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The IEDC
Economic Development Journal

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INTERNATIONAL
ECONOMIC DEVELOPMENT
COUNCIL

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ABOUT IEDC

The International Economic Development Council (IEDC) is the premier international association dedicated to leadership and excellence in economic development. IEDC can equip you with the tools and resources that are helping to shape economic development throughout the country and around the world. Our services include:

- *ED Now*, a twice-monthly newsletter
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- Improved access to resources and information
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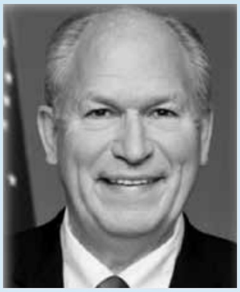


Bill Walker
Governor of Alaska

LETTER FROM THE GOVERNOR

welcome to alaska

Dear International Economic Development Council Members,

On behalf of the State of Alaska, it is my pleasure to invite you to attend the International Economic Development Council (IEDC) 2015 Annual Conference in Anchorage, Alaska!

I appreciate the work of IEDC over the past 14 years, bringing together economic professionals from all over the world to work together to meet the ever-changing landscape and challenges of economic growth and prosperity.

Foundational Transformations: Creating Future Growth & Prosperity is a theme Alaskans embody and know well. Our private, non-profit, corporate, and government stakeholders tirelessly work together to creatively build an environment that will grow the economy in our state through oil and gas, mining, timber, seafood, health care, transportation, government, and the visitor industry to name a few.

I trust you will enjoy the conference as you network together, attend programs, special events, workshops, and participate in professional development courses that expand your knowledge, as well as experiencing some of the spectacular experiences to be found in and near Anchorage. Alaskans are proud to show off our state, including our glaciers, salmon streams surrounding mountain ranges, and hundreds of miles of wilderness trails. Anchorage also offers metropolitan amenities, abundant fresh-caught seafood, and Alaskans' "Last Frontier" warmth.

We hope to see you in Alaska in October.

Sincerely,

Bill Walker
Governor of Alaska

welcome to anchorage

Dear International Economic Development Council Members,

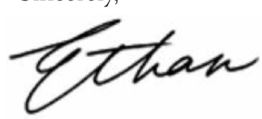
On behalf of the Municipality of Anchorage, it is my pleasure to welcome you to our beautiful city for the International Economic Development Council 2015 Annual Conference.

There is no better place than Anchorage to represent *Foundational Transformations: Creating Future Growth & Prosperity*. As many of you know, Anchorage is in its centennial year, celebrating 100 years as a great city, and looking forward to what the next 100 years will bring. Anchorage is a great city not only because of where we are, the air cross roads of the world and the gateway to the Arctic, but we are great because of who we are, and I can't wait for you all to experience all our city has to offer.

During your stay I hope you get the chance to get out and play and see what we are doing to move Anchorage forward. Be sure to enjoy our vibrant downtown, the expansive trails and parks, our culturally diverse neighborhoods, and my favorite, all the unique food around town.

Again, welcome to Anchorage, have a great conference!

Sincerely,



Ethan Berkowitz
Mayor-Elect of Anchorage

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an unexpected journey

By William Dann and Archana Mishra

BACKGROUND

Shortly after taking the helm at the Anchorage Economic Development Corporation (AEDC) in 2007, President and CEO Bill Popp realized a major course correction was needed. After discussions with a number of AEDC investors, it became apparent that the organization was losing status and credibility. Though the organization could point to a number of major past successes, it faced lingering issues asking them "what have you done for me lately?" and "what are you going to do to develop the economy so that my kids want to return home and seek opportunities here?"

Popp's assessment was that the organization lacked a compelling vision or destination. The five-year vision that was on the books lacked sizzle. In his first meeting with the strategic planning consultant ultimately retained by AEDC, he noted that the outcome from the process that was most important to him was determining whether the board (a body of about 50 members, including ex-officios) had an appetite for doing something meaningful or continuing to move along incrementally.

He also assessed that traditional economic development techniques were not going to get it done in Anchorage. There were a number of formidable structural barriers that would require innovative thinking. These barriers included an economy that lacked diversity, consisting of one-third oil production, one-third government, and one-third "other," dependent on oil production and/or government spending for attaining success. In addition, several years of surveying community business leaders about barriers to business retention and expansion confirmed deep-seated impediments.

Further, feedback from several sets of site selector teams confirmed that there were also structural barriers that prevented Anchorage from even getting into the "game" for site selectors. That is, Anchorage would not make the first cut and even come up for consideration. Those barriers included geography (distance and cost of getting any goods to markets), cost of doing business (workforce, food, housing etc.), and the lack of a large skilled labor pool. In short, until some of those shortcomings were solved or overcome by other advantages, Anchorage would not get into the competitive game.

Then in March 2010, AEDC began a new journey. The Board of Directors adopted a compelling new vision – Anchorage will be the #1 city in America in which to live, work, and play by 2025. This article

Photo of Anchorage by Travis Smith.

William Dann is president of Professional Growth Systems and a member of the AEDC Board of Directors and the AEDC Executive Committee. (billd@professionalgrowth-systems.com) He is the author of *Creating High Performers: 7 Questions to Ask Your Direct Reports*.

Archana Mishra is the director of Live. Work. Play., AEDC. (amishra@aedcweb.com)She is the author of *The Fortunate Child*.

All the included photos were posted to the I Love Anchorage Instagram account. Each week a different Anchorage resident hosts the account and shares photos of how they live, work and play in our city. AEDC created the community account and manages the schedule of hosts. To view more photos of everyday life in Anchorage, go to www.instagram.com/iloveanchorage.

ANCHORAGE'S PATHWAY TO ECONOMIC DEVELOPMENT

This article explores the Anchorage Economic Development Corporation's bold vision for the city of Anchorage – to make it the #1 place in America – through a grassroots movement called Live. Work. Play. It encapsulates the rationale for such a vision that goes beyond the traditional economic development model, along with the journey of garnering support from the wider community, the lessons learned from this experiment, and the foreseen challenges that lie ahead in achieving the vision. The article dives into the history of the initiative's formation, the foundational leaders, the processes that worked and others that failed, and the key areas that this initiative focuses on. Also included are highlights of the twists and turns in this journey so far.

About the Anchorage Economic Development Corporation:

AEDC is a private, nonprofit membership organization developed in 1987 to grow a prosperous, sustainable, and diverse economy in Anchorage. The organization has more than 250 investors, which represent all industries in Anchorage and Alaska. The AEDC vision is for Anchorage to become the number 1 city in America to Live, Work and Play by 2025. For more information, visit www.AEDCweb.com.

shares the twists and turns of the ongoing journey to attain this vision and lessons learned along the way.

THE JOURNEY BEGINS

In March 2010, AEDC initiated its strategic planning process. As part of the planning process, staff presented a strategic environment assessment to the board (in this case the Executive Committee due to the board's size) and then it agreed upon a vision and a discrete set of strategic initiatives. During that portion of the process, Mike Prozeralik, a local architect, opined that AEDC should shoot for Anchorage becoming the #1 city in America in which to Live, Work, and Play. The consultant working with the group encouraged them to put forth a vision that had "gulp factor," meaning you were anxious about putting it out there for fear of being held accountable along the way, and you knew that it would be very challenging indeed. The sweet spot for a vision is just short of unreality.

Well, gulp the group did and they embraced Prozeralik's idea immediately and unanimously. The energy in the room dramatically increased. Like all good Type A business people, they quickly moved on to how to make it happen. More specifically, they directed Popp and his team to develop a set of measures that would objectively gauge progress and attainment of the vision.

In July 2010, AEDC hosted Joel Kotkin, noted demographer and author of *The Next Hundred Million*, as keynote speaker for its annual luncheon. In front of an audience of over 1,000 community and business leaders, he challenged Anchorage to find its own pathway to prosperity. Kotkin had done his homework and noted that in years past AEDC had adopted a strategy of trying to become the Silicon Valley of the North. He had seen other communities adopt this strategy. He bluntly stated to the audience, "You aren't and never will be that, because it's not you."

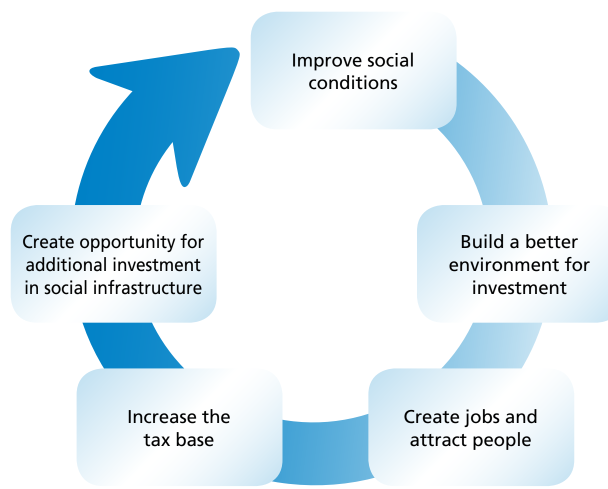
Anchorage's Westchester Lagoon. Photo by Jess Rude.

Kotkin challenged the group to discover itself, the community's DNA and then build on that strength. He encouraged the group, declaring that his research told him future generations would be seeking what Anchorage had in spades and other communities lacked – land, clean air and water, and access to nature at its best.

Following Kotkin's presentation, the AEDC Executive Committee and then Board of Directors reasoned that they lived in Anchorage because they all preferred life here and that others could be drawn to this as well. They bought into the notion that if they could make our community the best place to live, work and play, Anchorage would attract the talent to innovate, start new ventures and thus grow our economy.

The implicit strategy adopted is aimed at spurring economic development by creating a vibrant community, which can be best explained as a virtuous cycle with the following:

1. Improve social conditions,
2. Build a better environment for investment,
3. Create jobs and attract people,
4. Increase the tax base which in turn creates opportunity for additional investment in community infrastructure, and
5. Repeat.



INITIAL STEPS

After adopting the new vision in August 2010, the first action of the Executive Committee was to direct staff to develop a set of proposed metrics that would measure progress and ultimately the achievement of #1 status. Establishing the metrics by August 2011 was set as the one-year target for Live.Work.Play. (LWP) in the initial year's strategic plan.

Understanding the extent of the challenge ahead and the workload of six employees, the board recognized the need to build a community-wide strategy and effort. Additionally, many had remembered previous top-down efforts to take Anchorage to great heights, only to be undermined by the hubris of the group "leading"

An intertribal gathering at the Alaska Native Heritage Center in Anchorage. Photo by Brooke Taylor.

the effort. The strategy of building community partnerships ultimately tagged AEDC's role as being the one to "connect, convene, cajole, and cheerlead."

A LWP Steering Committee of AEDC board and community members was appointed and later given wider latitude and authority by AEDC's Board of Directors to lead the effort. The community members were from business, non-profit and government organizations. Additionally, a sub-committee was established for each of the three Live, Work, and Play categories respectively.

Now, how to define Anchorage's DNA? AEDC leadership met with Joel Kotkin, who had consulted on the successful re-building of North Dakota. Initially, there was discussion of contracting with him for input on strategy, but because of a shortage of local funding, that was not affordable. In that initial conversation, Kotkin generously offered that if you want to discover the DNA of your community, survey residents with two questions: "Why do you live here?" and "Why would you leave?"

In February 2011, AEDC undertook the community survey. Input from 700 responses was then fed into the three sub-committees. Each sub-committee analyzed the survey results and drafted a narrative of what Anchorage would be like if it were to be the #1 place in America to Live, Work, and Play respectively. The three narratives were completed by early May and merged into a single overall narrative in June.

Meanwhile, staff was furiously researching metrics per the Executive Committee's direction. Staff proposed a rationale that Anchorage would compare itself with the largest cities in each of the 49 states. Thus, we were up against Los Angeles and New York as well as Fargo and Boise. LWP sub-committees were consulted on the metrics, which prompted a vigorous debate that continues to this day. The concern is that there is no congruence between the narrative of what the community believes is important about Live, Work, and Play elements, and what existing national metrics are actually measuring.

This creative tension has led to the board's formal policy that the metrics do not represent what the LWP effort is trying to attain but rather serve as an indicator of positive movement or shifts in competing cities that warrant research and evaluation. Ultimately, staff developed 31 LWP metrics that included data relating to education, safety, housing, employment, recreation, and diversity. The AEDC board formally adopted the overall narrative and metrics in July 2011 along with the staff proposed target for the 2012 strategic plan: Namely, "Strategy in place and community engaged to move Anchorage to 2025 vision."

The LWP metrics consist of quantifiable, objective measures derived from sources such as the U.S. Department of Labor and the U.S. Census Bureau. In the process of determining how to actually gauge the progress within the Live, Work, and Play categories, it was deemed imperative that these metrics are quantitative and could easily be used to rank the cities in each measured category. Qualitative metrics were deemed too subjective and too expensive to maintain over a 15-year timeframe.

The initial data on the 31 LWP metrics showed Anchorage ranking as number 10 for Live, number 1 for Work, and number 9 for Play nationally. Not a bad position to start with.

The challenge of keeping up the momentum

LWP benefitted from Peter Kageyama (author of *For the Love of Cities*) whose work session gave Anchorage's true believers real examples of small celebrations of life in cities from around the world. Participants committed to pull off such activities in Anchorage in the coming months. Excitement was mounting as the ambitious vision seemed increasingly doable.

Within a month, dozens of businesses had expressed strong interest in the LWP initiative. But the adrenaline was disappearing at AEDC, where LWP was simply being heaped upon the staff's existing duties. Fatigue set in, and the effort languished for about six months.

Then, another dose of inspiration came from Popp's chance reading ("saw it in an airport") of Jim Clifton's book, *The Coming Jobs War*, and his subsequent speech to the 1,500 gathered for another one of the organization's Economic Forecast Luncheons. AEDC's CEO and the LWP Steering Committee's chair both saw a total alignment of Clifton's theories with the LWP strategy. Despite ongoing financial challenges with increasing investors, the organization gambled that it could attract the funds and hired a full-time LWP director. By February 2013, the organization was again cooking, moving forward with the initiative.

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Downtown Anchorage in the summer. Photo by Amy Slinker.

That same month, the LWP director reached out to potential community partners to enter into a Memorandum of Understanding (MoU) pledging to work together to achieve the vision. To date, over 144 such MoUs have been garnered.

In April 2013, the three sub-committees (Live, Work, and Play) participated in a summit along with the Steering Committee and staff. The original set of metrics, final narrative, and memorandum of understanding were presented. The three groups were asked to review the metrics for their respective area of the vision and to a) commit to whichever metrics their organization would take responsibility for and b) commit to a session to plan their work to improve metrics performance and achieve the vision.

However, there was major blowback from the three groups when reporting out. Their concerns were the following:

- The metrics don't reflect where we want to go.
- There are synergies between the Live, Work, and Play elements and it makes no sense to organize them in that fashion. We want to collaborate and not be pigeonholed.

Shifting the strategy – selecting areas of focus

So, it was back to the drawing board for AEDC strategists. There was (and is) a dynamic tension between those trying to shepherd or manage the effort and the community activists who were willing to lend a hand but wanted to be more self-determined. It was clear that this fine line would be walked until the vision was achieved.

Responding to the three groups' concerns at the summit, the LWP Steering Committee shifted the strategy in the following two weeks to one of selecting a discrete set of "focus areas." It reiterated the AEDC policy that the metrics were only indicators of momentum and success versus targeted achievements or strategies. The Live, Work, and Play sub-committees were abandoned and an initial set of seven focus areas were chosen through the following process.

Having little or no resources of its own to bring to bear, the Steering Committee reviewed existing community initiatives that aligned with the LWP vision and divided them into three buckets:

1. Established and working well,
2. Established and needing assistance, and
3. Not established and needed.

The Steering Committee strategy was to try and support the second group. Then, a second set of criteria was applied to filter known community efforts. Those criteria were:

- Has received community recognition,
- Connects and affects other issues,
- Partners are engaged,
- Some degree of resources have already been allocated,
- Issues/barriers would benefit from a boost of AEDC influence/support,
- Makes Anchorage special, and
- Data are available to measure progress.

After applying the criteria, the Steering Committee approved the following Areas of Focus (AoFs):

1. Education

It is absolutely crucial that a city have the educational offerings necessary for its next generation to succeed in a world with an ever-increasing demand for knowledge and skills. This AoF works to facilitate that kind of academic success. Increasing graduation rates, monitoring academic progress, workforce readiness, and properly allocating the resources needed to address educational issues are all part of this AoF's overall goal: to harbor every student's learning process so that they may thrive, from cradle to career.

2. Workplace Well-being

The Workplace Well-being effort focuses on the overall health and satisfaction of Anchorage's workforce. It examines current and potential ways to further develop an environment conducive to employee health – mental, physical, and emotional. Input from both employers and employees is a significantly helpful tool in creating an optimal workplace dynamic. Workplace Well-being looks to a more holistic approach to individual health. It is not merely about midday calisthenics; feeling connected and well taken care of by one's

The Workplace Well-being effort focuses on the overall health and satisfaction of Anchorage's workforce. It examines current and potential ways to further develop an environment conducive to employee health – mental, physical, and emotional.

organization includes having proper resources available that provide an all-encompassing focus on job satisfaction. That is the goal behind this AoF.

3. Community Safety

Quality of life in a city is greatly influenced by how safe that city's residents feel. The Community Safety AoF aims to help ensure that the people of Anchorage know they are safe on a daily basis, so that they can enjoy its many benefits. This includes a wide variety of objectives, from violence prevention to getting chronic inebriates off the streets to helping the homeless access the vital immediate resources they need, such as food, clothes, and shelter.

4. Trails Initiative

Anchorage prides itself on its vast, beautiful trails system which provides a means of recreation, relaxation, and transportation for the city's residents. Of course, so many of these residents have an affinity for the outdoors. The Trails Initiative works to ensure that these over 250 miles remain a point of pride for the city, as well as further improving upon the system. Anchorage has the makings of a world-class trails offering, which is one thing the Trails Initiative hopes to make a reality. Not only do Anchorage residents utilize the trails to maintain fitness, they also use them as an effective alternative in commuting to work. With so much to offer and an incredibly substantial amount of support behind it, the Trails Initiative is a very important component in the unique attraction of Anchorage.

5. Housing

The Housing AoF concentrates on the issues and opportunities facing Anchorage in terms of affordability, accessibility, and availability of homes. With so many complex and unique aspects that make up the Anchorage housing landscape, the Housing AoF goal is to ensure that people have a wide variety of appealing options when it comes to making the city the most desirable place to live.

6. Creative Placemaking

The creation of this AoF was fueled by a nationwide movement incorporating art and culture in shaping the physical, social, and economic character of a place. The creative sector in Anchorage stands to be a tremendous contributor to the city's societal landscape. Creative placemaking serves as a means to highlight tangible illustrations of Anchorage's identity. This involves bringing together the numerous arts and culture players in order to

LIVE. WORK. PLAY. TIMELINE

May 2010:
New Vision for Anchorage

- AEDC Board of Directors adopts new vision for AEDC and Anchorage: "By 2025, Anchorage will be the #1 city in America to Live, Work and Play."
- AEDC Board of Directors tasks AEDC staff with defining quantitative metrics to measure progress and to create a narrative describing the vision attainment.
- Mike Prozeralik was named Chair of the seven-member Live. Work. Play. Committee.

February 2011:
Live. Work. Play. Survey Launched
Online community survey launched that asks two simple questions: "Why do you live here?" and "Why would you leave?"

October 2011:
Live. Work. Play. Narrative Created
Narrative for Anchorage created using the results of the survey. Narrative describes the vision of Anchorage as the #1 city in America to Live, Work and Play. The narrative was adopted by the AEDC Board of Directors.

October 2011:
Live. Work. Play. Metrics Created
To measure progress and to compare Anchorage to other cities, AEDC staff develops quantitative metrics in three categories: Live, Work and Play. These metrics were adopted by the AEDC Board of Directors.

January 2012:
First Live. Work. Play. Metrics Unveiled
AEDC released the first Live. Work. Play. metrics at the 25th Anniversary Economic Forecast Luncheon. Anchorage ranked 10th for Live, 1st for Work, and 9th for Play.

February 2012:
Work Session with Peter Kageyama
Peter Kageyama, author of For the Love of Cities, conducts a half-day work session in Anchorage with 100 participants and challenges them to think of creative ways to engage the community and improve the city.

January 2013:
2013 Live. Work. Play. Rankings Released

- Live: 8th
- Work: 3rd
- Play: 11th

April 2013:
Live. Work. Play. Summit Held
Full-day work session held with more than 60 participants to get feedback on Live. Work. Play.

May 2013:
New Structure for Live. Work. Play. Defined

- Using results of the work session, a new structure for Live. Work. Play. is revealed.
  - Live. Work. Play. defines six "Areas of Focus." The areas are: Housing, Education, Workplace Well-being, Community Safety, Trails Initiative, and Creative Placemaking.

June 2013:
Steering Committee Formed
The Live. Work. Play. Committee evolved into a Steering Committee with expanded membership beyond the AEDC Board of Directors and is tasked with overseeing the Areas of Focus.

June 2013:
Memorandum of Understanding Developed
AEDC staff develops non-binding MoU for businesses, organizations, and groups in Anchorage to sign and formally acknowledge their support of the Live. Work. Play. vision.

September 2013:
One Anchorage, One Economy Area of Focus Created
A seventh area of focus is added to Live. Work. Play. One Anchorage, One Economy is a diversity focused area.

September 2013:
Engage Anchorage Area of Focus Created
An eighth area of focus is added. Engage Anchorage becomes the young professional effort of Live. Work. Play.

September 2013:
I Love Anchorage Instagram Launches
The community Instagram account, I Love Anchorage is launched by AEDC. Each week a different Anchorage resident is given access to the account to post how they Live, Work and Play in Anchorage.

January 2014:
2014 Live. Work. Play. Rankings Released

- Live: 16
- Work: 5
- Play: 14

November 2014:
I Love Anchorage First Friday
AEDC hosts the signature event of 2014 for Live. Work. Play. at the Egan Center. The event is an art exhibit displaying one year of photos from I Love Anchorage.

Hiking in Anchorage. Photo by Julie Saupe.

better help them develop their respective trades, which in turn adds dimension to a very important aspect in Anchorage's appeal – both to its own residents and the rest of the world.

7. One Anchorage, One Economy

This AoF became the final piece in the interwoven components of the LWP structure. The diversity of Anchorage's population is a valuable resource for continuous economic growth. One Anchorage, One Economy focuses on utilizing and celebrating that diversity to the fullest. The ethnic population and lesbian, gay, bisexual and transgender (LGBT) community continues to increase, a fact that more and more Anchorage businesses are beginning to acknowledge in their pursuits of success. In turn, One Anchorage, One Economy also seeks to provide ways to acknowledge and commend those businesses in their efforts to create a place where all groups of people feel like valued members of the community.

In May 2013, in response to the blowback at the initial summit, the AEDC board empowered the LWP Steering Committee to make all decisions and approve the work of AoFs except where legal or financial commitments by AEDC are required. The following month, the AoFs began developing their own plan of action with set targets and objectives, as per the requirement of the Steering Committee policy. The Steering Committee presented the initial set of one-year targets for all AoFs that were presented to the AEDC board in February 2014. The targets include the following:

- **Housing:** raise public awareness of housing issues through employer and employee surveys.
- **Creative Placemaking:** commence work on establishing a local arts and culture organization.
- **Community Safety:** demonstrate use of effective lighting to address crime in downtown Anchorage.
- **Education:** develop and execute action plans to increase high school workforce readiness.
- **Trails Initiative:** develop branding, marketing, capital improvement & business engagement for Anchorage trails.
- **One Anchorage, One Economy:** quantify the LGBT community's role in Anchorage commerce and develop a recognition program for participating businesses.
- **Workplace Well-being:** design and communicate the concept of Workplace Well-being for the Anchorage business community.

LESSONS LEARNED TO DATE

Since its inception, LWP has been charting unknown territory. An economic development organization undertaking community redevelopment has not been done in Anchorage before. As a result, a number of valuable lessons have been learned and are summarized below:

1. Losing control in order to gain engagement, commitment, and action

In order to garner support from a diverse group of stakeholders, it was pertinent for AEDC to loosen control in a cautious and organized manner. As a truly grassroots initiative, LWP could only thrive if AEDC wasn't prescriptive with a top-down approach, while still setting clear expectations. While it is a delicate balance to maintain engagement versus maintaining accountability to AEDC as a result, the servant leader model has been effective in engaging the stakeholders and committing them to act toward the common goal.

2. Community's view about a business organization

Prior to LWP's formation, the community stakeholders didn't view AEDC as their partner in what they were trying to accomplish. The business community was generally perceived as disengaged from community issues and their support mainly financial. LWP changed that perception when the AEDC board adopted a vision for the city.

The community partners realized that AEDC's voice could be powerful in gaining traction on their issues. It also led to other business organizations such as the Anchorage Chamber of Commerce, Anchorage Downtown Partnership, and, very recently, the Anchorage Society for Human Resource Management, joining in to further strengthen the community's voice.

It was a pleasant surprise to see the amount of clout AEDC had with its community partners as they began their engagement with this initiative.

Prior to LWP's formation, the community stakeholders didn't view AEDC as their partner in what they were trying to accomplish. The business community was generally perceived as disengaged from community issues and their support mainly financial. LWP changed that perception when the AEDC board adopted a vision for the city.

Community redevelopment is resource-intensive and building such a broad platform as LWP is bound to create tension between the partners about the resources and whether this initiative will take that away from the existing initiatives. AEDC has consistently communicated that LWP is not a new initiative, but rather a collective effort to make existing initiatives stronger.

3. Imposing a planning methodology

Soon after the summit, AEDC came up with a planning methodology to progress to the next step and invited the partners to adopt a specific planning process for tracking and reporting progress. Contrary to AEDC's expectation, it wasn't universally adopted. There were questions raised about the need for such a planning approach. The questions may have stemmed from a lack of clarity about the planning tool or a suspicion of AEDC's need to control the process or a combination of both.

It took another year before all AoFs started adopting the planning tool and using it for reporting progress. A majority of them have now said that this tool is useful for them and are pleased with the results. A few of them are still learning to fully embrace it but are moving in the positive direction. It took a lot of engagements with and support to the AoFs by AEDC to get to this stage.

4. Resource conflict

Community redevelopment is resource-intensive and building such a broad platform as LWP is bound to create tension between the partners about the resources and whether this initiative will take that away from the existing initiatives. AEDC has consistently communicated that LWP is not a new initiative, but rather a collective effort to make existing initiatives stronger.

It has been a challenge to address funding requests from various community partners as they view this initiative as a pathway to connect with and seek support from the business community. LWP wasn't designed to generate funding for projects and it is not intended to be that way for the foreseeable future. This creates an interesting dynamic whereby AoFs are excited to design new initiatives and undertake big tasks, but they also need to secure resources for implementation. That leads to some efforts being more successful quicker than others.

5. A new challenge for the Board of Directors

While the AEDC board adopted the ambitious goal to make Anchorage number one through community redevelopment efforts, it had limited experience in this field. The board wants this initiative to be successful as it sees a direct link between that and their ability to make Anchorage a better location to attract investment and talent. However, they are still grappling with what would be the most effective ways to engage in all the elements under this effort that are growing at a rapid rate.

The challenge for AEDC is to keep its board and also its broader membership fully informed and find new ways of engaging them in an effective manner. The board owns the vision, but some of its members are still on the journey to own the effort that will fulfill that very vision.

KNOWN CHALLENGES BEFORE US

In 2014, the staff sought feedback about the LWP initiative from a number of stakeholder groups which, combined with internal assessments, provided a list of challenges before us. The stakeholder groups included the AEDC Board of Directors, LWP MoU signatories, AoF members, and a team of Leadership Anchorage members that reviewed the LWP initiative as their community project. The following challenges were highlighted:

- Provide clear, concise, and sustained communication to Anchorage residents.
- Provide ease of participation and involvement with the initiative.
- Ensure the initiative has adequate resources to continue and progress toward the goals identified by all AoFs.
- Support all AoFs in reaching their goals through AEDC board engagement.
- Maintain and increase the momentum through wider participation.
- Encourage AoFs to work with each other for better synergy, where applicable, e.g. Trails Initiative affects Housing and vice versa.
- Sustain and increase partnerships with private, public, and non-profit sectors.
- Hold on to the current partners, while reaching out to new ones to work toward the common goal.

Photo by Philip Walters of him preparing to run the Iditarod.

Photo by Jamie Gates of her at a Tim McGraw concert in Anchorage.

- Increase partnerships and engagement with the city administration as a number of the goals' success depends on legislative/policy changes.
- AEDC has to continue to hold itself accountable and achieve the vision without being more prescriptive and controlling.
- Steering Committee needs better clarity on the nature and extent of policy and structure to govern the initiative.
- New issues will continue to emerge and seek to be part of this initiative, requiring regular check-ins with the community and fine-tuning the focus of LWP.

CONCLUSION

The Live.Work.Play. Initiative is an experiment in aiding a city's economic development through supporting community redevelopment efforts. An economic development organization's ambitious goal of making its city the best in America has been carefully executed, managed, and measured.

Strategic partnerships, a focused approach toward identifying and addressing the issues, and a rigorous data driven evaluation of the progress, are good indicators of its likely success.

The key to ensuring that Anchorage achieves its goal by 2025, however, lies in overcoming the challenges ahead and continually seeking new opportunities to strengthen the initiative.

The Live.Work.Play. Initiative is an experiment in aiding a city's economic development through supporting community redevelopment efforts. An economic development organization's ambitious goal of making its city the best in America has been carefully executed, managed, and measured.

resource revenues and

FISCAL SUSTAINABILITY

By Gunnar Knapp

INTRODUCTION

In 1968, the Prudhoe Bay oil field was discovered on Alaska's North Slope – the largest oil field ever discovered in North America. That discovery led to an economic and fiscal transformation of the young state of Alaska. A 1969 sale of Prudhoe Bay leases brought the state $900 million in one day ($4.9 billion in 2014 dollars) – six times the state's budget that year of $115 million (Ragsdale, 2008).

After the completion of the Trans-Alaska pipeline, oil began flowing from the North Slope – bringing the state very large annual oil revenues. Cumulatively, between 1978 and 2014 the state earned $111 billion in unrestricted general fund oil revenues ($164 billion expressed in 2014 dollars).[1, 2] (See Table 1.)

TABLE 1
Alaska North Slope Oil Production and Revenues: Selected Indicators

Average daily production (thousands of barrels per day)	FY 1988 (peak production year)	2,005
	FY 2014	531
State oil revenues, FY 2014 (millions of dollars)	Total oil revenues	5,682.9
	Unrestricted oil revenues	4,755.3
	Royalties	1,685.0
	Production taxes	2,598.2
	Corporate income taxes	316.6
	Property taxes	128.1
	Restricted oil revenues	927.6

It has not been a smooth ride. Annual state oil revenues have varied widely since North Slope production began, particularly because of changes in oil prices, but also because of changes in oil production, costs of production, and oil tax laws (Figure 1). Soaring oil revenues in the early 1980s were followed by 20 years of decline, including a very sharp drop in 1987 which contributed to a severe recession in Alaska. Rising prices brought soaring revenues again from 2005 to 2012 – followed by another very sharp drop since 2012, with drastically lower oil revenues projected for FY 2015 and FY 2016.

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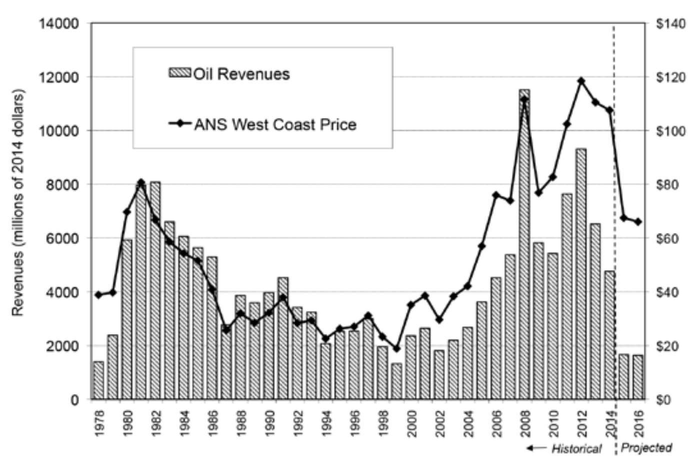
FIGURE 1
Alaska Unrestricted General Fund Oil Revenues and Oil Prices



Soaring oil revenues in the early 1980s were followed by 20 years of decline, including a very sharp drop in 1987 which contributed to a severe recession in Alaska. Rising prices brought soaring revenues again from 2005 to 2012 – followed by another very sharp drop since 2012, with drastically lower oil revenues projected for FY 2015 and FY 2016.

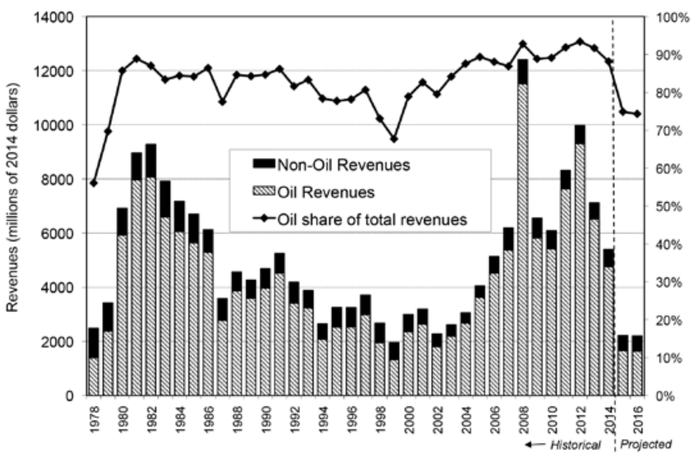
LESSONS OF THE ALASKA DISCONNECT

Alaska's experience with oil wealth offers cautionary lessons for states or countries fortunate enough to earn large revenues from a single resource industry. Even with very large resource revenues it is advisable to maintain some level of taxes on the general population and other industries. Without these "broad-based taxes," growth in other industries increases government costs without corresponding increases in government revenues, increasing fiscal dependence on the resource industry and vulnerability to production or price decreases. The absence of broad-based taxes enables the growth of marginally profitable industries that are unable to "pay their own way" if or when the resource revenues decline.

As state oil revenues grew, so did the state's fiscal and economic dependence on oil revenues (Figure 2). For the period 2005-2014 oil revenues averaged 90 percent of UGF revenues.

FIGURE 2

Alaska Unrestricted General Fund Revenues: Oil and Non-Oil



Non-oil revenues are mostly from corporate income taxes, excise taxes (mostly insurance premiums, motor fuel and tobacco), fisheries and mining taxes, charges for services, and licenses and permits (Table 2). Alaska collects no broad-based income taxes or general sales taxes: the legislature voted to eliminate an individual income tax in 1980, as oil revenues soared.

TABLE 2

Alaska FY 2014 Non-Oil General Fund Unrestricted Revenues

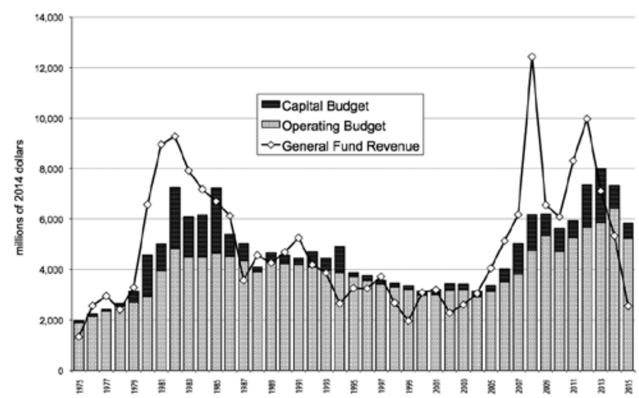
	$ million	percent
Corporate income taxes	104.1	31.1%
Insurance premium taxes	55.4	16.6%
Tobacco taxes	42.8	12.8%
Motor fuel taxes	39.3	11.7%
Other excise taxes	28.1	8.4%
Fisheries taxes	32.2	9.6%
Mining tax	32.8	9.8%
Charges for services	24.2	7.2%
Licenses and Permits	42.7	12.8%
Rents & Royalties	33.0	9.9%
Miscellaneous	62.7	18.7%
Total	334.7	100.0%

In 2012, local governments accounted for 18 percent of total state and local government own-source revenues in Alaska, compared with 46 percent nationally (U.S. Census Bureau). Oil and gas property taxes accounted for 24.5 percent of local government tax revenues, of which 95 percent was collected by two jurisdictions, the North Slope Borough and the City of Valdez (Alaska Department of Commerce, 2012). Other local property taxes accounted for 56 percent of local government revenues and sales taxes accounted for 14 percent.

Alaska's response to oil wealth was in some ways typical of oil-rich states and nations. When oil revenues were growing, it greatly increased both operating and capital spending, responding to strong public demands for more and better services and infrastructure (Figure 3). It invested in a wide range of economic development and diversification projects, with varying degrees of success (and some spectacular failures). When oil revenues were falling, it cut back on spending – particularly for capital projects.

FIGURE 3

Alaska Unrestricted General Fund Revenues and Budget



Unlike many other oil-rich states and nations, Alaska also saved a significant share of oil revenues. Part of the savings were of unrestricted general fund surpluses in years when revenues were rising, much of which were deposited in "rainy day" savings funds. These funds paid for large deficits when oil prices were falling in the late 1990s and since 2013.

In 1976, voters adopted a constitutional amendment to create the Alaska Permanent Fund, in which at least 25 percent of oil and other resource royalties must be deposited. The principal of the fund may not be spent: only realized investment earnings may be spent. With royalty contributions, "inflation proofing" contributions from earnings, and special contributions by the legislature in years of high surpluses, the value of the Fund grew to more than $50 billion by the start of FY 2015 (Alaska Permanent Fund Corporation, 2015).

Beginning in 1982, the state began an annual distribution of a share of the Permanent Fund's earnings as "dividends" to all Alaska residents (including children). The amount distributed annually is approximately equal to half of the average annual realized earnings over the preceding five years. In 2014, the state distributed dividends of $1,884, at a total cost of $1.2 billion. Not surprisingly, the Permanent Fund Dividend program has become enormously popular among Alaskans.

THE ALASKA DISCONNECT

Alaska's high dependence on oil revenues, and the corresponding low level of broad-based taxes, has led to a problem which University of Alaska Anchorage Professor Scott Goldsmith has described as the "Alaska Disconnect":

> "In most states economic development that brings new jobs and payroll generally pays its own way from the perspective of the public treasury. Because of the Alaska Disconnect, economic development in Alaska does not pay its own way . . . In Alaska, only oil pays its own way. For several decades Alaska has been the beneficiary of growth driven by the development of our oil resources – resources of high market value compared to their cost of production. The huge profits, shared among the companies, the federal government, and Alaska state and local governments have been more than enough to ensure that the oil industry has paid its own way – and more. Today, because of a combination of low taxes and high expenditures, no other industry pays its own way. . . Furthermore, it is hard to imagine any new economic development that would pay its own way in our current low tax environment (Goldsmith, 1990).

Goldsmith defined the following as necessary conditions for a new business to "pay its own way":

- "Business and household taxes and fees paid by the new business and its workers are sufficient to pay for the public services (1) directly required by the new business activity (like infrastructure development and regulation) and (2) directly required by the new workers and their families (like schools and teachers for the children, police and fire protection, and new road construction and maintenance)."
- "Taxes and fees collected from the spinoff businesses and their workers generated by the new economic development are sufficient to cover the public sector costs imposed by those spinoff businesses and families."

Under what conditions will growth in an industry "pay for itself" – in the sense that the increase in government revenues is sufficient to cover the increase in government costs? The answer depends on the direct taxes paid by the industry, the broad-based taxes paid by the general population, the costs of government services for the industry, the costs of government services for the general population, and how growth affects the population.

Pipelines on Alaska's North Slope.

Based on 1999 state and local tax and expenditure data, Goldsmith estimated that "each new job directly created by economic development results in an annual drain on the public treasury of $1,100 . . . The Alaska Disconnect could be offset in this case by a broad-based tax that generates revenues of about $640 per new job, including both those jobs directly created by the new development and those additional jobs created by the 'multiplier' effect."

Goldsmith noted that his estimates were for a "very optimistic scenario of economic development," because the estimates were for Anchorage, where local government broad-based taxes per capita are relatively high and government expenditures per capita are relatively low compared with other areas of Alaska.

WHAT AFFECTS WHETHER ECONOMIC GROWTH "PAYS FOR ITSELF"?

Under what conditions will growth in an industry "pay for itself" – in the sense that the increase in government revenues is sufficient to cover the increase in government costs? The answer depends on the direct taxes paid by the industry, the broad-based taxes paid by the general population, the costs of government services for the industry, the costs of government services for the general population, and how growth affects the population. The appendix to this article shows mathematically how all these factors affect the changes in revenues and costs associated with growth in an industry. In general:

1. Whether growth in an industry pays for itself depends in part on whether the increase in revenues paid directly by the industry exceeds the increase in government costs directly associated with the industry.

TABLE 3

State of Alaska FY 2014 Unrestricted General Fund Non-Oil Revenues and Unrestricted General Fund Budgets for Agencies Providing Broad-Based Services

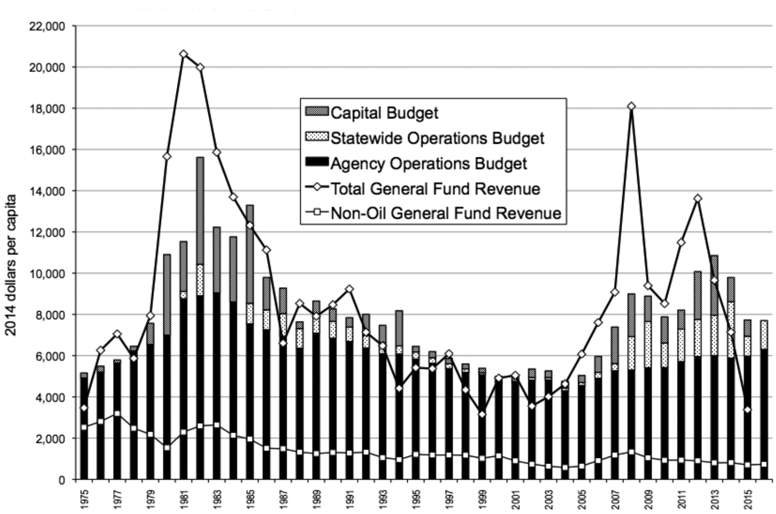
Budget components	Total ($000)	Per-capita
Unrestricted General Fund non-oil revenues	**638,700**	**$854**
Unrestricted General Fund budgets for agencies providing broad-based services	**3,516,771**	**$4704**
Department of Education & Early Development	1,282,644	$1716
Department of Health & Social Services	1,246,874	$1668
University of Alaska	371,324	$497
Department of Corrections	297,398	$398
Department of Public Safety	172,553	$231
Judiciary	110,574	$148
Department of Labor and Workforce Development	35,404	$47

Source: Alaska Legislative Finance Division.

2. Whether growth in an industry pays for it depends in part on whether the increase in broad-based revenues driven by population growth exceeds the increase in broad-based costs associated with population growth, including (importantly) the increase in education costs associated with growth in the school-age population. This depends in turn on whether per-capita broad-based taxes exceed per-capita costs of public services.
3. If per-capita broad-based taxes are less than the per-capita costs of public services, the effects are magnified by the extent to which economic growth in an industry results in population growth, including (importantly) the extent to which it results in growth in the school-age population. This depends on several key factors, including:
   - The "multiplier" effects of employment growth in the industry on employment in other industries.
   - The extent to which employment growth causes population growth.
   - The share of population growth which is school-age children, who add to education costs without increasing revenues.

FIGURE 4

Alaska Per Capita Unrestricted General Fund Revenues and Budget



ALASKA BROAD-BASED REVENUES AND EXPENDITURES

Comparison of Alaska state and local non-oil revenues and broad-based expenditures shows that for most Alaska industries and in most parts of Alaska, growth does *not* "pay for itself," at either the state or local levels. In FY 2014, the unrestricted general fund budgets for agencies providing broad-based services were more than five times as high as all unrestricted general fund non-oil revenues. Even if the marginal costs associated with employment and population growth in non-oil industries were far lower than average costs, it is hard to imagine how marginal non-oil revenues could pay for them (Table 3).

Figure 4 provides a longer-term comparison of real per-capita state budget levels with real per capita revenues. Total revenues have fluctuated widely over the past four decades, with short-term trends reflecting oil prices while the long-run declining trend reflects the 75 percent decline in oil production since 1988. Total spending has fluctuated with revenues, but the most dramatic fluctuations have been in the capital budget and the "statewide operations" budget (which pays for debt service, contributions to retirement funds to offset unfunded liabilities, and other spending not attributable to specific state agencies). The agency operations budget – which pays for the state agencies which provide broad-based services, has been much more stable. However, over the entire period, per-capita non-oil revenues have trended downward as population has grown.

A Bristol Bay salmon fisherman with a boat load of sockeye salmon. Alaska's commercial fishing industry employs far more people than the oil industry but contributes far less in state taxes.

ALASKA'S CURRENT FISCAL CHALLENGE

During the 1990s and early 2000s, falling oil prices and production led to a long period of declining real (inflation-adjusted) Alaska oil revenues (Figure 3). Despite declining real expenditures, for much of this period, the state ran budget deficits, which it paid for by drawing down savings in reserve funds created from earlier surpluses and special tax settlements. As these savings were depleted, there was increasing concern that the state's fiscal structure was unsustainable, and would have to be addressed not only through budget reductions but also new revenues and uses of Permanent Fund earnings to help fund state government (with corresponding reductions in Permanent Fund dividends).

These highly unpopular options were avoided when oil prices soared after 2005, bringing the state record revenues and large surpluses – despite rapid growth in spending. However, falling oil prices after 2012, and then a more-than 50 percent drop in prices during the first half of fiscal year 2015, brought ever-increasing deficits – projected at $3.5 billion at the time of writing – a sense of fiscal crisis, and a renewed recognition that the state's fiscal situation was unsustainable, and that deficits would likely erase reserves within seven years and possibly much sooner if oil prices stayed low.

Clearly, over the long-term, Alaska will have to diversify its revenue sources. North Slope oil is a finite resource; production has been declining for decades and is at one-fourth of its 1988 peak.

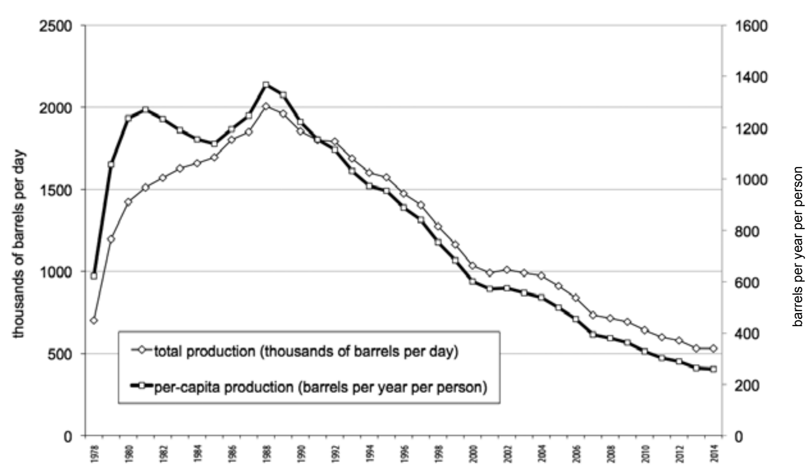
As during the earlier fiscal crisis of the 1990s, imposing new taxes or using Permanent Fund earnings remain highly unpopular among Alaskans as options for addressing the state's fiscal challenge. At the start of the 2015 legislative session, both the governor and legislative leaders declared these options "off the table" at least until state spending was substantially reduced – despite the fact that addressing a more-than-50 percent deficit through budget cuts alone seemed improbable at best. More popular is the decades-old argument for the need to diversify Alaska's economy to reduce the state's dependence on oil.

But economic diversification has been relatively modest – occurring primarily through growth of other resource-based industries (seafood, mining, and tourism) and air cargo. It has not reduced Alaska's dependence on oil revenues. And because of the "Alaska disconnect," economic growth in industries other than oil would increase rather than decrease Alaska's fiscal challenge.

Clearly, over the long-term, Alaska will have to diversify its revenue sources. North Slope oil is a finite resource; production has been declining for decades and is at one-fourth of its 1988 peak. Because Alaska's population has been growing, per capita oil production has fallen even further, to just 18 percent of the 1988 peak (Figure 5). As oil production declines, the state cannot continue to fund broad-based services primarily from oil.

FIGURE 5

Alaska North Slope Oil Production



Luckily for Alaska, the very large accumulated savings of the Alaska Permanent Fund provide the potential for a much higher level of about $4.0 billion in sustainable yield from a combination of both resource revenues and investment earnings (Goldsmith). But the higher the rate of future population growth, the lower the per capita potential future yield.

REFLECTIONS ON LESSONS OF THE ALASKA DISCONNECT

Alaska's experience with oil wealth offers cautionary lessons for regions, states or countries fortunate enough to earn large revenues from a single "resource industry" such as oil. Even if these revenues are very large – enough to pay for all or most government services – or even to greatly expand these services – it is nevertheless advisable to maintain at least some level of "broad-based taxes" on the general population and other industries. The reasons are difficult to see or appreciate in the short term – but they become increasingly important over time. The following reflections are the author's perspective after decades of observing Alaska's fiscal circumstances and political debates over fiscal policy.

1. Having diversified revenues reduces both the volatility of government revenues as well as the vulnerability to revenue shortfalls in the event of unexpected shortfalls. Resource revenues are both volatile and difficult to predict. Dependence on resource revenues makes public revenues more volatile and difficult to predict.
2. Without broad-based taxes, diversified economic growth – in industries other than the resource industry – increases government costs without corresponding increases in government revenues, increasing fiscal dependence on the resource industry and vulnerability to production or price decreases. Even if there were easy ways to diversify the Alaska economy away from oil – under the current tax structure they would not add significant new revenues.
3. The absence of broad-based taxes enables the growth of marginally profitable industries that are unable to "pay their own way" if or when the resource revenues decline. Similarly, it enables employment of marginally-paid workers who cannot afford to "pay their own way" if or when resource revenues decline.
4. Fiscal dependence on the resource industry may lead to political pressures to increase revenues from the industry, potentially slowing growth of the industry over time.
5. Not paying broad-based taxes reduces the interest and involvement of citizens in choices about how much money government spends and what it spends it on. For more than three decades, the total level of state spending has received little scrutiny from most Alaskans, as long as they felt they were getting their "fair share" of state spending.
6. Unsustainable dependence on resource revenues may discourage investment by firms which fear abrupt and potentially high future taxes once the resource revenues are no longer available.

Having diversified revenues reduces both the volatility of government revenues as well as the vulnerability to revenue shortfalls in the event of unexpected shortfalls. Resource revenues are both volatile and difficult to predict. Dependence on resource revenues makes public revenues more volatile and difficult to predict.

Not paying broad-based taxes reduces the interest and involvement of citizens in choices about how much money government spends and what it spends it on. For more than three decades, the total level of state spending has received little scrutiny from most Alaskans, as long as they felt they were getting their "fair share" of state spending.

ENDNOTES

[1] Except where otherwise noted, all financial data in this article are for Alaska fiscal years (July 1-June 30). State budget data were provided by the Alaska Legislative Finance Division (www.legfin.akleg.gov). Alaska revenue and oil production data are from the annual Fall Revenue Sources Books of the Alaska Department of Labor Tax Division (www.tax.alaska.gov/programs/reports.aspx).

[2] This figure excludes restricted oil revenues, including oil royalties deposited in the Alaska Permanent Fund.

APPENDIX:
BASIC MATHEMATICS OF NECESSARY CONDITIONS FOR ECONOMIC GROWTH TO "PAY FOR ITSELF"

To illustrate mathematically the conditions under which an industry "pays for itself," consider a simplified case of a region with two kinds of government revenues and three kinds of government costs:

Revenues	Industry revenues	Taxes and other revenues paid by the industry
	Broad-based revenues	Taxes and other revenues paid by the general population
Costs	Industry costs	Costs of government services for the industry
	Broad-based costs	Costs of services for the general population
	Education costs	Costs of K-12 education

The impacts on revenues and costs associated with growth of an industry are given by the formulas shown in the table below:

Type of impact	Formula	Definitions
change in industry revenues	output impact x industry tax rate	output impact = change in value of industry output resulting from growth of the industry industry tax rate = revenues paid by industry from all sources per dollar of output
change in broad-based revenues	population impact x per-capita tax rate	population impact = change in population resulting from growth of the industry per capita tax rate = average total taxes paid by households / total population
change in industry costs	output impact x industry cost factor	output impact = change in value of industry output resulting from growth of the industry industry cost factor = industry costs per dollar of output
change in broad-based costs	population impact x per-capita costs	population impact = change in population resulting from growth of the industry per capita costs = per-capita cost of broad-based services
change in education costs	student impact x cost per student	student impact = change in school-age population resulting from growth of the industry cost per student = education cost per student

Note that changes in broad-based revenues, broad-based costs, and education costs depend on how the total population and the school-age population are affected by growth of the industry. At one extreme, if the economy is closed to immigration, or if any increase in overall employment is filled entirely by workers from within the region, there will be no population impact and no student impact – and also no corresponding increases in broad-based revenues, broad-based costs, or education costs.

At the other extreme, if the economy is very open to immigration, and/or is already at full-employment, then any increase in overall employment may be filled mostly by workers from outside the region – who either take the new jobs created by the growth or alternatively fill in the jobs left by residents to take the new jobs created by the growth. This in turn would lead to growth in both the total population and the student population:

Type of impact	Formula	Definitions
population impact	direct employment impact x employment multiplier x population response ratio	direct employment impact = the number of new jobs in the industry created by growth employment multiplier = ratio of total new jobs to new jobs in the industry population response ratio = ratio of population growth to total new jobs
student impact	population impact x school-age share	school-age share = school-age children share of population growth

Having defined these terms, here are four different ways of comparing the changes in government revenues and costs resulting from growth in an industry:

Change in revenues	Change in costs
change in industry revenues + change in broad-based revenues	change in industry costs + change in broad-based costs + change in education costs
output impact x industry tax rate + population impact x per-capita tax rate	output impact x industry cost factor + population impact x per-capita costs + student impact x cost per student
output impact x industry tax rate + population impact x per-capita tax rate	output impact x industry cost factor + population impact x [per-capita costs + (school-age share x cost per student)]
output impact x industry tax rate + direct employment impact x employment multiplier x population response ratio x per-capita tax rate	output impact x industry cost factor + direct employment impact x employment multiplier x population response ratio x [per-capita costs + (school-age share x cost per student)]

REFERENCES

Alaska Department of Commerce. 2013. Alaska Taxable 2012. http://www.commerce.state.ak.us/dnn/Portals/4/pub/OSA_TAXABLE_2012.pdf.

Alaska Department of Revenue Tax Division. Fall Revenue Source Books. http://www.tax.alaska.gov/programs/reports.aspx.

Alaska Department of Revenue Permanent Fund Dividend Division. http://pfd.alaska.gov/Home/index.

Alaska Permanent Fund Corporation. http://www.apfc.org/home/Content/aboutFund/aboutPermFund.cfm.

U.S. Census Bureau. American Fact Finder, Table LGF001: State and Local Government Finances by Level of Government and by State: 2012. http://factfinder.census.gov.

Goldsmith, Oliver Scott. 1997. "Fiscal and Socioeconomic Impacts of Marginal Oil Field Development in Alaska: Does it "Pay its Own Way?" *Journal of Energy Finance & Development*, Volume 2, Number 1, pages 103-119.

Goldsmith, Scott. 2000. "The Alaska Disconnect," on "The Alaska Citizen's Guide to the Budget" website: http://citizensguide.uaa.alaska.edu/11.BUDGET_FAQs/11.1 _AK_Disconnect_FAQ.htm.

Goldsmith, Scott. 2015. "Maximum Sustainable Yield: 2015 Update and Model." Institute of Social and Economic Research Web Note No. 19, January 2015. http://www.iser.uaa.alaska.edu/Publications/webnote/2015_01-WebNote19-2016MSYandMODEL.pdf.

Ragsdale, Rose. 2008. "Lease sales opened doors to prosperity," in *Petroleum News, Harnessing a Giant: 40 Years at Prudhoe Bay*. http://www.petroleumnews.com/products/Prudhoe40yrs.pdf.

mining and sustainable

COMMUNITIES

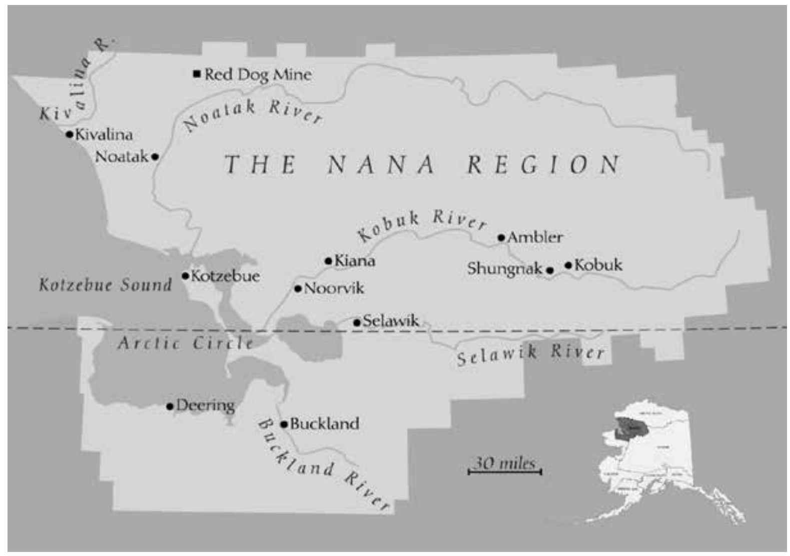
By Bob Loeffler

Politicians and planners work to attract economic development because of the desire to provide jobs and income for residents, and to find tax revenue to fund government services. Their focus is usually statewide: jobs, income, and taxes for Alaskans. This article is about the impact of one remote development project on nearby, Native communities. It is about the community effects of the Red Dog Lead and Zinc Mine in northwest Alaska. 2014 was the 25th anniversary for the mine, which began operation in 1989. This case study evaluates the mine's effects on the communities after 25 years of operation. It begins with an overview of the communities and the mine. It evaluates the mine's effects on these communities in four ways: 1) jobs and income, 2) governance, 3) education, and 4) subsistence. This case study provides lessons for development in other rural communities.

INTRODUCTION TO THE COMMUNITIES AND THE MINE

The Communities of the Northwest Arctic. This article focuses on the 11 villages of the Northwest Arctic Borough. (Boroughs are Alaska's version of counties). The villages in the region are small, Iñupiat Native communities, unconnected by road. In 2013, the population of the region totaled 7,796 residents, of which 41 percent live in the regional hub, Kotzebue, and the rest in 10 peripheral villages varying in size from 159 to 872 people. The villages are spread throughout the borough, which is about the size of the state of Virginia (approximately 40,000 square miles). The region is on the northwest coast of Alaska, 400 miles from Alaska's road system. (See Figure 1.)

FIGURE 1



The region is 85 percent Native. More non-Natives live in Kotzebue than in the surrounding villages, which are typically 95 percent Native. Nineteen percent of residents live below the poverty line. All villages are unconnected by roads. Goods are transported to the villages by small plane, though some of the villages also get a once-per-year barge. As a result, prices are expensive in the region, especially in the outlying villages. In the fall of 2014, the gasoline price in Shungnak, one of the region's villages, was approximately twice that of Anchorage: $7.50 per gallon. Groceries, heating oil, and other goods are similarly expensive.

For 10,000 years, the lives of the region's first residents have revolved around fishing, hunting, and gathering nearby resources. Today, this subsistence use remains an important part of the diet and economy. Essentially all residents participate in subsistence activities during the year. The major sub-

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A CASE STUDY OF THE RED DOG MINE

The Red Dog Mine celebrated its 25th year of operation in 2014. This article evaluates the mine's effects on 11 remote, predominantly Iñupiat Native communities in Northwest Alaska. It evaluates the effects in four ways: 1) jobs and income, 2) governance, 3) education, and 4) subsistence. The article describes significant positive community effects and attributes these achievements to institutional relationships between organizations within the region; and to goals, strategies, and leadership. The contributing factors to the mine's community benefits provide lessons for achieving positive community effects from development in other rural communities.

sistence species, depending on the village, are caribou, seal, Dolly Varden char, salmon, moose, and for some coastal villages, beluga whale. In 2007, a study estimated that in Kivalina the per capita consumption of subsistence foods was almost 600 pounds per person – over 1.5 pounds per day.

While subsistence plays an important part in Iñupiat culture and economy, most families in the region exist in a mixed cash-subsistence economy. Households rely on local subsistence food, but also require cash for housing, fuel, heating, electricity, non-subsistence groceries, and so forth. The hunting, fishing, and gathering requires money for boats, motors, snowmachines, etc. A comfortable life in the villages requires a mix of subsistence and cash. Unfortunately, the economy of northwest Alaska offers limited opportunity for well-paying jobs.

The Red Dog Lead-Zinc Mine. The Red Dog Mine is a lead-zinc mine in northwest Alaska. It is the second largest producer of zinc and the fourth largest producer of lead in the world. Red Dog production represents 5 percent of global zinc production and 3 percent of global lead production. It is just over 100 miles north of the Arctic Circle and 50 miles from the Chukchi Sea. It is connected to the sea through the road constructed for the mine. The mine trucks carry concentrate to a dedicated port site. Ore is stockpiled there for eight months, and then shipped from the port between July and October when the port is ice-free.

No villages are connected to the mine road. Mine workers commute to the mine by airplane from area villages or from Anchorage (air cost paid by the mine). They work on a variety of schedules, with two weeks at site and two weeks off being the most common schedule.

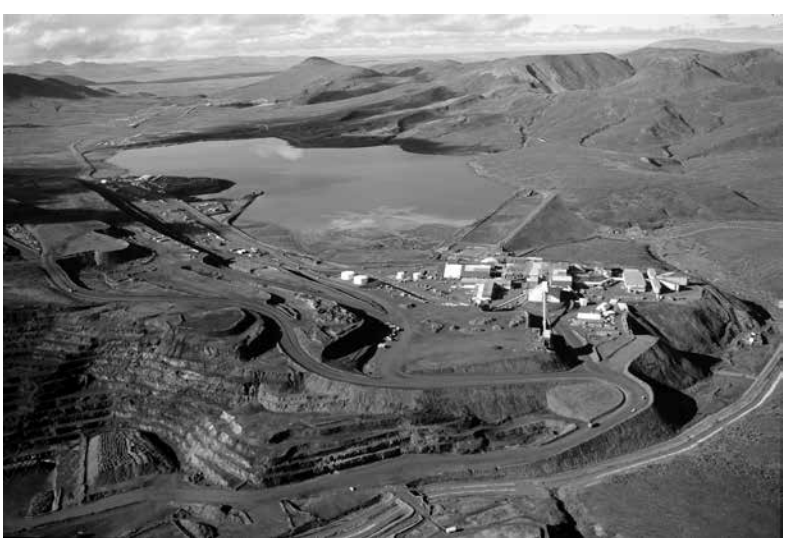
The relationship between the mine and the region is not the typical employer-town relationship. The unique relationship is important and greatly influences its effects on the villages.

In most of the United States, aboriginal land rights were settled by force and treaty and resulted in Indian Reservations with which most Americans are familiar. In Alaska, the Alaska Native Claims Settlement Act of 1971 settled the Native land rights differently. The act established for-profit corporations with exclusively Native shareholders.

The regional Native corporation for the northwest arctic is NANA Regional Corporation that was capitalized with $28.9 million and the right to select over 2.2 million acres of land in the region. In 1980, NANA selected the area of the mine because of its mineral values. The Native people of the northwest arctic own the ore body through their private corporation, NANA, in which they are shareholders. The act also requires the Native corporations to share natural resource revenues with each other.

The story of the mine started before NANA selected the land. For generations, the Natives of the area knew about red-stained creek beds with water so acidic that fish could not survive. In 1968, bush pilot and prospector Bob Baker, who flew with his companion Irish Setter (the Red Dog), noticed the reddish streams and lack of vegetation. During the 1970s, USGS publications called attention to the area. But during the 1970s, NANA regional shareholders did not support mineral exploration. They feared it would harm traditional subsistence resources and lifestyle. For a time, the corporation even had an explicit policy against mineral development.

During the 1970s, NANA discussed mining with the region's residents, and discussed the Red Dog deposit with mining companies interested in developing it. In 1979, NANA polled its shareholders and "results indicated that most individuals felt the Red Dog mine could be developed in a way that protects the traditional way of life." The result of these discussions was an agreement between NANA and a mining company that included provisions for the



Courtesy of Carl Portman.

The Red Dog Mine. The open pit is in the lower left of the picture. Tailings lake and mill complex stretches across the picture. The road to the port leaves the picture in the upper left.

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mining company to develop the site, share revenue with NANA, bring economic opportunity to the region, and protect subsistence.

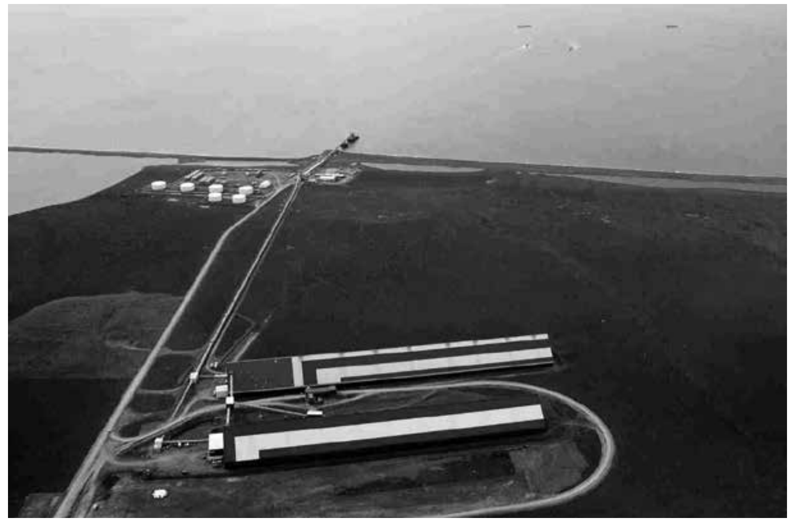
In 1982, NANA signed the Development and Operating Agreement for Red Dog that gave Cominco (now Teck) the right to build and develop the mine. In return, the corporation received $1.5 million, plus an additional $1 million every year until the mine went into production (which turned out to be 1989). Once production began, NANA received 4.5 percent of net smelter returns (essentially a gross royalty before costs are deducted). After Teck recovered its capital investment in 2007, NANA shared in the net proceeds of the mine beginning at 25 percent and increasing every five years until NANA and Teck share equally in the profit. As of today, 2015, the corporation receives 30 percent of net proceeds.

The agreement is important not just for NANA's income, but also for the community aspects of the project. It established a 12-person committee equally split between NANA and Teck to oversee all mining activities. The agreement also established a goal of 100 percent shareholder employment at the mine by 2001 and established specific measures to implement this goal, including a joint committee to oversee employment matters at the mine. The agreement also included shareholder hire preferences and mechanisms for shareholder training and promotion.

The provision for contracting preference to NANA companies has allowed the corporation to use the mine to develop companies and expertise that then spin off to compete elsewhere. This expands business expertise and shareholder employment opportunities beyond the mine. NANA/Lynden operates the fleet of trucks that transport ore from the mine to the port site and bring supplies up the road to the mine. NANA Management Services is the housekeeping/catering firm that provides the food and housekeeping services for mine employees. Both are now profit-making subsidiaries of NANA that operate in other locations.

The agreement also established a Subsistence Committee, which is made up of Elders from the two nearest communities – Noatak and Kivalina; Teck representatives are ex-officio members. The committee provides a mechanism to work out environmental and subsistence issues related to the mine. According to the NANA-Teck agreement, the Elders have the power to shut down the mine in certain situations if they see a threat to subsistence.

After 25 years of mine operation, the close working relationship between Teck and NANA is part of the two groups' working culture, but it is also promoted by the details of the original Development and Operating Agreement by which Teck operates the mine. This agreement and relationship is an important factor in the mine's community effects.



Courtesy of Carl Portman.

The port on the Chukchi Sea. The ore storage buildings in the foreground are the largest buildings in Alaska. Ore is stored there during the winter, and during the summer ice-free period, the ore is lightered from the shallow water at the port to the ocean-going freighters in the upper part of the picture.

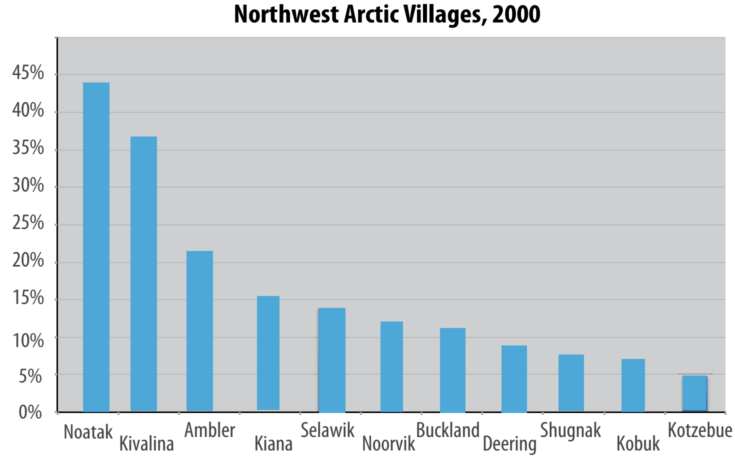
EFFECTS ON VILLAGES OF THE NORTHWEST ARCTIC BOROUGH

Jobs, Income, and Shared Profit

Jobs. An August 2014 evaluation of the Socioeconomic Benefit of Red Dog Operations by the McDowell Group presents the jobs and income effects of the mine. The McDowell Group reported that, in 2013, Teck employed 480 workers. On-site contractors, mostly NANA Lynden and NANA Management, employed another 130 workers. Of these 610 employees, 57 percent of them were NANA shareholders – i.e., Native Alaskans. The 57 percent shareholder employment is less than the 100 percent goal in the original agreement, but it is high by global standards.

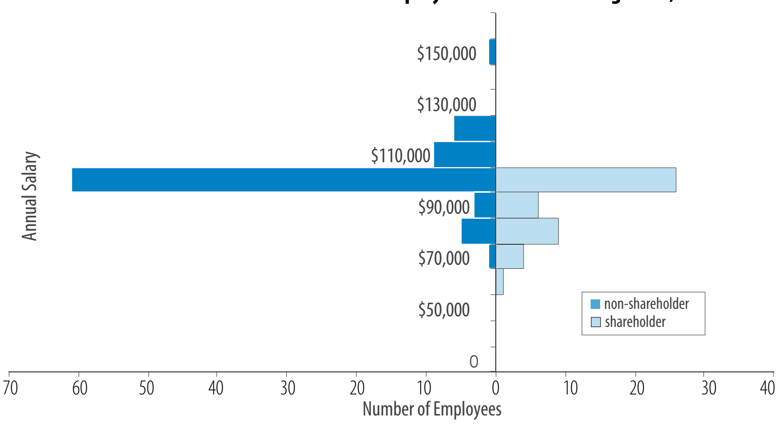
Figure 2 shows that for many villages, Red Dog jobs are an important proportion of the total employment. Of the roughly 350 Native shareholders

Figure 2
Red Dog Employment As a Percent of Total Employment in Northwest Arctic Villages, 2000



Source: Haley and Fisher, 2012.

Figure 3
Shareholder and Non-Shareholder Employment at the Red Dog Mine, 2007



Source: Haley and Fisher, 2012

at the mine, 144 lived in the 11 borough villages and the rest lived throughout Alaska, primarily in urban Alaska. Village employees varied from a low of two in a few villages to 40 employees from Noatak. These figures include only direct employment; they do not include indirect or induced employment from mine operations. Including direct and induced effects, McDowell Group estimates that the total 2013 effect on the borough villages is 715 jobs and $65 million in wages.

Figure 3 shows the distribution of shareholder and non-shareholder employment by income in 2007. It shows a concentration of shareholder employees at the upper end of the income scale, but below management. The figure shows that Red Dog has done quite well with shareholder hire in some job classes, but less well in others, particularly management. A study of the mine (Haley and Fisher, 2012) concludes, "the commitment to shareholder hire by Red Dog managers is quite sincere, but the barriers they face to improving shareholder hire and retention in certain areas, especially in supervisory and management positions, are not easily overcome, and the solutions are long term, with no quick results." Barriers include a lack of shareholders with college degrees, the need for managers to learn by working at other mines far from the region, and differences between village and western work culture.

In part because of the goal in the mining agreement and the Teck-NANA committee to oversee hiring practices at the mine, the mine developed a series of initiatives to improve shareholder hire, including at managerial levels. These include initiatives with the local school district (described later in this article); university scholarships; shareholder relations positions at the mine to provide counseling, mediation, and advocacy for work issues at the mine or work-related conflicts at home; and other programs. However, all of these are long-term initiatives with benefits presumably spread out over the next decades.

Income. The 610 Red Dog jobs paid an average wage of $99,000 for a wide variety of occupations such as drillers, truck drivers, geologists, millwrights, water chemists, cooks, and housekeepers. The average Red Dog employee earned almost twice the average annual private sector wage in Alaska ($50,340), or elsewhere in the Northwest Arctic Borough ($51,630, excluding Red Dog employees). This payroll is important to the overall income in the region.

A list of the largest employers in the region provides evidence of the limited private economy in the region. An Environmental Impact Statement (EIS) for the Red Dog Mine included a 2007 list of the 20 largest employers in the region. Those 20 largest businesses employed 2,227 people (including those at Red Dog). Almost all of those businesses were government or funded by government, such as a publicly funded health authority or the school district. These 20 largest businesses included only 191 employees from non-Red Dog, non-publicly funded private employers. In fact, according to the McDowell Group, the 2013 total direct payroll of $55 million in the region was 40 percent of all private sector wages and 30 percent of all wages, including government.

Given the number of high-paying Red Dog jobs relative to the otherwise limited economy, Red Dog's high wages are reflected in a higher median household income in the region. Figure 4 compares the median household income in the Northwest Arctic Borough with those of other predominantly rural Native areas. None of the other areas has a similar economic engine to Red Dog. (The North Slope, which has a great deal of oil wealth, is excluded from the comparison). The figure shows that the borough enjoys a higher median income than those rural, Native areas without an economic engine such as Red Dog.

Figure 4
Median Household Income Northwest Arctic Borough and Rural, Native Census Tracts

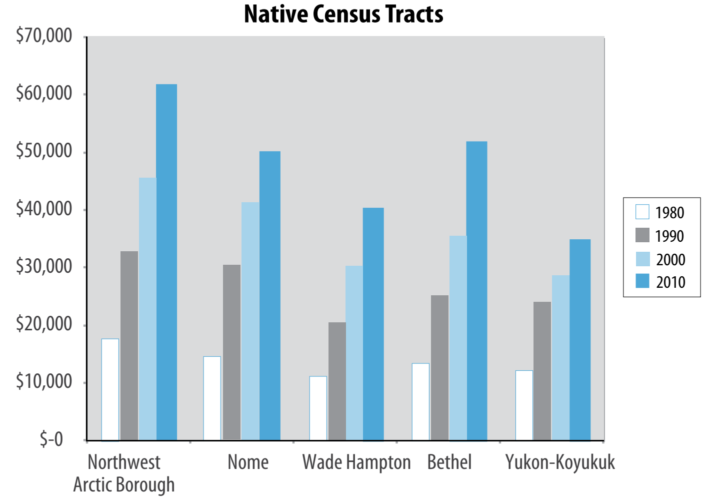


Photo credit: NANA/Arend

Noorvik, Alaska, on the banks of the Kobuk River. 2010 population, 688.

Shared Profit. There is one additional economic effect on the villages: most village residents actually own the mine through their role as stockholders in NANA Corporation. In 2013, NANA received 30 percent of the net proceeds of the mine: $143 million. However, because of the provision that requires Native corporations to share natural resource revenues, $93.5 million was shared with Native corporations in other regions of Alaska. Since the mine started, it has paid over $1 billion to NANA; more than $617 million of that amount has been shared with other regions.

These payments are an important source of income to NANA and to other Alaskan Native corporations. They fund corporate dividends, a corporation's other investments, and fund services that NANA and other corporations provide to shareholders. NANA's 2014 dividend was $9.4 million to shareholders both within and outside the region.

Governance. Most Americans take local government for granted. They are served by city government, county government, or both. Rural Alaska is different. Large parts of Alaska are without local government. Sometimes there are incorporated cities, but unless the city has a significant tax base, it provides few services.

Prior to the Red Dog Mine, 10 of the region's 11 villages were incorporated as cities. But the villages lacked a revenue source and provided few services. At that time, there was no borough, and no school district. Decisions about whether and how to fund a new school, barge landing, etc. were made by state agencies or the legislature. The agencies were typically in Anchorage and the Alaska Legislature meets in Juneau.

Juneau is approximately 1,000 miles from the region. This distance is greater than the distance from Washington, D.C. to Oklahoma. Including travel from a peripheral village and time between planes in Kotzebue and Anchorage, the travel to Juneau takes all day, if not two days. It is easier and usually faster to fly from Los Angeles to Washington, D.C. than to travel from the region to Juneau.

Negotiations between NANA and the mining company were accompanied by an agreement to establish local government using the tax base of the anticipated mine. The Northwest Arctic Borough and the school district were established in 1986. As part of the negotiations for the mine, the company agreed to a payment in lieu of taxes – essentially a negotiated tax payment.

Red Dog's payment to the borough is 89 percent of the borough's general fund revenue. In 2013, the mine paid $11 million to borough government, including a $2.4 million payment directly to the school district. Between 1982 and 2013, the mine's payments have totaled $116.4 million. It is unlikely that the borough would have formed without tax payments from the Red Dog Mine.

It is difficult to convey the sense of lack of self-determination when what should be local decisions are made from such a distance. It is a major change to bring those decisions back to the region and make them by locally elected officials with ties to the villages. It is a significant step in local democracy and makes an unmeasureable but important change for residents of the region.

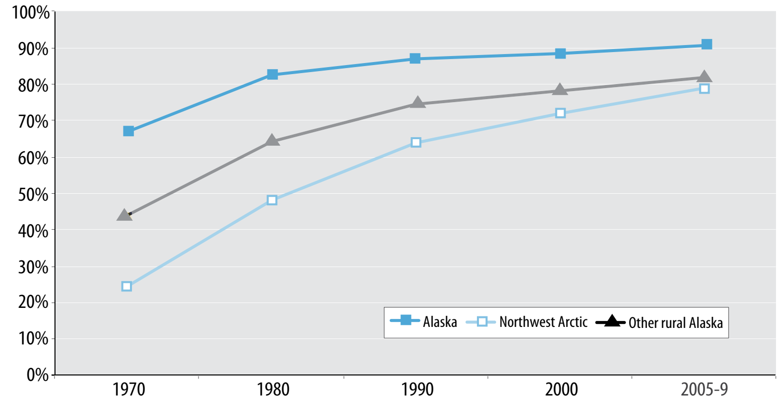
Education. The Red Dog Mine affects education in the Northwest Arctic Borough: 1) it provides funds to the school district through its payment in lieu of taxes; 2) it provides programs including various training and apprenticeship programs, and scholarships for youth; 3) it provides a career path for students; and 4) it helps teach the work culture of America's western society. (Subsistence activities require hard work and high skills but in a different manner from western work culture).

In addition to funding the school district as described previously, the mine provides various train-

Photo credit: NANA/Arend

The Napaaqtugmiut School (K-12) in Noatak, Alaska, built in 2009. The building, like most in the region, is elevated above the ground to prevent its heat from melting the permafrost.

Figure 5
Percent of the Population (Over 25) with High School Diplomas or Equivalency, 1970-2009



Source: Haley and Fisher, 2012.

The presence of a large employer provides the critical mass for other school district initiatives. For example, the school district operates the Alaska Technical Center, which is a statewide vocational and technical education training facility. The school district also operates a high school magnet program with dormitory facilities for high school vocational training. These facilities benefit more than the Red Dog Mine, but the presence of the mine as a major employer provides the critical mass that makes them possible, or at least easier.

ing and apprenticeship programs, scholarships for youth, and tuition assistance programs for mine employees. One of the important high school programs is a job shadow opportunity in which high school students come to the mine for a week and shadow employees to understand the skills and work environment.

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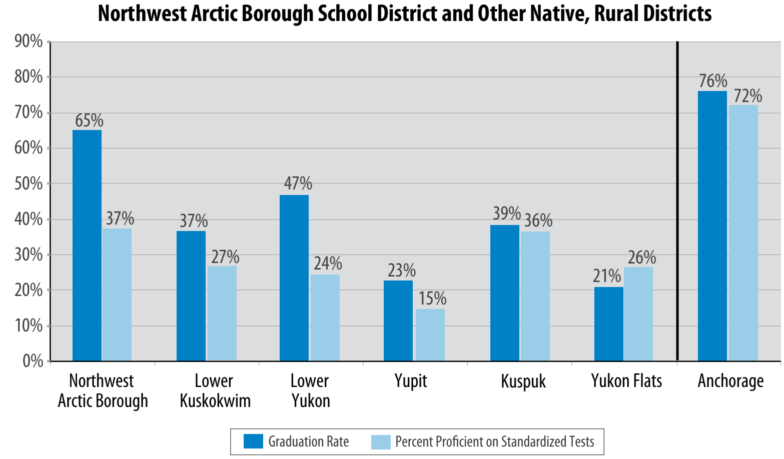
There is only indirect evidence that links the mine's funding and programs to an increase in student achievement. Figure 5 from Haley and Fisher, 2012, shows the increase in high school graduation compared with elsewhere in Alaska. It shows the low starting point (less than 25 percent of students graduated in the 1970s) but that the region has caught up to other rural areas and is close to the statewide average.

Figure 6
Northwest Arctic Borough School District and Other Native, Rural Districts



While Figure 5 compares the Northwest Arctic Borough with Alaska in general, Figure 6 makes a similar comparison for the rural, predominantly Native census districts. These comparison districts offered few economic opportunities in 1980 and, unlike the northwest arctic, still lack them today. It is a small subset of the "other rural Alaska" in the previous figure.

Figure 6 shows that the Northwest Arctic Borough School District had the highest graduation rate of any comparable rural, predominantly Native school district. Its 65 percent graduation rate is still lower than that of Anchorage, 76 percent, shown for reference. The figure also shows the results of statewide proficiency tests. The rate is the percentage of students who achieve the proficiency standard for that grade. The Northwest Arctic Borough School District has a low proficiency rate compared with urban Alaska, but it has the highest proficiency rate compared with similar rural districts without an economic engine.

In 2013, staff of the school district in discussion with the author, described that the mine provides a realistic career path for many students in the district, especially the over 90 percent who are not college bound. Even though the mine is only one employer, the career path is important. In a 2001 employment access survey for 10 villages, 26 percent of the residents had worked at Red Dog at some point in their career. Another 18 percent had applied but not been hired. District staff indicated that this career path motivated many students in high school, including careers that did not involve the mine.

According to some, the mine also has had an important effect on work culture. In one telling exchange, a school district official told the author, "You know what the mine does that no one else does in this area? They fire people." To which another official responded, "You mean, like your son." The original official said, "Yes. He was fired twice from Red Dog. And now he gets it." The message from this exchange was that in an area dominated by subsistence, which requires hard work and its own set of skills, the mine is one of the region's most effective methods of teaching the western work culture to residents.

It is difficult to empirically evaluate the extent of mine-related programs' effects on student achievement. And the data provided in Figure 6 are unavailable for the 1980s for a before-and-after-Red Dog comparison. Further, it is unrealistic to expect a single employer to transform educational achievement. However, considering the evidence above, and information provided to the author by school district staff, it appears that the Red Dog Mine is associated with an improvement in K-12 achievement in the region. However, given the proficiency results in the figure, there is significant room for further improvement.

Effect on Subsistence. NANA's initial discussions with its shareholders, before the mine was authorized, centered on potential economic opportunity and the potential for the mine to disrupt traditional subsistence activities. In 2009, the U.S. Environmental Protection Agency completed an EIS for expansion of the mine. As part of that EIS, the agency reviewed the mine's past effects on fish, wildlife, other resources, and subsistence use.

Red Dog is within the subsistence use area of two villages: Noatak, 35 miles south of the mine in a different watershed, and Kivalina, approximately 50 miles downstream from the mine on the coast of the Chukchi Sea. Other villages are much further away. Residents of Kivalina in particular have voiced concern about the mine's potential negative effects on caribou, beluga whales, and fish, all of which are important for village subsistence use.

Caribou. The most significant concern of residents with respect to caribou is that traffic on the road could disrupt a portion of the caribou migration of the western arctic herd (200,000 to 490,000 caribou, depending on the year). During fall migration, approximately 20,000 cross the road as they travel south. "To avoid impacts, the Red Dog Mine has a policy in place that includes informing drivers about the presence and location of caribou and requiring

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Lessons for Rural Development Projects

The experience of the Red Dog Mine provides lessons for other resource development projects in rural communities. The lessons are, in part, taken from the data presented in the article, and, in part, from the author's observations.

1. **Goals are important.** Even before the Red Dog Mine was permitted, the mine and NANA agreed on important goals: shareholder employment, business development, establishing local government, and minimizing effect on subsistence.
2. **Goals by themselves are not enough. It is important to have specific procedures and strategies.** The 1982 agreement between NANA and Cominco (now Teck) included goals but also includes specific procedures to oversee progress toward those goals: the management committee, employment committee, subsistence committee, and specific strategies overseen by these committees. The procedures and programs are necessary to ensure that the goals are not empty promises and hopes.
3. **Strategies must be able to change due to results (or lack of them).** The programs described in this article were not all implemented initially. The school district's vocational programs, the job shadowing program, and the shareholder relations counselors were added at some point over the years. What is expected to work initially may not always be correct; conditions change. It is important to have the commitment and oversight to modify programs due to success and failures, and as conditions change. Today this goes by the somewhat overused jargon of adaptive management. But it is necessary.
4. **Partnership is important.** The author's observations of NANA, the Red Dog Mine, the borough, and the school district make clear that the partnership accomplishes much more than individual groups could accomplish. That is, the mine has a greater proportion of shareholders employed because they share strategies and vision with the borough and NANA. Teck's commitment to the goal is crucial, but they could not do it alone. Similarly, the school district's relationship with Teck helps the students through vocational training, the job shadow program, and other ways. Strategies for achieving the goals require work across jurisdictions – the school district, borough, the mine, and others. A partnership among the groups has been important in making the strategies work.
5. **Leadership is important; culture is important.** From the author's visits to the Red Dog Mine, to NANA, and to the northwest arctic, it is clear that commitment to the social and environmental goals described here is a part of Teck's work culture at the mine. Working as a partner with Teck is a part of NANA's culture and its community partners. That is not to say there are not differences and disagreements between the partners, but a culture of commitment to the goals and practices seems critical. From the observations of this author, this commitment occurs only because of strong leadership at Teck, NANA, the school district, and the borough.

   The importance of strong leadership is crucial. Leaders create the programs, and they create the culture that binds others to the programs. The strong leadership was present in the 1980s for the discussions that brought residents to the conclusion that mining was appropriate, it was present for the negotiations that included social and environmental goals into the mining agreement, and it is visible today in Teck, NANA and their partners. The leadership at the mine, the borough, and elsewhere is a critical part of the socioeconomic success in the communities.

Photo credit: NANA/Arend

Drying salmon in Selawik, Alaska.

that drivers stop until caribou have moved through. The policy calls for closure of the…road for short periods during the migration (i.e., when caribou are crossing the road)."

However, Kivalina residents are concerned about potential effects of traffic on the migration. The EIS did not indicate that the mine and mine road had a significant effect on the caribou population or on the overall migration pattern. It concluded that there may be some localized effects – changes in behavior or migration – and this may have affected local caribou harvests by Kivalina residents. The EIS did not indicate significant subsistence effects from any other village.

Whales. Kivalina concerns with beluga whales were similar to concerns about caribou. Kivalina residents hunt whales as they migrate along the coast in the spring. Village harvests have decreased in recent years, but residents still hunt beluga whales. The subsistence committee for the mine regulates when ore loading may begin at the port. They give approval only after the spring migration passes the site. The EIS did not report a decrease in whale populations, but Kivalina residents report that whales travel further from the coast to avoid the port activity.

The EIS reported that port activities are not the sole reason for local changes in migration patterns. Other factors include changing ice conditions and outboard motor noise, particularly when hunting the whales. However, port activities may be part of the change in migration pattern and partially responsible for decreased hunting success by Kivalina residents.

Fish. Fish are an important subsistence food source for residents of the northwest arctic. For Kivalina residents downstream of the mine, Dolly Varden char make up approximately a quarter of the villagers' subsistence food. The mainstem of Red Dog Creek, which runs through the mine deposit, is a tributary of the Wulik River, which flows adjacent to Kivalina.

Before the mine existed, Red Dog Creek picked up lead and zinc from the deposit and became acidic. During the spring high flows, the natural pre-mining metal concentrations and acid in the water killed fish and aquatic insects in the creek before it merged with a larger creek that diluted these natural toxins. The mine now routes Red Dog Creek around the deposit so that it does not pick up the acid and metals.

The mine operates a water treatment plant and discharges consistent with a government permit that limits the metals and requires a neutral (non-acidic) discharge. According to the state monitoring agencies, the mine has improved water quality and fish habitat downstream.

The Alaska Department of Fish and Game monitors the habitat, algae, benthic environment (the bugs and invertebrates that are the foundation of the aquatic food chain), fish population, and fish health including metals uptake by fish. Consistent with improved water quality, the agency reports an aquatic environment that is healthier than before the mine existed: a healthy benthic environment downstream of the mine, and healthy fish populations with metals within safe concentrations. The Red Dog mine has produced the unusual situation of improving downstream water quality.

Despite these monitoring results, Kivalina fishers still have concerns. In interviews with subsistence fishermen completed for the 2009 EIS, 65 percent of the interviewees in Kivalina and 32 percent of those in Noatak indicated concern about the health of Dolly Varden char. Concerns included physical abnormalities, fewer fish, and changes in texture of the meat. There is a difference between the conclusions of agency scientists and the conclusions of subsistence fishers, especially from the downstream village of Kivalina. The fishers' perceptions may influence their harvest and enjoyment of the fish.

CONCLUSIONS

Effects on Communities. After 25 years, the health of the Red Dog Mine and the health of communities in the Northwest Arctic Borough are interconnected. Red Dog has increased villagers' economic opportunity, provided employment, and increased median household incomes for village residents. The shareholder hire rate of 57 percent, while not achieving NANA's goal of 100 percent, is high by global standards. Through NANA's requirement to share profits with other regions, the mine has shared these benefits with Native corporations throughout Alaska.

The mine has also provided the opportunity for self-government by the region. It funded the borough and allowed decisions previously made thousands of miles away by strangers to be made locally. It allows villagers to achieve local democracy that most Americans take for granted.

It is probably unfair to expect a single employer to transform K-12 education. However, it appears

Photo credit: NANA/Arend

Getting ready for fishing in Kiana, Alaska.

that the mine has had a generally positive effect. It is associated with increased graduation rates, possibly with increased student performance (certainly for some individuals). It has provided a path to a career, and provided the critical mass to allow the school district to provide vocational training and other services. Finally, it has helped many individuals with the transition from a subsistence lifestyle to western work culture.

Village concerns about the mine include more than material well being, governance, and education. They also include maintenance of subsistence populations and opportunities. The mine has not changed subsistence for most of the region's 11 villages, but there are clearly some concerns from Kivalina, and to a lesser extent from Noatak, about perceived local displacement of caribou and whales, and the health of an important food source: Dolly Varden char.

There is room for improvement in most of the effects – increases in shareholder hire, especially management; improvements in school performance; and possibly decreasing subsistence concerns. But none of the improvements will be quick. After 25 years of work on the issues, the remaining barriers are difficult and the returns long term. For example, increasing the Native college graduation rates (especially those interested in working at Red Dog) will take years. Working with mine processes and Kivalina residents on subsistence effects and concerns is probably also a long-term effort including both scientific monitoring and working with locals and their knowledge and perceptions.

Red Dog has accomplished some impressive and important achievements for the villages of the Northwest Arctic. These achievements were not pre-determined; resource development does not automatically create these improvements. The achievements were the result of the on-going partnership between the mining company, NANA Corporation, the borough government, the school district, and others. The partners created concrete strategies to achieve these results – high levels of local employment, career pathways, etc. The continuing commitment to the original goals, the ability to adapt strategies as needed, and the multi-party partnership have all contributed to these achievements for the communities of the Northwest Arctic Borough.

CALENDAR OF EVENTS

IEDC sponsors an annual conference and a series of technical conferences each year to bring economic development professionals together to network with their peers and learn about the latest tools and trends from public and private experts.

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CONFERENCES

2015 Annual Conference
October 4-7
Anchorage, AK

2016 Leadership Summit
January 24-26
New Orleans, LA

2016 Federal Forum
April 3-5
Arlington, VA

Economic Future Forum (formerly Spring Conference)
June 12-14
Tulsa, OK

2016 Annual Conference
September 25-28
Cleveland, OH

2015 TRAINING COURSES

Real Estate Development & Reuse
July 16-17
Philadelphia, PA

Foreign Direct Investment and Exporting
(Advanced Course)
July 23-24
Chicago, IL

Workforce Development Strategies
August 6-7
Indianapolis, IN

Economic Development Marketing & Attraction
August 13-14
Atlanta, GA

Business Retention & Expansion
August 20-21
Denver, CO

Entrepreneurial & Small Business Development Strategies
September 10-11
Minneapolis, MN

Economic Development Strategic Planning
September 17-18
Fort Worth, TX

Neighborhood Development Strategies
September 24-25
Baltimore, MD

Workforce Development Strategies
October 1-2
Anchorage, AK

Real Estate Development & Reuse
October 29-30
Chapel Hill, NC

Workforce Development Strategies
October 29-30
Edmonton, AB

Entrepreneurial & Small Business Development Strategies
November 5-6
Toronto, ON

Managing Economic Development Organizations
November 12-13
Columbus, OH

Economic Development Credit Analysis
December 2-4
Atlanta, GA

2015 CERTIFIED ECONOMIC DEVELOPER EXAM

October 3-4
Anchorage, AK
(Appl. Deadline: August 4)

2015 WEBINARS

June 23
Leveraging the EB-5 Visa Program to Attract Jobs and Investment

July 31
Greener the Second Time Around: Industrial Renewal

August 5 (Free)
Primer to the CEcD Exam Process

Disaster Preparedness & Economic Recovery (Free Webinar Series)

July: Keeping the Lights On: Energy Planning and Recovery Tools

August: Developing an Entrepreneurship Ecosystem for Resiliency

October: Identifying Economic Recovery Priorities

RECERTIFICATION FOR CERTIFIED ECONOMIC DEVELOPERS

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For more information contact Jenny Murphy, editor, at murp@erols.com **(703-715-0147)**.

INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL

NEWS FROM IEDC

EDRP RELEASES NEW REPORT ON ENCOURAGING YOUTH AND DIVERSITY IN ECONOMIC DEVELOPMENT

As the baby boomer generation retires en masse and the demographic makeup of the western world shifts, only those organizations that are able to adapt will remain competitive. Engagement of young and diverse populations in economic development will ensure the continued success of the field and the organizations within it.

ECONOMIC DEVELOPMENT RESEARCH PARTNERS

International Economic Development Council

EDRP's latest report considers how to bring a younger and more diverse population into the economic development field. It reviews best practices for engagement of these populations at the board, staff, and community level, and considers how an organization's culture and practice contribute to success in an increasingly diverse world.

Widening the Circle: Engaging a Young and Diverse Workforce in Economic Development is available from www.iedconline.org and is free for members to download. Non-members can purchase it for $25 from IEDC's bookstore.

AEDO PROGRAM REACCREDITS TWO MEMBERS

IEDC is proud to announce the reaccreditation of two AEDO members: CenterPoint Energy and the Greater Halifax Partnership. Located in Houston, TX, CenterPoint Energy is led by Economic Development Manager John Cook, CEcD, and has been accredited since 2011. The organization is the only utility to have earned AEDO status. The Greater Halifax Partnership of Halifax, Nova Scotia, Canada, became the first Canadian EDO to earn accreditation in 2011. The organization's accreditation efforts were led by Executive Vice President and Chief Economist Fred Morley.

Earning the AEDO accreditation is an effective way for economic development entities to increase their visibility in the community and gain independent feedback on their organizational operations. For more information, contact Program Manager Tye Libby at tlibby@iedconline.org.

INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL

IEDC AT THE 2015 SELECTUSA INVESTMENT SUMMIT

IEDC was pleased to host a hospitality suite at the 2015 SelectUSA Investment Summit. The second Summit attracted twice as many attendees, with nearly 2,600 investors and economic developers coming from 60 countries and every U.S. state and territory for two and a half days of conference programming and matchmaking.

IEDC hosted several senior officials in our suite for informal networking with members, including SelectUSA Executive Director Vinai Thummalapally and Assistant Secretary for Economic Development Jay Williams. Members reported lots of activity in the exhibit hall, with some scheduling meetings back home with international investors before they returned to their home countries.

RESHORING AMERICAN JOBS WEBPAGE

Reshoring in the United States can be defined as the act of returning American manufacturing, IT, and service jobs to U.S. soil from offshored locations. Reshoring American Jobs is a webpage where economic developers can learn about and find resources to support activities encouraging reshoring in their community.

Divided into three sections, this regularly updated webpage features the latest news, case studies, and in-depth research on reshoring activity to help them stay in-the-know on reshoring trends. The Reshoring American Jobs webpage is funded by the U.S. Economic Development Administration. Check out the Reshoring American Jobs webpage at www.iedconline.org/reshoring.

IEDC RELEASES UPDATED DISASTER RECOVERY PUBLICATION – "LEADERSHIP IN TIMES OF CRISIS"

IEDC announces the release of a revised, Leadership in a Time of Crisis toolkit. The toolkit is designed to benefit a wide range of public and private sector officials working with businesses and industries in the economic recovery process before and after a major disaster or economic interruption.

Leadership in Times of Crisis provides tools, resources, how-tos, checklists, and real world case examples that highlight best practices to be better prepared or to spur recovery. The revised toolkit has updated strategies, information, and a new chapter on Infrastructure and Building Back Better. Download the toolkit today at http://restoreyoureconomy.org/toolkit/ and follow Restore Your Economy on Twitter at @restoreyourecon.

alaska's nonprofit sector

By Dennis McMillian, Laurie Wolf, and Andrew Cutting

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In 2007, The Foraker Group, Alaska's state nonprofit association, worked with the Institute of Social and Economic Research (ISER) at The University of Alaska Anchorage (UAA) to develop the first comprehensive study of the nonprofit sector's impact on the Alaska economy. In 2010, the second study was completed, the third in 2013. A precedent has been set. Foraker is now committed to monitoring the economic impact of the sector every three years, using the best available data and our own analysis, to meet two primary objectives: (1) help sector leaders address current concerns and plan for the future, and (2) demonstrate to policy makers the positive impact of the sector on the overall Alaska economy.

While this is Foraker's most comprehensive study to date, and we better understand how to compute and use the data, consistency and timeliness of the data continues to be a concern – not just to us but also to organizations around the country that conduct similar research. One consistent set of relevant data from the same source simply does not exist. For example, as in previous reports, we made allowances to ensure all Alaska nonprofits were included in the study, going so far as purchasing the complete file of IRS Form 990s for Alaska organizations so we could better analyze data and assure no organization was missed. By doing this, we immediately discovered a glaring omission from the state of Alaska statistics. Our largest nonprofit organization – Providence Health and Services – is not included because it is registered with the state of Washington.

> The Foraker Group started in January 2001 as Alaska's only nonprofit support organization. Today, Foraker offers a rich array of products and services – all designed to assist staff, volunteers, and boards to better lead and manage their organizations. Foraker became a member of the National Council of Nonprofits in 2013 and is now recognized as the state's nonprofit association. Foraker members are referred to as Partners. Information can be found at www.forakergroup.org.

> Nonprofits are especially prominent in Alaska because they help fill the gap between government services and critical community needs. They also bring activities to the public in ways that aren't supported by commercial endeavors. And they are at the forefront of building communities, creating change, and driving innovation.

We are confident that we are using the best and most trusted sources available, both for raw data and research from the field. Those sources include the IRS, State of Alaska, U.S. Census Bureau, Chronicle of Philanthropy, Giving USA, National Center for Charitable Statistics, BoardSource, and the Institute of Social and Economic Research at UAA. We want to note, especially, the assistance of Dr. Mouhcine Guettabi, assistant professor of economics at UAA and ISER researcher, who worked with us to prepare the 2014 report, which was based on the third study.

The data confirms what Foraker has seen in the field – nonprofits are adapting to a shifting world, with leaders becoming more aware of and taking action in the economic environment that has developed since the 2008 recession. This "new normal" continues to evolve, and many Alaska nonprofits are transforming their strategies and structures to collectively carry out the missions that serve the state.

GENERATING ECONOMIC IMPACT

This article highlights research on the economic impact of the nonprofit sector in Alaska in a way that has not previously been available, with a focus on revenue and jobs generated. The intent of this research is (1) to validate that impact as a way to inform public policy through greater understanding and appreciation of the sector, (2) to activate nonprofit board and staff leaders to use the information to educate, inspire, and connect with the public, and (3) to monitor trends to assist nonprofits in effectively planning and making decisions.

Several key findings surfaced as we worked through the data:

- Nonprofits have a significant, positive impact on the economy – the more rural the area, the more significant the impact.
- The trends predicted in our last study – a funding crisis and the "crash of the herd"– came true faster than we expected.
- Organizations are effectively creating new structures and transforming the way they work.

THE ECONOMIC IMPACT OF ALASKA NONPROFITS IS SIGNIFICANT

Alaska's nonprofit sector, which is made up of approximately 5,700 organizations, accounts for $6.5 billion in direct expenditures. A total of $4.4 billion is generated by charitable nonprofits, or 501(c)(3) organizations, and $2.1 billion comes from other 501(c) organizations.

The sector employs 39,000 people – or 12 percent of the state's workforce – an increase of 7,000 from 2010. Nationally, the nonprofit sector makes up 10.6 percent of the workforce.

By comparison, in its December 2013 *Alaska Economic Trends*, the state reports that in Alaska local government accounts for 43,000 direct jobs; state government for 26,400 jobs; the federal government for 14,100 jobs; oil and gas for 14,700 jobs; and seafood processing for 10,600 direct jobs.

Nonprofits are especially prominent in Alaska because they help fill the gap between government services and critical community needs. They also bring activities to the public in ways that aren't supported by commercial endeavors. And they are at the forefront of building communities, creating change, and driving innovation.

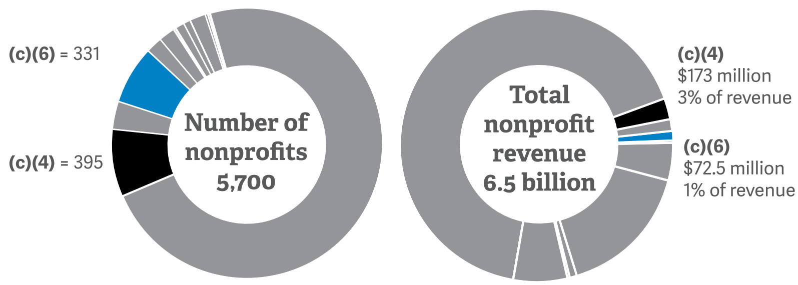
The sector is diverse – with organizations working on a broad range of missions. When most people think about nonprofits, they focus on the 501(c)(3)s – or charitable nonprofits with missions like health care, arts and culture, conservation, human services, animal welfare and many others. This article focuses later on this portion of the 501(c) spectrum.

The data confirms what Foraker has seen in the field – nonprofits are adapting to a shifting world, with leaders becoming more aware of and taking action in the economic environment that has developed since the 2008 recession. This "new normal" continues to evolve, and many Alaska nonprofits are transforming their strategies and structures to collectively carry out the missions that serve the state.

However, it's important to also note the other types of nonprofits because they, too, are important contributors to the economy. This study includes data on every type of 501(c), or IRS approved nonprofit.

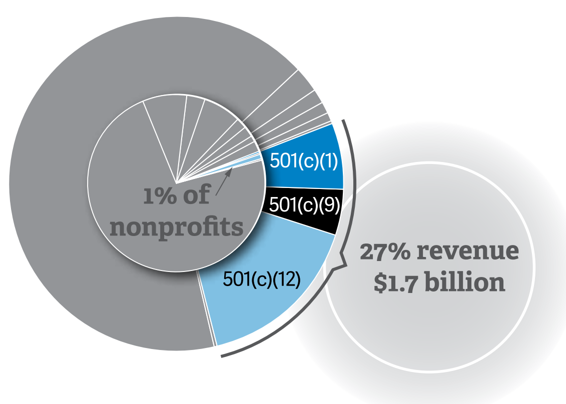
Figure 1 represents 501(c)(4) and 501(c)(6) classifications. Organizations like Rotary Clubs, civic leagues, employee associations, and groups that promote social welfare make up the 501(c)(4) category. The 501(c)(6) category is primarily made up of business leagues like chambers of commerce. Both are economic drivers in our communities.

FIGURE 1 – ORGANIZATIONS LIKE ROTARIES AND CHAMBERS CONTRIBUTE ECONOMICALLY



As seen in Figure 2, even more dramatic is the revenue generated by three other classifications of nonprofits – federal credit unions, power and telephone companies, and life insurance trusts. These organizations represent just 1 percent of total nonprofits, yet generate 27 percent of the sector's revenue.

FIGURE 2 – 1% OF NONPROFITS GENERATE 27% OF THE SECTOR'S REVENUE



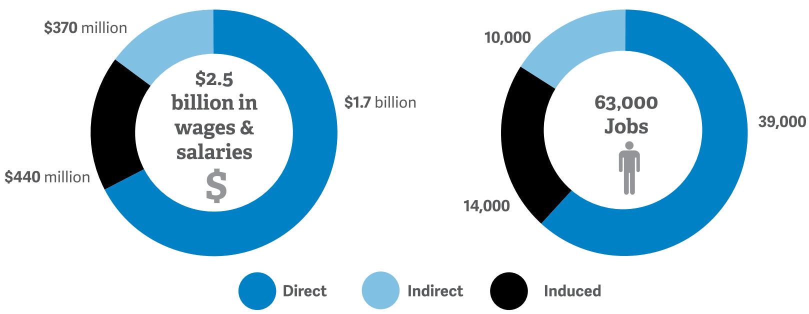
Economic impact extends beyond direct jobs and revenue

As with all economic studies, we calculated the direct, indirect, and induced impacts of wages and salaries on the broader economy. Focusing on the nonprofit sector, the direct impact indicates specific numbers that are a result of nonprofit expenditures in the local economy. Indirect impacts represent increases in jobs or sales in businesses that support the beneficiaries of nonprofit direct expenditures. Induced impact represents the multiplier effect caused by successive rounds of spending throughout the economy as a result of a nonprofit's direct and indirect expenditures.

Using these standard economic indicators, the total employment impact is 63,000 people – or 19 percent of the Alaska workforce. The total impact from wages and salaries is $2.5 billion. We are certain that if more complete data were available on overall sector expenditures, the impact of all nonprofit economic activity would be significantly larger.

Once again, as noted in Figure 3, Alaska nonprofits have a significant economic impact.

FIGURE 3 – ALASKA NONPROFITS HAVE A SIGNIFICANT ECONOMIC IMPACT



The sector continues to outpace Alaska and the U.S. in GDP and workforce growth

The Alaska nonprofit sector is growing at a faster rate any way you measure it, which is clear in Figure 4. In Alaska, nonprofit sector revenue is an important part of the state's GDP, making up 12 percent of the total. This compares to the national average where the sector makes up just 5.5 percent of GDP. A much stronger impact is evident in revenue growth from 2007 to 2013. With growth from $3.5 billion in 2007 to $6.5 billion in 2013, the sector's impact increased by 86 percent.

FIGURE 4 – NONPROFIT REVENUE GROWTH EXCEEDS ALASKA AND U.S. RATES

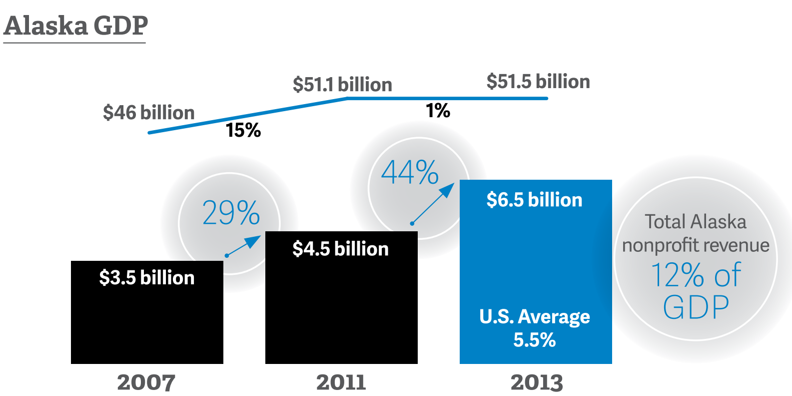
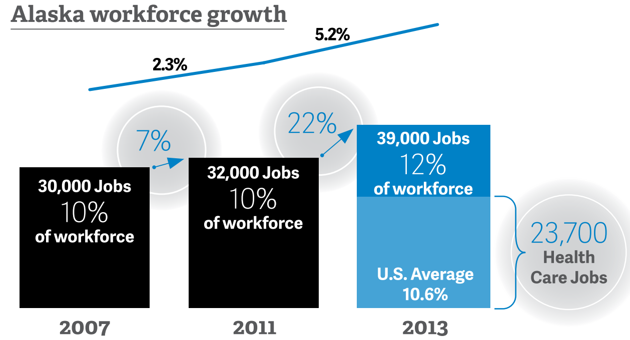


Figure 5 shows a similar pattern in the nonprofit workforce. At 12 percent of total employment, the sector exceeds the U.S. average of 10.6 percent and outpaces overall growth in the Alaska workforce. Nonprofit sector jobs grew from 30,000 in 2007 to 39,000 in 2013 – a 30 percent increase – while jobs in the state as a whole increased by only 7.5 percent. As is also shown in Figure 5, the majority of jobs in the sector are in the health care field.

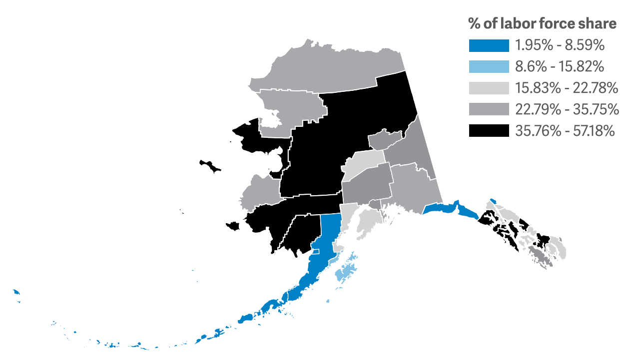
FIGURE 5 – GROWTH IN THE NONPROFIT WORKFORCE IS ACCELERATING



The nonprofit sector provides jobs in all parts of Alaska

The map in Figure 6 indicates the concentration of nonprofit employees in various parts of the state. In some areas, the percentage is higher than others. But only in a small area is the percentage less than the national norm of 9 percent. At the higher end – from the Yukon-Kuskokwim region to Canada – almost 50 percent of the workforce is in the nonprofit sector. In fact, in most of rural Alaska, nonprofits account for more than 25 percent of the workforce. These findings validate the critical role the sector plays in the economy of rural communities.

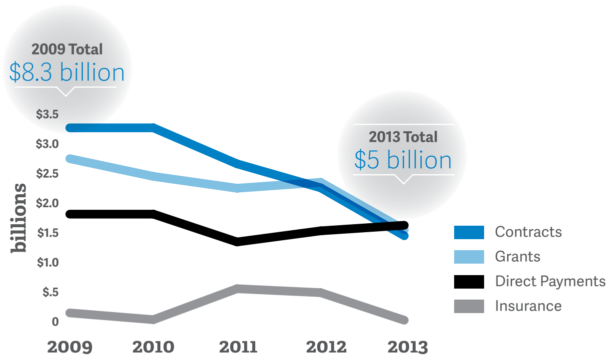
FIGURE 6 – NONPROFITS PROVIDE RURAL JOBS



Federal funding to Alaska continues to decline

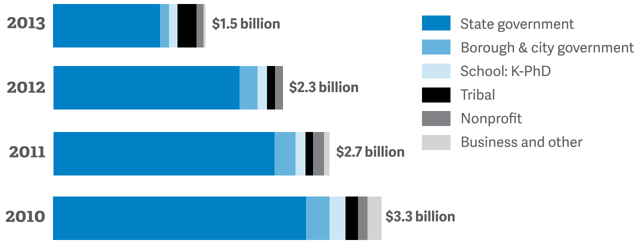
It's no longer a trend – it's now established. Funding from the federal government to all sectors in Alaska, not just the nonprofit sector, is declining – and all indications are that it will continue to decline. (With the decline in oil prices, we also expect cut-backs in state funding in the future.) Figure 7 shows the changes in all types of federal funding. With the exception of direct payments, all categories are down, with total revenue to Alaska declining from $8.3 billion in 2009 to just $5 billion in 2013.

FIGURE 7 – FEDERAL FUNDING TO ALASKA CONTINUES TO DECLINE



More specifically, Figure 8 shows the decline for various recipients of federal grant payments, with a decrease from $3.3 billion in 2010 to $1.5 billion in 2013.

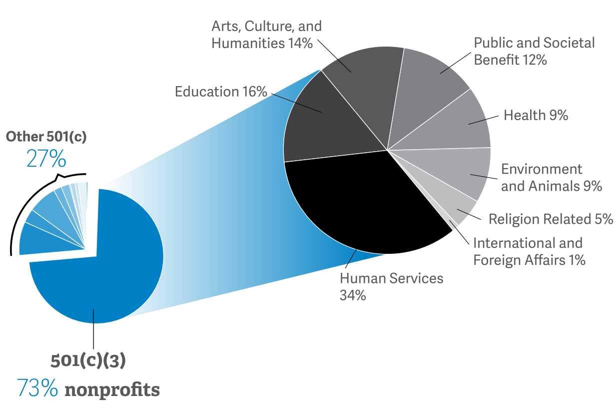
FIGURE 8 – FEDERAL GRANT FUNDING TO ALASKA CONTINUES TO DECLINE



Looking at the 501(c)(3)s – the largest part of the sector

The 501(c)(3) organizations – or charitable nonprofits – represent the largest number of 501(c)s, both in the U.S. and Alaska. They are the nonprofits we know best and are dedicated to missions like health care, arts and culture, conservation, human services, animal welfare, and many others. Figure 9 shows the breakdown by mission of Alaska's registered charitable nonprofits. They make up 73 percent of the total sector with the largest number of organizations falling into the human services category.

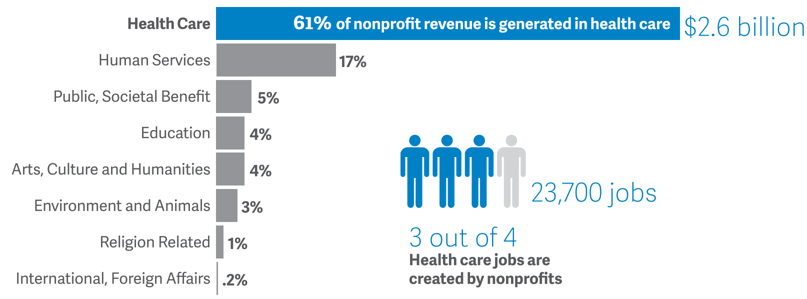
FIGURE 9 – 4,800 501(C)(3) ORGANIZATIONS REFLECT A VARIETY OF MISSIONS



Health care drives economic impact

As seen in Figure 10, health care nonprofits, while fewer in number compared to other categories, account by far for the most revenue and jobs generated in the sector.

FIGURE 10 – HEALTH CARE DRIVES FINANCIAL IMPACT



The 501(c)(3) segment of the sector is dominated by health care. Revenue from health care nonprofits is $2.6 billion or 61 percent of all charitable nonprofit revenue. The vast majority of that is earned revenue because health care organizations are based on a revenue-driven business model. Often Alaskans don't realize that they receive health care from a nonprofit hospital or clinic. But in fact, three out of four of all health care jobs are generated by nonprofits.

Health care organizations also make up the top 501(c)(3)s in the state as measured by their assets. Of the organizations noted in the top ten, all but the last – Rasmuson Foundation – are health related. Providence Health and Services and Banner Health are both registered outside Alaska but strongly contribute to the state in employment and revenue.

Top 10 501(c)(3)s by assets:

1. Providence Health and Services
2. Alaska Native Tribal Health Consortium
3. Southcentral Foundation
4. Yukon Kuskokwim Health Corporation
5. Banner Health
6. Tanana Chiefs Conference
7. Central Peninsula General Hospital, Inc.
8. Norton Sound Health Corporation
9. Southeast Alaska Regional Health Consortium
10. Rasmuson Foundation.

Regional Alaska Native nonprofits grow in economic influence

When we look at the top ten private foundations in the state, a trend has emerged that is important for all of Alaska as well as Alaska Native communities. Alaska Native foundations are increasing in total assets and have become an important component of charitable support available in Alaska, especially in the field of education. Alaska Native education foundations (highlighted by italics) are investing in many aspects of

Alaska, including cultural and language preservation and education of the next generation of leaders.

Top 10 Alaska private foundations:

1 – Rasmuson Foundation	$627,000,000
2 – CIRI Foundation	*$56,000,000*
3 – Atwood Foundation	$32,000,000
4 – Arctic Education Foundation	*$30,000,000*
5 – Benito and Frances C Gaguine Foundation	$19,000,000
6 – Doyon Foundation	*$16,000,000*
7 – Alaska Kidney Foundation	$12,000,000
8 – Harvey Samuelsen Scholarship Trust	*$11,000,000*
8 – Carr Foundation	$11,000,000
9 – Bristol Bay Native Corporation Education Foundation	*$7,000,000*
10 – Koniag Education Foundation	*$6,000,000*

(These numbers reflect total assets in 2013, with the exception of the Benito and Frances C Gaguine Foundation, whose assets are based on 2012 reporting.)

THE ECONOMIC TRENDS ARE SET AND WILL CONTINUE

When we reviewed data from the first study to the second, three trends emerged that were, in turn, validated in the third study. Those were:

- The "funding crisis." Nonprofits are beginning to adapt to the reality of less government funding by increasing the more reliable sources of earned revenue and charitable giving. This shift is continuing to shape our nonprofit economic business models.
- The "crash of the herd." Even though this study shows a slight decrease in nonprofits, we still have too many for our population. We simply do not have enough of the right people to serve on the boards and staffs of all Alaska's organizations.
- The "funding crisis" and the "crash of the herd" lead to the third trend of developing "new structures" for the way we do business. Nonprofits must be more adaptable and creative in working collaboratively in business models that will maximize human capacity, strengthen financial position, and allow for the greatest positive impact in each community.

New understanding of these trends today indicates where we see progress and where there are areas for more improvement.

The "funding crisis." Nonprofits are beginning to adapt to the reality of less government funding by increasing the more reliable sources of earned revenue and charitable giving. This shift is continuing to shape our nonprofit economic business models.

Alaska nonprofits are adapting to the "funding crisis"

The intriguing news in this most recent study is that the charitable sector is compensating for the shift in funding we had anticipated – at least it has so far. Figure 11 shows the changing proportion of revenue, with earned revenue for Alaska charitable nonprofits actually exceeding the national average in 2013. Interesting, too, is that the percentage of income from government grants versus earned revenue has reversed when you compare 2007 to 2013, while the percentage of contributions has remained essentially the same.

FIGURE 11 – GOVERNMENT FUNDING CONTINUES TO DECLINE

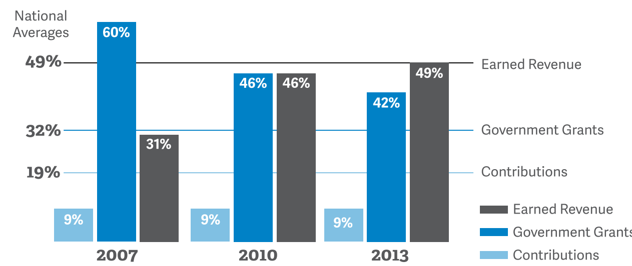
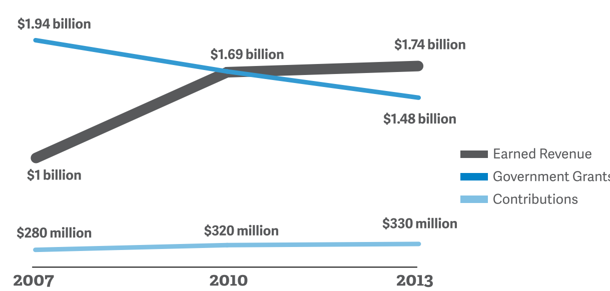


Figure 12 cites the trend in actual dollar amounts, showing the decline of federal grants to charitable nonprofits from $1.94 billion in 2007 to $1.48 billion in 2013. At the same time, earned revenue has increased from $1 billion to $1.74 billion. This shows us that Alaska charitable nonprofits are adapting to the funding crisis by finding new sources of earned revenue like product sales and fees for services to make up for the decline in federal grants.

FIGURE 12 – NONPROFIT EARNED REVENUE IS GROWING



The smallest source of unrestricted revenue – charitable giving – still represents less than 10 percent of the total. That compares to the national norm of 19 percent. However, total charitable support grew from $280 million in 2007 to $330 million in 2013.

One example of charitable giving among Alaskans is Pick.Click.Give. From the time the program started in 2009 through the 2014 campaign, pledges increased from just over one-half million to almost $2.8 million. Another way to view this success is to understand that from 2009 to 2012 total charitable giving grew 9 percent nationally and 11 percent in Alaska. So while charitable support as a percentage of total revenue has not yet increased, thanks to the organized commitment to build a culture of philanthropy in Alaska, charitable giving is gaining momentum.

People in rural Alaska give generously

For the first time, we are able to break out individual giving by census area. The source for this data is the *Chronicle of Philanthropy*, which analyzed census reports and tax returns. While those tax returns don't capture all individual giving because some people don't itemize their donations, we now have a good comparison by borough (county) of those who do itemize. A remarkable finding is that people who file itemized returns in many regions of rural Alaska give a higher percentage of their income to charity than those in urban areas – and they give more dollars.

The information in Figures 13 and 14 is derived from itemized federal income tax returns and then broken out by census areas, which in most cases in Alaska are aligned with borough designations.

Figure 13 shows how giving in rural Alaska is outpacing the U.S. average (based on itemized taxes). The Southeast Fairbanks census area leads the state. The regions around Nome, Northwest Arctic, and North Slope are close behind. Figure 14 shows the median individual contribution in Anchorage is $3,860, or 4.3 percent of discretionary income. In the Southeast Fairbanks census area it is $10,109, or almost 5.9 percent of income. Granted, in a small community a handful of donors can set a trend while in larger communities a minority of generous donors is lost in the trend. Still, as a whole, those in smaller communities give more.

FIGURE 13 – MEDIAN INDIVIDUAL CONTRIBUTIONS, BASED ON IRS ITEMIZED TAX RETURNS

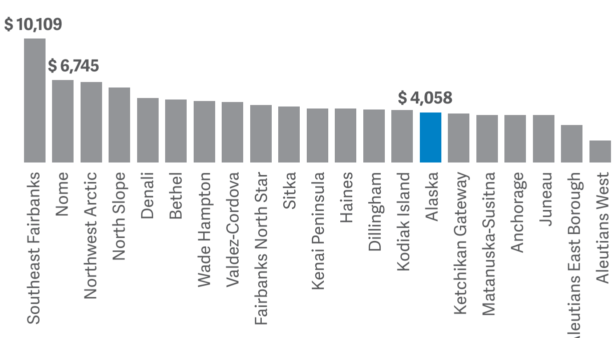


FIGURE 14 – PERCENT OF INCOME GIVEN, BASED ON IRS ITEMIZED TAX RETURNS

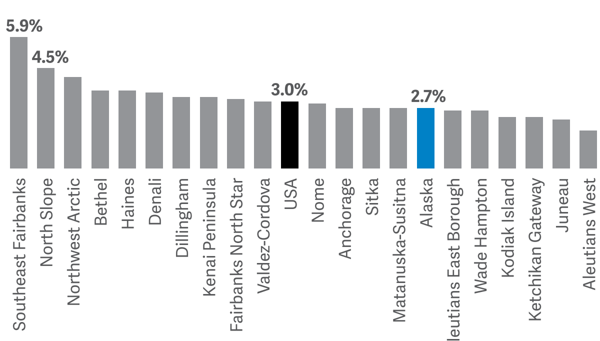
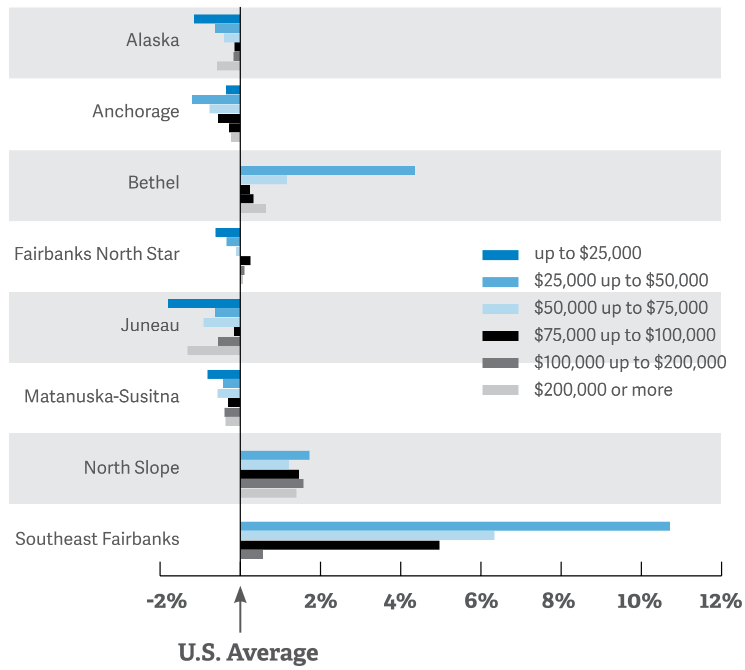


Figure 15 shows how giving in Alaska compares to the U.S. average, which is represented by the center vertical line. Again, these statistics come from itemized federal income tax returns and are broken out by census areas. In most boroughs, households in rural communities give at a higher rate than those in urban ones. This information shows that great potential exists to develop individual philanthropy in high-income households across Alaska.

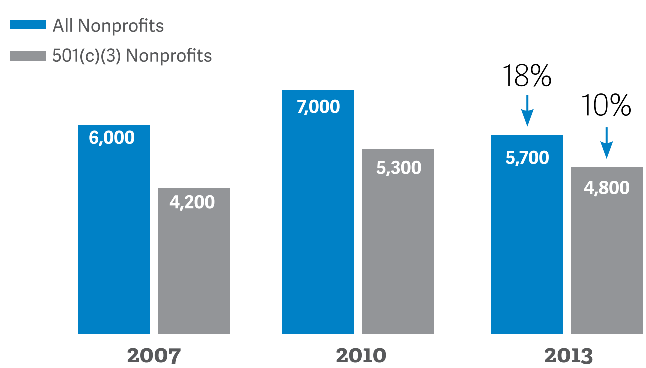
FIGURE 15 – PERCENT OF HOUSEHOLD GIVING ABOVE AND BELOW U.S. AVERAGE



What the data tell us about "crash of the herd"

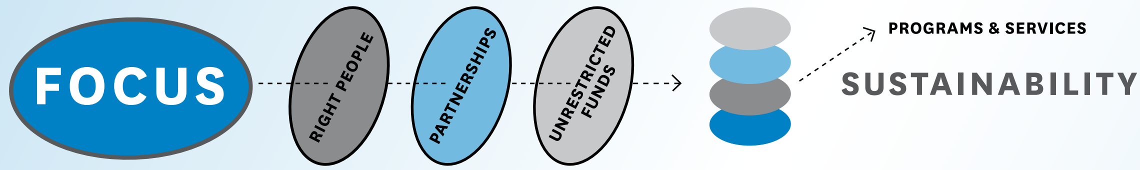
In 2010, approximately 7,000 nonprofits were operating in the state, or one nonprofit for every 100 Alaskans. That number has since declined. Figure 16 shows that approximately 5,700 nonprofits are operating in the state, or one for every 127 Alaskans. That's a decrease of 18 percent from 2010.

FIGURE 16 – TOTAL NUMBER OF ALASKA NONPROFITS IS DECLINING



We can easily identify 800 organizations that account for the decline. Those are ones that neglected to file 990s after the IRS started implementing a new rule

THE FORAKER NONPROFIT SUSTAINABILITY MODEL



The Foraker Group has been looking for some time at the factors that distinguish sustainable organizations and has captured those factors in a model, which is derived from the premise that sustainability is an organization's journey, not its destination. This diagram shows how the factors are inter-related and how they move from **focus**. The factors, like lenses, help us reflect on sustainability.

Founding purpose and values are part of **focus**. In a sustainable nonprofit, they don't change – they are absolute, almost sacred. **Focus** reflects the passion of the founders, defining both the core purpose and the core values that drive and motivate the whole organization. It's the anchor for everything the organization does and answers the fundamental question, "Who are we?"

The other part of **focus** is flexible – it helps us stay relevant and answers the question, "Where are we going?" That direction is under consistent review. As the external environment changes, it must be adjusted so the organization continues to move in the right direction and has the greatest impact. Together, the founding purpose and values, along with a clear direction, provide a **focus** that is both true to the founders' intent and relevant to today's community.

Moving from **focus**, the next lenses also are constant in their underlying principles while remaining flexible as each adapts to current conditions. Organizations that use the lenses as a way to view their actions become more resilient and are able to:

- ***Focus*** *on founding principles, making strategic decisions and looking ahead*
- *Recruit and retain the* ***right board and staff*** *and work together effectively as partners*
- *Seek and nurture strategic* ***partnerships*** *to maximize impact*
- *Assure sufficient* ***unrestricted funds*** *to take advantage of opportunities and handle emergencies*

Using the lenses, you can begin to understand the dynamics of sustainability. Then, and only then, is it time to develop programs and services. That's why they are presented at the other end of the diagram.

Programs and services are flexible – they are not sacred activities. One simple way to understand this is, "what you do is not who you are." The strategic organization modifies programs and services, drops them, or adds new ones as it adjusts to the needs in its community – always influenced first by the factors of sustainability.

in 2010 that removed nonprofits from the rolls for failing to file their 990s three years in a row. That step happened again in 2013 and will continue in the future.

In addition, from our experience we believe that more nonprofits may have merged and/or gone out of business. At the same time, we know that many new organizations formed in the last three years. Therefore, with the data that's available now, we cannot account for the remaining decline in numbers. It's likely these numbers will rise in the future because of new simplified IRS application forms, which we expect will result in increased incorporations.

Another caution from 2010 was the shortage of board members – a problem facing both large and small organizations around the state. Identifying, recruiting, and retaining board members continue to be among the biggest concerns of Foraker Partners. The scale of this problem may not be fully understood as long as people from the Baby Boom generation stay on boards. When they leave their board seats, however, we fear efforts to satisfy the demand may be too little and too late.

NONPROFITS ARE TRANSFORMING THE WAY THEY WORK FOR GREATER IMPACT

The third trend that surfaced in 2010 and is now established is that organizations need to look at new models to achieve their missions. These models can take the form of program partnerships, back office consolidation, mergers, or coalitions, to name just a few examples. Little national, state, or local data is available that allows us to track how frequently nonprofits are establishing new structures in which to work. However, we do know that during the past three years – compared to the first nine years of Foraker's work – we have had more calls to assist nonprofits to establish creative collaborations, to merge, or to go out of business.

Restructuring the sector is inevitable because of shifts in funding and demographics. And it simply makes the most sense in achieving impact. Foraker assists nonprofits with mergers and creative collaborations through our programs like shared human resources, shared financial services, interim executive director services, and a number of peer support cohorts. We also have launched Sultana, which provides fiscal sponsorships for organizations that are in the preliminary stages of their development.

Innovative collaborations are taking place around the state, and they come in many forms. The success of these efforts is encouraging and a testament to the creativity of sector leaders in finding effective ways to deliver their missions. In 2013, Foraker and the other nonprofit state associations in the Northwest launched a five-state survey to establish a baseline of our own collective work, along with that of individual organizations in the region. What we found was encouraging. Respondents say that nonprofits are coming together – with government, business, and each other – to address issues. As a sector, we are clearly learning to work with others in our field.

The results of this survey also indicate that potential exists to "move the needle" on collaboration, especially with business and government. This is where nonprofit leaders can get involved. We all have roles in creating and guiding successful collaborations – and we must do it as often as possible.

A significant portion of Foraker's work as the state's nonprofit association is to help both nonprofit and civic leaders to understand, appreciate, and support the sector. Looking again at the survey mentioned above, we learned that nonprofit leaders do believe the sector is part of the policy-making process, and that organizations in Alaska generally function in a friendly policy environment. Still, favorable treatment can't be taken for granted and working toward sound public policy cannot be left to just a few. We will only succeed when we look beyond the particular needs of our own organizations, and we all speak up for the sector as a whole.

Our sector is successfully running businesses that generate $2.5 billion in salaries and wages, contribute to 63,000 jobs for Alaska, and add total expenditures of $6.5 billion to the state's economy. Alaska nonprofit professionals are highly skilled and carry out their missions with commitment and integrity. This, combined with the quality of products and services nonprofits provide, makes the sector an essential part of Alaska's economy.

With that in mind, we encourage nonprofits and others to use the information in this study in ways that support organizations, missions, and communities. The sector has an important story to tell. We make a significant contribution – both by improving our society as a whole and, especially, by adding to Alaska's economy. Our sector is successfully running businesses that generate $2.5 billion in salaries and wages, contribute to 63,000 jobs for Alaska, and add total expenditures of $6.5 billion to the state's economy. Alaska nonprofit professionals are highly skilled and carry out their missions with commitment and integrity. This, combined with the quality of products and services nonprofits provide, makes the sector an essential part of Alaska's economy.

economic development

FINANCING

By Mike Catsi, CEcD

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INTRODUCTION

In 1967, as Alaskans celebrated the centennial of Alaska's purchase from the Russians and the adoption of its new state motto, "North to the Future," the Legislature set forth in statutes a bold vision for an entity that would promote economic growth and diversity while creating new job opportunities for its citizens. The intent of this legislation was to focus on growing the Alaska economy at a time when the economy depended on appropriations from the federal government, seafood harvesting and processing, mining, and timber. Oil was yet to be discovered in the massive quantities that later would become the primary economic driver for the state.

Allen Marine, a family operated tourism and shipbuilding company, was approved for a $23 million participation loan by Wells Fargo with AIDEA providing $16.1 million.

The authority's mission is to provide affordable, long-term asset financing for commercial and industrial projects in the state of Alaska. While the original bill gave AIDEA limited tools, its financing powers have been significantly expanded over the past 47 years and now include a variety of tools that reflect the evolving nature of the authority and the Alaska economy.

This legislation created the Alaska Industrial Development Authority, which was later changed to Alaska Industrial Development and Export Authority (AIDEA). AIDEA was created as a public corporation, a political subdivision of the state of Alaska, under the Department of Commerce and Economic Development, but with a separate and independent legal existence. This independent legal existence provides the authority with a buffer from the whims of political intervention.

The authority's mission is to provide affordable, long-term asset financing for commercial and industrial projects in the state of Alaska. While the original bill gave AIDEA limited tools, its financing powers have been significantly expanded over the past 47 years and now include a variety of tools that reflect the evolving nature of the authority and the Alaska economy.

The authority lay dormant from 1967 to 1978 due to the 1968 discovery of oil in Prudhoe Bay. During this time, the state focused its attention on developing these discoveries and, in response to the 1973 oil crisis, to constructing the 800-mile Trans Alaska Pipeline from the North Slope to tidewater in Valdez.

DEVELOPING THE "LAST FRONTIER"

Promote, develop, and advance economic growth and diversification in Alaska by providing various means of financing and investment. *This was the mandate given to the newly created authority by the Alaska Legislature in 1967. The Alaska Industrial Development and Export Authority (AIDEA) accomplishes its mission by providing long-term, affordable asset financing and by facilitating the financing of a broad range of Alaska's industrial and commercial sectors. In addition to this, AIDEA also has the capability to own and operate facilities to advance this goal and to create meaningful employment opportunities. In the ensuing years, the powers of the authority have expanded and enhanced to meet the needs of Alaska's changing economy and financial needs of its clients.*

The pipeline helped make production of the vast reserves economical, resulting in a maximum daily throughput of 2.15 million barrels in 1988. From the time oil first traveled down the pipeline in 1977 to 2014, over 17 billion barrels of oil have made the journey to Valdez.

The current AIDEA began to take shape in 1981 when the Legislature transferred $15 million in cash and $165.5 million in a loan portfolio to the authority in order to capitalize a Loan Participation program. These funds were used to finance operations and support the state's banking system by purchasing portions of commercial loans in the secondary market.

REVOLVING FUND

The Legislature created the Revolving Fund in AIDEA to be the vehicle by which it finances its investments and loans. Within the Revolving Fund are two separate accounts each with a distinct purpose. The Enterprise Development Account is used to secure bonds that the authority issues to finance the purchase of loans for projects, or to purchase participation in the loans for projects. The Economic Development Account is used to finance, acquire, manage, and operate development projects that AIDEA intends to own and operate, or to provide development project financing for development projects it does not intend to own and operate.

The authority currently (as of June 30, 2014) has $1.33 billion of assets under management in its Revolving Fund. These comprise three distinct classes: project assets, short-term investments, and an extensive loan portfolio. Project assets are valued at $543 million and consist of projects in which AIDEA retains an ownership position. These projects include, among others, the Ketchikan Shipyard, Skagway Ore Terminal, and the Fed-Ex Maintenance, Repair and Operations facility at Anchorage International Airport. AIDEA maintains about $380 million in short-term investments that are easily accessed for its use. The remaining $407 million is composed of the outstanding balances of the loans in its portfolio.

AIDEA has a very favorable credit rating of AA+ from Standard & Poor's, which is due to its strong balance sheet, conservative and effective management of its assets, and consistently strong performance. This high quality credit rating allows it to borrow money cheaply, which it is then able to pass on those savings to its clientele.

ANNUAL DIVIDEND

In 1996, a dividend program was created to pay between 25 and 50 percent of AIDEA's net operating income to the state's General Fund. These dividends not only repay the state for the capital infusions it invested in AIDEA originally but also provide a long-term, sustainable source of revenue to finance General Fund activities. Since 1996, the authority has declared 20 dividends totaling $373.6 million.

SKAGWAY ORE TERMINAL

Loading a vessel with copper concentrate from the Skagway Ore Terminal.

PROJECT DESCRIPTION

In July 1990, AIDEA purchased the Skagway Ore Terminal (SOT) to bring stability to Skagway's then major year-round industry; fund essential environmentally efficient renovations to the terminal; and open the door to additional economic growth by marketing the terminal to other potential users. The current user is Minto Explorations Ltd., a subsidiary of Capstone Mining Corp. The user contracted with Mineral Services Inc. (MSI) to operate and maintain the terminal in April 2008.

The SOT consists of a 6.7-acre industrial waterfront lot whose primary features include: a 98,000-square-foot 16-inch thick concrete floor surrounded by concrete containment walls, office, shop, laboratory, electrical and wash buildings; enclosed materials handling loadout conveyors and ship loader; and an adjacent lot which contains a fueling facility (two 10,000-gallon day tanks) and tank farm (four 30,000-gallon storage tanks).

PROJECT HISTORY

The terminal was constructed in 1969 and began shipping ore from the Cypress Anvil Mine in the Yukon Territory. This concentrate was loaded onto freighters and barges at the terminal from 1969-1993, with brief interruptions from 1982-1986 and 1995-1997. Approximately 50,000 tons of low-grade zinc (60 percent) and lead (40 percent) ore concentrate from the Faro Mine passed through the terminal each month. Ore was transported to the terminal by railcars until 1982, and then by trucks from 1986-1993. Ore was loaded onto freighters and barges every two weeks on an open conveyor system until 1991 when the system was enclosed during a major renovation of the entire terminal.

AIDEA purchased the lease on the property and the terminal facilities in 1990. A drop in base metal prices in 1993 forced the shutdown of the facility but it was reopened in 1995 for 16 months. In 2003, AIDEA demolished the old concentrate storage building because advanced corrosion had created safety problems. In January 2007, AIDEA signed a contract with the current customers, led by Sherwood Copper, and constructed a new 14,000 SF concentrate storage building. Ore shipping resumed in October 2007, and has continued. Minto/Capstone shipped 60,663 dry metric tons of copper concentrate through the terminal in 2014.

BUDGET/FINANCE

The original acquisition budget was $25 million which was financed with tax-exempt bonds sold by the authority, to be repaid with terminal user fees. AIDEA financed the Minto/Capstone upgrades for a total of $14 million (AIDEA funds on hand) and was reimbursed by tenant fees over a seven-year period. Minto/Capstone pre-paid the outstanding balance of $8.5 million (plus a pre-payment fee) in December 2010.

PROJECT/ ECONOMIC BENEFITS

Under current operations, the SOT creates up to 10 jobs at the terminal, plus jobs associated with the trucking of the concentrates from the mines to Skagway. Mineral concentrate shipping operations normally occur on a year-round basis, enhancing employment in a community otherwise heavily dependent on the summer tourist season. AIDEA continues to engage with potential users of the terminal. Additionally, all Skagway residents benefit from the enhanced winter road maintenance to Whitehorse, as well as additional revenue through real property taxes.

KETCHIKAN SHIPYARD

PROJECT DESCRIPTION

The AIDEA owned Ketchikan Shipyard, which is operated by Vigor Marine, provides vital jobs to Ketchikan which underwent a considerable downturn when the veneer and lumber mills closed down in the 1990s.

The Ketchikan Shipyard consists of approximately 25.27 acres of real property, various buildings and improvements, a 10,000 long-ton floating dry-dock, and a variety of equipment and tools. AIDEA acquired title to and ownership of the Ketchikan Shipyard ($80.3 million) and entered into an agreement with Alaska Ship and Drydock (ASD) for the operation of the shipyard effective July 1997. Vigor Industrial purchased the shipyard operator, Alaska Ship and Drydock, in March 2012 and ASD's name changed to Vigor Alaska.

PROJECT HISTORY

The Alaska Department of Transportation & Public Facilities (DOT&PF) spent approximately $30 million to construct the shipyard during the 1980s to provide maintenance for Alaska's ferry system. Under an agreement with the state of Alaska, the city of Ketchikan subleased operation and management of the shipyard to private contractors, each of which experienced difficulties. In 1991, the state canceled its lease with the city and closed the shipyard for two years. In November 1993, DOT&PF awarded an operating contract to reopen the shipyard and manage Alaska's ferry overhauls. In July 1997, the shipyard was transferred from DOT&PF to AIDEA. In conjunction with the transfer, an MOU between AIDEA, city of Ketchikan, Ketchikan Public Utilities, and the Ketchikan Gateway Borough was established. In 1997, the operating agreement for the shipyard was established between AIDEA and ASD.

BUDGET/FINANCE

The shipyard has undergone a series of expansion and upgrade projects since 1999, making it one of the most modern in the United States and providing an excellent year-round location for new builds, repair, and refit to support nearly any vessel working Alaska's waters. These capital investments in the shipyard have been funded through a number of different sources including federal transportation programs, the EDA, state of Alaska, AIDEA, and the Ketchikan Gateway Borough. AIDEA does not provide financial support for shipyard operations.

AIDEA's financial return from the shipyard is based on terms in the Agreement for the Operation and Use of the Ketchikan Shipyard, which was amended in 2005. Under the amended agreement, the financial returns are through revenue and net profit sharing, first to reimburse AIDEA's administrative expenses, next into the R&R fund until it's funded to 125 percent and then distributed as profit sharing to AIDEA, the borough, and city of Ketchikan.

PROJECT/ ECONOMIC BENEFITS

AIDEA's goal is to establish the shipyard as a viable enterprise, creating and maintaining permanent jobs in Ketchikan with long-term economic development impacts. The shipyard currently provides 161 direct jobs and provides reliable, cost effective and quality vessel maintenance repair and construction services.

In September 2014, Vigor Alaska was selected to build two Alaska class ferries at the shipyard. At 280 feet, each ferry will seat up to 300 passengers and carry 53 standard vehicles. This project will increase employment by 60-80 per year for four years, and result in an additional $22 million in wages and $9.8 million in local spending for a total of $32.1 million.

STRATEGIC PLANNING

Between 2008 and 2010, AIDEA underwent a comprehensive strategic planning process to review its programs and tools, organizational structure, regulations and statutes. During this process, it actively solicited input from stakeholders. The resulting plan provided a range of suggested financial tools, programmatic revisions, and organizational changes to be undertaken over a five-year period. The goal was to modernize the authority. The three strategic initiatives that resulted from these efforts were:

1. Diversify and grow AIDEA's assets to support economic development,
2. Improve AIDEA's existing programs and add targeted new economic development financing tools, and
3. Expand the deployment and impact of AIDEA's economic development financing.

These strategic recommendations were adopted and implemented over a four-year period with the net result that AIDEA's financial tools were expanded, structural changes were made, and its statutes were updated to better reflect the current needs of its clientele. As a result, it is now seen as a successful and innovative development finance authority and is considered a best practices model.

PROGRAMS

The authority's programs are based on commercial and project finance principles rather than incentives, grants or subsidies. Built into its statutes is the intent that AIDEA will not only recoup its investments but it will also earn a return on those investments. These returns cover the cost of funds, and administrative and program costs. Return levels are calculated as a function of the risk profile of each investment.

All potential projects are reviewed to ensure they are consistent with its mission and are analyzed to determine whether a sound business case can be made. Each project must meet these criteria after undergoing a comprehensive due-diligence process prior to any decision to invest. In general, the final approval for investments over $2 million is made by the Board based on the analysis conducted by staff. In those cases where AIDEA lacks the expertise to conduct its own underwriting, it contracts with firms to provide that capacity.

CONDUIT REVENUE BONDS

In AIDEA's establishing statutes is also the authority to issue bonds to fund its investments. These bonds are General Obligation bonds backed by a moral obligation of AIDEA but not of the state. AIDEA has since added revenue bonds to that authority and since 1978 has issued 317 bonds for a total of $1.4 billion.

The authority provides access to the affordable tax-exempt bond markets for projects that meet the federal eligibility criteria. While its GO bonds require a promise from AIDEA for their repayment, revenue bonds are based on the projected revenues of the project itself for repayment. The authority's role is to lend its expertise to the issuance of the bonds, in essence, providing a conduit between the seller and the buyer(s). While no assets of the authority are at risk, AIDEA does receive fair compensation for its services through issuance fees which are based on the amount of the bond.

Revenue bonds have been used most recently for financing hospital expansion projects both in Anchorage and Fairbanks, veterinary and eye clinics, a brewing company, multiplex cinema, and an airport car rental facility.

LOAN PARTICIPATION PROGRAM

The Loan Participation Program is a long running and hugely successful program at AIDEA that provides support to the state's private sector commercial lending institutions. Hundreds of loans have been purchased through this program. The economic benefits – jobs created or retained – are significant. Since 2002, over 10,000 construction and permanent jobs have been created and/or retained.

The program allows AIDEA to purchase a participation in a commercial loan originated by an eligible commercial lending institution. It can purchase up to 90 percent of a loan to a maximum of $20 million. The program provides the benefit of long-term fixed or variable rate financing on the portion of the loan purchased by the authority. By participating in the secondary market, the authority ensures that it does not compete with the state's commercial lenders, but rather shares in their risk and frees up valuable capital in those institutions. The benefits to the borrower are the blended terms, which on AIDEA's portion tend to be longer, up to 15 years for equipment or 25 years for real estate, increasing the cash flow for the business and reducing the burden of debt service. This program works well for the lenders because they receive credit for the whole loan, service the loan for the entire term, and have higher liquidity in order to make additional investments.

AIDEA's role is to promote economic development and it does so, in this case, by incentivizing the deployment of private sector debt capital. This program facilitates the development of many projects which do not fit neatly into a lender's risk profile or into their portfolio's asset classes. Given that the loans are

Fairbanks Memorial Hospital has undergone several expansions in part financed by tax-exempt revenue bonds issued by AIDEA.

EQUITY – AIDEA 100 PERCENT OWNERSHIP

DeLong Mountain Transportation System (DMTS)

DeLong Mountain Transportation System port and ore concentrate storage facilities for the Red Dog Mine. The port and the 52-mile road connecting the mine to the port are owned by AIDEA and Teck repays AIDEA's investment through tolls and throughput fees.

In the early 1980s, the state of Alaska, in partnership with Teck Cominco, authorized AIDEA to finance, develop, and own the infrastructure needed to support operations at the Red Dog Mine in northwest Alaska. The Red Dog Mine has at various times been the largest and/or the most valuable zinc mine in the world.

The Legislature committed $143.5 million in cash and a loan portfolio to AIDEA for use in compiling the financing required to construct the project. The original DeLong Mountain Transportation System (DMTS) project included a 52 mile long limited-access, industrial road; two large ore concentrate storage sheds; a conveyor system and ship loader; bulk fuel storage; and onsite employee housing. The project cost $185 million, which AIDEA funded through bonds. In later years, an additional $85 million was spent on upgrades as ore production increased.

The economic and social benefits that have resulted because of the mine are difficult to estimate, but it can be said that the entire region is different because of it. The mine is located on NANA lands, an Alaska Native Corporation, which owns the sub-surface rights. The mine was built in partnership between Teck Cominco and NANA, with agreements covering revenue sharing, employment opportunities for NANA shareholders, and protection of traditional subsistence and cultural resources.

Repayment of AIDEA's investment is achieved through a "toll" structure for use of the road and port. The toll mechanism provides for a minimum annual payment and additional payments based on escalated zinc prices and higher throughputs. The additional throughput payments are deposited to a reserve account that is used for any potential unpaid operation costs or future capital improvements. AIDEA's tolerance for patient capital was critical to the success of this project and the repayments were structured over a 50-year term with an expected ROI of 6.5 percent.

Examples of the benefits include:

- 500 regular and 100 seasonal jobs,
- Direct and indirect payroll for local residents is approximately $15 million annually,
- Royalty payments from Teck to NANA are more than $35 million annually,
- Payment in Lieu of Taxes to the Northwest Arctic Borough are more than $9 million, and
- In 2010, the Red Dog deposit accounted for 73 percent of all US zinc production and 82 percent of Alaska's mineral export.

Today, the mine has begun operations on the Aqqaluq deposit after its first deposit was depleted. This will keep the mine operating for another 20 years and 2015 represents 25 years of ore concentrate shipped through the road and port. The mine has developed a well-paid, trained workforce that allows local residents the option to live in their communities and continue to participate in their traditional ways while providing a sustainable future for younger generations.

EQUITY – PARTIAL OWNERSHIP THROUGH AN LLC

Mustang Operations Center 1, LLC. (MOC 1)

The Mustang Operations Center #1 (MOC 1) is an oil and gas processing facility to produce pipeline quality crude oil for sale through the Trans-Alaska Pipeline System (TAPS). MOC 1 is under construction on Alaska's North Slope and is designed to process 15,000 barrels of oil per day. Unlike the DMTS where AIDEA is the sole owner of the asset, this project is being financed and constructed in two phases with different special purpose vehicles for each phase.

The authority's $70 million investment in the project leverages an additional $540 million in private investment in the facility, infrastructure, and development of the field. The development of MOC 1 provides numerous benefits, including the following:

- Production of oil that will sustain the flow and life of North Slope oil infrastructure and the TAPS,
- Estimated state royalty and production tax payments to the state of more than $300 million based on proven reserves,
- More than $45 million in property tax payments to the North Slope Borough over the project lifetime,
- Up to 250 jobs for the design and construction of the facility,
- Up to 20-25 full-time jobs for facility operations,
- Over 200 indirect long-term jobs due to local facility related spending and expenses, and
- Enables the continued exploration and development of oil from other nearby fields and leases.

Phase 1 - Mustang Road, LLC.

In 2013, the construction of the 4.5-mile road and 17-acre production pad was completed. This phase was financed through the Mustang Road, LLC., in which AIDEA invested $20 million while Ramshorn Investments and the Alaska Venture Capital Group provided the remaining $7 million. The authority's term on this portion of the project is 15 years at an annual interest rate of 8 percent. Over the past two winters, the LLC generated significant revenues from use of the road and pad by other firms operating in the area.

Phase 2 – MOC 1, LLC.

Construction of phase 2, the oil processing facility, began in early 2015 and is expected to be flowing oil into TAPS in the first quarter of 2016. AIDEA and CES Oil Services Pte, Ltd. (CES) will own the facility through MOC 1, LLC, while Brooks Range Petroleum Corporation will build and operate the facility. MOC 1's financing is comprised of a $1 million contribution by CES, a $150-175 million loan arranged by CES from Strategic Equipment Inc., and AIDEA's $50 million investment via a preferred share ownership. AIDEA's financing is to be repaid over a seven-year period with a quarterly dividend and annual share repurchases following first oil.

originated by the lender and then sent to the authority for further underwriting, the default rate in these loan participations is extremely low. The average default rate for FY2014 was 0.50 percent.

Examples of the Loan Participation Program include:

Allen Marine was approved as a $23 million participation loan, with the authority providing 70 percent support to Wells Fargo Bank's. Through the AIDEA and Wells Fargo partnership, Allen Marine was able to restructure long-term and short-term debt; provide startup capital for Alaskan Dream Cruises; and create 12 construction, four permanent and 40 seasonal positions in Alaska.

B&L Motels, Inc., a Kansas corporation that owns and operates eight hotels in Alaska, Washington, Arizona, Colorado, and Kansas, was approved for $5.4 million (90 percent) of a $6 million loan brought to AIDEA by First National Bank Alaska, which originated the loan. The purpose of the loan was to refinance debt and provide long-term financing of a newly constructed 79-room Comfort Suites hotel located in Anchorage.

AIDEA approved a loan participation to *Sea Lion Corporation* in the amount of $1,012,500 (90 percent) of a $1,125,000 loan brought to AIDEA by First National Bank Alaska. The purpose of the loan was for term financing of a 6,390-square-foot building located in Hooper Bay and leased to the United States Postal Service; the State of Alaska Court System; and GCI, an Alaska communications firm. This project, which included renovations to create space for a new courthouse, created 15 construction jobs and five permanent positions.

PROJECT FINANCE

Project finance is the long-term financing of infrastructure and industrial projects based upon the projected cash flows of the project. A typical financing structure would include a number of equity investors as well as banks or other lenders that provide loans to the project. These loans are often non-recourse loans, secured by the project assets and paid from project cash flow. The financing is secured by the project's assets, and the lenders are given a lien on the assets in case of default.

AIDEA was given the authority to own and operate assets in the mid-1980s in order to assist Teck Cominco in developing what was to become the world's largest zinc mine, the Red Dog Mine in Northwest Alaska (see DeLong Mountain Transportation System - DMTS sidebar). Since then, AIDEA has taken an ownership position in several projects around the state either by direct investments, e.g. Skagway Ore Terminal, or by pass through agreements from the federal government, such as the Ketchikan Shipyard and the Snettisham Hydroelectric Plant.

AIDEA owns but generally does not operate assets. When it is taking a partial ownership position, a special purpose vehicle is created for each project, outlining the ownership and operating agreements under which the vehicle is structured. Each project is highly collateralized to protect the authority's investment and, in most cases, an exit strategy is defined in those agreements. These assets are then made available to the project sponsor, and AIDEA's investment is repaid through leases, user fees, tolls and/or other receipts.

The range of projects eligible for project finance is intentionally broad, allowing AIDEA the flexibility to facilitate economic development. Under this program, projects including natural resource development and processing, manufacturing, transportation infrastructure, federal facilities, energy, communications and others are eligible for financing. While the authority does not actively pursue projects, it does actively implement business development strategies by engaging with industry trade groups, chambers of commerce, economic development organizations, and the state's investment community.

The authority was originally required to be the sole owner of projects it owned and operated. This was the working position for many years, and many successful projects were completed under this system, e.g. Ketchikan Shipyard, Skagway Ore Terminal, Fed-Ex MRO Facility in Anchorage, and the DeLong Mountain Transportation System. This system did require AIDEA to take all of the risk in the project with little recourse other than having sole possession of an asset that may have limited use or value in the event of a default.

Recent legislation allows AIDEA to take a partial ownership position in a project. This strategy accomplishes two things; first, it can invest as a partner with the private sector in the project, sharing in the cost as well as in the risk, and second, it is able to leverage its resources, freeing up funds for additional investments. This new approach to investment has significantly changed the manner in which the authority analyzes and deploys its resources.

Another recent addition to its project finance suite of tools is the ability to make a direct loan to a project rather than take an ownership position. These types of projects may include those that play an important economic development function, or projects that require only relatively small investments, both of which may be completed more efficiently through direct lending.

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SPECIALTY AND LEGISLATIVE PROGRAMS

In addition to its main programs, the authority also manages programs that are narrower in scope, or created by the Legislature to address specific areas of need. The following programs are examples of these.

New Markets Tax Credit Loan Guarantee Assistance Program

In 2011, the authority identified the need for a program to incentivize Alaska's banking community to become more engaged in the federal New Markets Tax Credit (NMTC) program. The issue identified by project proponents was the difficulty in securing a leveraged loan as part of the NMTC transaction which inhibited their ability to secure the needed NMTC credit allocations for their projects. This portion of the transaction requires lenders to forbear from foreclosure and collect interest only for the seven-year transaction period.

AIDEA saw an opportunity to mitigate risk for lenders by providing a loan guarantee for the term of the transaction. In 2012, the Legislature passed enabling legislation and the program was capped at a $40 million rolling total. While several projects have approached it for assistance, no transactions have been completed as yet, mostly because of the substantial demand for allocations around the nation.

AIDEA partnered with the private sector to bring a second jack-up rig to Cook Inlet for oil and gas exploration.

Small Business Development Loans

AIDEA has two small business development loan programs that it has capitalized either solely or in partnership with the Economic Development Administration. These programs have loan limits of $300,000 and are focused on businesses that do not meet the lending criteria of the state's commercial lenders. Both programs are administered by the Department of Commerce, Community and Economic Development on behalf of AIDEA as part of their suite of small business development loan programs. In total, both programs have issued approximately 250 loans, totaling over $29 million, and have created/retained 1,769 jobs. Industry sectors invested in include retail, manufacturing, tourism, accommodation, and restaurants.

The authority's success lies in its ability to operate at arm's length from political interference. AIDEA also finances its own activities, both operating and investments, without assistance from General Fund monies. In fact, the authority makes an annual contribution to the state's General Fund while growing its own balance sheet.

Sustainable Energy Transmission and Supply Development Fund (SETS)

In 2013, the Alaska Legislature created the SETS program within the authority to facilitate the development of the state's energy infrastructure with the goal of reducing Alaska's high energy costs. AIDEA can provide direct loans, loan and bond guarantees, and issue bonds to assist in financing projects. Limitations include $20 million in credit enhancements and 33 percent of the project's costs in direct financing. An initial capitalization of $125 million was to be deployed in developing renewable and non-renewable energy sources to help reduce the cost of energy in Alaska.

The Arctic Infrastructure Development Fund

Created by the Legislature in 2014, the fund is a response to the growing need to develop critical infrastructure in Alaska's Arctic regions. While the US is an Arctic nation, it falls far behind other Arctic nations in economic development and infrastructure. Understanding the critical timelines that must be met if the region is to catch up and keep up, Alaskans have taken it upon themselves to begin the process of identifying the region's needs and in developing creative financing mechanisms to meet those needs. As the Arctic opens up to more shipping and exploration activity, it is critical to have ports, safe anchorages, search and rescue and spill response capabilities, and infrastructure to meet the needs of the region.

The fund allows for financing of construction, improvement, and expansion of emergency response facilities, and other facilities in-state that support the development of the Arctic. Included in this program was the ability to finance the construction and expansion of shore-based plants, equipment or other assets used in the support of a fishery in the Arctic. While the fund was not capitalized, it remains in place as a vehicle for the Legislature to support Arctic development.

CONCLUSION

As AIDEA approaches its 50th anniversary, it is clear that the AIDEA of 2015 is very different to that from 1967. Much of that can be attributed to the flexibility built into the authority that allows it to evolve as its clients and the Alaskan economy changes. AIDEA continues to demonstrate that the public sector can provide meaningful support to the private sector, based on partnerships beyond grants and incentives. The authority's success lies in its ability to operate at arm's length from political interference. AIDEA also finances its own activities, both operating and investments, without assistance from General Fund monies. In fact, the authority makes an annual contribution to the state's General Fund while growing its own balance sheet.

As AIDEA looks to the future, its continued success will be determined by maintaining focus on its mission, ongoing partnerships with the private sector, and investments based on sound financial principles.

the determinants of
SMALL BUSINESS SUCCESS IN ALASKA

By Mouhcine Guettabi

INTRODUCTION

Although the contribution of small businesses and entrepreneurship to regional communities and the economy at large is widely supported in the literature, there does not seem to be a universally accepted definition for small businesses and entrepreneurship. Without an agreed upon definition, it is challenging for governments and policy makers to address the needs, concerns, and issues of these firms. It also makes it difficult to understand the link between small businesses and economic growth.

The majority of definitions stem from qualitative measures such as ownership/control and quantitative measures such as number of employees or owned assets. They also tend to vary from industry to industry, reflecting their differences. The following definition from the U.S. Department of the Treasury reflects this complexity.

"Size is determined by the amount of average annual receipts or by the number of employees. Service businesses generally have a size standard that would be determined by averaging your gross annual receipts for the last three years. This average is then linked to the North American Industrial Classification System (NAICS) code for the procurement you are looking to compete under. If your average annual receipts falls under the amount designated for that NAICS code, then your firm is considered to be small by definition. For example, if you were selling Computer Programming Services under NAICS code 541511 your average annual receipts over the past three years would have to be below $21.0 million to qualify as a small business concern. For most manufacturing NAICS codes, the number of employees will be used as a size standard. For example, a mining firm is considered "small" if it has fewer than 500 employees."

Understanding the determinants of new firm creation is especially important due to the positive economic benefits and overall regional development that are associated with increased business activity.

A different approach defines small business as one where no public negotiability or share ownership exists, and one in which owners must personally guarantee any existing or planned financing (Osteryoung and Newman, 1992).

The emergence of an entrepreneurial approach has broadened small business and entrepreneurship to encompass ideas of wealth creation, innovation, and value adding processes both for the individual and the community (Kao et al., 2002). Most scholars seem to agree that a typical entrepreneurship is a small business; however, small businesses are not necessarily entrepreneurial enterprises. This is mainly due to the amount and the speed of wealth creation, the level of risk-taking, and the innovative ability. Entrepreneurship is generally a type of behavior that concentrates more on opportunities rather than resources (Stevenson and Gumpert, 1991).

This article examines the extent to which the creative class contributes to growth in Alaska communities. The heterogeneity of the communities' economic structures coupled with their resource dependence make this strategy less than ideal. Places considering a creative class development approach should analyze their economic drivers and determine if the strategy fits with the current industrial structure and general environment.

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A SPECIAL FOCUS ON THE CREATIVE CLASS

The presence of human capital has been linked to employment growth in both urban and rural areas. This article examines the relationship between small business development using multiple metrics in Alaska's boroughs and the presence of the creative class. There is weak evidence supporting a causal link once we account for initial place specific economic conditions. Regions that are considering creative class theory as a development strategy need to recognize that place specific characteristics determine to a large extent the likelihood of success. Quality of life interacts with industrial structure and therefore cannot be ignored when entertaining economic development options.

Before we proceed with our analysis, we provide a description of the Alaska economy. In the Alaska economy, as of 2013 there were 15,220 firms, the majority of which are very small. Figure 1 and Table 1 show that 70 percent of all firms in the state have less than 10 employees and account for about 13 percent of the workers. On the other hand, while there are less than 1,000 (5 percent) firms with more than 50 employees, they employ more than 60 percent of the labor force. This concentration of employment in large firms is not dissimilar from the national picture. Alaska's dispersed population makes the analysis slightly more complicated.

Understanding the determinants of new firm creation is especially important due to the positive economic benefits and overall regional development that are associated with increased business activity.

FIGURE 1

The study objectives were to first describe the current state of small businesses and entrepreneurship across the different boroughs in Alaska and then attempt to determine the factors influencing the success and growth of these outcomes.

To achieve this end, we did the following:

a) Examine previous work that has investigated the contributing aggregate factors to business start-ups, longevity, growth, and other metrics of success to create an exhaustive literature review as a baseline.

b) Determine the role played by factors identified in the previous step in encouraging small business development in Alaska.

It is evident, however, that much of the literature that focuses on the determinants of small businesses/entrepreneurship and their economic impact has been conducted on a national, regional or international context. County level studies on states with characteristics like Alaska's are scarce.

c) Understand why these Alaska specific factors may be different from those in the previous literature.

Review of Major Concepts

The U.S. Small Business Administration reports indicate that small businesses are the vast majority of employers, and they create the lion's share of new jobs each year and more than half of all net new jobs in recessionary periods (Headd, 2010). Looking at the last three recessions, the smallest firms created more jobs following the 2001 recession, larger small firms led the expansion following the 1991 downturn, and a combination of the two followed the most recent recession. This evidence has resulted in numerous efforts at the federal, state, and local levels to foster small business development.

It is evident, however, that much of the literature that focuses on the determinants of small businesses/entrepreneurship and their economic impact has been conducted on a national, regional or international context. County level studies on states with characteristics like Alaska's are scarce. The study aimed to close that gap by addressing how Alaska's industrial structure, cultural environment, climate, and human and creative capital influence the small business environment.

Most growth theories are based on the idea that human capital or the human factor is key. The research approach has differed depending on the emphasis of the question. For example, Schumpeter (1911) focused on entrepreneurial or innovative skills, while Becker (1964) highlighted the role of education, and Florida (2002) zeroed in on creativity as being the true engine of growth.

The line of research that has received the most attention and is relevant here has examined the factors which effect regional firm formation. Some of the old-

TABLE 1: EMPLOYERS AND EMPLOYMENT BY FIRM SIZE (PRIVATE AND LOCAL GOV'T) ALASKA 2013[i]

Employees in Firm	Number of Firms	Full Time Employees		Part Time Employees		Temporary Employees	
		Number	Percent	Number	Percent	Number	Percent
1 to 9	10,678	21,926	58%	9,619	25%	6,576	17%
10 to 49	3,618	44,112	61%	14,442	20%	14,224	19%
50 to 99	464	20,287	64%	5,373	17%	5,898	18%
More than 99	460	104,498	70%	21,282	14%	24,003	16%

er studies focused on issues such as taxation, transport costs, and scale economies (Bartik, 1989; Kiescnick, 1981). Others identified population density, industrial clustering and the availability of financing as causal determinants of regional differences in firm birth rates (Reynolds et al., 1994).

Florida argues that creative skills, measured by the number of workers in creative occupations, are crucial for economic growth and has found supporting evidence for this premise in urban areas. And rural growth from 1990 to 2004 was positively associated with creative occupation employment (McGranahan and Wojan, 2007). Given some of these findings, the attention has shifted to policies recommending that cities must attract and retain creative workers. This line of reasoning is derived from three premises: 1) urban economic development now depends largely on novel combinations of knowledge and ideas, 2) certain occupations specialize in this task, and 3) people in these occupations are drawn to areas providing a high quality of life.

To help determine share of employment in the creative class, we used the best creative class measure, along with two measures of diversity.

The Creative Class:

Richard Florida defines the creative class as: "People in science and engineering, architecture and design, education, arts, music and entertainment whose economic function is to create new ideas, new technology, and new creative content." [ii]

However, as McGranahan and Wojan explain, although a premise of Florida's work is that the creative class is relatively footloose, some occupations included in the definition, most notably "education, training, and library occupations" and "healthcare practitioners and technical occupations" are involved in economic reproduction and locate largely to provide essential services to a population. In rural areas, the perverse result is that high employment shares in these occupations can indicate a dearth of economic development.

In recasting the creative class, these two broad occupational categories are dropped. Comparing results using the recast creative class measure with Florida's original measure confirms that the present measure is a more valid construct.

Diversity and Tolerance:

The creative class as defined here is attracted to areas with low entry barriers that are perceived to be welcoming. It is assumed that more diverse regions are expected to have an advantage in attracting and retaining creative people with unorthodox ideas by lowering the entry barrier and making diverse ideas available. We used two measures of diversity in the analysis.

(1) *The Melting Pot Index* is a measure of the percentage of the population that is foreign born. Previous studies support the inclusion of the index since they have found a significant and positive effect of immigrants on new firm formation (Reynolds et al., 1995; Saxenian, 1999; Kirchhoff et al., 2002). Since the immigrants usually lack skills, resources, and networks, they tend to be more self-employed than non-immigrants. In addition, they bring new ideas and cultures to enrich a region and create new business opportunities.

In the context of entrepreneurship and small business creation, the relationship between creative workers/openness and business development is slightly harder to determine because the decision to start a business or become an entrepreneur is a complicated process that rests on a confluence of factors.

(2) *Tolerance:* A Gay Index is used to capture the broader diversity of a region. The index is a measure of the concentration of same-sex male unmarried partners, commonly understood to be gay male couples, in the population and is used to approximate the level of openness or tolerance to newcomers or "non-conformists" in a region. It is assumed that high concentrations of gay men in a region signal a broader openness towards those who are different, creating lower entry barriers to human capital of various kinds and backgrounds.

In the context of entrepreneurship and small business creation, the relationship between creative workers/openness and business development is slightly harder to determine because the decision to start a business or become an entrepreneur is a complicated process that rests on a confluence of factors.

As we can see in Table 2, there is significant variation in the share of employment in creative class occupations across the different boroughs in Alaska. Across time however, there does not seem to be significant changes, which is unsurprising given the fact that industrial structure (composition of industries) is slow to change.

Minnitti and Bygrave (1999:43) argue that an individual's decision to become an entrepreneur is a function of three elements: "1) the subjective initial endowment, which is personal; 2) the institutional and economic circumstances of the economy, which are objective and community specific; and 3) the existing level of entrepreneurial activity in that community as perceived and evaluated by the individual."

The first component implies a micro perspective that can, however, be analyzed at the macro level by observing the demographic characteristics of a community. The other two components are macro components that are critical in the analysis of the conditions that foster entrepreneurship in a community.

TABLE 2: SHARE OF EMPLOYMENT IN THE CREATIVE CLASS

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Borough												
Aleutians East	4.18%	4.12%	4.12%	4.02%	3.98%	3.42%	3.26%	3.21%	3.61%	3.80%	3.49%	3.70%
Aleutians West	5.87%	6.16%	5.39%	5.71%	4.80%	5.42%	5.64%	5.85%	6.45%	6.50%	5.74%	5.91%
Anchorage	**15.91%**	**15.85%**	**16.30%**	**16.24%**	**16.60%**	**16.80%**	**16.33%**	**16.35%**	**16.92%**	**17.86%**	**17.39%**	**17.58%**
Bethel	8.06%	7.63%	7.29%	7.79%	7.70%	7.97%	7.96%	7.36%	7.51%	7.79%	8.12%	7.35%
Bristol Bay	4.18%	3.66%	3.94%	3.40%	3.30%	3.51%	3.13%	4.93%	4.58%	4.80%	5.12%	6.71%
Denali	10.62%	11.72%	9.42%	8.10%	8.36%	8.16%	8.71%	7.57%	7.72%	8.15%	8.22%	8.20%
Dillingham	10.49%	10.72%	11.85%	10.17%	10.60%	10.66%	10.92%	10.67%	9.45%	8.78%	9.22%	9.09%
Fairbanks North Star	14.99%	14.77%	14.70%	14.85%	15.20%	15.05%	14.04%	14.78%	15.25%	15.33%	15.38%	15.50%
Haines	8.80%	8.07%	8.13%	7.70%	7.55%	8.67%	7.88%	7.62%	6.63%	8.58%	7.51%	7.97%
Hoonah-Angoon									5.41%	6.04%	7.64%	6.98%
Juneau	**17.15%**	**16.98%**	**16.79%**	**16.40%**	**17.57%**	**17.16%**	**16.87%**	**17.25%**	**17.29%**	**17.62%**	**18.30%**	**17.63%**
Kenai Peninsula	8.99%	9.13%	9.47%	9.30%	9.59%	9.32%	10.05%	9.80%	9.82%	10.18%	10.59%	10.35%
Ketchikan Gateway	11.10%	11.44%	11.47%	12.11%	11.22%	11.08%	10.82%	11.70%	11.45%	11.57%	12.21%	11.98%
Kodiak Island	8.88%	9.21%	9.37%	9.20%	9.40%	9.10%	9.17%	8.61%	8.60%	9.46%	9.03%	8.84%
Lake and Peninsula	6.35%	6.37%	6.31%	5.87%	6.13%	5.60%	4.73%	4.65%	6.75%	7.65%	11.35%	7.39%
Matanuska Susitna	9.92%	9.30%	9.99%	10.14%	10.34%	10.30%	10.91%	11.26%	11.72%	11.59%	11.61%	11.50%
Nome	11.04%	10.43%	10.11%	10.28%	10.33%	10.48%	9.93%	9.61%	10.31%	10.18%	10.01%	10.89%
North Slope	9.87%	10.38%	11.70%	12.14%	12.43%	12.05%	12.13%	11.99%	11.63%	11.80%	12.90%	12.68%
Northwest Arctic	10.04%	10.24%	10.38%	9.80%	8.38%	8.55%	8.53%	8.46%	8.48%	9.32%	10.37%	11.70%
Petersburg									7.62%	9.22%	7.73%	8.15%
Prince Wales												
Ketchikan	8.80%	8.86%	7.35%	7.27%	5.79%	6.39%	7.13%	7.64%				
Prince of Wales-Hyder								8.48%	7.85%	7.75%	8.40%	
Sitka	10.37%	10.63%	10.61%	9.70%	10.22%	10.75%	10.33%	10.18%	11.06%	11.18%	11.27%	11.75%
Skagway									16.53%	19.34%	18.20%	19.94%
Skagway Hoonah												
Angoon	9.33%	9.14%	9.04%	9.40%	8.72%	11.63%	11.73%	11.76%				
Southeast Fairbanks	7.66%	9.59%	8.88%	9.20%	8.90%	8.63%	8.87%	8.35%	8.37%	9.38%	9.88%	10.39%
Valdez Cordova	9.76%	10.34%	10.25%	9.90%	11.61%	11.18%	11.02%	11.10%	10.36%	10.83%	10.48%	10.24%
Wade Hampton	8.02%	7.54%	8.57%	7.30%	8.46%	7.18%	8.00%	6.56%	6.69%	6.03%	8.46%	6.90%
Wrangell									7.32%	7.21%	6.35%	6.40%
Wrangell Petersburg	6.05%	6.92%	6.54%	7.18%	6.40%	6.38%	6.63%	8.63%				
Yakutat	4.98%	6.66%	9.52%	7.68%	7.50%	10.72%	10.71%	11.73%	11.04%	10.89%	10.00%	8.48%
Yukon Koyukuk	8.44%	7.96%	8.24%	9.50%	8.90%	9.19%	9.40%	8.20%	7.64%	6.93%	7.24%	6.74%

TABLE 3: VARIABLE DESCRIPTIONS

Variable	Description	Source
Nonfarm Proprietors	Nonfarm proprietors employment is the number of sole proprietorships and partners (excluding limited partners). Nonfarm proprietors employment is estimated using IRS Schedule C and Schedule B tax forms.	Bureau of Economic Analysis
NonEmployer	NonEmployers are those businesses with no paid employees that have receipts above $1,000 and below $1 million for corporations and partnerships. Two exceptions are construction businesses for which receipts must only be above $1, and service-type industries for which receipts must be below $2 million. Sole proprietorships are different in that restrictions on receipts vary by industry. It is important to note that the methodology used to classify NonEmployer businesses changed in 2009. NonEmployer statistics only count those businesses that file taxes, as most of the data on NonEmployers comes from IRS business income tax returns.	NonEmployer Statistics – Census Bureau
Small Establishments	Number of Establishments with less than 250 employees	County Business Patterns – Census Bureau
Births	Number of Establishment births from previous year to current year. Ex: If data is labeled 2000, the variable indicates establishment births from 1999 to 2000.	Statistics of US Business – Census Bureau

Economic factors suggest the levels and types of resources that are available for entrepreneurship and prior entrepreneurial activity suggest the extent to which past opportunities and pre-dispositions toward entrepreneurship exist.

Given the difficulty in defining small business development, the variables defined in Table 3 are used as proxies for small business activity. This helps capture the borough business dynamics through a few different metrics.

As a first step, we provide the changing conditions across all boroughs using these different proxies in Table 3. It is fairly obvious that they do not all move in the same directions as the relative importance of for example capital may be more pronounced in determining the change in the number of non-farm proprietors than that of non-employers.

Community developers need to be clear about the metric they are targeting given that the determinants of overall establishments are not necessarily the same as those of non-employers. The recipe for encouraging entrepreneurial growth is not the same as the strategy one would take in trying to boost economic growth. For example, tax incentives may be attractive to large firms but do little to encourage an employee to start a business.

What are the attributes of some of the fastest growing communities?

Table 4 shows how these proxies have changed in the last decade. Six boroughs have seen an across the board increase (Denali, Fairbanks, Kenai, Kodiak, Matanuska, and Southeast Fairbanks) in all the metrics. With the exception of Matanuska, the other boroughs have economies that revolve around an economic base. Table 5 shows each borough's economic base or relative concentration using the location quotient method. For this study, the local area is the boroughs; and the base region is the state. (For more discussion on location quotients, see the sidebar)

$$LQ = (e_{i,j} / e_j)/(E_{i,S}/E_S)$$

Where

$e_{i,j}$: Employment in industry i in borough j

e_j: Overall employment in borough j

$E_{i,S}$: Employment in industry i at the state level

E_S: Overall employment at the state level

The Mat-Su Regional Medical Center. This new hospital, opened in 2006, is a symbol of growth and change in Alaska's fastest-growing region, the Matanuska-Susitna Borough north of Anchorage.

Denali is a clear example of a borough leveraging its locational advantage with sustained growth over the last 20 years by becoming a tourism hub. An increase in the number of hotels and other accommodations has accompanied the impressive growth in visitors. Of the 97 establishments in Denali, 40 of them are in accommodation and food services, and seven are in arts, entertainment, and recreation. Fairbanks's economy is heavily dependent on military and government employment, which makes it sensitive to base closures and government budget cuts.

Kenai and Kodiak are fishing communities whose economies are dependent on the resource while Matanuska was largely a bedroom community that afforded Anchorage employees lower housing costs but has grown to include employment in some basic industries. Given the diversity in specialization across the boroughs, it is necessary to account for the infrastructure availability in determining the type of development that matches the communities' characteristics.

Krugman (1991) explains that regions with higher levels of manufacturing activities present opportunities for the creation of new firms. He argues that these places contain resources that minimize costs for exporting goods to other regions. On the other hand, less developed areas may lack the infrastructure necessary for new

Typically if LQ>1, LQ =1, or LQ<1, then the proportion of industry concentration is greater than, equal to, or less than the industry concentration in the base region as a whole. The interpretation is normally that a LQ>=1 indicates that the economy is self-sufficient, and may even be exporting the goods or service of that particular industry, while a location quotient less than 1.0 suggests that the region tends to import the goods or service. So a portion of local employment in that industry is assumed to be export.

TABLE 4: PROXIES FOR SMALL BUSINESS GROWTH

	Non-Employers (2004-2010)	Number of Births (2000-2010)	Number of Establishments (2000-2010)	Number of Non-Farm proprietors (2000-2010)	Overall Employment (2000-2010)
			Change between 2000 and 2010		
Aleutians East	-38	-1	11	695	-283
Aleutians West	-22	-3	13	0	676
Anchorage	825	-107	573	-641	32,301
Bethel	210	-5	-23	166	-76
Bristol Bay	-6	1	-1	232	-95
Denali	10	1	30	107	138
Dillingham	156	-5	4	-117	66
Fairbanks	249	1	263	805	5,552
Haines	12	-5	10	187	134
Juneau	61	-2	6	-1,702	690
Kenai	209	12	159	1,153	2305
Ketchikan	65	0	-6	257	281
Kodiak	13	8	17	131	274
Lake and Peninsula	*-7*	*3*	*0*	*-355*	*-6*
Matanuska	852	16	534	3,926	5,412
Nome	102	-4	-30	224	507
North Slope	45	-5	1	175	780
Northwest Arctic	23	-17	-29	373	232
Prince of Wales	92	9	-31	601	-753
Sitka City	65	6	-13	401	243
Skagway	-38	10	31	327	-6
Southeast Fairbanks	33	12	43	279	351
Valdez-Cordova	166	-17	-56	409	424
Wade Hampton	117	-1	-7	295	-158
Wrangell-Petersburg	38	-4	-33	560	212
Yakutat City	*-1*	*1*	*-4*	*-136*	*-118*
Yukon-Koyukuk	*-20*	*-6*	*-27*	*338*	*-206*

TABLE 5: WHAT ARE THESE COMMUNITIES' SPECIALTIES?

Fastest growing areas are highlighted

Location Quotient:[iii] $\{(e_i/e_t) / (E^i/E_t)\}$	**Industries of Specialization (in terms of employment)**
Aleutians East	None
Aleutians West	Manufacturing
Anchorage	None
Bethel	Forestry, Fishing, and Related Activities/Utilities/Local Government
Bristol Bay	Manufacturing/Real Estate and Leasing
Denali	Arts, Entertainment, and Recreation/Accommodation and Food Services/Federal Civilian
Dillingham	Forestry, Fishing, and Related Activities
Fairbanks	Military
Haines	Management of Companies and Enterprises/Arts, Entertainment, and Recreation
Juneau	State Government
Kenai	Forestry, Fishing, and Related Activities
Ketchikan	None
Kodiak	Forestry, Fishing, and Related Activities/Manufacturing
Lake and Peninsula	Arts, Entertainment, and Recreation/Gov't and Gov't Enterprises/Local Gov't
Matanuska	None
Nome	Local Gov't
North Slope	Mining/Administrative and Waste Management
Northwest Arctic	Arts, Entertainment, and Recreation
Prince of Wales	Forestry, Fishing, and Related Activities/Local Gov't
Sitka City	None
Skagway	Arts, Entertainment, and Recreation
Southeast Fairbanks	Federal, civilian
Valdez-Cordova	Forestry, Fishing, and Related Activities/Transportation and Warehousing
Wade Hampton	Forestry, Fishing, and Related Activities
Wrangell-Petersburg	None
Yakutat City	Federal Civilian/State and Local Gov't
Yukon-Koyukuk	Local Gov't

firms to flourish. Researchers (e.g. Birch, 1987; Gartner, 1985) argue that environments where adequate services, transportation, facilities, infrastructure, and good living conditions are available are more conducive to new venture creation. Availability rather than costs and the level of economic development, they say, will direct entrepreneurs to the establishment of businesses in particular regions.

This viewpoint is particularly relevant for Alaska, given the high cost of business, transportation challenges, and the possible lack of financial access in certain communities. To fully comprehend the opportunities and challenges in Alaska, some context is helpful.

An important Alaska specific report produced by The Institute of Social and Economic Research, University of Alaska Anchorage investigated the factors influencing small business viability in rural Alaska communities that are off the road system ("Viability of Business Enterprises for Rural Alaska: Community Factors and Entrepreneurial Strategies," 2008). They found that some of these places have location advantages that make business development more likely.

The places that are close to national parks, or have strong local commercial fisheries, or relatively lower travel costs from Anchorage are likely to have a larger, more diverse group of businesses. Places with larger populations are also more likely to draw businesses, but location is even more important than size. The authors note that these advantages may seem obvious, "places that can draw outside money, either from tourism or from commercial fisheries, have advantages over places that don't have such resources." But it is useful to keep in mind that not all rural places are the same – and that some face even bigger challenges than others.

TABLE 6: THE DETERMINANTS OF THE CHANGE IN THE FOUR EMPLOYMENT METRICS

Table 6[iv v]	Births Change			Small Business Change			Non-Employer Change			Non-Farm Proprietor Change		
	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010
Important Variables												
Initial level of activity	(-)	(+)	(-)	(+)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)
Creative Class	N.E	N.E	N.E	N.E	N.E	N.E	N.E	(+)	(-)	(+)	(+)	(+)
Melting Pot	(+)	N.E	(+)	(+)	N.E	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Owner Occupied Housing	(+)	(+)	N.E	(+)	(+)	(-)	N.E	(+)	(-)	N.E	N.E	N.E
Bachelor's Degree or Higher	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E

TABLE 7: THE DETERMINANTS IN THE GROWTH RATE IN THE FOUR EMPLOYMENT METRICS

Table 7	Births Growth Rate			Small Business Growth Rate			Non-Employer Growth Rate			Non-Farm Proprietor Growth Rate		
	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010	2000-2010	2000-2006	2007-2010
Important Variables												
Initial level of activity	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E	N.E
Creative Class	(-)	(-)	(-)	(-)	(-)	(-)	N.E	N.E	(+)	(-)	N.E	(-)
Melting Pot	(+)	N.E	(-)	N.E	N.E	(+)	(+)	N.E	(+)	(+)	(+)	(+)
Owner Occupied Housing	(+)	(+)	N.E	(+)	(+)	(-)	(+)	(+)	(-)	(+)	(+)	(+)
Bachelor's Degree or Higher	(+)	(+)	(+)	N.E	N.E	(+)	(+)	(+)	N.E	(+)	(+)	(+)

METHODOLOGY

We relied on the literature to inform our specification. Our regression exercise tries to isolate the determinants of small business change and growth. We regress the dependent variables of interest (change/growth) on the initial community characteristics, creative class attributes, and other human capital controls.

Some of the Hypotheses are presented below:

- Demographic factors are positively related to new venture creation. Specifically, a) education, b) creative class, c) diversity (melting pot), and tolerance (Gay Index) are positively related to new venture creation.
- Density and availability of resources are positively associated with new venture growth. Specifically, a) previous levels of small businesses, b) being in a metropolitan area, and c) financial access are positively related to future venture creation.

ISOLATING THE DETERMINANTS OF SMALL BUSINESS CHANGE AND GROWTH

Tables 6 and 7 present a summary of the results isolating the determinants. They contain all U.S. counties including Alaska boroughs. We include an Alaska interaction effect (not shown) to test if the variables of interest affect Alaska differently than they do the rest of the country. Our regressions indicate that the independent variables of interest do not have a different effect in Alaska than in the rest of the U.S. For all four dependent variables, the initial level of activity (entrepreneurial culture) is very strongly associated with future changes for the period between 2000 and 2006 but not with future growth rates.

This relationship does not hold in the 2007 to 2010 period for births and small business establishments. Initial Diversity (melting pot) seems to also be positively associated with the change in all measurements of business activity. Initial levels of the creative class affect future change in non-farm proprietors but have no independent effect on the other measurements.

Financial capital (as measured by ownership rates) and education (bachelor degrees) affect the future growth rate of non-employers and non-farm proprietors but not the absolute changes. This seems to indicate that the marginal effect of some of these variables is more pronounced in areas with smaller initial levels of activity. In other words, the barriers to growth in rural communities are not necessarily the same ones faced by a small business trying to expand in Anchorage.

CONCLUSION

As explained above, the decision to start a business is affected by a confluence of factors. This article attempts to chart the community or borough specific factors which may influence this process. It is, how-

Having individuals in creative class occupations is certainly an asset to any community in Alaska. This does not mean that a creative class centric approach is a panacea. Any development strategy needs to also recognize such factors as place specific industrial structure, economic base, demand potential, and proximity to markets.

ever, imperative to recognize that the base economic conditions in the different Alaskan boroughs make it difficult to make sweeping statements regarding the determinants of business activity.

Many rural communities due to the lack of scale/demand are comprised of mainly support service businesses which fulfill the needs of the local residents. Others are endowed with natural resources (commercial fisheries, mining) and therefore have economies which consist of both basic industries (engines of growth that draw resources from outside the region) and non-basic industries (support services) which circulate dollars throughout the economy. To illustrate this point, we generated industries of specialization (Table 5) using the location quotient method. From a policy standpoint, recognizing these locational and resource advantages and disadvantages is key in establishing businesses, especially smaller ones.

In our original analysis, we also considered demographic and economic characteristics of the different boroughs. This is important because it not only gives us a sense of the resources (human capital, financial capital) but also the demand potential of a specific community. Along the same lines, a useful resource in understanding basic community differences is the borough typology produced by the USDA, which provides further insight into some policy sensitive areas. Understanding the industrial composition of some of these communities along with the strengths/weaknesses makes small business considerably more likely to succeed.

We also looked at how the different metrics of the small business environment have changed across the different boroughs. It is clear that some boroughs have fared much better than others. The six boroughs (Denali, Fairbanks, Kenai, Kodiak, Matanuska, and Southeast Fairbanks) that have positive changes along all dimensions are ones which are reliant on a combination of military, federal government, and fisheries businesses.

Due to the resource rich nature of the state, many jobs in the oil and gas industry are technical jobs which are included in the creative class specification but are not necessarily conducive to new venture creation. In fact, the share of people in creative class occupations in Alaska exceeds that of the national average (20 percent vs. 18 percent).

Having individuals in creative class occupations is certainly an asset to any community in Alaska. This does not mean that a creative class centric approach is a panacea. Any development strategy needs to also recognize such factors as place specific industrial structure, economic base, demand potential, and proximity to markets.

Education (whether it is identified in terms of years of schooling or type of job), diversity (melting pot), and financial capital (proxied by percent owners), in addition to the entrepreneurial culture were the most robust determinants/predictors of future success/growth rates. However, these results are slightly different depending on the measurement of small business that one uses.

Development practitioners have many levers to encourage their communities' growth. Improving quality of life as a way to encourage in-migration of creative class workers is not a panacea. This strategy is more likely to work in areas that are proximate to natural amenities and are equipped with already existing infrastructure. Place specific characteristics and the type of industries a community specializes in are also important to take into account before allocating dollars to such a strategy.

Development practitioners have many levers to encourage their communities' growth. Improving quality of life as a way to encourage in-migration of creative class workers is not a panacea. This strategy is more likely to work in areas that are proximate to natural amenities and are equipped with already existing infrastructure. Place specific characteristics and the type of industries a community specializes in are also important to take into account before allocating dollars to such a strategy.

ENDNOTES

i These data come from a recent survey of Alaska firms we conducted for a different project.

ii Read more: http://www.businessinsider.com/why-the-creative-class-is-taking-over-the-world-2012-7#ixzz36nxWyMld

iii Location quotient is a simple method to measure the relative concentration of an activity (industry in our case) relative to a base unit. For our purposes, the specialization is determined if the intensity or concentration of employment in a borough is at least twice that of the state average. e_i: employment in industry i of a given community / e_t is overall employment for a given community
E_i: employment in industry i at the state level / E_t overall employment at the state level
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E_i: employment in industry i at the state level / E_t overall employment at the state level

iv Tables 6 and 7 summarize the results by simply showing the sign of the coefficient of interest.

v N.E stands for no statistically significant effect. We include an interaction term to determine if the effect of the variables of interest differed in Alaska than the average (None of the effects of interest were different).

REFERENCES

Acs, Z. and Armington, C. (1998). *Longitudinal Establishment and Enterprise Microdata (LEEM) Documentation*. CES 98-9. Center for Economic Studies, U.S. Bureau of the Census, Washington, DC.

Acs, Zoltan and Catherine Armington. (2004). "Employment Growth and Entrepreneurial Activity in Cities." *Regional Studies* 38: 911-927.

Armington, C. and Acs, Z. (2002). The determinants of regional variation in new firm formation. *Regional Studies*, 36(1): 33-45.

Armington, C. (1998). *Statistics of U.S. Businesses – Microdata and Tables of SBA/Census Data on Establishment Size*. Office of Advocacy, U.S. Small Business Administration, Washington, DC.

Bartick, T. (1989). Small business start-ups in the United States: estimates of the effects of characteristics of states. *Southern Economic Journal* 55, 1004-1018.

Bruce, Donald, John Deskins, Brian Hill, and Jonathan Rork. (2007). "Small Business and State Growth: An Econometric Investigation." Washington, DC: U.S. Small Business Administration, Report Number 292, February.

Evans, D. S. and Leighton, L. S. (1990). Small business formation by unemployed and employed workers. *Small Business Economics* 2, 319-330.

Florida, R. (2002a). Bohemia and economic geography. *Journal of Economic Geography*, 2: 55 71.

Florida, R. (2002b). The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community, and Everyday Life. New York: Basic Books.

Goetz, S. J. & Freshwater, D. (2001). State-level measures of entrepreneurship and a preliminary measure of entrepreneurial climate. *Economic Development Quarterly*, 15, 58-70.

Goetz, S. J. & Rupasingha, A. (2009). Determinants of growth in non-farm proprietorship densities: 1990-2000. *Small Business Economics*, 32, 425-438.

Goetz, S. J., Rupasingha, A. & Fleming, D. (2012). The economic impacts of self-employment: A review of the evidence. *Journal of Agricultural and Applied Economics*, 44, 315-221.

Headd, Brian. (2010). "An Analysis of Small Business and Jobs." Washington, DC: U.S. Small Business Administration, March.

Henderson, Jason. "Building the Rural Economy with High-Growth Entrepreneurs." Federal Reserve Bank of Kansas City, *Economic Review* (Third Quarter 2002): pp. 45-70.

McGranahan, D. A. and Wojan, T. R. (2007). Recasting the creative class to examine growth processes in rural and urban counties. *Regional Studies*, 41(2): 197-216.

Partridge, M. D. & Rickman, D. S. (2008). Distance from urban agglomeration economies and rural poverty. *Journal of Regional Science*, 48, 285-310.

Reynolds, Paul, David J. Storey, and Paul Westhead. "Cross-National Comparisons of the Variation in New Firm Formation Rates." *Regional Studies*, Vol. 28, No. 4 (1995): pp.443-456.

Reynolds, P., Miller, B. and Maki, W. (1993). Regional characteristics affecting business volatility in the United States, 1980-4, in Karlsson, C., Johannson, B. and Storey, D. (Eds) *Small Business Dynamics*, pp. 78-115. Routledge, New York.

Reynolds, P., Miller, B. and Maki, W. (1995). Explaining regional variation in business births and deaths: U.S. 1976–88, *Small Business Economics* 7, 389-407.

Schumpeter, Joseph A. (1911). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Cambridge: Harvard University Press.


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