

# The First 50 Years and the Next: ISER and Alaska's Future

Institute of Social and Economic Research  
University of Alaska Anchorage



*Celebrating 50 years of public  
policy research in Alaska*

State of Alaska

SESSION LAWS

Resolutions and  
Memorials



1961

PASSED BY THE FIRST SESSION  
OF THE SECOND STATE  
LEGISLATURE

CONVENED AT JUNEAU, THE CAPITAL, ON THE  
TWENTY-THIRD DAY OF JANUARY, 1961,  
AND ADJOURNED THE SEVENTH  
DAY OF APRIL, 1961

# ISER Established by the Legislature: April 1961!

## CHAPTER 80

### AN ACT

Relating to the establishment of a business, economics and public administration research program by the University of Alaska; and providing for an effective date.

(H.B. 161)

Be it enacted by the Legislature of the State of Alaska:

Section 1. The University of Alaska is authorized to establish a business, economics and public administration research program for the purpose of developing

and publishing statistics and other information regarding the economy, government and resources of the state.

Sec. 2. This Act takes effect on the day after its passage and approval or on the day it becomes law without such approval.

Approved April 13, 1961



**Institute of Social and Economic Research**  
**University of Alaska Anchorage**

# Since 1961...

**ISER has been enhancing “the well-being of Alaskans and others, through nonpartisan research that helps people understand social and economic systems and supports informed public and private decision-making.”**

(ISER Mission Statement)

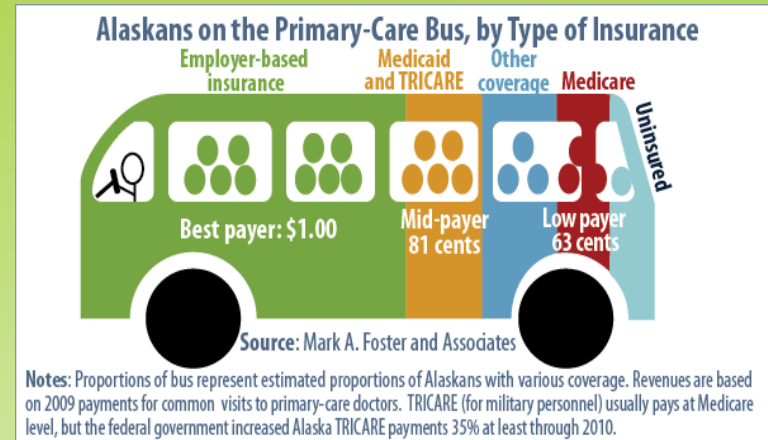
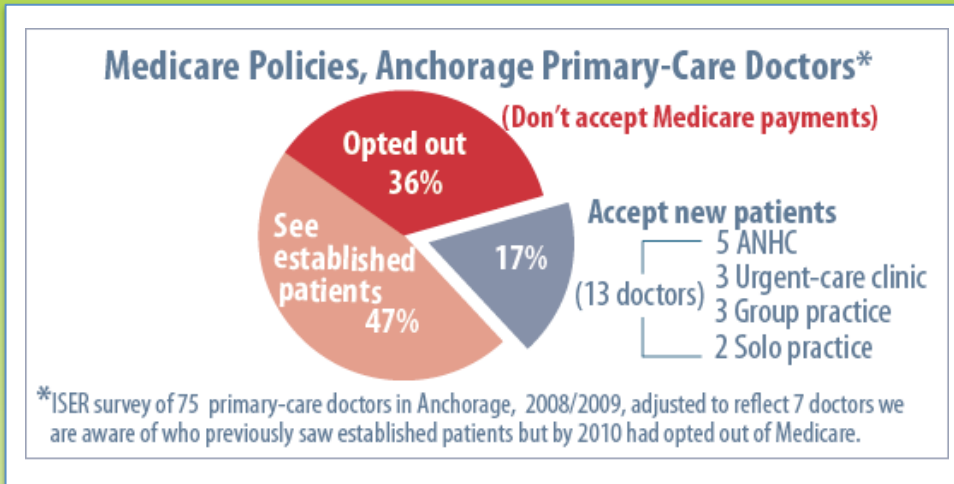
## **Research Areas and Activities:**

- **Alaska Economy**
- **Energy and Environment**
- **Education**
- **Applied Social Research**
- **Arctic Social Systems**
- **Fisheries and Natural Resources**



**ISER's Plans for our 50<sup>th</sup> Anniversary**

# Health Care



In 2009, Roz Frazier of ISER, with Mark Foster and Associates, conducted the first survey documenting the growing unwillingness of Alaska’s primary-care doctors to accept new Medicare patients.

Follow-up research in 2010 examined options for improving older Alaskans’ access to primary care; that work was cited in the September 2010 Interagency Access to Health Care in Alaska Task Force Report to Congress.

Research continues on the critical issue of access to health care—not only for older Alaskans but all Alaskans.

## Current Health Care Projects:

### Access to Health Care

- survey of nurse practitioners in Anchorage, Mat-Su
- funded by Pomeroy Foundation

### Evaluation of Frontier Extended Care Clinics

- funded by Alaska Center for Rural Health

### Information for Professional Nurses in Alaska

- analysis of 2010 nursing re-licensure survey
- funded by State Board of Nursing

### Older Alaskans: Primary Care Clinic Models and Chronic Disease

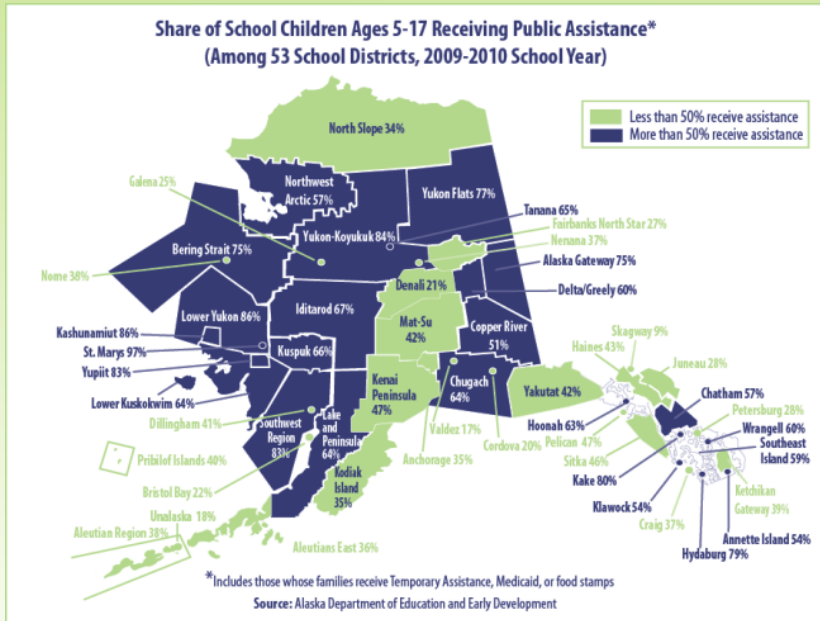
# Kids Count Alaska

The Annie E. Casey Foundation sponsors Kids Count programs in every state, documenting the well-being of children. Since 1996, ISER has been the home of Kids Count Alaska, directed by Virgene Hanna. By collecting and publicizing data about the health, economic status, safety, and education of Alaska's children, Kids Count Alaska is intended to help inform policymakers and others with responsibilities for protecting Alaska's children.



## Covenant House Alaska

In 2010, ISER researchers Stephanie Martin and Alejandra Villalobos Melendez found that teenagers who turn to Covenant House—Alaska's only shelter for homeless teenagers—come with severe problems. They are doing follow-up work to help the shelter design services for victims of violence.



### Why Do Kids at Covenant House Need Help?

- 66%** Haven't finished high school (among those 18 to 20)
- 46%** Have been sexually abused (among girls)
- 40%** Have been in residential mental-health treatment
- 33%** Have been in foster care
- 33%** Already have children of their own (among girls)
- 22%** Were on the streets, in jail, in hospitals, or at other shelters before arriving at Covenant House
- 14%** Have been arrested in past three months
- 13%** Are pregnant when they arrive (among girls)

Source: Stephanie Martin and Alejandra Villalobos Menendez, *Keeping Kids Off the Street: Snapshot of Covenant House Alaska*, ISER, March 2010

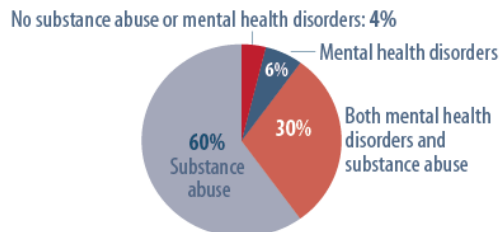
# Alaska Justice System

In research for the Alaska State Senate, ISER researchers Stephanie Martin and Steve Colt found that a relatively small investment in treatment and other programs for prison inmates could cut the number of inmates 10% and save the state hundreds of millions over the next 20 years.

ISER is working with the Alaska Judicial Council on a follow-up study, evaluating the effectiveness of programs implemented based on findings of earlier ISER work.

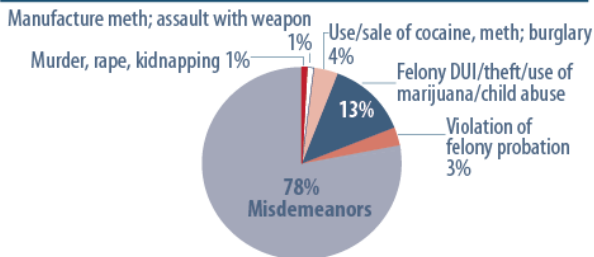
ISER is also working with the Alaska Judicial Council, Department of Corrections, Anchorage Probation, the Court System, Police, Public Defenders, and Prosecutors to evaluate a new probation program.

## How Many Alaska Inmates Have Substance Abuse or Mental Health Disorders?



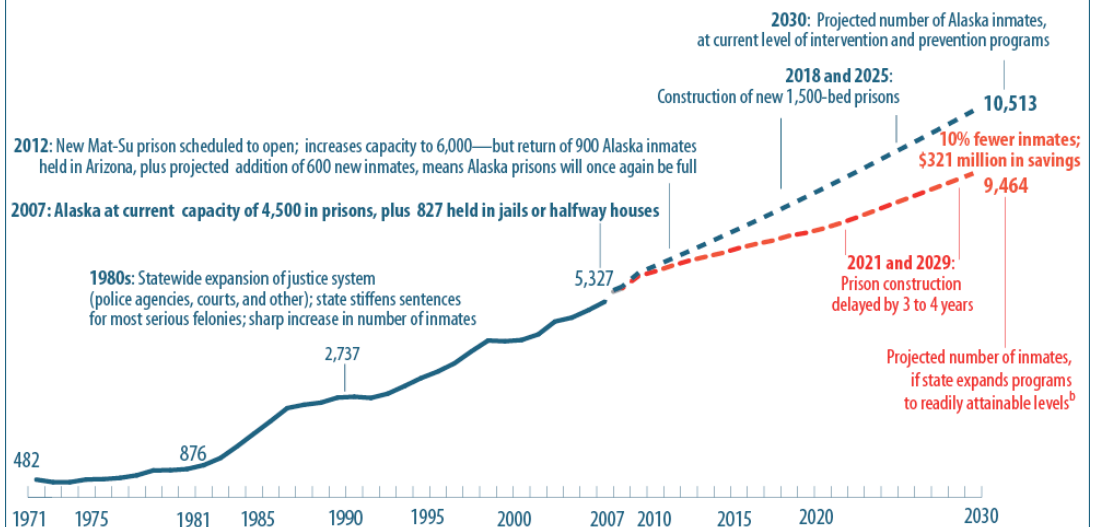
Sources: Alaska Department of Corrections; Alaska Mental Health Trust

## Who Gets out of Jail or Prison in Alaska? (Total Releases, 2002-2007: 82,339)



Source: Alaska Department of Corrections

## Average Number of Alaska Inmates,<sup>a</sup> 1971-2007, and Projected Number, 2008-2030



<sup>a</sup>Average daily number of people in prisons, jails, and halfway houses. <sup>b</sup>The number of people who could be readily added to program rolls varies considerably by program.

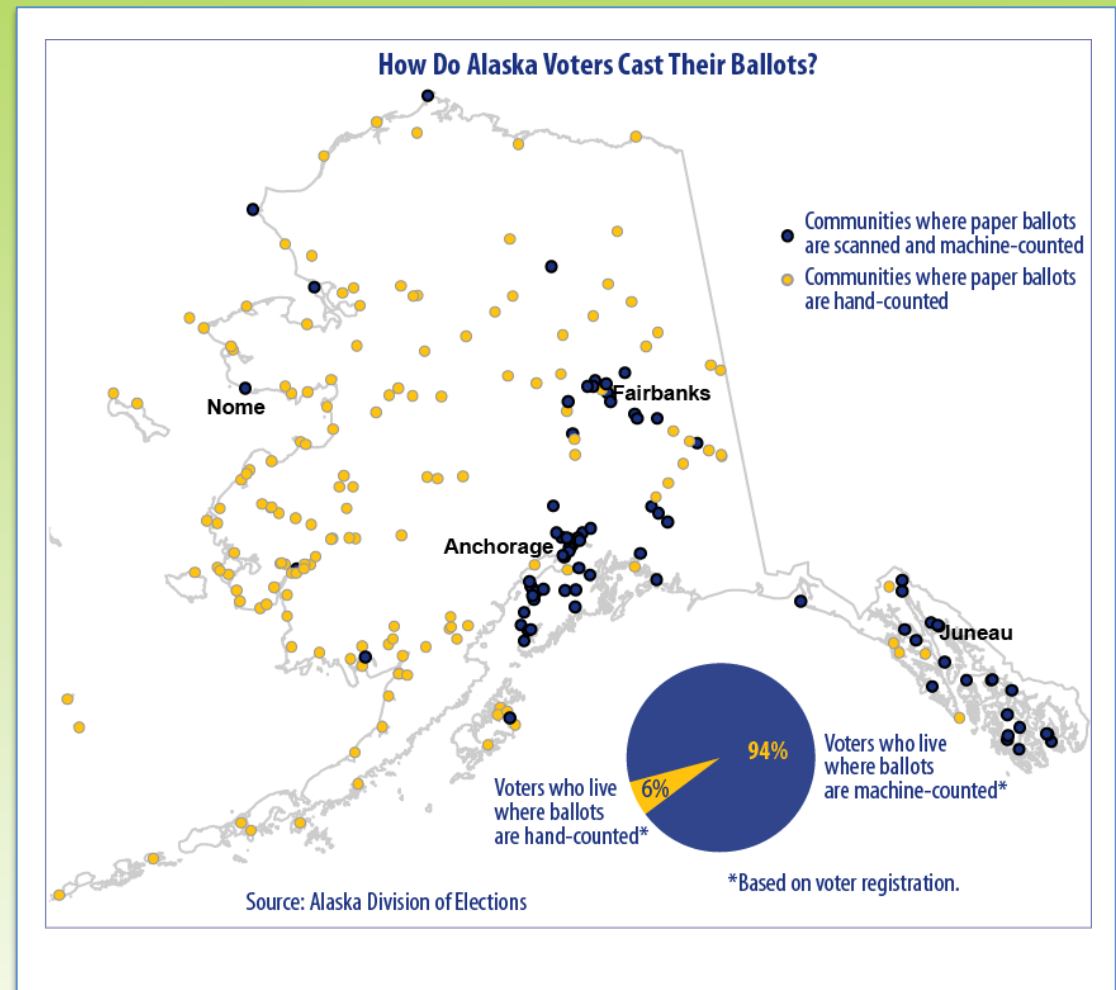
Sources: Alaska Department of Corrections; ISER projections of number of prisoners, based on Alaska Department of Labor projections of Alaska population 18-64 and assuming no change in current use of rehabilitation programs as well as expanded use; Washington State Institute of Public Policy



# Alaska Elections

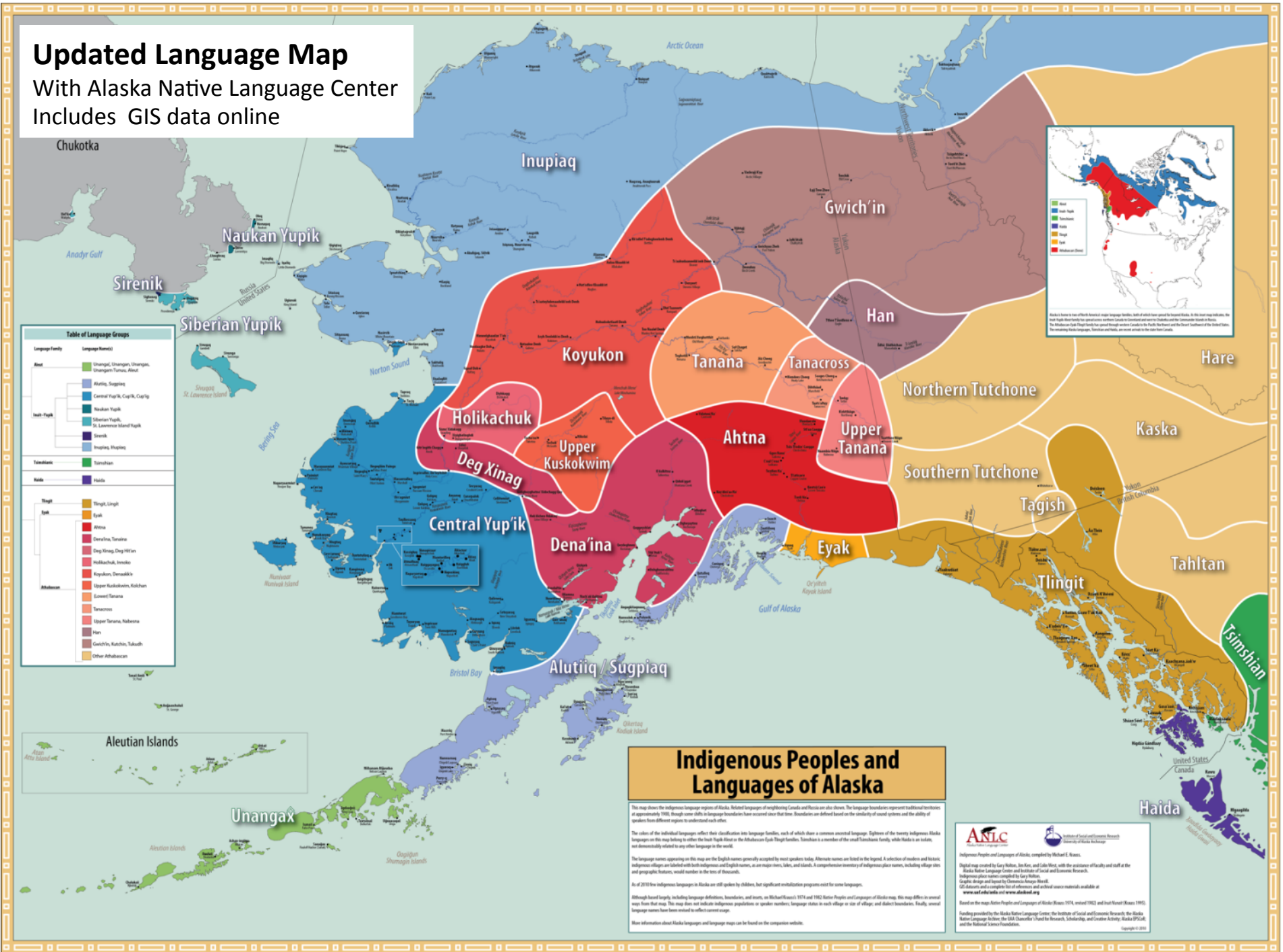
At the request of Alaska's lieutenant governor, Stephanie Martin of ISER, faculty of UAA's School of Engineering, and departments of UAF worked together to assess the quality of Alaska's election security system. They found that its centralization, uniform hardware and software, and other features increase its security.

For the Division of Elections, ISER also recently developed a network of key tribal organization and village representatives in the Bethel census area, to work with the division on its Yup'ik language assistance program.



# Updated Language Map

With Alaska Native Language Center  
Includes GIS data online



**Table of Language Groups**

Language Family	Language Name(s)
Aleut	Unangai, Unangan, Unangan, Unangan Tunuu, Aleut
	Aleutik, Sugpiet
	Central Yup'ik, Cup'ik, Cup'ig
	Naukan Yupik
	Siberian Yupik, St. Lawrence Island Yupik
Eskimo-Aleut	Sirenik
	Imupik, Iqalupit
Tahltan	Tahltan
Haida	Haida
Eskimo-Aleut	Thlingit, Lingít
	Eyak
	Ahtna
	Dena'ina, Tana'ina
	Deg Xinag, Deg Hit'an
	Holikachuk, Invelin
	Kupukon, Denali'ik
	Upper Kuskokwim, Kulkh'm
	Lower Tanana
	Tanacross
Upper Tanana, Nabesna	
Athabaskan	Gwich'in, Hants'ik, Tukath
	Other Athabaskan

### Indigenous Peoples and Languages of Alaska

This map shows the indigenous language regions of Alaska. Related languages of neighboring Canada and Russia are also shown. The language boundaries represent traditional territories at approximately 1900, though some shifts in language boundaries have occurred since that time. Boundaries are defined based on the similarity of sound systems and the ability of speakers from different regions to understand each other.

The colors of the individual languages reflect their classification into language families, each of which share a common ancestral language. Speakers of the many indigenous Alaska languages on this map belong to either the Na-Dene family (or the Athabaskan-Eyak-Thlingit families, Tana'ina is a member of the small Tsimshian family, while Haida is an isolate, not demonstrably related to any other language in the world).

The language names appearing on this map are the English names generally accepted by most speakers today. Alternate names are listed in the legend. A selection of modern and historic indigenous village and tribal names with both indigenous and English names, as well as major rivers, lakes, and islands. A comprehensive inventory of indigenous place names, including village sites and geographic features, would number in the tens of thousands.

As of 2010 few indigenous languages in Alaska are still spoken by children, but significant revitalization programs exist for some languages.

Although listed largely including language definitions, boundaries, and terms, on Michael Krauss' 1974 and 1982 Native Peoples and Languages of Alaska map, this map differs in several ways from that map. This map does not indicate indigenous populations or speaker numbers, language status in each village or size of village, and dialect boundaries. Finally, several language names have been omitted to reflect current usage.

More information about Alaska languages and language maps can be found on the companion website.

**ANLC**  
Alaska Native Language Center  
University of Alaska Fairbanks

**Institute of Social and Economic Research**  
University of Alaska Fairbanks

Indigenous Peoples and Languages of Alaska, compiled by Richard E. Grant.  
Digital map created by Gary Nelson, Jim Cox, and Julie Thrane, with the assistance of faculty and staff at the Alaska Native Language Center and Institute of Social and Economic Research.  
Indigenous place names compiled by Gary Nelson.  
Graphic design and layout by Christopher Anson-Blaustein.  
GIS Education and compilation of all information and all other source materials available at [www.uaf.edu/india](http://www.uaf.edu/india) and [www.alaskanet.org](http://www.alaskanet.org).

Based on the maps: Native Peoples and Languages of Alaska (Krauss 1974, revised 1982) and Inuit (Krauss 1985).  
Funding provided by the Alaska Native Language Center, the Institute of Social and Economic Research, the Alaska Native Language Center, the USA Canada's Inuit Research, Scholarship, and Creative Activity (ISCAR), and the National Science Foundation.

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# Rural Communications Applications and Policy

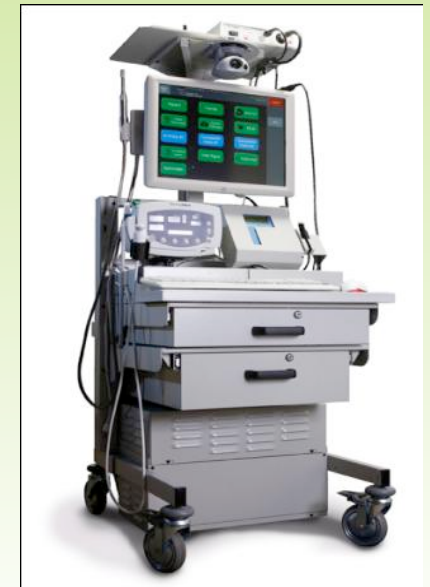
## Research Areas:

- Rural broadband planning
- Communications policy
  - Alaska and rural U.S.
  - Northern Canada; Arctic
  - Developing and isolated regions
- Socio-economic impacts of communications services
  - Telehealth, distance education, e-government,
  - e-commerce, etc.
- History of Alaska telecommunications



## Research Activities:

- Alaska Broadband Planning
- Evaluation of rural Alaska broadband ARRA Stimulus projects
- Universal service policies
- Evolution of Telecommunications in Alaska: Symposium June 2011

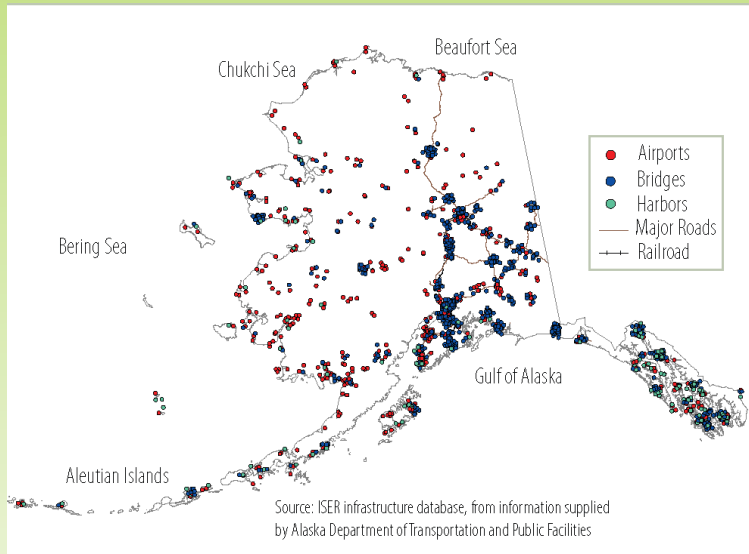


# Transportation System Analyses

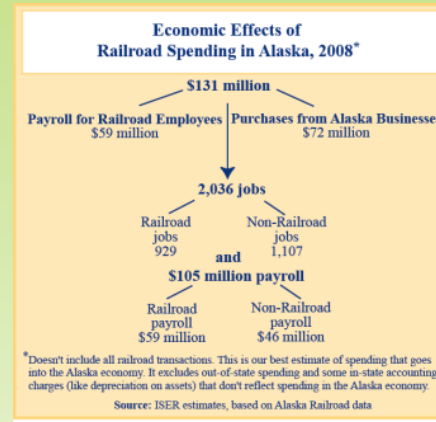
## Economic Value

ISER researchers built the first database of Alaska's public infrastructure and estimated its replacement costs, including \$33 billion for transportation infrastructure.

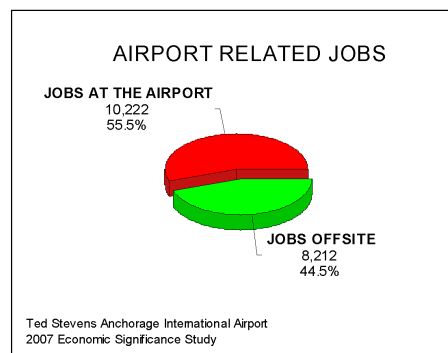
## Alaska Transportation Infrastructure



Current transportation studies include an analysis of the energy requirements of Alaska's transportation systems.



## Economic Significance



## Replacement Cost: Alaska Public\* Infrastructure (Million 2008 \$)

<b>TOTAL INFRASTRUCTURE</b>	<b>\$ 58,879</b>
<b>PUBLIC BUILDINGS</b>	<b>\$ 12,192</b>
Schools	\$ 5,953
Government Buildings	\$ 2,468
Public Hospitals	\$ 1,261
Court Facilities	\$ 1,056
Health Buildings	\$ 868
Law Enforcement	\$ 415
Emergency Services	\$ 171
<b>PUBLIC UTILITIES</b>	<b>\$ 13,472</b>
Energy	\$ 5,598
Sewer Systems	\$ 4,327
Water Systems	\$ 1,683
Electric Grid	\$ 1,000
Natural Gas	\$ 462
Telecommunications <sup>3</sup>	\$ 402
<b>TRANSPORTATION</b>	<b>\$ 33,215</b>
Roads	\$ 21,399
Airports	\$ 5,793
Ak Railroad	\$ 2,625
Bridges	\$ 1,898
Harbors	\$ 1,500

\*Excludes Department of Defense facilities  
Source: ISER

# Resource Management

## Visiting Professorship

- Funding from the Council of Alaska Producers
- Bob Loeffler: teaching and research on land management and issues in Alaska development

## Socioeconomic impacts of development on rural communities

(Bob Loeffler, Sharman Haley, Ginny Fay)

*Donlin Creek and Red Dog Mines NPRA*

## North by 2020: Seminars and workshops “Defining Risk in Arctic Coastal and Offshore Resource Development: Perspectives and International Standards.”

*Seminars on Defining Risk video-conferenced to UAF, UAA, UAS and BARC, with broad participation from industry and agencies*

Strengthening Institutions: Strategies for  
Cooperative Management in the Marine  
Environment of the Beaufort and Chukchi Seas





# Fisheries and Seafood: ISER is engaged in many activities related to fisheries and the seafood industry.

- **Research**

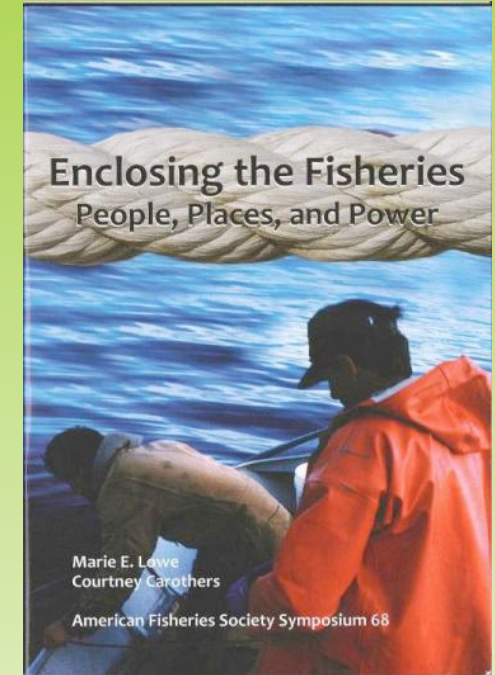
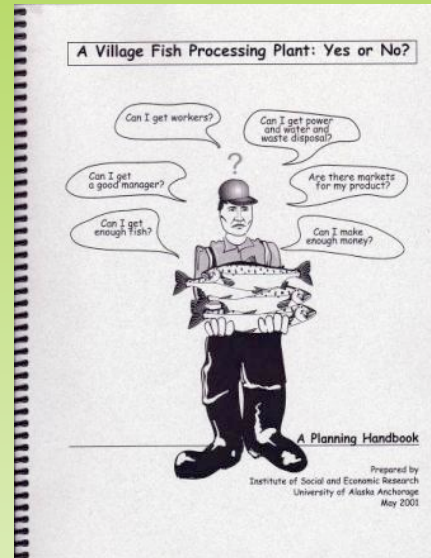
- Salmon and pollock markets
- Commercial fishing safety
- Future Yukon salmon catches
- Rural limited entry permit loss
- Seafood industry in Alaska economy
- Fisheries and community change

- **Teaching**

- Fisheries economics and markets
- Textbook project: Gunnar Knapp
- Research internships

- **Service and Outreach**

- Government agencies
- Media
- Industry
- Public



## Arctic Social Systems

### Research Area: Mobility as an Adaptation to Change

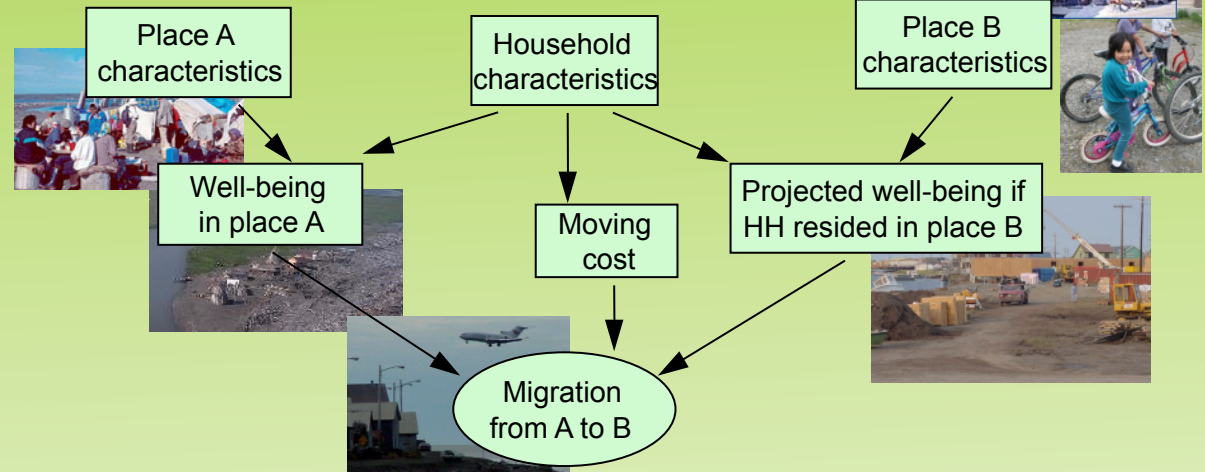
*Migration in the Arctic*

*Understanding*

*Migration in the  
Circumpolar North*

Investigators: Lee Huskey,  
Matt Berman, Lance  
Howe, Stephanie Martin

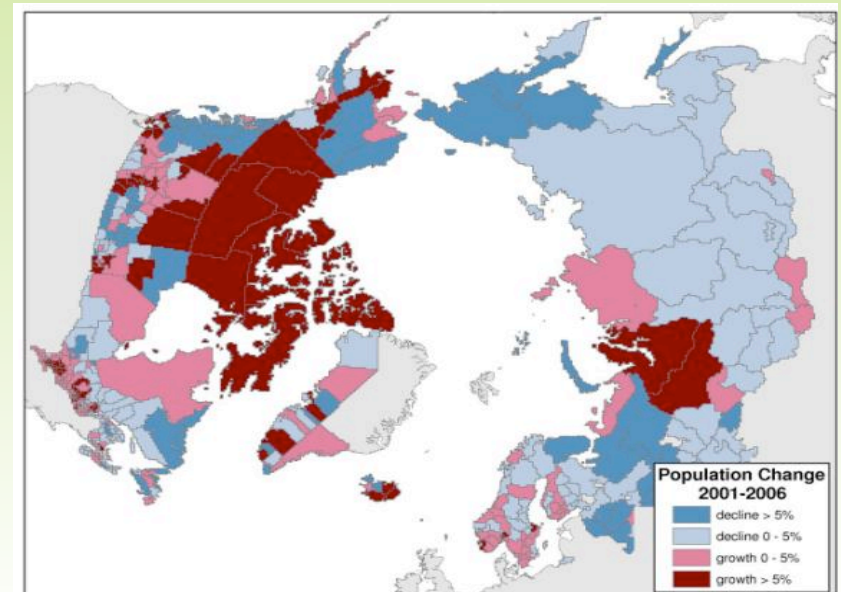
*Migration is an indicator of relative well-being  
at the community level.*



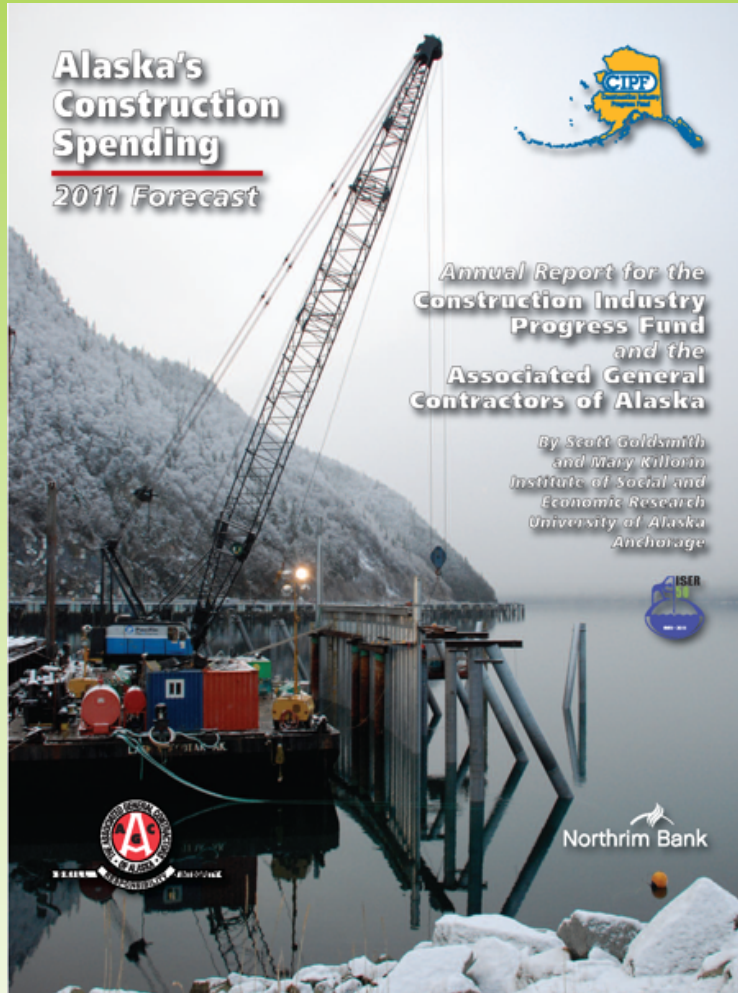
### Research Area: Recording Changing Social and Economic Conditions

*Arctic Observation Network - Social  
Indicators Project (AON – SIP)*

ISER Investigators: Jack Kruse, Matt Berman,  
Ginny Fay, Sharman Haley, Marie Lowe



# Construction Spending Forecast



A widely cited annual estimate of construction spending for the coming year, by ISER researchers Scott Goldsmith and Mary Killorin

	Level	Change
<b>TOTAL</b>	<b>\$ 7,110,000,000</b>	<b>+4%</b>
Total without Oil and Gas	\$ 4,200,000,000	+5%
<b>PRIVATE</b>	<b>\$ 4,455,000,000</b>	<b>+6%</b>
Oil and Gas	2,910,000,000	+3%
Mining	305,000,000	-1%
Other Rural Basic Industry	0	
Utilities	615,000,000	+28%
Hospitals	305,000,000	+38%
Other Commercial	120,000,000	-21%
Residential	200,000,000	-4%
<b>Private without Oil and Gas</b>	<b>\$ 1,545,000,000</b>	<b>+13%</b>
<b>PUBLIC</b>	<b>\$ 2,655,000,000</b>	<b>+1%</b>
National Defense	555,000,000	+1%
Highways	530,000,000	-5%
Airports and Ports	310,000,000	-11%
Alaska Railroad	50,000,000	+16%
Denali Commission	60,000,000	-
Education	355,000,000	+25%
Other Federal	285,000,000	-26%
Other State and Local	510,000,000	+29%

Source: Institute of Social and Economic Research. Percent change based on revised 2010 estimate.



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# Alaska Economy and Fiscal Policy

- Importance of Oil and Gas in Alaska's Economy
- Prospects for a Sustainable Economic Future



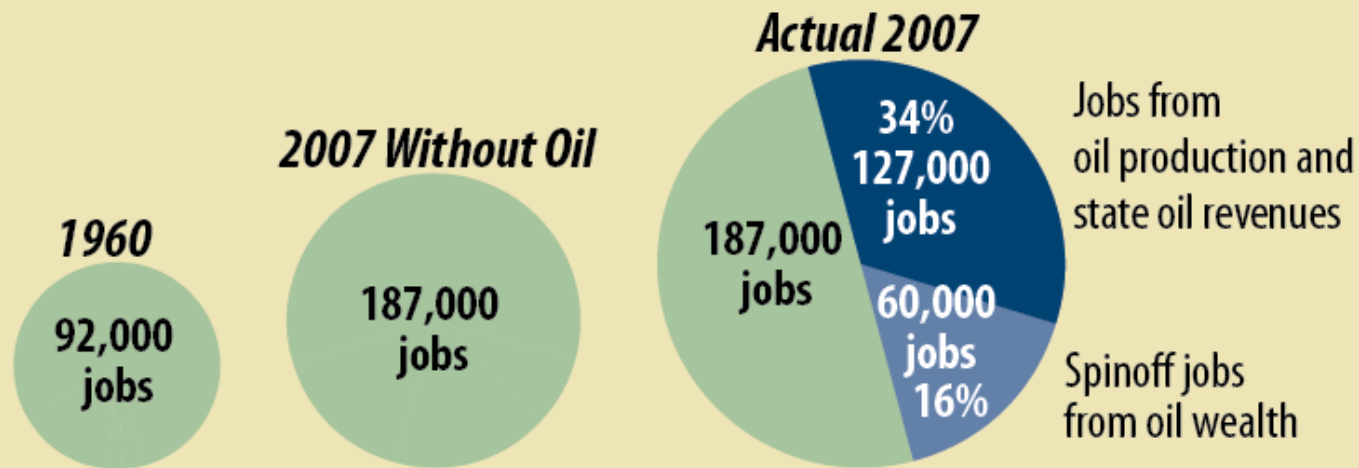
*Investing for Alaska's Future*  
Funded by a grant from Northrim Bank.



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## Importance of Oil and Gas in Alaska's Economy

### Alaska Jobs, With and Without Oil



### Oil-Wealth Spinoffs

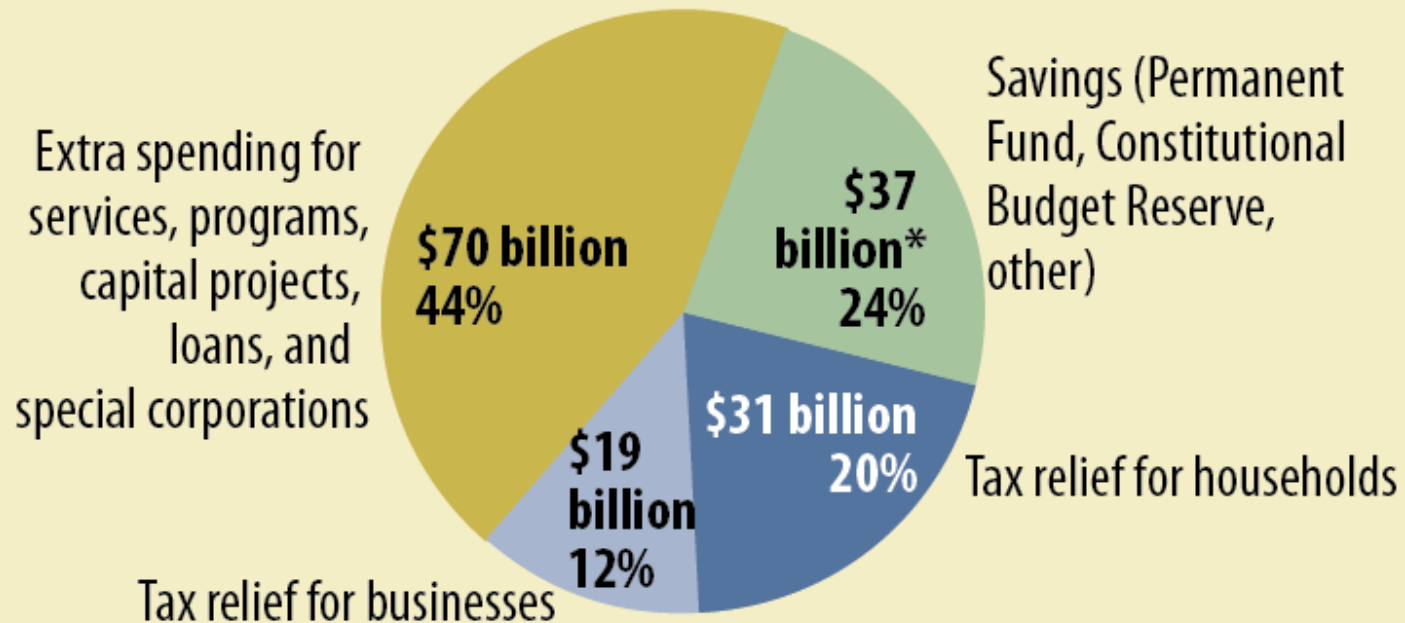
- Bigger and Richer Economy
- Double the Population
- Stability of the Economic Base
- Low Tax Burden
- High Public Expenditures



## Importance of Oil and Gas in Alaska's Economy

### What Did the State Do with \$157 Billion of Oil Money?

(Cumulative Oil Revenues, 1959-2010, in 2010 Dollars)

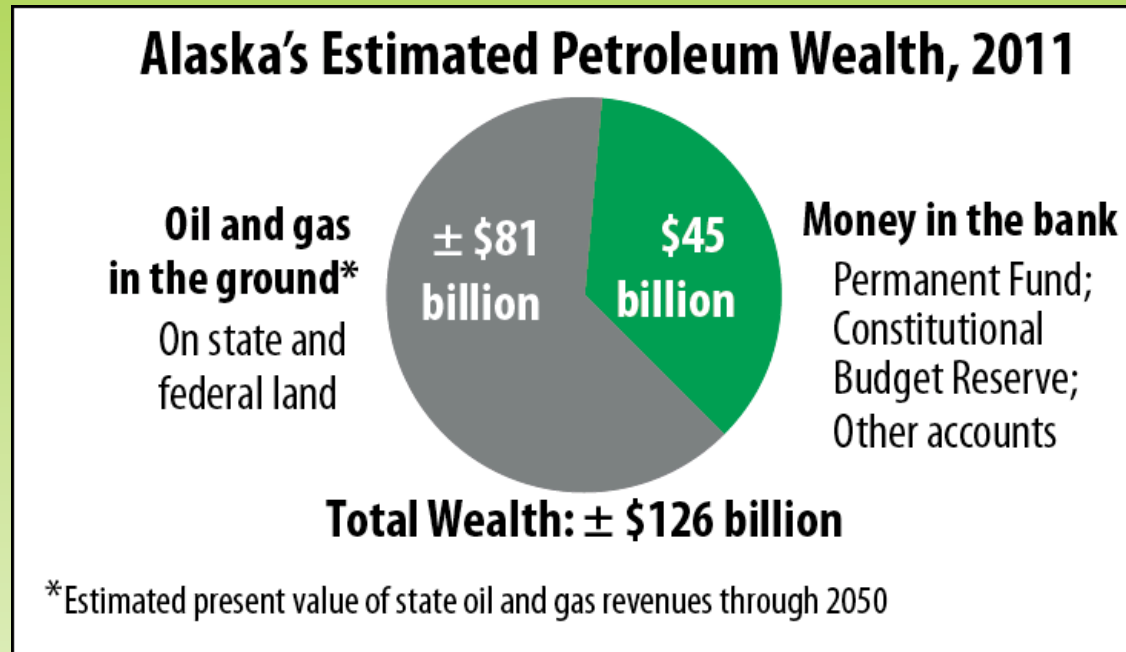


\*This is not the total balance of these accounts in 2010. It includes only the actual oil revenues deposited over time and excludes earnings that have been re-deposited.



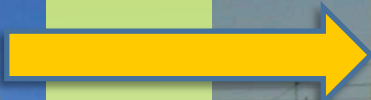
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## Alaska's Petroleum Wealth: How Much Should We Save?



**Alaska could draw up to \$7,200 per resident (in \$2010) annually and keep its petroleum wealth at a constant value per resident—assuming annual population growth of 1%.**





Hooper Bay, Alaska. Photo by S. Colt

# Renewable and Alternative Energy ISER Energy and Environment Group



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# ISER Energy Research Goals

- **Work with communities to understand energy – economy – community interactions**
- **Work with technical experts to evaluate emerging technologies, especially wind and nuclear**
- **Analyze and propose policy innovations to encourage Arctic-hardy alternatives to diesel**

## **Total Current Research Portfolio (as of December 2010)**

- **About 15 active projects**
- **About \$2 million external funding**



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## Energy – Economy – Communities

- How is energy used for transportation in Alaska?  
What is the scope for cost-effective alternatives?
- Why is the *delivered* cost of remote fuel so high?  
How will alternatives be delivered and distributed?



Chevak, Alaska. Photo by S. Colt

- Where are long-run fuel prices headed?  
Which alternatives are likely to make economic sense?
- What is the “structure” of end-use energy demand?  
How can alternatives be integrated into that structure?



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# Flagship Example

## *Making Wind Work for Alaska*

*Sustainable, resilient, cost-effective wind-diesel systems for isolated communities*

### Collaborative effort

ACEP/ISER/UAA Engineering/Communities/Agencies/Industry

Funded by U.S. Department of Energy-EPSCoR (3 years, \$2.8M)

### ISER portion

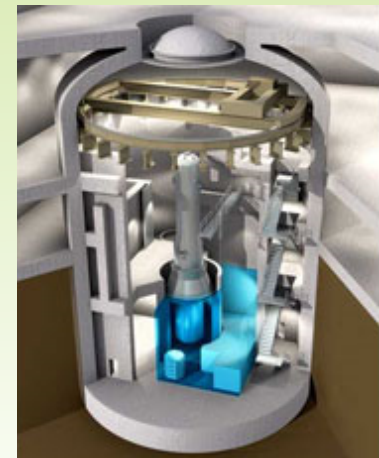
- People and communities are crucial “moving parts” of any wind system
- What are the critical socioeconomic, management, and policy factors that make Alaska (and Arctic) wind projects successful?

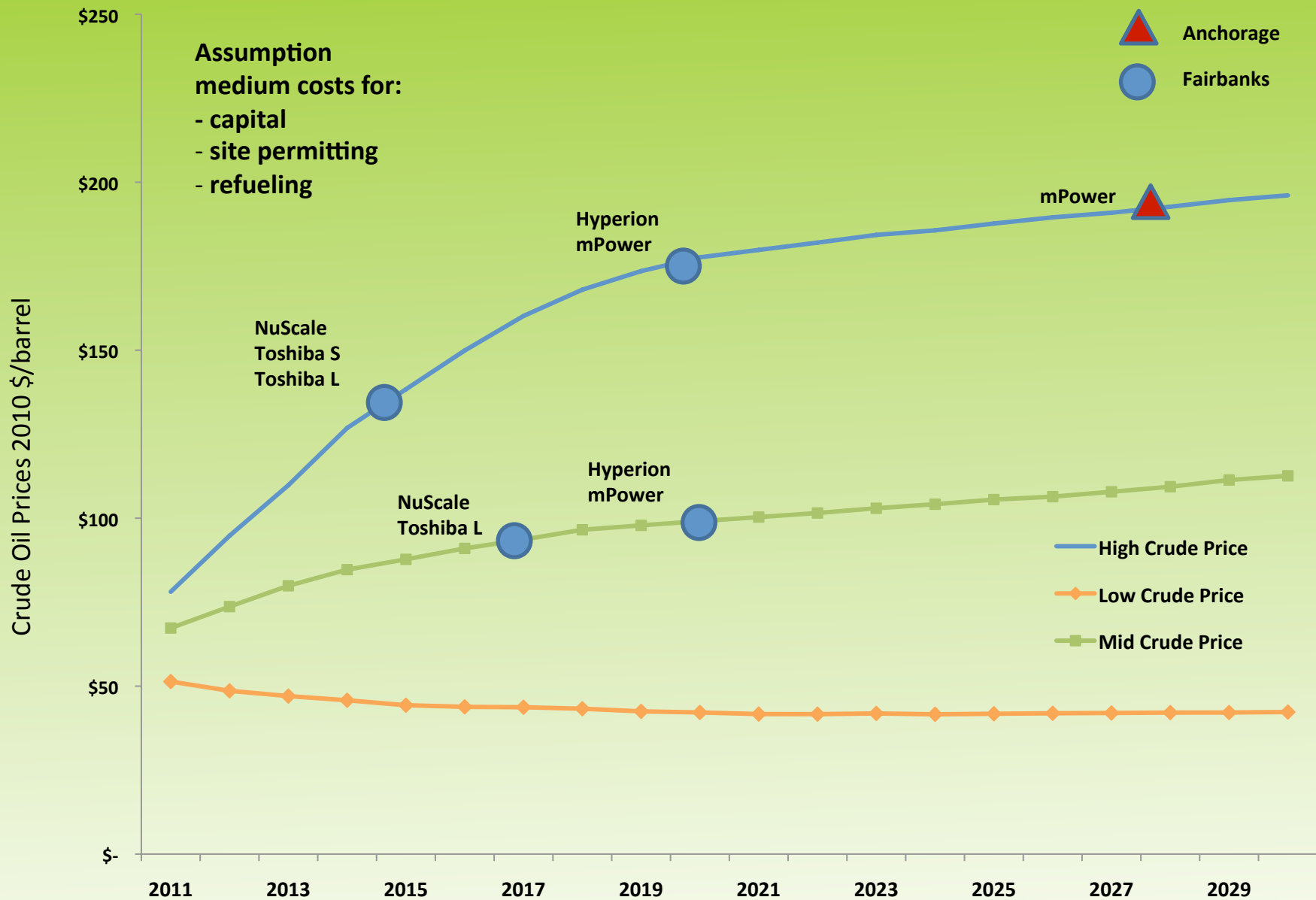


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# Small Modular Reactor Economic Screening Analysis

- Small Modular Reactors (SMRs) are nuclear power plants smaller than 300 MW.
- Smaller, compact designs; factory-fabricated reactors transportable by rail and truck.
- Modeling goals
  - Determine if different SMR technologies are economic energy options for Alaska
  - Identify how economics shift with oil and gas and CO2 price assumptions
- Analyzed Railbelt and rural hubs





# Alaska Energy Statistics: 2011

- Big picture of electricity and energy in Alaska
- Comprehensive look at energy production/generation and use/consumption in the state
- Last published 2002

## Statistics

- Installed Capacity
- Net Generation
- Sales
- Revenue
- Customers
- CO2 Emissions and relative efficiency (New)

## Industry and Military

## Railbelt Overview

## Alaska Renewable Energy

- Renewable Energy Fund
- Hydroelectric
- Geothermal
- Combined Heat and Power
- Heat Recovery
- Wind



# ISER Energy Key Partners and Funders

- UA Alaska Center for Energy and Power



- Alaska Energy Authority



- Denali Commission



- Alaska Housing Finance Corporation



- RurAL CAP (data sharing)



- U.S. Department of Energy – EPSCoR





# Education Research Themes

- Center for Alaska Education Policy Research
- K-12 Workforce
- Rural and Indigenous Issues
- Program Evaluation



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# Center for Alaska Education Policy Research



- **Start-up supported by the UA Foundation**
- **Mission:** The Center for Alaska Education Policy Research enhances decision-making by policymakers, education professionals, and the public through collaborative, interdisciplinary research, analysis, and dissemination. The center conducts non-partisan research on policy issues concerning educational access, equity, and excellence in the Alaska context, across early childhood, primary and secondary, and higher and adult education.



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# Center for Alaska Education Policy Research

## Initial activities

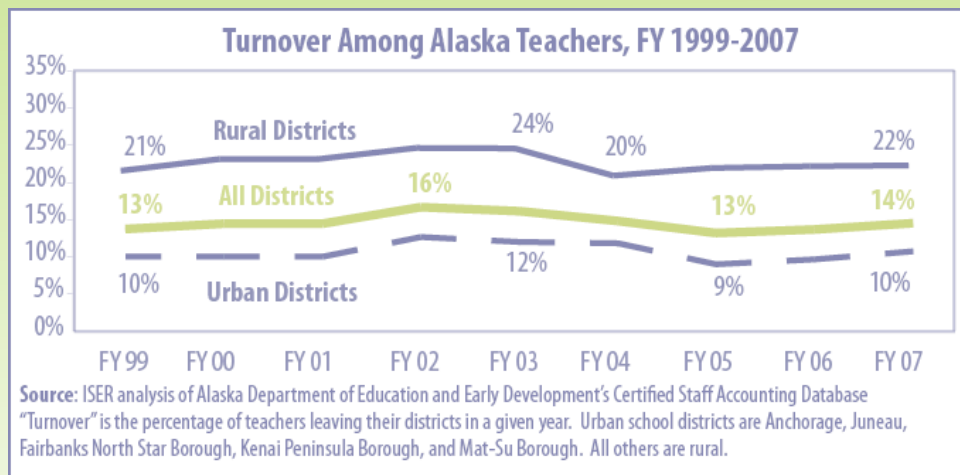
- **Building on current policy research agenda and expanding into new areas**
  - Expanding educator supply and demand study
  - Adding higher education, CTE projects
- **Building education policy research capacity across the UA system**
  - Collaborating with the deans of education at the three MAUs
  - Faculty mini-grants
- **Developing relationships with key partners and policymakers**
  - Developing NW regional education policy research initiatives with Education Northwest
  - Working with Education Commission of the States and National Education Policy Center on national collaborations
- **Creating a plan to sustain funding**



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# K-12 Workforce

- Analyzing supply of and demand for teachers (multi-year collaboration with Alaska Teacher Placement)
- Responding to legislation (Senate Bill 241) calling for a University of Alaska report to the state legislature on teacher preparation, retention, and recruitment

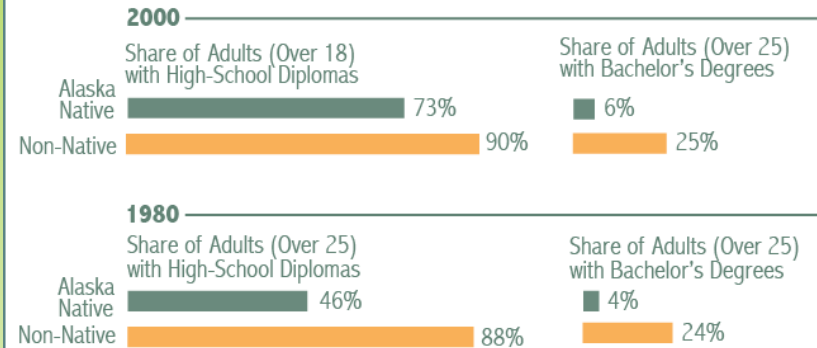


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# Rural and Indigenous Issues

- **Boarding school experiences (historic and contemporary)**
- **Alaska Native student success**
- **Models for providing rural education**

## Changing High-School and College Education Among Alaskans



Source: U.S. Census Bureau



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# Program Evaluation

**ISER researchers are evaluating several programs:**

- **Alaska Educational Innovations Network:** partnership of UAA's College of Education and several school districts, uses networked learning among communities of rural and urban educators to improve student outcomes.
- **Alaska Network for Understanding American History:** helps Alaska educators in teaching American history (Anchorage School District).
- **Alaska Pacific University's Education Innovations Project:** to increase the number of Alaska Native certificated teachers and to provide professional development to educators serving Alaska Native communities.
- **A new U.S. Department of Defense program:** helps children of military personnel in the Anchorage School District with transitions and achievement when their parents are deployed.



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# ISER's Plans for our 50th Anniversary

## Northern Frontier to the New North: Alaska People, Institutions, and Resources

- September in Anchorage: Celebration and public lecture
- Keynote speaker and panel of past ISER directors

## Symposia, Conferences, Co-Sponsored Events

- Climate Change Symposium, co-sponsored by University of Alaska Anchorage and the Chugach National Forest (May)
- The Evolution of Telecommunications in Alaska (June)
- Reconsidering the Coastal Community; Resources of Land and Sea (September)

## Outreach: ISER on the Road (or "on the plane")

- Juneau: Briefing for legislature
- Fairbanks: UAF and community
- Bethel, Dillingham, other regional campuses



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# ISER 50: And Beyond

## Publications and Multi-Media

- Alaska Native Language Map: available in hard copy and online
- Web-based materials and interactive tools showcasing ISER's history and research
- Publications based on research presented by ISER in 2011

## ISER 50 and ANCSA 40

- Contributing historical research and bibliography
- Collaboration with First Alaskans Institute

## George Rogers Fund for Emerging Scholars

- Fellowships and support for young scholars to undertake research in Alaska
- Provide research opportunities for young scholars
- Attract promising researchers to ISER and UAA
- In honor of ISER co-founder George Rogers

For more information: [www.iser.uaa.alaska.edu](http://www.iser.uaa.alaska.edu)  
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