Alaska Rural Broadband Impact Study Proposal

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More than 50 years of public policy research in Alaska

A Significant Opportunity

- **To invest in research that can provide information:**
  - **To contribute to the Task Force's planning goals**
    - **Regional, national and global competitiveness**
    - **Commerce needs and opportunities**
    - **Opportunities for government services**
    - **Opportunities for education and health care**
  - **To inform future State decisions on broadband**
  - **To contribute to knowledge about impact of broadband on rural social and economic development**

Why Focus on Rural?

- *Rural* broadband is the key challenge for Alaska
  - In terms of isolation, small population, economic challenges, significant indigenous population
- Studies by NTIA and FCC on Internet and broadband access and adoption do not have sample sizes large enough:
  - To provide information on rural vs. urban Alaska
  - To provide information on Alaska Natives
- Generally, national communications data on Alaska are highly skewed by Alaska's urban population
  - Need to sample rural areas separately, or significantly oversample rural areas in statewide data collection

Why TERRA?

- **Will bring broadband to 65 rural communities**
- **Opportunity to conduct systematic before-and-after study of impact of rural broadband**
  - **Also to identify barriers to broadband adoption**
- **Results can be useful for State broadband planning**
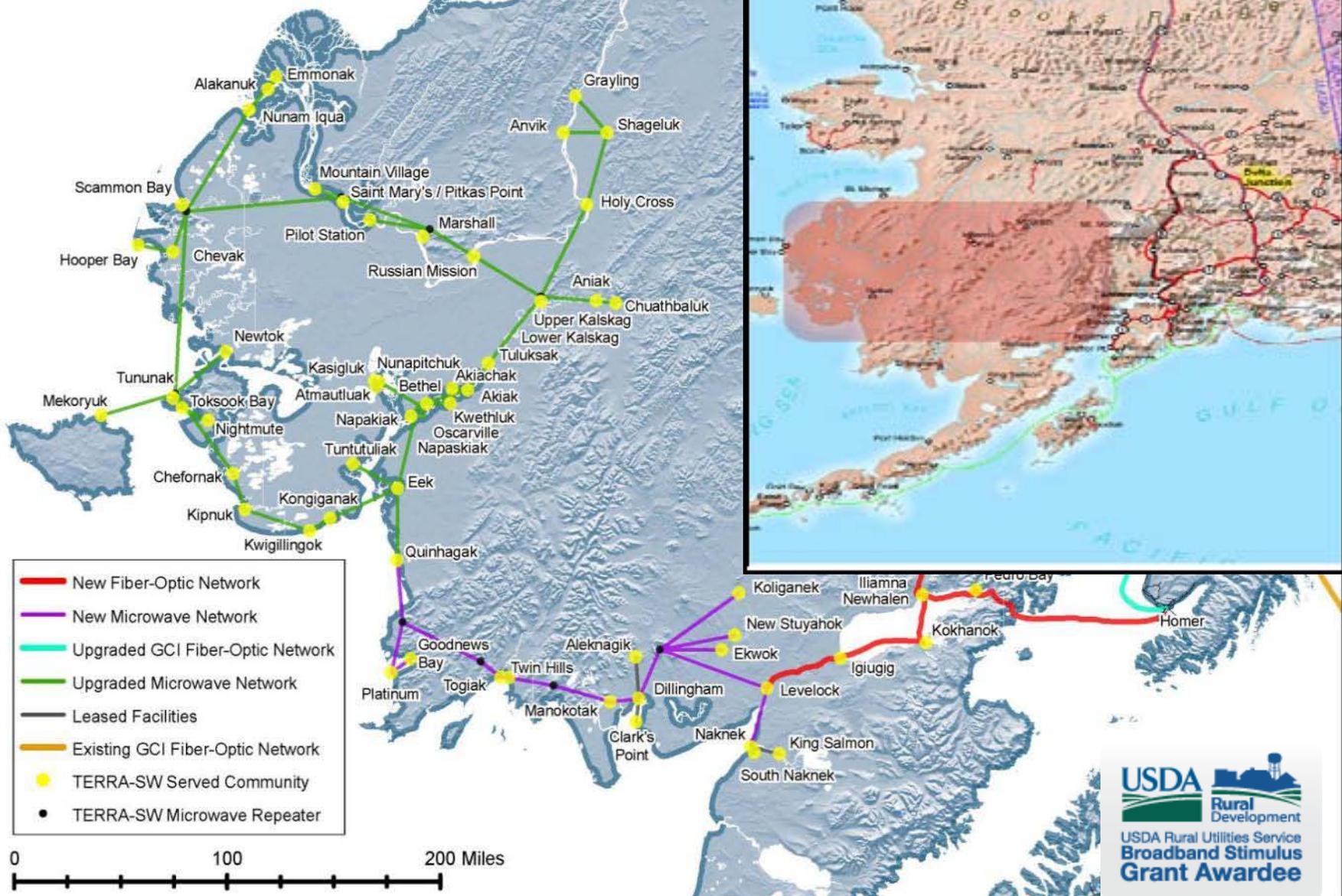- **Important to collect baseline data before broadband is introduced**

AND a major investment of $88 million by U.S. taxpayers and the private sector

- **Important to know "What difference did it make?"**

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TERRA: $88 million RUS grants and loans, 65 communities

Key Research Questions

- Once broadband is available, what *broadband applications and services* are utilized for personal, institutional, and commercial purposes in rural Alaska?

- Are there applications for which there is rural demand that are not *available* or not *affordable*?

- What new *economic activities* such as jobs and new businesses may be facilitated by increased access to broadband?

- Can broadband improve the cost-effectiveness and reach of *government services?*

- How can *Alaska Native corporations and nonprofits* take advantage of broadband capability?

- Are there *barriers to widespread adoption* of broadband technologies by rural Alaskan individuals, businesses, and organizations? Are different barriers perceived by Alaska Natives and nonNatives?

- Are there *success factors* necessary to derive maximum benefits?

Research Plan

- **Gather baseline data from rural communities**
- **Focus on villages:**
  - No previous experience with broadband
  - Relevant for understanding potential impacts and adoption barriers for other unserved Alaska villages (> 100 communities)
  - Will not receive broadband until summer 2012
- **Random sample telephone interviews**
  - Use landline and cell numbers
  - Less expensive than in-person interviews
  - ISER has extensive experience in rural Alaska phone surveys
  - Allow for statistically valid results of before and after surveys
- **Second phase would be similar surveys after at least 1 year with broadband available**

Research Framework

- **Usage:**

  Institutional Use: businesses, government, nonprofits

  Community Use: at schools, libraries, community centers

  Household Use: family members at home

  Personal Use: smart phones, tablets on WiFi, 3G/4G

- **Education and Health Services**
- **Innovation**
- **Entrepreneurship**

Collect data on:

- **Current access to / use of: computers, Internet**
  - **If no or limited use, perceived barriers**
- **Interest in services, content available with broadband**
- **Access to/use of: smartphones, tablets, etc.**

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Short-Term Research Products to Aid Task Force

- **Review of research on rural broadband**
  - **U.S. rural projects**
  - **Other rural/remote/indigenous broadband**
  - **Macro-level studies on economic impact of broadband investment**
  - **Identify findings relevant for Alaska**
- **Case studies of Dillingham and Bethel**
  - **Broadband now available**
  - **Interviews with institutional users:**
    - **Business: fisheries, tourism and lodging, flight services, small businesses, etc**
    - **Native corporations: regional and local**
    - **Nonprofit organizations**
    - **Health care: regional hospitals**
    - **Education: schools and UA regional campuses, etc.**

Synergies with Other Projects

- **OWL (Online with Libraries)**
  - **includes 10 sites in TERRA SW region**
- **Bridging the E-Skills Gap (UAF)**
  - **Internet literacy**
  - **IT training for local tech support jobs**
- **SWAMC**
  - **strategies to use broadband for regional economic development**

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