



MANOKOTAK COMMUNITY COMPREHENSIVE PLAN UPDATE

August 2015

Prepared by Agnew::Beck Consulting



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ACKNOWLEDGEMENTS

The Manokotak Community Comprehensive Plan is the result of a collective effort by the City of Manokotak, Manokotak Natives Limited, Manokotak Village Council, and the residents of Manokotak, including local youth and elders. This plan is the direct result of their contributions of time, knowledge of their community, and their shared desire for a healthy, well and sustainable future for Manokotak. The Manokotak Planning Committee, a group with representatives from each of the three key community entities, played a key role in leading the planning process and reviewing draft materials.



Manokotak youth at the Community Open House

Manokotak Community Planning Committee (CPC) members:


- Moses Toyukak, Sr., President, Manokotak City Council
- Michael Alakayak, President, Manokotak Natives Limited
- Bonnie Ayojiak, Board Member for Manokotak Natives Limited
- Wassillie Tugatak, Sr. President, Manokotak Village Council
- Carl W. Evon, Manokotak Village Council
- Bibiana Gloko, IGAP Coordinator, Manokotak Village Council; Vice President, Manokotak City Council

We would also like to extend a special thanks to the following individuals for their assistance and contributions to the plan:

- Members of the Manokotak Student Council
- Members of the Manokotak Community School Committee
- Melvin Andrew, Mayor, City of Manokotak
- Nancy George, City Administrator, City of Manokotak
- Deb Forkner, Principal, Manokotak Nunaniq School
- Dana Bartman, Assistant Principal, Manokotak Nunaniq School
- Joanne Knight, Teacher, Manokotak Nunaniq School
- Arline Franklin, Administrator, Manokotak Village Council; City Council Member
- Valda Borbridge, General Manager, Manokotak Natives Limited
- Mike Gloko, Former Vice President, Manokotak City Council
- Laura John, City Clerk, City of Manokotak
- Tessa Nickerson, Bristol Bay Economic Development Corporation Community Liaison, City of Manokotak; Vice President, Manokotak Village Council
- Alyssa Apalayak, Utility Manager, Manokotak Power Company; Secretary, Manokotak City Council
- Billy Bartman, Manokotak City Council
- Ferdinand Sharp, Southwest Regional School District Board
- Kevin Waring and Associates

PLANNING PROCESS

Many people contributed to this Community Comprehensive Plan. This section outlines the process and steps that led to the development of this plan.

- The planning process began with a review of past planning documents and identification of the roles and responsibilities of the Manokotak Community Planning Committee. The Community Planning Committee was identified, with representatives from the City of Manokotak, Manokotak Natives Limited and the Manokotak Village Council. Agnew::Beck also prepared a list of guiding questions for a fall comprehensive plan training.
 - In November 2014, the Community Planning Committee and other community representatives gathered for a four-hour comprehensive plan training in Anchorage. The training provided practical advice about successful community comprehensive planning in the context of small, rural Alaska towns and helped prepare community leaders for the upcoming planning process, including review of Community Planning Committee roles and responsibilities. At the meeting, participants discussed and refined the Manokotak community comprehensive planning approach, process and timeline. Planning Team members and other representatives from the City, Corporation and Tribe participated in the training. Five community members attended in-person, with an additional eight residents on the phone.
- 
- In-person participants at the Community Leadership Comprehensive Planning Training in Anchorage
- Prior to the first community visit, the project team collected background information and data on the community and conducted a review of relevant regional planning efforts.
 - A community survey was created to engage the community in the planning process and to gather feedback from residents. A total of 101 residents responded to the survey, which is over 20 percent of the community. In order to increase the number of responses, the City of Manokotak offered free commemorative “45 years of service” water bottles to each respondent. Surveys were distributed at community events, via social media, at the public open house and at the City office.
 - In February 2015 the project team visited the community to conduct a series of meetings with different community groups and stakeholders, and to facilitate a community-wide open house. This visit included the following activities.
 - Upon arrival in the community, Agnew::Beck met with the City Administrator to prepare for the community open house, followed by a short tour of the community.
 - On day two of the visit, the project team had conversations with members of the Community Planning Committee and other community leaders to confirm preliminary priorities and concerns and to get feedback on the format of the open house.



Residents at the February Community Open House (photo by Melvin Andrew)

- On Tuesday, February 24, 2015 a community open house was held to gather public input for the plan. The open house gave residents an opportunity to review recent community accomplishments and background data, and to weigh in on community issues, existing conditions, challenges, opportunities and potential strategies. Residents shared their priorities by responding to and writing on a series of maps and posters. Healthy snacks and a variety of door prizes were offered in order to encourage attendance. We would like to thank Pen Air for their donation of a round trip ticket to Anchorage and the City of Manokotak for their donation of a \$100 cash prize. Eight Visa gift cards were also given out. Over 130 residents attended the open house.
- On the final day of the community visit, Agnew::Beck met with the Manokotak Student Council and 10th grade students at the Manokotak Nunaniq School. These students are the next generation of Manokotak leaders, and the project team wanted to capture their ideas and concerns. Students shared their vision for the community, what changes they would like to see and their career plans for after high school. The feedback provided helpful insight into the concerns and challenges for younger people growing up in the community.
- The project team met with the Manokotak School Committee during their regularly-scheduled monthly meeting to learn more about the current and upcoming plans and priorities for the school. Agnew::Beck learned about the school's efforts to integrate additional economic development opportunities and traditional subsistence and language activities into the school.
- During the writing and updating process for the plan, follow-up conversations were held with the following stakeholders and key informants:
 - Kevin Waring, Consultant on City of Manokotak's Annexation Petition
 - Barry Moring, Chief Financial Officer, Bristol Bay Housing Authority
 - Mischa Ellanna, Bristol Bay Native Corporation
 - Rick Dallmann, Facilities Director, Southwest Region School District
 - Nancy George, City Administrator, City of Manokotak

The project team compiled the extensive information from the community visit, survey, research and interviews into this updated Community Comprehensive Plan. A second community visit occurred in

August 2015 to share the results of the plan with the Community Planning Committee, which included a prioritization process. The plan was approved in August 2015. The project team hopes to find additional funding to work with youth to present the results to community residents.

Photos were provided by Agnew::Beck Consulting unless noted otherwise. Maps were compiled by the State of Alaska Department of Commerce, Community and Economic Development (DCCED) as part of the Community Profiles Mapping Project. Funding for the preparation of this plan was provided by the Bristol Bay Economic Development Corporation. Agnew::Beck was hired to lead the process and provided meeting facilitation, planning assistance and assistance with publication.

Community Survey Responses to the Question, “Why do you live here? What makes Manokotak special?”

“Manokotak’s culture and language is still strong and friendly. The welcoming spirit is awesome!”

“I choose to live here because I grew up here. Manokotak is special in many ways: people help each other out, they all get along, and they respect each other.”

“I grew up here. This is my home and where I plan to raise my kids. Manokotak is a unique place, close to the ocean and lakes.”

RESOLUTIONS FROM GOVERNING BODIES



Community of Manokotak

Resolution # 15-12

Title: Manokotak Community Comprehensive Plan Update, August 2015

Whereas: the Manokotak City Council (MCC), Manokotak Village Council (MVC), and Manokotak Natives Limited (MNL) are the governing bodies for the residents of Manokotak and are fully authorized to act on behalf of its residents; and

Whereas: MCC, MVC and MNL are empowered to act for and on behalf of its members in adopting resolutions; and

Whereas: this resolution shall give notice that all three entities approve and support the Manokotak Community Comprehensive Plan Update, August 2015 for the residents of Manokotak.

NOW THEREFORE BE IT RESOLVED that the MCC, MVC and MNL hereby recognizes that the community residents provided the information in the plan concerning the plan's goals, actions and implementation; and


BE IT FURTHER RESOLVED that MCC, MVC and MNL adopt the comprehensive plan and will work together and with other partners in the community and region for the betterment of the residents of Manokotak; and commit to report back to the community on the progress of implementing the Comprehensive Plan Update; and

BE IT FURTHER RESOLVED that the following priorities have been identified in the Comprehensive Plan Update, as the most important priorities for the community to focus on over the next five years (these are not in ranked order):

- Work with regional partners to construct a road from Manokotak to Dillingham.
 - Create village wellness team to increase collaboration between service providers and law enforcement and ensure village needs are identified and met.
 - Expand and support workforce readiness programs in the school.
 - Upgrade the water and sewer infrastructure in the main village.
 - Develop a comprehensive strategy for funding new homes that includes a mix of grants, loans, private investment and sweat equity.
- Create a community work space or shop space for residents.

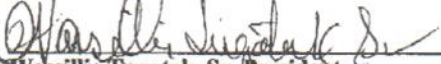
Develop a Manokotak land use plan.

BE IT FURTHER RESOLVED that by the Mayor's and Presidents' signatures, this resolution was duly considered and adopted at the joint entities quarterly meeting on August, _____ 2015 and was passed by a majority vote.



Melvin Andrew, Mayor
City of Manokotak

8/27/15
Date



Wassillie Tugatak, Sr. President
Manokotak Village Council

9-4-15
Date



Michael Alakayak, President
Manokotak Natives Limited

9-9-15
Date

LIST OF ACRONYMS

- ADF&G – Alaska Department of Fish and Game
- AEA – Alaska Energy Authority
- AHFC – Alaska Housing Finance Corporation
- ALARI – Alaska Local and Regional Information, from the Alaska Department of Labor and Workforce Development, Section of Research and Analysis
- ANTHC – Alaska Native Tribal Health Consortium
- BBAHC – Bristol Bay Area Health Corporation
- BBEDC – Bristol Bay Economic Development Corporation
- BBHA – Bristol Bay Housing Authority
- BBNA – Bristol Bay Native Association
- BBNC – Bristol Bay Native Corporation
- BIA – Bureau of Indian Affairs
- CIP – Capital Improvement Projects
- DCCED – Alaska Department of Commerce, Community and Economic Development
- DEC – Alaska Department of Environmental Conservation
- DOLWD – Alaska Department of Labor and Workforce Development
- EDA – U.S. Economic Development Administration
- EMA – Emergency Medical Services
- HUD – U.S. Department of Housing and Urban Development
- ICDBG – Indian Community Development Block Grant
- IGAP – Indian Environmental General Assistance Program
- IHBG – Indian Housing Block Grant Program
- TPP – Tribal Transportation Program
- MNL – Manokotak Natives Limited
- NAHASDA – Native American Housing Assistance and Self Determination Act
- STEM – Science, Technology, Engineering and Math
- SWAMC – Southwest Alaska Municipal Conference
- SWRSD – Southwest Region School District
- TANF – Temporary Assistance for Needy Families
- VPSO – Village Public Safety Officer

INTRODUCTION

PURPOSE OF PLAN

Villages, regional organizations and statewide entities all recognize the need for communities to clearly state their goals and visions for the future. Community planning is the process of coming together to agree on a future direction, and gathering momentum to carry it forward. A united community is like a river that starts out braided and dispersed, but gains power by funneling all its separate channels into one stream. A united community, regardless of size or location, can achieve its goals through building consensus and clearly pursuing a direction all community members support. This is the key to self-sufficiency and self-governance.

Community goals can range from constructing facilities, such as housing or a community center, to expanding infrastructure, creating jobs, protecting subsistence areas and sustaining cultural traditions. By planning ahead, villages can act on new opportunities and be prepared for challenges associated with economic and demographic changes.

This Comprehensive Plan focuses on the existing City of Manokotak. If the City's pending annexation petition is approved, the City will prepare a supplemental plan for the annexed territory.

PROCESS TO PREPARE MANOKOTAK'S COMPREHENSIVE PLAN

The Manokotak Comprehensive Plan, 2015, builds on multiple previous plans completed by the community and all of the community engagement efforts described above under the "Planning Process" section. Most directly, this plan draws from the 2005 Manokotak Comprehensive Plan, a document developed largely from the 2003 Manokotak Community Plan, a local planning effort led by Bonnie Ayojiak. Other relevant plans consulted during this planning process include the following:

- Manokotak Village Council Indian Environmental General Assistance Program (IGAP) Work Plan (2015)
- Alaska Housing Finance Corporation Alaska Housing Assessment (2014)
- Bristol Bay Native Association Comprehensive Economic Development Strategy (2014)
- Southwest Alaska Municipal Conference Municipal Conference (2014)
- Alaska Maritime Workforce Development Plan (2014)
- Southwest Alaska Municipal Conference Bristol Bay Regional Energy Plan (2013)
- Bristol Bay Regional Seafood Development Association: Five Year Strategic Plan, 2013-2018 (2013)
- Manokotak Village Council: BIA Long Range Transportation Plan (2011)
- Subsistence Harvests and Uses of Wild Resources in Aleknagik, Clark's Point, and Manokotak, Alaska (2008)

PLAN COMPONENTS

This section provides an overview of the outline of the plan structure, along with brief descriptions of each chapter.

- **Vision, Values and Goals:** this chapter shares the community’s overarching vision and values, and summarizes the goals and priority strategies from each of the subsequent chapters.
- **Community Profile:** this chapter gives an overview of Manokotak, including information about population change, the economy and the environment.
- **Community Survey:** this chapter provides a brief overview of the survey timing and response rate, and includes a word-based image that depicts the collective community responses to the question, “Why do you choose to live here? What makes Manokotak special?” Specific survey responses are also included throughout the Plan.
- **Community Wellness and Capacity:** this chapter includes information about Manokotak’s culture, leadership structure, school, workforce development opportunities and health and wellness. It includes goals and strategies aimed at improving the community’s health, education and economic opportunities.
- **Land Use and Environment:** this chapter discusses land ownership, land use and the environment in Manokotak. It includes background on existing land use and environmental concerns as well as proposed land use and environment goals and strategies.
- **Housing:** this chapter shares an overview of Manokotak’s housing stock and current housing-related concerns, and includes goals and strategies to address the community’s housing needs.
- **Public Facilities and Services:** this chapter provides an overview of current public facilities and services in Manokotak, and includes goals and strategies that highlight community needs and recommended improvements.
- **Transportation:** this chapter outlines the current transportation infrastructure and needs in Manokotak, and identifies priority goals and strategies to address the transportation needs and concerns of community residents.
- **Energy:** this chapter provides information on the cost and availability of energy in Manokotak, and includes goals and strategies to reduce energy costs and energy consumption in the community.
- **Comprehensive Plan Revision Process:** this final chapter provides information on when and how to update the plan. It also contains information and recommendations to support plan implementation.

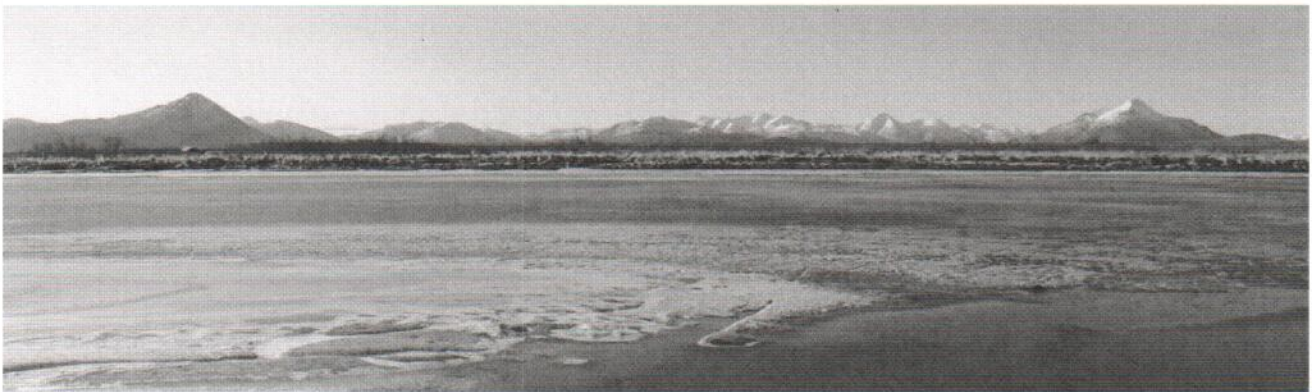
SUPPORT IN STATE STATUTE: State Statute Section 29.40.030. Comprehensive Plan

Under Title 29 of Alaska Statutes, the City of Manokotak has the option to exercise local planning powers (AS 29.35.260(a)), and has chosen to do so. AS 29.40.030, which applies only to municipalities with mandatory planning powers, offers a definition of the comprehensive plan and plan adoption process that can guide the City of Manokotak. The key elements of the state statute are extracted below:

(a) The comprehensive plan is a compilation of policy statements, goals, standards, and maps for guiding the physical, social, and economic development, both private and public, of the first or second class borough, and may include, but is not limited to, the following:

- Statements of policies, goals, and standards;
- Land use plan;
- Community facilities plan;
- Transportation plan; and,
- Recommendations for implementing a comprehensive plan.

(b) With the recommendations of the planning commission, the assembly shall adopt by ordinance a comprehensive plan. The assembly shall, after receiving the recommendations of the planning commission, periodically undertake an overall review of the comprehensive plan and update the plan as necessary.



Igushik River in spring

VISION, VALUES AND GOALS

VISION STATEMENT

We are a cross-culturally active community focused on becoming self-reliant and self-determined using traditional and conventional ways. We want better communication and unity among our members. We aim toward culturally-based jobs in education, health and safety that meet our needs for community development.

VALUES

- **Health, wellness, vitality.** Engaged, productive, contributing individuals, families and community.
- **Collaboration.** Working together.
- **Cross-cultural, multi-cultural respect.** Pride in self, in community, in culture, in others.
- **Knowledge.** Well-learned and utilized cultural traditions and practices, coupled with new skills and education.

SUMMARY OF GOALS AND PRIORITY STRATEGIES

Below are the priority strategies and the community goals from the following chapters of the Community Comprehensive Plan.

PRIORITY STRATEGIES (these are all priorities, and are not in any particular order)

- Work with regional partners to construct a road from Manokotak to Dillingham. (Transportation Chapter)
- Create village wellness team to increase collaboration between service providers and law enforcement and ensure village needs are identified and met. (Community Wellness and Capacity Chapter)
- Expand and support workforce readiness programs in the school. (Community Wellness and Capacity Chapter)
- Upgrade the water and sewer infrastructure in the main village. (Public Facilities and Services Chapter)
- Develop a comprehensive strategy for funding new homes that includes a mix of grants, loans, private investment and sweat equity. (Housing Chapter)
- Create a community work space or shop space for residents. (Community Wellness and Capacity Chapter)
- Develop a Manokotak land use plan. (Land Use and Environment Chapter)

GOALS

COMMUNITY WELLNESS AND CAPACITY

- Goal 1: Gather as a Community
- Goal 2: Improve Communication among Leadership Organizations
- Goal 3: Create More Local Jobs
- Goal 4: Increase Workforce Development Opportunities
- Goal 5: Increase Youth Opportunities
- Goal 6: Increase Effectiveness of Social Service Providers through an Integrated Approach to Wellness

LAND USE AND ENVIRONMENT

- Goal 1: Identify Areas for Specific Uses and Future Growth
- Goal 2: Increase Amount of Land Available for Housing
- Goal 3: Maintain a Clean, Healthy Environment in and Around the Community

HOUSING

- Goal 1: Identify Funding, Land and Resources to Construct New Housing
- Goal 2: Improve Existing Housing Stock

PUBLIC FACILITIES AND SERVICES

- Goal 1: Sustainable Operation and Maintenance of Public Services
- Goal 2: Improve Existing Facilities and Services
- Goal 3: Develop New Facilities and Services

TRANSPORTATION

- Goal 1: Improve Connectivity to Manokotak
- Goal 2: Improve Road, Bike and Pedestrian Connections

ENERGY

- Goal 1: Develop New, More

Community Open House: resident responses to the question, "What are our community priorities?"



Affordable Energy Sources

- Goal 2: Reduce Energy Consumption

COMMUNITY PROFILE

INTRODUCTION

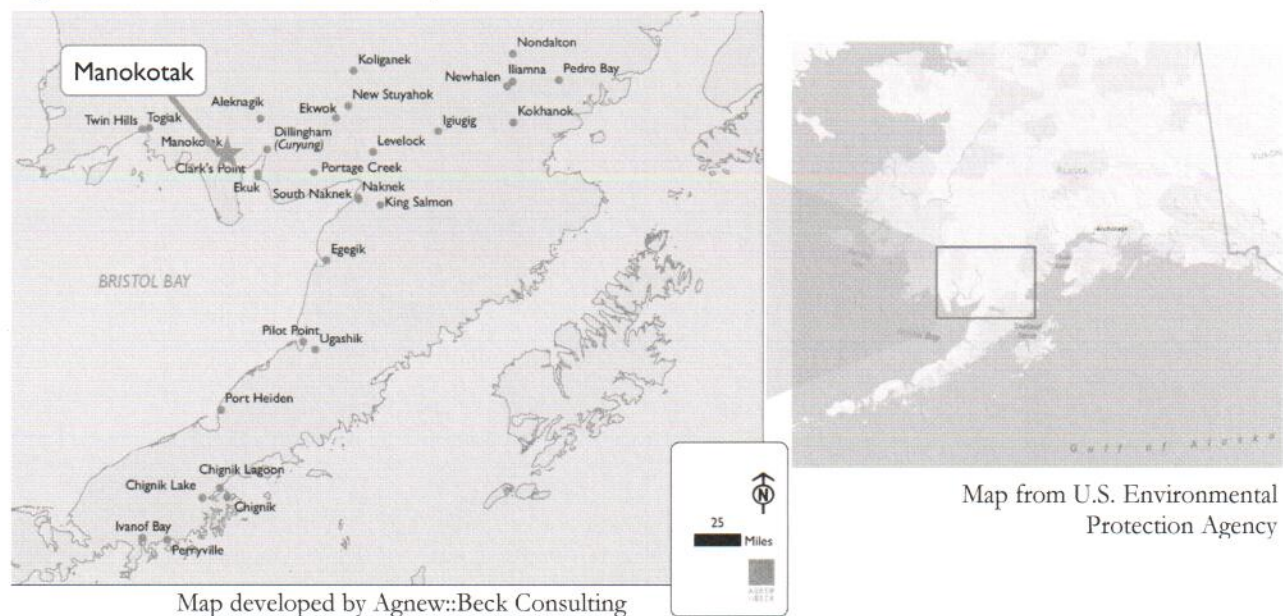
This chapter contains an overview of the community and surrounding area. The first section includes community information such as Manokotak's location, population and economy. This is followed by general background information on Manokotak's governance, physical setting, environment and subsistence activities. This community profile draws heavily from secondary and primary sources, including the following:

- United States Census Bureau, decennial census data and American Community Survey Five-Year Estimates,
- Alaska Department of Labor and Workforce Development, Section of Research and Analysis's Alaska Local and Regional Information (ALARI),
- Alaska Housing and Finance Corporation's 2014 Alaska Housing Assessment, and
- A 2012 publication from the Alaska Department of Fish and Game, Division of Subsistence, *Subsistence Harvests and Uses by Residents in Aleknagik, Clark's Point, and Manokotak, Alaska, 2008* by Davin Holen, Jory Stariwat, Theodore M. Krieg, and Terri Lemons.

Local elders also provided critical background information on the history of Manokotak during the 2005 comprehensive planning process.

PROJECT AREA

Figure I. Location of Manokotak, Alaska



DESCRIPTION

Manokotak is a Yup'ik Eskimo village with a fishing, trapping, and subsistence lifestyle. Located 25 miles southeast of Dillingham on the Igushik River, it lies approximately 350 miles southwest of Anchorage, Alaska's largest city. The community of Manokotak sits between the east bank of the Igushik River and a lone hill that rises to an elevation of about 850 feet. The Tuklung Hills are visible in the background to the west. The area encompasses 36.4 sq. miles of land and 0.9 sq. miles of water. Igushik Village, where the Igushik River enters Nushagak Bay, has long been the summer fish camp where most Manokotak families base their most productive subsistence and commercial fishing harvest activities.

Manokotak's location was originally chosen, at least in part, because of the abundance of firewood in the area— firewood which could provide residents heat and fuel for steambaths. The site was also attractive because of its proximity to rivers where waterfowl, marine mammals and fish were abundant. These animals were caught for subsistence and commercial purposes. Upriver, a steady supply of spawned out red salmon and Dolly Varden provided residents with food for their dogs. The addition of school services provided by the Moravian Mission made it possible for residents to receive an education in the village.

Manokotak is one of the newer villages in the Bristol Bay region. Manokotak became a permanent settlement in 1946-47 with consolidation of the villages of Igushik and Tuklung. Manokotak was incorporated in 1970. People also migrated to Manokotak from Kulukak, Togiak, and Aleknagik. Most of the residents leave during the summer, traveling to fish camps in either Igushik or Ekuk. Igushik has become a summer fish camp and is located on the mouth of the Igushik River. As of 2013, ninety-one residents hold commercial fishing permits (Alaska Fisheries Entry Commission). Sharing relationships exist with several area villages, especially Togiak and Twin Hills.

The community is increasing in population: in 2014, the community had an estimated population of 500 (ALARI), an increase of 13 percent since 2010. The village is split between two primary locations: the traditional community site (the “main village” or the “old village”), and a newer housing development called Manokotak Heights, located approximately five miles from the main village. Manokotak Heights is located next to the school, on the route between the main village and the newly constructed runway.

GOVERNANCE

Manokotak has both tribal and municipal governments. The municipal government was incorporated as a second class city in 1970. Many Manokotak residents are shareholders of Bristol Bay Native Corporation (BBNC) as well as the local village corporation, Manokotak Natives Limited. Some residents are also shareholders of adjacent village corporations, including Twin Hills Natives Limited, Togiak Natives Limited and Aleknagik Natives Limited.

PHYSICAL SETTING AND HABITAT

Manokotak is located in a climatic transition zone. The primary influence is maritime, although the arctic climate affects the region. Cloudy skies, mild temperatures, and moderately heavy precipitation characterize the area. Annual precipitation ranges from 20 to 26 inches. Fog and high winds exist periodically through the year. The river is ice-free from June through mid-November.

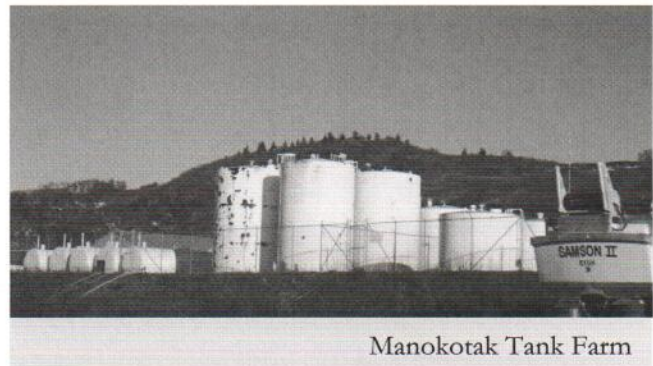
The dominant vegetation type in the area is tundra with willows, and scattered clumps of cottonwoods grow along the rivers. Small patches of spruce grow in some areas. Lakes and small ponds dot the landscape.

Bristol Bay drainages are the world's most productive areas for sockeye (red salmon), but four other species of Pacific salmon also spawn in Bristol Bay drainages: Chinook, chum, pink, and Coho salmon. Marine fish in the region include herring, smelt, halibut, and flounder. A variety of freshwater fish species, particularly rainbow trout, Dolly Varden, Arctic grayling, and northern pike are common in many drainages.

ENVIRONMENTAL ISSUES

The community has an active Indian General Assistance Program (IGAP) funded by the U.S. Environmental Protection Agency and managed through the Manokotak Village Council. The IGAP program has identified the following environmental issues for Manokotak:

- Residents are concerned about air quality in the summer and fall due to dust from the unpaved roads. This is a health hazard for village residents, particularly elders and children.
- Protect subsistence sites in and around Manokotak used for berry picking, seal and beluga hunting, fishing, and other subsistence activities.
- Demolition, renovation and replacement of dilapidated public buildings and houses.
- Conduct water and sewer system upgrades and efficiency improvements.



Manokotak Tank Farm

SUBSISTENCE ECONOMY

Manokotak relies heavily on wild food for subsistence. According to a 2008 Alaska Department of Fish and Game report, which is the most current resource available, 100 percent of households use wild food. The report is based on interviews with 64 percent of households in the community. Ninety-seven percent of households and 80 percent of individuals harvest wild food. According to the 2008 report, the average harvests are estimated to be 759 pounds per household per year and 298 pounds per person per year.

The study asked residents a variety of questions about their subsistence harvesting and use. Numbers for use are higher than harvesting numbers because many households share resources, so while a household may not be actively harvesting a resource they may still be using it. During the study year, Manokotak residents on average harvested 13 kinds of resources and used an average of 22 kinds of resources. Salmon was the most commonly harvested resource, with 97 percent of households harvesting salmon during the year for a total of 51,214 pounds of salmon or 533.5 pounds per household. According to the report, salmon are generally caught at the Igushik fish camp on Nushagak Bay and on the Igushik and Weary Rivers near Manokotak.

Other commonly harvested wild resources include land mammals such as caribou and moose (average 176 pounds per household); non-salmon fish such as smelt, herring roe, char, Alaska blackfish and northern pike (172 pounds/household); berries (100 pounds/household); birds and eggs (68.4 pounds/household); and marine mammals such as seal, whale and walrus (58 pounds/household). For a breakdown of the top ten resources harvested and used in Manokotak in 2008 on a per capita basis, please see Table 1.

During the survey, residents were asked how the 2008 harvest year compared to previous years. Sixty-six percent of households said harvests remained the same, 19 percent said they harvested more than in recent years, and 15 percent of households said they harvested less. Compared with three earlier studies (1973, 1985, 1999), harvesting information was similar across most categories. Notable changes include a decline of large land mammals from 113 pounds in 1999 to 45 pounds in 2008 and steady declines in both marine mammal and small land mammal harvests. Berry, plant and marine invertebrate harvesting has increased in recent years. Overall the studies show a decline in the pounds of usable weight harvested per capita, going from 406 pounds (1973), to 384 pounds (1985), to 356 pounds (1999) to 298 pounds (2008).

Table 1: Top Ten Resources Harvested and Used, Manokotak 2008

Harvest			Use		
Rank	Resource	Pounds per capita	Rank	Resource	Percentage of households using
1	Sockeye salmon	67.3	1	Sockeye salmon	93%
2	Chinook salmon	50.0	2	Berries	92%
3	Moose	36.4	3	Smelt	89%
4	Berries	25.3	3	Moose	87%
5	Northern pike	14.8	5	Geese	82%
6	Coho salmon	14.0	6	Cockles	80%
7	Plants/greens/mushrooms	10.1	7	Ptarmigan	79%
8	Caribou	8.1	8	Chinook salmon	77%
9	Smelt	7.7	9	Northern pike	70%
10	Beluga whale	6.6	10	Seabird and loon eggs	70%

Source ADF&G Division of Subsistence household surveys, 2009.

MANOKOTAK POPULATION

POPULATION

Table 2 shows the population for Manokotak at 10-year intervals, 1950 through 2010, and estimated population from 2011-2014. Manokotak has experienced steady growth over the past 60 years. According to the Alaska Department of Labor and Workforce Development, the 2014 population of Manokotak was 500.

Manokotak is located in the Dillingham Census Area. The population center for the Dillingham Census Area is the community of Dillingham, accounting for 50 percent of the population of the census area. The Dillingham Census Area maintained a steady population between 2000 and 2010, and saw a slight increase in population between 2000 to 2014, from 4,873 to 5,044 residents. Manokotak’s population growth of 13 percent between 2010 and 2014 is faster than both the statewide rate of three percent and the regional growth rate for the Dillingham Census Area, which is four percent.

The Alaska Department of Labor and Workforce Development (DOWLD) provides population projection estimates for different regions of Alaska based on birth, death and migration rates and projections. Between 2012 and 2042, DOWLD estimates the population for the Dillingham Census Area will see a slight increase to 5,341 in 2042. Table 3 shows a breakdown of the population projections and components of change. The projections forecast high outward migration from the region, but the high estimated birth rates help overcome the population lost due to migration out of the region.

Table 2: Population for Manokotak and Dillingham Census Area, 1950-2014

Year	1950	1960	1970	1980	1990	2000	2010	2011	2012	2013	2014
Manokotak	120	149	214	294	385	399	442	454	456	459	500
Dillingham Census Area	-	4,024	3,485	4,616	4,012	4,922	4,873	4,942	4,980	5,020	5,044
Alaska	129,000	226,000	302,000	401,851	550,043	627,963	713,985	722,818	722,818	722,818	722,818

Source: Census Data from Alaska DOLWD

Table 3: Average Annual Components of Projected Population Change for the Dillingham Census Area, 2012-2042

	Births	Deaths	Net Migration	Population Change	Growth Rate	Population Estimate
2012-2017	106	37	-61	8	0.16%	5,027 (2017)
2017-2022	106	39	-59	8	0.16%	5,066 (2022)
2022-2027	102	42	-52	8	0.16%	5,104 (2027)
2027-2032	101	46	-46	9	0.18%	5,151 (2032)
2032-2037	105	48	-43	14	0.27%	5,221 (2037)
2037-2042	111	50	-37	24	0.45%	5,341 (2042)

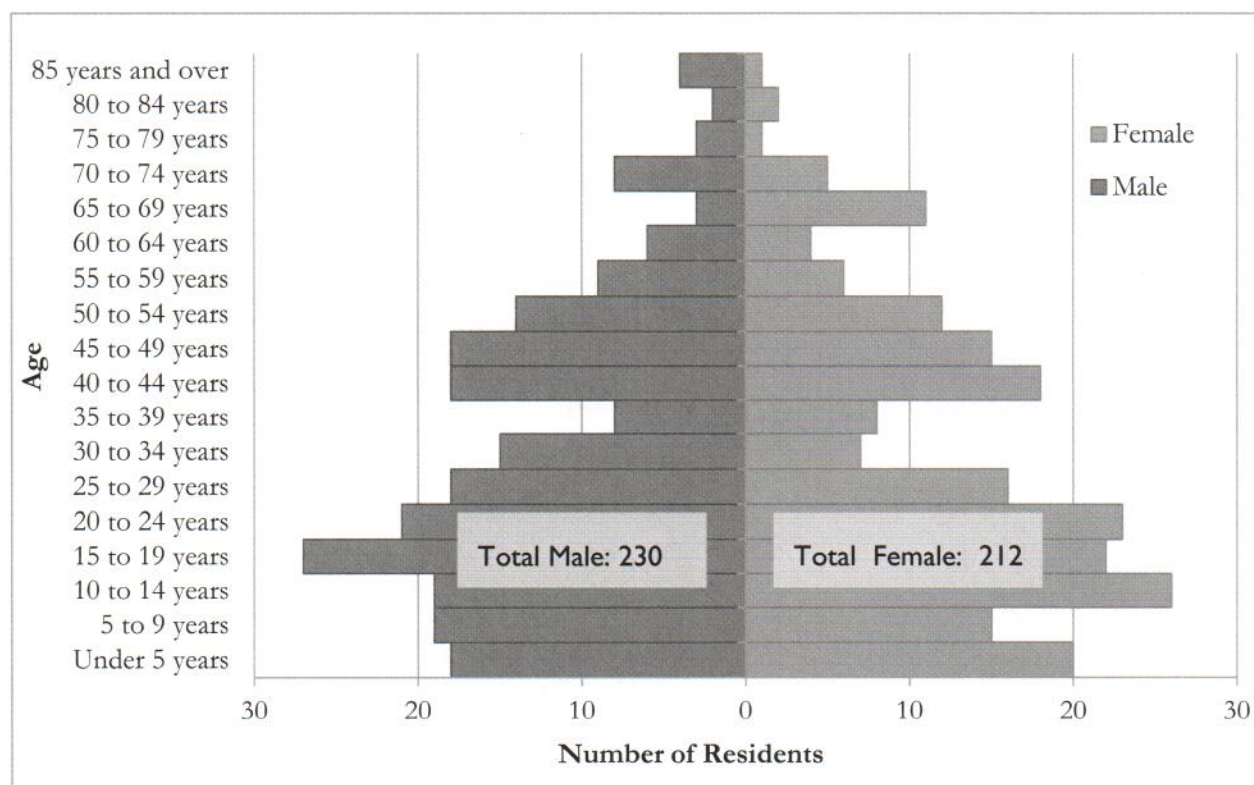
Source: Alaska DOLWD

AGE AND GENDER

Age distribution gives an indication of whether the population of a community is generally young or old and growing or declining. It is a predictor of future school enrollments, an indicator of what resources and programs the community may need for specific age groups, and one source of information about the available labor force, and the impacts of changes in the nature of the local economy.

Figure 1 shows age and gender information for Manokotak during the 2010 Census. According to the 2010 Census, the median age for Manokotak is 26 years old, up from 21.9 years in the 2000 Census. In 2010, 52 percent of the population was male and 48 percent of the population was female.

Figure 1: Population Pyramid, 2010

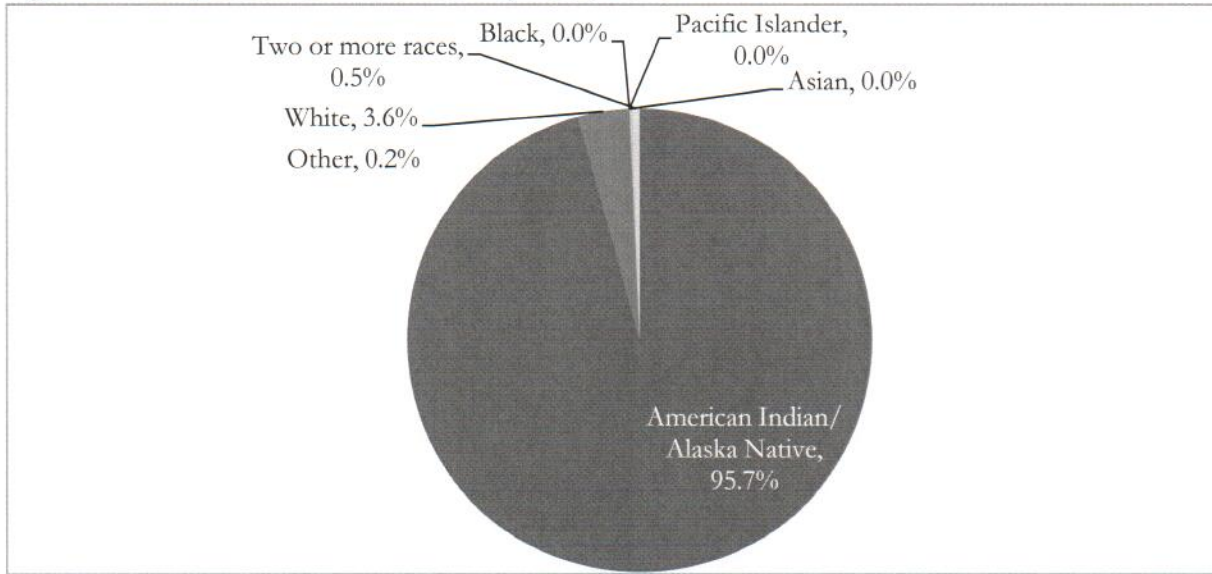


Source: 2010 Census

RACE

During the 2010 Census, 423 individuals or 95.7 percent of the population reported they were Alaska Native or American Indian. This is higher than the Dillingham Census Area’s 2010 Census results, with 71.6 percent of the population identifying as Alaska Native or American Indian, and higher than the statewide 2010 Census results, with 14.8 percent of the population identifying as Alaska Native or American Indian. The full distribution of the population for Manokotak can be seen in Figure 2.

Figure 2: Composition of Manokotak by Race, 2010



Source: 2010 Census

HOUSEHOLDS

Table 4 shows housing and household information for Manokotak, the Dillingham Census Area and Alaska. This information is summarized from 2010 Census data. The average household size in Manokotak is 3.7 individuals, slightly higher than Dillingham Census Area (3.1 individuals) and the state (2.7 individuals). Average family size in Manokotak is 4.4 individuals, which is also larger than both Dillingham Census Area and statewide. There are 138 housing units in Manokotak, 121 of which are occupied and 17 which are vacant. Of the vacant units, two are for rent, two are for sale, one is reserved for seasonal use and twelve were listed as “other.” The overall vacancy rate for the community is 2.1 percent, higher than Dillingham Census Area’s 0.7 percent and the statewide rate of 1.7 percent. At 6.9 percent, the rental vacancy rate is about the same as Alaska and half the rate of the Dillingham Census Area.

According to the Alaska Department of Labor and Workforce Development’s New Housing Unit Survey, nine new housing units were built in 2009, and no new housing units were built between 2010 and 2013. The Bristol Bay Housing Authority (BBHA) works with the community to oversee funding for low income housing programs from the U.S. Department of Housing and Urban Development (HUD). For more information on BBHA and other housing-related partners, see the Housing Chapter of this plan.

Table 4: Housing Information for Manokotak, Dillingham Census Area and Alaska, 2010

	Manokotak	Dillingham	Alaska
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		Census Area	
Average household size	3.7	3.1	2.7
Average family size	4.4	3.7	3.2
Total housing units	138.0	2,427	306,967
Occupied housing units	121.0	1,563	258,058
Vacant housing units	17.0	864	48,909
Vacant housing units - For rent	2.0	99	6,729
Vacant housing units - For sale only	2.0	7	2,876
Vacant housing units - For seasonal, recreational, or occasional use	1.0	646	27,901
Vacant housing units - All other vacants	12.0	89	9,730
Homeowner vacancy rate	2.1%	0.7%	1.7%
Rental vacancy rate	6.9%	13.4%	6.6%

Source: 2010 Census

MANOKOTAK ECONOMY

Given the limited opportunities for cash employment, subsistence is an important part of the local economy in Manokotak. As in much of the Bristol Bay area, most cash employment is seasonal (e.g., commercial fishing) with little year-round employment (e.g., jobs with the city or tribal governments). State and federal funding has historically contributed significant resources to the community, although the availability of state and federal funding is expected to decline in the future. In particular, the State of Alaska is forecasting significant cutbacks in funding across all departments. These changes will have serious implications for the availability of funds for capital projects, schools and transportation in rural communities.

“Declining State revenue sharing, high cost of energy, and privatization mentality caused by commercial fishing all make it hard to get things done in the community.”

-Community survey participant

INCOME

Personal income is the pre-tax income received by people from all sources. It includes private sector and government wages, salary disbursements, other labor income, farm and non-farm self-employment income, rental income, personal dividend income, personal interest income and transfer payments.

Per capita personal income is the annual total personal income of residents of an area divided by the number of residents. Per capita personal income is one measure of economic well-being. According to the 2009-2013 five-year estimates from the American Community Survey, per capita personal income in Manokotak

Table 5: Median Household and Per Capita Income: 2009-2013 Five-Year Estimates (in 2013 inflation-adjusted dollars)

	Manokotak City	Dillingham Census Area	Alaska
Median Household Income	\$34,038	\$54,150	\$70,760
Per Capital Income	\$14,286	\$21,498	\$32,651

Source: American Community Survey 5-Year Estimates

was \$14,286 compared to \$21,498 for the Dillingham Census Area and \$32,651 for the state. The lower per capita is due in part to the larger household size which was 3.65 individuals in Manokotak compared to 3.07 for the census area as a whole and 2.65 for the state.

As in many other Alaska villages, incomes vary considerably from year to year and household to household, and are generally lower than those of urban Alaska. For example, the Manokotak median family household income from the 2009-2013 American Community Survey Five-Year Estimates was \$34,038 – about half of the statewide median family household income of \$70,760, and less than the Dillingham Census Area median family household income of \$54,150.

POVERTY RATE

The poverty rate is a commonly used indicator of the level of economic need in a community. Community factors such as the status of resources like affordable housing, transportation, education and training, jobs providing a living wage, health insurance, and availability of child care determine to a large extent an area’s poverty rate.

Information on the Manokotak poverty rate contains error margins of 7.2 percent, so we have included more accurate Dillingham Census Area information here from the 2009-2013 American Community

Survey Five-Year Estimates. The poverty rate for families in the Dillingham Census Area is 13.3 percent, which is about twice the Alaska statewide family poverty rate of 6.8 percent.

EMPLOYMENT

A community’s labor force provides a measure of how much employment and economic activity a community may have. Labor force is defined as the number of persons 16 years of age or older, the age at which an individual is legally able to work.

Table 6 shows the number and percent of individuals 16 years and older, individuals in this age category in the labor force, and employed and unemployed individuals. These numbers are the average estimates over the five-year period between 2009-2013.

Unemployment rates do not take into account individuals who are underemployed or discouraged workers who are not actively seeking employment. Approximately 40 percent of individuals 16 and over in Manokotak participate in the labor force compared to over 61 percent force in the Dillingham Census Area (U.S. Census 2000). The seasonal nature of seafood processing employment, the traditional practice of a subsistence lifestyle, and the absence of other employment opportunities all affect labor force participation rates. According to the Department of Labor and Workforce Development’s Alaska Local and Regional Information, less than half (122) of Manokotak’s 239 employed residents were employed in 2013.

Table 6: American Community Survey 2009-2013 5-Year Estimates: Employment Status

	Alaska		Dillingham Census Area		Manokotak	
	Estimate	Percent	Estimate	Percent	Estimate	
Population 16 years and over	553,214	----	3,491	----	435	----
In labor force	393,037	71%	2,118	61%	226	52%
Employed	343,366	62%	1,777	51%	173	40%
Unemployed	32,939	6%	341	10%	53	12%
Not in labor force	160,177	29%	1,373	39%	209	48%

Source: American Community Survey

Table 7 shows the top occupations for 2013, the

most recent year available. These numbers are based on unemployment insurance, and they therefore exclude federal workers, the self-employed, crews of small fishing operations, and the owners and officers of companies. Construction laborers was the number one occupation with 32 workers, followed by teacher assistants with 29 workers and then installation, maintenance and repair helpers with 18 workers. While not included in this table, fishing is also an important occupation. For more information on fishing activity in Manokotak, please see the following section in this chapter, “Fisheries Participation.”

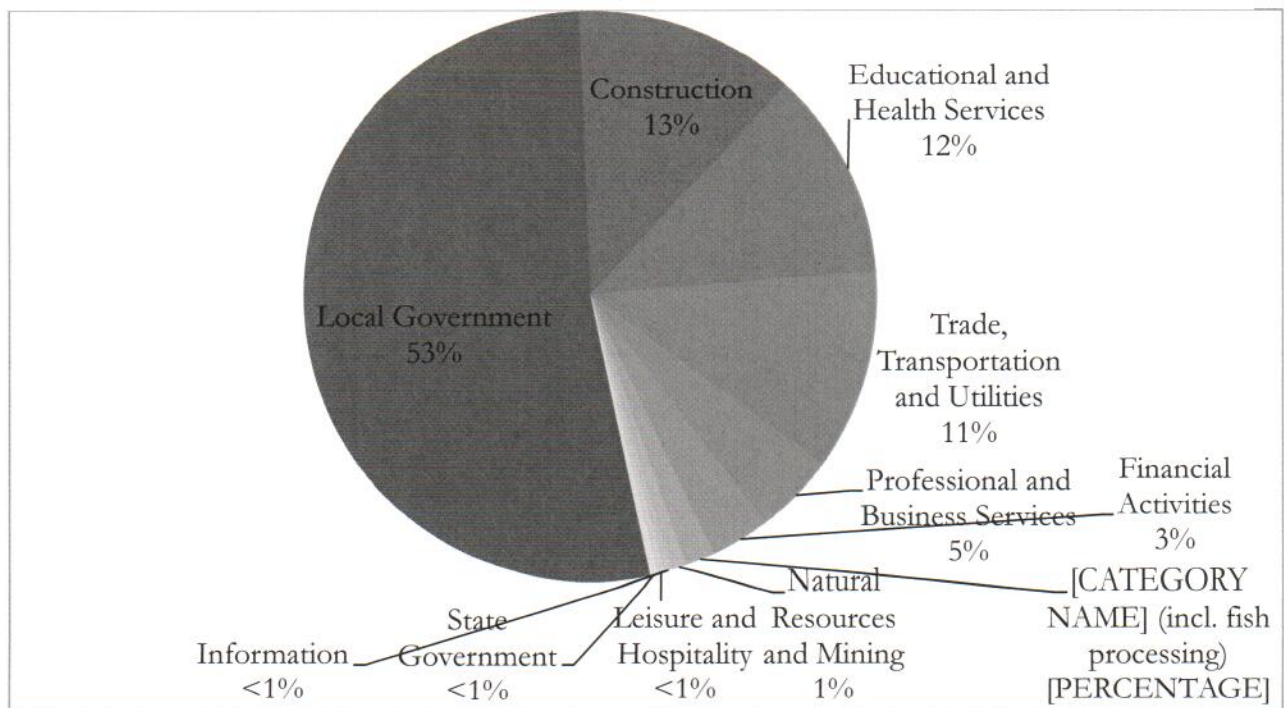
Table 7: Top Occupations for Manokotak, 2013

Occupation	Number of workers	Female	Male
Construction Laborers	32	8	24
Teacher Assistants	29	22	7
Helpers--Installation, Maintenance, and Repair Workers	18	7	11
Grounds Maintenance Workers, All Other	15	6	9
Retail Salespersons	8	5	3
Administrative Services Managers	7	7	0
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	7	2	5
Carpenters	7	2	5
Secondary School Teachers, Except Special and Career/Technical Education	6	4	2
Healthcare Support Workers, All Other	6	6	0
Personal Care Aides	6	3	3
Stock Clerks and Order Fillers	5	2	3
Plumbers, Pipefitters, and Steamfitters	5	0	5
Bus Drivers, School or Special Client	5	1	4
Heavy and Tractor-Trailer Truck Drivers	5	0	5

Source: Department of Labor and Workforce Development's Alaska Local and Regional Information

The Alaska Department of Labor and Workforce Development also collects information on the number of workers by industry. In Manokotak, more than half of workers are employed by local government, which includes City government, Tribal government and public school employment. The second largest industry by employment is construction with 13 percent, followed by educational and health services with 12 percent and trade, transportation and utilities with 11 percent. Like the

Figure 3: 2013 Employment by Industry



occupation numbers, these industry employment numbers exclude business owners and the self-employed.

FISHERIES PARTICIPATION

Table 8 shows fishing permit ownership and participation trends in Manokotak from 2003-2013. This information is collected by the Alaska Commercial Fisheries Entry Commission. The total number of commercial fishing permits owned by residents in Manokotak declined from 95 permits to 82 permits between 2005 and 2011 and then increased to 91 in 2013, the most recent year for which data are available (see Figure 4). Total number of commercial permits fished in Manokotak has stayed fairly consistent over the past decade in the mid-50s, with two notable exceptions: the number of permits fished dropped to 44 in 2007 and 43 in 2009.

Total pounds landed and estimated gross earnings are not available for all fish species, but are available for “salmon only.” In general, total pounds landed and gross earnings follow similar trends. However, the estimated gross earnings of salmon increased \$330,514 between 2012 and 2013 due to increased salmon prices, even though total pounds landed of salmon declined. These trends are visible in Figure 6.

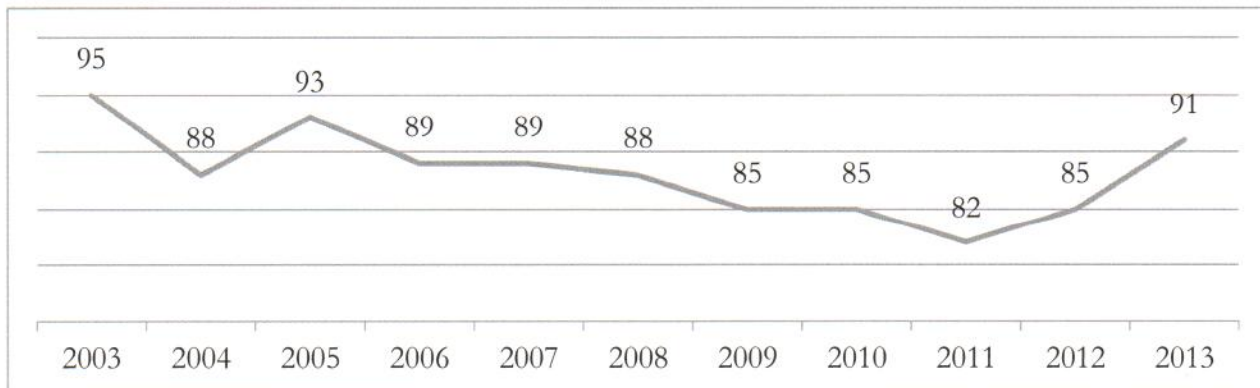
Table 8: Manokotak Fishery Participation and Earnings, 2003-2013

Year	Permit Activity			Fishing Activity				Total Pounds Landed, salmon only*	Estimated Gross Earnings, salmon only*
	# of Permit Holders	# of Crew Members	# of Permits Issued	# of Fishermen Who Fished	# of Permits Fished	Total Pounds Landed	Estimated Gross Earnings		
2003	95	64	143	54	57	1,770,990	\$792,223	1,665,812	\$774,844
2004	88	68	125	50	53	x	x	1,814,825	\$836,683
2005	93	67	126	53	55	x	x	1,761,486	\$951,834
2006	89	66	117	48	50	x	x	1,800,308	\$1,061,770
2007	89	73	115	43	44	x	x	1,628,485	\$1,000,225
2008	88	75	113	50	51	x	x	2,023,839	\$1,415,650
2009	85	93	109	41	43	x	x	2,018,331	\$1,500,910
2010	85	95	107	50	50	x	x	2,421,349	\$2,243,279
2011	82		103	54	57	x	x	1,779,034	\$1,894,536
2012	85		105	57	58	x	x	1,208,077	\$1,280,709
2013	91		109	57	58	x	x	1,142,854	\$1,611,223

*Best estimate based on available data. Total pounds landed and estimated gross earnings may not reflect actual amounts due to confidential fishery data.

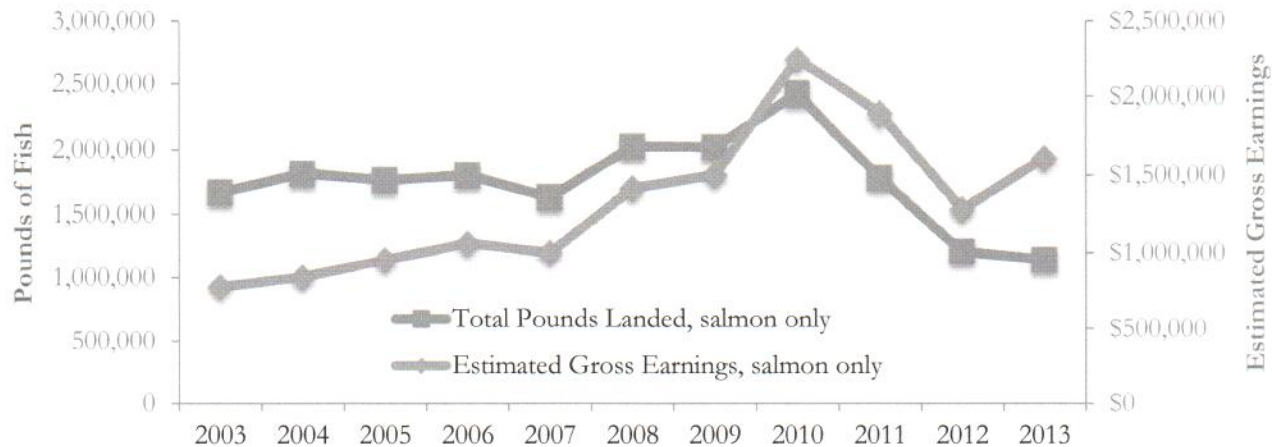
Source: Alaska Commercial Fisheries Entry Commission

Figure 4: Number of Manokotak Fish Permit Holders, 2003-2013



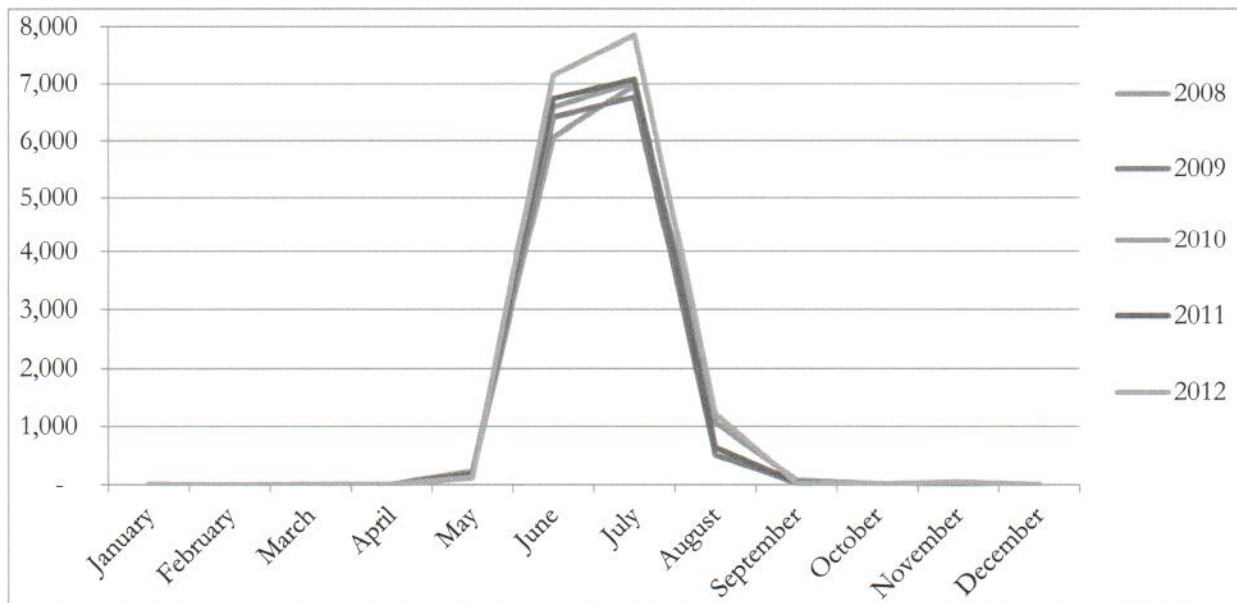
Source: Alaska Commercial Fisheries Entry Commission

Figure 5: Pounds Landed and Gross Earnings, Manokotak, Salmon Only



The Alaska Department of Labor and Workforce Development, Research and Analysis Section collects monthly fish harvesting employment data by species and by region. The information is based on data collected by the Commercial Fisheries Entry Commission and the National Marine Fisheries Service. Figure 6 depicts the monthly data from 2008 to 2012. As shown in the graph, fish harvesting employment consistently spikes in June, July and August, with maximum employment reaching an average high of over 7,000 people in July and drops to less than ten people during the fall, winter and spring months. For communities such as Manokotak that rely heavily on the fish harvesting industry for employment and income, this can result in high seasonal unemployment when the fishing season is over.

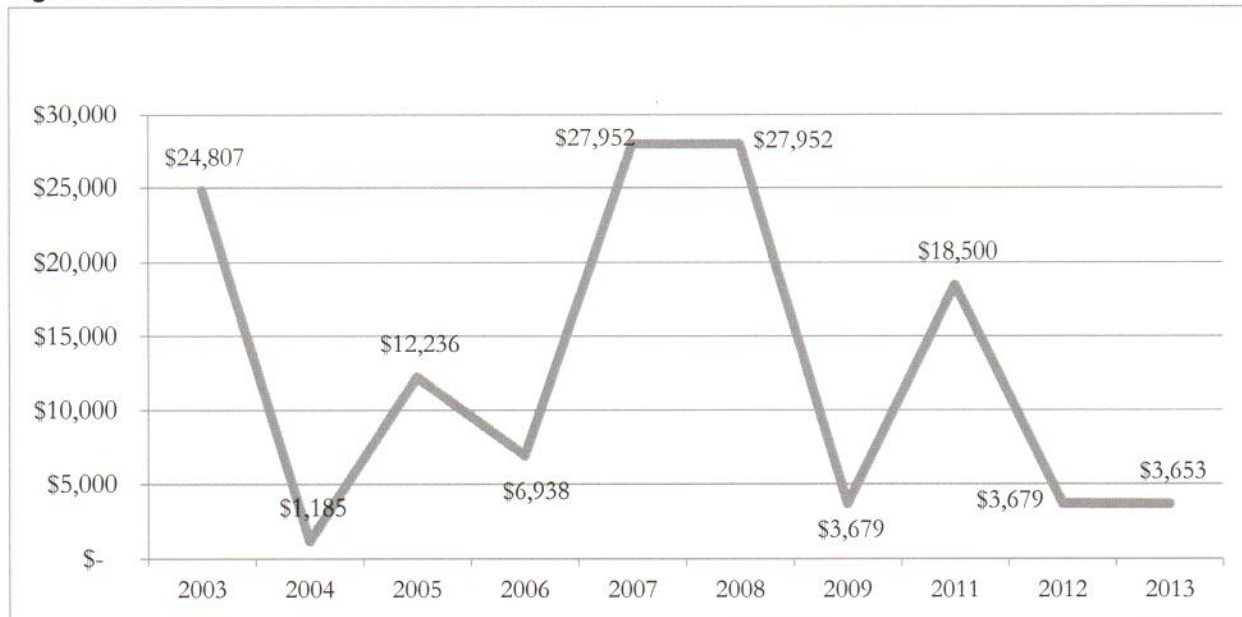
Figure 6: Fish Harvesting Employment by Species and Month, 2008-2012



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, the Commercial Fisheries Entry Commission, and the National Marine Fisheries Service. Alaska Commercial Fisheries Entry Commission

Manokotak has a two percent sales tax. However, total tax revenue has varied greatly year-to-year (see Figure 7). Gaining a better understanding of the source of sales tax revenue, how this tax is collected, reported and later, allocated back to community priorities should be a near-term priority for the City.

Figure 7: Manokotak Tax Revenue, 2003-2013



Source: Alaska Department of Commerce, Community, and Economic Development, Office of the State Assessor

NUMBER AND TYPES OF SMALL BUSINESSES

Table 9 provides an overview of current business licenses on file with the Department of Commerce, Community and Economic Development, Division of Occupation Licensing, Business Licensing Section, as of 2013. These licenses may not represent actual business activity, since a business may have a license but not be actually open and providing services or products.

Table 9: Active Business Licenses, 2013

Business Name
Manuqutaq Trading Company (MNL-owned grocery store)
Gram's House (child care)
Manokotak Natives Limited (gasoline station)
Manokotak Natives Limited (school and employee bus transportation)
Melissa's Store (piece goods, notions and other dry goods merchant wholesalers)
Dan and Ernest Enterprises (airport transportation and warehousing)
Stepan's Quick Stop (Convenience store – video, tape and disc rental)

Source: Department of Commerce, Community and Economic Development, Division of Occupation Licensing, Business Licensing Section

MIGRATION

Migration between Southwest Alaska communities is not unusual as families move around to be closer to relatives in neighboring communities. Table 10 shows annual migration trends over a ten year period, from 2004 to 2014. This information comes from Alaska Permanent Fund Dividend applications and therefore only tracks movement of permanent Alaska residents within the state. Migration numbers vary from year to year but generally show a steady flow of people entering and leaving Manokotak from surrounding communities, Southwest Alaska and other parts of the Alaska.

Table 10: Migration Into and Out of Manokotak

	Moved to Manokotak from...			Left Manokotak to move to...			Net Migration
	another place in Dillingham Census Area	another place in Southwest Alaska*	another place in the state (outside of SW)	another place in Dillingham Census Area	another place in Southwest Alaska*	another place in the state (outside of SW)	
2004-2005	17	6	13	7	5	9	15
2005-2006	3	8	4	8	16	12	-21
2006-2007	6	21	4	8	3	11	9
2007-2008	5	3	3	5	5	9	-8
2008-2009	4	15	9	7	3	16	2
2009-2010	3	5	13	4	3	8	6
2010-2011	8	1	9	10	10	7	-9
2011-2012	17	4	11	10	2	19	1
2012-2013	17	3	16	8	1	6	21
2013-2014	2	6	11	11	0	10	-2
Annual average	8	7	9	8	5	11	1

*Southwest Alaska includes Aleutians East Borough, Aleutians West Census Area, Bethel Census Area, Bristol Bay Borough, Dillingham Census Area, Lake and Peninsula Borough, Wade Hampton Census Area
 Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, based on Alaska Permanent Fund Dividend applications. This table does not include births, deaths or residents not eligible for the Permanent Fund, such as new residents.

COMMUNITY WELLNESS AND CAPACITY

CONTEXT

CULTURE

Manokotak is a traditional Yup'ik village where most adults and many children speak Yup'ik as their first language. The school has an immersion program for grades K-3 in which Yup'ik and English are alternated during the day.

While Manokotak has many children and youth (33 percent of the population is under-18), there is also a significant population of Elders, who are treasured by the community and who participate and lead in village decision-making.

There is one church in the village, the Manokotak Moravian Church, which provides a gathering place and events for the community.

Subsistence is one of the most important aspects of village life. Many residents move to fish camp during the early summer months, at the mouth of the Igushik River. Strengthening community ties and passing on traditional knowledge to young people are important priorities for Manokotak residents.



The Manokotak Moravian Church

A community hall is needed for village gatherings, as well as a cultural activity room for teaching traditional skills and arts and crafts. Plans for the new City administrative building include a community hall.

Residents would like to see more cultural skills included in the school curriculum. This will require working with the Community School Committee and community elders. Additionally, Yup'ik language instruction is not available for older students. In recent years the Community School Committee has made some positive changes in terms of incorporating cultural skills and emphasis into the school (see the Education section for more information).

Manokotak youth shared they would like to see an improved social life in the community, including more opportunities for social gatherings and activities.



Residents at the Community Open House (at the school)

Residents recognize workers must be motivated, and may need to relocate temporarily for training and for employment. Manokotak community members would like to see increased access to trainings and certifications such as classes offered by the Southwest Alaska Vocational and Education Center (SAVEC) and the Alaska Vocational Training and Education Center (AVTEC), both of which provide postsecondary vocational and technical training. The University of Alaska Fairbanks also offers distance-learning classes through its Bristol Bay Campus. While training and education is important, it is equally important Manokotak residents have the resources and support to actually connect with available jobs, such as assistance with resumes, preparing for interviews and an understanding of what jobs are available. Emphasis should be placed on the types of jobs that are currently needed in the community. Additionally, for certain certifications in high demand, workers may have the opportunity to travel to neighboring communities to provide services.

One of the best places to enhance workforce development opportunities is in the local school. The Alaska Department of Labor and the Southwest Region School District (SWRSD) have both been supportive partners of integrating practical job skills into middle and high school programs. For example, the SWRSD received funding for introducing computer simulation equipment into their schools, and they are developing plans and securing funding for a workshop addition to the school for woodworking, welding and other craftsmanship classes. The Community School Committee has also been working with administrators at the school to enhance career and technical education programming in the school. Currently Manokotak high school students travel to Dillingham for a career fair each March with Johnson O'Malley education funding, and one of the school's goals for the 2014-2015 academic year was for 95 percent of 12th graders to take the American College Testing Program's WorkKeys employability skills assessment tool and earn a score that qualifies for points on the College and Career Readiness indicator.

There are a variety of plans in place that could generate additional employment opportunities in Manokotak. If constructed, a road to the Snake River will bring improved access to both commercial and subsistence fishing. If a road to Dillingham is constructed it will connect residents with improved opportunities for employment, education and workforce development opportunities, not to mention the jobs related to the actual road construction. Finally, addressing certain barriers to employment such as lack of child care in the community would enable more young parents to go to work.

When asked about the types of jobs they would like to see, Manokotak residents provide a number of suggestions, including the following:

- Natural resource jobs (oil and gas, mining, fishing, etc.). These jobs can range from technical jobs (e.g., welding and pipeline construction) to business, management, science and marketing.
- Commercial fishing jobs such as boat captain, deckhand, or jobs that support the commercial fishing fleet, such as fiberglass and aluminum fabrication. However, one of the challenges with commercial fishing jobs is that they are usually seasonal. Optimally,

Community Survey responses to the question, "What can be done to create stable jobs in Manokotak? What kind of jobs might these be?"

"Keep an eye out and create jobs that aren't here. We need good paying jobs like electricians, firemen, pilots, net menders, mechanics"

"Look into tourism and use the natural resources that we have. Build a greenhouse that would provide fresh produce, a local cannery or fish processor plant, and hire guides for tourism."

"Bristol Bay is rich in renewable and non-renewable resources. The challenge is to find a way they can co-exist."

there would be off-season opportunities for these workers to help sustain them, their families and the community through the winter months.

- Fish processing plant jobs, including initial construction and ongoing operational jobs, and construction and maintenance of a boat yard. The City is looking into the Bristol Bay Economic Development Council (BBEDC)'s Infrastructure Grant Fund to help kick start the project through initial infrastructure investment at the Snake River.
- Skilled jobs such as engineers, electricians, power plant operators and surveyors.
- Mechanics. There are no mechanics or a mechanic shop in the community. Currently boats have to go for Dillingham for repairs.
- An expanded store, with an increased variety of goods and healthy foods that align with community interests and demands.
- Construction and related jobs such as engineers, heavy equipment operators, electricians and surveyors. These jobs will be especially in demand if land is opened up for new housing developments and if road construction to the Snake River and Dillingham moves forward.
- Pilots and related jobs in the aviation industry.
- Teachers. Residents would like to see more local residents in the schools serving as role models for Manokotak youth. During the 2014-2015 school year only two of the school's teachers were from Manokotak. Most teachers are from the Lower 48 and have lived in Alaska for a short time.
- Farming and agriculture. Some residents have successfully developed personal vegetable gardens, and certain produce does well in the area, such as potatoes, turnips and cabbage. Farming would have the added benefit of increasing access to fresh and healthy food. The use of greenhouses could significantly increase the variety of plants and the growing season, resulting in higher yields.

**Manokotak Youth Responses to the Question:
What do you picture yourselves doing in 5 years? What job will you have/would you like to have?**

"In five years I can picture myself living with my siblings, taking care of them. I would fish during the summer. I would possibly live in Anchorage. I haven't decided on a job yet other than fishing."

"I'll go to college for medical school, then be a doctor or a nurse. I would maybe come back to Manokotak – it depends."

"I picture myself working. Maybe finishing college. Driving to work or school."

"Driving to work in a big truck to my office job in Anchorage, after stopping at Starbucks."

"Working on airplanes or power boats. Not sure where – wherever there is a job."

The comprehensive planning committee also met with middle and high school students at the school during spring 2015 to discuss their employment interests. When asked about the types of jobs they were interested in, responses included: pilot (possibly through National Guard to reduce cost of training in other settings), office assistant/administration (trained through AVTEC), teacher, nurse, policeman, health aide, "local tech job business," Pebble Mine employee, and a mechanic for airplanes or powerboats. Some students say they hope to fish seasonally. Many students would like to move to Anchorage.

EDUCATION

The Manokotak Nunaniq School provides instruction for grades K-12 and had 133 students enrolled in the 2013-2014 school year. The school is one of eight run by the Southwest Region School District with headquarters in Dillingham. The Bristol Bay Native Association also operates a Head Start program in the school. The nearest university campus to Manokotak is located in Dillingham at the University of Alaska, Fairbanks, Bristol Bay Campus. This campus offers distance learning and on-site instruction for postsecondary students in a full range of academic and vocational disciplines. The Southwest Alaska Vocational and Education Center located in King Salmon offers a full array of workforce development and vocational courses, and also provides student lodging for multi-day courses. Additional vocational and technical courses are available in Seward and Sitka. Additional university campuses are located in Anchorage and Fairbanks.

School Mission Statement:

“Manokotak Nunaniq Staff will strive to create a safe, positive, culturally-rich environment focused on success and life-long learning.”

The school has an active Community School Committee. The committee provides a forum for bringing community and school concerns to a common table. This committee is active during the school year and works to bring community concerns to the attention of school administrators. The school established two goals for the 2014-2015 year: 1) to develop a way to measure students' current levels of cultural awareness, and 2) to make sure 95 percent of 12th graders take WorkKeys and earn a score that qualifies for points on the College and Career Readiness Indicator. The WorkKeys assessment system is designed by the American College Testing program and helps assess skills and workforce readiness. The



Manokotak Nunaniq School

Community School Committee is also investigating ways to incorporate more career and technical education opportunities in the school.

An important aspect of education for Manokotak residents is passing on traditional language, skills and arts to young people. While there is a Yup'ik immersion program in the school, this does not serve the upper grades. In recent years, some traditional skills have been incorporated into the curriculum, such as an annual survival training day that brings elders to the school and focuses on safety, survival skills, shelter-building, fishing and storytelling. Residents would like to see more local teachers from the

HEALTH AND WELLNESS

Manokotak has a number of entities, both within the village and the region, helping to promote health and wellness in the region. These include the Manokotak Village Clinic, Manokotak Moravian Church, Manokotak Village Council, Manokotak City Council, Manokotak Natives Limited, Manokotak Community School Committee, Manokotak Post Office and Manokotak Health Aides. The Manokotak Village Clinic is owned by the Village Council and operated by the Bristol Bay Area Health Corporation.

The community has developed rules and regulations to promote safety and well-being, but enforcement is sometimes lacking. While there are a number of service providers in the village, some of these positions are unfilled, and there has not been a forum for service providers to meet and to plan to work together. There has also been little connection between service providers, law enforcement, the village clinic and the governing organizations. In order to truly create wellness, Manokotak will need to form and strengthen these working relationships. The community is making progress on this topic; for example, Manokotak recently hired a new Village Public Safety Officer for the community, which is discussed in more detail below under “Emergency Services.”

Another concern is there is very little mental health support for residents. There is a family service worker at the clinic that provides limited support, but otherwise residents are referred to Dillingham. Residents would also like to see a tribal court reestablished. There was a tribal court but it was eliminated due to funding issues. The Tribe is working to reinstate the court but the process has been moving slowly. As an additional challenge to people overcoming substance abuse, residents also say those recovering from historical trauma, illness and substance abuse are often stigmatized in the community and experience challenges finding local employment. Finally, residents cite a lack of adequate facilities for early childhood programs. Decreasing alcohol related assaults and accidents, domestic violence, and protecting elders and children are the top priorities for wellness in Manokotak.

According to survey respondents and open house participants, alcohol and substance abuse are an ongoing challenge in Manokotak. In particular, elders shared concerns about increasing use among young adults. Manokotak is a dry community, meaning that alcohol is prohibited. While a road to Dillingham is one of the community’s top priorities, residents recognize that access to the hub community could bring additional health and wellness challenges. Residents at the open house and in the survey shared concerns that a road could increase access to drugs and alcohol, along with associated social impacts such as assault and violence.

COMMUNITY WELLNESS AND CAPACITY GOALS AND STRATEGIES

GOAL 1: Gather as a Community

Strategies

- a. Pursue plans for a new City building that includes meeting space and a gathering space for up to 300-400 people.
 - a. Actions include submitting a \$250,000 grant to the United States Economic Development Administration (EDA) for funding to include energy efficiency measures for the proposed building.
- b. Encourage more arts and culture classes. Possible topics include:
 - Skill-building courses such as boat building, net repair and Elder-led games and Yu’pik dance.

- Traditional arts and crafts skills such as beading, skin sewing basket making, net mending, carving and sled building.
 - Subsistence skills such as hunting, butchering, skinning and storing; snare setting, plucking duck and waterfowl; fishing skills such as net mending and hanging, splitting fish, ice fishing; and knowledge of edible plants.
- c. Encourage more community gatherings such as potlucks, clean-up days, holiday celebrations, Elder-led games and other events.
 - d. Offer an annual cultural week.

GOAL 2: Improve Communication among Leadership Organizations

Strategies

- a. Improve communication among community entities.
 - Make quarterly meetings a priority. Use the meetings to coordinate efforts.
 - Document progress and plans to avoid duplicating what others have already planned or accomplished, including documentation of decisions and actions.
 - Make documents and plans easy to find, share and reference. Keep electronic file versions whenever possible.
- b. Improve transitions in staff and leadership.
- c. Review and revise current policies, procedures and ordinances. Create a mechanism for ensuring this happens at regular intervals.
 - Make available to the community city and village ordinances to increase awareness of ordinances, and to make it easier for enforcement officers to take action. Make sure everyone is aware of the rules.
- d. Use planning efforts to guide leaders' decisions about the community.
 - Continue community planning to keep communication going between entities and residents.
 - Follow the Comprehensive Plan Revision process, detailed at the end of this plan, to keep the plan up-to-date.

GOAL 3: Create More Local Jobs

Strategies:

- a. Create a community work space or shop space for residents. (**COMMUNITY PRIORITY**)
- b. Conduct a Manokotak jobs survey to assess current and future job potential and identify open positions.
- c. Inventory skills among the local workforce – for example, mechanics, heavy equipment operators, guides, etc.
- d. Use job sharing, flexible scheduling and other means to ensure job schedules fit with other family obligations, subsistence needs.
- e. Encourage new service businesses. Possible examples include a restaurant, tourism or guiding business, van or shuttle service, arts and crafts center or co-op, mini-market at the

Manokotak Heights, mall engine repair shop, a remodeling and carpentry business, local farm, rock crushing and gravel operation, child care and elder care.

- f. Explore the creation of new or expanded infrastructure to support the fishing industry.
 - For example, explore the feasibility of a flash fish freezer plant at Snake River. Projects should include a local hire policy that prioritizes training and hiring local workers before seeking outside labor.
- g. Encourage entrepreneurship in the community.
- h. Encourage fair and non-discriminatory hiring practices in the community. Encourage local organizations such as for the City, Village and MNL to establish hiring guidelines and criteria.
- i. Explore the feasibility of opening a child care facility.
- j. Encourage all local projects to have a 'local hire' preference to make sure projects employ local residents, and to retain administrative funds in the community.
 - Come to agreement between local entities on a definition of 'local hire' and include the definition in all project contracts, to ensure maximum local hire.
 - Encourage local hires to represent the community well by committing to fulfill job requirements and terms of employment.

GOAL 4: Increase Workforce Development Opportunities

Strategies:

- a. Expand and support workforce readiness programs in the school. **(COMMUNITY PRIORITY)**
 - Continue to offer visits to nearby job fairs.
 - Help the SWRSD secure funds for the workshop addition to the school.
 - Take advantage of funding and programs through the Alaska Department of Labor that offer workforce development tools for classrooms, Temporary Assistance for Needy Families (TANF)'s federal assistance program, and through Southwest Alaska Municipal Conference (SWAMC) to support Science-Technology-Engineering-Math (STEM) programming.
 - Encourage schoolteachers to emphasize the need for good work ethics and employment expectations.
- b. Create a local resource center and/or counselor in Manokotak, possibly in partnership with BBNA, for adults (perhaps at the school or a multi-use facility) where they can find information on financial aid, scholarships, trainings and continuing education. Offer training on resumes, interview skills and internet access to access distance learning through Bristol Bay Campus, UAS in Sitka, AVTEC in Seward, and SAVEC in King Salmon. Post local job openings.
- c. Offer grant writing and administration training locally, perhaps through a one-week intensive workshop be held in the village; this reduces the cost and difficulties of attending training off-site, and would allow more residents to attend.

GOAL 5: Increase Youth Opportunities

Strategies

- a. Dedicate space in the village for youth activities and programs such as a ball court, bike trail and other outdoor activities.
- b. Offer more afterschool activities such as Boys and Girls Club or Eskimo Olympics.
- c. Address issues of youth bullying and self-esteem through counseling and programming.
- d. Engage youth in community decisions and invite youth to attend entity meetings. Establish leadership mentoring and grant-writing mentoring programs, so youth can fund and run their own organizations.
- e. Continue to use Johnson-O'Malley funding to provide traditional and cultural programming in the school.

GOAL 6: Increase Effectiveness of Social Service Providers through an Integrated Approach to Wellness

Strategies

- a. Create village wellness team to increase collaboration between service providers and law enforcement and ensure village needs are identified and met. **(COMMUNITY PRIORITY).**
 - Host wellness conversations to increase community connections and address historical trauma.
- b. Offer outlets and opportunities for healthy communication.
- c. Link wellness team to village and city councils through regular reporting and creating opportunities to work together for wellness.
- d. Increase access to social and supportive services for children, families and elders.
- e. Re-establish tribal court.
- f. Explore options to provide mental health services through the clinic.

Community Survey Responses to the Question, "How can we improve community health and wellness?"

"Fresh produce!"

"One of the biggest challenges is the different types of drugs that are coming to the village and spreading to the young adults, who are the future leaders of the village."

"Continuing alcohol & drug prohibition, healthy living education, and keeping our subsistence heritage while embracing conventional living."

"Doing more hands-on activities such as sled making, sewing circles and community events like cleanups. Bring youth and elders together."

LAND USE AND ENVIRONMENT

CONTEXT

LAND USE

The City of Manokotak is 36.4 square miles in size. The local village corporation, Manokotak Natives Limited (MNL), owns most of the surface lands in the community, and Bristol Bay Native Corporation (BBNC) holds subsurface rights to most of the land around the community. The Togiak National Wildlife Refuge borders native lands to the west. The City of Manokotak and the State of Alaska both own parcels of land in the community. Manokotak is comprised of two distinct areas, with part of the community living at the traditional community site (“the main village”), and others living at Manokotak Heights, located approximately five miles away from the main village, close to the community’s school, and en route to the airport. Each area has a separate well and sewage treatment system. Figure 9 on the next page provides a community map, with key land use areas highlighted.

Since 1950, when the Census began in this area, the population of Manokotak has increased every decade. As discussed in the community profile, the Alaska Department of Labor and Workforce Development forecasts continued steady growth in the region. The main village townsite has limited space for expansion: there is swamp to the south, mountains to the east and the river to the west. Consequently the only direction for expansion is along the road to Manokotak Heights and toward the new airport and the Snake River. Much of this land is owned by MNL. The current land use pattern in the village has begun to spread out over a comparatively large area. This increases the cost of maintaining and providing public services, such as water and sewer, electrical service and road maintenance.

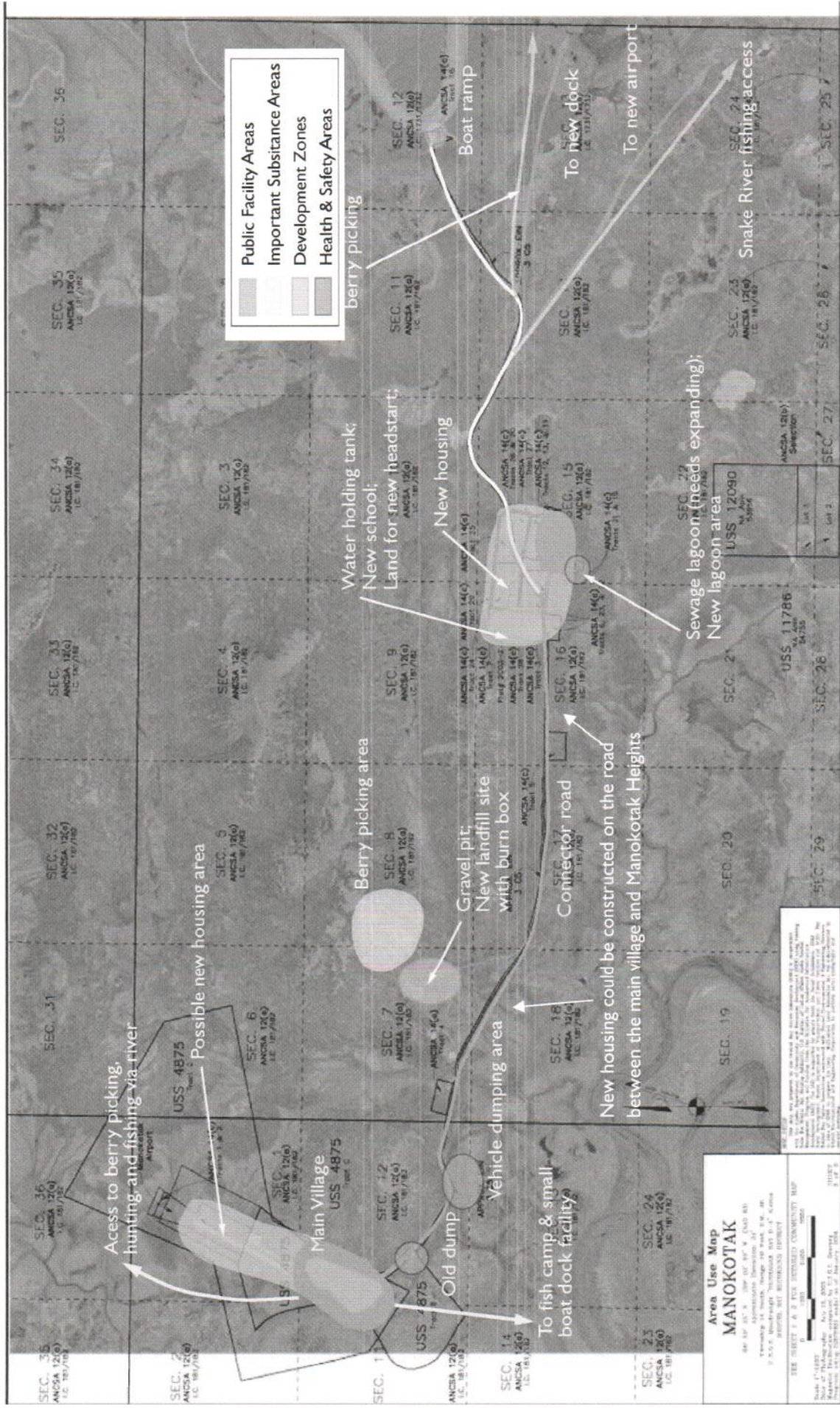
The new airport location, which is eight miles from the main village, presents some challenges for Manokotak (see Public Services, Facilities and Transportation chapter for discussion). It also brings an opportunity for extending the road network to create a docking facility on the Snake River. This eliminates approximately 30 miles of river travel residents used to make to access fishing grounds.

The City of Manokotak has prepared a petition to annex 155 square miles of territory including (a) the Igushik Section of Nushagak Bay, (b) Igushik Village where most Manokotak families have fish camps, and (c) the Weary/Snake River corridor between Manokotak and Nushagak Bay. In 2010, the City of Dillingham petitioned to annex 396 square miles of Nushagak Bay, including the Igushik section. The Igushik Section is the most important subsistence and commercial fishing area used by Manokotak residents. The City of Manokotak and other affected parties opposed Dillingham’s petition. The Local Boundary Commission approved Dillingham’s petition but, in 2014, the State Superior Court overturned the Local Boundary Commission’s approval. The City of Dillingham refiled its annexation petition in 2015. In the next year or two, the Local Boundary Commission will consider and decide how to resolve the competing petitions.



Residents sharing their ideas on a map at the Community Open House

Figure 9: Manokotak Land Use Map



Source: Alaska Department of Commerce, Community and Economic Development Community Map, with annotations by Agnew::Beck

ENVIRONMENT

Environmental protection is a priority for the community. Manokotak has an active Tribal Environmental Program funded through the US Environmental Protection Agency's Indian General Assistance Program, managed by Bristol Bay Native Association. The IGAP program helps organize environmental efforts. Current initiatives include hosting an annual spring cleanup, providing community recycling education and working toward proper disposal and removal of electronic waste.

One of the environmental concerns in the community is contaminated soil at the old school site. The old school is located adjacent to a tank farm where a number of fuel releases occurred, including a large spill in 1994. The Southwest Region School District (SWRSD) has been working with the Alaska Department of Environmental Conservation (DEC)'s Division of Spill Prevention and Response to assess the situation and identify clean-up measures. The SWRSD has offered to transfer the school site to the City, but the community is worried about being responsible for large clean-up costs at the site. In the meantime, the SWRSD is actively moving forward on abatement and demolition of the old school building during summer and fall 2015.

Other environmental concerns include concerns about the old landfill, road dust polluting the air in the spring and summer, and the potential impacts of climate change on the region's weather patterns and environment, with the associated impacts to fish, subsistence activities and winter travel conditions.



In spring, thin ice limits travel and can create hazardous transportation conditions

GOALS AND STRATEGIES

The goals and strategies for this chapter focus on creating additional space for new housing and identifying future development areas.

GOAL 1: Identify Areas for Specific Uses and Future Growth

Strategies

- a. Develop a land use plan and map for the community, to include and consider proposed annexation areas. The plan should include land ownership maps. **(COMMUNITY PRIORITY)**

The plan should also include existing and desired future land categories, including areas intended for the following purposes:

- Housing.
- Recreation/open space.
- Business/commercial development (e.g., city/tribal offices, stores).
- Industrial use (e.g., fish processing plant).

- Public facilities and services (e.g., power and/or water plant, airport).
 - Protected areas (e.g., subsistence grounds, cemetery).
- b. Assess re-use options for former airport site, including potential residential use or public open space use such as a park, ball field, and playground or sledding hill.
 - c. Pursue annexation to extend the City’s jurisdiction to the Igushik Section of Nushagak Bay, Igushik Village, and other nearby areas important to Manokotak residents.

GOAL 2: Increase Amount of Land Available for Housing

See also: *Chapter 2, Housing*

Strategies

- a. Investigate land suitability for building homes on the former airstrip.
- b. Consider options for denser housing in current village site, such as multi-use housing.
- c. Check and enforce city and village ordinances to set guidelines for housing development – building setbacks from lot lines; electric and sewer lines. Develop new ordinances, as needed, possibly in conjunction with site planning.
- d. Work with Manokotak Natives Limited to identify and set aside land for new housing, to be surveyed by the City and sold at affordable costs (just enough to cover surveying costs).

GOAL 3: Maintain a Clean, Healthy Environment in and Around the Community

Strategies

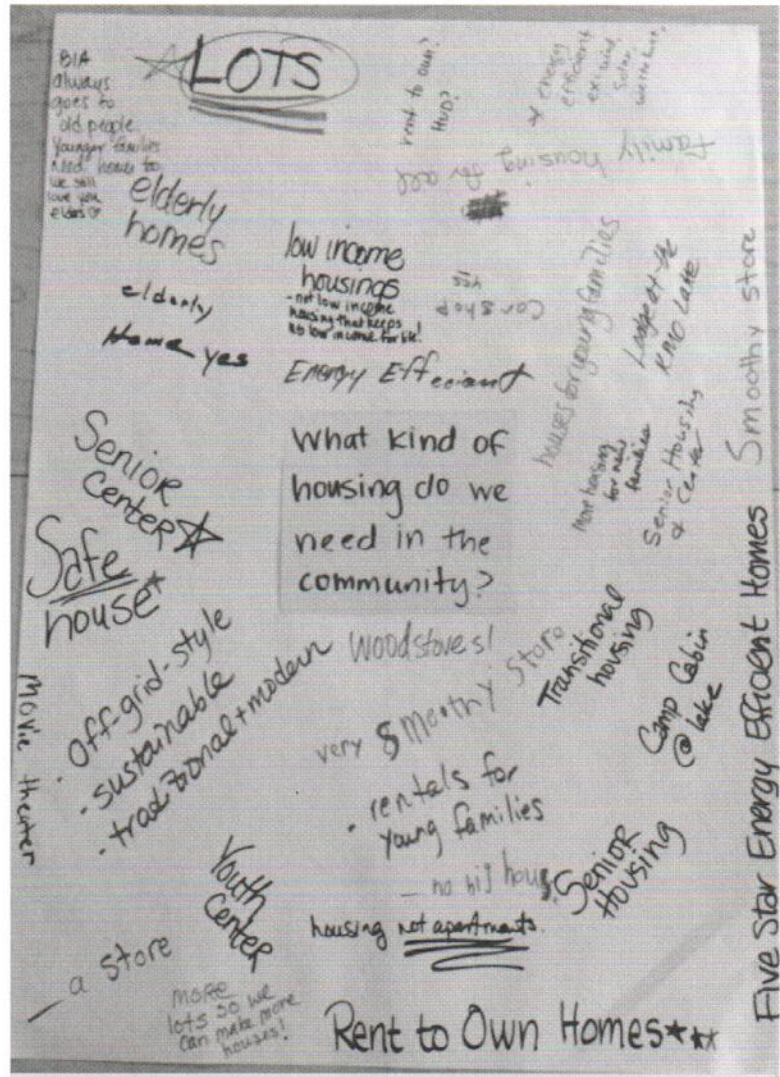
- a. Work with the Southwest Alaska School District to ensure the appropriate steps are taken to demolish the old school and to clean up the contamination at the site. Explore different options for repurposing the site.
- b. Support IGAP’s efforts on community recycling and the reduction of electronic waste.
- c. Clean up former landfill site.
- d. Educate community about separating hazardous and non-hazardous waste.
- e. Surface roads to minimize dust.
- f. Continue “Community Clean-Up Days.”
- g. Retain vegetation where possible in built areas.
- h. Keep fire buffers between housing units.
- i. Expand Manuquutaq Trading Company to include more offerings, including healthy food choices.

HOUSING

CONTEXT

Manokotak is facing a severe housing shortage. The main village is densely packed with homes. Without available land in the main village, residents often “subdivide” their lot to make room for other family members to build homes. Without land use polices on building setbacks and other construction standards, development is without direction or standards - buildings cross lot lines, houses are built close together and lack adequate drainage. Some of the houses in the main village are in a dilapidated state and are considered hazardous by village residents.

To meet the increasing demand for housing, but also to mitigate sprawl and keep infrastructure costs down, Manokotak will need to repurpose abandoned land and explore new areas in and surrounding the village. Expanding housing to the old airport strip is one possibility. Another possible site for future development could be the land parcels along the road to Manokotak Heights, currently owned by Manokotak Natives, Ltd (MNL). Although MNL cannot give land to residents who are not shareholders, in the past MNL has successfully transferred land to the City, and the City can then survey and then sell or distribute land to residents or put it toward general community use, regardless of shareholder status. This happened successfully with the road to Manokotak Heights and with the land for the new school. Community leaders hope to follow a similar approach to open up new housing, with MNL providing the land to the City, and the City then conducting surveying work and selling the land to residents for new home construction. In order to make the lots affordable, the City would charge for the cost of surveying but not attempt to create any profit. Access roads to properties would also need to be considered



Community Open House: resident responses to the question, “What kind of housing do we need in the community?”



The old airport, a potential site for new housing

as a part of any residential surveying and expansion effort. BBNC owns sub-surface rights to land in and around the community and therefore need to be a part of any land transfer conversations.

Current density levels in the main village ranges from four to six housing units per acre. When considering future housing development a target density level should be agreed upon that maintains compact development but provides adequate green space and separation between buildings. If the lower density level of four units per acre were used, and reducing the gross acreage by 20 percent to disregard land that is physically unsuitable for development, the number of units described on the following table could be developed in areas adjacent to the main village. This estimate does not account for actual development suitability, or other considerations such as designating areas for open space, roads and trails.

Manokotak is interested in providing several types of housing opportunities to residents: the possibility for families to build their own homes by making land available; offering construction and maintenance training; making “starter homes” available to young families; guaranteeing quality housing to all residents, especially elders; and keeping their village attractive and well-maintained through building and design guidelines. Related to this goal is a concern on the part of residents that these houses be affordable.

“The younger generation has nowhere to move or go to, except to live here at home with parents. There are no houses.”

-Community survey participant

Housing development in Manokotak requires an active partnership between village organizations, village residents and the regional housing authority, Bristol Bay Housing Authority (BBHA). BBHA administers Low Income Housing programs funded by the Department of Housing and Urban Development (HUD). Manokotak Village Council has chosen BBHA as their “Tribally Designated Housing Entity.”

BBHA constructed and manages 12 rental apartments in Manokotak Heights. Rent is based on household income. BBHA owns and manages a number of other rental houses and duplexes in the community, including some formerly managed by BIA. BBHA passes through to the Village Council one half of the “Need” funds provided by a formula allocation under NAHASDA. BBHA maintains a “regional pool” with the other half of the funds from each village participating in the “pool,” and constructs new homes on an annual basis from a ranked village list. For a few years, Manokotak opted out of their partnership with BBHA. During this time, the Village Council received the full 100 percent of the NAHASDA funds instead of the standard 50 percent.

Eventually, Manokotak rejoined BBHA. BBHA requires that Manokotak repay the 50 percent contributions into the regional pool for the years the community opted out of participation with the housing authority. Manokotak must finish repaying the contributions in order for the community to become eligible for new housing projects from the regional pool fund. As a result, Manokotak’s NAHASDA funds are being used for repayment to the BBHA regional pool for the period in which Manokotak operated its own NAHASDA program. In reality, this repayment process is happening very slowly, since a significant portion of Manokotak’s community funds are used for housing rental subsidies through the Low Income Housing Tax Credit project instead of going toward repayment. BBHA estimates Manokotak will complete repayments around the year 2021, which means the community will not be eligible for new housing projects through the regional pool until after that date. For more information about the regional pool and use of NAHASDA funds, please contact Bristol Bay Housing Authority.



Teacher housing at the school

Village organizations will need to evaluate the capacity and desirability of possible new development areas in order to pursue development of future housing areas. The following graphic, which was originally developed for the 2005 Comprehensive Plan, outlines important decision points to be made in evaluating sites. First, the community will need to identify sites and density targets. Next, a site plan will be needed for the development area, along with an estimated cost for the development. The community will need to consider issues of site control and methods for land disbursement, as well as the feasibility of connecting new sites to the community's existing water and sewer infrastructure. Ordinances will also need to be adopted to make development guidelines binding.

A VILLAGES'S CAPACITY FOR EXPANSION

TEST QUESTIONS:
 How many houses will you need?
 How close together should the houses be?
 Where is there land for more houses to be built?
 Where would you like new houses to go?

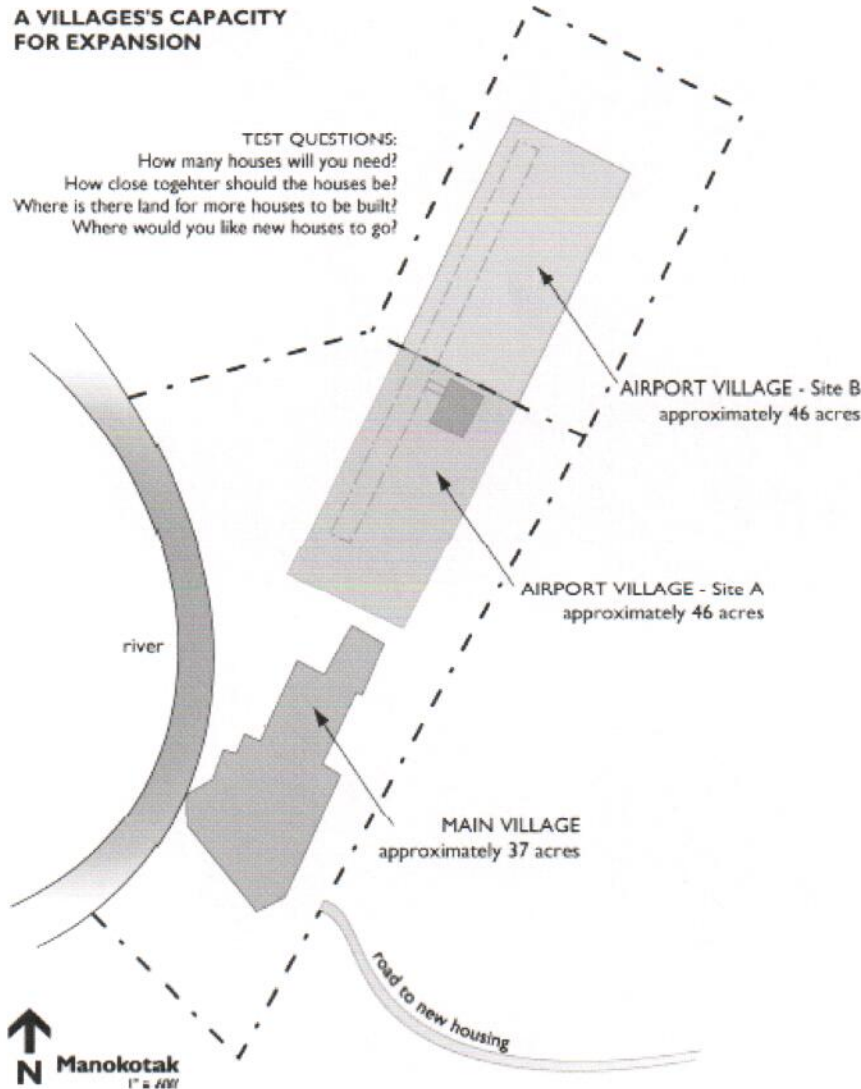


Table 11: Estimated Capacity for Expansion of Manokotak's Main Village

Area	Land Available (gross acreage)	Adjusted Land Available (approximate)	No. of Homes @ 4 units/acre	No. of Homes @ 6 units/acre
Main Village	37 acres			
Airport Site A	46 acres	40 acres	160 homes	240 homes
Airport Site B	46 acres	25 acres	100 homes	150 homes

Values calculated by Agnew::Beck for the 2005 Comprehensive Plan

HOUSING GOALS AND STRATEGIES

See also: Chapter 1 - Land Use and Environment, Goal 1: Increase Amount of Land Available for Housing

GOAL 1: Identify Funding, Land and Resources to Construct New Housing

Strategies

- a. Develop a comprehensive strategy for funding new homes that includes a mix of grants, loans, private investment and sweat equity. **(COMMUNITY PRIORITY)**
- b. Provide training opportunities for villagers to increase their ability to build and maintain homes.
- c. Make a clear process for how shareholders can secure land from the village corporation for building their own homes.
- d. Develop local workforce of general contractors, plumbers, carpenters, electricians and other tradespersons that can build new homes and/or refurbish existing homes.

GOAL 2: Improve Existing Housing Stock

Strategies

- a. Renovate existing homes that are in poor shape, including homes that are vacant due to their deteriorated condition.
- b. With owner's permission, demolish vacant and unusable housing.
- c. Consider applying for an Indian Community Development Block Grant (ICDBG) to repair, demolish and upgrade existing housing.

PUBLIC FACILITIES AND SERVICES

CONTEXT

There are several projects and capital improvements that will improve quality of life for Manokotak residents. A combination of community support and leadership for these projects and an increased capacity for the City, Council and Corporation to fund and maintain these projects will allow Manokotak to continue working on needed capital improvements.

EMERGENCY SERVICES

Manokotak is classified as an isolated village, it is found in Emergency Medical Services (EMS) Region 2I in the Bristol Bay Region. Emergency Services have river and air access to the community. Emergency service is provided by volunteers and a health aide. Auxiliary health care is provided by Manokotak First Responders.

In 2013, Manokotak Village Public Safety Officer (VPSO) Tom Madole was shot and killed in the line of duty. VPSO Madole was a well-liked and respected community member. The State has since made changes to the program, including providing optional firearm training to VPSOs.



Bristol Bay Native Association (BBNA) recently hired a new VPSO for Manokotak. The new VPSO started in June 2015 after completing the VPSO academy in Sitka. The community unanimously agreed to have an armed VPSO. The former community Fire Hall was turned into a VPSO building to incarcerate residents who break Village and City ordinances.

WATER AND SEWER

The City of Manokotak operates two separate water and sewer systems, one at the traditional village site and one at Manokotak Heights. The water and sewer infrastructure was funded with Indian Health Services federal funds.

Over the past ten years, household plumbing has increased from 75 percent to almost 100 percent. The community relies on water from two wells, which is treated and stored in 150,000-gallon tanks. Having to oversee and maintain two separate systems in different parts of town is challenging. The City charges for water and sewer, but not all residents are able to pay, so the City operates the service at a loss.

The City's Capital Improvement Project (CIP) list includes needed upgrades to the lagoon, water pipes, sewer lines and other infrastructure in the main village. The system serves 61 households. The main village has been facing increasing challenges with water shortages, particularly during December through April. Upgrades to the water and sewer in the main village is one of the community's top priorities. The Alaska Native Tribal Health Consortium (ANTHC) is a possible partner and resource for pursuing water and sewer upgrades.

Manokotak Heights is served by a separate well and treatment system. The system services approximately 30 households. Recent upgrades include a new storage tank and new water well. According to some residents, the Manokotak Heights Pumphouse does not have enough water pressure to meet the need of the farthest-out houses and apartments. The school and adjacent teacher apartments are connected to the sewage lagoon at Manokotak Heights but have their own water system.

The City would like to see the water and sewer improvements happen during upcoming road improvement efforts. As new housing and development is planned, the City wants to make sure the feasibility of water and sewer connectivity is taken into account.

POWER

See Energy Chapter.

LANDFILL

The community has a recently-constructed Class III Landfill, which replaced the previous landfill. The old landfill was overfull and had air and water pollution concerns due to its proximity to water and the main village site. The City is actively working on solid waste ordinances, fees and procedures for the new landfill.

COMMUNICATIONS

Nushagak Cooperative and GCI Cellular provide communications services. GCI provides most of the internet through fixed wireless broadband. Residents say the service can be slow, although Manokotak Heights is generally faster. Over the past ten years there has been a surge in cell phone use, and community members would like to see a 3G data network in the future. According to Connect Alaska, the maximum residential broadband download speed is between 6 Megabytes per second and 10 Megabytes per project¹.

FACILITIES

Post Office

Manokotak has a post office that was established in 1960. The facility does not have enough storage space and the community would like to see it renovated.



Manokotak Post Office

¹ Connect Alaska: Maximum Residential Broadband Download Speed Map for the Dillingham Census Area, October 2014. http://www.connectak.org/connectednationftp/alaska/BoroughCensusArea_Maps/BoroughCensusArea_DownloadSpeed/AK_DownloadSpeed_Dillingham%20Census%20Area.pdf

Boat Yard

The current boat yard is filled to capacity. Residents would like to see a larger boat yard in a new location. If the road to Snake River is completed, there may be an opportunity to store boats at the Snake River site.



Manokotak Boat Yard

Old School Site

The old abandoned school, which is located in the main village, is a safety concern and aesthetically unattractive. The Southwest Region School District (SWRSD) was going to demolish it in 2013, but the bid price was too high. SWRSD has abatement plans for summer 2015 and demolition plans for fall 2015. The SWRSD hopes to reclaim some of the materials, and will remove the remaining materials from the community after demolition. The old school site also has contamination issues from past fuel spills (see the Land Use and Environment chapter for more information). The SWRSD hopes to transfer the property to a local entity such as the City for repurposing, but due to contamination concerns the City is not interested in the property.

Senior Center

Manokotak does not currently have a senior center. Elders are cared for by family and the community. Residents would like to see a senior center or assisted living facility for aging residents.

Other Facilities

The City and MNL both have heavy equipment storage facilities. MNL owns a small store in the main village called the Manokotak Trading Store, and the community has a Alaska Moravian Church.



Manuqutaq Store (owned by MNL)

PUBLIC SERVICES AND FACILITIES GOALS AND STRATEGIES

GOAL 1: Sustainable Operation and Maintenance of Public Services

Strategies

- a. Power company, water and sewer, and other utilities should be managed to cover all operating and maintenance costs, including system upgrades, and reserve funds.
- b. Develop a long-term funding strategy for existing and future facilities that includes operation, maintenance and capital costs for repair and replacement.
- c. Maintain the ability of local organizations to apply for and manage grants.
- d. Improve sales tax revenue collection processes. Gain a better understanding of the source of sales tax revenue and how this tax is collected, reported and allocated back to community priorities.

GOAL 2: Improve Existing Facilities and Services

Strategies

- a. Upgrade the water and sewer infrastructure in the main village. (**COMMUNITY PRIORITY**)
- b. Renovate the existing post office to add more room and increase the storage area.
- c. Demolish the old school site.
- d. Prepare feasibility study to explore options for repurposing the old armory building.
- e. Improve Internet access for all residents.
- f. Welcome and support the new community VPSO.
- g. Develop solid waste ordinances, fees and procedures for the new landfill.



The playground at Manokotak Nunaniq School

GOAL 3: Develop New Facilities and Services

Strategies

- a. Consider the feasibility of developing and operating a laundromat.
 - This could be a public service, or it could be an opportunity for a privately-owned business.
- b. Construct a new City building (see Community Wellness and Capacity Chapter, Goal #1).
 - If possible, use wind-generation to help support the building's energy needs.
- c. If a road is constructed, develop a boat yard or storage area on the Snake River.
- d. Explore the feasibility of a community senior center or assisted living home.

would provide to jobs, shopping, education, health care and more. However, residents did note some concerns with a road to Dillingham, including easier access to drugs and alcohol and potential negative impacts on subsistence by providing access to land for non-residents.

While a road to Dillingham has been discussed since the 1980s, the increase in the costs of air transportation in recent years has made the road a higher priority. During spring 2015, community leaders met with representatives from Bristol Bay Native Corporation (BBNC), Bristol Bay Native Association (BBNA), the City of Dillingham, the Nushagak Electric Co-op and other local corporation representatives to discuss the feasibility of the road. Manokotak leaders also met with Saguyaq Incorporated (the village corporation for Clark's Point) and Chogguing Corporation (the village corporation in Dillingham) to discuss the road in April 2015, since the preferred route would cut through their lands. Both corporations were in support of the project.

"There has been talk of building a new road to Dillingham. If this were to become a reality, it would open doors for job/training opportunities and improve access to the grocery stores and airport hub."

-Community survey participant

The community is currently identifying funders for the needed feasibility study, which is estimated to cost around \$53,000. Possible partners and funders include BBEDC, BBNC and the communities of Manokotak, Clark's Point and Dillingham.

Snake River Access Road

Related to the Road to Dillingham is an access road to the Snake River. This is a priority capital improvement project for the community. A road would provide improved ocean access and reduce the amount of time to bring materials into the community. It would also likely be a good location for a fish processing facility. The community is considering a flash freezer plant if the Snake River Access Road is built. The area also has strong winds and may be a good location for wind turbines. The site also has potential for gravel extraction. A road to Snake River would form the first segment of the proposed road to Dillingham. The community is currently working with partners to secure funding for a feasibility study for the road to Snake River.

Airport

The State Department of Transportation constructed a new airport in 2008. The former airport was located one mile north of the main village, while the new site is located four miles beyond Manokotak Heights and eight total miles from the main village. The new airport is on former MNL land. The old airport site is still owned by DOT, although the land is ultimately supposed to be transferred MNL and the City as part of a land swap agreement for the new airport. MNL has concerns about contaminants from oil spills at the old runway site, and would like to conduct more studies before the transfer occurs.

The community has a variety of concerns about the new airport. The airport's location is an



inconvenience for residents as it is no longer within walking distance, requires more fuel and can be a hazardous drive in winter. Although the new airstrip is located eight air miles closer to Dillingham and

has shortened the flight time to the community, flight costs continue to rise. Residents also cite issues with crosswind at the new airport. The 2011 Manokotak Long Range Transportation Plan calls for an additional, shorter airstrip closer to town to address crosswind concerns.

Dock Facilities

Docking facilities around Manokotak are somewhat limited. There is a 6.5 mile road from the community to a boat ramp and barge landing at the Weary River, although the boat ramp was poorly designed and placed in the wrong location, and is in need of improvements to control erosion and improve access and safety. The Weary River ramp was originally owned by the Tribe but was transferred by the City. The City maintains the ramp Tribal Transportation Program (TTP) pass-through funds from the Tribe.

Other Connections

According to the 2011 Manokotak Long Range Transportation Plan, an inland, land and water route is needed to connect a major fishing area at Kulukak Bay with the village. The proposed route would include a tramway located at the historic portage between Kulukak Bay and Ualik Lake, a water section across Ualik Lake, down Ongoke River and across Amanka Lake, and an all-weather road from Amanka Lake. This will provide for shorter, quicker and much safer movement of boats and personnel to and from the fishing grounds. The Long Range Transportation Plan estimates the cost for this route at approximately \$20 million dollars. However, due to the current state fiscal challenges, funding for this project seems unlikely.

TRANSPORTATION WITHIN MANOKOTAK

Local Road Improvements and Maintenance

Many local roads are in need of maintenance and improvements. The community also faces challenges with dust in the summer. The road inventory from the 2011 Manokotak Long Range Transportation Plan lists most roads in Poor Condition. The Village has Tribal Transportation Program (TTP) funding to help fund improvements. There are currently plans for upgrading 2nd and 3rd streets.

Between the Main Village and Manokotak Heights Residents would like to see safety improvements and upgrades along the Manokotak Heights Roads. The community would like to add a pedestrian and

bicycling trail alongside the

road. Residents in both the survey and the community open house requested lights be added alongside the road to improve safety and visibility, especially for those traveling on foot or bicycle. Some residents would also like to see shuttle transportation available between the main village and Manokotak Heights. The City of Manokotak recently hired a transportation planner to investigate options for improving transportation and

connectivity between the main village and Manokotak Heights, and potentially Dillingham in the future.



Road in the Main Village

"We need lights along the road between the main village and heights. Without lights it is hard to see people walking in the dark."

-Community survey participant

Finally, the Community School Committee would like to see improved transportation to school for children who live in Manokotak Heights. The neighborhood is not eligible for bus funding because the homes are within a mile of the school, but parents have concerns about the cold, safety and wildlife. The community is looking into Safe Routes to School grant funding to see if there are ways to improve transportation and access to the school.

TRANSPORTATION GOALS AND STRATEGIES

GOAL 1: Improve Connectivity to Manokotak

Strategies

- a. Work with regional partners to construct a road from Manokotak to Dillingham **(COMMUNITY PRIORITY)**.
- b. Extend the airport road to the Snake River.
- c. Construct a new dock facility and boat ramp on the Weary River. Increase capacity for boat storage.
- d. Update Manokotak's Long-Range Transportation Plan to examine and prioritize community needs.
- e. Consider building an additional airstrip to address crosswind issues at the current airstrip.
- f. Improve maintenance, marking and signage of the winter trail to Dillingham.
- g. Evaluate the feasibility of constructing a barge for the community in order to do direct purchase and delivery of goods and fuel.

*"Airlines are getting very expensive
- our 7 minute flight one way from
DLG to KMO is \$100 or more!"*

-Community survey participant

GOAL 2: Improve Road, Bike and Pedestrian Connections

Strategies

- a. Update Manokotak's Long-Range Transportation Plan to examine and prioritize needs for community transportation projects.
 - Include a review of trails in the study.
- b. Construct a bike and pedestrian path along the Manokotak Heights Road.
- c. Install lights along the Manokotak Heights Road.
- d. Develop a Safe Routes to School plan and apply for funding to enhance transportation options to the school.
- e. Keep village roads graded and clear.
- f. Identify and purchase needed road maintenance equipment.
- g. Explore options for new road surfaces in order to reduce dust.
 - Send City transportation staff to training on air quality improvement.
 - Send a proposal to DOT/PF and BIA Roads program to resurface roads.

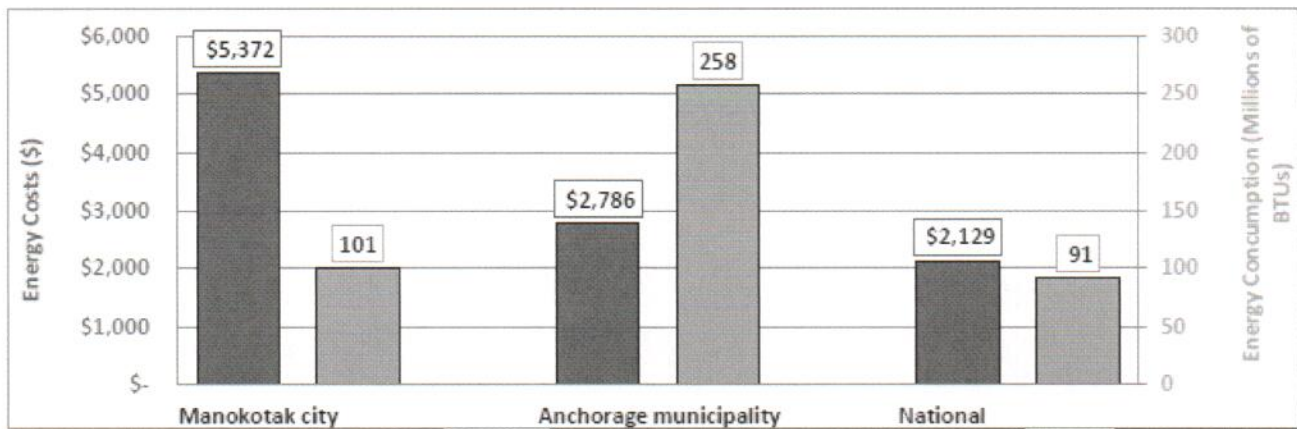
ENERGY

CONTEXT

Like most rural Alaska communities, Manokotak experiences challenges with high energy costs. Energy costs contribute to a higher cost of living in the community and make it harder to sustain a thriving economic environment. As of spring 2015, residents report fuel oil costs of approximately \$7.20 per gallon, and gas costs of approximately \$7.00 per gallon. The fuel cost dropped to \$5.20 during the summer 2015 fuel delivery, which reflects

a nationwide trend in lower fuel prices. When the community runs out of fuel between barge deliveries, the fuel has to be flown in, bringing it as high as \$15 per gallon. The barge fees are also inconsistent, contributing to uncertainty around future costs. According to the Alaska Housing Finance Corporation (AHFC)'s 2014 Alaska Housing Assessment, households in Manokotak on average use less than half the amount of energy of Anchorage households, but pay almost twice as much to heat their homes on an annual basis (Figure 10). High fuel costs also contribute to the expensive cost of air transportation to

Figure 10: Average Annual Home Energy Costs and Use

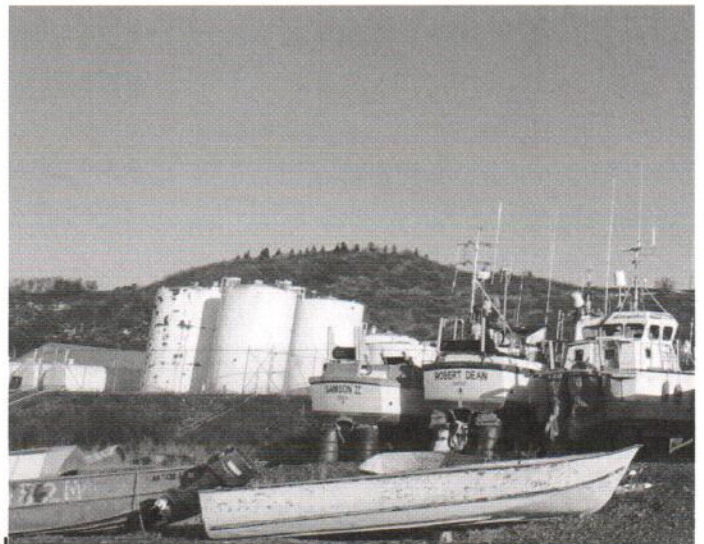


Source: AHFC 2014 Alaska Housing Assessment

Manokotak.

The Manokotak Power Company, owned by Manokotak Natives Limited (MNL), provides diesel-generated electricity to the community through overhead lines. The current system has dated infrastructure and would benefit from energy efficiency upgrades. Both the community diesel generators and the tank farm need upgrades. The community would like to find alternative sources of energy that are more sustainable, more affordable and less contaminating than fuel.

Bringing renewable energy into the community is on Manokotak's Capital Improvement Projects (CIP). Manokotak is especially interested wind power, and has acquired funding from the Alaska Energy



Manokotak Tank Farm

Authority (AEA) to investigate the feasibility of using wind power to help offset the costs of the community's electricity generation. In the past, previous wind power feasibility studies have identified challenges with variable and inconsistent wind levels across seasons. However, sites near the new airport, the Snake River, and Manokotak Heights have not been studied, and residents believe these sites have high potential for wind power. The City is currently pursuing funding to incorporate wind turbines into its new office at Manokotak Heights. Other less-explored options for expanding community energy sources include geothermal in Naknek, tidal power near the Weary River boat ramp and an intertie with the Nushagak Electric Cooperative. These possible energy options should be displayed on future land use maps as part of the Manokotak Land Use Plan (see Land Use and Environment Chapter).

Increasing energy efficiency is another effective way of reducing energy costs. Between 2008 and 2011, 47 households participated in the AHFC Weatherization Program, or almost half of all occupied households in the community. Further pursuing additional energy efficiency upgrades in existing structures and encouraging energy efficient design in new buildings is another way the community can keep energy costs low.

ENERGY GOALS AND STRATEGIES

GOAL 1: Develop New, More Affordable Energy Sources

Strategies

- a. Explore the feasibility of developing wind power infrastructure at key community locations such as Manokotak Heights, Snake River and the new airport.
- b. Provide accurate public information about the costs and benefits of maintaining the current system of electrical production compared to developing new energy sources.
- c. Work with nearby utilities such as Nushagak Cooperative to develop feasibility assessments for developing new energy sources and installing interties with other communities.

GOAL 2: Reduce Energy Consumption

Strategies

- a. Continue to improve the energy efficiency of residential, commercial and public facilities.
- b. Increase community education on energy ratings and the benefits of energy efficient design.
- c. Educate homeowners about simple energy conservation habits.
- d. Promote state and federal reimbursement programs for homeowners and businesses that improve energy efficiency.

accomplishments made, and the new priorities that surface. Measurements can be taken to evaluate the plan's success and its rate of implementation, such as:

- Holding an annual formal review of the plan goals and priority actions to determine which goals and actions have been accomplished, which are in progress, and which need attention, resources and development.
- Asking the City and Village Administrators to catalog and circulate how many grants have been applied for and administered as a result of the plan and how many projects or pieces of capital equipment have been acquired.
- Surveying to determine how many jobs and new businesses have been created since the plan was adopted, and how many people have taken advantage of education and training opportunities.
- On a semi-monthly basis, checking with service providers and similar organizations (such as the school, a Wellness Team or local youth organization) to see if they are implementing steps outlined in the plan, and if they need assistance or support from community members and entities.
- Tracking statistics in order to track progress in the community. These could include education statistics such as graduation rates and student body performance on standardized tests, community crime statistics, and health/wellness statistics from the clinic, as well as traditional indicators such as population, poverty, employment and income.
- After ten or twenty years, and the completion of many of the goals and strategies of the comprehensive plan, village organizations will want to reflect upon the accomplishments of the preceding 20 years and, again, plan for the next 20 years by taking on a public participation process to gain community-wide input on the next Manokotak Community Comprehensive Plan.

APPENDICES

Community Survey: January 2015

