

ST. MICHAEL LOCAL ECONOMIC DEVELOPMENT PLAN 2016-2021



Draft 2016 Top 11 Community Development Priorities

1. Public Safety Building with Holding Cell
2. Completion of 14c Process
3. Local Bulk Fuel Tank Farm
4. Seawall Erosion Protection
5. Additional Water Storage Tank
6. Heavy Equipment and Storage Facilities
7. Reindeer Facilities
8. New Teen Center
9. Establish a Local Housing Authority
10. New Gravel Source
11. More Housing and Rental Units

Prepared For:

The Community of St. Michael and
The Bering Strait Development Council

Facilitated By:

Pearl Mikulski, Planner and
Carleen Jack, Planning and Dev. Specialist
Community Planning and Development
Kawerak, Inc. P.O. Box 948 Nome, AK 99762
(907) 443-4253/FAX (907) 443-4449
www.kawerak.org
Sep. 21, 2016



Table of Contents

Joint Resolution #16-07-07.....	4
1.0 Introduction and Purpose of the 2016 – 2021 Local Economic Development Plan.....	6
2.0 Planning Process and Public Involvement.....	7
2.1 Planning History and Accomplishments in St. Michael	7
2.2 Planning Committee & Staff Description	11
2.3 Method for Plan Development and Components	12
2.4 Comprehensive Development Status	13
3.0 Community Descriptions	14
3.1 Location.....	14
3.2 History and Culture	14
3.3 Government, Corporations, and Service Providers	15
3.3.1 St. Michael IRA Council	15
3.3.2 City of St. Michael	16
3.3.3 St. Michael Native Corporation.....	18
3.3.4 Regional Corporations.....	20
3.3.5 Other Product or Service Providers	21
3.4 Community Infrastructure	22
3.4.1 Housing.....	22
3.4.2 Schools	24
3.4.3 Water and Sewer.....	25
3.4.4 Landfill	26
3.4.5 Electricity	28
3.4.6 Fuel	29
3.4.7 Existing Transportation Systems.....	30
3.4.8 Communications.....	32
3.4.9 Health Care.....	33
3.4.10 City Buildings and City Heavy Equipment	35
3.4.11 Tribal Buildings and Equipment	36
3.4.12 Native Corporation Buildings and Equipment	36
3.4.13 Public Safety.....	37
3.4.14 Libraries and Museums, Cultural Buildings, and Social Events and Programs.....	38
3.4.15 Cemeteries and Graves	38
3.4.16 Public buildings, lands, churches, parks, camps, and recreational areas.....	39
4.0 Population and Growth Trends	39
4.1 Saint Michael Census Data	39
4.2 Employment and the Economy	41
5.0 Environmental Scan	42
5.1 Soils and Topography.....	42
5.2 Vegetation	43
5.3 Climate	43
5.4 Wildlife.....	43
5.5 Historic Preservation	44
5.6 Seismic, Flood, and Wetland Information	44
5.7 Land Status	45

5.8 Designated Land Status and Management Issues	45
5.9 Land Use Potential	46
6.0 Strengths, Weaknesses, Opportunities, and Threats	46
6.1 Development Opportunities, Trends, and Strengths	46
6.2 Development Barriers, Threats, and Areas of Concern	46
7.0 St. Michael’s Vision, Goals, and Values	48
7.1 St. Michael’s Vision	48
7.2 St. Michael’s Vision Statement	49
7.3 St. Michael Development Goals and Objectives	49
7.4 St. Michael Community Values and Development	51
7.4.1 St. Michael Values	51
7.4.2 Applying Values to Community Development	51
8.0 Development Priorities and Implementation	52
8.1 PRIORITY # 1 Public Safety Building with Holding Cell	52
8.2 PRIORITY # 2 Completion of 14c Process	54
8.3 PRIORITY # 3 Local Bulk Fuel Tank Farm	55
8.4 PRIORITY # 4 Seawall Erosion Protection	56
8.5 PRIORITY # 5 Additional Water Storage Tank	57
8.6 PRIORITY # 6 Heavy Equipment and Storage Facilities	58
8.7 PRIORITY #7 Reindeer Facilities	59
8.8 PRIORITY # 8 New Teen Center	60
8.9 PRIORITY # 9 Establish a Local Housing Authority	61
8.10 PRIORITY # 10 New Gravel Source	63
8.11 PRIORITY # 11 More Housing and Rental Units	64
9.0 Future project ideas:	65
10.0 Review and Update Process	68
11.0 Maps	69
12.0 Public Participation	71
BIBLIOGRAPHY	72

Joint Resolution #16-07-07
Native Village of St. Michael, City of St. Michael and St. Michael Native Corporation

A RESOLUTION OF THE NATIVE VILLAGE OF ST. MICHAEL ADOPTING THE 2016-2021 LOCAL ECONOMIC DEVELOPMENT PLAN (LEDP) APPLICABLE FROM July 1st, 2016 to June 31st, 2021.

WHEREAS, the Native Village of St. Michael IRA Council is the federally recognized governing body of the tribal members of St. Michael, Alaska; and,

WHEREAS, the St. Michael City Council is the municipal governing body of St. Michael, Alaska; and,

WHEREAS, the St. Michael Native Corporation is the village corporation established under ANCSA; and,

WHEREAS, the purpose of the Native Village of St. Michael IRA Council, City Council, and Corporation Board are to serve the people, community, and businesses of the tribe by promoting economic opportunities that improve the economic, social, and environmental quality of life; and,

WHEREAS, the Native Village of St. Michael IRA Council, City Council, and Corporation Board are responsible for the planning and implementation of economic development activities for the tribe in St. Michael; and,

WHEREAS, the Native Village of St. Michael IRA Council, City Council, and Corporation Board are responsible for the development and implementation of a community economic development strategy to guide the economic growth of the village in order to help increase local employment opportunities, foster a more stable and diversified economy, and improve the quality of life for residents, while maintaining the cultural heritage of the community; and,

WHEREAS, the LEDP provides the factual data support necessary to qualify for assistance in funding local projects; and,

WHEREAS, the Native Village of St. Michael IRA Council in a Joint Meeting with the City of St. Michael and the St. Michael Native Corporation, with assistance from Kawerak Community Planning and Development Program staff, has updated its five-year LEDP that states the community's values, goals, objectives, and strategy necessary for guiding future growth and economic development of the village; and,

WHEREAS, the 2016-2021 economic development priorities listed in this LEDP were developed, reviewed, and approved by the community during a joint public meeting held on May 19th and 20th, 2016; and,

WHEREAS, we ask all public, private, and non-profit entities serving our community to recognize and use this plan; and,

NOW THEREFORE BE IT RESOLVED, that the Native Village of St. Michael Council, City Council, and Corporation Board approves and adopts the five-year St. Michael LEDP 2016-2021 and priorities for the tribe in St. Michael, applicable between July 1st, 2016 and June 31st, 2021.

NOW THEREFORE BE IT FURTHER RESOLVED, the economic development priorities listed below for the Native Village of St. Michael has reviewed, updated, re-prioritized, and approved on June 10, 2016 are:

1. Public Safety Building with Holding Cell
2. Completion of 14c Process
3. Local Bulk Fuel Tank Farm
4. Seawall Erosion Protection
5. Additional Water Storage Tank
6. Heavy Equipment and Storage Facilities
7. Reindeer Facilities
8. New Teen Center
9. Establish a Local Housing Authority
10. New Gravel Source
11. More Housing and Rental Units

CERTIFICATION: I certify that the foregoing resolution was adopted at a convened meeting of the Native Village of St. Michael Council on June 10, 2016 at which a quorum was present, by a vote of 6 for and 0 against, and 0 abstaining.

Theresa Kobuk 7/5/16
President, Native Village of St. Michael Date

Thomas Cheemuk 6/10/16
Secretary Date

CERTIFICATION: I certify that the foregoing resolution was adopted at a convened meeting of the St. Michael City Council on June 10, 2016 at which a quorum was present, by a vote of 6 for and 0 against, and 1 abstaining.

Bobbi Ann Andrews 6-10-216
Mayor, City of St. Michael Date

CERTIFICATION: I certify that the foregoing resolution was adopted at a convened meeting of the St. Michael Native Corporation Board of Directors on June 15, 2016 at which a quorum was present, by a vote of 6 for and 0 against, and 0 abstaining.

Alberta Steve 6/15/16
President, St. Michael Native Corporation Date

Richard Elachik, Sr. 6/15/16
Secretary Date

*actual copies of the resolution are filed at the entity offices.

1.0 Introduction and Purpose of the 2016 – 2021 Local Economic Development Plan

St. Michael is located on the east coast of St. Michael Island in Norton Sound. This region was a trading area where Yup'ik, Inupiat, and Indians would come to do business. A Native village was settled on the northeast side of the island. A fortified trading post called "Redoubt St. Michael" was built by the Russian-American Company at the present location of St. Michael in 1833. It was the northernmost Russian settlement in Alaska. The Native village of "Taciq" stood to the northeast. When the Russians left Alaska in 1867, several of the post's traders remained. "Fort St. Michael," a U.S. military post, was established in 1897. During the gold rush of 1897, it was a major gateway to the interior via the Yukon River. As many as 10,000 persons were said to have lived in St. Michael during the gold rush. St. Michael was also a popular trading post for Eskimos to trade their goods for Western supplies. Centralization of many Yup'iks from the surrounding villages intensified after the measles epidemic of 1900 and the influenza epidemic of 1918. The village remained an important trans-shipment point until the Alaska Railroad was built. The Native Village of St. Michael was incorporated in 1948. The city government was incorporated in 1969. St. Michael's population is largely Central Yup'ik and Inupiaq today, and many residents are descendants of Russian traders. Seal, beluga whale, reindeer, moose, caribou, waterfowls, fish, berries, and greens are important staples.

The LEDP is a critical step in the on-going development of the tribe and its efforts to improve community conditions and the well being of its members. This comprehensive plan is structured to:

- Provide the community with a complete inventory of existing demographics, races, social conditions and services, economic conditions and activities, public services provided, and public and private facilities;
- Equip the community with the basic informational tools of local planning that accurately show land status and ownership as well as traditional resources and subsistence areas;
- Provide implementation strategies for development priorities; including land use, public facilities and services, capital improvements, economic development and community governance;
- Place emphasis on the crucial development issues; economic and resource development, land use planning and needs of the community with regards to infrastructure, and priority capital improvement projects;
- Involve key decision makers to assist in the identification of common goals and direction to achieve those goals.



Facilitator, Pearl Mikulski, listens as Bernie Joe speaks of issues facing St. Michael during the LEDP workshop in May 2016.

2.0 Planning Process and Public Involvement

2.1 Planning History and Accomplishments in St. Michael

The Kawerak Community Planning and Development Program (CPD) worked with the Community of St. Michael in developing its Local Economic Development Plan (LEPD). LEPDs analyze local conditions, identify problems and opportunities, and develop goals, strategies and outcomes to address community issues, on-going development, and future development. St.



Michael's first Comprehensive Plan was completed in 1998, and the LEDP was completed in 2011. The St. Michael IRA Council, the City of St. Michael and the St. Michael Native Corporation regularly update their priorities.



Participants from the St. Michael Local Economic Development Plan workshop, May 19 - 20, 2016. Standing: Milton Cheemuk, Albert Washington, James Niksik, Sr., Thomas Cheemuk, Sr., Helen Laws, Shirley Martin, Genevieve Myomick, Bobbi A. Andrews, Paula Myomick, Bill Hawkins, and facilitator Pearl Mikulski. Seated: Bernadette Joe, Elizabeth Aketachunak, Emily Lockwood and Andrew Lockwood, Sr. Photo taken by Carleen Jack.

Accomplishments and Status of Progress on Top St. Michael Priorities Since 2011

2011 – 2015 Top Priorities	Status or Ongoing Progress	Completed?
1. Public Safety Building (<i>and other Public Safety Issues</i>)	Inventory completed and reorganization of all fire equipment. NSHC Triplex completed in 2016 for VPSO housing. There are 2 local VPO's and currently recruiting for a VPSO. VPO offices are in the old school which is owned by the City of St. Michael. The City of St. Michael obtained 4-wheelers and snow machines for the VPO's. Still need a holding cell and new office space for local law enforcement. Fire and Search and Rescue departments need storage and office space.	Partially completed - VPSO housing available in the new NSHC triplex, two ATV vehicles and small office for the VPOs provided by the City of St. Michael.
2. Completion of 14c Process	Four St. Michael Native Corporation members attended 14c training, some local meetings were held to discuss the 14c process. The cutoff date was 1971 and the 14 (c) process is ongoing.	Partially completed - Preliminary steps
3. Local Bulk Fuel Tank Farm (<i>and other Power Issues</i>)	Preliminary planning has started, MOA needs to be updated, regular maintenance done annually, but tanks are aging and need to be replaced, intertie completed and power has been provided by the AVEC plant in Stebbins since 2015, AVEC built new backup generators and has agreement with BSSD for fuel for the backup generators, city provides storage and purchases the fuel for the water treatment plant, city obtained Alaska Commercial's 10,000 gallon fuel tank and uses it to sell gasoline, city applies for the NSEDC bulk fuel loan.	X

2011 – 2015 Top Priorities	Accomplished or ongoing	Completed?
4. Seawall Erosion Protection	Sites needing protection have been identified, some preliminary planning documents developed.	 Not completed
5. Additional Water Storage Tank (<i>and other Water and Sewer Issues</i>)	Feasibility study done for energy efficiency of the water treatment plant, regular water treatment, NSEDC benefits share provided for a subsidy. The system is costly to maintain as water must be transferred year around because there is not enough storage space in the 2 existing tanks, city staff have a better understanding of Alaska Rural Utility Cooperative's (ARUC) role in the management of the water and sewer.	X
6. Heavy Equipment Facilities	Parts are ordered and equipment is maintained as local funding allows, grants were submitted for a new bulldozer for the dump maintenance. Some equipment is stored in the old airport warehouse, but more storage space is needed. Most of the heavy equipment in St. Michael and Stebbins needs major repairs or replacement.	X
7. Reindeer Facilities	Temporary corral was moved, and new corral is planned and in progress but not completed yet, 4 residents attended UAF – Northwest Campus High Latitude classes, Stebbins and St. Michael tribes jointly manage part of the herds and the joint corral project. The new corral site is located on Qusingaq and an estimated 10,000 head of reindeer exists on St. Michael Island.	X
8. New Teen Center (<i>and other Teen Activities</i>)	City Gym open 7 days a week, 8 pm – 10 pm is designated for teens, but community is still seeking a teen center facility. The city was awarded an AmeriCorps grant and hired staff that hosts weekend activities. School has afterschool sports.	X
9. Establish a Local Housing Authority, <i>and Other Housing Needs</i>	The tribe assists people with housing applications. New NSHC triplex was completed in 2016 which will provide housing for healthcare and/or VPSO professionals, 2 new BSRHA houses were built, 1 HIP house was built but not yet completed due to lack of funding, several other homes are in progress in 2016, but no local housing authority formed, 1 family is seeking a loan to build a new house, St. Michael Native Corporation is seeking to build an rental units, Handicap accessible ramps were installed on several homes, teacher housing is being renovated, renovation painting and weatherization of some homes.	X
10. Another Store	Alaska Commercial operates one store. The St. Michael Native Corporation renovated their old store and re-opened a new store. There is also another privately operated store.	 Completed

Completed projects ideas that were identified in the 2011 LEDP:

1. develop a community study hall
2. advocate for changing the school grading system back to ABCF scale
3. start a local reading program
4. help people apply for scholarships
5. vocational training, and higher education
6. renovation and weatherization of older houses
7. hold a local health fair
8. local certified healthcare providers
9. high seas fishing training
10. train more counselors
11. open a community hall (city obtained old school, more space at IRA when Head Start moved out)
12. build access road to the cemetery and repair and renaming of graves
13. open a Native store (new Jerry's General, and renovation of SMNC store)
14. behavioral health center or office
15. youth and city league sports (at city gym)
16. develop a sanitation collection service
17. more parental and family involvement and activities for families
18. gas station (city started selling gas)



Alaska Commercial built a new store after the old AC was totally destroyed in a fire in 2002.



The New Jerry's General Store opened a few years ago through assistance from NSEDC'S Small Business Initiative Grant.

Other Accomplishments in St. Michael since 2011:

1. Business Development & Tourism – new private store Jerry's General Store (JGS), some are operating small home businesses, local artists sell at the Alaska Commercial store, the St. Michael native Corp. renovated and re-opened a grocery store.
2. Communications (telephone, radio, TV, internet, mail, newspapers) – new internet provider called Exceed is faster but more expensive, but are allowing more people to access the internet and fill out applications etc, there are several bulletin boards around town where information is shared, some hunters have satellite phones, VHS, or marine radios, many community members utilize Facebook to share information, ARCS has improved and there are 4 television channels, cell service is available but has dead zones and call cut-offs frequently, DISH network is available but expensive, there are 3 radio stations and 2 newspapers sold in town.
3. Youth and Elders, Cultural – organized dance group meets in the winter months, Alaska Native language scholarships available to paraprofessionals at the school, Kawerak has a



St. Michael Native Corporation renovated the building and opened the new Craters Store in 2015.

youth mentoring program, some local residents attended AFN and Kawerak’s regional conference, there is a local youth leaders group.

4. Social – the city operates an AmeriCorps program and has activities on the weekend, youth basketball, family fun nights, church operates a local sewing/arts & crafts group, Bingo, city basketball, holiday events and potlucks, there are afterschool sports offered through the school, there is a summer food program and 2 local food banks.
5. Education – Head Start moved to the city building (old school), upgrading the heat/air system at the school, Alaska Native language classes for paraprofessionals tuition free paid by BSSD if students receive a passing grade.
6. Jobs and Job Training – Tribe has a Development Coordinator (grant writer and project planner), local carpentry classes offered, HAZWOPPER classes, St. Michael Native Corp members attended 14c training, IGAP grant training, Tribal council training, Tribal coordinator training, ICWA training, CDL classes.
7. Environment (protection & pollution of air, water, land) – Beach cleanup done by NSEDC, Tribe operates an IGAP grant and runs the recycling program, monitors operate 24/7 to record, monitor erosion and Army Corp DOD has a fall project to eliminate contaminated soil removal.



Old village site on the coastline of St. Michael.



The ground southeast of St. Michael has eroded and sunken over the last few years.



Inland looking toward St. Michael.



Looking east of St. Michael across Whale Island.

8. Health (health care & prevention, dust control) – local Physicians Assistant, 2 new vehicles for the clinic, NSHC triplex completed in 2016, backup generator repaired, specialty clinics are available weather permitting,
9. Law Enforcement (VPO/VPSO & ordinances) – NSHC triplex opened and has a space for VPSO housing, recruiting now for a VPSO, despite high turnover the city employs 2 VPO’s and provides them with office space and 2 new four wheelers, the city has updated their ordinances.

10. Natural Resources (timber, minerals, fish & wildlife) – the St. Michael Native Corporation operates a gravel site and is seeking a new gravel source.
11. Public Facilities & Buildings (community halls, libraries, basketball courts, etc.) – the city obtained the old school building and is making good use of the space, Tribe is planning how to utilize the space vacated but the Head Start program moved to the old school building owned by the city, the carpentry class built a local morgue, planning for a new teen center, seeking to renovate city gym, city obtained grant to fix windows and doors, there are 9 cemetery sites in and around St. Michael, IRA boiler maintenance completed.



Left to Right: Emily and Florence Lockwood and Harold Kobuk enjoy the grand opening ceremony of the NSHC Triplex.

12. Transportation (roads, trails, airports, harbors, & boardwalks) – DOT will be working on the crosswind runway in 2017 and the airport will be closed during construction (St. Michael will need to use the Stebbins airport, new road completed to the cemetery sites in 2014, the Native Village of St. Michael receives IRR funds, Kawerak does dust control as funding allows, channel markers are maintained or replaced annually.
13. Tribal & City Governance – Tribal Council training done regularly, Tribal audit with a Certified Public Accountant (CPA) completed, and Tribal Coordinator training.
14. Waste Management (landfill, honey bucket haul, & contamination cleanup) – dump improvements made and management has improved, IGAP program does annual spring cleanup and ships out hazardous and recyclable materials, beach cleanup efforts by NSEDC, Army Corps DoD-Nalemp Program, city organizes cleanup of the areas around the dump, residents are more waste conscious and recycle more.



Albert Washington, Chanelle Lockwood, and Albert Washington brainstorming new project ideas for St. Michael.

2.2 Planning Committee & Staff Description

Realizing that changes within the community and some current public service facilities are not adequate to achieve program parity, the City of St. Michael, the St. Michael IRA Council and the St. Michael Native Corporation held public joint meetings where they decided to update the Local Economic Development Plan which analyzes how current infrastructure affects residents of St. Michael and determines the top priorities. With assistance from Kawerak’s Community Planning and Development Program staff, a public planning workshop was held May 19-20, 2016. The joint boards approved the top priorities on June 10, 2016. A draft LEDP written, reviewed by the joint entities and then

presented to the public for comments on Sept 14, 2016. After some edits, the plan approved and published on [REDACTED], 2016.

2.3 Method for Plan Development and Components

The planning organizations in Saint Michael sought a strategic planning process based upon:

- Technology of Participation methods developed by *the Institute of Culture Affairs*
- *Let Your Assets Be Your Guide: A Handbook for Community Planning* by *Rural Alaska Community Program and the Denali Commission*

These methods are proven effective in encouraging full participation from diverse groups and are best applied within community-based settings. This process was implemented among the participant's by first brainstorming ideas individually, then sharing ideas through small group discussions, and finally finishing with review among all participants confirming new resolves and decisions. The following foundational values or ground rules were applied during planning sessions:

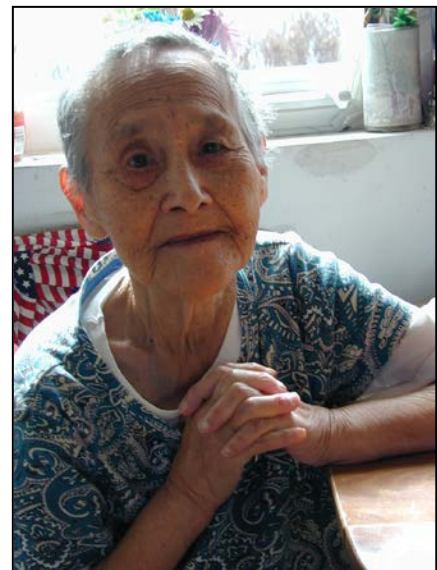
- Participation: each person brings a different insight, perspective and knowledge that formulates the larger picture
- Respect: respect and honor each person's views and ideas, empower each other
- Teamwork: each person works with everyone else in their role to accomplish the goals of the community
- Creativity: giving permission for the dialogue between the rational (mind) and intuitive (heart) perspectives, keep our eyes open, new ways of thinking
- Action: moving economic development towards local responsibility and accountability

The planning process was made up of four parts. Each component helped provide a comprehensive planning approach.

- LEDP Vision, Values and Goals - Developed the direction for the community's social and economic development with an overall vision, guiding community values, and development goals.
- Implementation Strategies - Created planning steps that the community can take in the coming 5 years to begin the actions and movement toward the vision and development goals.
- Funding - Identified potential funding and community investments to implement development goals.
- Recommended application of community values during implementation of development activities.

It is expected that the Local Economic Development Planning document should include:

- Community profile and assessment data
- Community vision, value statement and goals
- Updated community priorities for community and



**St. Michael Elder, Mary
"Kingaq" Cheemuk.**

- economic development
- Top priority implementation strategies for guidance in community development projects

2.4 Comprehensive Development Status

As a second-class city in the unorganized borough, the city of Saint Michael has optional powers under the state law for planning, platting, and land use regulation within municipal boundaries. The City of Saint Michael has assumed some of these powers. As the federally recognized governing body of the tribal members of Saint Michael, the Native Village of Saint Michael IRA Council shares some of these responsibilities and powers.

A Community and Economic Development Strategy (CEDS), a regional economic development plan, was updated for the Bering Strait Region communities in 2013 by the Bering Straits Development Council. The next full CEDS update is scheduled for 2019. This document can be found at: <http://www.kawerak.org/forms/csd/2013%20Comprehensive%20Economic%20Development%20Strategy.pdf>

St. Michael has published plans in April 2004 and June 2010. Many of the priorities turned into successful development projects that were completed. The new priorities for this Local Economic Development Plan were updated by the St. Michael Joint Council on June 10, 2016.

The approved 2016-2021 priorities are:

1. Public Safety Building with Holding Cell
2. Completion of 14c Process
3. Local Bulk Fuel Tank Farm
4. Seawall Erosion Protection
5. Additional Water Storage Tank
6. Heavy Equipment and Storage Facilities
7. Reindeer Facilities
8. New Teen Center
9. Establish a Local Housing Authority
10. New Gravel Source
11. More Housing and Rental Units



Some of the prioritized projects developed at the LEDP workshop in May 2016.

3.0 Community Descriptions

3.1 Location

St. Michael is located on the east coast of St. Michael Island in Norton Sound. It lies 125 miles southeast of Nome and 48 miles southwest of Unalakleet. The area encompasses 21.8 sq. miles of land and 6.3 sq. miles of water. St. Michael has a subarctic climate with maritime influences during the summer. Summer temperatures average 40 to 60; winters average -4 to 16.



Extremes from -55 to -70 have been recorded. Annual precipitation is 12 inches, with snowfall of 38 inches. Summers are rainy and fog is common. Norton Sound is ice free from early June to mid-November. The 2010 census recorded a population of 406.

3.2 History and Culture

A fortified trading post called "Redoubt St. Michael" was built by the Russian-American Company at this location in 1833; it was the northernmost Russian settlement in Alaska. The Native village of "Taciq" stood to the northeast. The U.S. Government had purchased Alaska in 1847, and the Russians left but several of the trading posts remained. "Fort St. Michael," the U.S. military post, was established in 1897. During the gold rush of 1897, it was a major gateway to the interior via the Yukon River. As many as 10,000 people were said to live in St. Michael during the gold rush. St. Michael was also a popular trading post for Eskimos to trade their goods for Western supplies. Centralization of many Yup'iks from the surrounding villages intensified after the measles epidemic of 1900 and the influenza epidemic of 1918. The village remained an important trans-shipment point until the Alaska Railroad was built. The city government was incorporated in 1969. The residents of St. Michael engage in traditional Eskimo song and dance. The people of St. Michael predominantly speak English as their first language; however, the older generations speak and know some Central Yup'ik Eskimo and Inupiaq. The art work is comprised of ivory, wood, grass, bead, and soapstone. The local ladies make beautiful fur hats and mittens made out of seal and beaver hides.

Brief History of Reindeer in the Seward Peninsula

In the 1800s, whaling ships traveled in the Bering Sea trading goods for meat and hides. With the development of plastics and petroleum products commercial whaling declined. However, animal populations had been severely impacted, leaving the Alaskan Natives at risk for subsistence resources. By 1888, reports of starvation among Alaskan Natives reached Dr. Sheldon Jackson, the Commissioner of Education in Alaska. He received approval from Congress to introduce reindeer into Alaska. In 1891 he purchased 16 reindeer from Siberia and shipped them to Amaknak Island. Then in 1892 he brought 171 more. Siberian and later Scandinavian families were employed as herding instructors. The Scandinavians introduced dogsleds as a means of transportation. Congress appropriated funds from 1896 until 1902 to purchase more reindeer for the Seward Peninsula and western Alaska. In 1898 Jackson ordered a drive of over 400 reindeer to an ice-bound ship of starving sailors.

After the discovery of gold in Nome in 1898, there was a large demand for meat. Jackson used reindeer as a means for teaching Native Alaskans English. A reindeer apprentice

received several head for each year of his schooling, and new herders were loaned enough reindeer to increase his herd to 50. In 1906 the government set a policy of placing more reindeer into Native ownership, and by 1913, Alaskan Natives owned over 65% of the reindeer in Alaska. By the late 1920s there were over 400,000 reindeer in western Alaska. Populations peaked at 640,000 in the 1930s! In 1937, the Reindeer Act restricted ownership to Native Alaskans. By 1950 there were about 50,000 reindeer, a decline due to the harsh winter of 1938-39, losses to migrating caribou, predation by wolves, and inefficient management of herds.

In the 1960s there was a gradual selection of Native Alaskan owners to become private reindeer herders with designated ranges. In 1968, the Bureau of Indian Affairs (BIA) became responsible for range management and modern range techniques were applied. Reindeer herding in Alaska has been a cultural and traditional mainstay in many western villages. The traditions surrounding reindeer herding and the use of their products continues today.

Currently, there are approximately 20 reindeer herders and 20,000 reindeer in western Alaska. These herders belong to the Reindeer Herders Association, which is part of the Kawerak, Inc. Natural Resources Division. This program provides assistance in the development of a viable reindeer industry to enhance the economic base for rural Alaska and to improve the management of the herds.

3.3 Government, Corporations, and Service Providers

3.3.1 St. Michael IRA Council

Incorporated in 1948, the federally recognized St. Michael IRA Council conducts tribal government affairs for their membership in the village. The Council owns the IRA building, which is centrally located near the old airstrip. The IRA administers a Bering Straits Housing Authority Youth Grant, a Department of Defense (DOD) Native American Lands Environmental Mitigation Program (NALEMP), an Indian Child Welfare Act

(ICWA) program, an Environmental Protection Agency (EPA) Indian Environmental General Assistance program (IGAP), and a Bureau of Indian Affairs (BIA) Roads program (with an MOA with the City concerning local roads), and a food bank. Boiler maintenance was completed at the IRA community building. The Council works closely with Kawerak, Inc., the regional non-profit Native organization.

GAPS IDENTIFIED: The tribe needs seek more funding to expand the tribal response program to continue contamination and beach clean-up and address other environmental issues, to better manage the reindeer, the new corals need to be completed, move the reindeer coral (temporary), and need to complete the ongoing building of the new coral.



Photo by Dan Eide

Native Village of St. Michael IRA Council-2016

President	Theresa Kobuk, Seat A expires 2018
Vice President	Elsie Cheemuk , Seat G expires 2017
Secretary	Thomas Cheemuk, Seat C expires 2018
Treasurer	C. John Lockwood, Seat E expires 2017
Member	Charlie Fitka, Jr., Seat D expires 2018
Member	Johanna Cheemuk , Seat F expires 2017
Member	Pius Washington, Seat B expires 2018

The council reorganizes itself by nominating and voting on President, Vice-President, Secretary, Treasurer and other members each year. The terms of the council seats are as follows:

- Seats A and B: 3 year terms
- Seats C and D: 2 year terms
- Seats E, F, and G: 1 year terms

Other Native Village of St. Michael Staff - 2016

Emily Kobuk, *Tribal Coordinator*; Susie Mae Kobuk, *IRA Payroll Specialist*; Molly Tom, *IRA Bookkeeper Assistant*; Shirley Martin, *Tribal Family Coordinator*; Michelle Snowball, *IGAP Project Coordinator*; Darlene Chiskok, *IGAP Project Assistant*; Vacant, *IGAP Project Laborer*; Pauline Hunt, *Development Coordinator*; Jeffery Long, *DOD- Nalemp Project Director/Tribal Response Coordinator*; Murrans Snowball, *Tribal Response Assistant*; Vacant, *Pull Tab Manager/Monitor*; Vacant, *Pull Tab Monitor*; Victor Steve, *Maintenance*; Dallas Acoman, *Janitor*; and Jason Steve, *Reindeer Herder*.



The Native Village of St. Michael IRA building was funded in 1998 and completed in November 2000. It has adequate office space, a community hall area, and a couple of overnight rental units.

3.3.2 City of St. Michael

The City of St. Michael was incorporated as a second-class city within the unorganized borough in 1969. City owned/operated services include Village Police Officers (VPO), washeteria, Bingo, gasoline sales, honey bucket collection, landfill management, and water/sewer service (Alaska Rural Utility Commemorative handles the collection of fees). In cooperation with Kawerak, the City is recruiting for a Village Public Safety Officer (VPSO) program. Since 2008 the old school gym is open 7 days a week. They also received a grant to replace windows and doors, operates the AmeriCorps program which hosts activities on weekends. The city levies a 4% sales tax. The sale, importation, and possession of alcohol is been banned since 1986.

GAPS IDENTIFIED: The City of St. Michael (and also the St. Michael Native Corp.) needs to obtain new heavy equipment and equipment storage facilities. The city applied for grants and needs to renovate their building and build a holding cell.

General Municipal Information:

Year of Incorporation:	1969
Manager or "Strong Mayor" Form of Government:	Mayor
Regular Election Held:	1 st Tuesday in November
Assembly/Council Meets:	1 st and 3 rd Tuesday of every month
Sales Tax:	4%
Property Tax:	None
Special Taxes:	None

Municipal Contact Information:

Address:	City of St. Michael P.O. Box 59070 St. Michael, AK 99659
Phone and fax:	907-923-3222 ph 907-923-2284 fax
E-mail:	bandrews@smk.bssd.org

St. Michael Planning Organizations

Native Village of St. Michael St. Michael Native Corporation	City of St. Michael
---	---------------------

Elected/Appointed Officials:

Mayor (term as mayor ends):	Bobbi Ann Andrews (2016)
City Council (term ends):	Thomas Cheemuk Sr., Vice Mayor (2016) Paula Myomick, Treasurer (2016) Genevieve Myomick, Secretary (2016) Emily Lockwood, member (2016) Harold Hawkins, member (2016) Anthony Andrews, member (2016)
Advisory School Board:	Richard Elachik Sr. (2016) Flora Matthias (2017) Alice Fitka (2017) Mary Long (2018) Alberta Steve (2018)
Regional School Board:	Milton Cheemuk (2017)

Municipal Employees:

Position:

Administrator
Bookkeeper
City Clerk
Janitor
Water Plant Operator
Water Plant Operator

Employee Name:

Vacant
Stephanie Lockwood
Richard Elachik, Sr.
Harold Kobuk
Norbert Otten Jr.
Alex Tom

State of Alaska Services & Facilities:

Alaska State Troopers, P.O. Box 1050, Nome, AK 99762
1-800-443-2835 or 907-624-3073, <http://www.dps.state.ak.us/ast/>

Alaska State Department of Fish and Game, 907-443-2825
Alaska State Department of Transportation and Public Facilities,
907-642-3261, <http://www.dot.state.ak.us/>

US Government

Post Office 907-624-3111, BLM 907-624-3396
National Weather Service 907-624-3561, Federal Aviation Administration 907-624-3121
Search and Rescue-U.S. Coast Guard, 1-800-478-5555, <http://www.uscg.mil/D17/>

3.3.3 St. Michael Native Corporation

The village corporation established under ANCSA in 1972 is the St Michael Native Corporation (SMNC). The for-profit corporation owns its main office, a heavy equipment building and the newly renovated Craters store which opened in 2015. SMNC operates the old gravel site which is near the water source. Another gravel source has been chosen at Flattop Mountain. There is another good rock source identified, which is difficult to access. Road access is needed in order to develop this site. For more information on SMNC needs see page 36. SMNC participates in the development of the Local Economic Development Plans and utilizes it to guide corporation development priorities. SMNC employs a land use planner that is beginning the 14c process for corporation lands. Four corporation members attended 14c training.



St. Michael Native Corporation Office.

GAPS IDENTIFIED: SMNC needs to develop a new gravel site, repair existing equipment and obtain new heavy equipment and heavy equipment storage.

Short Term Goals for the St. Michael Native Corporation:

- Complete 14c3 process
- Repair existing heavy equipment
- Obtain new equipment
- Adequate equipment storage
- New fuel tanks for all corporation buildings

Long Term Goals for the St. Michael Native Corporation:

- Expansion of gravel business
- Better road access to new gravel and rock source site

St. Michael Native Corporation Board-2016

Position:

President
Vice-President
Treasurer
Secretary
Member
Member
Member
Regular Election Held:
Board Meets:

Name:

Alberta Steve
James Niksik Sr.
Nobert Otten Jr.
Richard Elachik Sr.
Diane Thompson
Milton Cheemuk
Andrew Lockwood Sr.
Every November
2nd Thursday of every mo.

Contact Information:

Address: St. Michael Native Corporation
P.O. Box 59070, St. Michael, AK 99659
Phone and fax: 907-923-3143 ph, and 907-923-3142 fax
E-mail: saintmichaelnativecorp@gci.net



LEDP workshop participants brainstorming new project ideas.

3.3.4 Regional Corporations

St. Michael is served by several regional corporations, which are located in Nome or Anchorage.

Local and Regional Government Contacts

Native Village of St. Michael P.O. Box 59050, St. Michael, AK 99659 923-2304, 2305, 2467 fax 2406 EPA IGAP program DOD NALEMP program	Kawerak, Inc. P.O. Box 948, Nome, AK 99762 443-5231, fax: 4452 www.kawerak.org Tribal Coordinator 923-2304 Head Start 923-3981 ICWA Phone 923-2546, fax: 2474
City of St. Michael P.O. Box 59070, St Michael, AK 99659 923-3222, fax 2284 bandrews@smk.bssd.org City Water Dispensing 923-3222 Water Plant 923-2036 City Clerk 923-3222 Village Police Officers 923-2308 Bingo 923-3018 Fuel Sales (gas only) 12-2 pm 923-9910	Norton Sound Health Corporation P.O. Box 966, Nome, AK 99762 443-3311, fax 2287 nortonsoundhealth.org/ Katherine Kobuk Memorial Clinic St Michael, AK 99659 Phone 923-3311, fax 2287 Tribal Travel 923-3311 Village Based Counseling 923-2431
St. Michael Native Corporation P.O. Box 59049, St Michael, AK 99659 saintmichaelnativecorp@hughes.net SMNC Office 923-3142, fax 3143 Craters Store 923-4448	Bering Straits Native Corp. and Bering Strait Development Corp. P.O. Box 1008, Nome, AK 99762 443-5252, fax 2985 www.beringstraits.com/
Alaska Village Energy Cooperative 4831 Eagle St. Anchorage, Alaska, 99503 800-478-1818	Bering Straits Regional Housing Auth. P.O. Box 995, Nome, AK 99762 443-5256, fax 8652
Bering Straits School District P.O. Box 225, Unalakleet, AK 99684 907-624-3611, www.bssd.org Anthony A. Andrews School Grade School: 923-3041 High School: 923-3021 fax 3031 100 Baker St, St Michael, AK 99659	Norton Sound Economic Dev. Corp. 420 L Street, Suite 310 Anchorage, AK 99501 1-800-650-2248 or 274-2248 fax 274-2249, www.nsedc.com
University of Alaska Fairbanks – Northwest Campus, Pouch 400, Nome, AK 99762, 443-8400, http://www.nwc.uaf.edu/	US Post Office – NG Armory Building St. Michael, AK 99659, 923-3531
Alaska State Troopers Unalakleet 907-624-3073 Nome 907-443-5525	Alaska Court System Nome, AK 99762 907-443-5216
Anvil Mountain Correctional Center Nome, AK 99762 907-443-2241	Alaska Legal Services Nome, AK 99762 907-443-2230

3.3.5 Other Product or Service Providers

GCI, Cable, P.O. Box 274, Nome, AK 99762, 1-800-800-4800 residential or 1-800-800-7754 business, www.gci.net	TelAlaska, P.O. Box 293, Nome, 907-443-0078 or 907-563-2003, 1-800-478- 7055, 1-888-478-3127 long distance and cellular, 1-800-478-7055 networks/internet, networks/internet help 888-570-1792, www.telalaska.com/
AT&T Alascom 505 East Bluff Drive, Anchorage, AK 99501-1100, 1-800-252-7266 www.corp.att.com/alaska/	Mukluk Telephone Company (one of a family of companies within TelAlaska) 907-563-2008
St. Michael Fuel Company St. Michael, AK 99659 907-923-3272	Alaska Rural Utilities Cooperative (ARUC), 1901 Bragaw St. Ste. 200, Anchorage, AK 99508, 1-800-560-8637, or 907-923-2036
Alaska Rural Communication Service (ARCS), Alaska Public Broadcasting, www.arcstv.org	Dish Network, www.dishnetwork.com/ 1-888-284-7116 current customers 1-888-825-2557 new customers
Starband, 1-800-4STARBAND Stargate Alaska – Kenneth Hughes 907-443-5130, nanuaq@StarBand.net	Exede Internet 1-855-523-2214 www.exede.com
Alaska Airlines P.O. Box 68900, Seattle, WA 98168 1-800-252-7522, www.alaskaair.com/	Arctic Transportation Services P.O. Box 790, Nome, AK 99762 907-443-5482, ats.texrus.com/index.jsp
Bering Air, P.O. Box 1650, Nome, AK 99762, 1-800-478-5422 http://www.beringair.com/	West Coast Aviation Services, Inc. P.O. Box 248, Unalakleet, AK 99684 907-624-3048, http://www.wcas.aero/
Everts Air Cargo, 6111 Lockheed Ave Anchorage, AK 99709, (907) 243-0009 1-866-242-0009, www.evertsair.com/index.php	Northern Air Cargo, www.nac.aero/ 3900 Old International Airport Road Anchorage, AK 99502 1-800-727-2141 (Anchorage Office) 907-443-5035 (907) 443-3157 (fax)
Ravn Alaska 4700 Old International Airport Rd. Anchorage, AK 99502 907-443-2414, www.flyravn.com/	Ryan Air PO Box 127, Unalakleet, AK 99684 907-624-3200, fax 3326 www.atsak.com/
KICY AM-850 and 100.3 FM - 408 West D Street P.O. Box 820, Nome, AK 99762, Phone Toll-Free: 1-800-478-5429 or 907-443-2213, fax 2344 www.kicy.org/	KNOM Radio Mission AM-780 and 96.1 FM - PO Box 988, Nome, AK 99762, 907-443-5221, (800) 478-5666, www.knom.org
Austin's Alaska Adventures St. Michael, AK 99659 923-2419 www.austinadventures.com/destinations/alaska/	KNSA Radio AM-930 P.O. Box , Unalakleet, AK 99684 907-624-3101 kdlg.org

Northland Services Marine Transportation 21 West 2 nd St., Nome, AK 99762 907-443-5738, Corporate Office: 4025 Delridge Way SW Suite 100, Seattle, WA 98106, 1-800-426-3113, Postal Address: PO Box 24527, Seattle, WA 98124, Remit to Address: PO Box 749661, Los Angeles, CA 90074-9661 northlandservicesinc.com/Default.aspx	Crowley Marine Services, Inc. P.O. Box 700, Nome, AK 99762 907-443-2484, or 923-5505 www.crowley.com <hr/> Alaska Logistics, PO Box 3512, Seattle, WA 98124, 1-866-585-3281 www.alaska-logistics.com
Jerry's General Store #4 Iditarod Ave., P.O. Box 59004, St. Michael, AK 99659, 923-2062	Alaska Commercial Company (store) 255 Main Street, St. Michael, AK 99659 923-3451, www.acvaluecenter.com
St. Michael Catholic Church St. Michael, AK 99659 923-3151	St. Michael Mission (Assemblies of God) St. Michael, AK 99659 923-3381
Western Union St. Michael, AK 99659 923-3128	Bering Sea Women's Group Nome, AK 99762 907-443-5491, www.beringseawomensgroup.org
National Park Service Bering Land Bridge National Preserve 907-443-2522	State of Alaska Dept. of Fish and Game Nome, AK 99762 907-443-2825

3.4 Community Infrastructure

3.4.1 Housing

The following housing data, unless otherwise noted, is from the 2010 U.S. Census and based on a total population of 406. There is a dire need for more local housing units in Saint Michael; where overcrowding is prominent and many families don't have the opportunity to own their own homes. The majority of the older homes are in need of renovation but mold issues present a barrier for weatherization and other projects making homes more energy efficient. New construction sites will need utility access. The tribe assists people with complex housing applications. BSRHA built 2 new homes and 1 HIP house, and several homes were painted, renovated, weatherized or had handicap accessible ramps installed. Teacher housing was renovated and a new NSHC triplex was built.



The handicapped resident awaits the completion of this Housing Improvement Program (HIP) house which is delayed due to funding or other issues. The owner has been placed in an apartment at the SMK IRA until the construction is completed.

GAPS IDENTIFIED: There is still overcrowding; older homes need to be more energy efficient; we need local carpenters, plumbers, and electricians to help families with repairs; no building materials or parts are available locally; there is a

need for rental units or low cost housing; and we need a local halfway house for non-violent offenders.

Housing Characteristics:

Total Housing Units:	120
Occupied Housing (Households):	98
Vacant Housing:	22
Vacant Due to Seasonal Use:	6
Owner-Occupied Housing:	52
Median Home Value:	\$114,063
Renter-Occupied Housing:	46
Total Households:	98
Avg. Household Size:	4.14
Family Households:	78
Avg. Family Household Size:	5
Non-Family Households:	19
Pop. Living in Households:	406



BSRHA house, pictured left to right: Susanna Tom, Jessica, Harper, and Dana, and Dorthea Acoman.



BSRHA house in progress for Martin P. Andrews, Sr.

Local Estimates on Plumbing/Kitchen/Phones/Heating:

Percent of Households That Lack Complete Plumbing (lack sink, bath/shower or flush toilet):	93.3%
Lack a Complete Kitchen (lack stove, fridge or running water):	85.4%
Lack Phone Service:	20.2%
Heat Using Electricity:	1.1%

Heat Using Fuel Oil, Kerosene:	81.0%
Heat Using Wood:	18.0%
Heat Using Propane:	0.0%
Heat Using Other Fuel:	1.0%
Use No Fuel:	0.0%

3.4.2 Schools

The Bering Strait School District operates schools in 15 villages in the Bering Strait region. The regional student population is 99% Alaska Native, and the student/teacher ratio is 9:7. In 2014-2015 school year, there were 17 teachers and 176 students enrolled in K – 12 schools in St. Michael. A new school, combining both elementary and high schools, was completed in 2008. The prior elementary school is now used as teacher housing, while the prior high school now serves as the City building.

The Head Start Program that is provided from Kawerak Inc. serves children age’s three to five. Head Start enrollment is 18. The program is located in the old School which now belongs to the St. Michael Cit. It has a capacity for up to 30 students.

Distance learning programs are available through the University of Alaska Fairbanks, though use is not yet widespread.

GAPS IDENTIFIED: Local residents feel there is a need for better sex education and parenting classes, there is a need for more substance abuse education, and we need an anti-bullying program.

Bering Strait School District

Operated By:	REAA
Total Number of schools:	15
Total Number of Teachers (St. Michael has 32 teachers):	177
Total Number of Students: (St. Michael has 176 students)	1685
Student/Teacher Ratio:	9.7
Dropout Rate (7-12):	4.4
Percent Native Students:	99.0%
Attendance Rate:	90.2%
Graduation Rate:	83.8%



The new St. Michael Anthony A. Andrews School was completed in 2008.

3.4.3 Water and Sewer

Water is derived from a volcanic clear lake located approximately 7 miles out of town which is treated and stored in a 1.2 million gallon tank; there is also a 400,000 gallon water storage tank which leaks. The source and water quality are sufficient for community needs. The system was renovated with the help of ANTHC in 2002- 2003,

solving some of the previous freeze up problems. An energy efficiency feasibility study was completed in 2014. However, pipes still freeze occasionally. Water is continuously transferred 24 hours a day, seven days a week. Operators boost the transfer rate prior to freeze up to ensure the maximum water availability in case

the raw water line source freezes. The system includes: a watering point at the city building potable water for homes, a piped gravity and vacuum sewer system with septic treatment, and household plumbing. There are 96 homes hooked up to water/sewer

service. A number of homes are not hooked up to water service because the inability to afford a \$175/month connection fee or the abandonment of the home due to fire. The homes not connected to piped water must haul their own water; paying \$0.05 per gallon. The City of St. Michael employs a worker to haul honey buckets weekly from collection points throughout the village to be emptied into a sewage lagoon; north of the village past the landfill. The city owns the water system, but it is managed by ARUC. NSEDC benefits share provides a subsidy on the water costs.

GAPS IDENTIFIED: The water plant needs a garage for storage of tools and parts and problems with vacuum system causes some homes not to be able to flush toilets. Pipe freeze ups are a big problem, and there is a need for a local plumber or assistance to help repair home plumbing issues. There is a high turnover of water plant staff.



The St. Michael City Water Pump House for the vacuum flush sewer system.



Water Tank building and office and includes the laundromat.



Honey bucket haul containers are still used by homes with freeze-up or vacuum sewage issues.

Maintenance is needed on the water tanks and we need a new storage tank so enough water can be stored in summer to last all winter. Water transfer lines are heated at great cost year around because there is not adequate storage capacity, and the 400,000 gallon water tank leaks. ARUC manages the water system but the community would like to take back ownership of the water system, and we need to renew the water certifications soon.

Water Distribution, Source & Treatment Systems:

Water System:

Operator: City
 Washeteria Operator: City
 Piped Water System: No
 Central Watering Point (Haul): Yes
 Multiple Watering Points: No
 Water Truck (Delivery): Yes
 Individual Wells: No
 Community Well Source: No
 Surface Water Source: Yes
 DEC Water Permit Number: 340337
 Water Is Filtered: Yes
 Water Is Chlorinated: Yes

Sewage Collection Systems:

Sewer System Operator: City
 Piped Sewer System: Yes
 Honeybucket Haul: Yes
 Honeybucket Pits: No
 Individual Septic Tanks: No
 Community Septic Tank: No
 Sewage Pumper: No
 Sewage Lagoon: No
 Sewage Lift Station: No
 Outhouses: No

3.4.4 Landfill

Individuals haul refuse to the city operated landfill north of the village. The city does not own a burn box. Staff supervised landfill burning is done when we have a north wind so that smoke does not affect the residents.

However, despite posted public notices, residents occasionally do burn refuse. Smoke from such fires has the potential of drifting into the village. In the past, there was a lack of organized management for the landfill site which was aggravated by individual residents hauling and dumping their own refuse. The city has heavy equipment and pays the



Scrap metal was sorted and separated when the landfill was organized, and plans to recycle the material or safely bury it elsewhere.



Sewage Lagoon.

operators wages to manage the landfill. The tribe has an IGAP grant and runs a recycling program and ships out hazardous wastes and recyclables through Kawerak’s Backhaul and Recycling Program. The tribe organizes an annual spring clean up in the community, and the city organizes an annual cleanup of the dump area. Recycling bins were distributed to each home.

Through a Memorandum of Agreement (MOA) with the St. Michael Native Corporation, the City of St. Michael, and the St. Michael IRA, an award was given for a 2011 ANTHC Integrated Solid Waste Management Grant to address the solid waste / landfill issues.



Trash burn fires like this can send toxic fumes into the environment.

Refuse/Landfill System

Refuse Collector:	Not available; individuals
Landfill Operator:	City
DEC Landfill Permit:	No
Type of Landfill:	Class 3

Top Landfill Priorities

The top priorities for the landfill over the next five years will be:

- Institute a more thorough management regime
- Potentially re-locate the landfill further away from the village
- Institute a refuse collection service



The landfill is improving, but more work needs to be done to insure proper maintenance.

GAPS IDENTIFIED: The city needs a new loader or new tracks for the old one. We need to continue the improved management of the dump area now that it is better organized and cleaner. The landfill area potentially needs fencing so that plastic and debris don’t scatter across the tundra.

3.4.5 Electricity

Since 2015 the village of St. Michael has been obtaining electricity through diesel powered generators located in neighboring village of Stebbins, eleven miles

away, operated by Alaska Village Electric Cooperative (AVEC).

The majority of the two communities' electricity is produced in Stebbins, and new back-up generators were installed in St. Michael. The old power plant and tanks were decommissioned.

The power lines within the village of St. Michael used to connect homes through the utilidor system running above ground through town. AVEC raised the power lines on poles, completing the project in 2010. The community obtains all of its fuel from barges that deliver in the summer time when the oceans are ice free deliveries.

System maintenance is performed regularly during spring and fall seasons and as needed in the case of storm damage. Transporting a technician to St. Michael to repair downed lines could take as long as two weeks due to weather and the remoteness of the community.

AVEC and the community of St. Michael sought alternative sources of electricity production.

AVEC performed a wind power feasibility assessment and the community completed a strategic energy plan in April 2011. AVEC determined a Class 5 wind regime in St. Michael is too minimal to have an effective wind turbines. AVEC has plan to put wind turbines in Stebbins, a Class 6 wind regime, both communities will benefit.



AVEC's new backup generator for St. Michael.



Decommissioned AVEC power plant. Power is now provided by the Stebbins power plant through an intertie.

St. Michael Power Provider Information:

Electric Utility Name:	AVEC
Utility Operator:	AVEC Co-op; City
Power Source:	Diesel
FY 2015 Av. Mo. PCE Rate/person:	60
Power Cost Equalization Subsidy:	Yes
FY 2015 Diesel kWh Generated:	1,746,764 kWh
FY 2015 Av. Annual PCE payment/ customer:	\$2,861
FY 2015 Effective Residential Rate (per kWh):	\$0.22/kWh

*The most current PCE report can be found at www.akenergyauthority.org

GAPS IDENTIFIED: Since St. Michael has been getting power from the Stebbins power plant we have more frequent outages that last as long as 4 days. It is very costly to heat the water transfer pipes year around, and we need to develop wind and solar to reduce energy costs.

3.4.6 Fuel

St. Michael is one of the most expensive communities in which to purchase fuel in the Norton Sound Region. In Sept 2016, the price of gasoline was \$5.98 which includes a 0.04% city sales tax and heating fuel was \$5.88 which includes a 0.04 city sales tax.



St. Michael Fuel Company’s bulk fuel tank farm located on the west side of the St. Michael.

The St. Michael Fuel Company (SFC) maintains a tank farm with a capacity of 40,000 gallons of heating fuel and gas. The City of St. Michael purchases and provides storage for fuel for the water plant and applies for and obtains the NSEDC bulk fuel loan annually. The city also obtained a 10,000 gallon fuel tank from the old Alaska Commercial store and sells gasoline. SFC is located on the east side of St. Michael.

In 2008 BSSD built a new school in St. Michael and installed three 30,000 gallon horizontal fuel tanks. In 2015 AVEC entered into an agreement with BSSD to use fuel from these tanks as needed for the new AVEC backup generators. The original AVEC tanks and the old power plant have been de-commissioned.

Fuel Tanks Currently in Use

OWNER	CAPACITY (in gallons)
Bering Straits Schools – three tanks 30,000 each	90,000
AVEC (decommissioned in 2015)	76,000
St. Michael Fuel Company	40,000
City of St. Michael (old AC tank used for gasoline-10,000, stove oil tank-10,000, and various other tanks-4,000)	24,000
Army National Guard tank	10,000
AK DOT tank	3,000

GAPS IDENTIFIED: We need improved maintenance of bulk fuel tanks, and we need to clean up old fuel tank sites. We need to obtain a new bulk fuel tank farm. The MOA needs to be updated, and we need to continue new bulk fuel planning for the community.

3.4.7 Existing Transportation Systems

Saint Michael is connected to the neighboring village of Stebbins by a 10.5 mile road and is otherwise accessible by air and sea. Primitive roads connect Saint Michael to Unalakleet to the north and Kotlik to the south during winter. A 2.5 mile road leads to the water source at Clear Lake and a 0.5 mile road leads to the landfill and sewage lagoon north of the village. Roads within St Michael average 14 feet in width. Snowmachines and 4-wheelers are the predominant form of transportation in the village and there are a number of other vehicles. Yet, the many roads in the community are too narrow for local traffic needs. There are no major bridges in St. Michael, though the village has a network of boardwalks and minor bridges connecting residences and businesses. Some of these need better maintenance.

Residents cite dust as a nuisance during the summer months. Kawerak’s Transportation Department (KTD) provided a dust control program in 2013 and may continue in 2016 if funding is available to dust control the road between St. Michael and Stebbins. In 2013 the KTD did road rehabilitation within the community and replaced the old boardwalks on the west side of town. Potholes and dust continue to be an issue. Local roads have speed limits, though they are not strictly enforced. If someone is driving a vehicle too fast, residents report the incident to local law enforcement. Law enforcement then typically issues a warning. The city maintains the streets. The tribe receives IRR funds for maintenance as well.



More board walks are needed and annual maintenance to insure safety.

St. Michael has a state-owned airport located approximately 1.25 miles west of town. The airstrip is unpaved and 4,000 feet long and 75 feet wide and is

maintained by Alaska Department of Transportation. DOT will be working on the crosswind runway in 2017. During that time the community will use the airport in Stebbins. Several daily scheduled flights link St. Michael to Nome, Unalakleet, and neighboring villages on Era and Bering Air. Freight is transported in on Ryan Air, Bering and Era. Fuel is can be flown in by Everts - 2,000 gallons at a time, if needed.

The top priority with regards to transportation in the community is a small airport terminal, to provide passengers and freight some protection from the elements while waiting for flights or the transfer to St. Michael.



The above ground vacuum sewer system poses challenges for navigation and board walks and ramps need regular maintenance to insure safety.

St. Michael is serviced by several barges during the summer, ice-free months. Northland Services, Alaska Logistics, and Seattle Action Services all provide freight services and have two to three scheduled sailings per season. Delta and Crowley make two to three fuel deliveries per year, depending on order volumes. Tachik Bay is the closest potential deep water harbor to the Yukon-Kuskokwim deltas and in the past served as a waypoint for marine traffic moving up and down the river. Additionally, the freshwater spring across the bay from the present village site served as a watering point for marine traffic. There is presently no dock, though a privately owned grounded barge serves as a landing.

GAPS IDENTIFIED: It will be challenging during the scheduled shut down of the St. Michael airport in the summer of 2017. We need to continue dust control projects, and the road to Stebbins needs to be resurfaced. The boat launch site is unusable and needs to be repaired or replaced, and the board walks and wooden bridges need to be repaired. Improved road access to gravel and rock sources will be necessary for expansion of Native Corporation efforts. Some road and other development in St. Michael often does not provide adequate drainages, and in spring time surface water forms large ponds which are a human safety hazard, especially for children and elders, and the runoff and erosion threatens our vital community infrastructure.

3.4.8 Communications

Various communication providers are available for TV, radio, local and long distance phone, cell phone service, internet, and there is a post office. There are 2 newspapers sold in the stores and several bulletins boards around



The Post Office has been located in the National Guard Armory since the former Post Office was destroyed in the fire of 2002.

town. Some residents have satellite phones or handheld radios. Mukluk Telephone Company / TelAlaska provide in-state telephone service while AT&T and GCI provide long distance service. GCI provides the majority of Internet service in the village with less than 50 percent of homes having in-house access to the Internet. A few residents use Hughes Net, though set up costs deter more widespread use. Hooking up to GCI requires residents to order the equipment and contact the local technician upon equipment arrival. Majority of the residents have Satellite Dish Network for cable and internet, if there is that option.

In 2008, the St. Michael received cell phone service. Prior to tower installation most households had landline phone service. After the installation, the community has shifted towards higher cellular service usage and lower landline usage. GCI will be upgrading internet services soon. As better streaming and web conferencing capacity improves, it will enable the community to access various trainings and increase community involvement in regional and other meetings.



Cell service has improved access to information and communication in rural Alaska, but there are still dead zones and dropped calls, and overage fees.

The St. Michael Post Office is located in the National Guard Armory building. There is one employee and the hours of operation are Monday through Friday 10am – 1pm and 2p – 5pm, and Saturday afternoon 1 – 4:30 PM.

St Michael receives radio signals from KSNA in Unalakleet and KNOM and KICY in Nome. Community flyers some distributed by the local EPA program, a weekly Head Start newsletter, and an annual newsletter from the DOD NALEMP program.

An additional form of communication in the village includes VHF radio. Many residents monitor VHF radios and occasionally the IRA makes announcements over VHF. The City, when the VHF is hooked up, has also used this medium, as well as the school.

Communications Providers:

In-State Phone:	Mukluk Telephone Co./TelAlaska
Long-Distance Phone:	AT&T Alascom; GCI; Mukluk Telephone
Internet Service:	GCI, Hughes Net, and Excede
Television/Cable:	ARCS, Dishnetwork
Radio Stations:	KICY-AM; KNOM-AM; KNSA
Teleconferencing:	Alaska Teleconferencing Network
Postal Mail:	United State Post Office, Fedex, UPS,
Deliveries:	Alaska Air Gold Streaks, Local airline hand carries

GAPS IDENTIFIED: The internet is costly and slow. Cell phone service is spotty and unreliable, and satellite TV is costly.

3.4.9 Health Care

The Katherine L. Kobuk Memorial Clinic serves as the community's primary health care provider and is operated by Norton Sound Health

Corporation. The clinic is staffed by four health aides, a Physician's Assistant Certified (PAC), and a Clinic Travel Clerk (CTC). A dentist visits the clinic on occasion but most dental procedures are completed out of the Unalakleet facility. Other specialists visit St. Michael less frequently; Public Health Nursing every three to four months, a pediatric dentist once per year, a doctor every three to six months, an audiologist two to three times a year, and an eye doctor once a year. When an audiologist was based in Unalakleet, visits were more regular, usually once per month, but have since grown less frequent. Behavioral Health Services maintains an office in the IRA building which is staffed by a village based counselor. A Nome-based therapist visits once or twice a month.



Katherine L. Kobuk Memorial Clinic.



New Norton Sound Health Corporation Triplex in St. Michael, AK and the first paraprofessional housing in the Bering Straits Region.

On average, about ten St. Michael residents travel to Nome per week for advanced medical treatment. About five residents travel outside the region to either Anchorage or Seattle for medical treatment per year.

Several years ago a new wing was added to the city building, allowing the clinic to move out of the old half, which is currently rented out by the city. The existing clinic space is currently inadequate for community needs. The clinic has three exam rooms, a trauma room, and a dedicated dental room, which is used as storage when a dentist is not visiting. Visiting specialists now can sleep in the new triplex which has kitchen and shower access. The clinic currently owns an ATV. NSHC purchased a Ford Explorer so the PA can travel to and from the Stebbins Clinic. The vehicle is also used to transport patients.



Inside the newly-furnished NSHC Triplex.

Once or twice a year, regional medevac surge capacity is overwhelmed as multiple villages experience emergencies serious enough to require evacuation. Such incidents leave at least one patient waiting for available transport to Nome.

Top Clinic Priorities

- Expand, renovate or build new clinic for more exam rooms, clinic space, offices and storage.
- Provide laundry and shower facilities at the clinic.
- Addressing medevac surge capacity.
- Seek better ways to insure patient privacy and HIPPA compliance.
- Recruit more healthcare staff in St. Michael.

Clinic Information

Name: Katherine L. Kobuk Memorial Clinic
Phone Number: 907-923-3311
Operator: Norton Sound Health Corporation - (907 443-3311)
www.nortonsoundhealth.org
Owner of Facility: City of St. Michael
Facility Status: Community Health Aid Program CHAP site
Alternate Health Care: Quyana Care Center in Nome, AK
Health Comments: Emergency Services have coastal, air and floatplane access. Emergency service is provided by a health aide.

GAPS IDENTIFIED: Weather often delays or cancels local specialty clinics. We need a way to insure all children receive an annual checkups. The clinic schedule is always full with long waiting lists, and medications are refilled out of Unalakleet now and take more time. The referral process takes too long, and more exam room and storage space is needed.

3.4.10 City Buildings and City Heavy Equipment

The City of St. Michael owns the new city building (the old school), the water treatment plant, the sewage treatment plant, two pump houses, the old city building which serves as the Public Safety Office, one 3-bedroom trailer, one 1 bedroom trailer, one residential home, and the old jail house. Kawerak Head Start is also operated out of



The old airport building now serves as the City of St. Michael equipment storage facility.

the old school now owned by the City of St. Michael. The City also owns the old airport hangar in the center of town that was renovated to be used as a welding shop. Agreements are in place to rent heavy equipment to or from the Corporation or the community of Stebbins as needed when equipment is in working order.

City-owned equipment includes:

- One M140 grader used for street clearing
- One 950 Cat loader
- One 450 John Deer crawler bulldozer
- One 1-ton utility truck
- One dump truck
- Two pickup trucks
- One backhoe
- One water truck
- Four ATVs

Top Short Term City Equipment Priorities

- Buy four new tires for the 950 Cat loader at about \$5,000 each.
- Buy two undercarriage tracks and idler shaft for the 450 John Deer crawler bulldozer at about \$30,000.
- Major maintenance and repair on M140 grater at about \$50,000.
- Maintenance on utility trucks and pickup trucks at about \$6,000.
- Annual order of 15 buckets of oil for all equipment at about \$130 per bucket.
- Buy 8 new tires for VPO ATV's at about \$180 each tire.
- Annual maintenance on 2 older ATVs at about \$2,000.

Top Long Term City Equipment Priorities

- Obtain one backhoe with several attachments (thumb, straight edge utility blade, rock bucket, finish bucket, and 22 ton vibratory plate).

- Obtain Two audit trucks.
- Obtain a 81-inch vibratory packer roller.
- Obtain one snowmachine.

GAPS IDENTIFIED: Good heavy equipment is needed to manage the landfill, maintain the roads, and for all new construction. There is a great need for new heavy equipment, maintenance costs to keep existing equipment operational, and equipment storage facilities to prolong the life of all equipment. The City also wants to build a new teen center.

3.4.11 Tribal Buildings and Equipment

The Native Village of St. Michael owns the IRA building, located at the southern end of the old airstrip in the center of town. The building houses the IRA administration, the Library Cultural Center, and has two rooms available for overnight accommodation. The building also has offices, a kitchenette and communal space, a community hall, and a commercial kitchen, which is used by the food bank. The IGAP program owns an ATV with a cart, and the DOD program has 2 ATVs. The reindeer herders' vehicles are no longer useable except for parts. The tribe also owns 2 storage buildings and 5 connexes.

GAPS IDENTIFIED: The tribe needs to complete the plan to utilize unused space in the IRA building, and there is a need to improve energy efficiency in the IRA building. It would be good to get a good dump truck to assist with the IGAP recycling efforts. The St. Michael tribal herders need two snowmachines, three ATVs, and a connex. The tribe would also like to explore developing a slaughter facility.

3.4.12 Native Corporation Buildings and Equipment

The Corporation owns its own office building, a store, and an equipment storage building.

St. Michael Corporation equipment includes:

- One 1983 - 12 yard dump truck
- One 1985 - 555 John Deer loader
- One 1973 - 5,000 gallon fuel truck
- One D6 1980's - Cat bulldozer
- John Deere 554 Loader
- Four pick-up trucks (only one Ford 350 flatbed is operational)
- One 1985 - 255 backhoe (not working)
- Cat 235 Excavator
- A Privately owned - D7 Cat bulldozer (not working, is stored outside)



Storage building for the corporation is not large enough to house all the heavy equipment.

Top Short Term Corporation Equipment Priorities

- Fix the existing excavator, dump truck, and D6 bulldozer.

- Buy a smaller Cat like a 450 dozer with backhoe, fork, grater, and blade attachments.

Top Long Term Corporation Equipment Priorities

- Obtain a new dump truck, flat bed truck, loader, and excavator.
- Obtain a new smaller truck and a 4 wheeler.



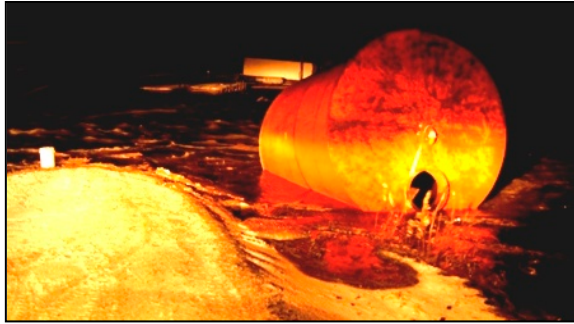
Kawerak Planner, Pearl Mikulski, facilitating the May 2016 LEDP workshop in the IRA Community Hall.

3.4.13 Public Safety

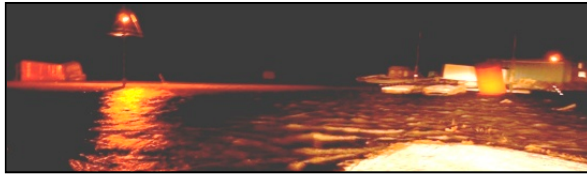
The village of St. Michael has two Village Police Officers (VPO’s). Alaska State Troopers do not maintain a station in the community, though they visit monthly unless there is an emergency. The VPOs has access to two newer 4-wheelers. The community has a code red connex, a water truck, and emergency radios. There are spigots installed in the water/sewer utilidors throughout the village to attach to in case of fire. The community does not have an organized emergency response plan. In the event of an emergency, able-bodied members of the community respond as needed. The community identified a building which is being used for public safety. This building needs some major renovations. Other identified needs include: increasing the amount volunteer fire fighters, obtaining a fire truck, greater enforcement of existing ordinances, and new snowmachines and a police car or truck for the VPOs. All the fire-fighting equipment and supplies were inventoried and reorganized. NSHC opened a triplex with space available for Village Public Safety Officer (VPSO) housing. The city will be working with Kawerak to recruit a VPSO. There are local fire fighting volunteers and search and rescue volunteers.



Future project ideas developed during the LEDP workshop.



Photos taken on November 9-10, 2013 where a fall storm caused a 2000 gallon fuel tank to tip to the right and float. It was tied down by local volunteers. Also a connex drifted out to sea and sank.



GAPS IDENTIFIED: We need to renovate or build a new a public safety building. We need more prevention and local education. It is a great loss when houses burn, so we need more effective fire fighting capability. We need a Hazard Mitigation Plan. We need to continue recruitment and obtain a VPSO, and obtain a holding cell and VPSO office. We need more staff and training for fire and search and rescue. We need a community watch program. We need to find ways to retain public safety staff as there

is high turnover in the VPO position. We need a good vehicle for prisoner transport.

3.4.14 Libraries and Museums, Cultural Buildings, and Social Events and Programs

The IRA building houses the Library Cultural Center, though the space is primarily used for meetings and events. The Bering Straits School District School offers limited open gym hours to the community during the school year, but not during the summer. As of June 2011, the City opened the old school gym and provides open gym to the community. The gym is available for youth dances and community events. The community celebrates Yupik days in late April, using the school as a gathering space. Other community events such as potlucks are generally held around the holidays. The tribe is planning how to better use their space.

GAPS IDENTIFIED: The school welding shop needs equipment. Head Start needs to be part of the school. There is no place to buy books locally.

3.4.15 Cemeteries and Graves

There are several cemetery sites throughout the village of St. Michael. The current burial site has adequate space for the foreseeable future though access is over the tundra, presenting a challenge to coffin bearers walking from the village.



One of the cemeteries located in or around St. Michael.

GAPS IDENTIFIED: One historic burial site is located near a beach subject to erosion. Exposed coffins are a potential issue. Some graves need to be identified and marked.

3.4.16 Public buildings, lands, churches, parks, camps, and recreational areas

Existing public buildings and spaces include the Library Cultural Center at the IRA building, the City Gym, and the bingo hall. Area trails are



New school playground was completed in 2008.

generally used for hunting rather than recreation and most residents hunt and fish out of St. Michael. Less than ten families maintain subsistence camps outside the village. There are three playgrounds in the villages; at the old school, at the new school (including two outdoor basketball courts), and at the IRA building.

Local recreational events include: city gym nights, AmeriCorps activities, two annual adult basketball tournaments, and Easter races and egg hunts. During summer months, community gatherings are occasionally held on the beaches. There are sewing/arts and crafts events at the Assemblies of God Church.



One of the community's two outdoor basketball courts, built and owned by BSSD.

There are two churches in the village. The Catholic Church and the Assembly of God church offer services on Sundays and Wednesdays. The Assembly of God Church also hosts children's activities on Saturdays and a weekly Bible study.

GAPS IDENTIFIED: There is still a need for a local teen center, and the boat launch needs to be replaced.

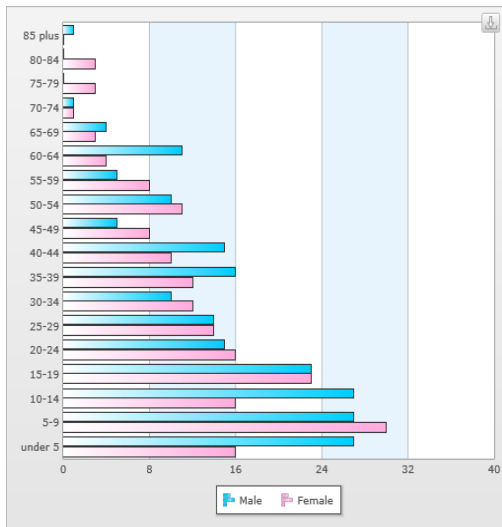
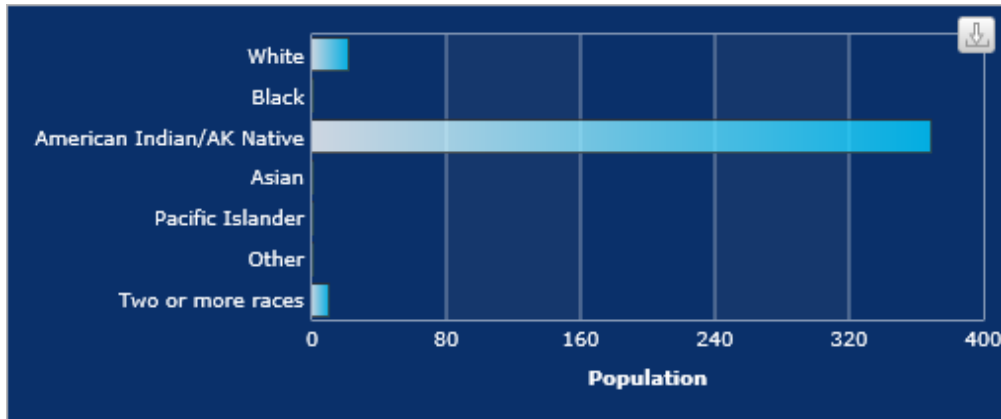
4.0 Population and Growth Trends

4.1 Saint Michael Census Data

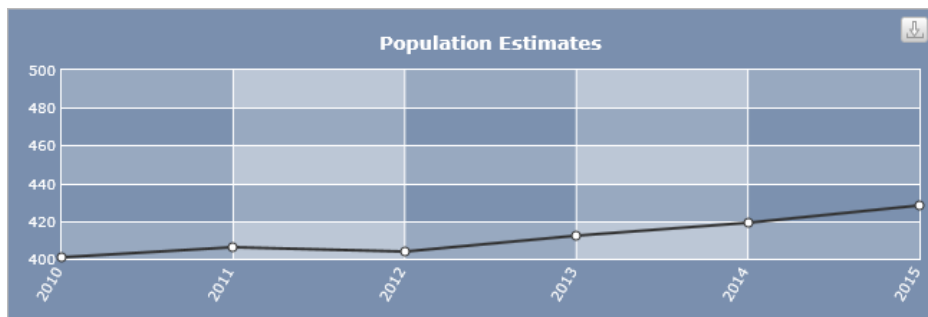
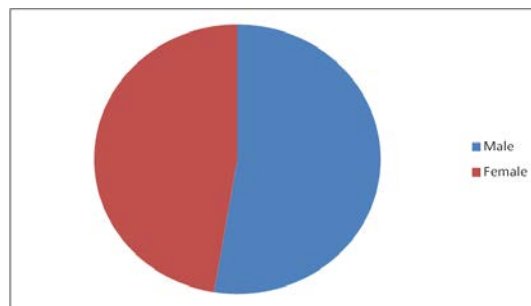
The following population data is from the 2010 U.S. Census. Additional detail is available from the Alaska Department of Labor and Workforce Development, Census and Geographic Information Network and the U.S. Census Bureau's American Fact Finder.

Population by Race:

White:	22
Alaska Native or Amer. Indian:	369
Black:	0
White:	5.5%
Two or More Races:	2.5%
Percent Native:	92.2%



2010 Population by Gender



4.2 Employment and the Economy

Saint Michael's economy is based on subsistence food harvests supplemented by part-time wage earning. Most employment positions are found through: the city, the IRA council, the village corporation, the school, the clinic, the local fuel company, the local stores or through the airlines. There is seasonal employment for construction projects. Some residents relocate for temporary jobs in Unalakleet in the summer. The sale or importation of alcohol has been banned in the village since 1986.

Seven residents hold commercial fishing permits, primarily for the herring fishery. The three reindeer herds are estimated to be 10,000 head, one owned by Ted Katcheak, the Stebbins Community Association, and the Native Village of St. Michael. The Saint Michael-Stebbins Reindeer Corral Project was completed in 1993. In 2014, there was temporary reindeer corral built between Stebbins and St. Michael. Construction has begun on a new corral at Qusingaq.

Residents depend on and maintain a subsistence lifestyle, hunting and fishing. This is supplemented by full-time and part-time wage earnings. Year-round jobs are limited. Important staple foods include seal, walrus, beluga whale, moose, caribou, reindeer, waterfowls (geese, ducks, ptarmigan, crane, swan), fish (tom cod, shee, herring, herring eggs (seagull, murre, comerant, duck, geese) trout, salmon, white fish, grayling), and crab, as well as several kinds of greens, roots, and berries which are gathered in the summer. Seal oil is used for storing greens, roots, and meat as well as being a nutritional staple in the Native diet.

Many residents sell artwork crafted from the subsistence resources. Ivory tusks and teeth are used by the local artists who carve the ivory into figurines, sculptures, tools, and jewelry. Seal, wolf, and wolverine skins are used to make hats, mittens, parkas and slippers. In 2011, six residents held commercial fishing permits. Tourism has



Dog lot belonging to Louie Ambrose.

tapered off in recent years, most tourists visiting Austin's Alaska Adventures based at a camp at Golsovia. Seasonal jobs are also limited, with the DOD NALEMP program will provide employment cleaning up the contaminated former military site in the village. Some contaminated sites have been cleaned up. More work will be started in the summer of 2016.

The 2010 census reports that 75% of the workforce is employed, but this number is not reflective of the community because, to be counted in the workforce adults must actively be seeking work. Many residents do not seek work because of the small number of job opportunities. Local unemployment rate exceed 60%.

The 2010-2014 ACS 5-year estimates:

- Median household income was \$27,222.
- Per capita income was \$12,255.

- 36.7% of residents were living below the poverty level.

The local Alaska Commercial store is small and does not offer all items needed in the community, but it provides some local employment. There are two other grocery stores in the community. The cost of living is high. Food is expensive and fresh produce can in poor condition and difficult to obtain. The cost of energy is very high, especially heating fuel. Outside agencies provide transportation, internet, and cable TV. Prices for these services are rising. When AVEC closed the St. Michael power plant and started providing power via the intertie to Stebbins, a few local jobs were lost.



St. Michael Fuel Company

Business Licenses in St. Michael

The following records reflect current business licenses on file with the Department of Community and Economic Development, Division of Occupational Licensing, Business Licensing Section. These licenses may not represent actual business activity. For more information on a specific business, use Commerce's Business License Search website.

Registered St. Michael Business Licenses

License Number	Business Name	Business Owner
14363	Austin Arms & Exploration	Jerry R. Austin
42607	Austin Arms & Exploration	Jerry R. Austin
267492	Austin's Alaska Adventures	Austin's Alaska Adventures
66542	Coastal Kennels	Mitchell S. Brazin
65273	Coastal Kennels and Fisheries	Mitchell S. Brazin
17292	Jerry R. Austin	Jerry R. Austin
254303-81	St. Michael IRA	St. Michael IRA
90128	St. Michael Fuel Company	St. Michael Fuel Company, Inc.
17332	St. Michael Native Corporation	St. Michael Native Corporation
1015950	Crater Shopping Center	Crater's
100510	Liberty Cafe	Bill Hawkins
960720	Shipton's Enterprises	Virginia Shipton

*Not all with business licenses actually operate currently.

5.0 Environmental Scan

5.1 Soils and Topography

The city of Saint Michael is situated on the eastern tip of St. Michael Island, facing St. Michael Bay. The island is part of the Yukon/Kuskokwim coastal lowland and is separated from the mainland by a narrow channel. The natural ground in the area typically consists of a layer of organic material, about 0.5 ft to 1.0 ft thick, below which is organic silt of high

moisture content (up to 200%) and varying organic content. The terrain is a mixture of very flat, marshy lowlands and gently rolling uplands, rising to an elevation of 450 feet at St. Michael Mountain. Vegetation is primarily moist tundra with moss, grass, scrub, willow, and alders. The mainland coastal plain has similar topography and vegetation and rises into the Nulato Hills to the east. Soils around St. Michael are poorly drained loess with a peaty surface layer. Hills are usually basaltic and many have small craters filled with water on top.

St. Michael Bay is quite shallow along its shore but provides an excellent harbor of refuge from Norton Sound. Tides range from a high of 5.0 feet to a low of -0.5 feet. Except along the coastline, most of the city is underlain by shallow permafrost. Permafrost is only one to three feet below most of the village, and thawing of the surface layer causes extremely wet soil conditions during the summer. Spring time surface water forms large ponds which are a safety hazard, and the runoff and erosion threatens vital community infrastructure.

5.2 Vegetation

Vegetation on the Seward Peninsula is principally tundra, with alpine dryas-lichen tundra and barrens at high elevations and moist sedge-tussock tundra at lower elevations. Patches of low-growing ericaceous and willow-birch shrubs occur on better-drained areas. Vegetation in and around St. Michael Island follows similar patterns consisting primarily of moist (mesic) tundra. Dwarf birch, low willows, blueberry, crowberry, bearberry, Labrador tea, cottongrass, and sedges are common. Other grasses, forbs, mosses and lichens make up the vegetative communities of the island. Occasional patches of alders and shrub willow grow in sheltered areas. To the south are extensive wetlands made up primarily of sedges.

Local residents harvest a variety of plants from the land including, various types of roots, greens (sura, beach greens, togayaks, and others), berries (salmon berries, black berries, blue berries, and cranberries), and other plants (fireweed, sour docks, fiddleheads, and wild celery). Some residents harvest rhubarb.

5.3 Climate

Saint Michael has a sub-arctic climate with maritime influences during the summer. Summer temperatures average 40° Fahrenheit to 60° Fahrenheit; winters average -4° to 16° Fahrenheit. Extremes from -55° Fahrenheit to 70° Fahrenheit have been recorded. Annual precipitation is low, with an accumulation of 12 inches during July, August and September. Seasonal snowfall averages 38 inches, with the greatest concentration occurring in October and February. Summers are rainy and fog is common. Norton Sound is ice free from early June to mid-November.

Winds from the north/northeast and southwest predominate at Saint Michael, with an average velocity of 15 knots. From October to June, cold brisk north and northeast winds prevail, while southeast winds are most common during the summer. Residents at Saint Michael have recorded 80 mph winds.

5.4 Wildlife

Major wildlife on land in the area includes moose, caribou, and domesticated reindeer. Sea mammals include harbor and bearded seals, walrus, and belugas. Over the past several decades seal numbers have declined.

Migratory birds are numerous. During springtime, migratory birds stop over on their way further north. Snow geese, migrating north to Wrangell Island, are especially valued by residents. Endangered species that pass through the area are emperor geese, whose numbers local residents claim are slowly increasing. One threatened species common to the area is the speckled belly goose. Local salmon runs include pinks, chums, and kings.

5.5 Historic Preservation

There are two entries in the National Park Service National Register of Historic Places, Fort St. Michael and St. Michael Redoubt Site. It is not presently known whether these sites will impose any restrictions on future development projects. Given the rich history of the area, recognition and communication of St. Michael's history might serve to augment tourism.

5.6 Seismic, Flood, and Wetland Information

St. Michael has a low risk of seismic activity and there is no record of damage in St. Michael from earthquakes or tsunamis.

The U.S. Army Corps of Engineers has reported a low frequency of flooding at St. Michael and designates it as a low flood hazard area. The lowest building in the community is the old Yutana Barge Line building which was constructed in 1900, but has never been flooded. Water has reached its footings. The Army Corps of Engineers has estimated the 100 year flood level to be just below the Yutana buildings first floor elevation and recommends building 2 feet above the first floor of the Yutana Building. In 2000 no houses or public facilities were in the flood hazard area, but a new evaluation is needed.



Nov. 10, 2013 photo showing off shore wind and high water at the Old Shipyard road to the St. Michael Fuel Company.

The village is protected from coastal waves and winds of Norton Sound, and the only flooding occurs from high tides and storm surges. Flooding in 1964, 1970, and 1971 did only minor damage, as flooding is limited to areas around the old shipyard. There is considerable bank erosion. It is known locally that when infrastructure is 10 feet to an erosion bank, it is considered to be threatened. There is one house where the bank erosion is at least 5 feet from collapsing into the bay. This person is worried his home could collapse during spring and fall storms which no longer have the shelf ice to protect the shore as in the past. Others residents are concerned that homes, other infrastructure and roads could be threatened in the future, especially the water and sewer utilidors nearest the bank erosion to the sewage treatment plant. Residents report that wind storms during the fall generally cause the most damage. In 2016 high winds off shore caused very high tides. No structures were damaged, but a connex drifted out to sea and sank near the old shipyard. A 2,000 gallon fuel tank drifted to the right side and had to be tied down.

Alaska's wetlands occupy 43.3 % of its 403,247,700 acres.

This contrasts to the contiguous US where they occupy only 5.2 % of the land surface. Wetlands in Alaska include: bogs, fens, wet and moist tundra, ponds, forests, mud flats, fresh and salt marshes. Most regions in Alaska have a land surface with extensive areas of wetlands.

Expanses of moist and wet tundra underlain by permafrost occur in the northern and western regions. Some of the Nation's most extensive complexes of salt marshes and mud flats occur along the coasts of the Bering Sea.



Fred Oyoumick's residence with the St. Michael sewage treatment plant and water and sewer utilidors near Sidewalk Street, all areas near extensive shore erosion.

5.7 Land Status

Under ANCSA 14 (c)(3), village corporations must reconvey certain land to the local city government or the state in trust to provide for community use and expansion.

Regional Corporation:

Bering Straits Native Corporation

Village Corporation:

St. Michael Native Corporation

5.8 Designated Land Status and Management Issues

There is an Audubon Society-recognized Important Bird Area (IBA) 15 miles to the southwest of St. Michael. The 95,000 hectare area is located within the Yukon Delta National Wildlife Refuge and consists of vegetated intertidal wetlands and provides important habitat to Semi-palmated Sandpipers, Red-necked Phalarope, and Dunlin.

The site possibly supports more than 50% of the breeding shorebirds in Norton Sound.



May 2016 LEDP workshop participants.

St. Michael is included in the Bering Strait Coastal Resource Service Area. Development in St. Michael may be subject to the Bering Strait Coastal Management Plan developed in

1989. The plan specifically aims to mitigate development project impacts on subsistence resources and their use.

5.9 Land Use Potential

The community has not yet completed the 14(c) process. There are existing lands within the community with potential for development; however an inventory of ownership and restricted lots is needed. There is currently no plan for expansion of the community and land management issues are dealt with on a case by case basis.

6.0 Strengths, Weaknesses, Opportunities, and Threats

6.1 Development Opportunities, Trends, and Strengths

What are opportunities, current trends in St. Michael, and community strengths and assets that will help us as we plan and complete projects in our community?

Potential opportunities for development

- Small business start up money
- Tourism
- Jobs
- Scholarships
- Teen center
- Public transportation
- Long distance fees
- Learning
- Counseling
- Reindeer / seafood markets
- Deepwater port
- Bottle water
- Farming
- Develop New Housing
- Erosion control
- New leadership in the future
- Healthcare (for the jobs it brings)
- New roads
- Outside employment
- Community expansion
- Independence (be able to provide for our own people)

Strengths or local assets for development

- Access / roads
- Transportation
- Rich history
- Natural harbor
- Room to grow
- Good people
- Elders
- Good water
- Availability of subsistence food
- Good churches
- Unity during crisis and tragedy
- Community support
- Organizations working together
- Healthcare
- Technology (computers , cells phones)
- Tribe Employs a Development Coordinator (grant writer/project planner)
- Steady population growth
- Hunters providing their big game (*to those that can't get it themselves*)
- Recycling and backhaul program
- Hunters teaching their children to share their 1st catch
- Sharing of knowledge of traditional values
- Community planning
- Community events
- Bringing back traditions
- Public safety (VPSO)
- Seasonal employment

6.2 Development Barriers, Threats, and Areas of Concern

What are development barriers, hazards, or areas of concern that we need to consider as we begin development projects?

Potential threats to future development

- Economy / cost of living
- Cost of fuel
- Cost of electricity
- Cost of food
- Natural disaster
- Erosion
- Terrorism
- War
- Confusing government regulations
- Complex land rights or townsite issues
- Complex housing application Process
- Drugs and alcohol
- Diseases
- Landfill
- Cost of healthcare
- Cost of education
- Cost of travel
- Water / sewer
- Dust
- Loss of culture / language
- Disappearing cash / funding
- Subsistence endangered
- Invasion of new species
- Contamination
- Tobacco use
- Wildlife loss
- Global warming
- Fire
- Domestic violence
- Crisis
- Arson
- Incest
- Peer pressure
- Listing of important species as endangered
- Lack of family heritage



- Teen pregnancy

Richard Elachik, Sr., Tony and Bobbi Andrews and Elizabeth Aketachunak at the 2016 LEDP workshop.

Areas of concern within the community

- Sewer & Water Freeze-ups - vacuum issues
- Drugs / alcohol
- Lack of education
- Lack of communication
- Loss of Yupik language and values
- Limited or lack of parenting skills & parent involvement
- Need for shelter cabins
- Lack of housing
- Need for good street lights & street signs
- Need for handicap building access for Elders
- Discrimination & Nepotism
- Unprofessional employees
- Negativity & Gossip
- Open burning of garbage
- Poor drainage on roads
- Self-gratification (people living for themselves)
- Lack of adequate facilities & infrastructure (teen center, picnic areas, garage, softball field)
- Lack of food security
- Lack of higher education / job training / driving licenses
- Lack of respect to people and properties
- Domestic violence
- Child neglect

- Lost emergency response capability

- Lack of teen jobs
- Lack of funding

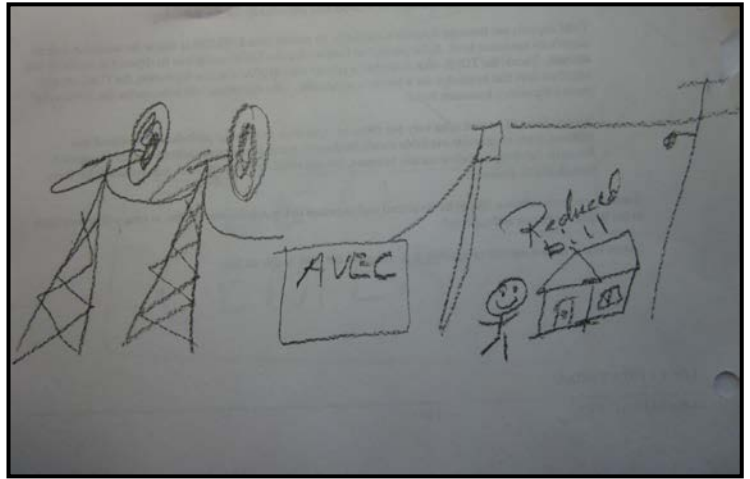
7.0 St. Michael's Vision, Goals, and Values

7.1 St. Michael's Vision

The community planning group participated in an exercise in which participants individually envisioned the community they wanted to see St. Michael become and drew their vision.

Participants then shared their drawing with the entire group and described their ideal community. From this exercise, the group produced a list of keywords that described their vision.

The group then drew on this list to develop a vision statement for the community.



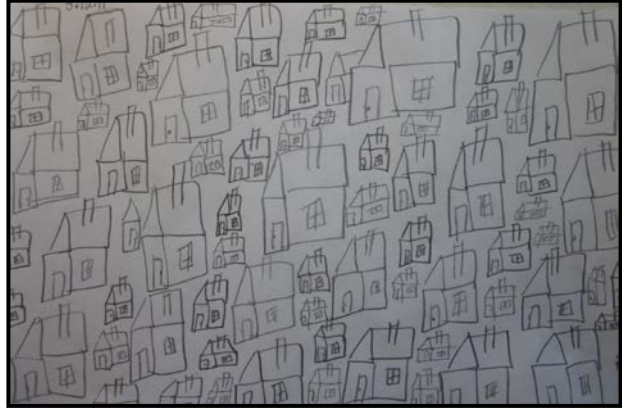
Community member's drawing of their vision of the future for St. Michael.

- | | |
|--|---|
| <ul style="list-style-type: none"> • more housing • water/sewer/lights • privacy / personal space • family • self sufficiency • feasible • affordable • safe • cheaper • health • knowledge • keeping current • less stress • wellness • clean air • cultural revival • sense of identity • sense of pride | <ul style="list-style-type: none"> • survival • respect for self, one-another, environment, our people • accountability • connections • easier transportation • jobs • passing down knowledge • self-esteem • environmentally safe • efficiency • cooperation • adequate community gathering facilities • follow through • commitment • understanding, educating, and respecting ourselves |
|--|---|

7.2 St. Michael's Vision Statement

The joint entities and workshop participants reviewed the community vision which was developed in previous planning sessions and decided it's still a good community vision:

“We the community of Taciq will cooperatively strive to provide and preserve our culture, health, economy, education, social wellness, and environmental services for our future generations through knowledge and experience from our Elders, respect, humility, determination, and commitment to become independent and productive citizens.”



Another community member's depiction of the future of St. Michael.

7.3 St. Michael Development Goals and Objectives

The joint entities and workshop participants reviewed and edited the community goals and objectives vision which were developed in previous planning sessions.



The LEDP workshop had participants from all three village entities as well as elders and youth.

Five Year Goals:

1. Improve our communication and transportation infrastructure while protecting our resources.
2. Through effective leadership, provide and maintain our culture while preserving our natural resources to maintain the health of our community.
3. Develop, maintain, and provide energy and health services while utilizing alternate energy sources.
4. Develop and ensure economic development by creating jobs and business while promoting higher education.
5. Provide affordable and adequate housing and public facilities and services through proper planning.

Five Year Development Objectives:

Areas of focus: Transportation and communications.

1. To improve, develop and protect access and resources.
2. To demand better service for local communication systems.

Areas of focus: Culture, health, natural resources, sewer and water, social, and Tribal/City/Corporation governance.

3. To continue to preserve our cultural heritage.
4. To improve and prolong the health of our community.
5. To develop and preserve our natural resources.
6. To provide affordable, safe, and efficient water and sewer services.
7. To provide meaningful and healthy activities for the community.
8. To train and educate for effective leadership.

Areas of focus: Energy, electricity and bulk fuel, environment, and waste management.

9. To reduce the cost of energy by going green and using alternative sources.
10. To ensure lower cost and availability of bulk fuel .
11. To prevent pollution and ensure a healthier environment.
12. To develop and maintain a healthy waste management system.

Areas of focus: Business development, economy, jobs and employment opportunities, and education and job training.

13. To offer a wider range of services to strengthen our economy.
14. To build a stronger efficient economy.
15. To ensure a qualified and reliable workforce.
16. To create more job employment for our people.

Areas of focus: Public safety, public facilities, law enforcement, and housing.

17. To provide affordable economic housing for everyone.
18. To protect and serve our community.
19. To provide adequate space for public services.
20. To improve public safety for our community though proper planning.



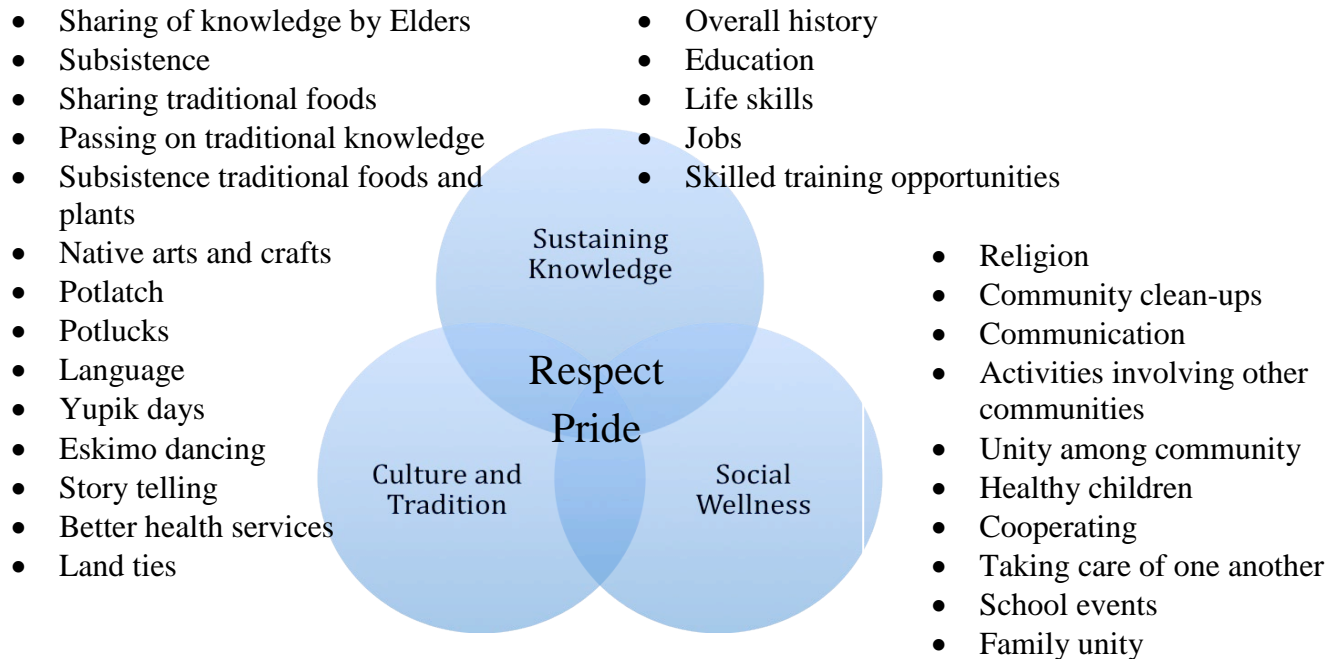
Daniel and Natalia Akaran.

7.4 St. Michael Community Values and Development

7.4.1 St. Michael Values

In 2016 the community re-examined its core values for guiding local development which were developed during previous planning sessions. Values help understand the collective community beliefs and serve as a foundation to overall development. This was based upon the following focus question: What are the values we, as a community, feel are important to our way of life?

St. Michael's Core Values



7.4.2 Applying Values to Community Development

When we develop and plan important projects or programs, what are the things we must remember? We should:

- When projects are a success, we should give back for the benefit of all.
- Give our time, knowledge, and resources to insure success.
- After a project, be sure the mess is cleaned up.
- Trust and respect one another, our Elders and youth.
- Do things to benefit the whole community.
- Follow through and get the projects done.
- Make sure projects are sustainable.
- Combine our efforts.
- Think about the future and learn from the past.
- Research and consider all resources.
- Be persistent and positive.
- Communicate effectively and cooperatively with teamwork by setting aside differences.
- Agree to disagree on some issues.
- Maintain our financial health.

8.0 Development Priorities and Implementation

There were 10 priorities identified by the St. Michael Planning Committee and approved by the City of St. Michael, the St. Michael Native Corporation, and the Native Village of St. Michael in order to improve the economic development for the community. In order to provide a thorough understanding of each project, the following information is given for each priority:

- Project Description
 - Background
 - Project Needs and Benefits
 - Potential Constraints to Project Development
- Project Implementation
 - Plan of Action
 - Organizations Responsible and Contact Information
 - Funding Possibilities

Jointly Approved Top 10 Priorities for the Community of St. Michael 2016 – 2021

- | | |
|---|--|
| 1. Public Safety Building with Holding Cell | 7. Reindeer Facilities |
| 2. Completion of 14c Process | 8. New Teen Center |
| 3. Local Bulk Fuel Tank Farm | 9. Establish a Local Housing Authority |
| 4. Seawall Erosion Protection | 10. New Gravel Source |
| 5. Additional Water Storage Tank | 11. More Housing and Rental Units |
| 6. Heavy Equipment and Storage Facilities | |

8.1 PRIORITY # 1 Public Safety Building with Holding Cell

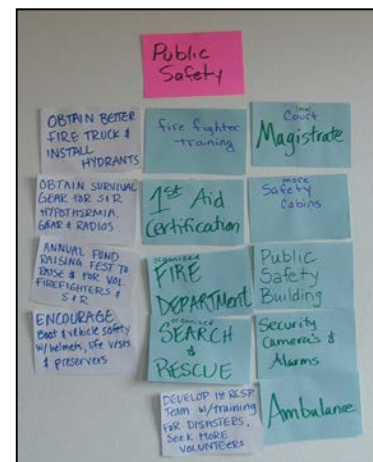
8.1.1 Project Description

Background

The community of St. Michael first identified the need for a public safety building in its previous LEDP (2005 – 2010), and since then the project has increased in importance. The City presently administers St. Michael’s VPO program and provides office space and utilities for the VPSO program. Volunteer fire fighting is presently carried out as a community effort, with members of the community showing up at the scene of an emergency if a need to act is perceived. Search and rescue activities are organized in the same way.

Project Needs and Benefits

There have been several residential fires in the past several years. Such fires decrease the already stressed housing stock of the community. A centrally-located facility, housing firefighting equipment along with an organized response plan, will assist the community in



Future Project ideas developed at the LEDP workshop in May 2016.

responding to emergencies in a manner timely enough to avoid complete destruction of the structure.

A public safety building, serving as a multi-purpose, multi-agency building, would assist in providing basic emergency services to the community of St. Michael. At present, emergency services are located separately throughout the community. The community will benefit from co-locating the offices of local law enforcement, the volunteer fire department, search and rescue teams, as well as the equipment these agencies use, in protecting the safety of the community. Housing all the offices and agencies concerned with public safety in St. Michael in the same building will also serve to familiarize the individuals involved with other public safety operations and enhance communication and partnership between agencies.

Additionally, the building will serve as a space in which trainings can be conducted and meetings held.

Potential Constraints to Project Development

The construction of a public safety building is likely to incur significant initial costs as well as maintenance and upkeep costs. Grant funding is available, though matching funds are likely to be required.

An adequate building site will be required, making coordination between St. Michael village entities necessary to identify the site. While this LEDP may meet some funding requirements, some programs specific to emergency management may require a disaster response plan. Such plans can be complex, requiring input from multiple entities. As a community of 401, St. Michael may not have the resources to complete yet another plan to be considered in the next funding cycle.

8.1.2 Project Implementation

Plan of Action

- Take inventory of existing spaces, equipment, and personnel.
- Assess present and future community needs.
- Coordinate in selecting a site suitable for the construction of the building
- Research funding opportunities and identify possible partners for the planning and design phase of the project.
 - Kawerak's Department of Community Planning and Development has a grant specialist that might be able to assist in identifying possible sources of funding.
- Submit grant applications
- Begin planning and design phase
- Research funding sources and partners for construction phase
- Submit grant applications

Organizations Responsible

- City of St. Michael
- Input into needs - VPO's, Kawerak VPSO Program, Fire Fighters, and Search and Rescue volunteers.

Funding Possibilities and Other Resources

- Indian Community Development Block Grants (ICDBG)
- Community Development Block Grants (CDBG)
- U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA)
- United States Department of Agriculture Rural Development (USDA)

8.2 PRIORITY # 2 Completion of 14c Process

8.2.1 Project Description

Background

The Alaska Native Claims Settlement Act established for-profit village and regional Corporations and transferred entitled land, depending on village size. Section 14(c) of the Alaska Native Claims Settlement Act states that village Corporations would transfer ownership of land conveyed from the United States Bureau of Land Management (BLM) to individuals, businesses, non-profits, and communities that occupied land in Alaska villages. Sections 14(c)1 (individuals), 2 (non-profits), and 4 (governmental transportation agency) have a vesting date of December 18, 1971, the date President Nixon signed ANCSA into law. 14(c)3, however, does not have a vesting date and provides for the conveyance of land to communities for public use and/or community expansion.

Project Needs and Benefits

Capital improvement projects benefit from clear title ownership of the land on which they are developed. By completing the 14(c) process, the community of St. Michael will be better able to develop community buildings and establish greater control over the long term development of the village.

Potential Constraints to Project Development

The St. Michael Native Corporation employs a land use planner. A single FTE employee may not be sufficient for the task, depending on the timeline in which the community wants to complete the project.

8.2.2 Project Implementation

Plan of Action

- ANCSA 14(c)1 and 2 claims
- ANCSA 14 (c) 3
 - Convene a joint meeting to determine what the community wants to accomplish

Organizations Responsible

- St. Michael Native Corporation

Funding Possibilities and Other Resources

- State of Alaska Division of Community and Regional Affairs (DCCED)
- Kawerak, Land Management Services

8.3 PRIORITY # 3 Local Bulk Fuel Tank Farm

8.3.1 Project Description

Background

Fuel costs in St. Michael are steep and they continue to rise. Crowley maintains a tank farm in St. Michael, though in May 2011 it was not in use. Municipal holding capacity has not been adequate to meet the community's needs between ice-free seasons when barges are able to make deliveries. The construction of a tank farm or upgrading existing facilities will help the community maintain and provide adequate fuel service for residents.

Project Needs and Benefits

While the community is currently researching alternative energy production options, these options will not be fully available for some time. Greater fuel holding capacity is needed to maintain steady energy prices for the interim period.

It is expected that the ability to maintain greater reserves of fuel will help the community avoid expensive air deliveries during months when the sea remains unnavigable due to ice conditions.

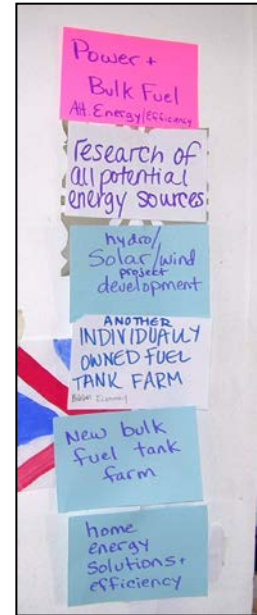
Potential Constraints to Project Development

The Denali Commission is interested in using funding to refurbish or maintain existing tank farms rather than building new fuel storage facilities. Funding may be easier to find for upgrades, though such a project alone may not meet the community's needs. Crowley maintains its own bulk fuel tank farm in St. Michael, though it's currently not in use. The possibility of creating redundant tank farms may dissuade agencies from funding the construction of an additional farm.

8.3.2 Project Implementation

Plan of Action

- Organizations within the community develop a policy to conserve fuel.
- Work with the community in developing ways to conserve fuel in the home
- Ensure that all fuel storage tanks in the community are filled before the barging season ends. Discuss a similar approach with Stebbins and plan for possible fuel transfers before the end of the barging season.
- Identify, assess, and inventory existing bulk fuel storage tanks within the community.
- Calculate community needs based on past usage.
- Identify potential funding sources and submit proposals.
- Develop a maintenance and training plan to ensure adequate upkeep as management changes hands.



Future power, bulk fuel and energy project ideas developed at the May 2016 LEDP workshop.

Organizations Responsible

- St. Michael Native Corporation

Funding Possibilities and Other Resources

- Denali Commission
- Indian Community Development Block Grants (ICDBG)
- Community Development Block Grants (CDBG)
- Alaska Industrial Development and Export Authority
- United States Coast Guard, District 17

8.4 PRIORITY # 4 Seawall Erosion Protection

8.4.1 Project Description

Background

North Beach is subject to active erosion and lacks a breakwater barrier to serve as protection. A storm during the week of September 23rd 2005 caused significant damage. Future storms of similar magnitude warrant concern among St. Michael residents. Erosion protection projects are generally conducted by the U.S. Army Corps of Engineers in four phases, following a five to eight year timeline. To qualify for the program, the shoreline intended for protection must be publicly owned or used. Private land may qualify if the project is necessary to protect nearby public facilities.

1. Reconnaissance Phase: This phase is 100 percent federally funded and serves to identify whether or not there is federal interest and/or economic justification in proceeding with the project.
2. Feasibility Study: The phase evaluates alternatives, determines costs and benefits and whether or not there is a plan that has feasible engineering that can be economically justified while being environmentally acceptable.
3. Pre-construction, engineering, and design: The design and preparation for construction is 75 percent federally funded and 25 percent locally funded.
4. Construction: The actual construction of the seawall is likely to be 80 percent federally funded and 20 percent locally funded. Both the IRA and the City need to write a letter to their congressional delegation requesting the naming of the study to add funding to the Corps of Engineers budget, enabling the project commencement.

Project Needs and Benefits

Coastal erosion serves to increase the vulnerability of the St. Michael residents living at or near the water's edge. Future storms will potentially threaten lives and property and thus decrease already stressed community assets. A seawall is needed to stabilize coastal erosion and mitigate future impacts to the community.

Potential Constraints to Project Development

Many coastal communities in the United States face similar dangers of storm surge and coastal erosion and funding becomes more and more limited. The rural location and small population will potentially make it harder to compete with

other coastal communities for program funding. Additionally, a hazard mitigation plan may be required for some programs.

8.4.2 Project Implementation

Plan of Action

- Inventory community assets placed at risk by storm surge and coastal erosion.
- Identify and note the costs and impacts of potential alternatives.
- Identify the potential land management issues and develop a plan to address them.
- Approach the Army Corps of Engineers concerning beginning the reconnaissance phase.
- Maintain steady, communicative relationship Corps of Engineers, while identifying potential matching cost funding sources.

Organizations Responsible

- Native Village of St. Michael
- City of St. Michael
- St. Michael Native Corporation

Funding Possibilities and Other Resources

- U.S. Army Engineer District, Alaska
- Indian Community Development Block Grants (ICDBG)
- Community Development Block Grants (CDBG)

8.5 PRIORITY # 5 Additional Water Storage Tank

8.5.1 Project Description

Background

While the water source is sufficient for community use, winter temperatures present potential problems due to freezing water lines. The community

currently has a newer 1.2 million gallon water tank and an older 400,000 gallon tank

in which water is stored. Water is continuously pumped from the source at Clear Lake to the tanks year round, though before freeze up, water system operators attempt to fill the tanks as much as possible to ensure an adequate supply throughout winter in the case of prolonged frozen lines.



The water source is adequate for the community, but the storage capacity is not sufficient, so water has to be transferred from the source, year-around.

The new water tank leaks, and the community needs a third water tank which would allow them to only transfer water in winter, and avoid the expense of heating the transfer lines in the winter.

Project Needs and Benefits

An additional water tank will ensure the community's needs are met in the case of prolonged frozen water lines. Additionally, extra storage capacity may serve to augment the future business opportunities in tourism, restaurants, and reindeer processing.

Potential Constraints to Project Development

Water systems in rural Alaska are frequently inadequate to meet community needs. As such, there is significant competition for funding addressing water and sanitation needs. St. Michael's water system, while vulnerable to extended system failure, already meets the community's basic needs.

8.1.2 Project Implementation

Plan of Action

- Assess current storage capacity and community water use over different seasons
- Develop water conservation policies for the largest users and an emergency conservation plan for the entire community
- Identify potential site for new tank
- Identify potential sources of funding
- Identify and seek training to manage and maintain new tank

Organizations Responsible

- City of St. Michael

Funding Possibilities and Other Resources

- State of Alaska Dept. of Environmental Conservation, Division of Water - Village Safe Water Program (VSW)
- Norton Sound Health Corporation (NSHC)
- Alaska Native Tribal Health Consortium (ANTHC)

8.6 PRIORITY # 6 Heavy Equipment and Storage Facilities

8.6.1 Project Description

Background

The climate in St. Michael is hard on equipment. Extended low temperatures, winter storms, and long hours of summer sun can lead to quicker degeneration of heavy equipment. Heavy equipment, such as graders and dozers, represent a significant investment. The productive life of existing and future equipment may be prolonged through proper storage and maintenance.

Project Needs and Benefits

A building in which to house the community's heavy equipment will serve to prolong the working life of dozers, graders, and such. Through shelter from the elements and an adequate space in which to repair and maintain these investments, the community will be able to decrease their maintenance costs.

Potential Constraints to Project Development

Funding may be difficult to obtain.

8.6.2 Project Implementation

Plan of Action

- Assess current structures' feasibility in housing the community's heavy equipment and develop an initial floor plan and number and type of equipment to be stored.
- Develop a list of potential building upgrades with pros and cons of each
- Develop a list of potential sites for a new building with title/easement issues for each.
- Develop a list of the needed equipment to adequately repair and maintain community heavy equipment to include in project plan.
- Decide on how the City of St. Michael and the St. Michael Native Corporation will divide facility use, costs, and labor responsibilities.
- Identify potential funding sources and apply while seeking matching funds.

Organizations Responsible

- City of St. Michael
- St. Michael Native Corporation

Funding Possibilities and Other Resources

- United States Department of Agriculture Rural Development (USDA)
- Indian Community Development Block Grants (ICDBG)
- Community Development Block Grants (CDBG)
- U.S. Economic Development Administration (EDA)

8.7 PRIORITY #7 Reindeer Facilities

8.7.1 Project Description

Background

Reindeer provide an important source of income for the community of St. Michael. Over recent years, the St. Michael herd, as well as meat sales, has increased. Hoping to continue and benefit from this trend, the community is seeking its own slaughter and processing facility, out of which it will be able to market its reindeer products. Reindeer are domesticated caribou that were introduced to the Seward Peninsula in the late 1800s from Eurasia as a potential food source following the decline of native species in the last half of the 19th century. Reindeer herding hit its peak in the 1920s, when 240,000 animals were being grazed on and around the Seward Peninsula. Since, the herd numbers have sharply declined. In the 1990's herds north of St. Michael were severely affected by the Western Arctic Herd of caribou expanding their range westward. St. Michael was not as severely affected, though some caribou have intermingled with domesticated reindeer.

Project Needs and Benefits

To adequately take advantage of increased herd size and meat sales, the community will benefit from the installation of a facility in which slaughter and processing can be done within the community. Such a facility will bring new employment to the

community and will allow greater control, and greater share of profits, to remain within the community.

Potential Constraints to Project Development

The two most significant constraints are likely to be USDA inspection and certification and facility costs. To pass USDA inspections, the facility must meet several guidelines that are likely to raise the costs of construction. Additionally, certification must be obtained on a regular ongoing basis. Travel logistics in rural Alaska may present difficulties to inspectors. In the Lower 48, mobile slaughter/processing units are becoming popular as a cost effective way of complying with food safety regulations while allowing costs to be spread over a larger geographic area. However, given the lack of roads in Western Alaska, the sharing of mobile units is problematic.

8.7.2 Project Implementation

Plan of Action

- Develop a cost benefit analysis of facility cost vs. income generated
- Identify potential funding sources and identify local matching funds
- Contact University of Alaska Fairbanks-Northwest Campus High Latitude Range Management program for information on previous similar projects.

Organizations Responsible

- Native Village of St. Michael

Funding Possibilities and Resources

- United States Department of Agriculture Rural Development
- Reindeer Herders Association

8.8 PRIORITY # 8 New Teen Center

8.8.1 Project Description

Background

Teenagers need a safe place in which to socialize, participate in activities, and relax. Having such a space allows teenagers to grow personally and establish productive and healthy relationships that will serve as the bedrock of the future community.

Project Needs and Benefits

The community of St. Michael currently lacks an indoor space that is dedicated to teenager leisure and socialization. The community youths gather at residents' houses or other places around the village in an unstructured manner. A designated teen center will not only provide the community youths with a space in which to congregate and games to play while there, but will allow adults within the community to more easily supervise youths, thus ensuring a more healthy and productive atmosphere.

Potential Constraints to Project Development

Funding might an issue because a structure designated for leisure may not be seen as vitally necessary to the community. The healthy socialization of community

youths might provide enough reason to convince funding agencies of the importance of the project.

8.8.2 Project Implementation

Plan of Action

- Identify existing buildings with the potential space. Develop a list stating the costs and steps needed to upgrade and remodel each.
- Develop list of criteria by which to judge potential sites
 - Cost
 - Location
 - Size
 - Ownership
 - Existing floor plan
- Survey community youths as to needs and desires in teen center
- Identify potential funding sources

Organizations Responsible

- Native Village of St. Michael
- City of St Michael
- St. Michael Native Corporation

Funding Possibilities and Other Resources

- Indian Community Development Block Grants (ICDBG)
- Community Development Block Grants (CDBG)
- Norton Sound Economic Development Corporation

8.9 PRIORITY # 9 Establish a Local Housing Authority

8.9.1 Project Description

Background

The process of obtaining housing supported through the Bering Straits Regional Housing Authority (BSRHA) is complex and lengthy. BSRHA operates on a system called the Mutual Help Model, which is based on block grants. Eligible families apply and are placed on a waiting list until housing becomes available. An aggregate of 6 – 10 new homes are built in each Bering Straits community every 10 years. However, funding has been decreasing as construction costs continue to rise.

Project Needs and Benefits

Establishing an organization responsible for providing local housing in St. Michael would assist in decreasing the waiting time between new housing projects. The community lacks adequate housing and many younger families need to live with relatives. Space in some homes is inadequate for multiple families. Additionally, fires have stressed the community's housing stock, and BSRHA will not be scheduling additional housing construction anytime soon.

A local housing authority would benefit the community in providing local control over the design and construction of additional future housing. A successful

organization will be able to directly make use of programs administered by federal and state agencies, such as the Department of Housing and Urban Development (HUD) and Alaska Housing Finance Corporation (AHFC), without having to compete with other regional villages through BSRHA. Ideally, the local housing authority would complement BSRHA services and seek funding from new sources.

Potential Constraints to Project Development

Few local personnel are qualified to operate a housing authority and so it may prolong the process due to workforce development and training issues. It will also take time to research all the construction options and best sources for supplies. Also a new, small housing authority seeking funding from federal and state sources may lack the economies of scale and political clout to achieve its mission.

Additionally, many funding agencies look for community and regional collaboration and partnerships to reduce the duplication of programming efforts. A solo agency representing a single village in a region where such services are already provided may serve as a barrier obtaining funds from some sources.

8.9.2 Project Implementation

Plan of Action

- Contact Stebbins, and Gambell, Native Village of Unalakleet to discuss their formation of their Housing Authorities.
- Conduct a needs assessment within the community by going house to house and:
 - Quantify overcrowding issues so you have data for grant applications.
 - Identify and prioritize which homes need improvements in terms of:
 - Energy efficiency
 - Ventilation
 - Mold remediation
 - Identify and prioritize the need for new home construction.
 - Number and current status of pending applications for housing from all existing sources
 - Family sizes and current living conditions
 - Identify housing services needed and gaps that are not being met.
- Identify and inventory assets needed for project
 - Construction skills within community
 - Potential trainings to maximize community-based labor
 - Tools / storage / shop space / existing materials
- Identify and research funding sources
- Identify land management issues with hooking new homes up to utilities and environmental issues with new constructions

Organizations Responsible

- Native Village of St. Michael

Funding Possibilities and Other Resources

- Alaska Housing Finance Corporation
- Indian Community Development Block Grants (ICDBG)
- Community Development Block Grants (CDBG)

- Association of Alaska Housing Authorities
- UAF Cold Climate Housing Research Center

8.10 PRIORITY # 10 New Gravel Source

8.10.1 Project Description

Background

The current gravel source is near the sewage lagoon, and it is not safe to encroach closer to the lagoon to mine gravel. Work has begun at a new site on Flat Top Mountain but the St. Michael Native Corporation needs better equipment to develop the site. Road access will be necessary to develop another rock source site that has been identified further away.

Project Needs and Benefits

The St. Michael Native Corporation has access to high quality gravel sources that are depleting or encroaching closer to the water source. New sources need to be determined and developed to keep up with the local demand for gravel. Having a new site will make future development more cost effective and open up economic opportunities for the community.

Potential Constraints to Project Development

Mineral studies and core samples are costly to obtain and can only be done in the summer season. Land issues and right of ways could also complicate things.

8.10.2 Project Implementation

Plan of Action

- Seek funding to repair existing heavy equipment (see priority 6).
- Estimate the remaining lifespan of the current gravel sources and the rate of annual consumption of gravel, and conduct a potential marketing study for gravel sales.
- Hold meetings to get community input and seek local knowledge on possible sites to explore for new gravel sources.
- Develop land use agreements as needed, then seek funding to do mineral source studies to select new gravel source site.
- Develop access plan to insure there will be road access to the new gravel sites.
- Develop a heavy equipment needs list and begin planning so that adequate new equipment will be available once the new gravel source is identified and opened for use.

Organizations Responsible

- St. Michael Native Corporation

Possible Resources and Other Resources

- Bering Straits Native Corporation (BSNC)

8.11 PRIORITY # 11 More Housing and Rental Units

8.10.1 Project Description

Background

The process of obtaining housing supported through the Bering Straits Regional Housing Authority (BSRHA) is complex and lengthy. BSRHA operates on a system called the Mutual Help Model, which is based on block grants. Eligible families apply and are placed on a waiting list until housing becomes available. An aggregate of 6 – 10 new homes are built in each Bering Straits community every 10 years.



BSRHA house occupied on a rent to own basis by Harold Oyoumick and Lydia Tom.

However, funding has been decreasing as construction costs continue to rise.

Project Needs and Benefits

When a fire occurs it is usually a total loss due to the limitations of local fire fighting capabilities. There is much overcrowding, often several generations living under one roof. Some families that are employed do not qualify for subsidized housing, and yet do not make enough to qualify for loans. There is a great need for low cost rental units for young families and for seasonal construction crews. Adequate housing will benefit the entire community and make for healthier families, allowing elders to stay in the community longer. Rental units for new families will help provide for growing families.

Potential Constraints to Project Development

Land issues in a village can delay housing projects, along with permits, right of ways, and other issues. Housing development is a challenge all over Alaska, even in the hub communities like Nome and urban areas like Anchorage. The high cost for materials, freight, and specialized labor skills compounds the costs. There is also a short construction season which is dependent on the safe arrival of construction materials by barge. Then there are site prep, safety precautions that must be addressed, material storage issues, utility hookup issues, and contingency issues that cannot be predicted.

8.10.2 Project Implementation

Plan of Action

- Conduct a survey to determine the needs and number of housing units needed.
- Develop preliminary plans for the size and projected costs of the project. Do a feasibility study in order to determine profitability of the project. Explore insurance options.
- Select potential sites for the project and look into easement and environmental issues as well as access issues to utilities.

- Write management and maintenance policies for the apartment units. Develop application forms and lease agreements forms.
- Secure funding and project partners for the various stages of planning and construction. The tribe can apply for the ICDBG grant on its own with assistance from the BSRHA, or they can look into leveraging options.
 - Title VI options – This is a program where they tribe borrows against future block grant allocations.
 - Partnering – There are USDA programs for low interest loans to build houses for eligible families.
 - Section 184 – There is a program where the tribe can use a commercial bank to obtain funds for new housing.
- Site Preparation- backfill and bring up to grade.

Organizations Responsible

- Native Village of St. Michael in cooperation with the City and Corporation on land issues

Possible Resources and Other Resources

- **Indian Community Development Block Grants (ICDBG)**
- **Community Development Block Grants (CDBG)**
- **HUD**
- **Rasmuson Foundation**
- **MJ Murdock Foundation**
- **Other private Foundations**
- **VA loans**
- **HIP program**

9.0 Future project ideas:

Community members were given the following focus question during a public brainstorming session:

What are the future community projects and activities St. Michael as a community can further develop to enhance the local economy which best build on the identified cultural strengths, economic opportunities, and current community assets over the next 5 years (2016-2021)? In regards to:

- Fostering a stable and diversified economy building on cultural strengths
- Sustaining and creating village employment opportunities
- Improving the living conditions in the community and region
- Strengthening the skills and qualifications of the local workforce
- Community services to best meet local needs
- Facilities and infrastructure for economic development



Lou Ann Bogeyaktuk and Milton Tom's daughter, Irene.

St. Michael's Future Project Ideas 2016 – 2021

(Listed in order of community ranking as per public planning session)

Project Ideas for the Future (each category is prioritized in order)

Water and sewer: additional water storage tank, washer and dryer in every home, improve water and sewer ramp crossing, continued testing for safe water, water and sewer parts shop

Healthcare: continue wellness committees, events and activities, work to control dust problem, recreational/fitness/exercise club and equipment, counselor for social relationships for preteen and teens, prevent teen pregnancy, parenting classes, build handicap accessible ramps on all public buildings, local food bank/warehouse of traditional foods, both dry storage and cold storage areas, local community farm or greenhouse, tobacco, cigarette, and snuff prevention program for children, local animal shelter

Transportation: build a small boat harbor or dock, adequate road signage and rename roads, build industrial road around town to improve safety and road connections, road maintenance, build snow fences, school bus for all students, build a designated bike trail, obtain a new, safer community transit van, annually install channel markers, have designated tundra trails and education about their use, build an airport shelter or terminal, extend Clear Lake Rd. To the beach, build more board walks, make St. Michael a hub with flights direct to anchorage and other communities, develop roads to other communities, build a deep water port, open a local dept. of motor vehicles to get IDs, driving exams, and licenses

Tribal Government: develop a local tribal court, develop a local tribal youth court, educate the public about tribal courts, have a local magistrate or court

Public Safety: fire fighter training and organize fire department, build a public safety building and holding cell, organize search and rescue, obtain a better fire truck and install fire hydrants, obtain survival gear for search and rescue and hypothermia gear and emergency radios, hold an annual fund raiser festival to raise funds for volunteer fire fighters and search and rescue, encourage boat and vehicle safety with helmets, life vests and life preservers, obtain an ambulance, first aid certification and training, develop first responders team with training for disasters and seek more volunteers, build more safety cabins, install security cameras and alarms at the gas station and all public buildings

Elders and Youth: host more community gatherings, encourage youth to seek law enforcement careers, completion of a new teen center, utilize local elders to teach our traditions and culture, build an



Future project ideas developed at the May 2016 LEDP workshop.



Future project ideas developed at the May 2016 LEDP

elders daycare center and food service, encourage youth to become more involved in government, build a boys and girls club, improve local job opportunities for youth

Education: encourage local educators to teach community values, modern values and lifestyles, obtain or build a new head start facility, form a parent teachers association, utilize other types of long distance learning opportunities online, build a local university in St. Michael, Alaska native s education program

Communication: reliable cell phone service, higher speed internet, local radio station or radio club at the school, build a new post office, advocate to end long distance phone rates between Stebbins and St. Michael, address by pass mail issues with freight

Power and Bulk Fuel: build a new bulk fuel tank farm, develop and research alternative energy like wind, solar and hydro, home energy solutions and improved energy efficiency, fix power lines and street lights

Business Development and Tourism: fish processing plant for fish, game, plants, kelp and cannery, start up grants for small business development, oil and gas delivery services, tour bus/charters/local guides/site seeing, local cab company, barber shop, build a bakery, local coffee shop, deli, or snack shop, build a health food store, local gun shop, local arts and crafts shop, repair/maintenance shop, local construction company, hardware/lumber store, laundry mat/sauna, industrial area to store fuel and freight, build a year around day care center, rebuild a replica of old fort at redoubt St. Michael, restaurant

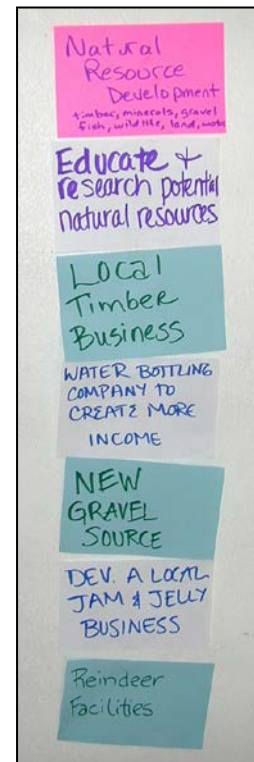
Environmental: protection of land and subsistence resources and food supplies, strengthen our environmental program (solid water management and youth camp to teach environmental issues), build a sea walls now that the sites have been identified, continue beach clean ups efforts annually, continue reporting contaminated areas to the local IGAP program,

Natural Resource Development: create a local water bottling company to create income, develop new gravel sources, improve reindeer facilities, educate the public and research potential for natural resource development, develop a local jam and jelly business, develop a local timber business

Law Enforcement: sustained funding for local law enforcement officers and VPSOs, more tribal police officers or VPOs, local trooper station

New Job Opportunities: develop a local job bank to identify workforce, local skills, and jobs available, create local jobs, more education recruitment incentives, equal opportunities for youth to work and on the job training, take back ownership and management of our water and sewer, host a annual job fair for young people thinking about a career, local veterinarian

Waste Management: enforce landfill ordinances, build a new dump site (join landfill managers), successful old landfill closure, obtain dump



Future project ideas developed at the May 2016 LEDP workshop.

truck and dumpsters, continue recycling, continue solid waste management, continue dump cleanup, pick up litter around town

Unity: cemetery renovations at the old site, unity among all entities, develop land use plan and include road to the new dump, have educated leadership, local involvement on existing state and federal fish and game boards, community involvement in ordinances, more involvement in local meetings, more student involvement in community meetings, youth mentors hip in local government, joint entities develop a comprehensive plan

City Government: complete update of city ordinances, have local government internships

Public Facilities and Buildings: build a teen/recreation center, build a softball field, build an outdoor recreation area and park with picnic tables, upgrade the playgrounds, finish the IRA library culture center/community building museum, seek funding to keep city gym open, build shelters around town where people can wait for rides, install benches at the basketball courts and along roadways

Culture: seek funds to employ local experts to teach crafts, skills, fish cutting, game hunting, food preservation, seek funding for traditional activities, pass down our knowledge, strengthen native language program, teach cultural awareness and story-telling, have English and Eskimo dancing practice, create new Eskimo songs and dances, hold summer camps and subsistence camps and classes, identify historic routes or scenic sites, teach place names of traditional hunting areas, arts and craft activities for all ages, teach boat building and repair, teach net making and mending for survival, local trapping, develop a local cultural heritage center, collect pictures. And artifacts for a museum, show our history in public photos and short clips/facts

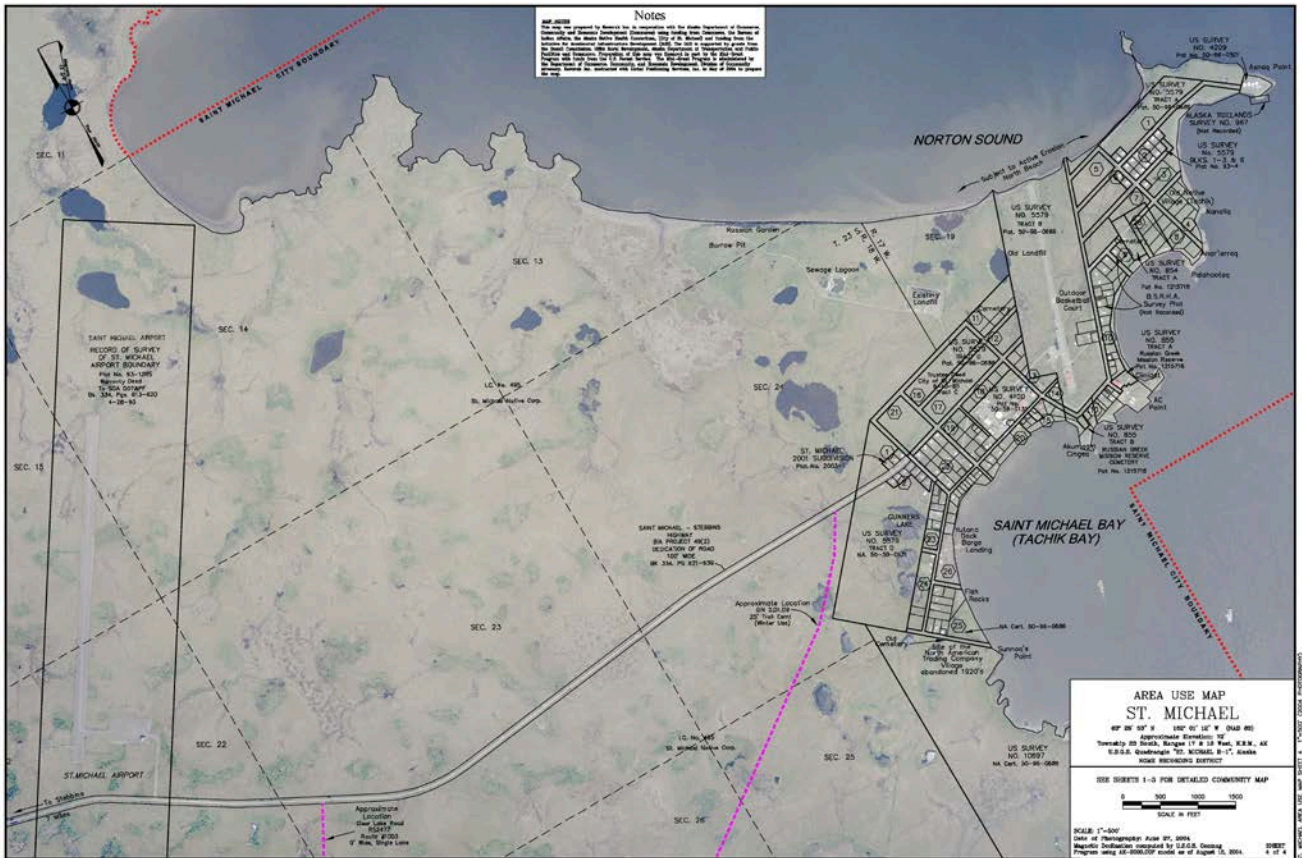
Job Training: adult basic education classes for follow up of drop outs, assistance with GED and other education and training, teach time management and budgeting, small engine repair training, carpentry classes, farming classes, heavy equipment training, job training center and classes, more job shadowing, on the job training and apprenticeships, develop a youth-run business as a training, boat building classes to involve youth in vocational training

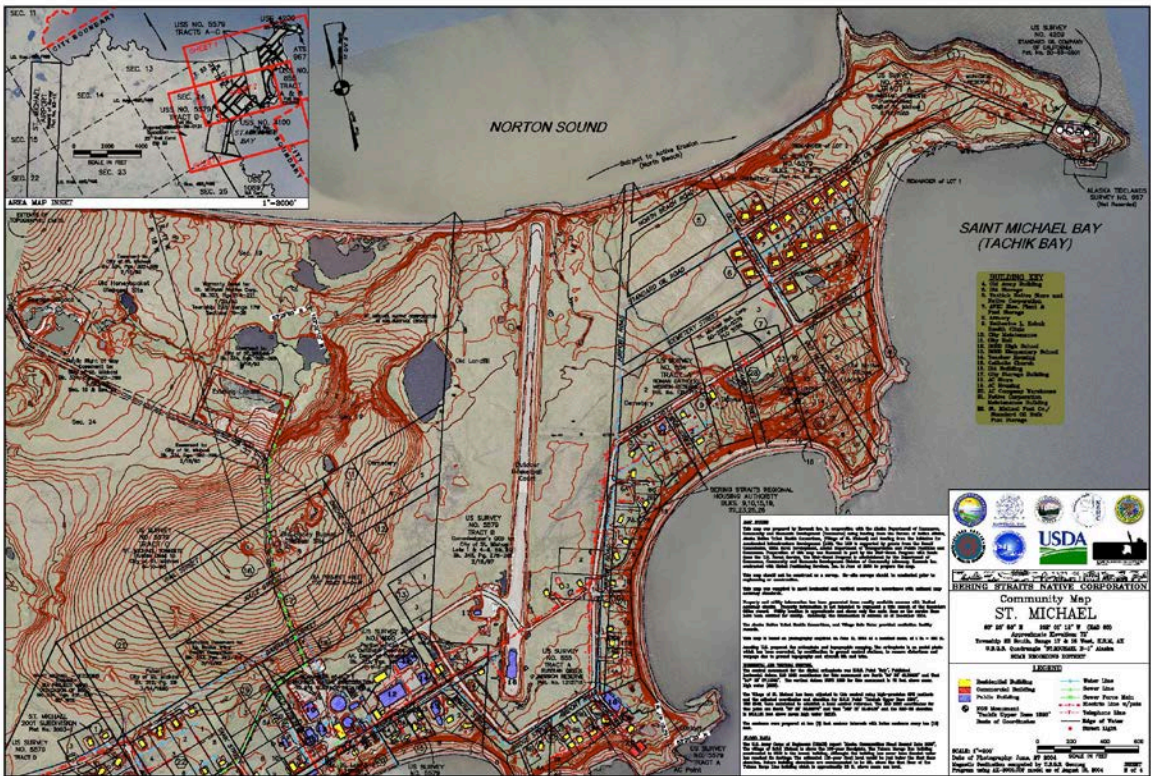
10.0 Review and Update Process

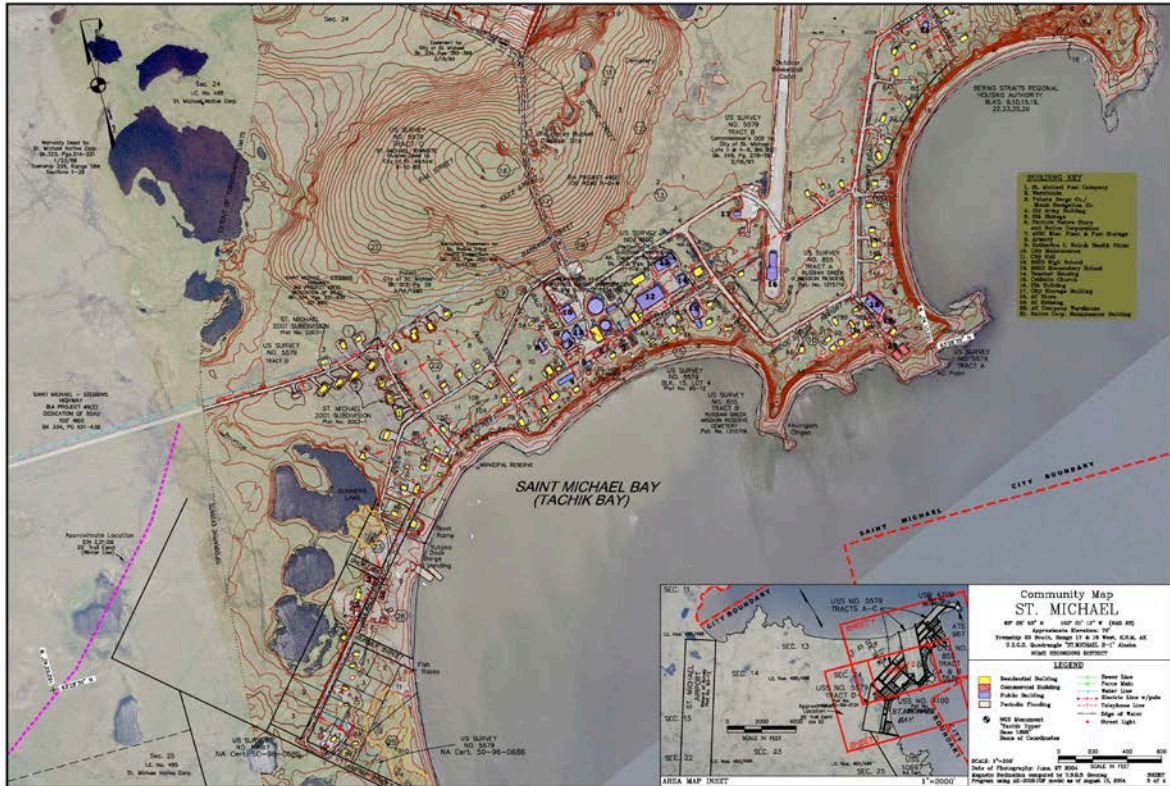
The Joint entities agreed to review the priorities annually and add addendums to this plan as needed.

11.0 Maps

Current map of the community is available through Kawerak’s Community planning and development program or Kawerak transportation







12.0 Public Participation

Public Planning Meetings

A public planning session was held on May 19th and 20th 2016 to assess the community’s current assets and needs, and revise the community’s local economic development plan. The community completed the process in May 2016, though a two-day planning session identifying development goals and priorities in line with the community values, strengths and needs. Participant attendance ranged from 17 to 29 with an average daily attendance of 23 community members. Members of the IRA Council, City staff and council, Native Corporation board, Youth Leaders, and the general public were present at each meeting, showing diverse input from the community on future paths of development.

Planning Workshop Participants - May 19, 20, 2016

Paula Myomick, City
 Genevieve Myomick, City
 Emily Lockwood, City
 Bobbie Andrews, City
 Anthony Andrews, City
 Richard Elachik Sr., City
 Thomas Cheemuk Sr., Native Corp
 Andrew Lockwood, Native Corp
 Milton Cheemuk, Resident
 Shirley Martin, IRA

James Niksik Sr., Native Corp
 John Lockwood, Resident
 Bernadette Joe, Resident
 Albert Washington, Youth
 Alvin Washington, Youth
 Elizabeth Aketachunak, IRA
 Harold W. Hawkins, City
 Luci A. Washington, Community Member
 Chelsea Washington, Youth
 Virginia Washington, City

Joint Entities Meeting Review of Draft

Following the completion of the public planning meetings in May 2016, the IRA Council, the City of St. Michael, and the Native Corporation Met on June 10, 2016 and approved the priorities. Staff and the joint council staff reviewed the draft LEDP then it was presented for public review and published _____.

BIBLIOGRAPHY

Ager, T. Late - Quaternary vegetation and climate history of the central Bering land bridge from St. Michael Island, western Alaska. 2003. (website no longer available)

Alaska Department of Commerce, Community, and Economic Development (DCCED), *Community Profiles*, available online at: <https://www.commerce.alaska.gov/dcra/DCRAExternal/community>

Alaska Energy Authority. Statistical Report of the Power Cost Equalization Program. Fiscal Year 2010. March, 2011. (website no longer available)

Bureau of Indian Affairs. St. Michael Profile. 1993.

Kawerak and the Bering Strait Development Council, *The Bering Strait Comprehensive Economic Development Strategy 2013*, Nome, Alaska 2013-2018.
<http://www.kawerak.org/forms/csd/2013%20Comprehensive%20Economic%20Development%20Strategy.pdf>

Kawerak Transportation Program. *Saint Michael Long Range Transportation Plan*. Nome, Alaska. March, 2007.

Reindeer Roundup - a curriculum book developed in 2004 and authored by Carrie Bucki, Reindeer Research Program, University of Alaska Fairbanks.

RurAL Cap - Let your Assets Be your Guide book: <https://www.ruralcap.com/publications/misc/Let-Your-Assets-Be-Your-Guide-Jan-2007.pdf>

Society of Wetland Scientists. (website no longer available)

U.S. Army Corps of Engineers, *Community Flood Hazard Data*. (website no longer available)

U.S. Census Bureau, Census 2010. Available online at <http://www.census.gov/quickfacts/table/PST045215/02>

U. S. Department of the Interior, Bureau of Indian Affairs. *Juneau Area Transportation Plan, Nome Agency Report*. Juneau, Alaska. 1993.

U.S. Geological Survey, *Narrative Descriptions for the Ecoregions of Alaska and Neighboring Territories*, Alaska 2001. (website no longer available)

**Prepared for the Community of St. Michael and the Bering Strait Development Council
By
The St. Michael Planning Organizations and Kawerak Community Planning and Development**

St Michael Planning Organizations

City of St. Michael
P.O. Box 59070
St. Michael, AK 99659

St. Michael Native Corporation
P.O. Box 59049
St. Michael, AK 99659

Native Village of St. Michael
P.O. Box 59050
St. Michael, AK 99659

Kawerak Community Planning and Development Department (CPD)

Community Services Division, Kawerak, Inc. - Facilitator and Document Coordinator: Pearl Mikulski-Planner
Documents Edits: City, Corporation and IRA staff and council/board members; Carleen Jack, Planning and Development Specialist; Patti Lillie, Community Development Specialist; and Obie Simonis, CPD Program Director.