Introduction

The community in St. George is hard at work on a local economic development strategy. This is part of a series of Working Papers that we will be sharing with you to keep you in the loop and involved in the conversation. Conversations are two-way; we need your feedback to be sure the path to making St. George strong reflects everyone’s values.

This working paper focuses on St. George’s history. What are the events that shaped St. George? Your input is needed to bring all of the voices and pieces together into one local economic development strategy. Please let us know if there are any parts of St. George’s history that we are missing.

“Resiliency is one of our strong suits.”
- Survey respondent
Key Dates

1786
Gavrill Loginovich Pribylov arrives on St. George in search of fur seals.

Late 1700s
Unanga hunters from Siberia, Unalaska, and Atka are enslaved and relocated for the fur seal harvest.

1867
The United States purchases Alaska. Unanga do not become wage earners.

1950
Unanga are allowed to organize Tribal Councils.

1960s
The United States Government tries to force St. George residents to St. Paul in order to reduce costs - the effort fails.

1973
St. George Tanaq Village Corporation is established as an Aleut-owned company. It manages land, is involved in the tourism industry, and owns several subsidiary environmental, energy, and resource conservation companies that provide services locally.

1979
St. George receives $8.5 million in partial compensation for the U.S. Government’s unjust treatment.

1983
The United States Government withdraws from the Island after ending the commercial seal harvest. St. George is provided $8 million to help diversify the economy.

1983
The City of St. George is incorporated.

1992
The Aleutian Pribilof Islands Community Development Association (APICDA) was established as one of six Western Alaska Community Development Quota (CDQ) corporations to support communities in sustaining fishing economies.

World War II
Unanga are confined in Funter Bay in an abandoned cannery and mine camp. The community suffers from disease and hunger.
St. George

St. George is home to a resilient community that has survived throughout the island’s complex history.

In 1786, Gavrill Pribylov arrived on St. George in search of fur seals.¹ In the following years Russian hunters forcibly enslaved Unangax hunters from Atka, Unalaska, and Siberia, and brought them to St. George for the fur-seal harvest.²

The USA’s formal presence in St. George began with the purchase of Alaska in 1867. It would take only 30 years for the revenue from the fur-seal trade alone to exceed the $7.2 million cost of this purchase.³ In 1870, the USA gave the Alaska Commercial Company a twenty-year lease to the fur-seal trade on the condition that they provide minimal food, housing, and education to the Unangax. A similar agreement was formed with the North American Commercial Company in 1890. The Unangax did not immediately become wage earners.

This system came to an end in 1910, when the U.S. Government assumed control of the Pribilof Islands and the fur-seal trade.⁴ The government exercised direct control over island residents, dictating local policies and forced labor. Almost all people were inadequately housed, and following 1916 they were only paid via store credit. Throughout the 1920s and 1930s, they were paid via goods and services, such as housing and food, and a small sealing bonus.⁵ In spite of the Indian Citizenship Act of 1924, government officials in the Pribilof islands chose to continue to treat the Unangax as wards of the state for many years following.⁶

During World War II, St. George residents were forced to evacuate to Funter Bay and stay in an abandoned mine camp.⁷ The Unangax were not provided with proper care, which resulted in unnecessary illness and death. Support from the Tlingit Indians from Angoon was one of the only reasons the Unangax avoided starvation.⁸ Upon their return, St. George residents found that their homes had been damaged, and that many of their valuables had been stolen by American soldiers.⁹

5 Barbara Boyle Torrey (1983) Slaves of the Harvest.
8 “St. George.” Aleutian Pribilof Islands Community Development Association.
It took many years to achieve any form of self-determination in the Pribiloff Islands. In 1950, some of the main principles of the 1934 Indian Reorganization Act were finally introduced, allowing for the organization of Tribal Councils. However, it was the Alaska Native Claims Settlement Act of 1971 that formally initiated the process of forming village corporations. Following a 1979 court decision, St. George received $8.5 million in partial compensation for their unjust treatment by the U.S. Government.

After Alaska became a state in 1959, it gained access to 70% of the revenue from the fur-seal trade. The decline in federal revenues from the fur-seal trade, in conjunction with declining fur-seal populations, prompted the federal government to introduce various measures to cut costs, including trying to force St. George residents to move to St. Paul. While some chose to relocate, many refused to leave St. George. These measures were followed by the Federal Government announcing its intention to withdraw from the islands in the early 1970s.

The U.S. Government ended the fur-seal harvest and withdrew from the islands in 1983, leaving St. George without an economic base. St. George received $8 million to support the economic transition. Adjusted for inflation, the cumulative value of the fur seal harvest generated by St. George is approximately $500 million (from 1871 to 1970).

In 1992, the U.S. Government created the Western Alaska Community Development Quota (CDQ) Program, which allocates a percentage of all Bering Sea and Aleutian Island quotas for ground fish, crab, and halibut to eligible CDQ groups, including the Aleutian Pribilof Island Community Development Association (APICDA), which represents St. George. Still in operation today, this program aims to create opportunities for communities with economic disadvantages, such as St. George, to generate capital and build their economies on the fishing industry. However, successfully transitioning St. George’s to a fisheries-based economy in the absence of needed infrastructure has proved difficult. The current state of St. George’s economy will be expanded upon in an upcoming working paper.

13 “Purpose and History.” Aleutian Pribilof Islands Community Development Association.
Conclusion

It is within this context of historical ill treatment that St. George residents are coming together to create a local economic development plan.

What does St. George's history mean for its future? Tell us what this history means to you and what it should mean for us as we move forward together.

Tell us what's missing! Go to our online survey: bit.ly/stgeorgesurvey2

Stay a part of the conversation!
Please contribute, your ideas are needed. Here are some simple ways to participate:

Go to our online survey and give your input about where St. George should go and how we should get there.

- bit.ly/stgeorgesurvey2

Send an email or contact:
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Introduction

The community in St. George is hard at work on a local economic development strategy. This Community Profile is part of a series of Working Papers that we will be sharing with you to keep you involved in the conversation. Conversations are two-way; we need your feedback to be sure the path to making St. George strong reflects everyone’s values and ideas.

Working Papers are drafts - they are intended to serve as living documents. More than anything, they are meant to provide a starting point for discussion. Please let us know if there is anything else that should be included in the Community Profile.

We want to highlight that there will be future Working Papers that will focus on specific aspects of the economy and start to delve into options and opportunities for the future. This working paper is intended to provide a high-level overview of the present situation.

Your input is needed to bring all of the voices and pieces together into one local economic development strategy. We all want St. George to succeed. Making sure that everyone has a shared understanding of the present context is an important step towards building a healthy and vibrant community.

"Everybody needs to start doing things together."
- Survey respondent
**Population**

St. George’s population has been declining since 2000, with the US Census demonstrating a decrease from 152 to 107 in 2010. In 2017, the American Community Survey listed the population at 85. The unofficial count in 2019 is less than 60.

The median age in St. George is 35, which is slightly higher than the average in Alaska (33.6 years), and slightly lower than the national average (37.7 years). The population is aging slightly, with the median age having risen since 2000 (from 33 years).

The vast majority of the population is American Indian or Alaska Native (89%). Of this total, 96% identify as Aleut, and 4% identify as Inupiat.

**Education**

**EDUCATIONAL ATTAINMENT**

The majority of St. George residents (69.5%) are high school graduates, with an additional 25.5% also holding some other form of higher education. Therefore, in total, 95% of St. George residents have a high school education or higher. As a point of comparison, 86% of residents in neighboring St. Paul have a high school education or higher. It should be noted that educational attainment is just one measure and does not reflect the full swath of knowledge and skills possessed by St. George residents.

**SCHOOL**

The St. George school stopped receiving funding in 2017 after falling below the threshold of 10 students. Six students were enrolled for 2016-17, representing a significant decline from 2000 when 48 students were enrolled. They are presently operating with one teacher, eight students, and limited short-term funding.

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1. 2012-2016 American Community Survey 5-Year Estimates
2. The latter statistic (96%/4%) is sourced from the 2010 Census as recent information is not yet available.
3. As this information is derived from two census dates, the decline is likely not entirely linear. It should also be noted that the Census data differs from the Alaska Department of Education data, which estimates 2000 enrollment at 27. However, the consistent decline in enrollment is reflected in both data sources.
Employment

SECTORS
Sales and office occupations represent the highest area of employment (38.2%), followed by service occupations (20.59%).

Figure 5: Employment by Sector, 2016

Currently, no St. George residents possess business licenses.

While it is not captured in the American Community Survey Estimates, fishing remains an important aspect of the St. George economy. In 2016, within the context of the Community Development Quota (CDQ) system, six St. George residents used limited entry permits to fish for Halibut (14 permits total are held by St. George residents). However, the same number of permits are yielding lower earnings than they have in the past ($217,778 in 2016 vs. $420,000 annually from 2007 through 2010). It is estimated that one resident also possesses an Individual Fishing Quota (approximately 2100lbs).4

The reasons for the decline in fishing related revenues are complicated and often compounding. It stems from multiple factors including a decline in halibut biomass, and correspondingly, a decline in CDQ available. There are many organizations working towards improving the fisheries, including APICDA - the CDQ group that represents St. George. A more in-depth discussion on the challenges facing fisheries, the complex regulatory environment, and potential avenues forward will occur in a fisheries specific Working Paper.

EMPLOYMENT LEVELS
Of the population over 16 in St. George, a higher percentage is participating in the labor force (81%) compared to 2000 (66%). Within those in the labor force, unemployment grew from 4% in 2000 to 15% from 2012-2016.

Figure 6: Employment Levels, 2000 - 2016


INCOME
The Median Household Income in St. George is $56,250 (from 2012-2016), slightly lower than in neighboring St. Paul ($60,000).

Amongst those employed, wages have declined 43% from 2001 to 2016. As a point of comparison, the wages in neighboring St. Paul have only declined by 17%.

While St. Paul possesses several distinct economic advantages (e.g., a large processing plant), this comparison demonstrates the degree to which St. George is suffering economically compared to a nearby local economy and points to the possibility of improvement. Other neighboring economies, such as Nelson Lagoon, have actually seen an increase in Median Household Income in recent years.

5 2012 – 2016 American Community Survey 5-Year Estimates
7 2013 – 2017 American Community Survey 5-Year Estimates
The fiscal health of the City is suffering due to a decline in recurring revenues. On a per capita basis, there has been a 60% decline between 2012 and 2017. The decline of fish-related revenue has been particularly detrimental. This revenue base is comprised of fish taxes, sales tax, fuel transfer tax, and State of Alaska revenue.

There are two key compounding factors: decline in revenue from the City-owned electric utility, and a decline in major infrastructure projects (which have historically improved City finances in addition to providing jobs for City residents). The decline in the City-owned electric utility creates additional problems for the City in that it no longer has the surplus needed to make necessary upgrades. The impact of the cost of fuel on the City-owned electric utility will be further explored in a quality of life Working Paper.

The City also receives dividends, fuel payments, and back audit supports from APICDA. We do not have sufficient information at present to extend the government revenues figure below to 2018. However, it should be noted that APICDA’s contribution to the City in 2018 was approximately $275,000.00. There are also forms of financial support that are not captured in government revenues as they are targeted towards the broader community. For example, APICDA contributed $174,917 in 2016 and $287,963 in 2017 through expenses related to halibut fishing in St. George. In 2018, APICDA’s contribution to the community as a whole totalled $800,000.00. Beginning this year, APICDA is also providing a grant of $300,000 that the City, Tribe and/or Village Corporation may apply for.

We are currently aiming to create a more complete picture of St. George’s fiscal situation. This section only focuses on the City. We do not have access to the recurring revenues of either the Tribal Council or the St. George Fishermen’s Association. However, we acknowledge that they are important components of the community’s overall economic health.

As a result of the decline in revenues, the City has made significant cuts to its spending.
Current revenue is not enough to cover core general government functions. At present, the City is often operating with a deficiency. Total expenses have declined from $627,525 in 2013 to $411,151 in 2017.\textsuperscript{13}

\textbf{Figure 9: City of St. George Fiscal Surpluses and Deficiencies by Year}

\begin{center}
\begin{tikzpicture}
\begin{axis}[
width=\textwidth,
height=0.5\textwidth,
axis y line*=left,
axis x line=bottom,
\]
\end{axis}
\end{tikzpicture}
\end{center}


A previous estimate suggests that the City government could operate sustainably if fish–related revenues were restored to as little as $500,000.\textsuperscript{14} The same estimate suggests that improved internal reporting, maintaining up–to–date balance sheets, and periodic audits could support the City in seeking outside funding or one–time debt relief. However, the author also stresses that the City has cut expenses to the “absolute minimum.”\textsuperscript{15}

Unfortunately, it is unclear how this revenue could be even partially restored, particularly in the absence of a functional harbor that was previously a key part of infrastructure enabling St. George’s fish–related revenues. What do you think is the best way forward? Let us know what you think would help improve the City’s fiscal situation.
Historic View

The economic decline in St. George is particularly troubling given the United States Government’s direction to St. George to pursue commercial fishing after stopping the fur seal harvest. The end of the fur seal harvest in 1972 caused a major shift in the St. George economy and way of life. Adjusted for inflation, the cumulative value of the fur seal harvest generated by St. George is approximately $500 million (from 1871 to 1970). The annual value from 1951 to 1970 was particularly high, averaging approximately $7.6 million per year. However, St. George residents never shared significantly in the wealth they helped generate (see the History Working Paper for additional detail). This limited benefit flow to St. George from the abundant and lucrative marine resource base surrounding St. George continues today as the economy has shifted focus from fur seals to fisheries.

In 2016, it was estimated that the Bering Sea and Aleutian Islands Region accounts for almost 60% of the wholesale value of Alaska’s fishing industry, with $725 million in labor income and $2.5 billion in wholesale value. There are 10,400 full-time jobs in the region associated with the fishing industry. In spite of being located in the heart of the Bering Sea, this economic output is not reflected in the fiscal health of St. George’s government or in the economic wellbeing of the community as a whole. Fisheries in the Bering Sea are typically rationalized, and subject to several quota management systems. Benefits from the industry are predominantly limited to support from APICDA, the CDQ organization that represents St. George and five other communities. As highlighted above, there are 14 halibut permits held by St. George residents (six of which were in use in 2016). It is estimated that one resident also possesses an Individual Fishing Quota (approximately 2100lbs).

A significant reason for the lack of sustainable economic base from Bering Sea fisheries is the lack of the essential infrastructure of a functioning and safe harbor – something St. George is aggressively trying to address.

20 “St. George.” www.apicda.com
Key Partners and Organizations

The following organizations and agencies play key roles in shaping and supporting St. George’s economic development:

• United States Government
• United States Coast Guard
• United States Army Corps of Engineers
• National Oceanic and Atmosphere Administration
• Government of Alaska
• City of St. George
• St. George Traditional Council
• St. George Tanaq Development Corporation
• St. George Fishermen’s Association
• Aleutian Pribilof Island Community Development Association (APICDA)
• Aleutian Pribilof Islands Association
• The Aleut Corporation
• Aleutian Housing Authority
• National Audabon Society
• Aleut Community of St. Paul Island

Conclusion

There are many people and organizations working hard to build St. George’s economy. It is clear current trends are unsustainable and that something needs to change. There may be disagreements about the causes of the problems and the potential solutions. However, what everyone shares is a desire to see St. George succeed. In the next working papers, we will start looking at potential opportunities and solutions as we work towards pulling together recommendations that everyone can get behind.

Is there anything missing from this paper? Is there anything we need to include in later ones? Let us know. This process is meant to ensure that the final plan is owned by the entire community and all of the organizations that support them.

TELL US WHAT’S MISSING!
Go to our online survey: bit.ly/stgeorgesurvey2

STAY A PART OF THE CONVERSATION!
Please contribute, your ideas are needed. Here are some simple ways to participate:

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Introduction

Grants can be considered “low hanging fruits” as they are essentially set up for the sole purpose of supporting communities like St. George. They have the dual benefit of contributing to economic development and improving the community by supporting local needs and values. Besides delivering money (often large sums), grants have a snowball effect: receiving one grant boosts the recipient’s profile and credibility and therefore increases its likelihood of receiving another. Additionally, grant money can be leveraged to generate more secure income, such as by investing it into critical infrastructure for revenue-generating industries, such as fishing.

Although we are calling it “low hanging fruit,” applying for and receiving grants does take effort; it takes time, research, and skill to write proposals. Also, most grants come with strings attached, including required reporting and rules on how funds can be spent.

Dozens of grant opportunities exist for the City of St. George (“the City”), the St. George Traditional Council (“Traditional Council”), St. George Tanaq Corporation (“Tanaq Corporation”), Tanaq Development Corporation, and individuals or entrepreneurs.

Community Feedback and Opportunity Summary

89% of St. George residents support the idea of St. George applying for more grants.  

SECURE ADDITIONAL GRANT FUNDING*

<table>
<thead>
<tr>
<th>POTENTIAL LOCAL JOB &amp; REVENUE OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs</td>
</tr>
<tr>
<td>5 – 6 jobs by 2023</td>
</tr>
</tbody>
</table>

*Note: securing additional grant funding is dependent on updated audits.

1 Community survey of adults living on St. George. May 2019. (n = 28)

St. George Economic Development Working Papers are early efforts to pull together the best available information for future decisions on St. George. These should be seen as partial, incomplete, and in need of your feedback. We are looking to those who care about St. George to provide corrections and better information so these can be updated for final recommendations and reporting.

Thank you to those who have provided input so far.

To provide feedback, additional information, comments, or questions about this Working Paper, please contact stgeorgeeconomicdevelopment@gmail.com or visit our website at www.stgeorgealaska.org. We look forward to hearing from you.
Current Situation

In the spring of 2019, St. George learned that $300,000 is available from APICDA as part of their new Community Development Grant Program. This funding will be split by the City and Traditional Council, and will be directed towards priorities set out in our community development plan.²

CITY OF ST. GEORGE

The City of St. George is currently struggling financially, largely caused by the decline of several revenue sources such as fish taxes, sales tax, fuel transfer tax, State of Alaska revenue sharing, and payments in lieu of taxes. One-time grants have historically accounted for a large portion of the City’s revenues, but this amount has declined significantly over the last few years. In 2014, the City received over $2 million in one-time grants; by 2017, this number had declined to less than $500,000, representing a decrease of 81% as displayed in Figure 1.³

Grants received by the City of St. George between 2013 and 2017 came from various sources and were put towards projects, such as:

- $2.5 million for breakwater construction and dredging (spread between 2012 and 2016)
- $3 million for harbor construction and reconstruction (between 2013 and 2017 until it was suspended due to a lack of current audits)⁴

St. George also receives financial support from the Aleutian Pribilof Island Community Development Association (APICDA) such as community dividends and matching funds for grants being applied to by the Traditional Council, the City, or Tanaq Corporation.

These examples demonstrate how the City’s administration of major grants for infrastructure projects can generate large flows of both revenues and expenses.⁶ According to a 2018 economic assessment of St. George, however, “state-funded capital improvement projects, which have historically buoyed both City finances and the overall island economy, are likely to be drastically reduced in future years.”⁷

Figure 1: City of St. George One-time Grants Revenue, 2013 - 2017


² City of St. George (2019) Personal Communication
⁶ Ibid.
The Traditional Council has several current sources of grant income, as displayed in Figure 2. There are additional non-competitive funding sources that it could also be accessing, some of which are included in the List of Available Grants (posted on the St. George economic development project website\(^8\)).

**Figure 2: St. George Traditional Council Current Grants**

![Figure 2: St. George Traditional Council Current Grants](image)

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL 93-638, BIA</td>
<td>$780,000.00</td>
</tr>
<tr>
<td>Marine Mammal Home Management Program, NOAA</td>
<td>$190,000.00</td>
</tr>
<tr>
<td>Beach Clean Up, Sitka Sound Science Centre</td>
<td>$157,000.00</td>
</tr>
<tr>
<td>Imminent Threat Grants, Aleutian Housing Authority</td>
<td>$81,000.00</td>
</tr>
<tr>
<td>St. George Health Centre Modernization, APIA, HRSA</td>
<td>$80,000.00</td>
</tr>
<tr>
<td>TOTAL = $1,288,000</td>
<td></td>
</tr>
</tbody>
</table>

The amounts were not yet available for inclusion in this paper, but this program is fully functioning and successful. Transportation safety plans can be used by the Traditional Council to seek other funds for road safety improvements.\(^9\)

While the island’s grant revenue has sharply declined over the last few years, there are options for reversing this pattern.

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\(^8\) [www.stgeorgealaska.org](http://www.stgeorgealaska.org)

Barriers and What’s Needed

Three of the main barriers preventing St. George from accessing grant revenue include:

- **Up to date audits and balance sheets:** A 2018 analysis of St. George’s fiscal and economic situation identified concerns with the City’s balance sheets. APICDA is currently supporting both the City of St. George and the Traditional Council in updating their audits. The Traditional Council expects theirs to be completed in 2020, and the City of St. George expects theirs to be completed in early 2019. This effort will need to be repeated and sustained over time, as maintaining current balance sheets and auditing is helpful, if not critical, to obtaining outside financial support.

- **Capacity, resources, and administrative support for grant applications and administration:** While there are several organizations within St. George that are eligible to apply for grants, at least one of them would need the time, resources, and know-how that grant applications require. Often, organizations will hire a professional grant writer to manage this. This could be someone from outside the community, and the amount of funds that they could potentially attract should more than cover the cost of hiring them. The Traditional Council has already indicated that they would like to hire a grant writer.

Once funds are received, there needs to be capacity and support to run the projects they are intended to fund. Additionally, there would need to be people, ideally St. George residents, willing to fill the jobs that these projects can create, which has proven to be a challenge in the past.

- **Opportunity to align local efforts:** With both the City of St. George and the St. George Traditional Council playing governance roles on the island, as citizens of St. George we have identified an opportunity to improve coordination and communication in order to best meet the needs of the community, such as accessing grants. The best way for multiple entities on St. George to secure grants would be through a unified approach. This may require some commitment between the different entities on St. George to work together, which could start with identifying shared values and mission, acknowledging any conflicts of interest, and agreeing on working terms.

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Opportunities

There are several options for how St. George could boost its economy by accessing grants. These options are not mutually exclusive; instead, option 2 would provide a good stepping stone to option 3.

Over twenty-five available grants were identified and included in the List of Available Grants, included on the project website. Each grant has its own objectives, eligibility, requirements, and intake dates (those included are either currently open or are expected to reopen in the future). To illustrate the potential impact that grants could have on St. George’s economy, some are highlighted in the options below.

**OPTION 1: EXISTING GRANTS**

*What’s involved:* Continue with current approach to finances, relying on existing grant revenue (e.g., through Shared Fisheries Business Tax Program, Community Assistance Program, Payment in Lieu of Taxes for the City, and BIA and other funds for the Traditional Council) as well as APIICDA’s financial support.

While this option requires the least investment of time and resources, the community would miss huge grant potential, and the opportunity to enhance St. George’s economy or quality of life.

**OPTION 2: NON-COMPETITIVE GRANTS**

The Traditional Council has indicated they are interested in applying for additional grants. There are non-competitive funding sources that are available specifically to Federally recognized tribes like the St. George Traditional Council. Non-competitive grants, also known as entitlements, are typically awarded based on a legally-defined formula (i.e., if the applicant meets certain criteria such as population, income levels, etc.).

While the Traditional Council is currently receiving some non-competitive funding from the Bureau of Indian Affairs (BIA) under the Indian Self-Determination and Education Act (P.L. 93-638), there is substantially more non-competitive funding available. Applying for and receiving even one more of these grants would make a significant contribution to the local economy and bring substantial ripple effects such as jobs creation.

*What’s involved:* Once the Traditional Council has finished updating its audits, which it estimates will take approximately 12 to 18 months, they could apply for additional non-competitive funding. This would require:

- Committing to investing more time and resources into securing grants.
- Ideally hiring a professional grant writer.
- Maintaining up-to-date audits and financial statements over time.
- Ensuring there is capacity to administer grant funds, implement funded projects, and meet monitoring and reporting requirements.

<table>
<thead>
<tr>
<th>Grant Name</th>
<th>Source</th>
<th>Funding Priorities</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian Environmental General Assistance Program (GAP)</td>
<td>Environmental Protection Agency</td>
<td>Provides financial and technical assistance to tribal governments and intertribal consortia to assist tribes in planning, developing, and establishing the capacity to implement federal environmental programs administered by the USEPA and to assist in implementation of tribal solid and hazardous waste programs.</td>
<td>$75,000 - $128,000</td>
</tr>
<tr>
<td>Invasive Species Program</td>
<td>Bureau of Indian Affairs</td>
<td>Supports programs that focus on the management/control of invasive species on tribal trust lands, individual Indian allotment lands, or in areas managed by tribes through treaties or agreements.</td>
<td>$2,5000 - $250,000</td>
</tr>
<tr>
<td>Endangered Species Program</td>
<td>Bureau of Indian Affairs</td>
<td>Supports projects directly related to the restoration, management, and/or economic development of “tribal trust resources.”</td>
<td>Max. $120,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>Min $77,500   Max $498,000</td>
</tr>
</tbody>
</table>
OPTION 3: COMPETITIVE GRANTS

Most of the grants included in the List of Available Grants, available on the project website, are competitive grants. While these are more challenging to secure (due to their competitive nature), there are many available that all together hold significantly more financial and economic potential than relying on non-competitive funds alone.

What’s involved: Once the City of St. George has finished updating its audits, which it expects in early 2019, it could apply for competitive funds. If and when the Traditional Council has secured more non-competitive funds, these could be leveraged and used to apply for more competitive funds. As both the City and the Tribe have indicated interest in applying for grants, and have both acknowledged that there would be benefits to working together, there would ideally be some alignment between both organizations’ efforts. This would require:

- Coordinating as best as possible between local governing bodies and organizations to discuss funding priorities and try to identify opportunities to work together.
- Committing to investing more time and resources into securing grants.
- Maintaining up-to-date financial statements and audits over time.
- Ideally hiring a professional grant writer.
- Starting with the initial List of Available Grants (listed on the project website) and researching additional grants that align with St. George’s priorities and needs.
- Ensuring there is capacity to administer grant funds, implement funded projects, and meet monitoring and reporting requirements.

Figure 3 on the following page demonstrates the potential impact, in terms of financial benefit and jobs creation, that grants could have on St. George. It is based on a scenario in which both the City and Traditional Council receive one additional grant per year over the next four years, based on the List of Available Grants. Important steps along the way are listed as milestones that would support the Traditional Council and City of St. George in achieving this scenario. This scenario is based on fairly conservative estimates of the actual potential benefits available from grants, and while the amount of difference in dollars may not seem drastic, the impact that such a scenario could truly have is well illustrated by the number of jobs that could be created. For a population the size of St. George’s, the creation of two to six new jobs would be highly significant.

Table 2: Sample Competitive Grants

<table>
<thead>
<tr>
<th>Grant Name</th>
<th>Source</th>
<th>Funding Priorities</th>
<th>Eligible Entities</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Community Development Initiatives Grants</td>
<td>United States Department of Agriculture and Rural Development</td>
<td>Funding to help non-profit housing and community development organizations support housing, community facilities, and community and economic development projects in rural areas.</td>
<td>•Federally recognized tribes •Local governments with less than 50,000 inhabitants •Non-profits</td>
<td>$50,000 - $250,000</td>
</tr>
<tr>
<td>Rural Business Development Grants</td>
<td>United States Department of Agriculture and Rural Development</td>
<td>Supports targeted technical assistance, training, and other activities leading to the development or expansion of small and emerging private businesses in rural areas.</td>
<td>•Federally recognized tribes •Local governments •Non-profits</td>
<td>$10,000 - $500,000</td>
</tr>
<tr>
<td>Coastal and Marine Habitat Restoration Grants</td>
<td>National Oceanic and Atmospheric Administration</td>
<td>Supports restoration projects that use a habitat-based approach to rebuild productive and sustainable fisheries, contribute to the recovery and conservation of protected resources, promote healthy ecosystems, and yield community and economic benefits.</td>
<td>•Federally recognized tribes •Local and state governments •Non-profits •For-profit organizations</td>
<td>$75,000 - $3,000,000</td>
</tr>
</tbody>
</table>

TOTAL: Min $135,000 Max $3,750,000
The above scenario is based on the following assumptions:

- **The City of St. George** secures one grant per year, using an average of the minimum and maximum grant amounts (from the List of Available Grants) based on an estimated four-year funding cycle.

- **The Traditional Council** secures minimum GAP (Environmental Protection Agency) funding in 2020, maximum GAP funding in 2021, an additional non-competitive grant in 2022 (using an average of the minimum and maximum non-competitive grant amounts from the List of Available Grants), and a competitive grant (based on the same average competitive grant amount) in 2023.

- Each grant will have a leakage rate of 50% (to cover overhead costs, project and construction costs, outside consultants’/experts’ fees, etc.). A wide range of leakage rates that would apply to S. George was heard during research and engagement for this paper, so a rough average was used.

- **The Traditional Council** continues to receive non-competitive tribal grants each year after the first year they are secured.

- The **City and Traditional** continue to receive baseline funding (not included in calculating jobs creation). Baseline amounts were based on the City’s and Traditional Council’s most recent financial information available at the time of writing.

- Number of jobs created is based on the 2017 median earnings for full-time, year-round workers in St. George of $43,750.

- Some information about baseline grant revenues may be missing (e.g., contributions from APICDA and/or Tanaq Corporation).

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**MATCHING FUNDS**

For most grants, federal funds cannot be used as matching funds, which makes in-kind contributions important. These could include donations such as services (volunteers or employees of other organizations), use of equipment or space, supplies, and land or property.

At the same time, the Federal Emergency Management Agency (FEMA) declared in 2016 that due to the severe storms of December 2015, St. George is eligible for Public Assistance and Hazard Mitigation grants and does not require matching funds when applying.


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Other Future Options: Explore Partnerships and Alternative Organizational Structures

Beyond applying for both competitive and non-competitive funds, there are other opportunities to expand and build upon grant revenues. These include:

• Exploring financial self-determination in the same manner as St. Paul (see Case Study). This would require significantly more responsibility and administrative resources, but would also enable St. George much greater control over our use of funds.

• Partnering with St. Paul to share resources such as their grant writer.

• Utilizing the tribal association for the two islands, Pribilof Islands Aleut Communities of St. Paul & St. George Islands. This may open eligibility to more funds.

• Trying to find a unified approach between both the City of St. George and the Traditional Council. Both have indicated that they have interest in hiring a grant writer and applying for more funds, and have acknowledged that there would be benefits to working together.

CASE STUDY: FINANCIAL SELF-DETERMINATION ON ST. PAUL, ALASKA

Since the Indian Self-Determination and Education Assistance Act of 1975, our neighbors on St. Paul have self-managed federal funds. According to their Tribe’s executive director, this has meant that 70% to 80% of that money now stays on the island, compared to about 1 out of every 4 dollars beforehand. This financial self-determination has enabled the Tribe to provide support for housing, domestic violence shelters, a youth center, community arts center, social services, trades training, and to purchase the local grocery store.14 Additionally, St. Paul leverages the non-competitive Federal funds they receive to obtain $2 to $3 in competitive funds for every $1 in non-competitive funds.15

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15 Baker, P. Executive Director, St Paul Island Tribal Government, personal communication, 2019.
Conclusion

Successfully attracting even just one grant would be a big first step and could catalyze St. George’s economic development. This could take many forms, depending on where St. George wants to put its efforts. There are many possibilities for economic development initiatives, some of which will be further discussed in upcoming Working Papers, from local entrepreneurial efforts like producing reindeer sausage, to community-wide conservation and education efforts that capitalize on St. George’s natural resources, to larger municipal infrastructure projects like a new harbor. There are grants out there that could help fund each of these examples, plus many more: it’s up to St. George and community members like yourself to decide which hanging fruit it wants to pick first!

ST. GEORGE HARBOR AND ASSOCIATED GRANT OPPORTUNITIES

One of the economic development options that will be explored in a future Working Paper is a new harbor. The existing harbor on the west side of St. George is essentially unusable due to its size and location. Grants have been received in the past to upgrade the harbor, as noted above, but these amounts have declined over recent years. There has been much talk about and investigation into the possibility of constructing a new harbor on the north side of the island. The U.S. Army Corps’ investigation notes that the total project costs would be $100,684,000.* Having a new harbor would likely open up opportunities for various other grants directly related to the harbor, such as for future infrastructure upgrades, as well as grants for other opportunities created by having a harbor, such as a new fish processing plant or tourism ventures.


TELL US WHAT’S MISSING!
Go to our online survey: bit.ly/stgeorgesurvey2

STAY A PART OF THE CONVERSATION!
Please contribute, your ideas are needed. Here are some simple ways to participate:

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› bit.ly/stgeorgesurvey2

Send an email or contact:
St. George Economic Development Project Team stgeorgeeconomicdevelopment@gmail.com

Or visit the project website:
www.stgeorgealaska.org
ANTICIPATED BENEFITS FROM THE DEVELOPMENT OF A NEW HARBOR

**Best Case Scenario**

<table>
<thead>
<tr>
<th>Jobs</th>
<th>Monetary and Other Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Dozens of direct jobs for construction</td>
<td>• $1 million in annual benefits</td>
</tr>
<tr>
<td>• 2 direct jobs - operation</td>
<td>• $383,800 in CDQ crab(^1)</td>
</tr>
<tr>
<td>• 10 jobs from development of a lodge</td>
<td>• $25,462 in delays prevented annually</td>
</tr>
<tr>
<td>• 100 jobs from seafood processing</td>
<td>• $43,700 increased subsistence foods harvested value</td>
</tr>
<tr>
<td>• 20 jobs from indirect small businesses</td>
<td>• Improved access to public health and safety (e.g., health clinic)</td>
</tr>
<tr>
<td>• 4 jobs from seasonal ferry</td>
<td>• 179.2 days of total increased safe access and moorage</td>
</tr>
<tr>
<td></td>
<td>• Reduces the cost of living (goods, services, and fuel costs)</td>
</tr>
</tbody>
</table>

\(^1\) The CDQ is an allocation of fisheries yield that generates annual royalties.

73% of residents support the idea of building a new harbor on St. George.

52% of residents are interested in jobs or training created as a result of this opportunity, with 22% saying they need more information.

Out of the six opportunities listed in the survey (new harbor, marine sanctuary, ecotourism, grants, commercial fisheries, and small businesses), developing **a new harbor is the #1 ranked opportunity** which participants believed would bring the most economic boost to St. George.
Introduction

A safe and functional harbor in our community is of critical importance. The current harbor, Zapadni Bay on the south shore of St. George Island, is not protected or deep enough to be a place of safety for ships.² St George is working with the US Army Corps of Engineers (USACE) and other partners to establish a new harbor. This working paper summarizes this effort and the importance of a working harbor to the long-term success of St. George.³

² For example, a new harbor would save $724,800 in estimated damages prevented annually.
Benefits of a New Harbor

The potential benefits of the new harbor project are significant. For St. George, the new harbor will expand economic opportunities, support community viability, and promote the tribal identities and cultural survival of the St. George Unangan. Completion of the new harbor would be a crucial step toward fulfillment of the federal government’s original promise to replace the former sealing economy with a self-sustaining marine resource-based economy. Specifically, it is estimated that the new harbor would provide:

- **Improved quality of life / reduced cost of living**
  - Reduce the cost of goods and services – in particular fuel costs
  - Support the retention of current residents and the attraction of new residents resulting from more local opportunities
- **Reduced transportation costs for infrastructure projects**
  - Repairs and maintenance of the fish handling facility and former crab processing facilities, the tank farm and gas pumps, the windturbine, the water and sewer, public buildings
- **Improved subsistence resource access and therefore food security and cultural heritage**
- **Improved health, safety and security**
  - 179.2 days of total increased safe access and moorage
  - Increased response capacity to environmental hazards
  - Safe moorage for local and industrial fishing vessels
  - A year-round ice-free harbor of refuge in Bering Sea
  - Improved access to public health and safety facilities (e.g., health clinic)
  - Improved reliability (via passenger ferry) to leave the island for medical emergencies
- **Increased revenue benefits**
  - $1,036,667 in total estimated average annual benefits
  - $25,462 in delays prevented annually
  - $383,800 annually worth of St. George’s crab Community Development Quota (CDQ)4 able to deliver to St. George, with processing plant, plus $13,015 in transportation savings if CDQ delivered to St. George
  - $43,700 increased value of harvested subsistence foods
- **Increased job opportunities**
  - Dozens of direct jobs related to the construction of the harbor
  - 2 direct jobs related to operation of the harbor
  - 10 jobs from development of a lodge, development of which has been committed to by APICDA
  - 100 jobs from seafood processing capacity development of which has been committed to by APICDA
  - 20 jobs from indirect small business support, which has been committed to by APICDA
  - 4 jobs resulting from a seasonal ferry, the purchase of which has been committed to by APICDA

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4 This program was designed to provide support for economically distressed communities in the Bering Sea / Aleutian Islands. The program’s goal is to generate capital which, in turn, would lead to small communities investing in Alaska’s seafood industry. The CDQ is an allocation of fisheries yield that generates annual royalties. Source: US Army Corps of Engineers (2018) St. George Navigation Improvements: Preliminary Draft Feasibility Report.
Current Situation

A new harbor is critical to creating the conditions that will allow our community to thrive. The presence of an operable harbor is essential for developing a fishing economy, supporting other economic opportunities and improving the quality of life. Without a safe harbor, the delivery of goods results in high costs, limited job opportunities, large unrealized revenues (e.g., fishing fleets cannot use unsafe harbor), reduced subsistence activities and access to resources and, in general, a lack of economic opportunities that promotes out-migration. The present harbor in Zapadni Bay was completed in 1988. Over the years it has proven to be a challenge to maintain functionality (see timeline). It is presently unsafe for navigation and infrastructure in the harbor is degrading.

Harbor Timeline:

1988
Harbor completed by the City shallower than original design

1990
Dredged, but some shallow pinnacles remained

2004
Damaged

2008
Material at entrance removed

2015
Waves damaged the south breakwater

2016/2017
Repaired to pre-existing state (maneuverability not improved)

2018
Study conducted by USACE on new harbor development alternatives

2019
New harbor being pursued

Case Study: Dutch Harbor, St. Paul Island, Alaska

Dutch Harbor on St. Paul is a major marine transportation hub for cargo and fishing. According to their recent economic development strategy, vessel traffic in the region has been growing and is expected to continue to grow as Arctic shipping traffic increases due to reduced sea ice. Long term benefits may also be realized through increased demand for supportive services such as vessel maintenance, fuel supply, emergency response, and other services.

**Evaluation of Options**

The USACE report compared a total of 11 alternative scenarios for the development of harbor infrastructure and found three options to be the most cost-effective opportunities: (1) no harbor improvements; (2) an outer breakwater development at Zapadni Bay; and (3) a CDQ-supporting harbor at St. George. This table shows the challenges currently faced by the community of St. George with the current harbor infrastructure, and the opportunities available should a new harbor be developed on the island.

In 2018, a study was conducted by the USACE to understand the alternatives available to our community. The study found minimal opportunities to improve upon the dangerous conditions of the current harbor and explored options for new development on the north side of St. George adjacent to the town.

<table>
<thead>
<tr>
<th>Description</th>
<th>Option 1: No Harbor Improvements</th>
<th>Option 2: Outer Breakwater at Zapadni Bay</th>
<th>Option 3: CDQ Supporting Harbor at St. George</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>A 3-acre boat basin enclosed by two rubble mound breakwaters and a third inner breakwater protecting the inner harbor. The 280-foot wide entrance channel varies in depth due to shallow rock pinnacles.</td>
<td>A 22-foot deep mooring basin enclosed by a 3000-foot seaward breakwater overlapping a perpendicular 300-foot northern breakwater.</td>
<td>A 550-foot-long by 450-foot-wide and 20-foot deep mooring basin protected by a long northern breakwater stub western breakwater. The basin connects to the Bering Sea with a 250-foot wide navigation channel with a depth of 18-feet.</td>
</tr>
<tr>
<td>Harbor Operations</td>
<td>Underutilized, inaccessible.</td>
<td>Total increased safe access and moorage days is 190 days.</td>
<td>Total increased safe access and moorage days is 179.2 days.</td>
</tr>
<tr>
<td>Harbour Damages</td>
<td>Expected to continue, approximately $724,800 annually.</td>
<td>Approximately $724,800 worth of damages prevented annually.</td>
<td>Approximately $724,800 worth of damages prevented annually.</td>
</tr>
<tr>
<td>Out-Migration</td>
<td>Cost of goods remains high and economic opportunities are low, ideal conditions for out-migration.</td>
<td>Increased safe access days for vessels may increase local opportunities.</td>
<td>Increased safe access days for vessels may increase local opportunities.</td>
</tr>
<tr>
<td>Delays</td>
<td>As high as $33,436 annually.</td>
<td>Not reduced.</td>
<td>$25,462 in delays prevented annually.</td>
</tr>
<tr>
<td>Vessel Damages</td>
<td>Could be as high as $64,000 (the historical maximum).</td>
<td>Could be reduced by $4,339 annually.</td>
<td>$762 of damages prevented annually.</td>
</tr>
<tr>
<td>Crab Fishery Benefits</td>
<td>Missed opportunity to process $384,000 of crab.</td>
<td>$383,800 crab CDQ annually plus $12,953 in transportation savings.</td>
<td>$383,800 crab CDQ annually plus $13,015 in transportation savings.</td>
</tr>
<tr>
<td>Subsistence Foods</td>
<td>Harvest not increased.</td>
<td>Harvest not increased.</td>
<td>$43,700 increased subsistence foods harvested value.</td>
</tr>
<tr>
<td>Average Annual Benefit</td>
<td>-</td>
<td>$745,872</td>
<td>$1,036,667</td>
</tr>
<tr>
<td>Average Annual Cost</td>
<td>-</td>
<td>$13,382,231</td>
<td>$3,572,219</td>
</tr>
<tr>
<td>Annual Increment Cost of Day Gained</td>
<td>-</td>
<td>$979,300</td>
<td>$19,934</td>
</tr>
</tbody>
</table>

---

7 Total opportunity gained is the sum of increased safe access/moorage days for each vessel classification (subsistence, crabber, barge and landing craft, water taxi, and transient vessels).

8 High fuel and freight prices are associated with vessel delays. Though it is not confirmed by research, the Alaska District of the USACE anticipates that demand for and supply of fuel and freight quantities will increase, resulting in lower prices. Fuel demand may increase as more commercial and subsistence vessels will make use of the harbor. Moreover, demand for goods may increase if transportation by freight replaces expensive air transportation.
A NEW HARBOR AND THE PROPOSED ST. GEORGE UNANGAN HERITAGE NATIONAL MARINE SANCTUARY

Would the sanctuary prevent a new harbor from being built? NO.

St. George is pursuing a NMS designation. Redevelopment and expansion of the St. George Harbor is exactly the type of local economic development that the NMS would support, as stated in the Sanctuary nomination. The nomination explicitly states that the Sanctuary boundaries would include “a quarter-mile buffer zone around the St. George Harbor [10] to ensure that the Harbor can be reconstructed, expanded, and returned to greater activity.” In fact, creation of the Sanctuary could help attract attention and support for funding creation of the new Harbor.

St. George is considering a NMS for many reasons, including conservation and protection of the marine ecosystem and economic benefits. These economic benefits include:

- At least four full-time jobs
- $200,000 in annual government spending to support a sanctuary office
- $140,000 to $1 million in expenditures due to research grants
- $55,000 to $240,000 in annual recreation expenditures
- A more sustainable subsistence harvest
- $2.8 billion to $3.3 billion in annual non-market ecosystem service benefits
- Additional benefits from increased tourism that may result

10 City of St. George (2016) St. George Unangan Heritage National Marine Sanctuary Nomination, p. 5
11 Ecosystem services are the benefits that humans freely gain from the natural environment and ecosystems, such as water purification, pollination of crops, and cultural services like recreation and sense of place.

Conclusion

The development of a harbor ties everything together for us, leading to opportunities to improve fisheries, marine conservation, tourism, and quality of life.

We need your feedback to make sure we’re getting everything we can to inform a strong economic development strategy. Help us by providing feedback, additional information, comments, or questions about this Working Paper!

TELL US WHAT’S MISSING!
Go to our online survey: bit.ly/stgeorgesurvey2

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Or visit the project website:
www.stgeorgealaska.org
Community Feedback and Opportunity Summary

81% of St. George residents support efforts to secure more benefits from commercial fishing (e.g. trying to attract fishermen to land on St. George in order to increase revenues from the raw fish tax), 11% said they needed more information. 41% of St. George residents say they are interested in jobs or training created by commercial fishing (e.g. working in fish processing), and 30% said they needed more information.¹

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>CURRENT LOCAL JOBS</th>
<th>POTENTIAL LOCAL JOB OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halibut day fishery</td>
<td>6</td>
<td>12–15</td>
</tr>
<tr>
<td>Alaska’s commercial fleet (non-day fishery)</td>
<td>0</td>
<td>15³</td>
</tr>
<tr>
<td>Fish processing¹</td>
<td>0</td>
<td>Up to 100⁵</td>
</tr>
<tr>
<td>New marine based innovations</td>
<td>0</td>
<td>0–3⁶,⁷</td>
</tr>
</tbody>
</table>

“Increasing fishing activities would be positive, and this is an initiative that has been going for many years already. However, it also requires an understanding of the unique circumstances and challenges in the industry, and a recognition of the necessary precursors for shoreside processing to be a viable business (e.g. infrastructure, etc.).”

- St. George Resident

¹ Community survey of adults living on St. George. May 2019. (n = 28)
³ The average crew size per boat is 34, and there is strong demand for new employees (APICDA, 2019)
⁴ Fish processing on St George is dependent on the construction of a functional harbor, for more information see the Harbor Working Paper.
⁵ Realistic estimate for St. George based on that the processing plant in False Pass employs 200 people and the one in St. Paul employs up to 400 people.
⁶ Mariculture is new in Alaska; in 2015 the industry provided 138 jobs in Alaska and the average number of workers per oyster farm is 3–95 (McDowell Group, 2017). Therefore, the estimate is based on current conditions, not future growth in the industry.
⁷ While mariculture may pose opportunity for St. George this would likely come in the form of sea cucumbers, urchins, kelp, etc. There are no oyster farms as far north as St. George at this point because of water temperature and habitat conditions. There are large logistical barriers to mariculture right now in remote communities such as cost-efficient transport for urchins and sea cucumbers, and a market for some of the easier and lower cost farms such as seaweed and kelp. APICDA (2019) personal communication.
Introduction

St. George is located within one of the richest fisheries in the world. Understanding the potential behind fisheries opportunities for our community is key in order to maximize benefits and share in the future prosperity resulting from this resource. Many people and organizations have been hard at work to help with the success of fisheries in St. George. We believe that our fisheries industry must contribute more in order for our economy and our community to succeed.

The intention of this working paper is to provide an overview of fisheries history and present context, and to identify some of the core opportunities that could help realize the potential of fisheries on St. George. While fisheries are a key focus of this working paper, it is important to consider the relationship fisheries has with a new harbor development in our community.

Why Do We Care About Fisheries in St. George?

St. George rests in the central-east area of the Bering Sea, which possesses some of the United States’ most valuable commercial fisheries. The Eastern Bering Sea represents over 40% of fish landed in the United States.

HISTORICAL CONTEXT

In the early 1980s, the U.S. government withdrew from the Pribilof Islands and ended the commercial seal harvest, which had functioned as St. George’s economic base since the late 1700s. At the time, the U.S. government concluded that St. George would need federal assistance in creating a viable alternative economic base through fisheries development. In order to assist with the transition and support the diversification of the economy, the U.S. government provided $8 million to St. George. Despite the expenditures and assistance in building a fisheries-supporting harbor in 1984, and subsequent repairs

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8 McDowell Group (2017) The Economic Value of Alaska’s Seafood Industry
in the years following, the St. George harbor remains practically inoperable and has created a standstill for the fisheries economy on St. George. Unlike our neighboring island, St. Paul, St. George received comparably little funding to support a fisheries-based economy, as promised by the U.S. government.\footnote{Merculieff, L. (2019) Draft Paper on the History of the Unangan People in the Pribilofs.}

Before this, in 1976, the Magnuson-Stevens Fishery Conservation and Management Act was passed and created a 200 nautical mile Exclusive Economic Zone (EEZ) from oceanic shorelines in order to protect fish stocks, habitat, and future fisheries.\footnote{OAA Fisheries (2019) retrieved from https://www.westcoast.fisheries.noaa.gov/whatwedo/msa/magnuson_stevens_act.html} This law assigned federal fisheries management to regional councils.\footnote{North Pacific Fishery Management Council (NPFMC) is one of eight councils established by the Magnuson-Stevens Act, which now has jurisdictional management of over approximately 900,000 square-miles off of Alaska, including the ocean area around St. George.\footnote{North Pacific Fishery Management Council (2016) “North Pacific Fishery Management Council.” www.fisherycouncils.org. Accessed 2019.}} The North Pacific Fishery Management Council (NPFMC) is one of eight councils established by the Magnuson-Stevens Act, which now has jurisdictional management of over approximately 900,000 square-miles off of Alaska, including the ocean area around St. George.\footnote{U.S. Regional Fishery Management Councils “Home” www.fisherycouncils.org. Accessed 2019.}


In the 1990s, St. George benefited from the Bering Sea crab fisheries. However, in part due to a decline in crab stock, access to Bering Sea crab fisheries was rationalized. As fishermen were guaranteed a set percentage each season, the incentive to stop in the St. George harbor ended. Breakwater damages to St. George’s harbor during this period also created an unsafe route for harvester and floating processor operators which led to deliverables being transferred to St. Paul for landing. Fishermen began utilizing St. Paul and Dutch Harbor, and the City of St. George.

For the time being, “…St. George shares the benefits of owning the processor quota shares accrued in the community with other APICDA member communities.” All APICDA-owned north-designated shares are processed in St. Paul.\footnote{White, Cliff (2017) Larry Cotter, long-time APICDA CEO, announces retirement. www.seafoodsource.com}

As of 2016, St. George’s primary fishery support services are marine fuel sales at the harbor and crab pot storage, although both have declined since the rationalization of crab and the harbor was damaged several years ago.\footnote{Northern Economics, Inc. (2016) Appendix A: BSAI Crab Rationalization Ten-Year Program Review Social Impact Assessment.} Today, both commercial and

subsistence fishing take place off St. George. Subsistence fishing consists of halibut, cod, sablefish, salmon, snails, urchins, and, along-side fur seals, it accounts for 40% of the community’s dietary needs. However, St. George residents would like to see an increased focus on developing a fisheries-based economy. In 2019, a community survey undertaken for this project highlighted that 81% of St. George residents would like St. George to secure more benefits from commercial fishing.

**POLICY CONTEXT**

Fisheries in the Bering Sea are governed and supported by a complex system of policies and programs. The vast majority of fisheries in the Bering Sea are rationalized, one of several management systems in place to manage over-fishing. Alongside rationalization, there are several management systems relevant to St. George.

The North Pacific Fishery Management Council creates regional fishery management plans (FMPs) that govern conservation and management. These FMPs are mandated by the Magnuson-Stevens Fishery Conservation Act for any area that requires conservation and management. The Management Area relevant to St. George is Bering Sea/Aleutian Islands (BSAI). Here, the groundfish fisheries are managed through the BSAI Groundfish FMP which includes all groundfish that is fished commercially using trawl, longline, pot, and jig gear. There is also an FMP specific to Commercial King and Tanner Crab Fisheries in the Bering Sea/Aleutian Islands, a Scallop FMP, and a Salmon FMP. FMPs have established allowable catch limits for target species and an overall optimum yield for groundfish; the total annual catch for all species in the BSAI is 2.0 million metric tons (mt).

Highlighted in the previous section, the Western Alaska Development Quota (CDQ) Program was created to give communities in western Alaska the opportunity to participate in BSAI fisheries. The CDQ Program provides a percentage of all BSAI quotas for groundfish, prohibited species, halibut, and crab to the six non-profit CDQ corporations. It is intended to address to barriers posed by the high capital.

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31 North Pacific Fishery Management Council (2011) “Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs.”
investment needed to be involved in fisheries and its
goals are to: (i) alleviate poverty, (ii) provide economic
and social benefits to residents, and (iii) achieve
sustainable local economies. APICDA represents St.
George and the Aleutian Chain, which encompasses
approximately 1,257 people (15% of the region’s
population).35,36 Currently, APICDA’s CDQ allocation
consists of groundfish, crab, pollock, and pacific cod,
all contributing to annual royalties. Pollock is harvested
by trawl catcher processors. Pacific cod is typically
harvested by longline catcher processors. APICDA
can direct quota to small-boat harvesters to benefit its
communities and residents.37

Alongside FMPs and the CDQ Program, there are
several other management systems in place. Many of
these include an Individual Fishing Quota (IFQ) and
an Individual Processing Quota (IPQ), that define how
much fish can be harvested or processed in a given
year. Unlike with the CDQ Program, which can be
leased, IFQ and IPQ can be sold from one harvester or
processor to another.38

The three fisheries most relevant to potential
processing on St. George are:

- Crab IFQ/IPQ
- Halibut IFQ
- Pacific Cod

POTENTIAL POLICY CHANGES

Changes to fish tax revenue sharing are currently
being considered at the state level. Gov. Mike
Dunleavy has proposed that fish tax revenue go
solely to the state instead of being shared with local
communities. The proposed changes would impact
the fisheries business tax and the fishery resource
landing tax. At present, the tax division results in half of
collected taxes going to local cities or boroughs (where
the processing or the landings occurred). In 2019, this
amount totalled $29 million.

In 2020, it is estimated that the proposed changes
would result in $28 million staying in the state’s general
fund. The proposed changes are part of a broader
effort to close a $1.6 billion state budget deficit. Many
small communities have expressed opposition to the
changes.39,40,41

When the budget passed in the House, it was decided
that municipalities would continue to receive a
portion of the raw fish tax.42 At the time of writing, the
House and the Senate still needed to meet to discuss
differences between their budgets and Governor
Dunleavy still needed to approve the budget. There are
many other potential budget cuts that could impact
rural Alaska in other ways (e.g., community assistance
funding, university, Medicaid).43 There is uncertainty
in the degree to which the legislation surrounding
taxation and funding for other services in rural Alaska
may change in the upcoming years.44

43 Leasia, Henry (2019) “House budget scales back cuts proposed by governor.” KHNS FM.
44 APICDA (2019) personal communication.
There are job opportunities for St. George residents in fisheries harvesting, and no current on island job opportunities in processing.\(^46\)

**Harvesting**

Employment in harvesting often takes two primary forms:

- Small-boat day fishing
- Industrial style fishing

Of the fisheries opportunities, St. George residents participate only in small-boat fishing in St. George that orients around halibut, a high-value limited quota fishery. It enables residents to fish during the day and return home at night. APICDA and the Central Bering Fishermen’s Association (CBSFA) were allocated halibut because of their historical participation and dependency on the fishery.\(^47\)

Industrial fishing opportunities are also available to our residents. However, these opportunities are not currently being taken advantage of. Industrial fishing requires going out to sea for 30 to 60 days at a time on larger commercial boats. Despite the opportunity for an individual to make enough income for the year during this short fishing season, there has not been uptake among our residents for this type of work. For example, there are no St. George residents directly involved in crab fishing. However, APICDA possesses an ownership interest in vessels that harvest pollock and Pacific cod and there are job opportunities available for residents of St. George on these vessels.\(^48\)

To participate in the halibut fishery, which is quota based, fishermen need to have an interim permit from the State of Alaska, which is available at nominal cost and usually financed by APICDA.\(^49\) In 2016, it was estimated that, six St. George residents fished for halibut (14 interim permits total are held by St. George residents), yielding a total of $217,778.\(^50\)

The estimate for individual IFQ possession ranges from 2001 lbs to 12,000 lbs.\(^51\),\(^52\),\(^53\) 2018 represents the first year that St. George residents successfully fished their full quota share.\(^54\)

**Processing**

Currently, there is no opportunity to work in processing on St. George. This is unlikely to change without improvements to the harbor.

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\(^{46}\) Jobs in fishing are not captured in the American Community Survey Estimates; no official numbers exist for St. George residents working in fisheries or the associated income for 2019.

\(^{47}\) The CBSFA is the management organization for St. Paul Island under the Western Alaska Community Development Quota (CDQ) program; Central Bering Sea Fishermen’s Association, retrieved from www.cbsfa.com


\(^{49}\) APICDA (2019) personal communication.

\(^{50}\) Coh, Steve (2018) “City of Saint George, Alaska Economic and Fiscal Profile and Recent Trends.”

\(^{51}\) APICDA (2019) personal communication.


\(^{53}\) This number is not representative of APICDA’s total IFQ holding; they hold CDQ but do not own any IFQ in area 4C, which is where their small-boat St. George fleet fishes, APICDA (2019) personal communication.

\(^{54}\) APICDA (2019) personal communication.
Our Assets

This table looks at the assets St. George currently has, the opportunities that these assets provide and the key barriers and possible responses to help our community develop these assets.

### Identifying Our Assets

<table>
<thead>
<tr>
<th>Asset</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish handling plant</td>
<td>A small processing-capable fish handling plant was completed in 2010 through APICDA and the U.S. Economic Development Administration. This facility could be expanded to accommodate crab processing if harbor improvements occur. Currently it is used for the production of ice for the local halibut fishing fleet and storage.</td>
</tr>
<tr>
<td>Capable fishermen</td>
<td>St. George is home to hardworking people with extensive fishing experience.</td>
</tr>
<tr>
<td>APICDA</td>
<td>St. George is a member of APICDA, which can provide training, economic support, and resources towards increasing participation in fisheries including CDQ.</td>
</tr>
<tr>
<td>Existing IFQ</td>
<td>It is estimated that St. George residents possess in between 2100 and 12,000 pounds of IFQ.</td>
</tr>
<tr>
<td>Existing boats/access to industry</td>
<td>St. George residents already have access to day fishing boats and jobs on larger industrial boats.</td>
</tr>
</tbody>
</table>

### Key Challenge Areas with Suggested Steps Forward

<table>
<thead>
<tr>
<th>Challenges and Success Factors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Challenge:</strong> Damaged harbor</td>
<td>• The federal government committed to constructing a harbor in the Fur Seal Act Amendments of 1983. The present harbor in Zapadni Bay was completed in 1988. However, navigation is presently unsafe for various reasons. The community estimates that the harbor is only fully usable 1.5 months per year.</td>
</tr>
<tr>
<td><strong>Success Factor:</strong> Functioning harbor</td>
<td>• The City believes that a harbor is essential for developing a fishing economy, a crucial step to creating the conditions that will allow people to stay in St. George. APICDA estimates that a harbor would enable seafood processing and a seasonal ferry. The US Army Corps of Engineers have a proposed funding model. However, they have acknowledged that further discussion is required by different levels of government to determine funding priorities. The estimated cost of the harbor is $100,683,939. Another draft report is anticipated in late 2019.</td>
</tr>
</tbody>
</table>

| **Challenge:** Complete designation of the St. George Unangan Heritage National Marine Sanctuary nomination | • A National Marine Sanctuary (NMS) is a federally designated area administered by the National Atmospheric and Oceanic Administration (NOAA). National marine sanctuaries protect waters in the U.S. that have unique qualities (conservation, ecological, recreational, historical, cultural, education, etc.). There are presently 14 NMSs. If NOAA designates St. George’s sanctuary, NOAA will initiate an extensive public consultation process leading to creation of a management plan. |
| **Success Factor:** Impacts of the National Marine Sanctuary are confirmed | • NOAA would consult a wide variety of stakeholders, e.g., APICDA, the North Pacific Fishery Management Council, the State of Alaska, to formulate the sanctuary’s integrated management plan. Sanctuaries reflect community inputs, are adaptively managed and promote multiple uses. Commercial fishing exists in nearly all national marine sanctuaries. It has been estimated that the creation of the St. George NMS would bring significant economic benefits to the community through increased tourism, scientific research and direct government investments. The creation of the sanctuary could also help stimulate additional support for the harbor renovation. |

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**Challenge:** Climate change may impact the health, nature, and availability of the fisheries

- The future impacts of climate change on fisheries are difficult to anticipate. However, it is to be assumed that the changing climate will alter St. George’s marine environment and fisheries.\(^{60}\) Currently, many marine species have either disappeared, are declining, or have changed their customary feeding grounds as migratory patterns change.

**Success Factor:** St. George is supported in navigating potential and future impacts

- Addressing potential impacts of climate change would likely require the support of scientific and professional partners, as well as higher levels of government.

**Challenge:** Jobs need to align with the culture in St. George

- In 2019, a community survey undertaken for this project highlighted that 42% of St. George residents stated that they would be interested in jobs or training pertaining to fishing. However, jobs should align with our Unangan culture and traditions. Creating a strong fisheries-based economy is not just about creating jobs - it is about creating the right type of jobs.

**Success Factor:** Support strong working partnerships between the City of St. George, the Tribal Council, APICDA, and the community

- All organizations need to be continually touching base with the community to make sure we are working towards creating the right opportunities for those that want them. For example, APICDA works with other entities to offer training and education programs in marine safety, equipment maintenance, and utility and financial management.\(^{61}\)

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### CASE STUDY: FALSE PASS SEAFOODS, FALSE PASS, AK*

Occupied since the early 1900s, the community of False Pass has historically depended on commercial salmon fishing and services, driving the local economy and providing a key refueling stop for nearby communities and fishing fleets. The community’s fishery processing dates back to 1917, then named P.E. Harris Co., and ceased operations in False Pass in the 1980s. However, through the hard work of the community and with support from APICDA, fish processing has been rejuvenated in the now named False Pass Seafoods. In the 1990s, APICDA secured a processing barge called The Dipper, mooring it at the city dock. From 2014 – 2016, the capacity of the shoreside seafood-processing facility was slowly built up leading to fuel facilities opening and starting revenue positive businesses. From this success, large outside investors (Trident Seafoods) invested in the community’s processing in 2018.

While there are many, context specific, differences between False Pass and St. George, the motivation, support, community energy, and willingness to improve the state of being for those in False Pass shows what can happen with strong and supported community development through fisheries development.

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\(^{60}\) Personal communication with an academic specializing in fisheries (2019)

\(^{61}\) APICDA (2019) personal communication.

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**Working Paper - Sustainable Tourism | page 8**
Fisheries Development Opportunities

**STATUS QUO**
St. George and its partners have made many efforts to develop fisheries. Community members would like to see increased coordination in developing the economy in general, and increased opportunities to participate in fisheries in particular. Continuing with the status quo is unlikely to result in increased collaboration and opportunities.

**Build on our Current Assets**

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus on halibut day fishing</strong></td>
<td>2018 was the first year that St. George residents fished their full quota share. It is anticipated that through close partnerships between APICDA and the community that this success can continue and be scaled up. It is estimated that even without improvements to the harbor, halibut day fishing could be increased (by over a dozen jobs). APICDA has stated that if there are St. George residents interested in halibut fishing, they would be willing to support their participation.</td>
</tr>
<tr>
<td><strong>Focus on securing placements on large industrial boats</strong></td>
<td>As highlighted above, there are positions available on larger industrial style fishing boats. However, these jobs require going out to sea for 30 - 60 days at a time. For example, residents can apply for positions on vessels owned in part by APICDA. However, previous fieldwork has shown this does not tend to happen in practice. An opportunity for St. George is to focus on connecting community members with these positions. This could include supporting them in commuting to different departure points (such as Bristol bay).</td>
</tr>
<tr>
<td><strong>Focus on rejuvenating the fish processing plant</strong></td>
<td>Previous estimates illustrate that rejuvenating the fish processing plant would bring on-island jobs to the community. However, these same estimates cite a new harbor as a precondition for this effort. The value of the CDQ crab allocation that is currently processed in St. Paul is approximately $384,000.</td>
</tr>
</tbody>
</table>

### Explore New Fisheries Innovations

<table>
<thead>
<tr>
<th><strong>Opportunity</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
</table>
| Explore aquatic farming | In Alaska, the majority of aquatic farm products are comprised of Pacific oysters, littleneck clams, and mussels. Oyster, clam, and mussel farms are unfeasible around St. George, but water temperature and habitat conditions could support sea cucumber and urchin farming, for example. The industry is comparably new, and requires permits from the Division of Commercial Fisheries, Aquatic Farming at the Alaska Department of Fish and Game (ADF&G). Most aquatic farms require an Aquatic Farm Operation Permit and a Stock Transport Permit. It typically takes approximately 10 months to go through the regulatory process. To be appropriate, a farm site requires:  
  - Good tidal flushing  
  - Protection from storms  
  - Reasonable proximity to markets that will buy farm products  
  - Staff who live close to the site  
  Start-up costs are high in this industry and farms require year-round maintenance. Existing farms tend to yield some income – but not enough to support a family. For remote areas, one of the key barriers to financial stability tends to be high transportation costs. Alaska does not permit finfish farming. In regard to fish, it only permits hatcheries. The Alaska Sea Grant Marine Advisory Program at University of Alaska Fairbanks provides technical, marketing, and business planning information to those interested in starting aquatic farms. |
| Explore seaweed farming | Seaweed is a new but rapidly growing industry in Alaska. As of 2017, there were only a couple of seaweed farms operating. There are two types of seaweed being cultivated in Alaska: ribbon kelp and sugar kelp. In order to be successful, a seaweed farm must have:  
  - Clear, nutrient-rich seawater  
  - Appropriate marine energy  
  - Adequate sunlight exposure  
  - Necessary temperature and salinity  
  - Proximity and connection to markets, as seaweed quality declines rapidly  
  Seaweed farms are also subject to permitting by the Alaska Department of Fish and Game (ADF&G), Department of Natural Resources. They also require an aquatic farm operating permit. Additionally, ADF&G requires that parent plants be collected within 50 kilometers of the farm site. NOAA’s Sea Grant program continually invests in the development of aquaculture. In the past, this has included providing support for seaweed farms. Blue Evolution, a San Francisco–based company has been working with Sea Grant to pilot seaweed hatchery research in Alaska. In 2017, they harvested 10,000 pounds grown by Near Island and Larsen Bay. |

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Conclusion

What do you think needs to happen to make sure St. George residents can participate in and benefit from fisheries? What do ideal fisheries look like to you? What will it take to get there?

Fisheries are central to the economy and culture in St. George. This Working Paper is a draft designed to share our history, understand where our current fisheries and opportunities for the future. We need your feedback to know what we are getting right and what we need to change or add. Help us create a strong fisheries economy in St. George that aligns with the values of St. George.

TELL US WHAT’S MISSING!
Go to our online survey: bit.ly/stgeorgesurvey2

STAY A PART OF THE CONVERSATION!
Please contribute, your ideas are needed. Here are some simple ways to participate:

Go to our online survey and give your input about where St. George should go and how we should get there.
bit.ly/stgeorgesurvey2

Send an email or contact:
St. George Economic Development Project Team
stgeorgeeconomicdevelopment@gmail.com

Or visit the project website:
www.stgeorgealaska.org
Community Feedback and Opportunity Summary

70% of residents support the idea of developing ecotourism opportunities (e.g. reindeer hunting trips).

50% of residents are interested in jobs or training created as a result of ecotourism opportunities, with 27% saying they need more information.¹

<table>
<thead>
<tr>
<th>OPPORTUNITIES</th>
<th>Potential - Jobs</th>
<th>Additional Notes / Benefits</th>
</tr>
</thead>
</table>
| **Build on our current assets (promote ecotourism, develop reindeer hunt)** | • 3 – 4 seasonal and part-time local jobs without developing harbor, ferry, or marine sanctuary  
• 1 full-time, 6 – 8 part-time seasonal jobs with new harbor, ferry, and marine sanctuary                                                                 | • Currently 1 part time local job on island  
• Currently less than $5,000 in benefits  
• Potential for less than $30,000 in benefits without developing harbor, ferry, or marine sanctuary  
• Potential for $60,000 – $150,000 in benefits with new harbor, ferry, and marine sanctuary |
| **Develop our own ecotourism business: community ecolodge and programming** | • 1 – 2 full time jobs, 7 – 10 part time jobs with new harbor, ferry, and marine sanctuary                                                                                                                        | • Potential for $150,000 - $500,000 with new harbor, ferry, and marine sanctuary                              |

¹ Community survey of adults living on St. George. May 2019. (n = 28)

St. George Economic Development Working Papers are early efforts to pull together the best available information for future decisions on St. George. These should be seen as partial, incomplete, and in need of your feedback. We are looking to those who care about St. George to provide corrections and better information so these can be updated for final recommendations and reporting.

Thank you to everyone that has provided their input so far.

To provide feedback, additional information, comments, or questions about this Working Paper, please contact stgeorgeeconomicdevelopment@gmail.com or visit our website at www.stgeorgealaska.org. We look forward to hearing from you.
Introduction

The kind of tourism we want for St. George is sustainable, it reflects our Unangan heritage and embraces the ideals environmental integrity, social justice and economic development. Tourism has the potential to provide an important part of our local economy. We have what global visitors are looking for: exceptional nature-based experiences, a unique heritage, and a distinctive culture. St. George is home to over 200 species of migratory birds, rare seabird sightings, huge colonies of Northern Fur Seals, artic fox, Orca whales, and other wildlife. Our landscape and history have been shaped by our Unangan people as well as Russian and American fur traders and colonists, altering the island’s economic, political, and cultural makeup over time. The natural and cultural features of the island provide an opportunity for St. George to market itself as a tourism destination to attract more visitors, and to create income for both residents and the broader community.

The demand is there. In 2018 the State of Alaska reported a significant amount of growth in the tourism industry as compared to any other sector of development in the state. The visitor industry in Alaska has seen a 20% growth in jobs since 2008, a 32% growth in labor income ($1.5 billion), and a 32% growth in visitor-related spending for the region. The southwest region, home of St. George, accounted for 1,800 jobs and $50 million in labor income in 2017. With only minor organizational and marketing effort, St. George has already been hosting dozens of visitors in past years, mainly cruise ship day visitors or small groups of adventurous and self-motivated nature lovers. While seasonality and climate change create some external uncertainty, there is potential for tourism to significantly contribute to our economy for the foreseeable future.

In this working paper we outline our assets, opportunities and challenges.

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5 Pursuing economic opportunities that are community driven can minimize adverse impacts and capture more of the benefits.
9 Personal communication, St. George Traditional Council, 2019
Current Situation

OUR ASSETS
In order to know where to focus our efforts in developing our community, having an inventory of what our current assets are is key. This table shows current assets on St. George with ownership responsibility and a description.

<table>
<thead>
<tr>
<th>Asset</th>
<th>Ownership/Responsibility</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
<td>Tanaq Corp</td>
<td>The St. George Tanaq Corporation currently operates one hotel, the Aikow Inn, which provides accommodation to travelers and visitors to the island, hosting up to 18 guests at a time.</td>
</tr>
<tr>
<td>Airport</td>
<td>Alaska Department of Transportation &amp; Public Facilities</td>
<td>The only airport on the island is 6 miles from the town of St. George. The layout of the airport prevents flights from landing in stormy / unsafe weather, which can strand visitors at times.</td>
</tr>
<tr>
<td>Reindeer Herd</td>
<td>Tanaq Corp</td>
<td>An introduced species to St. George, this herd of around 400 reindeer are occasionally hunted by locals for subsistence. Currently this herd is managed by the Tanaq Corporation.</td>
</tr>
<tr>
<td>Wildlife</td>
<td>Residents of St. George International Community</td>
<td>Our Island is home to one of the largest populations of nesting seabirds in Alaska, large fur seal populations, and arctic foxes all attracting photographers and visitors from around the world.</td>
</tr>
<tr>
<td>Landscape/Seascape</td>
<td>Residents of St. George</td>
<td>The natural landscape around St. George is rugged and beautiful, attracting hikers and photographers to the island.</td>
</tr>
<tr>
<td>Current Tours</td>
<td>Traditional Council, Tour companies¹¹, Independent Travelers¹²</td>
<td>The only tourism venture operating out of the hotel is a guided tour of the island to see the bird and seal rookeries and other points of interest on the island. Our Island attracts ‘niche’ visitors who are looking for birding, wildlife, as well as heritage and cultural tourism opportunities. In the past, when visitors came to our community we would host, feed, and put on cultural performances, charging per person.¹³</td>
</tr>
<tr>
<td>Roads and Infrastructure</td>
<td>City of St. George</td>
<td>The City of St. George has limited road and trail network to support on-island movement of people.</td>
</tr>
<tr>
<td>Nationally Designated Heritage Sites</td>
<td>Residents of St. George</td>
<td>St. George is home to the Fur Seal Rookeries National Historic Landmark (NHL), nominated for formal listing in the National Register of Historic Places in 1962, with unique themes related to industry, conservation, and ethnic heritage. The NHL designation encompasses the entire town of St. George and is associated with Northern Fur Seal processing from the 19th century and into the early 20th century (1786 – 1959).¹⁴</td>
</tr>
<tr>
<td>Remote and Rugged Location</td>
<td>–</td>
<td>Few places in the world are as remote and rugged as St. George. This geographic fact is a challenge but also an asset to be leveraged for a unique tourism experience. Research shows that remoteness is a quality that sells in the higher-end ecotourism market.¹⁵</td>
</tr>
<tr>
<td>Unangan Culture</td>
<td>–</td>
<td>We have unique knowledge, heritage, values, beliefs, art, skills traditions and activities that are important to us and of interest to others.</td>
</tr>
</tbody>
</table>

¹⁰ Personal communication, St. George Traditional Council, 2019
¹¹ Planet Earth Adventures: https://www.discoverak.com/st-george-island-photo-tour
¹² https://www.fodors.com/world/north-america/usa/alaska/the-bush/hotels/reviews/st-george-tanaq-hotel-431327
¹³ Personal communication, St. George Traditional Council, 2019
INSIGHTS FROM ALASKAN TOUR OPERATORS

There’s no doubt that St. George is an ideal place for tourists to visit, with its epic landscape, wildlife, culture, and history. Our island has an abundant amount of bird species and a landscape that is ideal for birders, photographers, and hikers. Tour operators in the region identified some of the biggest barriers to making St. George a thriving tourism destination:

• **Limited and unreliable access...**
  a harbor with ferry access could greatly increase visitors coming to our community. Tour operators go through St. Paul to come to our island anyway, so reducing dependence on flights by having a harbor with ferry access to St. George increases opportunities to travel to our island. A ferry would also create a partnership between St. Paul and St. George leading to additional benefits between the two communities.

• **Lack of on-island tourism infrastructure...**
  signage for trails and wildlife would help people experience our islands; restaurants and more hotel space would allow travelers to stay for longer and spend more money in our community; and sharing our island’s culture and history with visitors can let visitors learn and experience what life is like here.

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16 Personal communications, May 2019, with Planet Earth Adventures, St. Paul Island Tours, High Lonesome Tours, and WINGS Birding Tours
### Key Challenges and Possible Responses

<table>
<thead>
<tr>
<th>BASIC NEEDS TO BUILD ON OUR CURRENT TOURISM ASSETS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commitment</strong></td>
<td><strong>Challenge</strong>: Commitment by Tanaq Corp to tourism.</td>
</tr>
<tr>
<td><strong>Success Factor</strong>: Confirm commitment by Tanaq</td>
<td>Lodging is an essential tourism asset. It is unclear if Tanaq Corp. is considering a stronger commitment to pursuing tourism as a priority on St.George.</td>
</tr>
<tr>
<td><strong>Success Factor</strong>: Confirm commitment by Tanaq</td>
<td>For near-term tourism development, Tanaq would need to be on-board, as they own the hotel (and the reindeer herd).</td>
</tr>
<tr>
<td><strong>Coordination and Strategy</strong></td>
<td><strong>Challenge</strong>: Coordination among our Traditional Council, City Council, and Tanaq Corp.</td>
</tr>
<tr>
<td><strong>Success Factor</strong>: Strong leadership and organizational commitment and a strategy as well as a champion to drive tourism on St.George</td>
<td>Our community has identified the need for our governing institutions to work more closely together while Tanaq could possibly pursue a small level of tourism independently. A model with a higher chance of success would include a coordinated effort by our Tribe and our City (e.g. to access development grants and maximize local participation). They each have assets, access to grants, and can lead our community forward.</td>
</tr>
<tr>
<td><strong>Partnerships</strong></td>
<td><strong>Challenge</strong>: Activating/Developing Partnerships</td>
</tr>
<tr>
<td><strong>Success Factor</strong>: Nurture current partnerships and form new partnerships</td>
<td>Tourism is an industry that requires experience and know-how. Partnerships with organizations that have the knowledge and capacity to make tourism happen on St.George will be critical to success.</td>
</tr>
<tr>
<td><strong>Success Factor</strong>: Nurture current partnerships and form new partnerships</td>
<td>We have established partnerships with organizations that can help, like APICDA, APIA, NOAA, National Audubon Society, St. Paul, Alaska Conservation Foundation and cruise ship operators. These partnerships will need to be activated for growth of our tourism sector. New relationships and partnerships with nature-based tourism companies and external partners will also support our desire to develop tourism.</td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td><strong>Challenge</strong>: Lack of trained tourism professionals</td>
</tr>
<tr>
<td><strong>Success Factor</strong>: Training of locals</td>
<td>For us to have more visitors to the island we will need to capitalize on our community members’ current skill sets, while also learning skills we don’t yet have.</td>
</tr>
<tr>
<td><strong>Success Factor</strong>: Training of locals</td>
<td>Our community members need the training required to be local guides and cooks for businesses where visitors travel and stay.</td>
</tr>
<tr>
<td><strong>Tourism Infrastructure</strong></td>
<td><strong>Challenge</strong>: Lack of tourism support infrastructure</td>
</tr>
<tr>
<td><strong>Success Factor</strong>: Upgrades to Island tourism infrastructure</td>
<td>Ecotourism requires little infrastructure, so addressing our limited tourism support infrastructure could be a quick start action.</td>
</tr>
<tr>
<td><strong>Success Factor</strong>: Upgrades to Island tourism infrastructure</td>
<td>Of key importance is the tourism product. We will need a well–planned network of trails to provide access to various habitats and points of interest, improved signage (interpretive and directional), basic infrastructure (observation stations), improving renovating the heritage site, World War II historical sites, Russian and American colonial sites, trail development, machinery, ground transportation (e.g., ATV, van), and equipment. Also developing opportunities for tourist to gather and spend money – coffee shop/restaurant/gift shop/ etc.</td>
</tr>
</tbody>
</table>

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17 Tanaq Corp did not respond to queries as to their priorities for this working paper.
Support for Next Level Tourism

There are several key challenges that need to be addressed to give tourism a chance to be a real sustainable contributor to our local economy. These are discussed below.

<table>
<thead>
<tr>
<th>Challenges and Success Factors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Harbor Development</strong></td>
<td>Without a seaport, our island is inaccessible for tourists. For example, St. George used to receive four to five cruise ships per year with 150–200 people stopping by the community on their way to other destinations using landings near the village, which have now become more difficult to land on due to damage by storms. We now see maybe one or two. Our south harbor is also in a state of disrepair. If a new harbor were to be built, this would replace the landings near the village and allow for safe access to the island, potentially leading to increases in visitors from cruise ships and allowing for reliable marine access.</td>
</tr>
<tr>
<td><strong>Access</strong></td>
<td>The remoteness of our community makes access the single largest barrier for tourism development.(^\text{18}) Tourists need reliable access on and off the island. It is not unusual for weather to delay flights. Uncertainty of access contributes to the difficulty of attracting visitors. Reliable transportation such as a passenger ferry or large transport vessel should be considered if we want to see more visitors to the island. A ferry between St. Paul and St. George would also greatly help to share resources between the two communities.</td>
</tr>
<tr>
<td><strong>Marine Sanctuary</strong></td>
<td>While this area has historically been one of the worlds’ most productive ecosystems, marine species populations have been declining over the last few decades, as observed by researchers and community members alike. Climate change and other pressures are contributing to this challenge. Scientists and residents can do more through accessing grants and coordinating with wildlife professionals and working together to conserve and protect our islands wildlife. If a National Marine Sanctuary were to be established around St. George, this would increase protection over our natural resource and boost local tourism, as this designation would signal to the world that the site has unique natural value worth protecting.(^\text{19})</td>
</tr>
<tr>
<td><strong>Ecolodge</strong></td>
<td>Our hotel on the island can only host 18 guests at a time and is not designed specifically for tourism. A dedicated, specifically designed and located ecolodge would distinguish St. George for marketing purposes and add much needed capacity.</td>
</tr>
<tr>
<td><strong>Finance</strong></td>
<td>Our community is struggling financially. We need to ensure that we have the capital assets required to pursue a tourism venture. Grants exist for tourism opportunities (see grants working paper for details on a list of specific conservation related tourism grants). If conservation grants and ecotourism could tie into and support other initiatives (e.g. harbor, marine sanctuary), this could work well on St. George and may provide needed resources for our community to pursue ecotourism options.</td>
</tr>
</tbody>
</table>


Tourism Development Opportunities

Driving tourism on St. George is the wildlife and landscape: large numbers and diversity of migratory seabirds and extensive colonies of Northern Fur Seals and Steller sea lions. Our culture and heritage only enhance these primary tourism assets.

EXISTING TOURISM ASSETS
Efforts to develop tourism on St. George to date have been opportunistic and unorganized, hindered also by limited access to our island (damaged marine infrastructure and uncertain flight schedules).

Currently, our hotel provides one part-time local job (lodge attendant at the Aikow Inn) and generates less than $5,000 in local revenue.

BUILD ON OUR CURRENT ASSETS
Promote Ecotourism

Our extraordinary natural assets and limited tourism related infrastructure (airport and hotel) can support a small tourism sector. However, with air transportation unreliable due to weather the potential risk of visitors getting stuck on St. George (and/or on St. Paul en route) for many days is a significant deterrent for tour companies and for all but patient or intrepid visitors. Further, with visitors having to pass though St. Paul on the way to St. George, and with St. Paul developing its own tourism sector based on similar natural assets, we are challenged to distinguish our tourism product and capture a piece of the growing Pribilof tourism market share. Despite these constraints a small niche market does exist for the authentic and unique experience that St. George currently has to offer. It is reasonable to assume that St. George could attract three to four wildlife/bird tours, resume of the occasional cruise ship day tours, and attract limited independent travelers. With effort and coordination, tourism could be a small contributor to our economy through promotion of our current assets, coordination amongst Tanaq, the Traditional Council and the City Council, building partnerships, and accessing training for our people. The prospects for growth of St. George’s tourism sector could receive a very substantial boost, however, if the Sanctuary were designated.

CASE STUDY: ECOTOURISM VENTURE ON ST. PAUL, ALASKA

A nearby certified ecotourism business, St. Paul Island Tours, operates seasonal tour packages from May to October offering travelers’ opportunities to see a variety of marine wildlife including Northern Fur Seals, Steller sea lions, whales, as well as nesting bird populations and Arctic foxes. A range of pricing is offered for both all-inclusive and land-only (non-airfare) pricing, ranging from $2,000 to $4,000 per trip. These tours are operated by Tanadgusix Corporation (TDX) whose operations generate about $5 million in revenue each year, with between $50,000 and $100,000 in profits annually.²⁰, ²¹

Develop a Reindeer Hunt

Our island is home to a herd of approximately 400 reindeer that are occasionally hunted by our community members. Assuming that there are enough reindeer on island to support a sustainable trophy hunt every year, a hunting business on island could potentially see one or two hunting parties coming to our island to sustainably trophy hunt per season, charging $10,000 per animal.22

Anticipated Local Benefits

1. Without Harbor or Marine Sanctuary Designation
   • 3–4 seasonal and part-time local jobs (local lodge attendant/chambermaids; guides; cook; maintenance)
   • Less than $30,000 in local revenue

2. With Harbor, Passenger Ferry and Marine Sanctuary Designation
   • 1 full-time job (local manager)
   • 6–8 part-time seasonal local jobs (local lodge attendant/chambermaids; lead guides and assistant guides; cooks; maintenance)
   • $60,000 to $150,000 in local revenue

CASE STUDY: ST. PAUL ISLAND HERD

St. Paul Island has a herd of ~375 reindeer that are managed by the Tribal Government. Permits are required for harvest, free for residents and $50 for nonresidents of the Island. The community is researching plans to grow the herd as a tourism opportunity, attracting visitors to the island for hunting. They are also exploring export potential for reindeer sausage as an economic opportunity.23

ALEUTIAN ADVENTURES, APICDA

Aleutian Adventures, a reindeer hunting business run through APICDA., charges $13,500 for one trophy reindeer hunt on Unmak Island, AK.24

22 Personal communication, APICDA, 2019
Develop our Own Ecotourism Business: Community Ecolodge and Programming

The Pribilof Islands are unique and we have natural assets that attract tourists from around the world. On St. George we also have our National Heritage site and our Unangan culture to share with visitors. To capitalize on this opportunity and justify the significant investment required to make tourism a core pillar in our local economy, we need reliable access to and from our island and commitment to the protection and conservation of our local ecology which is our primary tourism attraction.

1. Functioning harbor – this will allow for water-based transportation (a large passenger vessel) making access to and from our island more reliable
2. Marine Sanctuary – signaling a commitment to conservation of a rare and special environment (i.e., an exceptional product) that could be further leveraged for marketing advantage

Our neighbors on St. Paul’s are experiencing an ever-increasing number of visitors interested in observing migratory birds, seals and the landscape of the Pribilofs. Because our tourism attractions are like St. Paul’s, we are at a competitive disadvantage due to unreliable access. Even with a functioning harbor, we lack a distinguishing feature. A marine sanctuary designation supported with a dedicated eco-lodge, however, would increase the overall demand for Pribilof tourism and distinguish us in the market.

An assumption for this option is that St. George will attract investment or otherwise have access to the capital required to upgrade the Aikow Inn and / or create a new ecotourism hotel on the island. Another assumption is that there will be enough visitors per year to sustain new and updated accommodations after the harbor and marine sanctuary are implemented.

Potential Tourism Activities and Programming:
- Photo Safari
- Birding
- SCUBA Diving
- Sports Fishing
- Wildlife Viewing
- Exploring (ATV, Jeep Tours, Guides)
- Kayaking
- Hiking
- Etc.

CASE STUDY: NIKOLSKI VILLAGE, UMNAK ISLAND

Alaska Adventure Travel, an ecotourism business that hosts various tours, lodgings, and educational travel opportunities runs an 8-10 person lodge in the rural village of Nikolski. Views of the town and the Vsevidof Volcano can be seen from the lodge and the $2,000 – $4,000 cost includes meals, guided tours, and in-field transportation.25

Anticipated Local Benefits

Assumes Harbor, Passenger Ferry and Marine Sanctuary Designation

- 1-2 full time jobs (on-site lodge manager)
- 7-10 part-time local jobs (chambermaids; lead guides and assistant guides; cooks; maintenance)
- $150,000 to $500,000 in local revenue\(^\text{26}\)

If the harbor is built, the Aleutian Pribilof Island Community Development Association (APICDA) has committed to contributing to:
- Construction of a lodge (est. 10 jobs)
- Seafood processing capacity (est. 100 jobs)
- Small businesses (est. 20 jobs)
- Seasonal ferry from St. George and St. Paul (est. 4 jobs)\(^\text{27}\)

These opportunities are reflective of the overall need for the harbor to assist St. George in developing a self-sustaining economy. If we develop a harbor, tourism and fisheries opportunities become more wide ranging, allowing our community’s economy to thrive. For more information on fisheries opportunities, see the fisheries working paper.


CASE STUDY: SPIRIT BEAR LODGE, KLEMTU, BRITISH COLUMBIA, CANADA

Spirit Bear Lodge offers various seasonal trip packages to the territory of the Kitasoo Xai’xais First Nation. Visitors are guided on hikes, canoes, and kayaks and educated on how this community promotes wildlife, culture, and conservation of their territory.

Source: https://www.spiritbear.com/site/experiences.html

THINKING AHEAD: GRANT FINANCING FOR TOURISM

Without funding, our community will not be successful in developing future tourism opportunities. There are a variety of grants available for St. George for this purpose, an example of which is listed here. If we were to successfully attain grants, other options would become much more feasible for us to pursue. More details on grants can be found in the List of Available Grants posted on the project website (link to website).

<table>
<thead>
<tr>
<th>Grant Title</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alaska Native Fund</strong></td>
<td>The Alaska Native Fund Steering Committee has identified environmental issues and core strategies to be supported by the fund. Indigenous Knowledge is at the center of the fund framework; the fund will support work in the following areas: climate change, food security, sustainable economies, energy, holistic wellness; applicants must incorporate at least one of the core strategies (policy development, leadership, youth organizing, communication and technology, art and expression, gathering)</td>
<td>Organizations range: $10,000 - $20,000; individual range: up to $10,000; youth range: up to $5,000</td>
</tr>
</tbody>
</table>
ST. GEORGE HARBOR

St. George’s existing harbor, on the west side of the island, is essentially unusable due to its size and location. As such, plans for a new harbor on the north side of the island are currently being assessed. Developing this harbor would both enable and strengthen our tourism industry, as it would allow for reliable access to our community and provide economic benefits that we can use to develop other tourism related assets in our community. Some of the other anticipated benefits of the harbor include:

- improved moorage and fishing boat access;
- better transportation to and from the island (e.g., for passenger ships);
- jobs and revenue creation during and after construction;
- enabling St. George to receive up to $383,800 worth of CDQ crab; and
- indirect benefits store sales, hospitality, marine services, and tourism industries.

The development of a new harbor will be further explored in an upcoming Working Paper.

Tourism provides a key source of economic benefits for many marine reserves worldwide. By establishing a national marine sanctuary around our community, it signals to nature-loving visitors that we are protecting and preserving an outstandingly significant marine environment around our island (in addition to tourism and other indirect benefits). Direct benefits to St. George (in addition to tourism and other indirect benefits) include:

- At least four full-time jobs
- $200,000 in annual government spending to support a sanctuary office
- $140,000 to $1 million in expenditures due to research grants
- $55,000 to $240,000 in annual recreation expenditures
- $22,000 to $44,000 in estimated subsistence harvest annually
- $2.8 billion to $3.3 billion in annual non-market ecosystem service benefits

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31 Ecosystem services are the benefits that humans freely gain from the natural environment and ecosystems, such as water purification, pollination of crops, and cultural services like recreation and sense of place.
Sustainable Tourism: The Impacts

If we’re going to meet the objectives of our people, we need to understand how future opportunities will affect our community. This matrix shows the impact that each of these tourism options would have on each of St. George's economic objectives. They are organized by without and with options of a harbor, passenger ferry, and marine sanctuary designation on the island.

### SUSTAINABLE TOURISM OPTIONS

<table>
<thead>
<tr>
<th>Community Economic Objective</th>
<th>WITHOUT Harbor-Passenger Ferry-Marine Sanctuary</th>
<th>WITH Harbor-Passenger Ferry-Marine Sanctuary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing Tourism Assets</td>
<td>Promote Ecotours</td>
</tr>
<tr>
<td>Increase cooperation between Tribe, City, and each other</td>
<td>Low</td>
<td>Med</td>
</tr>
<tr>
<td>Secure jobs for St. George residents</td>
<td>Low</td>
<td>Med</td>
</tr>
<tr>
<td>Maintain stable and sustainable finances</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Encourage our people to come home</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Advocate for secure, informed consent and consultation from the government</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>

### IMPACT SCORE END-POINT DEFINITIONS:

<table>
<thead>
<tr>
<th>Community Objective</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase cooperation between Tribe, City, and each other</td>
<td>City, Tribe and Tanaq work independently</td>
<td>City, Tribe and Tanaq work together</td>
</tr>
<tr>
<td>Secure jobs for St. George residents</td>
<td>Less than 2 (seasonal)</td>
<td>More than 10 (seasonal)</td>
</tr>
<tr>
<td>Maintain stable and sustainable finances</td>
<td>No financial contribution to government services (city or Tribe)</td>
<td>Important contribution to government services (city or Tribe)</td>
</tr>
<tr>
<td>Encourage our people to come home</td>
<td>No economic incentive or opportunity for our people to come home</td>
<td>Jobs our people want are available on St.George</td>
</tr>
<tr>
<td>Advocate for secure, informed consent and consultation from the government</td>
<td>Our government and citizens are not informed and not involved in key decisions affecting St.George</td>
<td>Our government and citizens are informed and involved in key decisions affecting St.George</td>
</tr>
</tbody>
</table>
Conclusion

Now that we know what our assets, opportunities, and impacts are, what are your thoughts on the future of St. George’s tourism industry? The impact that a harbor, passenger ferry, and marine sanctuary would have on our community is very promising. They could enable a thriving tourism industry that would bring money, jobs, visitors, and a sense of community pride to our Island.

We need your feedback to make sure we’re getting everything we can to inform a strong economic development strategy. Help us by providing feedback, additional information, comments, or questions about this Working Paper!

OPPORTUNITY
Community Ecolodge and Programming
1-2 full time job
7-10 part-time jobs
Less than $150 to $500k in local revenue

OPPORTUNITY
Promote Ecotours
Develop Reindeer Hunt
3-4 part-time jobs
Less than $30k in local revenue

TELL US WHAT’S MISSING!
Go to our online survey: bit.ly/stgeorgesurvey2

STAY A PART OF THE CONVERSATION!
Please contribute, your ideas are needed. Here are some simple ways to participate:

Go to our online survey and give your input about where St. George should go and how we should get there.
bit.ly/stgeorgesurvey2

Send an email or contact:
St. George Economic Development Project Team
stgeorgeeconomicdevelopment@gmail.com

Or visit the project website:
www.stgeorgealaska.org
Community Feedback and Opportunity Summary

64% of St. George residents support the idea of establishing a National Marine Sanctuary (NMS) around St. George.

39% of St. George residents are interested in jobs created as a result of a marine sanctuary, with another 32% saying they would need more information.

75% of St. George residents think it would be a good idea to partner with St. Paul on certain economic development initiatives, such as the Bering Sea Campus and Research Centre (discussed below).

<table>
<thead>
<tr>
<th>OPPORTUNITY*</th>
<th>CURRENT LOCAL JOBS</th>
<th>POTENTIAL LOCAL JOB OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. National Marine Sanctuary</td>
<td>NA</td>
<td>4 full-time²</td>
</tr>
<tr>
<td>2. Collaborate with St. Paul – Bering Sea Campus &amp; Research Centre</td>
<td>NA</td>
<td>To be determined in collaboration with St. Paul</td>
</tr>
<tr>
<td>3. Boost education, research, and conservation programs on St. George</td>
<td>1 full-time position, EPA funded</td>
<td></td>
</tr>
<tr>
<td>a. Summer seal monitoring and harvesting (existing opportunity)</td>
<td>4 – 5 unfilled seasonal positions</td>
<td>4 – 5 part-time, seasonal</td>
</tr>
<tr>
<td>b. Marine Debris Removal Grant (existing opportunity)</td>
<td>0</td>
<td>10 temporary (two weeks)</td>
</tr>
<tr>
<td>c. Participation in US Fish and Wildlife Service bird monitoring</td>
<td>0</td>
<td>1 – 2 part-time, seasonal³</td>
</tr>
<tr>
<td>d. Additional funding for youth programming</td>
<td>0</td>
<td>8 part-time, seasonal internships⁴</td>
</tr>
</tbody>
</table>

*These opportunities are further described below.

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1 Community survey of adults living on St. George, May 2019. (n = 28)
3 Current USFW bird monitoring on St. George involves 2 – 3 people per year. Assuming at least one person would need to be from off-island to train St. George residents to start, the other 1-2 positions could potentially be filled by St. George residents.
4 Estimate based on number of youth jobs created through a project funded by the National Fish and Wildlife Foundation’s “Developing the Next Generation of Conservationists” in a comparable location. See https://www.nfwf.org/youth/Documents/2014-project-list.pdf.

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St. George Economic Development Working Papers are early efforts to pull together the best available information for future decisions on St. George. These should be seen as partial, incomplete, and in need of your feedback. We are looking to those who care about St. George to provide corrections and better information so these can be updated for final recommendations and reporting.

Thank you to everyone who has provided input so far.

To provide feedback, additional information, comments, or questions about this Working Paper, please contact stgeorgeeconomicdevelopment@gmail.com or visit our website at www.stgeorgealaska.org. We look forward to hearing from you.
Current Situation

St. George lies within a biologically rich area of the Bering Sea known as the “green belt,” home to globally significant populations of seabirds, mammals, and (shell)fish. These include roughly 70% of the world’s Northern Fur Seal population, older female halibut that support the entire coast–wide Pacific halibut population, and the largest (by volume) American fishery of Alaska walleye pollock, as well as many important marine mammal migrations through the Bering Strait.

Our community’s livelihood, culture, and history, as well as Unangan spirituality, are closely intertwined with the surrounding marine ecosystems. From the island’s early history with fur seal harvesting to the rise of commercial fishing in the 1980s, marine resources have always been central to the island’s economy. A heavy reliance on subsistence use continues today, with an average of 52 pounds of marine mammals and fish per person harvested annually – a critical source of affordable food.

Due to its ecological uniqueness, as well as various heritage sites and archeologically noteworthy resources, including unexplored shipwrecks, St. George has long been a special destination for researchers, scientists, and wildlife tourists. Due to St. George’s unique characteristics, research on and around St. George can be used to monitor and understand changes taking place throughout the entire Bering Sea. For example, the primary species that breed on the Pribilofs are all declining; this can be studied as indicators of the Bering Sea ecosystem’s health. Despite the ongoing potential for research, education, and wildlife viewing on and around St. George, the number of visitors to the island has been minimal for a number of reasons (transportation, marketing, lodging, etc.).

While this area has historically been one of the worlds’ most productive ecosystems, species have been declining in population over the last few decades, as observed by researchers and community members alike. We are already feeling the impacts of climate change (loss of sea ice, warming average air temperature, ocean acidification, etc.) which, along with pollution, the impact of commercial fisheries, increased vessel traffic, invasive species, oil and gas spills, and marine debris threaten the area’s marine ecosystems. This has also affected the fishing industry, and (for a variety of complex reasons) our island’s economy is no longer being directly sustained by the fishing industry despite being surrounded by some of the United States’ most valuable commercial fisheries.

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9 City of St. George (2016) St. George Unangan Heritage National Marine Sanctuary Nomination
11 Through the Aleutian Pribilof Island Community Development Association (APICDA), our economy benefits from the Bering Sea commercial fishery.
12 Alaska Department of Fish and Game. “Commercial Fisheries Overview.”
Current conservation, monitoring, and education efforts include:

- Seabird cliffs on St. George are protected as part of the Alaska Maritime National Wildlife Refuge, established in 1980.\(^{13}\)
- The US Fish and Wildlife Service sends a team of two or three biologists to the Pribilof Islands every summer to survey nest-success rates for seabirds.\(^{14}\)
- Stellar Sea Lions and Northern Fur Seals are protected and monitored through a co-management agreement (2001) between the St. George Traditional Council and National Marine Fisheries Service (a branch of the National Oceanic and Atmospheric Administration, or NOAA) under the Marine Mammal Protection Act, including conservation efforts to limit hunting to Alaska Native subsistence hunters, protection of rookeries, etc.\(^{14, 15}\)
- In the summer of 2018, the St. George Traditional Council posted four to five part-time job openings on-island as part of the seal harvest, yet received no applications.\(^{16}\)
- The Pribilof Domain, surrounding St. George, is recognized by the Audubon Society as an Important Bird Area, a program that aims to conserve, monitor, and protect critical bird habitats through community-supported conservation.\(^{16, 17}\)
- Seabird Camps for youth are put on by the Seabird Youth Network.\(^{18, 19}\)
- Summer science camps are offered every year by the Aleut Community of St. Paul Island Ecosystem Conservation Office (ECO) for youth from both St. Paul and St. George Islands.\(^{20}\)
- The Audubon Mapping Project has made a set of maps for the Pribilof Islands to highlight special ecosystems and provide communities with sets of maps to restore local knowledge of species.\(^{16, 17}\)
- Beach marine debris clean ups have taken place in the past, supported by NOAA’s Community-based Marine Debris Removal Grant.\(^{21}\) St. George and St. Paul recently jointly applied for this funding again, which could bring approximately $80,000 to St. George and employ 10 people for two weeks.\(^{22}\)

With such a unique yet threatened environment, we are looking for additional ways to preserve and protect our land, water, and wildlife on and around St. George. Despite existing challenges to the community (e.g., transportation), additional protections could be achieved through a National Marine Sanctuary, which is anticipated to enable integrated management and provide benefits to the community,\(^{23}\) as well as additional research and education opportunities as explored below.

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\(^{13}\) https://www.fws.gov/refuge/alaska_maritime/purpose.html
\(^{17}\) http://ok.audubon.org/important-bird-areas-4
\(^{18}\) The Network is a partnership between the Pribilof School District, the Aleut Community of St. Paul Island, the City of St. Paul, Tanadgux Corporation, the St. George Traditional Council, St. George Island Institute, the Alaska Maritime National Wildlife Refuge, and the wider scientific community. The Network was started to support students in learning about local natural resource management and related careers, and to build local capacity for seabird monitoring.
\(^{20}\) With support from the Central Bering Sea Fishermen’s Association and APICDA.
\(^{22}\) St. George Traditional Council (2019) personal communication.
Key Challenges and Possible Responses

There are several challenges that need to be addressed in order to pursue opportunities related to research, education, and conservation.

<table>
<thead>
<tr>
<th>Challenges and Success Factors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transportation to and from St. George</strong></td>
<td>The remoteness of our community makes access the single largest barrier for tourism development, researchers, and scientists. It is not unusual for weather to delay flights. Visitors need reliable access on and off the island, and uncertainty of access contributes to the difficulty of attracting visitors. Transportation could be improved through a passenger ferry/large transport vessel between St. Paul and St. George, as well as a new harbor.</td>
</tr>
<tr>
<td><strong>Misinformation and Uncertainty</strong></td>
<td>The NMS project has the potential to protect St. George’s marine environment and bring economic benefits to the community. The initiative will be most successful and beneficial if it has wide ranging community support, and as such it will be highly important to address all concerns, considerations, and remaining questions.</td>
</tr>
<tr>
<td><strong>Climate Change &amp; Associated Impacts</strong></td>
<td>Uncertainty about the impacts of climate change on St. George’s marine resources makes it difficult to plan for the future. For example, rising ocean temperatures impact all sea life, from microbes to the migration and breeding patterns of fish and mammals, adding a layer of complexity to how and where conservation strategies are put in place. Additional scientific research into the impacts of climate change to our community is important.</td>
</tr>
</tbody>
</table>

Opportunities

This symbol indicates how opportunities would be impacted by the presence of a National Marine Sanctuary (see opportunities 2 and 3).

OPPORTUNITY 1: NATIONAL MARINE SANCTUARY

What it is: A National Marine Sanctuary is a federal designation under NOAA that promotes sustainable uses (including fishing, research, education, and tourism) and protects marine life within a designated marine area. There are currently 14 NMSs across the USA covering more than 170,000 square miles of waters. Sanctuaries are designated around marine areas of special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational, or esthetic qualities.

St. George’s Sanctuary Proposal:

In 2016, the City of St. George submitted a nomination to NOAA to designate the waters surrounding St. George as the St. George Unangan Heritage National Marine Sanctuary (the “Sanctuary”). The proposed boundary would extend seaward 30 miles around the island of St. George, and 20 miles due north for a total of 3,300 square miles, as shown in the figure.

In early 2017, the proposed sanctuary was accepted through NOAA’s nomination process and added to their inventory of areas to be considered for potential designation as an NMS. The actual designation process entails greater analysis and planning, usually taking 2-3 years. During that period, NOAA consults extensively with the public and relevant stakeholders (e.g., regional councils, government agencies, industry coastal zone management agencies, federally recognized tribes, etc.) to take into account the perspectives and interests of all concerned and to develop an integrated management plan. Were the Sanctuary to be designated, the perspectives of a wide range of stakeholders would also be included in the Sanctuary decision-making process through a Sanctuary Advisory Council that would include, among others, representatives of the St. George community.

Image source: https://unangansanctuary.wordpress.com/maps/

Image source: https://unangansanctuary.wordpress.com/maps-and-photos/
POTENTIAL BENEFITS SHOULD THE SANCTUARY BE DESIGNATED INCLUDE:

- At least four full-time jobs
- $200,000 in annual government spending to support a sanctuary office
- $140,000 to $1 million in expenditures due to research grants
- $55,000 to $240,000 in annual recreation expenditures
- $22,000 to $44,000 in estimated subsistence harvest annually
- $2.8 billion to $3.3 billion in annual non-market ecosystem service benefits

Additional benefits from tourism that may result

Note: Further investigation into how much of these benefits will flow directly into St. George’s economy is required. This information was not available at the time of writing.

These benefits could grow over time. In addition, marine sanctuaries help preserve fish populations which will help ensure that the fishing industry is more sustainable long-term. Resources that would accompany the Sanctuary designation (e.g., a Sanctuary office), as well as the increased national profile of St. George’s marine environment, would enable greater research and studies on marine ecology, biology, and oceanography, as well as on Unangan cultural heritage.

CASE STUDY: FAGATELE BAY NATIONAL MARINE SANCTUARY, AMERICAN SAMOA

Fagatele Bay is one of the smallest NMS offices and is the most remote, yet it delivers large economic benefits to the small island around which it is located. These include:

- $5 million per year in total benefits to American Samoa residents and visitors derived from coral reefs;
- Increasing numbers of tourists; and
- $250,000 worth of commercially landed fish in 2009.

Note: Further detail about how much of these benefits stayed on the island would be helpful but was not available at the time of writing.

27 Ecosystem services are the benefits that humans freely gain from the natural environment and ecosystems, such as water purification, pollination of crops, and cultural services like recreation and sense of place.
29 City of St. George (2016) St. George Unangan Heritage National Marine Sanctuary Nomination
Sanctuary Q & A

Q: How would the sanctuary impact fishing?

A: Sanctuaries do not manage fishing. In fact, commercial and recreational fishing and shore-side operations exist in virtually every national marine sanctuary. Under the National Marine Sanctuary Act, sanctuaries are adaptively managed and promote multiple uses. In the case of the St. George Sanctuary, the North Pacific Regional Fisheries Management Council and the State of Alaska would retain management and regulatory authority over St. George’s fisheries. If a fishery issue were to arise within Sanctuary waters, Sanctuary staff and the Sanctuary advisory council would work with federal and state managers to understand and address the issue cooperatively. The Sanctuary provides an opportunity to manage our marine resources comprehensively and build resilience to current challenges such as climate change, marine pollution, plastic debris, increased shipping, etc. The intention would be to ensure a sustainable environment that both supports human livelihoods and protects our treasured resources.

Q: Where would the Sanctuary office be located?

A: The nomination proposes using the NOAA-owned Seal Skin Plant on St. George to house the sanctuary office.

Q: Would the sanctuary prevent a new harbor (see text box) from being built?

A: No. Redevelopment and expansion of the St. George Harbor is exactly the type of local economic development that the Sanctuary is intended to support, as stated in the Sanctuary nomination. The nomination explicitly states that the Sanctuary boundaries would include “a quarter-mile buffer zone around the St. George Harbor [to] ensure that the Harbor can be reconstructed, expanded, and returned to greater activity.” In fact, the creation of the Sanctuary could help St. George to gain support for our Harbor project.

Q: Could the boundaries ever be shifted?

A: During the designation process, NOAA will analyze the proposed boundaries. Following designation, the Sanctuary boundaries could only be modified using the same process used for the original designation (i.e., various phases of consultation, planning, analysis, etc.).

ST. GEORGE HARBOR
St. George’s existing harbor, on the west side of the island, is essentially unusable due to its size and location. As such, plans for a new harbor on the north side of the island are currently being assessed. The U.S. Army Corps’ of Engineers estimates that the total project costs would be $100,684,000. Some of the anticipated benefits of the harbor include:

- improved moorage and fishing boat access;
- better transportation to and from the island (e.g., for passenger ships);
- jobs and revenue creation during and after construction;
- enabling St. George to potentially receive $383,800 worth of CDQ crab; and
- indirect benefits to sales, hospitality, marine services, and tourism industries.  

It is important to note that the harbor and marine sanctuary are mutually beneficial, not exclusive. For example, having a new harbor would make it easier for research boats and cruise ships to dock on the island to visit the sanctuary; having a sanctuary would draw such vessels to utilize St. George’s harbor. The new harbor opportunity will be further explored in another Working Paper.

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OPPORTUNITY 2: COLLABORATE WITH ST. PAUL ON THE BERING SEA CAMPUS AND RESEARCH CENTER

The Tribal government on St. Paul is currently in the process of developing a Bering Sea Campus and Research Center, which would support natural resource management and attract additional scientific research and exploration. The Tribe’s Ecosystem Conservation Office (ECO) aims to host and partner with external researchers, and to lead their own research projects to provide education and employment opportunities for youth on St. Paul.

This project is in its early phases of development. The ECO has made clear that St. George would be welcome to collaborate with St. Paul on this project. Joining this effort, already underway, could benefit both communities in the near term and could be expanded to bring additional benefits were the Sanctuary to be designated. The details of how this would look would need to be further discussed between St. Paul and St. George.

POTENTIAL BENEFITS TO ST. GEORGE INCLUDE:

- Shared access to greater research and education facilities to conduct or share in scientific exploration and studies;
- Strengthened foundation for attracting additional funding and grants;
- Research, training, education, and possibly employment opportunities for youth and community members; and
- Opportunities to collaborate with the proposed NMS to together attract greater resources, international attention, and visitors.

33 St. Paul Ecosystem Conservation Office (2019) Personal communication
34 St. Paul Ecosystem Conservation Office (2019) Personal communication
OPPORTUNITY 3: BOOST EDUCATION, RESEARCH, AND CONSERVATION PROGRAMS AND PROJECTS ON ST. GEORGE

Existing programs (listed above under “Current Situation”) are undoubtedly benefitting the community by deepening participants’ understanding of the importance of protecting St. George’s natural surroundings while building and expanding their skills and knowledge. These benefits could be elevated even more with additional funding, capacity, and institutional support (e.g., through NOAA) for community-involved research, conservation, and monitoring programs that integrate Western science with local Unangan knowledge. Several opportunities are as follows:

<table>
<thead>
<tr>
<th>OPPORTUNITY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3a. Summer seal monitoring and harvesting</strong></td>
<td>The co-management agreement between the St. George Traditional Council and National Marine Fisheries Service includes seal monitoring and harvesting. In the summer of 2018, the St. George Traditional Council posted four to five part-time job openings on-island as part of the seal harvest, but received no applications. These positions could perhaps be filled in the future through increased community education and awareness around the opportunity, and, if possible, adjusting the job positions to match the needs and interests of potential applicants. This may require two-way discussion beforehand.</td>
</tr>
<tr>
<td><strong>3b. Marine Debris Removal Grant</strong></td>
<td>Beach marine debris clean ups have taken place in the past, supported by NOAA’s Community-based Marine Debris Removal Grant. St. George and St. Paul recently jointly applied for this funding again, which could bring approximately $80,000 to St. George and employ 10 people for two weeks.</td>
</tr>
<tr>
<td><strong>3c. Participation in US Fish and Wildlife Service bird monitoring</strong></td>
<td>Discussions could be held with US Fish and Wildlife Service on how to include St. George community members in the above-mentioned bird monitoring that takes place every summer.</td>
</tr>
<tr>
<td><strong>3d. Additional funding for youth programming</strong></td>
<td>Funding could be sought to boost or develop additional youth monitoring and education programs, such as the National Fish and Wildlife Fund’s “Developing the Next Generation of Conservationists” grant. Other available grants can be found on the project website.</td>
</tr>
</tbody>
</table>

**ADDITIONAL POTENTIAL BENEFITS:**

If the Sanctuary is designated, St. George could be opened to other educational programs run by NOAA, such as Ocean Guardian school and classroom programs for youth.

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Image source: http://seabirdyouth.org/day-three-st-george/
Conclusion

St. George island and the surrounding Bering Sea are globally significant due to their unique marine, ecological, cultural, historical, and archeological resources. There are various opportunities to protect and strengthen the area’s ecology, culture, and history while boosting the island’s economy, some of which have been highlighted in this Working Paper. As with any of the economic development opportunities, the dedication and collaboration between all organizations and individuals on St. George will be key to making them happen.
Community Feedback and Opportunity Summary

When asked what goals people are hoping the Economic Development Strategy will help achieve, “Jobs for St. George residents” was the number one goal chosen by St. George residents. “Jobs for St. George residents” was also the second most highly ranked factor that would help improve residents’ quality of life.1

<table>
<thead>
<tr>
<th>OPPORTUNITY*</th>
<th>POTENTIAL LOCAL ECONOMIC BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reindeer Harvesting and Processing</td>
<td>3 – 4 jobs2</td>
</tr>
<tr>
<td>2. Homestay Accommodation</td>
<td>$6,776 annual earnings / host3</td>
</tr>
<tr>
<td>3. Home-Based Restaurant</td>
<td>1 – 3 part-time jobs4</td>
</tr>
<tr>
<td>4. Catering Business</td>
<td>1 – 2 part-time jobs5</td>
</tr>
<tr>
<td>5. Island-made Artisanal Products</td>
<td>1 – 2 part-time jobs6</td>
</tr>
</tbody>
</table>

*These opportunities are further described below.

1 Community survey of adults living on St. George. June 2019. (n = 28)
4 Estimates based on comparable businesses
5 Estimates based on comparable businesses
6 Estimates based on comparable businesses

St. George Economic Development Working Papers are early efforts to pull together the best available information for future decisions on St. George. These should be seen as partial, incomplete, and in need of your feedback. We are looking to those who care about St. George to provide corrections and better information so these can be updated for final recommendations and reporting.

Thank you to everyone that has provided their input so far.

To provide feedback, additional information, comments, or questions about this Working Paper, please contact stgeorgeeconomicdevelopment@gmail.com or visit our website at www.stgeorgealaska.org. We look forward to hearing from you.
Introduction

One of the major challenges facing St. George is having enough job opportunities to keep residents, particularly youth and young families, on the island. For the past several decades, fishing has been the economic foundation of the island, but in recent years fishing related revenues have declined and few St. George residents are directly employed in this industry (see the Fisheries and Community Profile Working Papers).

At the same time, only about half of the limited entry Halibut fishing permits held by St. George residents were used in 2016, and recent job postings to harvest the annual allowable seal hunt received no applications. This suggests a possible mismatch between the types of jobs available and the types of jobs people want on St. George. As such, it will be important that efforts to create jobs consider what types of jobs people are interested in doing.

Small, rural communities around the world that were formerly single resource-dependent are diversifying their economic base to include growing industries like ecotourism (see Working Paper 5), and innovative ways of earning income. This opens opportunities to those with an entrepreneurial spirit and a good business idea. In this working paper, business supports and potential small business opportunities are highlighted.

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7 Colt, Steve (2018) “City of Saint George, Alaska Economic and Fiscal Profile and Recent Trends.”
8 St. George Traditional Council (2019) Personal communication.
Current Situation

As of 2016, 81% of St. George residents over the age of 16 are participating in the labor force. Of the residents within the labor force, 15% were unemployed as of 2016.\(^9\) Despite fishing being a center point of St. George’s economy in the past several decades, the most common type of work currently is in local island administration.

No St. George residents currently possess business licenses,\(^10\) although there are several businesses and government services on the island that create some employment, listed in Table 1.

Table 1: Employment by Organization on St. George

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>EMPLOYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Businesses</strong></td>
<td></td>
</tr>
<tr>
<td>Store/canteen run by the Traditional Council</td>
<td>1 job</td>
</tr>
<tr>
<td>Small grocery mart run by the City of St. George</td>
<td>2 part-time jobs</td>
</tr>
<tr>
<td>Aikow Inn, owned by St. George Tanaq Corporation</td>
<td>1 full-time caretaker, 1 part-time maintenance worker</td>
</tr>
<tr>
<td><strong>Government Services</strong></td>
<td></td>
</tr>
<tr>
<td>City of St. George</td>
<td>7 jobs</td>
</tr>
<tr>
<td>St. George Traditional Council</td>
<td>Approx. 2 jobs</td>
</tr>
<tr>
<td>Airport (Federal Aviation Authority)</td>
<td>2 jobs</td>
</tr>
<tr>
<td>Health Clinic</td>
<td>3 – 4 jobs</td>
</tr>
<tr>
<td>Post Office</td>
<td>1 job</td>
</tr>
</tbody>
</table>

\(^9\) U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates.
\(^10\) Ibid.
Key Challenges and Possible Responses

St. George faces the same small business challenges that many small communities do, compounded by its highly remote location and transportation barriers. These are outlined in Table 2 below.

Table 2 Challenges to small business on St. George

<table>
<thead>
<tr>
<th>Challenges and Success Factors</th>
<th>Description</th>
</tr>
</thead>
</table>
| **High transport and shipping costs** | **Challenge:** The high cost and unreliability of transportation and shipping create barriers for moving goods and products to and from the island.  
**Success Factor:** Reliable transportation options to and from St. George, such as through a new harbor (see Harbor working paper).  
Transportation would be greatly improved with the construction of a new harbor (see ‘Harbor and Business Opportunities’ text box below) which would enable more and larger vessels to dock at St. George.  
In addition, other innovative transportation models may present opportunities to send and receive goods and materials (see ‘Innovative Transportation’ text box below). |
| **Small domestic market** | **Challenge:** St. George’s population is too small to support many businesses.  
**Success Factor:** Use of online marketplaces to expand reach beyond the on-island market.  
Depending on what product or service is being offered, the market is not necessarily confined to St. George island, especially given today’s variety of online marketplaces. A study of small, remote island enterprises in Europe found that all successful businesses are focused on exporting, and that marketing is most effective when the branding aligns with the history and culture of the island on which they are produced. |
| **Inability to operate at economies of scale** | **Challenge:** It is more expensive to purchase and sell goods and materials in smaller quantities.  
**Success Factor:** Making use of both innovative and traditional ways of the island’s various natural resources.  
The same study found that most successful, small island companies have developed a manufactured product whose core raw material input is mainly or totally sourced from the island, which reduces import bills and accompanying transportation and insurance costs. |
| **Maintaining employees** | **Challenge:** There is a gap between the types of jobs available and potential employees with suitable interest, skill, and a desire to stay on St. George rather than moving to bigger, urban centres.  
**Success Factor:** Concerted effort to match job opportunities and training with residents’ skills and interest.  
In working to create job opportunities, it will be important to ensure that they align with the skills and interests of residents. Targeted job training and skills development (for which various grants exist, see Grants Working Paper) could help fill labour gaps. When organizing training and skills development opportunities, it will be important to first discuss with community members what areas they are interested in. |
| **Lack of business support and infrastructural services** | **Challenge:** Lack of business support and infrastructural services, such as telecommunications (e.g., high speed internet) and venture capital make it difficult to start a business on St. George.  
**Success Factor:** Utilize existing resources and pursue better communications connectivity.  
Various resources (e.g., business planning, financing, etc.) are offered, such as by the State of Alaska’s Small Business Assistance, to support small businesses and entrepreneurs (see below).  
Upgrading St. George’s internet and cellphone service would benefit the Island in a multitude of ways, including making it much easier and more desirable for businesses to operate on St. George (see below). |

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12 Ibid

INNOVATIVE TRANSPORTATION

A new agreement between Sabrewing Aircraft Co., and St. Paul Island will transport cargo between mainland Alaska and St. Paul and St. George islands using electric vertical takeoff and landing (eVTOL) aircraft. The aircraft are gas–electric hybrid, fly autonomously, and are capable of landing and taking off in all weather conditions. While the purpose of this agreement is to provide reliable food, medicine, and other life–essential supplies to St. Paul and St. George, there may be future opportunities to expand the use of this kind of aircraft to ship goods and products.

Opportunities

Opportunities in both infrastructure and supports to facilitate small businesses and entrepreneurship, as well as specific business ideas viable on St. George, are explored below.

INFRASTRUCTURE AND SUPPORTS

Internet & Telecommunications Connectivity

Improved internet and cellphone service on St. George could go a long way in encouraging remote workers to move (back) to or stay on St. George. Remote workers benefit the local economy by:

- Attracting new talent and building entrepreneurship;
- Building the tax base;
- Strengthening local technology culture and diversifying labor pools;
- Stimulating the local economy and reducing unemployment rates; and
- Increasing tourism (e.g., if people come in for meetings).

Internet on St. George is currently poor, and the island is not connected to cell service. Some potential options for improvement have been discussed, such as a microwave tower, or connecting to a fibre optic cable planned along a nearby route (there was discussion of a fibre optic connection between Japan and Nome, Alaska.)

REMOTE ISLAND INTERNET ACCESS

While connecting an island as remote as St. George may seem challenging, it is possible. The highly remote, island nation of Tonga, for example, secured a fibre optic cable connection through Fiji by appealing to the World Bank for financial support, following a UNESCO report that linked growth in broadband access to a 1.4% rise in low income nations’ annual economic growth.

15 City of St. George (2019) Personal communication.
**Micro Loans & Financing**

Financing a start-up or small business expansion can be challenging. Various loans and financing options are available to support small business start-up and expansion, such as through the State of Alaska Division of Economic Development, Department of Commerce, Community, and Economic Development:

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mariculture Loan Program</td>
<td>up to $100,000/year for planning, construction, and operation of a mariculture business.</td>
</tr>
<tr>
<td>Microloan Loan Program</td>
<td>up to $35,000/person for working capital, equipment, construction or other purposes for a business.</td>
</tr>
<tr>
<td>Rural Development Initiative Fund</td>
<td>up to $150,000 for working capital, equipment, construction, or other purposes to finance start-ups or business expansion that will create long-term employment.</td>
</tr>
<tr>
<td>Small Business Economic Development</td>
<td>up to $300,000 to finance start-ups and business expansions that will create significant long-term employment.</td>
</tr>
</tbody>
</table>

For more information on these opportunities and others, visit the State of Alaska’s [Small Business Assistance Centre](#).

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**Small Business Supports/Resources**

Many resources offering support and resources for Alaskan businesses already exist, such as:

**Business Development Supports:**

The Alaska Small Business Development Center helps small businesses throughout Alaska grow by providing:

- low cost business workshops,
- online resources (e.g. business plan outlines, financial model worksheets, etc.), and
- no-cost confidential and one-on-one business coaching.

The State of Alaska’s Small Business Assistance Center provides direction and support for entrepreneurs, start-ups, and existing businesses in Alaska. Their [website](#) lists dozens of resources ranging from Events/Training, to Financing, to Licenses and Permits, etc.

**Marketing Supports:**

Value can be added to small island products through distinct and differentiated products and marketing that build on the island’s unique culture and history, which helps especially in targeting the tourism sector.

- [Alaska Grown](#) highlights products grown in Alaska (including meat, mariculture, etc.) to help connect Alaskan farmers with consumers. Eligible producers get to use the Alaska Grown logo.
- [Made in Alaska](#) promotes products (ranging from small gift items to large industrial modules) made, manufactured, or handcrafted in the state.

The Aleutian Marketplace Fellowship Competition is a regional competition open to businesses in APICDA communities. It aims to improve small business development by facilitating innovators’ and entrepreneurs’ access to established training and mentorship opportunities at statewide events. Aspiring entrepreneurs who win the competition are awarded grants by APICDA.

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17 Mariculture is the cultivation of fish or other marine life for food.
Small Business Ideas and Opportunities

REINDEER HARVESTING AND PROCESSING
Owned by the St. George Tanaq Corporation, a herd of approximately 350 reindeer lives on St. George, some of which could be harvested and processed. A collaboration between Unalaska and St. George is already underway to gather equipment for a reindeer processing plant that could harvest approximately 50 reindeer annually. This would require additional equipment and materials (on top of what has already been sourced from Unalaska) for the plant, as well as securing and training several employees. This opportunity would require relatively small capital to start, and would bring benefits such as:

- Creating three or four new jobs.
- Producing a sustainable source of food for St. George residents, some of which could also be sent to Anchorage, processed into sausages, and sold for additional revenue.
- Boosting St. George as a hunting destination, as sport hunters might pay between $5000 - $10,000 for a week-long reindeer hunting trip. (See the Sustainable Tourism Working Paper for more information on reindeer hunting). Transportation permitting, this could eventually also be extended to the additional land owned by St. George on other Aleutian Islands that are home to significant herds of cattle, sheep, and more reindeer.

HOMESTAY ACCOMMODATION
Offering alternative accommodation on St. George is one way to appeal to adventurous travellers. Airbnb has become the preeminent home sharing platform, and is becoming increasingly successful in rural areas, particularly remote communities with no investment by corporate hotel chains, like St. George. Benefits and key points about Airbnb include:

- Additional income: Median annual earnings for a rural host (across the US) in 2017 were $6,776. Airbnb generally charges the host a 3% fee per reservation.
- Growing industry: Alaska has seen a 186% year-over-year growth in guest arrivals to rural regions since 2012.
- Low barriers to entry: to become an Airbnb host, one needs some spare space (e.g., a guest bedroom), an account on Airbnb, and to check local laws and tax obligations.
- Ripple effects to the local economy: Airbnb guests spend a high percentage of their money in the hosting communities.
- Existing BnBs and hotels, such as the Aikow Inn, can also list themselves on Airbnb and benefit from the increased marketing and exposure that comes with using such a popular platform.

While there are currently no postings on St. George (or neighboring St. Paul), other remote Alaskans have already taken advantage of this platform. Postings in spring of 2019 include:

- $167/night to stay in a “New York Style Loft Apartment” in Unalaska
- $167/night for an “Adak/Aleutian Experience” in Adak
- $133/night to stay in a shipping container in Prudhoe Bay

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20 City of St. George (2019) Personal communication.
22 Some controversy surrounds Airbnb’s impacts on host communities’ housing availability and affordability, previously existing businesses, as well as lack of regulation and tax collection. However, these impacts can be mitigated through proper local regulation.
24 Laws and tax obligations related to Airbnb vary by municipality, and many cities have put regulations in place to ensure Airbnb is done responsibly and in a way that contributes to the local economy.
CATERING AND GASTRONOMY

Currently, there are no restaurants on the island; visitors who stay in the hotel can use the kitchen to cook for themselves. This presents at least two opportunities:

1. **A home-based restaurant** could be marketed as an authentic Unangan or Alaskan culinary experience that uses local ingredients to serve traditional meals. Culinary tourism is a growing global industry that can both strengthen local culture and cuisine, and deliver positive economic impacts.27

2. **A catering business** would be especially effective together with other economic development initiatives, such as the harbor, marine sanctuary, and/or ecotourism trips, which could draw larger groups of researchers, scientists, wildlife viewers, etc. to the island. This could potentially be done in partnership with the hotel, which already has a kitchen space. While demand may be sparse or sporadic in the beginning, having catering available is the sort of feature that potential visitors may look for when planning a trip, and could be one more reason for a group of researchers or wildlife viewers to choose St. George as their destination.

CASE STUDY: BARNACLE FOODS

Barnacle Foods, based in Juneau, has a vision to “create jobs and help Alaska boost its food security.”28 They produce kelp products, such as kelp pickles ($7.95 online) and kelp seasoning powder ($13.95 online), that are currently sold online and in specialty food stores and gift shops in Alaska.29

Source: https://www.barnaclefoods.com

CASE STUDY: KEENAWAI’S KITCHEN, SKIDEGATE, CANADA

An example of this sort of enterprise is Keenawaii’s Kitchen, located in Skidegate, BC, on the remote islands of Haida Gwaii. Started by local chef Keenawaii, her business attracts groups of two to twenty-five tourists at a time, year-round, and is marketed as traditional Haida foods with ingredients caught, harvested, or grown on-island. Customers each pay approximately USD$37 per meal, and Keenawaii often employs one to two helpers per meal.

Keenawaii’s Kitchen, Haida Gwaii, BC. Image source: https://lovenorthernbc.com/community/skidegate/business/keenawaiis-kitchen/#&gid=1&pid=1

ISLAND-MADE ARTISANAL PRODUCTS

As past research suggests, sourcing the main material input locally and associating branding with the history and culture of the island on which products are produced helps create successful artisanal business models.30 This both reduces the cost of materials and enables niche marketing for the product that could synergize with the local tourism industry. Among other opportunities, this could take the form of Island-made artisanal products, such as:

- Driftwood art and firewood sales
- Grass harvesting and sales for basket weaving
- Kelp products: global demand for seaweed products (e.g., food, fertilizer, animal feed, cosmetics, and other value-added products) is growing rapidly.31 (See the Fisheries Working Paper for more information on seaweed farming).

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Conclusion

While some of the larger potential projects on St. George, like a new harbor, have the greatest potential to create jobs, the collective impact of individual efforts, like starting a new business, should not be underestimated. Even just one successful new business that builds on St. George’s current assets could provide a significant boost to our local economy.

ST. GEORGE HARBOR AND BUSINESS OPPORTUNITIES

One of the economic development options that will be explored in a future Working Paper is a new harbor. The existing harbor on the west side of St. George is essentially unusable due to its size and location. The increased flow of goods and people to and from the island that would result from a new harbor would inevitable create additional business opportunities. Some suggestions so far include:

- A café
- Washateria with public showers
- Steam bath
- Heavy equipment storage

Tell us what’s missing!
Go to our online survey: bit.ly/stgeorgesurvey2

Stay a part of the conversation!
Please contribute, your ideas are needed. Here are some simple ways to participate:

Go to our online survey and give your input about where St. George should go and how we should get there.

bit.ly/stgeorgesurvey2

Send an email or contact:
St. George Economic Development Project Team
stgeorgeeconomicdevelopment@gmail.com

Or visit the project website:
www.stgeorgealaska.org
Community Feedback and Opportunities Summary

This summary table outlines the core findings from this working paper on quality of life. Of the opportunities explored, potential benefits and outcomes for St. George are listed. On the next page, we also outline some of the key aspects related to quality of life, identified by people living on St. George.

<table>
<thead>
<tr>
<th>OPPORTUNITIES*</th>
<th>BENEFITS / POTENTIAL OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windmill repairs and other renewable energy sources</td>
<td>• $250,000 - $300,000 in annual cost savings¹&lt;br&gt;• Renewable power for half the community²&lt;br&gt;• Reduces diesel use on island</td>
</tr>
<tr>
<td>Expanding the greenhouse</td>
<td>• 2 jobs³&lt;br&gt;• Local food production (potential for farmers market)⁴&lt;br&gt;• Educational opportunities⁵&lt;br&gt;• Provides communal space for our people to connect and share food⁶</td>
</tr>
<tr>
<td>Communications and internet accessibility</td>
<td>• Access to potential job opportunities⁷&lt;br&gt;• Can provide educational opportunities for youth and other community members⁸&lt;br&gt;• Can lead to opportunities for sophisticated medical equipment on island, benefiting access to health resources⁹</td>
</tr>
</tbody>
</table>

*These opportunities are further described below

1 City of St. George (2019), personal communication.
3 City of St. George (2019), personal communication.
4 City of St. George (2019), personal communication.

Thank you to everyone that has provided their input so far.

To provide feedback, additional information, comments, or questions about this Working Paper, please contact stgeorgeeconomicdevelopment@gmail.com or visit our website at www.stgeorgealaska.org. We look forward to hearing from you.
Community members were asked which of the following options are most important to enhancing quality of life on St. George. The figure below shows how members ranked quality of life aspects on St. George, with reduced living costs (including food), better transportation, and more job opportunities coming out on top.

**Most Important Aspects of Enhancing Quality of Life on St. George**

- Reduced living costs (including food): 21
- Better transportation: 13
- More job opportunities: 13
- Access to fresh, affordable food: 8
- Building community cooperation and unity: 8
- Protecting and connecting with our environment: 6
- Better internet access: 5
- More community and social services: 4
- Access to appropriate and affordable housing: 2
- Other: 1

**Introduction**

Quality of life is an all-encompassing term that describes physical health, family, education, employment, wealth, safety, religious freedom, and a healthy environment. Our quality of life is determined by what we value as a community, how our core needs are met, and what aspects of our community support life satisfaction. There are so many aspects of our community that contribute to the betterment of our lives, and we want to explore options that will improve quality of life on St. George. Our skills and capacities as a community support our quality of life on the island and will help us meet our needs.

In this paper we explore our current situation and describe what assets we share as a community, overview of key quality of life challenges we are facing, and outline planned, potential, and underway opportunities that will help improve our community.

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10 Community survey of adults living on St. George, (June 2019, n = 28)
## Current Situation

### OUR QUALITY OF LIFE ASSETS

The table here lists and describes some of the assets on St. George that support our quality of life, including ownership responsibility.

<table>
<thead>
<tr>
<th>Asset</th>
<th>Ownership Responsibility</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support Organizations (APICDA, APIA, AHA)</strong></td>
<td>Based on each organization</td>
<td>Aleutian Pribilof Island Community Development Association (APICDA) offers opportunities to pursue business startup funds, scholarships, vocational training opportunities, and internships. Alaskan Pribilof Islands Association (APIA) offers services in behavioral health, cultural heritage, education, and tribal child support. The Aleutian Health Authority (AHA) provides housing support services as well as employment opportunities and job training.</td>
</tr>
<tr>
<td>Church</td>
<td>The Church has ownership responsibility and the City of St. George assists when possible.</td>
<td>Provides spiritual services for community members on St. George.</td>
</tr>
<tr>
<td><strong>Natural Landscape and Wildlife</strong></td>
<td>Everyone is responsible for treating and respecting the lands and waters around St. George. Certain organizations on St. George have specific mandates related to wildlife / environmental management. For more information on this see the Research, Education, and Conservation Working Paper.</td>
<td>Our island is home to globally significant populations of nesting seabirds, large Northern Fur Seal populations, and Arctic foxes. The natural landscape around us is rugged and beautiful.</td>
</tr>
<tr>
<td>Ball field, playground, basketball (in disrepair)</td>
<td>The City of St. George?</td>
<td>Provide recreational opportunities for our community members. In need of repairs to become functional again.</td>
</tr>
<tr>
<td>Health Clinic</td>
<td>Traditional Council</td>
<td>Provides health services to the community.</td>
</tr>
<tr>
<td>St. George School</td>
<td>City of St. George</td>
<td>Our school is now closed due to low numbers of attendance resulting in funding cuts.</td>
</tr>
<tr>
<td>Rec Centre</td>
<td>Traditional Council</td>
<td>A place for our community to engage in recreational activities.</td>
</tr>
<tr>
<td>Store / Canteen</td>
<td>Traditional Council</td>
<td>Provides food for purchase for our community.</td>
</tr>
<tr>
<td>Small Mart</td>
<td>City of St. George</td>
<td>Provides food for purchase for our community.</td>
</tr>
<tr>
<td>Greenhouse</td>
<td>City of St. George</td>
<td>Our greenhouse offers an opportunity for residents to grow and access food. The community would like to expand so that residents could have their own plots.</td>
</tr>
<tr>
<td><strong>Wind Turbine and Power Generators</strong></td>
<td>City of St. George</td>
<td>Provides renewable energy to our community – is currently in the repair process.</td>
</tr>
</tbody>
</table>

Key Challenges and Possible Responses

There are several challenges that need to be addressed for our quality of life to improve on island. Overcoming these challenges would significantly contribute to a positive quality of life.

<table>
<thead>
<tr>
<th>Challenges and Success Factors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td><strong>Challenge:</strong> Lack of available education and skills and capacity training for youth and adults. <strong>Success Factor:</strong> Accessible on-island education and skills training for youth and adults.</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td><strong>Challenge:</strong> High cost of fuel and few alternatives available. <strong>Success Factor:</strong> Reliable sustainable energy for the community.</td>
</tr>
<tr>
<td><strong>Climate Change &amp; Associated Impacts</strong></td>
<td><strong>Challenge:</strong> Impacts of climate change on our community. <strong>Success Factor:</strong> Preparing, adapting, and mitigating the worst effects of climate change.</td>
</tr>
<tr>
<td><strong>Connectivity (cell phone and internet)</strong></td>
<td><strong>Challenge:</strong> Lack of cell phone service and reliable internet connectivity. <strong>Success Factor:</strong> Upgrading St. George’s internet and cellphone services.</td>
</tr>
<tr>
<td><strong>Transportation</strong></td>
<td><strong>Challenge:</strong> No fully functioning harbor and unreliable air transportation. <strong>Success Factor:</strong> Building a fully functioning harbor, transportation program, passenger ferry.</td>
</tr>
</tbody>
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14 Traditional Council (2019), personal communication.
<table>
<thead>
<tr>
<th>Challenges and Success Factors</th>
<th>Description</th>
</tr>
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</table>
| **Funding to Sustain Tribe Services** | **Challenge:** Funding for tribal services is low.\(^{15}\)  
**Success Factor:** Reliable income / grant sources to sustain the Tribe’s services.  
Funding is lower and lower every year for our tribal community services. If we don’t have funding, our support organizations cannot provide essential services. If grant opportunities are secured and / or sustainable sources of income can be found, essential services that the Tribe offers to our community won’t be at risk. For information on potential grants, see the Grants Working Paper. |
| **Access to Job Opportunities** | **Challenge:** Too few jobs on island.  
**Success Factor:** Create new job opportunities for the community, search for grants, attract both on and off-island members.  
Jobs in our community are scarce and without any opportunities, our residents cannot have reliable sources of income to support their quality of life. As explored in other working papers (Ecotourism, Small Businesses, and Grants), it’s important for our community to innovate and look for opportunities for new jobs on the island. More job availability means employment for current residents and potentially new residents coming to our island, which will boost our economy. |
| **Building Partnerships and Community** | **Challenge:** Coordination among our leaders and organizations.  
**Success Factor:** Building supportive partnerships and a connected community would bring us together to work on initiatives that improve our community.  
Our governing institutions need to work more closely together to create coordinated efforts towards improving quality of life on island for our residents. |
| **Food Security** | **Challenge:** Food insecurities can and likely will impact our community as the result of increased storms due to climate change, high costs of importing food, and the limited ability to grow / harvest on island.\(^{16}\)  
**Success Factor:** Our community can prepare for these impacts by supporting and maintaining a food system on island.  
Our food security can quickly shift, so preparing by strengthening our food system on island can help to decrease these risks. If we expand and upgrade our greenhouse, we can provide food for our community members, training opportunities for youth and adults, provide jobs for people on island, and create a communal space for our people to connect. |
| **Housing** | **Challenge:** Community roofs in a state of disrepair.  
**Success Factor:** Grants to support roofing being pursued by housing authority.  
Our housing needs to be upgraded, roofing being in a state of disrepair. Through the Aleutian Housing Authority, a $780,000 grant to redo roofs was successfully obtained, which will result in repairs that will employ 2-4 people. |

\(^{15}\) Traditional Council (2019), personal communication.  
Quality of Life Opportunities

EXISTING QUALITY OF LIFE ASSETS
Based on the results of the community survey, residents’ choices for quality of life improvements were: reducing the cost of living (including food), better transportation, having more job opportunities, access to fresh affordable food, building community cooperation and unity, protecting and connecting with our environment, better internet access, more community and social services, and access to appropriate and affordable housing. Additionally, education is a core need of the community that should be addressed, as our school has closed due to low attendance.

Fitting this all together, there are planned, potential, and underway opportunities that all contribute to various aspects of our quality of life. Our community organizations are already working towards improving quality of life and meeting the needs of our people. Health programming, home management, transportation initiatives, and food service support are either currently being provided to our members or are planned future services.

Below is a list of current and planned programs that contribute to our on-island quality of life:

Current programs:\[^17\]
- Health Programming – funding from APIA has been received to sustain this programming
- Home Management – funding received from NOAA
- Food Bank – serves 25 households

Upcoming planned quality of life contributors:\[^18\]
- Tribal transportation program – in town roads and road to harbor
- Roof grant: through the Aleutian Housing Authority; $780,000 to redo roofs that will employ 2-4 people
- Remodelling Health Clinic – APIA has asked for this support

![Figure. Planned and potential future opportunities for quality of life improvements on St. George.](image-url)

[^17]: Traditional Council (2019), personal communication.
[^18]: Traditional Council (2019), personal communication.
QUALITY OF LIFE OPPORTUNITIES ON ST. GEORGE

Three core opportunities are explored below: repairing and upgrading our energy infrastructure, improving our community garden, and exploring internet options.

Renewable Energy: Repairs and Other Energy Sources

If we invest in repairing the wind turbine or explore adding additional wind turbines or other renewable energy options, fuel costs could be reduced. Additionally, offsetting diesel use on the island would reduce our impact on the environment. We’ve recently had maintenance workers come to inspect the turbine and plan to work towards repairing it as soon as possible.\(^\text{19}\) If operable, it could provide up to half of our community’s energy needs.\(^\text{20}\) The core benefits of repairing the turbine include:

- $250,000 - $300,000 in annual cost savings\(^\text{21}\)
- Providing renewable power for half the community results in energy security
- Replacing diesel use on the island, and therefore our community’s impact on the environment
- Reducing our city spending on fuel costs, which can then be spent on other community needs\(^\text{22}\)

According to the Alaska Energy Authority (AEA), grants and loans are available for various renewable energy projects (wind, hydro, biomass, heat recovery, heat pumps, etc.) and remote communities with high energy costs are likely recipients of project funding, with over $15 million in grants already invested in the Aleutians.\(^\text{24}\) The AEA is planning more renewable energy grant funding opportunities for 2020 and 2021.\(^\text{25}\)

Renewable Energy Funding and Grant Opportunities: An updated list of funding and grant opportunities for energy projects (with status, deadline, eligibility, and application deadline information included) is available through the Southwest Alaska Energy Network. This organization already works with partners in the Aleutians to develop energy projects and build capacity.\(^\text{26}\)

\(^\text{19}\) City of St. George (2019), personal communication.
\(^\text{21}\) City of St. George (2019), personal communication.
\(^\text{22}\) City of St. George (2019), personal communication.
\(^\text{25}\) Alaska Energy Authority (April, 2019). Renewable Energy Fund Grant Program Fact Sheet, retrieved from: http://www.akenergyauthority.org/Portals/0/Programs/FactSheets/Documents/REF.pdf
**Food Security and Community: Expanding the Greenhouse**

One method for improving quality of life on St. George would be to expand the greenhouse, which could: reduce the cost of living (food costs), provide access to fresh food, create jobs and educational opportunities, increase connective community spaces, and promote respect for the environment. If we expand our greenhouse by building additional garden plots, our residents could cut their food costs as well as grow resiliency to food insecurities brought on by unpredictable weather and high fuel costs. The hiring of a part-time or volunteer lead gardener could provide, learning opportunities for youth and adults in our community. By expanding our food infrastructure, we could create construction, growing, and garden maintenance jobs for our community members. Additional community garden plots and greenhouse could also provide a gathering place for community members. Community survey respondents stated that they wanted more opportunities to bond and build connections with one another. The core benefits of upgrading our community greenhouse are:

- 2 jobs created from expanding the greenhouse and associated benefits
- Grow more local food and supply it to grocery stores
- Potential to start a farmer’s market
- Educational opportunities for community members
- Increasing community spaces for members to gather and connect

Supporting ideas:

- The power plant is near the greenhouse and could potentially provide waste energy to heat the greenhouse in the winter months; lamps could also be installed to provide additional heat.
- Community kitchens that offer training and education on healthy cooking and use locally grown food could be explored; this would also provide additional opportunities for community members to gather.

### ALASKA

In 2016, 95% of Alaska’s food was imported, with $1.9 billion being spent on import costs. As weather becomes less predictable and fuel prices rise, these statistics are predicted to grow over time, leading to food shortages and insecurities for Alaskan communities. Some communities are already working on food security initiatives. The remote community of Kotzebue, AK has created upwards of 600 community gardens for residents to grow food. In Anchorage, afterschool programs have started to use food security as a teaching tool where youth learn about food independence, growing techniques, and nutritional education. In Bethel, AK, the city installed community gardens for all citizens and provided permafrost melting pipes to support farmers.

### TOOLKIT FOR BUILDING AND HEATING GREENHOUSES

With contributions from communities, non-profits, energy associations, and government organizations around Alaska, a toolkit was developed to assist community organizations and schools develop cold climate greenhouses and food programs with heating systems to support growth of various plants suitable for the climate. Additional case studies, funding, finances, and educational opportunities are described to support communities.

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30 Community survey of adults living on St. George, (June 2019, n= 28)
31 City of St. George (2019), personal communication.
32 City of St. George (2019), personal communication.
33 City of St. George (2019), personal communication.
Connecting our Community: Communications and Internet Accessibility

Without reliable internet and communications, our community continues to be disconnected. Without reliable internet speeds, there’s no stable opportunity for our youth and the rest of our community to learn remotely. The Entrepreneurs, Small Business, Innovation, and Government Services Working Paper explores how fast and reliable internet installed in our community could lead to more opportunities for small businesses, increasing access to jobs for our people. Some potential options for improvement have been discussed, such as a microwave tower, or connecting to a fiber optic cable planned along a nearby route (there has been discussion of a fiber optic connection between Japan and Nome, Alaska.)

Additionally, future statewide plans to bring high speed fiber optic connections across all of Alaska are being explored. Core benefits of internet accessibility in our community include:

- Access to new job opportunities for our community members, including working remotely
- Educational opportunities for our students, youth, and other community members
- Can lead to opportunities for sophisticated medical equipment on the island that relies on internet connectivity, benefiting our community’s access to health resources

CASE STUDY: VILLAGE OF UTQIAGVIK, AK

After major government investments, and a warming Arctic environment that allowed for infrastructure development, cables were placed underwater to distribute broadband internet to remote communities across northern Alaska. Not only did this improve general Wi-Fi connectivity but it allowed for reliable educational opportunities for classrooms and the ability to use sophisticated medical equipment that relies on internet connectivity. Microwave towers are also being installed in remote Alaskan communities to provide internet.

Source: https://www.apnews.com/939f52f243c42efb72ad6f0a97e43b
Conclusion

Improving our quality of life needs to be a collective effort. If we're going to make St. George a better place to live, we need to put in the work. The opportunities explored in this paper link to other working papers and are considered in the context of all other work being done in the economic development process.

We need your feedback to make sure we're getting everything we can to inform a strong economic development strategy. Help us by providing feedback, additional information, comments, or questions about this Working Paper!

TELL US WHAT'S MISSING!
Go to our online survey: bit.ly/stgeorgesurvey2

STAY A PART OF THE CONVERSATION!
Please contribute, your ideas are needed. Here are some simple ways to participate:

Go to our online survey and give your input about where St. George should go and how we should get there.
bit.ly/stgeorgesurvey2

Send an email or contact:
St. George Economic Development Project Team
stgeorgeeconomicdevelopment@gmail.com

Or visit the project website:
www.stgeorgealaska.org