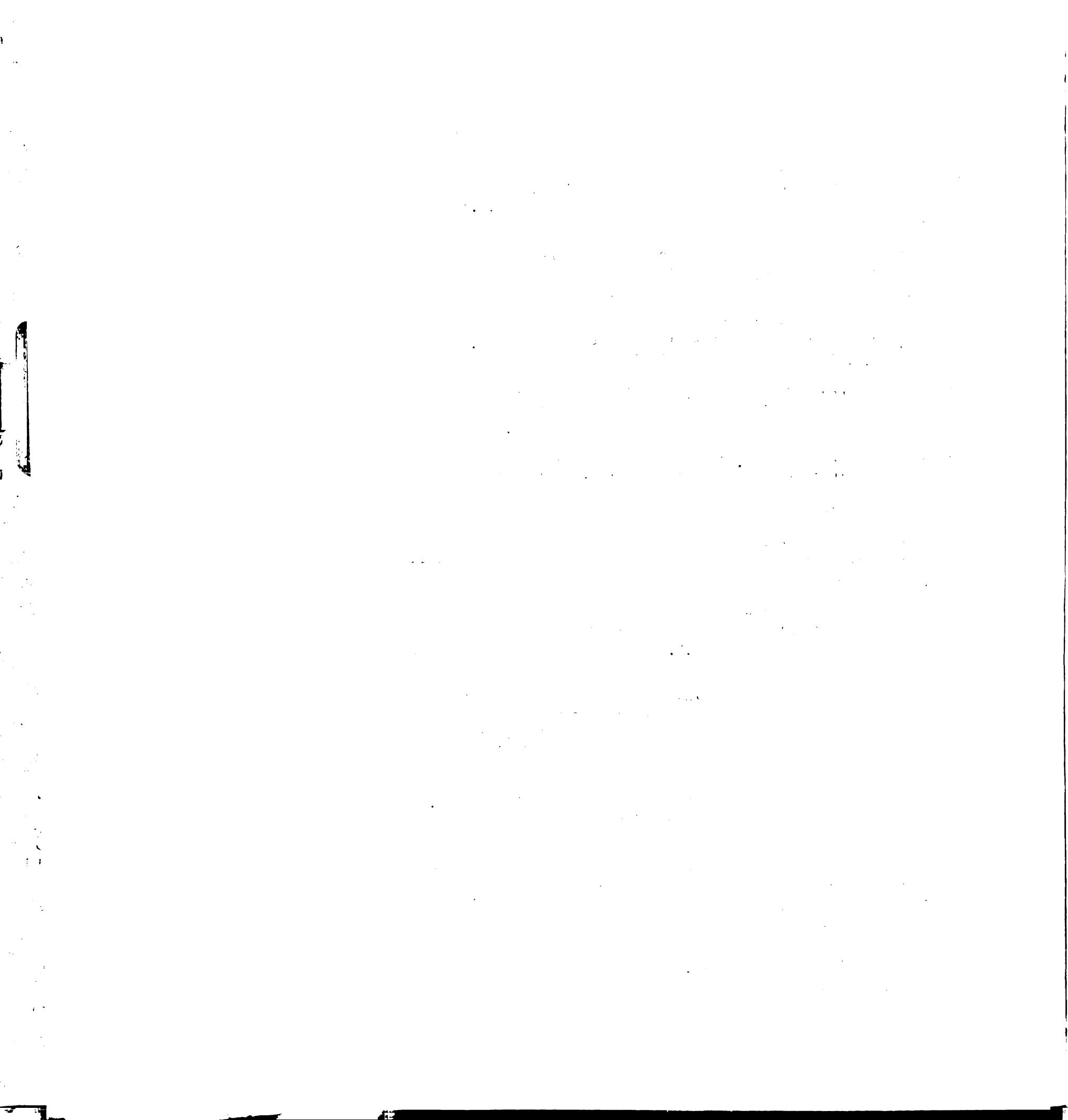
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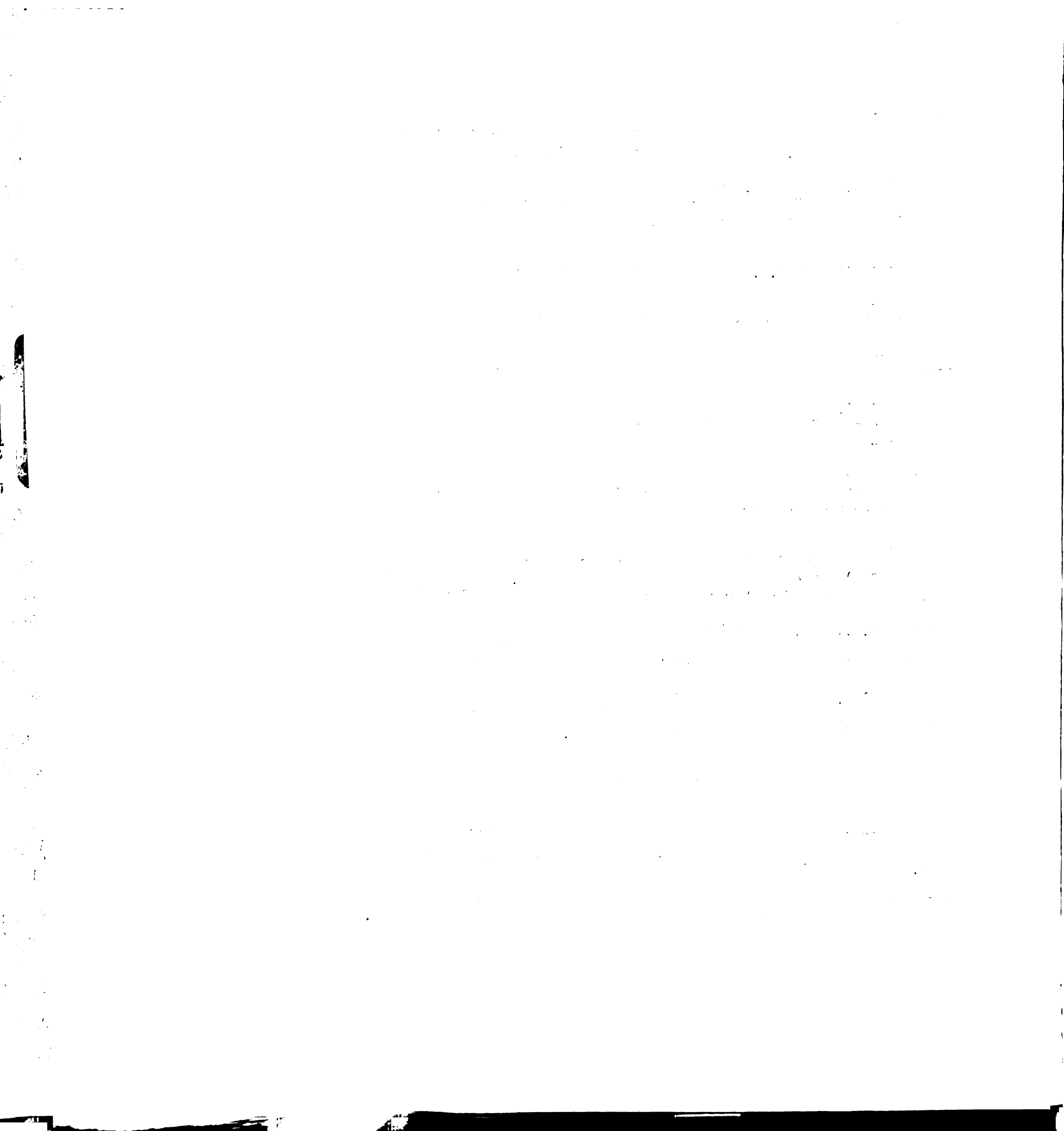
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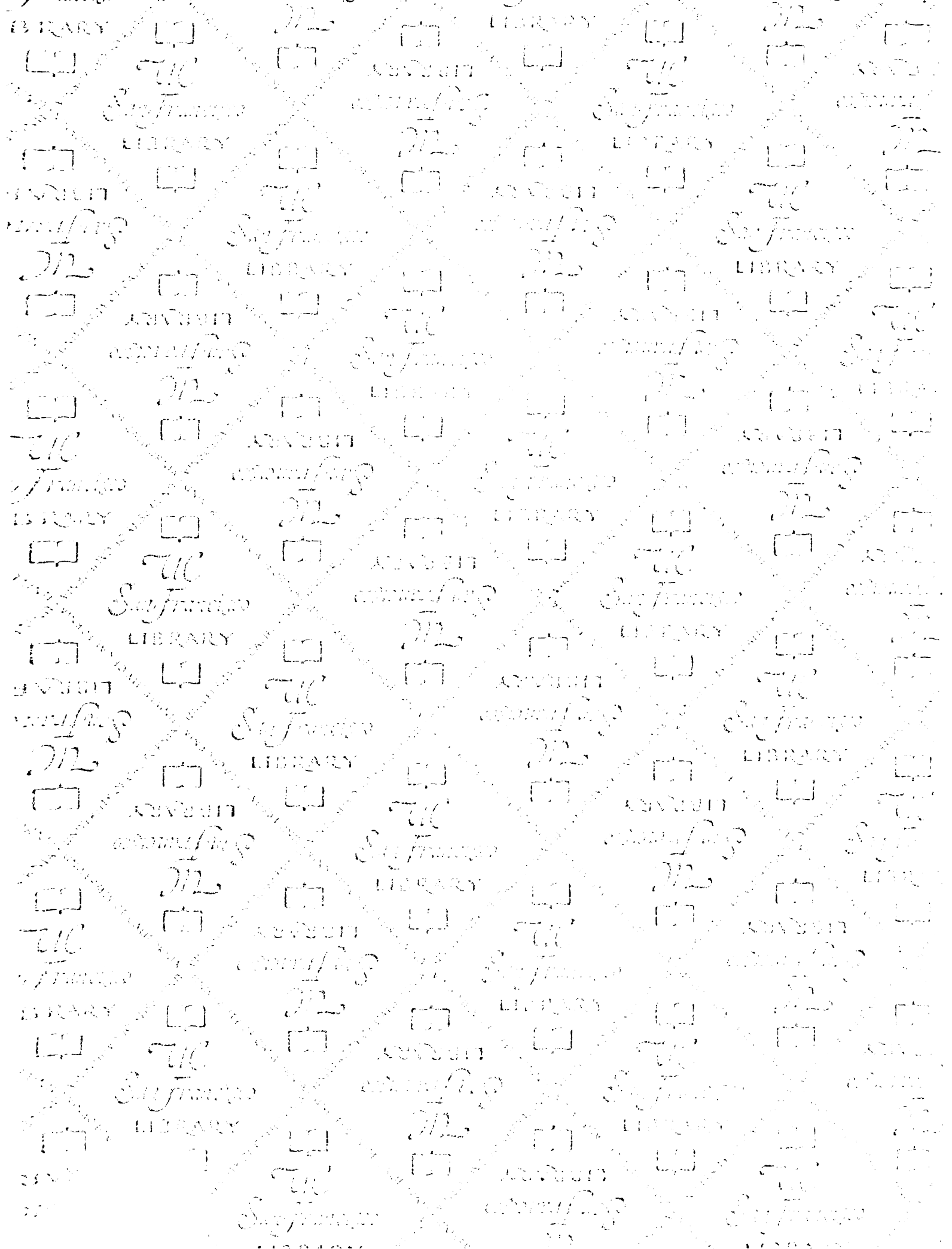
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