# The First 50 Years and the Next: ISER and Rural Alaska

## 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



### 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

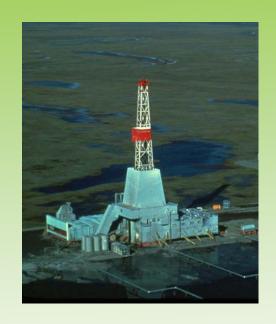
ISER's Plans for our 50<sup>th</sup> Anniversary

Institute of Social and Economic Research

University of Alaska Anchorage

### **Alaska Economy and Fiscal Policy**

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



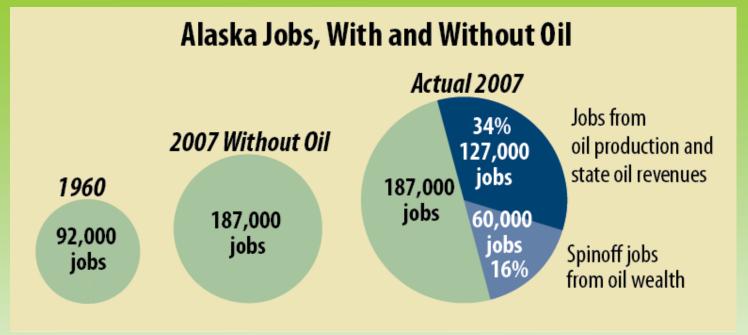
**Research by Scott Goldsmith:** 

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





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

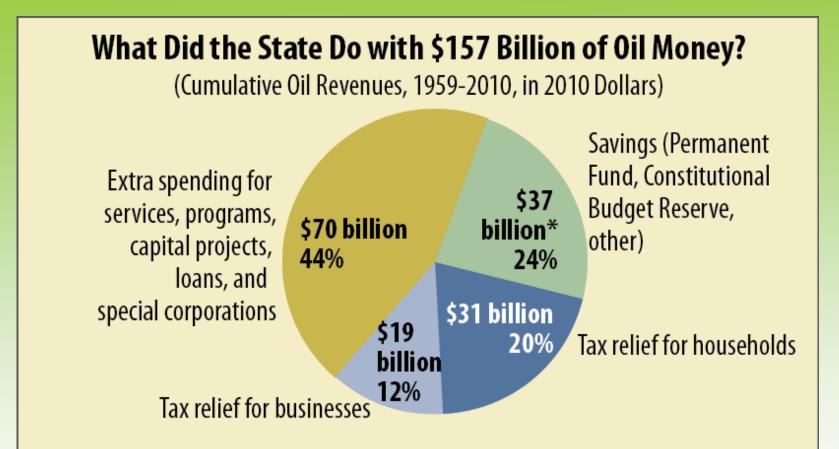


### **Oil-Wealth Spinoffs**

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

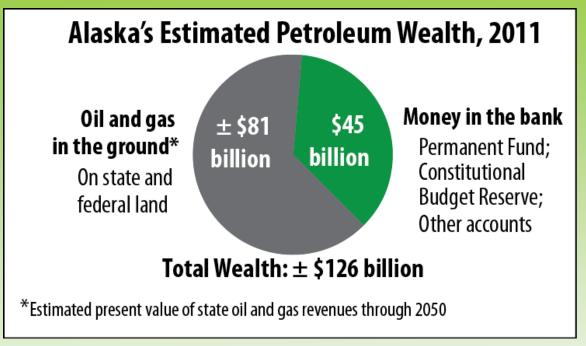


### Importance of Oil and Gas in Alaska's Economy



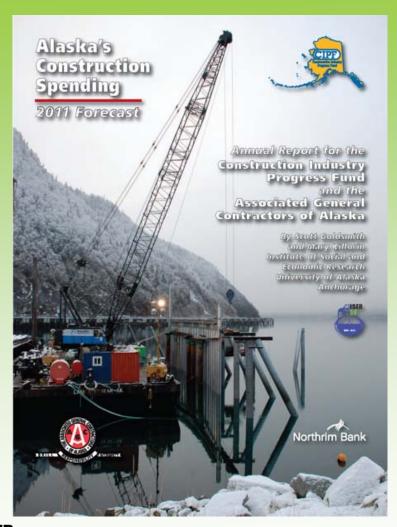
<sup>\*</sup>This is not the total balance of these accounts in 2010. It includes only the actual oil revenues deposited over time and excludes earnings that have been re-deposited.

### 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%.

### **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
TOTAL	\$ 7,110,000,000	+4%
Total without Oil and Gas	\$ 4,200,000,000	) +5%
PRIVATE	\$ 4,455,000,000	) +6%
Oil and Gas	2,910,000,00	) +3%
Mining	305,000,00	0 -19
Other Rural Basic Industry		0
Utilities	615,000,00	) +289
Hospitals	305,000,00	+389
Other Commercial	120,000,00	219
Residential	200,000,00	-49
Private without Oil and Gas	\$ 1,545,000,000	+13%
PUBLIC	\$ 2,655,000,000	) +1%
National Defense	555,000,00	) +19
Highways	530,000,00	0 -5%
Airports and Ports	310,000,00	-119
Alaska Railroad	50,000,00	) +16%
Denali Commission	60,000,00	) –
Education	355,000,00	) +25%
Other Federal	285,000,00	0 –26%
Other State and Local	510,000,00	) +29%

### **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)

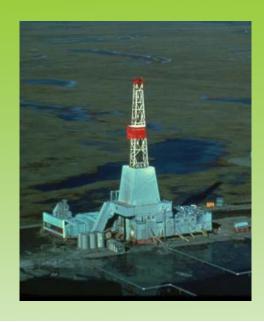
Donlin Creek and Red Dog Mines NPRA

### 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

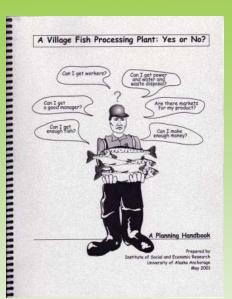
- Fisheries economics and markets
- Textbook project: Gunnar Knapp
- Research internships

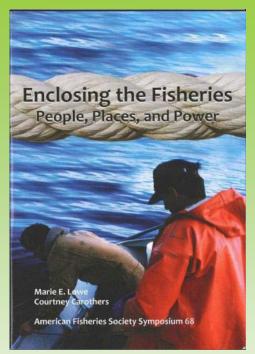
#### Service and Outreach

- Government agencies
- Media
- Industry
- Public



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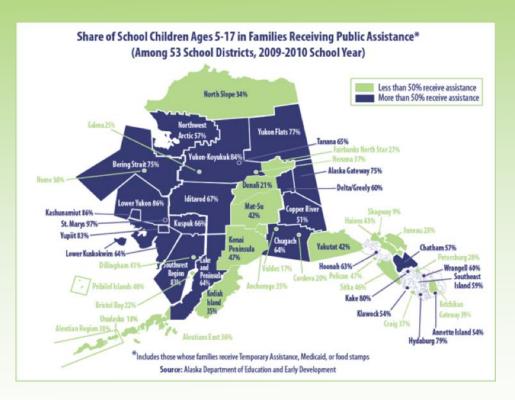




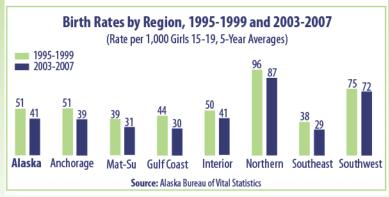


### **Kids Count Alaska**

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.

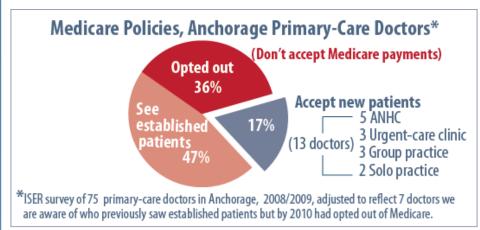


# Percentage of Alaska Babies With Low Birthweight, by Region\* (5-Year Average, 2003-2007) 5.9 6.2 6.5 5.4 5.5 6.0 5.3 5.6 Alaska Mat-Su Interior Southeast Northern Southwest \*Mothers whose residence is unknown are included in the statewide Alaska calculations. Source: Alaska Bureau of Vital Statistics





### **Health Care**



Best payer: \$1.00

Source: Mark A. Foster and Associates

Notes: Proportions of bus represent estimated proportions of Alaskans with various coverage. Revenues are based on 2009 payments for common visits to primary-care doctors. TRICARE (for military personnel) usually pays at Medicare level, but the federal government increased Alaska TRICARE payments 35% at least through 2010.

Alaskans on the Primary-Care Bus, by Type of Insurance

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**

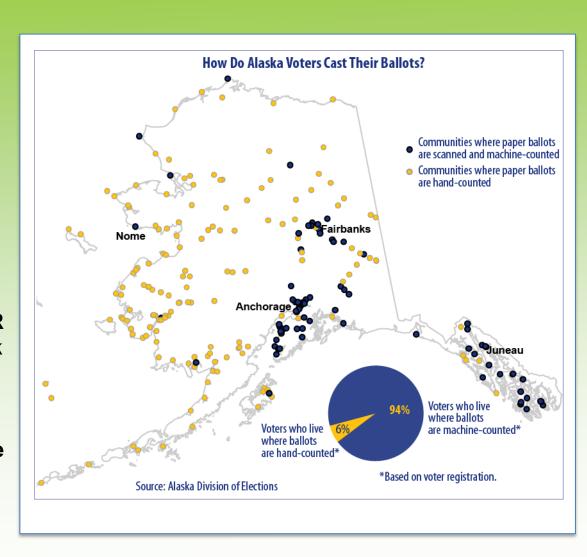
- analysis of 2010 nursing re-licensure survey
- funded by State Board of Nursing

Older Alaskans: Primary Care Clinic Models and Chronic Disease

### **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.



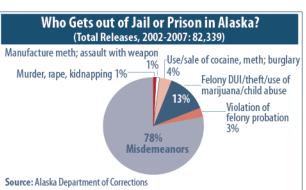
### **Alaska Justice System**

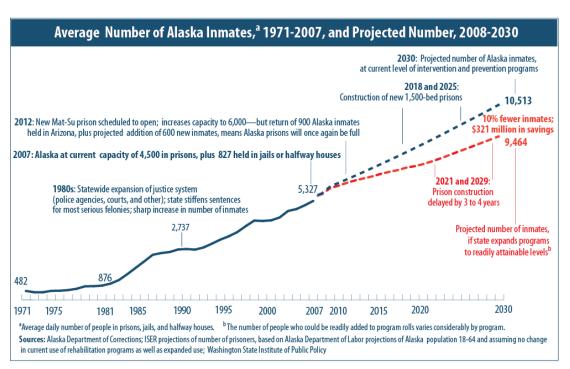
In research for the Alaska State Senate, ISER researchers Stephanie Martin and Steve Colt found that a relatively small investment in treatment and other programs for prison inmates could cut the number of inmates 10% and save the state hundreds of millions over the next 20 years.

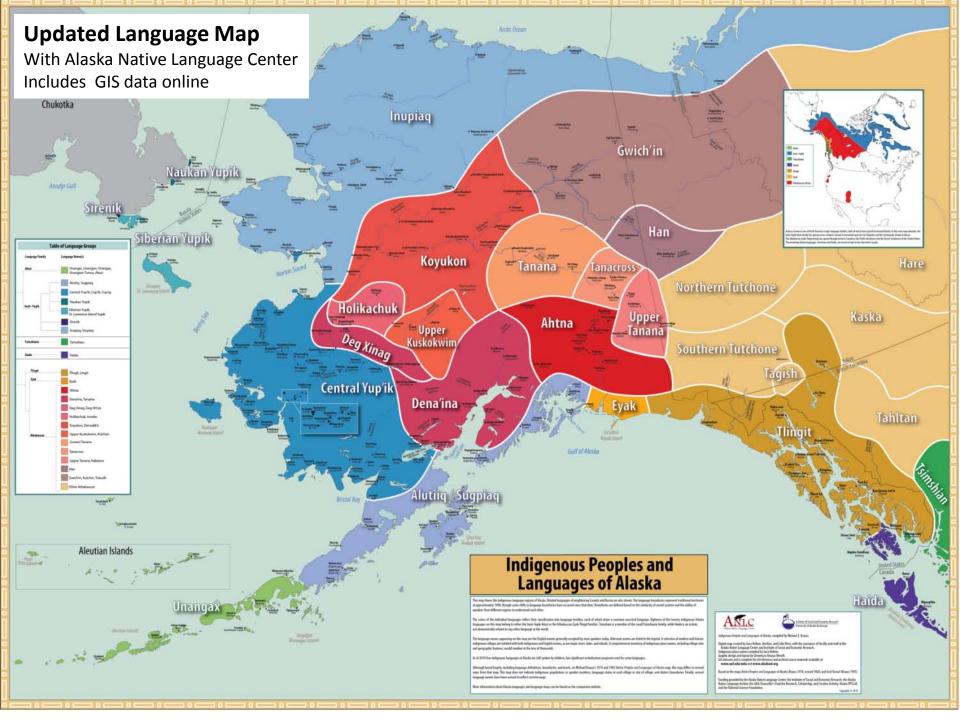
ISER is working with the Alaska Judicial Council on a follow-up study, evaluating the effectiveness of programs implemented based on findings of earlier ISER work.

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.









### **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



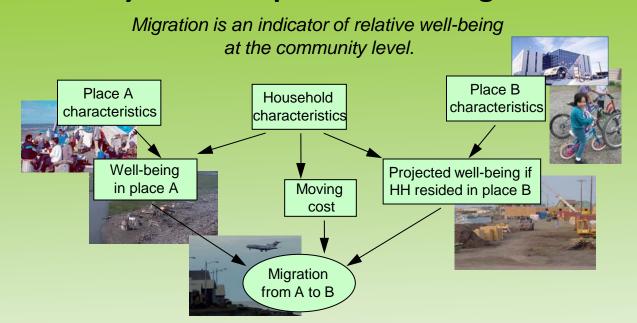




### Research Area: Mobility as an Adaptation to Change

Migration in the Arctic
Understanding
Migration in the
Circumpolar North

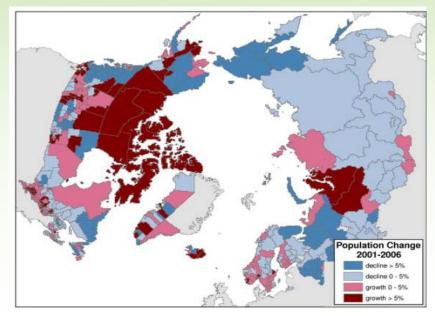
Investigators: Lee Huskey,
Matt Berman, Lance
Howe, Stephanie Martin



### 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



### **Education Research Themes**

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



### Center for Alaska Education Policy Research (CAEPR)

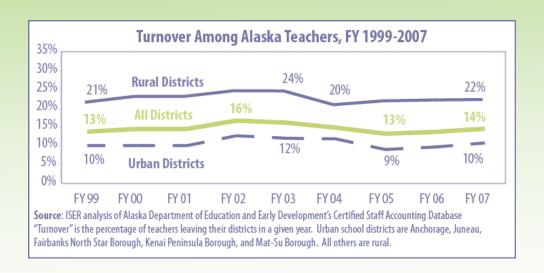
Start-up supported by the UA Foundation



 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.

### 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

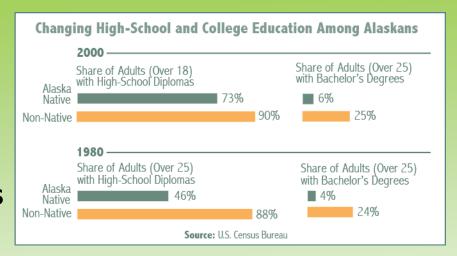






### **Rural and Indigenous Issues**

- Boarding school experiences (historic and contemporary)
- Alaska Native student success



Models for providing rural education





### **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 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.

 Alaska Network for Understanding American History: helps Alaska educators in teaching American history (Anchorage School District).

 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.







Renewable and Alternative Energy ISER Energy and Environment Group

Institute of Social and Economic Research University of Alaska Anchorage

### **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



### **Energy – Economy – Communities**

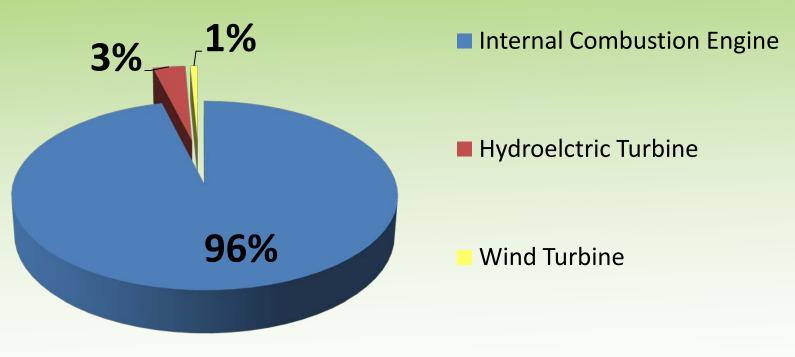
- How is energy used for transportation in Alaska? What is the scope for cost-effective alternatives?
- Why is the delivered cost of remote fuel so high? How will alternatives be delivered and distributed?



- 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?



# Net Generation by Prime Mover in Southwest Alaska





### **Electricity in Southwest Alaska**

	Bethel	Southwest	State
Installed Capacity, KW			
	12,600	84,613	2,151,950
Net Generation, MWh	41,723	178,254	6,498,988
Residential Customers, Accounts	1,616	9,393	270,014
Cost of Electricity, \$/KWh	0.49	0.49	0.17



### Fuel Usage, Cost & Efficiency

- Diesel Used 362,804 barrels/year
- Average Fuel Cost per KWh \$0.24
- Highest price per KWh
  - Lime Village \$1.17
- Lowest price per KWh
  - King Cove \$0.24
- Most efficient utility
  - Nushagak Electric in Dillingham

# Power Generation Efficiency in SW Alaska Communities





Efficiency, KWh/Gallon

### **Alternative Energy: Wind**

### **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?

### **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'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

### **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 junior scholars to undertake research in Alaska
- Provide Alaska research opportunities for emerging scholars
- Attract promising researchers to ISER and UAA
- In honor of ISER cofounder George Rogers

For more information: <a href="www.iser.uaa.alaska.edu">www.iser.uaa.alaska.edu</a> iser50@uaa.alaska.edu

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