

Yukon-Koyukuk Census Area

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A profile of rural Interior Alaska

The Yukon-Koyukuk Census Area covers most of Alaska's Interior region. It covers 148,258 square miles, over a quarter of Alaska's landmass. It is larger than the state of Montana, the nation's fourth largest state. Because its geographic boundaries do not surround a square land parcel or follow a river, the area is difficult to describe. The northern boundary runs south of the Brooks Range, and Canada's Yukon Territory lies to the east. The southeastern boundary separates Yukon-Koyukuk from the areas which comprise the remainder of the Interior region: Southeast Fairbanks Census Area, and Fairbanks North Star and Denali boroughs. The southern border turns due west to Holy Cross, the area's southwest corner. From here, the western border runs through the Nulato Hills. The outward edges of the Endicott Mountains form the area's northwestern outline. (See map in Exhibit 2.)

Great rivers, great mountain ranges

Five national wildlife refuges and several mountain ranges lie within the Yukon-Koyukuk's vast landscape. The Yukon River roughly bisects the area, flowing approximately 1,100 miles through it in a southwesterly direction. Five of Alaska's ten largest rivers are tributaries of the Yukon, ranging between 314 and 555 miles in length. The Kuskokwim, Alaska's fourth longest river, also has its origin in this area.

Only 6,372 people reside in the census area, and 63.3% of the population is Alaska Native. (See

Exhibit 1.) Most settlements are located on the Yukon River or its tributaries. McGrath is on the banks of the Kuskokwim River. Rivers are the most important transportation routes for residents.

The Yukon-Koyukuk Census Area

A statistical snapshot

	Alaska	Yukon-Koyukuk Census Area
Population (1999):	622,000	6,372
Median age (1999)	32.9	32.7
Persons per household (1999)	2.68	2.57
Age:		
Percent under 5 years old	8.2	7.9
Percent school age population (5 to 17)	22.9	27.7
Percent adult workforce population (18 to 64)	63.5	57.1
Percent seniors (65 years & over)	5.4	7.3
Gender:		
Percent female (1999)	48.0	45.4
Demographics of the region (1999):		
Percent Native American	16.8	63.3
Percent White	73.7	35.9
Percent African-American	4.4	0.3
Percent Asian/Pacific Islander	5.1	0.5
Percent Hispanic	4.7	0.7
Workforce issues:		
Annual average unemployment rate (1999)	6.0	13.5
Annual average monthly employment (1999)	273,624	2,000
Income measures:		
Personal per capita income (1998)	\$27,835	\$18,005
Wage and salary employment (annual avg. 1999)	\$33,510	\$26,661
Median Household Income (1997)	\$43,657	\$30,532
Educational attainment:		
Percent high school graduate or higher (1990)	86.6	73.2
Percent bachelor's degree or higher (1990)	23.0	13.8

Source: Alaska Department of Labor and Workforce Development;
U.S. Bureau of the Census, Bureau of Economic Analysis

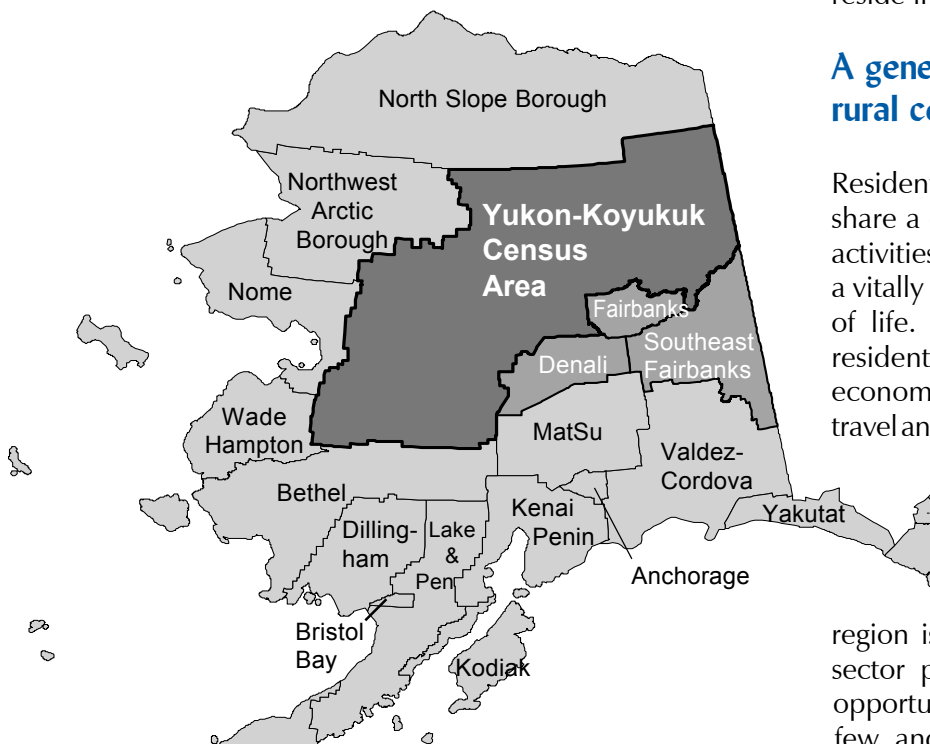
In winter, they serve as ice roads; the traffic includes cars, snow machines and even sled dog teams. In summer, riverboats replace the vehicles. Inside the villages four-wheelers are the typical transportation. Just seven settlements in the Yukon-Koyukuk Census Area are on Alaska's road system, so airplanes provide a year-round connection to Fairbanks and other places. Most communities receive seasonal freight delivery by river barge, while a few villages, such as Nikolai, Minchumina, and Arctic Village, rely almost exclusively on air transportation. All communities except Nenana are situated in remote locations. The smallest inhabited place is Coldfoot with a population of 18 people. Fort Yukon is the largest with 570 inhabitants. (See Exhibit 3.)

The area's large subdivisions

The Yukon-Koyukuk is subdivided geographically into the Koyukuk-Middle Yukon area, a large section in the northwest; the McGrath-Holy Cross area in the southwest; and Yukon Flats, the northeastern corner. Little commercial interaction occurs among these large subdivisions because of the vast geographic distances. Most supplies and services are dispatched from Fairbanks, the Interior's urban center.

Nearly 3,600 people live in 20 settlements in the Koyukuk-Middle Yukon area. Galena is the largest community. Most of the area's indigenous population is of Athabascan or Eskimo descent. The McGrath-Holy Cross area has a population of 1,286. McGrath is the largest of nine communities, and most villagers share an Athabascan heritage. In the northeast in Yukon Flats, an area with 1,491 residents, Fort Yukon is the largest town. This area is home to the Gwich'in Indians, who reside in nine settlements.

2 Yukon-Koyukuk Cuts Swath Across Alaska's Interior



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

A general profile of Yukon-Koyukuk rural communities

Residents of the Yukon-Koyukuk Census Area share a common lifestyle and similar economic activities. Subsistence hunting and fishing remain a vitally important part of the economy and way of life. Delivery of supplies and services to residents is the main ingredient of the cash economies. Airways are the most used link for travel and supplies. Typically, village infrastructure is modest, although most inhabited locations have an airstrip. Basics of modern living such as indoor plumbing or piped-in water are still considered amenities here. The region is rich in mineral deposits. The public sector plays the role of lead employer. Job opportunities in all the remote communities are few, and regional income is low.

Wage and salary employment grew little

During the past eight years employment grew by 113 jobs, or six percent. Most of the new jobs stemmed from the services and trade sectors. Government remained the dominant employer in the Yukon-Koyukuk Census Area, claiming more than half of all payroll jobs. Although the public sector maintained its dominance, it did suffer substantial job losses when the Air Force Station in Galena closed. Since 1995, wage and salary employment growth has flattened, hovering around 2,000 jobs. (See Exhibit 4.)

In 1999, government jobs made up 59 percent of the census area's total wage and salary employment. Federal and state government employment was fairly small, but local governments, including school districts, employed nearly half of the area's entire wage and salary workforce. City and village government entities employed almost 370 workers, and the remaining 600 were school district employees, making public education the leading economic force. Five school districts operate in the area and all of them are on the list of largest employers. (See Exhibit 6.) The Galena City School District is the largest. In addition to its regular school and a boarding school for high school students, this district runs a popular cyber school. Two other local districts, the Iditarod Area and Nenana City Schools, also offer long distance learning programs.

The cyber schools

The Interior Long Distance Education Area (IDEA) branch of the Galena City School District is the region's most popular education program, although only 10 students in the Yukon-Koyukuk Census Area are using it. In October 2000, IDEA enrollment reached nearly 3,100 students, down some from its record high of 3,487 in 1999. This new education format offers home schooling programs from kindergarten through 12th grade. The district provides computer equipment,

	1990	1999	Change 90-99
Yukon-Koyukuk Census Area	6,714	6,372	-5.1%
Koyukuk-Middle Yukon census subarea	3,928	3,595	-8.5%
Allakaket	170	187	10.0%
Alatna	31	34	9.7%
Allakaket	139	152	9.4%
Evansville	69	50	-27.5%
Bettles	36	26	-27.8%
Evansville	33	24	-27.3%
Galena	833	563	-32.4%
Hughes	54	61	13.0%
Huslia	207	272	31.4%
Kaltag	240	254	5.8%
Koyukuk	126	101	-19.8%
Lake Minchumina	32	38	18.8%
Manley Hot Springs	96	88	-8.3%
Minto	218	248	13.8%
Nenana	393	348	-11.5%
Nulato	359	381	6.1%
Rampart	68	66	-2.9%
Ruby	170	184	8.2%
Stevens Village	102	92	-9.8%
Tanana	345	301	-12.8%
Wiseman	33	20	-39.4%
Remainder of Koyukuk-Middle			
Yukon census subarea	413	341	-17.4%
Coldfoot	34	18	-47.1%
McGrath-Holy Cross census subarea	1,448	1,286	-11.2%
Anvik	82	93	13.4%
Grayling	208	184	-11.5%
Holy Cross	277	247	-10.8%
McGrath	528	423	-19.9%
Medfra	-	-	
Nikolai	109	105	-3.7%
Shageluk	139	140	0.7%
Takotna	38	48	26.3%
Telida	11	2	-81.8%
Remainder of McGrath-Holy Cross			
census subarea	56	44	-21.4%
Flat	9	12	33.3%
Yukon Flats census subarea	1,338	1,491	11.4%
Arctic Village	96	138	43.8%
Beaver	103	126	22.3%
Birch	42	35	-16.7%
Canyon Village	-	-	
Central	52	62	19.2%
Chalkyitsik	90	102	13.3%
Circle	73	89	21.9%
Circle Hot Springs	29	35	20.7%
Fort Yukon	580	570	-1.7%
Venetie	182	232	27.5%
Remainder of Yukon Flats census subarea	91	102	12.1%

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Internet access, and other teaching material for its students. The program requires that a parent assist and monitor the learning progress of each student. Educational professionals, students, and parents communicate via electronic mail.

Galena's new long distance learning program immediately gained statewide popularity. Alaska's urban students, in particular, have taken advantage of it. Most IDEA program students live in Anchorage, Fairbanks, Juneau, the Matanuska Valley, or on the Kenai Peninsula. The Galena district recently opened offices in Anchorage, Juneau, Fairbanks, Kenai, and Wasilla, offering tutoring service and consultation for its subscribers. In school year 2001, the district is receiving over \$9.7 million in state funding to educate the Internet-linked students. Enrollment in other long distance learning programs is strong as well. This year, Nenana Schools have 1,683 students enrolled in their Cyber-Lynx program, and Iditarod Area Schools reported that 484 students were enrolled in its Distance Learning program.

Private sector employment has concentrated on essential services

In 1999, only 820 jobs were in the private sector, most of them in the services industry. The most important employers were the local tribal councils that provide housing, health care, and other social services to residents. Nearly all of the 38 settlements have their own tribal organizations. These councils perform services under contract with non-profit organizations or government entities. In essence, public funds support their effort. The retail sector had the second largest employment count in the area, but retail jobs are generally located in larger places, such as in Fort Yukon, Galena, or McGrath. Small villages typically have only one variety store. The transportation industry is also very important, with most jobs airline related. Construction represented four percent of all wage and salary employment in 1999, but the economic impact of this industry typically waxes and wanes. (See Exhibit 5.) Construction activity in Interior Alaska depends largely on public funding.

4 Wage and Salary Employment In Yukon-Koyukuk Census Area

	1991	1992	1993	1994	1995	1996	1997	1998	1999	Change 90-99
Total Nonag. Wage & Salary Employment	1,887	1,846	1,812	1,858	2,031	1,962	2,046	2,001	2,000	113
Agriculture, Forestry, Fishing	1	4	7	6	6	4	2	3	2	1
Mining	44	9	8	16	25	35	54	87	26	(18)
Construction	5	3	4	54	194	130	97	48	79	74
Manufacturing	0	0	0	2	21	21	17	15	15	15
Transportation	82	96	101	211	181	99	128	115	96	14
Trade	108	110	135	145	145	168	188	212	190	82
Wholesale	8	13	14	14	16	17	20	18	17	9
Retail	100	97	121	131	129	151	168	194	173	73
Finance, Insurance & Real Estate	39	37	38	43	40	49	50	42	44	5
Services & Misc.	207	217	210	211	259	290	325	340	368	161
Government	1,396	1,367	1,304	1,171	1,161	1,164	1,185	1,140	1,179	(217)
Federal	187	185	158	125	116	119	115	98	95	(92)
State	140	107	117	137	116	124	121	120	114	(26)
Local	1,069	1,075	1,029	909	929	921	949	922	970	(99)

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Public sector construction has picked up

Construction activity has been brisk in Interior villages. Projects such as airstrip renewals or rebuilds, sewer and water systems, and upgrades to bulk fuel farms have been the main focus of village infrastructure improvement. Public housing projects have also helped improve the standard of living. In fiscal year 1999, the Department of Housing and Urban Development (HUD) helped with \$8.2 million. Additional funds from state and other federal agencies were used to construct more than 30 new single family units, multi-purpose buildings, and modernize existing structures. Usually, the Interior Regional Housing Authority and individual tribal village housing authorities employ local workers on village projects. Often such labor is not counted in construction employment because public entities and housing authorities remain the principal employers. Construction work, identified as "force account" labor, therefore often is recorded as services, real estate or government employment.

Income is low and poverty high

The various income accounts for the Yukon-Koyukuk Census Area show earnings falling considerably below state averages. Wage and salary income in 1999, for example, was more than 20 percent below the statewide average. The most recent personal per capita income measure, for 1998, pointed to a 35 percent difference. In 1997, household income ranked 25th among Alaska's 27 census areas. Median household income was \$30,532, trailing the statewide median by 30 percent. (See Exhibit 1.) All measures show widespread poverty in the area. The U.S. Census Bureau recently published its 1997 poverty estimates, concluding that 24.2% of residents of the Yukon-Koyukuk area were living in poverty. This is more than twice the statewide rate of 11.2%.

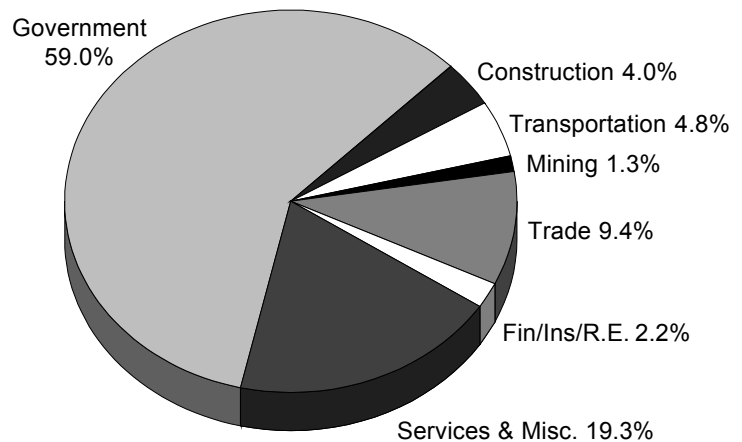
Statistics also show that earnings have declined in recent years. Total payroll earned in the area has decreased from \$65.4 million in 1995 to \$53.3 million in 1999. Some of the decline relates to the mine closures at Illinois Creek near Galena, and the Nixon Fork Mine, which was located north of McGrath.

The size of the drop in total personal income figures was held to \$1.1 million between 1995 and 1998 because two of its components, transfer payments, and dividend, interest and rental income, rose in the same time period. In three years, transfer payments increased by nearly 16 percent and income derived from dividends, interest, and rent grew more than 10 percent. Transfer payments describe disbursements from government to individuals, non-profit organizations, and businesses.

A closer look at 1998 area personal income underscores the importance of transfer payments for rural Interior Alaska. (See Exhibit 7.) More than \$113.6 million of personal income accrued for the census area, and just 48.7% of it was net

Wage and Salary Jobs By industry in Yukon-Koyukuk, 1999

5



Source: Department of Labor and Workforce Development, Research and Analysis Section

earnings from employment. Transfer payments added 36.3%, and dividend, interest and rental income generated 15% of the total. The transfer payment portion amounted to nearly \$41.3 million.

More than 38 percent of the area's government payments were spent on behalf of the resident population for medical services. (See Exhibit 8.) Alaska's Indian and Eskimo populations receive free health care benefits under federal mandate. Since 1995, those payments have increased by 21.5%, despite little change in population. The second largest transfer payment category, claiming nearly 24 percent, is classified as "other" payments. Alaska Permanent Fund dividend distributions are captured in the "other" group. Since 1995, those payments rose by 32 percent, most of which reflects the increase in the amount of Permanent Fund dividend checks. Income maintenance benefits payments, which include family assistance, food stamps, and other assistance, made up nearly 22 percent of the transfer payments. In 1998, the amount spent on such assistance was nearly three percent below its 1995 level. The remaining 16 percent of transfer

payments were unemployment insurance, retirement, disability payments and disbursements to nonprofits, businesses, education and training programs. The amount distributed for these types of transfer payments changed little between 1995 and 1998.

The economy of the Yukon-Kuskokwim area cannot generate all the cash it requires, and subsidies, whether in kind or cash, are needed. The infusion of public funds into the region is relatively large. Despite public subsidies, village residents enjoy few modern conveniences. Life is very basic and subsistence plays a major role.

A subsistence foundation

Hunting and fishing are the traditional sources of food. They are basic to the rural economy; area grocery prices are among the highest in the state. Transportation charges to these remote and sparsely populated settlements are high.

In the Yukon-Koyukuk, subsistence centers mostly around fish and big game. The Yukon and its tributaries provide fish, although the salmon resource has seriously declined. In 1999, the subsistence chinook and chum salmon harvest yield was just 58 percent of the 1990 catch. Still, the 1999 harvest, albeit small, produced over 1.3 million pounds of fish for local residents. Data have not yet been compiled for the disastrous 2000 season. But it likely will be the lowest subsistence take on record in the middle and upper Yukon area.

Big game is another important subsistence resource. Moose, caribou and black bear are among the most important species. Recently, the Alaska Department of Fish and Game conducted a sub-regional subsistence harvest survey for the Middle Yukon/Koyukuk area. It showed that hunting success from April 1999 through March 2000 yielded 413 moose, 137 caribou, and 62 black bear for a resident population of about 2,130. Not all households hunt, and meat is usually shared among the members of a

6 The Largest Employers In Yukon-Koyukuk Census Area

Rank	Company Name/Organization	Annual Avg. Employment
1	Galena City School District	148
2	Yukon-Koyukuk School District	134
3	Iditarod Area School District	120
4	State of Alaska	114
5	Yukon Flats School District	111
6	Federal Government	95
7	Athabaskan Tribal Government Council	65
8	Nenana City School District	48
9	Kiewit Pacific	45
10	City of Galena	41

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

community, according to ancestral traditions. Wild fowl hunting and berry picking are supplementary subsistence activities.

Traditional cash-generating economies have been ailing

Until recently, gold mining, commercial fishing and trapping were part of the region's cash producing economies. The rich mineral deposits of the Interior are legendary. Many settlements cite a gold rush in their chronicles and have contributed to Alaska's turbulent gold mining history. In recent history, rich gold deposits warranted the construction of two mines. The Illinois Creek Mine, near Galena, and the Nixon Fork Mine, north of McGrath, built in the mid 1990s, had a combined production potential of nearly 80,000 ounces of gold per year. But both mines, operating in high cost environments, had to suspend operations when gold prices started to deteriorate in 1998. Placer mining operations also fell victim to unfavorable business conditions.

Commercial fisheries harvests began in 1978 in the Upper Yukon area and developed into roe fisheries. Typically, commercial harvesters extracted and sold only the roe, mostly of female chum salmon. Though not substantial, this type of fishery produced some income for residents of the region. In 1990, for example, it earned over \$2.4 million for 116 local permit holders. Recently, poor fish runs created uncertainty about the viability of such commercial activity. In 1999, earnings amounted to just \$210,300 for 37 permit holders. During the 2000 season all commercial fishing ceased on the middle and upper Yukon because the salmon run fell to record low levels.

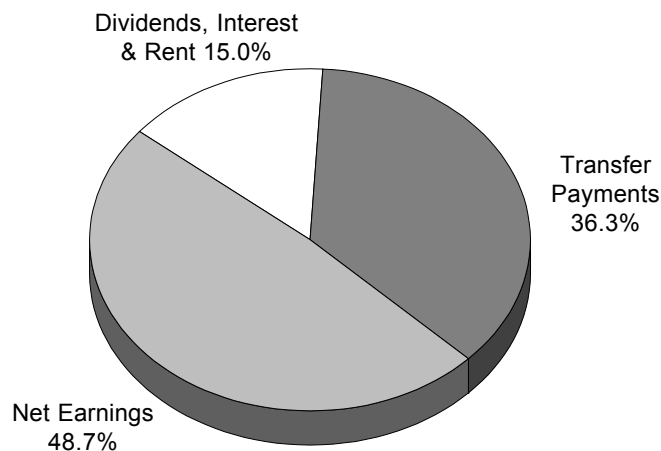
The frontier economy also includes trapping, Alaska's oldest commercial activity. Most trappers use snow machines to run their traplines, which in the Interior average 44 miles in length. Only a few trappers still use dog teams. According to a Department of Fish and Game report, lynx, beaver, and wolf were the top species harvested in the

Interior during the 1998-1999 season. Effort, however, has diminished because the demand for furs has dropped off sharply during the past decade.

The visitor industry has identified a few "hot" spots

Because access to most villages is limited, most of the Yukon-Koyukuk area has not been touched by mass tourism. Nenana is the big exception, due to its location on the Parks Highway between Denali National Park and Fairbanks. Many tour buses and independent travelers make a special stop in town. Among Alaskans, the town is famous for the Nenana Ice Classic, a lottery that rewards the best date and time guess for the spring ice breakup on the Tanana River near the highway bridge. The lottery employed nearly 100 workers in April 2000. Other places such as Manley Hot Springs and Circle Hot Springs are popular retreat spots for Alaskans, particularly Fairbanks residents. Their big advantage is that they can be reached by road.

Sources of Personal Income Yukon-Koyukuk Census Area \$113.6 million in 1998



Source: U.S. Department of Commerce, Bureau of Economic Analysis

The Dalton Highway has recently become an attraction for visitors seeking an Arctic adventure.

The villages along the Iditarod trail make the news during the famous sled dog race, but only a few visitors actually observe the race from Interior villages. High airfares and a lack of visitor infrastructure are limiting factors. Villages on the Yukon River have seen a rise in visits from travelers, many of them tour boat passengers or canoeists stopping for short visits.

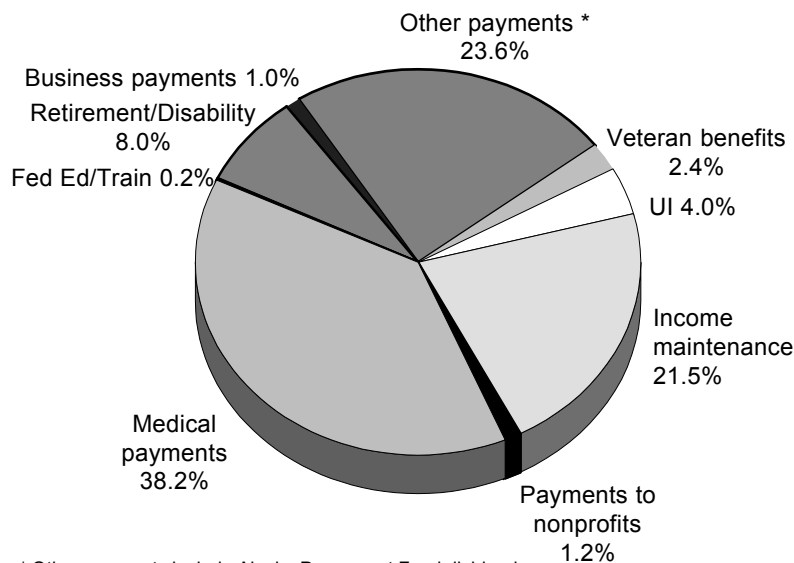
Sport hunters and anglers regularly visit the rural Interior. Outfitters from urban Alaska, however, organize the big game hunts, and only a few local residents work as guides. This also holds true for the boat charter business. According to the Commercial Fisheries Entry Commission, only 37 of the 134 charter boats that operate on the Yukon and its tributaries are home-ported in villages of the Yukon-Koyukuk. Although the tourism industry is growing, it has not yet become big business in

the rural areas of the Interior.

Job opportunities are scarce

The lack of employment opportunities remains a basic characteristic of rural Interior Alaska. Year-round employment is rare. Villagers often have to leave their communities to take jobs elsewhere. Construction work and fire fighting are examples of such seasonal jobs. Therefore, it is not surprising that many people of working age leave the villages. This appears to be happening in the Yukon-Koyukuk Census Area; the working age population (18-64 years of age) has declined 6% between 1990 and 1999. Net migration figures confirm that fewer people come into than leave the area. In fact, the overall population has declined in most years of the 1990s, and natural increase from births could not offset this trend. Despite its rich mineral resources and natural beauty, economic development is a challenge for most of the Yukon-Koyukuk Census Area because of limited access and vast distances.

8 Large Portion of 1998 Y-K Transfer Payments was for health care



* Other payments include Alaska Permanent Fund dividends

Source: U.S. Department of Commerce, Bureau of Economic Analysis