

## Energy \& Infrastructure Funding in Rural Alaska Barriers \& Potential Solutions

Discussion Paper prepared for Alaska Venture Fund
December 2023


## Table of Contents

Acronyms \& Abbreviations ..... 2
Executive Summary ..... 3
Introduction ..... 6
Context: Funding Landscape ..... 8
Case Study: DOE Section 40101(d) Formula Funding ..... 10
Funding Barriers and Potential Solutions ..... 13
Overarching Themes and Potential Solutions ..... 13
Upfront Costs / Matching Costs ..... 15
Complexity and Capacity Constraints ..... 17
Applicant Eligibility ..... 19
Lack of Interagency Collaboration ..... 21
Technology ..... 22
Buy America Requirements ..... 23
Issues Unique to Alaska ..... 24
Other Barriers \& Potential Solutions ..... 26
Appendices ..... 28
APPENDIX A: DETAILED BARRIERS \& CHALLENGES ..... 29
APPENDIX B: DETAILED POTENTIAL SOLUTIONS ..... 35
APPENDIX C: METHODOLOGY ..... 40
APPENDIX D: LIST OF INTERVIEW QUESTIONS - APPLICANTS, TECHNICAL ASSISTANCE PROVIDERS ..... 42
APPENDIX E: LIST OF INTERVIEW QUESTIONS - FUNDERS ..... 43
APPENDIX F: ADDITIONAL BARRIERS AND SOLUTIONS, FROM 2023 ALASKA SUSTAINABLE ENERGY CONFERENCE SUMMARY ..... 44

## Acronyms \& Abbreviations

ANA: Administration for Native Americans
ANCSA: Alaska Native Claims Settlement Act
AVF: Alaska Venture Fund
BCA: Benefit-Cost Analysis
BIL: Bipartisan Infrastructure Law
CDBG: Community Development Block Grants
COL: Cost of Living
DOE: U.S. Department of Energy
DOT: U.S. Department of Transportation
EAA: Economic Adjustment Assistance
EDA: U.S. Economic Development Administration
EPA: U.S. Environmental Protection Agency
FAQ: Frequently Asked Questions
FEMA: Federal Emergency Management Agency
FOA: Funding Opportunity Announcement
FOIA: Freedom of Information Act
GAO: Government Accountability Office
HECG: High Energy Cost Grant
HUD: U.S. Housing and Urban Development
IIJA: Infrastructure Investment and Jobs Act
IPP: Independent Power Producer
Lower 48: Contiguous United States
NOFA: Notice of Funding Availability
NOFO: Notice of Funding Opportunity
NRCS: Natural Resources Conservation Service
PW: Public Works
RFP: Request for Proposals
ROI: Return on Investment
RurAL CAP: Rural Alaska Community Action Program, Inc.
SAM: System for Award Management
SF: Standard Form
TEDO: Tribal Energy Development Organization
USFS: U.S. Forest Service
USDA: U.S. Department of Agriculture

## Executive Summary

## Purpose

A myriad of unique challenges stand in the way of Alaska's rural, remote, and tribal communities' access to federal funding. Despite efforts to prioritize the equitable administration of funding through Justice40 Initiative targets, the communities most in need are often the ones least able to overcome barriers to grant opportunities.

Alaska Venture Fund (AVF) contracted with DeerStone Consulting to:

1. Identify barriers to tribal energy and other infrastructure funding opportunities in Alaska.
2. Develop actionable potential solutions for reducing identified barriers.

This discussion paper shares findings on these barriers and potential solutions gathered from stakeholder interviews. This paper is intended to serve as a catalyst for meaningful conversations with the ultimate aim of guiding changes at the policy and agency levels.

This paper emphasizes the need for an equitable approach to grant funding, particularly in rural, remote,
"Alaska's Tribes and rural and remote communities don't want special treatment; we just want fair treatment." and tribal communities in Alaska. Improving the efficiency and effectiveness of funding mechanisms will have the dual benefits of advancing the goals of rural Alaska communities and better meeting federal program and policy goals.

## Key Findings

Taken together, interviewees described a situation where the communities most likely to need funding support for infrastructure projects are the least likely to have funds to provide the required cost share, the specialized expertise needed to prepare complex applications, and the resources to hire outside help for grant writing or technical studies required for some grant applications. Grant processes tend to favor applicants with more capacity and money for grant writing over those with the highest need, undermining the goal of equity in access to infrastructure funding.

An overarching recommendation is to increase flexibility to better account for the unique and varied structures, capacities, and circumstances in rural Alaska communities.

This paper describes barriers and shares suggestions for addressing them, including some ideas that have been tested or implemented on a limited scale. These are summarized below and expanded upon later in this document. Additional barriers, examples, and potential solutions are provided in an appendix.

## Upfront and Matching Costs

Barriers: Limited revenue generation opportunities and high costs make it difficult for rural remote Alaska communities to provide the matching funds most federal grants require and up-front funds for grants designed as reimbursable.

Potential Solutions: Reduce the burden of match requirements by allowing use of other federal funds as match, providing advance decisions for match waiver requests, offering a sliding-scale match, and accepting alternative ways of demonstrating community "stake" in a project. Eliminate reimbursable grants and/or provide bridge loans and other ways of accessing up-front cash.

Complexity and Capacity Constraints
Barriers: Grant writing and compliance have demanding administrative obligations, posing disproportionate challenges for communities with limited staff and resources. Other challenges include confusing, complex, or missing guidance; federal rules sometimes interpreted as a prohibition on answering applicant questions; and funding agency capacity constraints.

Potential Solutions: Use models such as HUD's High Energy Cost Grant program, which simplified its application process and uses flexible needs-based criteria, broad rather than narrowly prescribed goals, and a streamlined application process. In addition, significant investment in capacity-building and technical assistance is needed.

## Applicant Eligibility

Barriers: With nearly half the nation's Tribes, Alaska has a unique range of entities serving and representing indigenous people, such as tribal governments, regional tribal nonprofits, and Alaska Native regional and village corporations. Federal programs that restrict eligibility to certain types of entities can limit access for Alaska Native communities.

Potential Solutions: Include regional tribal consortia and nonprofits as eligible applicants for federal grant opportunities. Adopt the U.S. Department of Energy's recently expanded definitions to provide for more inclusive eligibility, including the definition of "Indian Tribe" to include Alaska Native Regional Corporations, Alaska Native Village Corporations, Tribal Energy Development Organizations (TEDOs), intertribal organizations, tribal consortia, and other tribal organizations.

Lack of Interagency Collaboration
Barriers: Many projects in rural Alaska require multiple funding streams, which are almost impossible to sync. For example, if a community needs to rebuild a road and also needs to install underground infrastructure (e.g., broadband or utility improvements), it would be most efficient to do them all at the same time, but there is no way to apply for an integrated set of projects because funding for each component comes from a different program with different processes, requirements, timing, and rules.

Potential Solutions: A multi-agency shared application would allow for integrated funding between programs and more efficient use of federal funds. This approach has been recommended in multiple forums, and the Denali Commission, a federal agency with a mandate to improve conditions in rural Alaska, has been identified as an entity that could help manage integrated funding streams and processes.

## Technology

Barriers: Despite recognition of significant disparities in broadband access, most federal grant opportunities rely on online templates, portals, and authentication processes. Other technology barriers include unreliable or patchy cell phone service that impedes twofactor authentication, and power outages, which are not uncommon in rural Alaska.

Potential Solutions: Expand grant application and reporting options to include email, fax, and paper submission, and more flexible ways of accessing and using online portals (such as accepting all versions of Adobe Acrobat) to create a more level playing field.

Buy America Requirements
Barriers: Stakeholders noted that while well intended, Buy America requirements cause many applicants to walk away from funding opportunities. The requirements can lead to project delays due to supply chain problems, lower-quality products, increased costs, and burdensome implementation that cripples operations.

Potential Solutions: Reconsider requirements that delay projects and place undue burden on applicants; shift certification responsibility to vendors rather than applicants; develop an approved list of exemptions; and raise the project size threshold for Buy America requirements to a level commensurate with the goal of national impact.

Issues Unique to Alaska
Barrier: As the only arctic state, the largest and most sparsely populated state, and the state with a unique Alaska Native land claims settlement system, rural Alaska's circumstances rarely fit one-size-fits-all requirements and assumptions. Challenges for small rural communities include, for example, extremely high freight costs, a limited cash economy and lack of economies of scale, extreme weather conditions, and land title complexities.

Potential Solutions: Recognize and adjust for cost-of-living differences in project economic analysis; shift away from a traditional benefit-cost analysis that penalizes lowpopulation, high-cost communities; and move toward a more tailored approach to project design and funding.

## Introduction

Without spending extensive time in Alaska, it is difficult to fully comprehend the number and scale of barriers to federal energy and infrastructure funding that are substantially different from the rest of the country. Requests to reduce these barriers can be misinterpreted as a desire to lower standards when, in fact, they present very real hurdles. A partial list of challenges Alaska communities face includes:

- Scale: Alaska's vast size and small population leave few opportunities for economies of scale or aggregation of goods and labor, especially in the state's approximately 200 remote communities (Texas, California, Montana, and $70 \%$ of New Mexico together could fit into Alaska).
- Accessibility and logistical challenges: A limited road system means many rural communities are accessible only by air and water.
- Climate change: Permafrost degradation, diminished river flows, intensified wildfires and other impacts exacerbate challenges and increase uncertainty.
- Freight challenges: High costs and timing uncertainty complicates projects.
- Weather: Severe weather compounds timing uncertainty, cost, and difficulty of moving goods and completing projects in rural Alaska.
- Land ownership: Alaska's unique and complicated land ownership structures make site control and property ownership difficult to secure and demonstrate.
- Limited eligibility definitions: Tribal and Alaska Native corporate structures can face barriers meeting inflexible eligibility standards.
- Labor: Limited labor, high costs, and union requirements can become major barriers in remote Alaska communities.
- Connectivity: There is severely limited broadband and WIFI across much of rural Alaska, creating issues related to funding applications and reporting.

> In Alaska, rural refers to a community on Alaska's extremely limited road system, while remote refers to a community only accessible by plane, boat, and/or snowmobile. Often, however,
> Alaskans lump these two terms together in referring to "rural" communities. In addition, most remote communities are primarily populated by Alaska Native residents. The term Native village, on the other hand, often refers both to remote communities and to rural communities on the road system that are primarily Native populated.

The input gathered for this project was remarkably consistent. Stakeholders identified many significant barriers and brought a solution-focused attitude and a wealth of creative ideas to the table. While individual agencies were sometimes lauded for seeking ways to reduce barriers while maintaining accountability, overall, the realm of government (particularly federal) grants appears ripe for a systems-level overhaul that will make it more equitable; time- and costefficient; and effective for applicants, awardees, and funders.

Two sentiments expressed by stakeholders sum up much of the feedback:

- First, the communities most likely to need funding support for infrastructure projects are also the least likely to have resources to provide the required cost share ("match"), the specialized expertise needed to prepare highly complex applications, the resources to hire outside help for grant writing, and/or available funds to pay for technical studies required as part of an application that may not lead to project funding.
- Second, these realities, combined with additional barriers detailed later in this report, culminate in a sense that the goal of equity in access to infrastructure funding is undermined by implementation methods.

These conclusions are not new. Numerous articles, studies, and reports have identified barriers to equity in federal funding for more than two decades, including at least four separate reports from the U.S. Government Accountability Office (GAO) dating as far back as 2003.

## Cumulative Impact of Individual Obstacles

While the project focused on rural Alaska, many of the issues identified would likely resonate with small, rural communities and Tribes across the country. This is another indication of the need for a systemic overhaul that places all federal funding applicants on a level playing field and provides truly equitable access.

A recent research report ${ }^{1}$ found that cumulatively, the "pattern of seemingly mundane obstacles may collectively disenfranchise many Alaska Native villages.... [which] are framed as responsible for a lack of competitive funding applications, absolving federal agencies of the need to actively render assistance" (Lezak, December 2023). Collectively, these large and small obstacles to funding undermine the ability of rural Alaska communities and Tribes to implement projects necessary for their communities to thrive.

Lezak also points out that although Tribes are sovereign nations, they are not afforded the same relationshipbuilding approach that the U.S. applies to other nations,
 such as "state dinners, gift exchanges, ambassadorships, and telephone calls. ... It is not beyond the capacity of the federal government to create long-lasting relationships based on trust and shared objectives; it is routinely done with other sovereign governments" (Lezak, December 2023). The potential solutions presented in this report might best be considered as increasing efficiency, transparency, and effectiveness, but also with an eye toward improving "domestic diplomacy."

[^0]
## Context: Funding Landscape

While the scope of this project did not include the compilation of a comprehensive list of energy and infrastructure funding available, DeerStone has experience with and a strong sense of the primary funding opportunities in Alaska, which may serve as helpful context. These include but are not limited to those listed in the table below.

| Funding Agency | Opportunity | Summary |
| :---: | :---: | :---: |
| Department of Energy | Formula 40101(d) | Annual allocation; all Tribes, Alaska Native Corps and Village Corps eligible |
|  | Clean Energy Technology Deployment on Tribal Lands | 2023: total funding available $\$ 50$ million, estimated 10-25 awards ranging from $\$ 100,000$ to $\$ 5$ million |
|  | Powering Unelectrified Tribal Buildings | Most recent: total funding available \$15 million, estimated 4-10 awards ranging from $\$ 250,000$ to $\$ 4$ million |
| U.S. <br> Department of Agriculture | High Energy Cost Grants | Most recent: total funding available $\$ 10$ million, made 6 awards ranging from $\$ 800,000$ to $\$ 2.5$ million |
| Environmental <br> Protection <br> Agency | Greenhouse Gas Reduction Fund (new, upcoming opportunity) | 3 programs: <br> - National Clean Investment Fund (total \$14 billion, 1-2 awards to intermediaries to disburse funds to businesses, communities, community lenders, and others) <br> - Clean Communities Investment Accelerator (total $\$ 6$ billion, 1-2 awards to intermediaries to disburse funds to community lenders) <br> - Solar for All (total $\$ 7$ billion, up to 60 awards to local governments and nonprofits) |
| U.S. Forest Service | Community Wood Grant Program | Most recent: total $\$ 17$ million, awards up to $\$ 1$ million |
| Denali <br> Commission | Energy Program Area | Most recent: total funding available $\$ 1.5$ million, estimated 2 or more awards up to \$750,000 |


$\left.$| Funding <br> Agency | Opportunity | Summary |
| :--- | :--- | :--- |
| Economic <br> Development | Public Works (PW) and <br> Economic Adjustment <br> Assistance (EAA) <br> Program | Need to show significant economic <br> development resulting from project. Current <br> year funds available: \$121.5 million (PW), <br> \$39.5 million (EAA). Anticipated award <br> ranges: \$600,000 - \$5 million (PW), \$150,000 - <br> $\$ 2.5$ million (EAA). Past average awards: \$1.4 <br> million (PW), \$650,000 (EAA). |
|  |  | Numerous grant and loan programs, including <br> community facilities |
| U.S. <br> Department of <br> Agricullture | Rural Development | Renewable Energy Fund | | Most recent: total pool ~\$50 million, awards up |
| :--- |
| to \$2 million (low energy cost areas) or \$4 |
| million (high energy cost areas); previous |
| funding cycle made 27 awards | \right\rvert\,

## Case Study: DOE Section 40101(d) Formula Funding

To set the stage for the barriers and potential solutions described in this paper, it is helpful to consider an example: the U.S. Department of Energy's Section 40101(d) formula funding for energy projects (see text box for details). This newer program offers a case study of a good concept toward equitable access to funding that has instead created more barriers. It is helpful to consider this example because:

- The primary focus of the program is intended to be energy equity. As a current opportunity, it is at the forefront of tribal stakeholders' minds.
- It sheds light on the barriers applicants are up against, even in the absence of competition.
- The amount of effort required to obtain these funds is out of proportion to the resources small Tribes have, and to the amount of funds available, leading to low usage to date of the opportunity.

Without exception, interviewees agreed that 40101(d) formula funding is a good idea gone awry, and they offered actionable and creative ideas for improvement. There is a widespread understanding that the agency has been tasked with speedy distribution of funds, but under extensive and detailed constraints that have led to multiple amendments and deadline extensions. A very small percentage of Tribes have applied to date due to the barriers they have experienced.

One illustration of the problematic process is the Frequently Asked Questions (FAQ) document, which can often be a good indicator of the clarity - or lack thereof - in funding guidelines. As of May 5, 2023, the FAQ document for this formula funding opportunity had reached more than 20 pages (for an 8-page application form and a 4-page narrative template). Numerous funding opportunities suffer from this same issue of unclear or overwhelming guidance.

There has been some progress. For example, initially, there was no means for aggregating applications at a regional or sub-regional level; every entity was required to individually go through a fairly involved application process for what are relatively small awards in the context of energy projects. After a year of advocacy, the guidelines have been amended to allow for aggregate as well as collaborative applications, partially mitigating the challenge for small communities.

## 40101(d) Formula Grants to States and Tribes

Under Section 40101(d) Formula Grant Program of the Bipartisan Infrastructure Law (BIL), the U.S. Department of Energy provides grants to states and Indian Tribes to improve the resilience of their electric grids. States and Tribes may further allocate funds to "eligible entities," as defined by Section 40101(d). These grants offer a unique opportunity to advance the capabilities of states and Tribes, and their communities, to address not only current but future resilience needs. The requirements of this formula grant program are defined within Section 40101(d) of the BIL. Section 40101 (d) stipulates that DOE allocate funding annually through grants to States and Indian Tribes according to a formula that includes such parameters as population, land area, and the historical precedence for experiencing disruptive events.

Formula funding, while appearing fair, often doesn't account for the fact that the costs of energy projects do not scale proportionately with community size. As a result, more populous communities may receive sufficient funding for significant projects, while low-population communities struggle to make meaningful improvements despite their genuine needs. In essence, the disparity in project costs between different community sizes is not linear, making formula funding less equitable than it may seem.

The most commonly noted remaining barriers identified for this funding opportunity include:

- The compliance requirements compound the burden on individual Tribes, leading many to conclude that an application is not worthwhile. For instance, the grants require matching funds, collaboration with a local utility, and a community engagement process as part of the application.
- The application window opened before the funding agency itself had sufficient clarity; as a result, agency staff are unable to provide answers and must take questions "up the chain." This has led to multiple amendments and FAQ document updates.
- Relatedly, guidance is unclear for many of the application documents. In one case, applicants are being made to use an outdated form that does not include any place to enter information that is now required. Guidance is also unclear on eligible uses of the funds, and document instructions often lack clear, concise guidance in favor of pointing applicants to complex regulations. Even individuals well-versed in federal grant applications must reach out frequently to the funder with questions.
- The complexity of the application process is out of proportion to the funding amounts available. One regional entity, for example, estimated that it would take five years to accumulate $\$ 1.2$ million through the program, a relatively small amount in the context of most energy projects.

Some of the potential solutions for continuing to improve this funding opportunity apply equally to many other funding opportunities:

- Simplify. For the smallest of Tribes, it may cost nearly as much as the award itself to complete the application process and comply with reporting requirements. Eliminating
public notice requirements, for example, would be reasonable and reduce tribal burden without negatively impacting energy projects.
- Clarify legislative versus agency roles and responsibilities. There is a perception that legislation can veer so far into the realm of implementation that it discounts the expertise of agency leaders and staff, restricting their ability to effectively and efficiently manage and distribute public funds. At the same time, in some cases staff may be overly cautious in interpreting their statutory mandate, adding barriers and requirements that may not actually be prescribed by law.


## Funding Barriers and Potential Solutions

Stakeholders identified many significant barriers and challenges related to federal (and, in a few cases, state) funding. They also had many ideas for addressing these barriers, and overall, interviewees conveyed a solution-focused attitude. Stakeholders expressed appreciation for the efforts of some agencies to reduce barriers. Still, overall, the grantmaking system is viewed as broken - not just inequitable but siloed, time-consuming, costly, inefficient, and, in some cases, ineffective.

Interviewees also acknowledged the need for a sense of local ownership and accountability; otherwise, a project may not be completed, hurting a community's chances at future funding, or a project may be completed but not well maintained, leading to a shorter useful life. As several stakeholders wondered, how do you create a process that significantly reduces barriers but still meets the need for transparency and accountability?

The main body of this report expands on the themes most frequently heard in the course of information gathering. More complete lists of barriers and potential solutions are provided as appendices.

## Overarching Themes and Potential Solutions

One overarching theme is the need to balance transparency and accountability measures with equitable access to federal funding opportunities. While some of the potential solutions presented below may have a policy or other issues to overcome, many do not and could, as the GAO and a recent study both assert, "be enacted through executive and agency action" (Lezak, 2023). All are, ultimately, actionable. In fact, many suggested solutions come from agencies that have already implemented them.

One stakeholder suggested that rather than trying to write "just in case" regulations and restrictions "for every possible scenario," which put a substantial burden on small entities, federal agencies place more emphasis on monitoring and auditing to identify and address issues as they arise. (The example given in an interview was private industry, which prioritizes precautionary measures based on a cost-benefit analysis of each potential measure.)

Stakeholders also overwhelmingly favored in-state management and distribution of federal funds due to Alaska's many unique circumstances, which are difficult to fully comprehend unless you live in the state or spend an extensive amount of time here. In-state decision-makers are more in tune with Alaska's day-to-day realities, resources, and challenges and the unique local and cultural knowledge Alaska Native/American Indian residents bring. The challenge is determining a set-aside for Alaska; however, there are existing models, including the method developed by the Department of Housing \& Urban Development (HUD) for allocating federal funds by region and designating Alaska as a distinct region. Ideas for facilitating this approach included the Denali Commission as a federal agency that is located in and focuses on the state; other in-state entities with high capacity, such as statewide nonprofits and tribal entities, were also mentioned.

Interagency collaboration is another consistent thread running through stakeholder feedback. Lack of communication and collaboration among federal agencies hits applicants hard, especially with large infrastructure projects that require multi-agency funding. Differing restrictions and compliance requirements lead to increased project complexities (such as having to form an Independent Power Producer (IPP) to meet regulatory requirements rather than being able to partner among local entities), longer timelines, and higher project costs.

## The Denali Commission

Sec. 311 of the Denali Commission Act of 1998 (42 U.S.C. 3121) provides that "any federal agency authorized to carry out an activity that is within the authority of the Commission may transfer any appropriated funds for the activity to the Commission." The purposes of the Commission include "to deliver the services of the Federal Government in the most costeffective manner practicable by reducing administrative and overhead costs" (Sec. 302(1)) and "to promote rural development, provide power generation and transmission facilities, modern communications systems, water and sewer systems, and other infrastructure need."

Key components of the Commission's transfer authority could support streamlined delivery. For instance, pooling funds from various agencies that can then be used more efficiently would allow one agency to issue an award covering an entire project rather than multiple agencies issuing awards, each covering portions of a project. Additionally, the authority turns "yearlimited" funds into "no-year" funds, allowing for longer-term projects. Finally, the Commission's authority removes limitations on other agencies' funds, reducing the administrative burden facing Alaska Native communities.

A successful example of the highest level of meaningful collaboration cited was a group of Alaska funders and other entities well versed in the state's needs that partnered to conduct a needs assessment of sanitation conditions in every community in the state. Together, the group developed ranking criteria, analyzed the needs assessments, and prioritized projects. Rather than using a competitive application process, this collaborative has consolidated public and private funding to address communities' needs in order of the agreed-upon prioritization.

Replacing the competitive process ensures needs are addressed in a timely fashion; reduces the tribal and community burden of developing an application and complying with reporting and administrative grant requirements; and maintains cost-effectiveness, transparency, and accountability. This approach can improve the ability to address infrastructure and energy needs in order of urgency. It also aligns more strongly with Native values; "many Alaska Native communities feel that competing with one another for scarce resources violates cultural norms." ${ }^{2}$

Additional frequently cited barriers and potential solutions are described below, with further detail in Appendix A (barriers) and Appendix B (potential solutions).

[^1]
## Upfront Costs / Matching Costs

## Barriers

Many rural communities face significant economic challenges due to limited opportunities for revenue generation; this is particularly true for small Tribes and communities located off the road system. The remoteness, low population, and challenging environmental conditions often restrict economic activities available to other parts of the state, such as tourism, commerce, and natural resource extraction, all of which face further difficulties due to complex land ownership (detailed below).

Communities' limited financial resources create substantial hurdles in funding projects and meeting cost-share requirements for a grant. Cost share, cost-benefit ratio requirements, and high costs of construction have all been identified as barriers to federal funding for small rural Alaska communities by the U.S. Government Accountability Office, Lezak, and other researchers.

Economic challenges are further exacerbated by the high cost of living in rural Alaska, which is significantly higher than in the rest of the country. ${ }^{3}$ This financial burden can make it even more challenging for Tribes to set aside the necessary funds for matching contributions. The smallest and most remote communities, many of which are Alaska Native villages, are not indexed for cost of living, but it is common knowledge that costs there are even higher: " $[E]$ xpenses depend on how remote they are. Everything costs more in rural Alaska, and shipping plays a primary role in those higher costs. ${ }^{4}$ Costs in the smallest remote communities are commonly understood to be higher than those in the remote "hub" communities.

Reimbursable-only grants compound these challenges by requiring small grantees to incur upfront costs and wait to be compensated. This leads to serious cash flow issues for small awardees, negatively impacting project timelines and putting other projects and programs at risk due to cash shortages. An undue burden is placed on grantees, who have generally been awarded because they have demonstrated feasibility and a solid implementation plan - what they need is money.

Matching requirements, too, are largely viewed as having a "one size fits all" approach to a widely diverse array of applicants with vastly differing economic situations and access to funds. Since public infrastructure is generally government-funded, requiring a non-federal match strikes many as unrealistic. Villages in Alaska also rely heavily on subsistence economies, and many lack a tax base or local economic opportunities to generate revenue for cost share, which can reach tens of millions of dollars for large construction projects.

[^2]
## Potential Solutions

Energy and other infrastructure projects are typically funded with government resources. Yet there are substantial restrictions on using "other federal funds" as a match for federal grants. Removing these restrictions would allow for more realistic project funding strategies. Additional ideas for making match requirements more realistic include offering advance decisions for match waiver requests to avert the burden of complex applications if a waiver request is denied; offering a sliding-scale match based on criteria related to local circumstances (EDA offers this, for example); and accepting as match an applicant's commitment to startup, ramp-up, and/or maintenance funds, which gives the community a sense of ownership as well as greater assurance of project sustainability.

## Alaska's High Energy Costs

More than one in four (27\%) households in Alaska, mostly rural, use heating oil as their primary heating source, versus $4.1 \%$ in the U.S. overall. This past winter (2023), the average cost of heating fuel among the many communities that rely on it was $\$ 6.41 / \mathrm{gallon}$, with a high of $\$ 13 / \mathrm{gallon}$. Heating oil is more prevalent because many rural Alaskan communities currently pay more than $\$ 1 / \mathrm{kWh}$ for electricity, more than four times the average residential electricity rate in the state as a whole. Additionally, "Alaska's per capita energy consumption is the second highest in the nation" due largely to the small population and harsh climate. (U.S. Energy Information Administration, Alaska State Energy Profile, https://www.eia.gov/state/print.php?sid=AK)

It should also be noted that while the State of Alaska has historically helped meet some nonfederal match requirements, recent budget constraints and policy choices have reduced the state's contributions. Multiple federal and state officials, along with representatives from tribal organizations, have expressed that exempting or reducing match requirements for Native villages would greatly enhance their access to federal assistance. The Alaska Energy Security Task Force recognized this challenge and included among its draft preliminary potential solutions (as of November 7, 2023) to "identify a funding or financing mechanism for rural communities, including a 'local match' for federal grants."

Reimbursable-only grants, in the context of strong funding proposals with demonstrated feasibility and a strong implementation plan, could do away with the reimbursement aspect. Reporting requirements will still serve as a means of demonstrating compliance with fiscal requirements. Three stopgap measures until reimbursement-based grants can be eliminated include:

- A system in which the funder disseminates funds directly to vendors and contractors. The Alaska Energy Authority has in the past used this approach with grantees with whom there were capacity or other concerns.
- With tribal approval, a larger entity with more robust accounting and reporting systems might serve as the fiscal agent for a grant.
- Establish a revolving loan fund for grant advances, in which loans serve as an advance on project costs and loans are repaid upon receipt of grant reimbursements.


## Complexity and Capacity Constraints

## Barriers

Grant writing and compliance have demanding administrative obligations, posing challenges for Native villages with limited staffing and resources. Competitive grant writing often pits large, high-capacity communities and organizations against small rural and remote communities and organizations where the few staff "wear many hats," making grant writing an activity that pulls people away from other critical duties. In addition, application scoring tends to favor applicants with strong grant writing and technological skills rather than applicants with the most pressing needs.

## Inherent Bias in the Term "Capacity"

Researcher Stephen Lezak notes that capacity building is a term that "has emerged as a solution that positions Native communities as a broken element in an otherwise functioning institutional meshwork." Capacity building is also a term that assumes that Tribes are fully "responsible for overcoming their own marginalization." In this report, the term "capacity" is used not with this connotation but to acknowledge and encompass issues related to the common circumstances of small Tribes having limited staffing, resources, and the specialized expertise needed to access federal grants. It is presented as just one component of a system that warrants a comprehensive approach to improving processes and equity, which must involve both agencies and Tribes.

The process is further compromised when agencies deny requests for clarification due to rules meant to ensure a level playing field. If guidelines refer to complex regulations rather than summarize them in clear and accessible language, for example, it can be difficult to decipher requirements. As Lezak points out, one need only turn to the many portals used by different federal agencies to understand how daunting the application process can be. He refers to the multi-agency website www.grants.gov, which he (correctly) summarizes as "a complex maze of information best suited to specialists."

We would add that while the site has made major improvements since its inception and does offer many benefits, its search engine is clunky, not all federal agencies use the site, and information on forecasted opportunities is inconsistently available, making it extremely difficult to identify all the federal funding opportunities that may be available for a given project.
Multiple federal agencies have also pursued their own widely varying application sites, most of which are not user-friendly. Two examples include the Department of Energy (https://eereexchange.energy.gov) and the Economic
"We need to acknowledge that most federal grant writing and grant administration are incredibly complex and require specific expertise." Development Administration (https://sfgrants.eda.gov/s). Other portals, such as those used by the USDA and Federal Emergency Management Agency (FEMA), require a login even to view the site.

It is hard to imagine that staff at a small organization, who already need a variety of skill sets to manage a wide-ranging array of daily issues (a tiny rural staff might oversee everything from housing and utilities to animal control, law enforcement, and child welfare), would have time to register for and become proficient at using myriad grant application portals to pursue funding for a project. Additionally, most people use these portals infrequently, which leads to additional time spent on having to "refresh" a portal's specific processes (and retrieve login credentials) every time it is accessed. One interviewee, the lone tribal staff member dedicated to grant writing and compliance, counted 40 different portals (application, compliance, and disbursement systems) needed to administer the Tribe's various grants.

Additional issues and concerns were identified around the execution of grant-funded work, administrative and financial
"We're not lawyers." management of funds, and overall grant compliance. The issues noted above also make it challenging to meet funders' differing and complex management, administration, and reporting requirements. While some agencies offer training and technical assistance related to grant writing and grant management, few offer ongoing support on par with their requirements' level of complexity. Some stakeholders noted that grant opportunities are often not pursued due to a lack of capacity for the required compliance.

## Potential Solutions

Multiple stakeholders identified a need for capacity building in Alaska and said federal investment into infrastructure needs to build in tools that recognize and address those issues. One suggestion was to set aside a percentage of funds from any particular grant that can be used for capacity building, e.g., training, mentoring, and other ongoing support, with a partnership approach.

There is also recognition that capacity, like many health and human service issues, is a long-term prospect requiring long-term solutions. Ideas included considering a public-private partnership to engage in a long-term rural/remote capacity-building initiative that addresses grant writing, project management, and grant administration. Rasmuson Foundation, The Foraker Group, and the Denali Commission were specifically mentioned as possible partners. However, this could be a more encompassing collaborative effort that includes regional tribal organizations, the university system, and others.

The USDA's High Energy Cost Grant (HECG) was offered as a model of an application process that advances equity by reducing applicant burden while maintaining effective program controls. Program features include no match requirement; needs-based, flexible eligibility criteria; broad rather than narrowly prescribed goals; and a more straightforward application than many other federal grants. The HECG program's approach recognizes that capacity limitations cannot be pinned solely on applicants and should not necessarily rule out projects.

Another specific suggestion was to offer tier-based grants with separate competitions based on entity size (such as annual revenue); this would expand on the current practice of setting aside a few grants in a competition for rural and/or tribal entities.

To facilitate access to competitive grants, providing technical assistance in the form of grant writing support and funding for third-party technical assistance to develop projects can be immensely beneficial for communities and has been implemented equitably by some agencies. Agencies have provided, for example, free multi-day training pre-submission review and detailed feedback.

Further, using selection criteria that account for the relative needs, high costs, or other meaningful metrics enables federal agencies to provide more effective support to small communities grappling with substantial challenges.

## Applicant Eligibility

## Barriers

Alaska has a unique tribal structure with a wide range of entities, each with a specific and important role. Federal programs that restrict eligibility to certain types of entities penalize Alaska Tribes. For instance, when Tribes choose to join a regional entity, they are executing selfdetermination; by excluding such organizations from federal grant eligibility, an agency disavows this important aspect of tribal sovereignty.

Regional organizations and consortiums are frequently overlooked in applicant eligibility. Excluding nonprofit tribal consortia and tribal organizations as eligible recipients of federal assistance hampers the ability of these entities to provide administrative support to Native villages. For example, one regional tribal nonprofit corporation noted that their agency has the staffing and expertise to seek and manage funding from diverse sources, while many Native villages in their region lack the administrative capacity to navigate the many various federal programs. While regional entities are not always the preferred mechanism and should not be required, categorically excluding them takes away tools that could benefit small Tribes and communities.

Inconsistent definitions present another challenge. Federal agencies follow differing guidance regarding the definition of "Indian Tribe" and "Indian land." This creates confusion, inefficiency, and arbitrary and inequitable barriers.

## Potential Solutions

Treating regional tribal organizations and consortium applications as eligible applicants would enable these entities to receive and manage grants for Native villages seeking assistance. Such organizations could in some cases effectively coordinate major initiatives (such as energy system upgrades) at a regional level, enhancing the efficiency of efforts to benefit multiple communities. Examples of these types of entities include Alaska Native regional nonprofits, Alaska Native regional for-profit corporations, intertribal organizations, and joint ventures between a Tribe and another party that eases the administrative burden on the Tribe (e.g., a local utility).

It is important that Tribes maintain authority to decide whether a regional organization may act on its behalf to avoid a situation where those organizations are directly competing with Native villages for funding.

The U.S. Department of Energy recently expanded its definitions to provide for more inclusive eligibility, including the definition of "Indian Tribe" to include Alaska Native Regional Corporations, Alaska Native Village Corporations, Tribal Energy Development Organizations (TEDOs), intertribal organizations, tribal consortia, and other tribal organizations This level of inclusivity should be adopted across federal agencies.

Varying Definitions of an "Indian Tribe"
BIA: "any Indian Tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act."

EPA: "Any Indian Tribe, band, nation, or other organized group of community, including any Alaska Native village, which is Federally recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians." (The EPA has not allowed Alaska Native Corporations or Village Corporations to apply.)

DOE: "Any Indian Tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians."

## Expanded Definition of "Indian Land"

U.S. Department of Energy regulations (Title 25, Chapter 37, 5 USC 3501) expand the definition of Indian land to include (a) land that is owned by an Indian Tribe and was conveyed by the United States to a Native Corporation pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), or that was conveyed by the United States to a Native Corporation in exchange for such land; (b) any land located in a census tract in which the majority of residents are Natives (as defined in section 3(b) of the Alaska Native Claims Settlement Act (43 U.S.C. $1602(\mathrm{~b})$ )); and (c) any land located in a census tract in which the majority of residents are persons who are enrolled members of a federally recognized Tribe or village. Adopting this expansion across federal agencies would mitigate the issues related to unique land ownership structures in Alaska and reduce disparities in access to federal funds.

## Lack of Interagency Collaboration

## Barriers

Because federal agencies, for the most part, pursue their mandates independently of other agencies with potentially overlapping mandates, funding programs are often managed and presented in a vacuum, without meaningful collaboration among agencies that may have similar priorities.

Agency priorities can also shift over time, leading communities to struggle to focus on their overarching vision and goals while they scramble to fit projects to the latest federal priorities. (One can look to the health and human services realm to see the consequences of shifting federal priorities, with funding priorities in the area of substance use rotating over the years between specific substances - alcohol, marijuana, opioids, etc. - rather than a consistent, unified, and long-term focus on addressing the underlying issues of substance misuse itself.)

Many barriers result from a lack of interagency collaboration. A Tribe may have an idea for a clean energy project, for example, but it may not be clear what specific funding mechanism it qualifies for. Requests for Proposals (RFPs) can be restrictive, and the full scope of a project may require multiple funding streams, but agencies do not typically communicate with each other to ensure a good fit across agency requirements. A common example is solar projects, which may involve the Department of Energy, Department of Agriculture, and other federal agency funds. Conflicting timelines of multiple grants also create unnecessary complications, as does the separate match required by each program.

Further, the time it takes to apply for multiple grants can be a barrier to tribal governments with limited staff; it can also lengthen project timelines, increasing costs and adding uncertainty to planning and implementation. As one interviewee noted, "You can't really apply for the project you need."

For example, if a community needs to rebuild a road and also needs to install underground infrastructure (e.g., broadband or utility improvements), it would be the most time- and costefficient to take care of all of these things at once; however, there is likely no way to apply for an integrated set of projects because funding would come from multiple separate programs. This means, for example, that a road might have to be built and later dug up again to install broadband. Alternatively, funding for planning may be received, so an awardee develops a plan but cannot secure implementation funding. "It's not only a waste of resources," a stakeholder said, "it's demoralizing."

Another unintended consequence of the lack of interagency collaboration is highlighted by Lezak, who visited one tribal office and observed, on the wall, a list of plans the Tribe had developed to meet various federal agency requirements, in some cases just so they could apply for project funding. The list included a "strategic plan" and a "strategic management plan," as well as a "risk assessment," a more specific "flood assessment," and a separate "resilience plan," among others. These plans all cost staff time and money, and often the added expense of an
outside consultant - and the opportunity cost of resources that could have been spent working on other immediate community needs.

## Potential Solutions

A multi-agency shared application would allow for integrated funding between programs and more efficient use of federal funds to tackle crucial projects. This would also help reduce the administrative burden on both applicants and funders, including a reduction in the need to "recreate the wheel" for applications that often request similar information in differing formats.

A shared application would also simplify the process should funds be aggregated for management through the Denali Commission's transfer authority. This approach was a recommendation of the 2023 Alaska Sustainable Energy Conference (summary included in Appendix F), the discussion paper "Alaska Native Communities and the Denali Commission," ${ }^{5}$ and Lezak ("Initiate federal-tribal collaborations prior to the technical planning stage").

## Technology

## Barriers

While the federal government has recognized wide disparities in broadband access across the country (and substantial funding has been committed to addressing these disparities ${ }^{6}$ ), most federal grant opportunities still have online templates, online portals, and online authentication processes that assume all applicants have equal broadband and other technology.

While some agencies offer alternative submission options (email or paper), these also present distinct barriers for rural communities. In addition to unreliable internet connectivity, rural communities experience unreliable (or no) cell phone service, making two-step authentication challenging. Power outages, which are also common, compound these technology issues. Due to these ongoing challenges, rural communities still often use fax to convey documents.

## Potential Solutions

There is strong interest in expanding options for submission of grant applications to include email, fax, and paper ("snail mail") in addition to online portals. Many agencies allow for paper submission as an alternative, but most haven't expanded this to include email or fax submission, which would allow an equitable application window for applicants who experience significant mail delays (in rural Alaska, mail is often delayed due to weather impacting small plane access). For paper delivery, an extended deadline would create a fairer playing field to accommodate unreliable mail delivery times.

[^3]Within online portals, agencies could expand submission options to include online form completion, uploading completed fillable PDF forms, and uploading manually completed forms. This practice is in use on the 'grants.gov' portal. Additionally, because there are so many versions of Adobe Acrobat in use, making all versions of this software acceptable and readable would improve equity. Other simple changes can be made, such as ensuring work in progress can be saved on webforms (which is not currently the case for all federal grant systems).

## Buy America Requirements

## Barriers

The consensus on Buy America is that it is a good concept with poor execution. From a lack of quality (or any) American manufacturers for certain products to procurement cost thresholds that are viewed as unreasonably low, these requirements have led many applicants to ask when assessing an infrastructure grant for possible pursuit, "Does it have the Buy America requirements?" If the answer is yes, many walk away.

Stakeholders pointed out unintended consequences of the requirements, including:

- Lower-quality products that cost more over the long term.
- Project delays and "stop-work" interruptions due to supply chain problems.
- Cost increases that can lead a once-feasible project to become non-feasible.
- Lack of significant benefits for intended beneficiaries (American small businesses).
- Overly prescriptive requirements can lead to disbursement delays and crippling cash flow issues for small organizations.

In one example, a grant-funded project was put on months-long pause because funding was withheld due to a vendor's "American-made" certification not specifying the city where the product was made. In another example, a funder applied Buy America requirements to an Alaska Native village's food program for elders, a burden that hampered the program's effectiveness.

## Potential Solutions

Every stakeholder who discussed Buy America suggested a careful reconsideration of requirements that delay projects and place an undue burden on applicants. Barring a revocation of the Act itself, potential solutions would include:

- Put the burden on vendors rather than applicants to get certified by the federal government and create a database of approved vendors for applicants to simply reference.
- Develop a pre-approved list of equipment, materials, and supplies that are known to be unavailable in the U.S. or not reliably available in the quality or quantity needed.
- Raise the threshold for Buy America requirements to a level more commensurate with the goal of national impact; a threshold of $\$ 10$ million was suggested.


## Issues Unique to Alaska

## Barriers

Rural Alaska faces many unique challenges in accessing federal funding. For instance, to understand the limited capacity of Alaska's Tribes, particularly their limited ability to tap into land-based economic opportunities, it helps to understand the tribal land ownership model in Alaska.

In the contiguous Lower 48 states, the federal government holds lands in trust for Tribes, and the Tribes have the right of self-governance and to use the land for various purposes, including economic development. In Alaska, by contrast, land ownership is primarily governed by the Alaska Native Claims Settlement Act (ANCSA) of 1971.

Tribes in the Lower 48 have more direct control and authority over their lands and resources than Alaska Tribes. Tribes in the Lower 48 can lease or develop their lands, engage in agricultural activities, extract natural resources, establish businesses, and generate revenues for the benefit of their tribal communities. In contrast, Alaska Tribes are restricted in such endeavors due to the corporate-based land ownership model established under ANCSA.

## Alaska Native Claims Settlement Act

 ANCSA extinguished aboriginal land titles in Alaska and established regional and village corporations, separate from tribal governments, to receive land and financial compensation. This resulted in a unique system where land is owned by regional and village corporations rather than the actual Tribes. These corporations are for-profit entities with a fiduciary responsibility to their shareholders (tribal members), and they have the authority to manage the lands and resources they received under ANCSA. However, this system means that Tribes often do not have direct control over the lands and lack the ability to generate revenues from them easily.Another barrier is the lack of consideration for cost-of-living differences in quantitative measures such as poverty rates and income levels, which are often used for establishing grant eligibility, scoring, and ranking grant applications. Disregarding the local context in assessing income and other economic data creates inequity. Cost of living adjustments are absent from most applications, but costs of everything from groceries to labor are often cripplingly high in rural and remote Alaskan communities and significantly impact project costs.

Quantitative measures also leave out other types of project benefits, such as energy security in off-grid communities that require backup options in a harsh climate.

Native villages also face obstacles in obtaining funds from programs that require an analysis of economic benefits and costs, given the narrow way these programs typically define and calculate project benefits. In conventional terms, the economic benefits of construction projects in rural Alaska rarely outweigh costs because of low population density in Native villages, high
construction costs, limited cash economy, and the fact that analyses typically undervalue avoided costs. In addition, benefits to subsistence opportunities, food security, energy resilience, health, and safety are difficult to quantify and are often disallowed or undervalued in benefit-cost analysis (BCA) guidelines.

Another challenge is recognizing rural and remote communities' need to modernize their grids ${ }^{7}$ before they can accommodate renewable and/or alternative energy systems. While the upgrades themselves may not generate immediate cost savings, and therefore deliver a lower BCA, they are a prerequisite for integrating alternative energy sources. Such upgrades also bring nonmonetary benefits such as energy security and resiliency and reduction of environmental impacts.

Another challenge affecting application scoring and project implementation is funders' labor requirements. Preference for union labor often conflicts with a preference for Alaska Native hire, in part because Alaska Native workers have less need for union healthcare benefits due to their status as Indian Health Service beneficiaries. For an Alaska Native electrician, for example, a non-union job with a slightly higher hourly wage and no health benefits would likely be preferable to a lower-paying union job with health benefits. It is also difficult to find labor for infrastructure projects outside of the large for-profit contractors, which are primarily non-union.

## Potential Solutions

The federal government incorporates cost-of-living considerations when determining agency staff salaries and travel per diem. These cost-of-living adjustments offer a straightforward opportunity to address the issue and promote fairness in rural Alaska and other high-cost communities. Taking into account cost-of-living differences could also be relevant when evaluating economic data related to match waiver requests. Additionally, when examining benefit-cost ratios, cost savings, ROI, and payback periods, cost of living should be incorporated, particularly freight cost differences.

Another recommendation is to move away from a traditional BCA and instead adjust for relative inflation of costs due to economic conditions or rural factors within communities. Funding evaluations could introduce variability, adjusting funding amounts based on the cost of living or the cost of project delivery specific to each location, similar to the way federal per diem rates are adjusted. By incorporating a variable adjustment for areas where construction costs are higher, greater equity and inclusion could be achieved across underserved and overburdened regions.

Modifying BCA requirements holds the potential to fundamentally change the game for rural communities needing energy and infrastructure assistance. Moreover, changing the way costs and benefits are valued in small remote Alaska Native communities is consistent with - and likely necessary to the success of - Justice40 Initiative goals.

[^4]
## Justice40 Initiative

The Justice 40 Initiative is a federal government effort to deliver at least $40 \%$ of the overall benefits from certain federal investments to disadvantaged communities. According to the White House, "This investment will help confront decades of underinvestment in disadvantaged communities and bring critical resources to communities that have been overburdened by legacy pollution and environmental hazards." Categories of investment within the Justice 40 mandate include climate change, clean energy and energy efficiency, clean transit, affordable and sustainable housing, training and workforce development, remediation and reduction of legacy pollution, and the development of critical clean water and wastewater infrastructure.

Some programs, like NRCS's Emergency Watershed Protection program, already allow for consideration of non-economic benefits in BCA calculations, and the approach has proven effective for rural communities.

Some programs limit the use of benefit-cost analyses to specific projects. For instance, HUD's Community Development Block Grant Mitigation (CDBG-Mitigation) program mandates the analysis of benefits and costs only for projects with a total cost exceeding $\$ 100$ million and funding of at least $\$ 50$ million from all CDBG sources. Moreover, agencies have the potential to address this obstacle by waiving the requirement for small and economically distressed communities or establishing different thresholds tailored to projects in those communities. The feasibility of such changes would depend on agencies being given the necessary authority to implement them.

Expanding allowable expenditures to accommodate upgrades to existing systems will provide energy security while rural communities work to build the capacity and funding to transition to renewable and alternative energy systems.

Finally, doing away with union preferences and requirements in favor of direct consideration of overall compensation would reduce conflicts with Alaska Native hiring preferences and make it less burdensome to hire the labor needed for rural projects.

## Other Barriers \& Potential Solutions

Additional areas of concern, which are further detailed in Appendix A (challenges/barriers) and Appendix B (potential solutions), include the following:

- Application timing: Timing typically does not consider applicant context (e.g., deadlines during commercial and subsistence fishing season or right after a major federal holiday).
- Inconsistent budget exclusions: Some agencies disallow "rolling stock," for example, while others disallow construction due to differing agency interpretations of regulations and differing perceptions of the administrative burden of allowing various cost categories.
- Tribal sovereignty: The State of Alaska requires applicant Tribes to sign a waiver of sovereignty to access State funds (including pass-through federal funds), putting tribal sovereignty at risk.
- Project implementation: Startup operational costs are typically excluded as allowable expenses, making it difficult in some communities to transition to smooth startup.
- Opportunity Zones: Final designations appear largely arbitrary and have not led to new funding opportunities nor to any real competitive advantage for existing funding.


## Appendices

A. Table of detailed feedback: barriers and challenges
B. Table of detailed feedback: potential solutions
C. Methodology
D. List of interview questions: applicants
E. List of interview questions: funders
F. Additional barriers and solutions from the 2023 Alaska Sustainable Energy Conference Summary

## APPENDIX A: DETAILED BARRIERS \& CHALLENGES

| Realm | Barriers / Challenges | Examples from Interviewees |
| :---: | :---: | :---: |
| Match requirements | Difficult for small, isolated communities <br> Other federal funds generally ineligible as match, but small community energy/infrastructure projects often fundable only federally Inconsistent match requirements Pits remote communities with limited economic base against those in diverse and/or significant economy Match waivers, when available, must be requested as part of application, forcing small applicants to invest considerable time and resources without knowing waiver status | Two programs within one agency with differing match requirements (the one with a higher match requirement received just 10 applications nationally) |
| Capacity | Many applications lengthy and complex, and presume a level playing field re applicant capacity but actually pit large, high-capacity entities against small, remote entities with high turnover and few staff who must "wear many hats" <br> Communities most likely to need funding are often least likely to have internal capacity for complex applications, and least likely to be able to afford external grant writing support, much less grant management and compliance; must weigh cost vs potential benefit of applying <br> Applications often require technical expertise for studies or reports but only provide a 30-60 day application window, resulting in barriers re both time and cost <br> Vast differences between applications and compliance requirements put added administrative burden on small staffs, leading to an added burden for Tribes to build an unofficial information sharing network, when agencies should provide this support <br> Entities with longevity, stability, clean audits, and proven track record must continue to "prove themselves," often with redundant paperwork, in some cases for the same funding program, adding to administrative burden that takes resources from project and program work | DOE Clean Energy on Tribal Lands application is so complex and timeconsuming that many communities shy away from applying Tribes request examples of applications and compliance reports that should be available through FOIA One agency conducted a 6-hour telephone review with a small Tribe |


| Realm | Barriers / Challenges | Examples from Interviewees |
| :---: | :---: | :---: |
| Issues unique to Alaska | Vast geography, severely limited road system, and geographical barriers for transport such as mountain ranges and large bodies of water <br> Complex and land ownership structures unique to the state, with much land ownership with non-eligible entities, affecting ability to demonstrate site control and ownership <br> Complex tribal structures that can affect eligibility <br> Freight issues including infrequency, inability to aggregate shipments, common disruptions, and high costs, which impact budgets, cost/benefit ratios, implementation, and project timelines <br> Loan programs rarely tapped in Alaska, due to non-feasibility of debt service in rural/remote communities <br> Some funding mismatched for realities of Alaska communities and Tribes, with eligible project types not aligning with highest needs <br> Some metrics required in applications and/or reporting don't apply to a lot of communities in Alaska <br> Some funding restrictions don't make sense for rural/remote communities Preference for union labor can conflict with preference for Alaska Native hire because of union healthcare benefits that Alaska Natives likely don't need. <br> It is harder to get labor for infrastructure projects outside of the large forprofit contractors, which have mostly chosen to go non-union, so the preference for union labor is having a greater impact on Alaskan applicants. SAM.gov requires annual recertification (rather than only when there are organizational changes), and will only accept a physical address, when many rural communities don't maintain street addresses. | Some communities only get one barge delivery annually; if a grant starts after that, an entire project can be delayed by a full year Vehicle crash data requirement when no road system and non-road vehicles more common (ATVs, boats, snowmachines) <br> Tribal Transportation Funds do not allow infrastructure development to access neighboring communities, due to assumption of a road system An Alaska Native electrician, for example, would likely make less money on a union job because the pay would be offset by health care benefits not needed by the Alaska Native electrician. |
| Technology | Severe limits in broadband/cell service, resulting in: (a) challenges joining webinars; (b) delays and timeouts logging into submission portals; and (c) difficulty with 2-level authentication for portal logins <br> Portals don't use or recognize all versions of Adobe, making documents inaccessible and/or not submittable for some applicants Portals differ between agencies, often complicated and not user-friendly, each requiring a learning curve | Agency staff having to take information over the phone and complete forms due to version incompatibility <br> Dept of Treasury use of ID.me for authentication: requires 2 pieces of |


$\left.$| Realm | Barriers / Challenges | Allowance for paper submission does not account for longer delivery times, <br> shortening application window for applicants where mail delivery is <br> inconsistent and unreliable due to weather, email and fax submission <br> generally not allowed as alternative |
| :--- | :--- | :--- | | Exampleal identification, biometrics, |
| :--- |
| phyd a videoconference with staff |
| ane community had to fly a paper |
| check to Anchorage by a certain |
| date to document match; when it |
| arrived, there was nobody in the |
| office to receive it, so it was flown |
| back, leading to a 3-4 week process | \right\rvert\,


| Realm | Barriers / Challenges | Examples from Interviewees |
| :---: | :---: | :---: |
|  | - Alaska communities pitted against one another in making a case for need in a state experiencing high monetary and environmental costs of diesel |  |
| Application timing | Deadlines during busy times for applicants (fishing, subsistence season), making it difficult to pursue some funding opportunities Hard to plan for the timing of some grants, because although funders maintain strict application and reporting deadlines, they don't always stick to opportunity release and award decision dates. Communities, Tribes, grant writers, and engineering firms have to juggle schedules among other demands, making changes difficult for everyone. Other unintended consequences include: <br> - Most likely submissions are for projects likely to happen anyway (already had feasibility study or design in place) <br> - More innovative projects less likely to be included <br> - Communities that need the most time to get something ready are least likely to be able to apply if they have little notice, short application windows, and/or shifting application timelines | Interviewees referred to funding opportunity release delays of up to 6 months <br> One agency releases new opportunity before previous funding cycle awards are announced, leading some applicants to go through another application process "just in case" <br> Higher authority pushing funding turnaround so quickly it forces tooshort application windows |
| Eligibility | Non-eligible entities (regional organizations, coalitions, etc.) reaching out to Tribes to apply for funding only Tribes are eligible for, putting additional burden on Tribe to manage grant for some larger coalition or set of external interests <br> Some eligibility expansions without increase in number of awards, increasing competition from large organizations with dedicated grant writing staff <br> Regional entities do a lot of beneficial work but have high indirect rates, reducing available funds to benefit at Tribe and community level, and can lead to project funding shortage and need to pursue multiple opportunities |  |
| Information access | Many opportunities across multiple agencies; hard to get sense of full landscape and prioritize <br> Even within agencies, things can differ so widely it's hard for staff to have a full sense of it all |  |


| Realm | Barriers / Challenges | Examples from Interviewees |
| :---: | :---: | :---: |
| Agency guidance and technical support | Regional decision makers don't always understand the day-to-day realities of truly remote communities; Alaska has such a large number of crucial differences from Lower 48, regional offices don't make sense; in addition, it "doesn't feel great" when an agency flies in staff for a couple of hours and don't try to get to know the community <br> Federal agencies but also employees within a single agency have different interpretations of level of technical assistance and support that can be provided to applicants <br> Forms and templates offer varying levels of guidance <br> Some funders less transparent than others about application evaluation criteria and funding decision processes <br> Some agencies don't provide a form for information requested in a very specific way, so applicants must develop a template <br> Even high-capacity applicants struggle with many federal grant applications Much of the rigidity in requirements appears to originate in Congress rather than at the agency level <br> All the new funding e.g., Infrastructure Investment and Jobs Act (IIJA) hasn't been accompanied by increase in staffing, so staff are stretched even more thin, especially with so many stringent funding parameters | Standard Forms ("SF" forms) lack specificity in guidance, and different agencies sometimes want different information in some of the sections |
| Varying budget exclusions | Agency interest in property acquired or constructed through grants has led to differing exclusions; some allow construction but not equipment, some allow personal property but not construction, etc., leading to needing workarounds for a project to meet differing agency exclusions | One agency funds energy related equipment but not storage structure to protect it from the elements |
| Tribal sovereignty | State of Alaska requires Tribes to waive sovereignty to accept a grant, including federal pass-through funds, precluding many Tribes from accessing funds | Example provided was health-care reimbursements |
| Project implementation | Cost reimbursable grants can create barriers to starting large implementation projects due to limited up front capital While it makes sense to demonstrate feasibility prior to funding for design and implementation, it then becomes difficult to fund a project comprehensively, with some funding only for planning/design or | For example, in implementing a large grant funded construction project, a small Tribe with limited capital may have a hard time getting a project started. They may also experience varied and unknown |


| Realm | Barriers / Challenges |
| :--- | :--- | :--- |
| implementation; having to separately and competitively apply for each |  |
| element adds burden and delays projects |  |
| Infrastructure funding does not include any startup operation and |  |
| maintenance funds |  |$\quad$| Examples from Interviewees |
| :--- |
| reimbursement timing, depending |
| on the grant/agency. |
| Some less reputable Lower 48 companies preying on Alaska communities, |
| but not all agencies include a means for due diligence (e.g., info on how to |
| do a company check) |$\quad$| Oportunity Zones are touted as improving equity, but that hasn't been the |
| :--- |
| Oportunity |
| Opportunity <br> reality in Alaska; hasn't led to new funding opportunities, nor to any <br> particular competitive advantage in existing funding opportunities, but <br> rather makes "already-attractive" projects even more so to investors |

## APPENDIX B: DETAILED POTENTIAL SOLUTIONS

|  | Potential Solutions |
| :---: | :---: |
| Match requirements | - Simplify ability to use other federal funds as match <br> - Require match that is more realistic for a community, such as in-kind, cash match in line with a community's resources rather than with the scale of a project budget, and/or commitment to maintenance funds, so they still have a sense of investment and ownership. <br> - Offer a sliding-scale match based on criteria related to local circumstances. (Some agencies do a simplified version of this, such as EDA.) <br> - Similar to pre-approval for paper submissions, provide advance decision on match waiver so applicants can determine if funding application worth the time and resources to pursue |
| Capacity issues | - Make applications more feasible for tribal applicants to complete internally to the extent possible <br> - Make compliance requirements more in proportion to project size and range of awards <br> - See USDA High Energy Cost Grant (HECG) as a good model: no match requirement, needs-based, broad eligibility, goals broader rather than narrowly prescribed, and application more straightforward than many other federal grants <br> - [Re. programming funding]: Once an agency commits to an awardee, and that awardee demonstrates success, some funding could be set aside over a longer period rather than making them go through the entire application process every 1-2 years. Issues took much longer than that to form and will take longer to solve. Example: national private funder (Kataly Foundation) that gives operating funds to organizations that are doing good work, with no reporting other than an annual phone call, to allow organizations to do what they're best at. (There is an understanding that for larger grants, funders will want more, but it would be helpful in those cases to have guidance as clear as possible, plus strong technical assistance.) <br> - Broaden the definition of investing in a community. Allow for an "inefficient" (years-long, holistic) capacity-building approach, including building trusting relationships, growing local sense of ownership, training, technical support, etc. This may increase costs but also build partnerships, which funders say they want to see. <br> - Look at capacity building as part of any project, with a set aside to allow for training, mentoring, and ongoing supports that "do with" rather than "do for" |

## Potential Solutions

- Consider a public/private partnership to engage in a long (20-25 years) commitment to rural and remote capacity building in grant writing, project management, and grant administration.
- Include everyone at the table from the start: Tribes and local government but also regionals, school/district, health, public safety, etc.
- Example: One nonprofit recently received $\$ 49 \mathrm{M}$ to accelerate the Alaska mariculture industry in coastal AK (Southeast, Kenai Peninsula, Southwest, and Prince Wm Sound).


## Alaska's unique <br> challenges

## Limitations of

 monetary and economic measures2"
" Re-evaluate metrics for universality, e.g., "transportation-related injuries" versus "road crashes"

- Engage Denali Commission (and/or other orgs with high capacity, such as nonprofits, regional entities) more in a management role in distributing federal funds for Alaska projects
- Funding to modernize grid to accommodate renewables
- Consider other benefits besides cost savings, cost-benefit ratios, monetary ROI and payback periods
- Consider cost of living differences in relation to need, match waivers
- Create differentials for and/or expand eligibility for waivers based on:
- Freight cost differences (Federation of Community Councils did this, for example)
- Cost of living (COL) differences: note that federal compensation has COL differences based on geography, so the data already exists. This would also make poverty data more meaningful, by putting income levels in context with COL
- Allow email and fax as well as paper submission for some applicants
- For paper submission, extend deadline due to longer delivery time
- Make all versions of Adobe Acrobat acceptable, and provide forms in various versions, including a nonAdobe version for those who don't have it at all
- Offer multiple ways to complete application documents (e.g., grants.gov online completion, completing a fillable .pdf and uploading, or manually completing a non-fillable .pdf and uploading)


## Buy America

 requirements Application timing- Raise monetary threshold to level with more of a national impact (suggested \$10M)
- Reconsider requirements that cause undue hardship on projects
- Consider application timelines that don't conflict with tribal busy times
- Consider rolling deadlines ( $2-4 \mathrm{x} / \mathrm{year}$ ) or open cycle, which would spread out the workload for federal agency staff and prevent "bottlenecks," while allowing applicants to pursue applications at a time of year most convenient for them
- Release new opportunity after previous cycle award notifications

|  | Potential Solutions |
| :--- | :--- | :--- |
|  | -Provide more advance notice of opportunity releases, esp for applications that will require technical <br> studies or other outside efforts |
| -Announce in advance length of application window; for those with highly technical requirements, <br> expand to 75-90 days |  |
|  | -Allow longer application and review windows in recognition of agency staff shortages, and to better <br> align with complexity level of funding opportunity, amount of funding, and number of awards |
| Eligibility | Allow aggregate formula funding applications <br> Expand eligibility to accommodate all Alaska tribal entities and structures (including village and <br> regional corporations); could allow them only to apply on behalf of Tribes that opt in for that (versus <br> adding them as separately eligible entities that compete for same pool of money) |
|  | - For some grants, put a cap on the indirect rate, so that most of the benefit goes to the project or program; <br> alternatively, once an entity has secured enough indirect dollars to cover their costs, waive indirect rate |
| on everything after that |  |

## Potential Solutions

Agency guidance and technical support

- Ensure federal agency staffing aligns with additional workload of new funding opportunities
- Visits to remote communities by agency decision makers as well as regional representatives
- Similar to the concept of the court-appointed attorney for those without means, offer a program of agency-appointed technical assistance for applicants without the resources to hire outside assistance
- Look to models of strong applicant/grantee support:
- ANA has regional training/technical support centers, including one in AK
- Some agencies e.g., EDA, Administration for Native Americans (ANA) offer pre-submission review and feedback; there's no federal regulatory reason to restrict this level of assistance; increase staffing to meet the need; in addition, the Freedom of Information Act (FOIA) means they can share examples of successful applications and grant reports
- One frequent suggestion was to filter federal funds for AK through the Denali Commission, or in some cases, other entities.
- Energy Ambassadors Program (DOE): trains and develops energy ambassadors to provide Native villages with front line technical assistance and a standardized model and quality process, while enabling tailored energy efficiency and renewable energy options for each village
- The Rural Alaska Community Action Program's (RurAL CAP) work with communities on housing assessments and funding development
- Identify and adapt models for inter-agency collaboration:
- There have been numerous multi-agency funding opportunities at the federal level. One older example was a joint opportunity funded by the U.S. Department of Transportation (DOT) and HUD, for planning grants that better aligned transportation, housing, economic development, and land use planning.
- At an even higher level of collaboration, a group of Alaska funders and other entities partnered to assess every community's sanitation needs, develop ranking criteria, and prioritize projects. Instead of competitive processes, they are consolidating funding and addressing the projects in order of agreed-on priority.
- Clearer, more specific, and consistent instructions across agencies for standard ("SF") and other forms
- Enlist outside, independent review of Notice of Funding Availability (NOFAs), Notice of Funding Opportunity (NOFOs), and Funding Opportunity Announcement (FOAs), for clarity
- Enlist outside, independent legal review of existing statutes to identify:
- Grant requirements required by statute, versus areas with potential for greater flexibility
- Statutes that have been driven by Congress but are unreasonably prohibitive to funding agencies


## Potential Solutions

- Where statutes cannot be changed, review models of other federal agencies with different approaches, e.g., how some agencies allow equipment, construction, etc. in project budgets
- More clearly delineate areas where Congressional leadership is needed versus where agency expertise is the more logical driver

Varying budget exclusions

Tribal sovereignty
Project
implementation

- Including debt relief in energy funding opportunities would have a huge impact on rates for those communities that are carrying huge debt but really don't have the resources to sustain that
- One agency instituted an exception, to allow Tribes to purchase rolling-stock equipment
(State): Eliminate requirement that tribal applicants must waive sovereignty
- Provide feasibility study funding, with set-aside for planning, design, implementation based on positive feasibility findings
- Set aside funds for startup and a number of years for ramp-up operations for rural/remote communities
- Offer multi-phase funding, with each successive phase based on successful completion of previous
- Expand ability of feasibility funding to move into planning and design phase
- Update monetary thresholds on a more regular basis to keep pace with inflation (such as single audit, procurement, etc.). Audits can cost $\$ 50,000$ in Alaska even for a small entity.
Opportunity Zones
If continued at all, should target at least some funding to underserved communities


## APPENDIX C: METHODOLOGY

DeerStone engaged a diverse group of knowledgeable Alaskan stakeholders, tribal and nontribal, to gather a broad range of perspectives. Due to the interest in gathering in-depth information, the most effective and feasible means was determined to be key informant interviews, versus a survey (less effective due to an inability to probe in-depth issues) or focus groups (less feasible to conduct in person with stakeholders from around the state).

Rather than attempting to reach every possible demographic (as might be done with a survey), key informants were selected to provide a variety of perspectives (applicant/awardee, funder, technical assistance provider), with a particular lens on tribal entities to gather viewpoints from various parts of the state and to foster in-depth discussions.

DeerStone staff interviewed 14 individuals for this projects. The table below shows the types of entities the individuals represented. In addition, several individuals provided input via email or other means.

| Entity type | $\#$ |
| ---: | ---: |
| Tribe | 5 |
| Non-profit tribal organization (regional, statewide) | 3 |
| Non-profit regional organization (non-tribal) | 1 |
| Tribal consultant | 1 |
| Agency funder | 4 |
| Total | $\mathbf{1 4}$ |

Most interviewees were given the opportunity to review and offer feedback on the draft of this report to ensure their input was accurately captured. ${ }^{8}$ Because some interviewees represent small communities, responses are anonymous.

Interviewees were asked to consider the entire spectrum of the grants process when thinking about barriers and ideas for solutions, from advance work needed before an opportunity is released through grant closeout. Areas of consideration included:

[^5]

## APPENDIX D: LIST OF INTERVIEW QUESTIONS - APPLICANTS, TECHNICAL ASSISTANCE PROVIDERS

What do you think are the biggest challenges regarding funding for energy and other infrastructure projects?

Tribal funding has an underlying purpose of improving equity. Are there issues that undermine that purpose, and if so, what are they?

Do you have any examples of specific grant applications or formula funding opportunities that you've worked on that had specific barriers?

Can you describe any barriers to access or concerns regarding submitting grants in a portal versus email submission applications?

Have you had any issues related to the Buy America requirements?
Do you have ideas for changes funders could make to solve some of the issues you've identified?

## APPENDIX E: LIST OF INTERVIEW QUESTIONS - FUNDERS

What do you think are the biggest challenges regarding funding for energy and other infrastructure projects?

Tribal funding has an underlying purpose of improving equity. Are there issues that undermine that purpose, and if so, what are they?

Do you have any examples of specific grant applications or formula funding opportunities that you are aware of that had specific barriers?

Can you provide any potential solutions or potential solutions to any of the barriers or challenges you've identified?

Do you have feedback regarding the Buy America requirements?
For those that take submissions by email, Can you please share the reasons for using email submission rather than an online portal?

# APPENDIX F: ADDITIONAL BARRIERS AND SOLUTIONS, FROM 2023 ALASKA SUSTAINABLE ENERGY CONFERENCE SUMMARY 

## 2023 Alaska Sustainable Energy Conference Summary

With the support of the Denali Commission, AML hosted a rural energy workshop during the State of Alaska's Sustainable Energy Conference. This summary reflects notes taken during this event, attended by rural energy stakeholders and state/federal staff. The following are neither direct quotes nor attributable to AML, the Denali Commission, or any participant.

## Identifying Disadvantaged Communities through an Equity Lens

Alaska's rural communities are experiencing environmental and climatic change that is drastically impacting traditional lifestyles. There are pathways forward, focusing on locally sourced renewable energy that will reduce carbon emissions contributing to climate change while lowering costs.

Competitive grant applications continue to highlight inequity among Alaska's communities. AML's priority is to help disadvantaged communities, those with less internal capacity, access renewable technologies at lower costs.

## Defining the technical Attributes of Community Projects

Strategic energy plans and community forecasting are necessary to account for potential growth in a community.

There is a need to develop methods for identifying and capturing accurate data that truly illustrates the high costs communities are currently facing.

Technologies must be appropriate to rural conditions and isolated microgrids.
There is a need to explore the use of heat pumps and other options for reducing residential heating costs.

The development of transmission lines would increase the economy of scale and encourage the integration of renewables and storage.

Understanding that clean energy can't outpace the shoring up of existing power plants, which will continue to need funding and maintenance until fully implemented.

Incentives, renewables, and new technology need to work for utilities, too, and not disrupt existing business models.

## Supporting disadvantaged communities and creating pathways for clean energy

Training the next generation with the right skillsets, from grant writers to project managers to linemen, will be increasingly necessary.

To help solve rural challenges and build capacity, stronger partnerships will help support training and the effort to secure additional resources.

For administrative efficiency, onboarding processes should be developed for new managers, economic development staff, planning positions, and grant writers.

Technical assistance for quality grant writing, engineering, and feasibility studies is limited but can be found. The Office of Indian Energy Policy and Programs is a good resource, as are 638 Contract - Tribal Contract or Compact Health Centers. Additional Federal technical assistance exists but can be oversubscribed. Beware of unscrupulous private offers of assistance.

## Federal Funding Deployment

It's important to note that funding cycles don't always line up with project cycles.
Implementation of IIJA/BIL has conflicted with funding or grant cycles, making it harder to plan.

Recently, funding efforts have underestimated labor shortages and supply chain delays, both hurdles to implementation and completion of projects.

High match requirements remain significant challenges for disadvantaged communities. There is still a need for additional investment to help communities respond to grant applications, either through intermediaries or bundled applications.

Prize competitions, including lists of potential projects, have been interesting for small projects. This method makes project development less onerous and improves return on investment.

## Further Potential Solutions

- Develop and support a network of those interested in the topic.
- Create a shared calendar of grant application opportunities.
- State match support mechanism and collective advocacy on that front.
- Create trusted pathways for technical assistance providers.
- Evaluate cohort model for technical assistance and support.
- Workforce development and technical assistance focused on new technologies.
- Grant writing capacity at the local level and just knowing what's coming.
- Identify the role of housing authorities - information on AHFC rolling out IRA program.
- Develop feedback mechanisms for federal agencies so they better understand the issues.
- Coalition of communication to federal agencies about Alaska's unique needs.
- Reinvestment in DOE technical assistance grant funding - contribute to feasibility analysis and strategic energy planning.
- DOE has an interest in funding climate resilience projects.
- Aggregate grant applications and awards for maximum impact.
- Develop ways to make formula funds more accessible.
- The opportunity to share successes and failures with one another.
- Sustainable operations - maintenance programs and support systems.
- Don't leave out aging infrastructure - it's not always bright, shiny, and new but includes aging systems that need regular maintenance and parts.
- Develop a simple email list to keep conversations going.


[^0]:    ${ }^{1}$ Stephen Lezak, Genevieve Rock. Improving Climate Adaptation Governance for Indigenous Communities: Lessons from Alaska Native Villages, 02 December 2023, PREPRINT (Version 1) available at Research Square [https://doi.org/10.21203/rs.3.rs-3406431/v1]

[^1]:    ${ }^{2}$ Relocation, Managed Retreat, and Protect-in-Place Issues in Alaska Listening Session Report for December 1-2, 2021. Jensen, K. et al., U.S. Department of the Interior, 2022; quoted in Lezak (2023).

[^2]:    ${ }^{3}$ Alaska Economic Trends, July 2023. Alaska Department of Labor \& Workforce Development.
    ${ }^{4}$ Ibid.

[^3]:    ${ }^{5}$ Alaska Native Communities and the Denali Commission: Strengthening Relationships, Increasing Impact. McKinley Research Group. September 2023. Discussion paper for Alaska Venture Fund. https://alaskaventure.org/wp-content/uploads/2023/10/AVF-Denali-Commission-Discussion-Paper-Sept-2023. ${ }^{6}$ It should also be noted, however, that a recent broadband opportunity was so complex that smaller communities and Tribes, the most in need of broadband, had to collaborate with larger entities to make an application feasible.

[^4]:    ${ }^{7}$ Modernizing grids may include work to the existing electric utility such as upgraded controls, new automated switchgear, new diesel gen sets and electric distribution system upgrades, for example.

[^5]:    ${ }^{8} \mathrm{~A}$ few interviewed later in the process did not review the report due to timing constraints.

