

# Broadband in Alaska

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If you are viewing or editing this document, thank you, and I appreciate the time you are taking to give your feedback.

Please feel free to adjust it as need be. The perspective of the writing is my own and can use a wider view.

I found these resources particularly helpful in making what I have thus far:

# Digital Prosperity: HOW BROADBAND CAN DELIVER HEALTH AND EQUITY TO ALL COMMUNITIES:

https://www.brookings.edu/wp-content/uploads/2020/02/20200227\_Brookings Metro\_Digital-Prosperity-Report-final.pdf

### A Blueprint for Alaska's Broadband Future:

https://aedcweb.com/wp-content/uploads/2014/10/Statewide-Broadband-Task-Force-Report-FINAL.pdf

### TOWARD UNIVERSAL BROADBAND IN RURAL ALASKA:

https://iseralaska.org/static/legacy\_publication\_links/2012\_11-TERRA.pdf

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# **E-inclusion or Digital Divide:**

Alaska is ranked the lowest of all states for broadband access. Further, availability is extremely limited in rural Alaskan communities, which are primarily populated by Alaska Natives. Rural Alaskan communities contain two-thirds of the indigenous population. The practice of systematically excluding Alaska Natives from vital infrastructures is **racist and exclusionary**. These are resilient communities that deserve access to the pathways that allow them to flourish and participate as fully social people. As long as individuals and groups are excluded from participation at any level in our current digital society, we are a digital divided society. To have equality and promote participation in society at all levels, we must have E-inclusion. E-inclusion promotes computer use by all members of society, to provide opportunities for those who do not have or cannot understand the technology. We either choose e-inclusion or a digital divide.

## Increased broadband grows economy

Broadband is so influential on society that the Federal Communications Commission and United Nations Sustainable Development Goals consider it essential infrastructure and a basic standard of living. In our daily lives, we interact with broadband at every level, whether socially, economically, politically, or for vital needs, such as health, education, or preparedness. Broadband goes beyond gaming and texting; it is an essential piece of inclusion. People that are disconnected or experience connectivity issues are systematically removed from conversations that affect them.

While the biggest barrier to access is cost, broadband delivers net economic benefits to both individuals and communities. Based on economic impact projections based on the most recent demographic and employment numbers from the 2011 Census, <u>a 1 percentage increase in the opportunity for Alaskan</u> <u>households to access greater Internet speeds could result in growing the Alaska</u> <u>economy by \$67.7 million.<sup>1</sup></u>

<sup>&</sup>lt;sup>1</sup> Statewide Broadband Task Force, 2014, pp. 1–100, *A Blueprint for Alaska's Broadband Future A Report from the Statewide Broadband Task Force*,

www.alaska.edu/oit/bbtaskforce/docs/Statewide-Broadband-Task-Force-Report-FINAL.pdf.



Other benefits would include:

- 1,890 jobs saved or created
- \$49,184,413 in direct annual income growth
- \$221,743 in average annual health care costs saved
- \$2,536,553 in average annual mileage costs saved
- 1,256,220 in average annual hours saved
- \$15,715,316 in annual value of hours saved
- 3,276,906 in average annual pounds of CO2 emissions cut
- \$19,933 in average annual value saved by carbon offsets<sup>2</sup>

## Broadband is life

For all Alaskans, especially rural Alaskans, **broadband can help every facet of life**, <u>especially during a pandemic, where we rely on remote connections to sustain</u> <u>ourselves without being at risk</u>.

### Health:

- Telehealth can directly improve health outcomes, especially for those without access to traditional health facilities
  - Some 59 percent of Alaskans, many of them Indigenous, live in "medically underserved areas." Broadband connects rural patients to urban care--65 percent of Alaska physicians are located in Anchorage.<sup>3</sup>
  - Broadband access reduces wait times for consultations, patient travel savings, and has high provider and patient satisfaction
    - Research by ANTHC has also documented travel savings of over \$2.85 million dollars for Medicaid from 2003 to 2009, so that for every \$1 spent by Medicaid on reimbursement, \$10.54 was saved on travel costs.<sup>4</sup>
- Broadband fills the gaps for patients who cannot travel or cannot afford to travel

<sup>&</sup>lt;sup>2</sup> Ibid

<sup>&</sup>lt;sup>3</sup> Hudson, Heather E. Institute of Social and Economic Research, 0AD, pp. 1–13, *Digital Diversity: Broadband and Indigenous Populations in Alaska*.

<sup>&</sup>lt;sup>4</sup> Hudson, Heather E. ISER, 2012, pp. 1–74, *Toward Universal Broadband in Alaska*.



- Online services allow patients to message their doctors to ask medical questions without going to a facility
- Digital tech reduces errors, and makes better diagnoses by having access to electronic medical records

#### **Education**:

- Broadband offers online curriculums, mobile technologies, open online courses (MOOCs), videoconferencing, and improvements in distance
  - Offers virtual mentors when in person or traditional education is not available
  - > Distance education can be as effective as in person instruction<sup>5</sup>
  - More than 10,000 students are served through out-of-district correspondence schools operated by other Alaska school districts <sup>6</sup>
- Adequate broadband access gives students better opportunity and improved chances of higher achievement
  - Online and virtual education allows women to participate in STEM and lessens the gender divide
  - > Online education offers hands-on and individualized learning
  - University of Alaska delivers courses online to reach students unable to attend classes on campus, and leases broadband capacity to link its rural campuses to the main campuses.
- Researchers in Alaska rely on connectivity to access information to share computing resources, and collaborate with colleagues around the world<sup>7</sup>
  - Broadband connection is also used by federal government to connect researchers to other researchers, facilities, and data

<sup>6</sup> See footnote one

<sup>&</sup>lt;sup>5</sup> See footnote four

<sup>7</sup> See footnote one



#### Safety and Community Health

- Public safety and first responder agencies in Alaska, including law enforcement, Department of Corrections, Village Public Safety Officers, fire, emergency medical services, hazardous materials response, 911 dispatch centers, and emergency management are all reliant on reliable communications<sup>8</sup>
- Broad communication methods allow media and awareness to spread both within and outside of communities
- Missing Murdered Indigenous Women and Girls:
  - There is a growing reliance on information management systems, particularly in the area of major and interjurisdictional criminal investigations, to protect remote communities reliable high-speed Internet needs to be a right<sup>9</sup>
  - Internet allows communities faster access to case management and resources
  - Broadband is an integral piece to defending and exercising human rights
  - Internet and telecoms are necessary for timely and effective access to government services
- Flights that transport necessary supplies and people are reliant on weather reports and reliable communications

<sup>&</sup>lt;sup>8</sup> See footnote one

<sup>&</sup>lt;sup>9</sup> National Inquiry into Missing and Murdered Indigenous Women and Girls, pp. 1–52, Calls for Justice.



#### Industry, Innovation, and Infrastructure

- Businesses with an online presences can expand their consumer base, for Alaskan businesses especially;
  - To develop ecotourism and other ecosystem services through websites and online support for reservations and logistics.
  - > To generate business with websites, phone contacts and email
- Small business rely on online applications such QuickBooks, manuals, and documentation<sup>10</sup>
  - > Online shopping can help businesses purchase supplies and equipment
  - Reliable internet lessens cost burdens on business and increases efficiency
- Increased internet communication between agencies and tribal corporations can bring more business to communities<sup>11</sup>
- Fisheries are a large portion of Alaskan economy and rely on stable internet:
  - Online offices of seafood processors need to interact with their workers, suppliers, customers, and government through broadband connections
  - Large fisheries communicate between on and offshore locations, reliable connection is essential, especially for remote areas<sup>12</sup>
- Internet connections allows customers to use tools of e-banking such as remote deposit
  - Customers with an online connection are easier and less expensive to serve<sup>13</sup>

<sup>&</sup>lt;sup>10</sup> See footnote four

<sup>&</sup>lt;sup>11</sup> See footnote four

<sup>&</sup>lt;sup>12</sup> See footnote four

<sup>&</sup>lt;sup>13</sup> See footnote four



#### Civic Engagement

- Connectivity powers civic engagement
  - broadband allows governments to develop new platforms through to engage the public<sup>14</sup>
  - Broadband has been shown to increase likelihood of voting, donating to campaigns, and participating in civic organizations<sup>15</sup>
  - Governments that have affordable and effective broadband connection run more efficiently and save costs in engagement and service distribution efforts<sup>16</sup>
- Broadband gives access to essential government services
  - > Many applications such as the PFD are processed through the internet
  - > Voter registration and information is online
- In a digital age political information is distributed through the internet and media that is reliant on broadband connectivity
  - social media platforms offer opportunities for citizens to group together based on shared civic goals.
  - citizens equipped with more information are more likely to become involved with community activities and organizations<sup>17</sup>
- In Alaska, tribal councils need internet connection to access their email, file reports, submit grant proposals, and other funding<sup>18</sup>
  - Ability to communicate between local office and the federal grant/funding agencies is vital to bringing money to communities
  - Regional nonprofit organizations and Tribal councils access funding and training opportunities

- <sup>16</sup> Ibid
- <sup>17</sup> Ibid

<sup>&</sup>lt;sup>14</sup> Tomer, Adie, et al. "Digital Prosperity: How Broadband Can Deliver Health and Equity to All Communities." *Brookings*, Brookings, 27 Feb. 2020,

www.brookings.edu/research/digital-prosperity-how-broadband-can-deliver-health-and-equity-to-all-comm unities/.

<sup>&</sup>lt;sup>15</sup> Ibid

<sup>&</sup>lt;sup>18</sup> See footnote four



#### Prison

\*incarceration is a money making ordeal of POC, internet is important to the people in prison, not the prison itself\*



- Access to the internet and communications helps rates of recidivism and aides inmates into transitioning from prison<sup>19</sup>
  - Basic necessities like housing, bills, and work are often accompanied by an online component or application, media literacy is necessary for inmates to be self-sufficient outside of incarceration<sup>20</sup>

<sup>&</sup>lt;sup>19</sup> Solomon, Amy L., et al. "Life After Lockup: Improving Reentry from Jail to the Community." *PsycEXTRA Dataset*, 2008, doi:10.1037/e719662011-001.

<sup>&</sup>lt;sup>20</sup> The Henry J. Kaiser Family Foundation, 2003, pp. 1–4, *Key Facts: Media Literacy*.



- Technology enhances personal finance skills, such as access to transactional data and price comparisons
- Inmates can learn with online education and find employment after incarceration with increased education and skills
  - Digital literacy is also a skill that is commonly needed in the workplace
- Technology such as video streaming, email, and social networking apps are crucial for inmates to return to their families or maintain their relationships
- Telehelath can alleviate inadequate access to care has often led to prisoners having untreated mental illness, and increased rates of violent behavior in correctional facilities as well as substantially increased recidivism<sup>21</sup>
- Increasing access to virtual mental health care for underserved groups can improve living conditions and safety inside correctional facilities.<sup>22</sup>
  - Telepsychiatry decreases travel and cost barriers, allowing greater access to treatment for the inmate and continuity of care without compromising public safety and security or incurring increased transportation costs<sup>23</sup>

 <sup>&</sup>lt;sup>21</sup> Deslich, Stacie Anne et al. "Telepsychiatry in correctional facilities: using technology to improve access and decrease costs of mental health care in underserved populations." *The Permanente journal* vol. 17,3 (2013): 80-6. doi:10.7812/TPP/12-123
<sup>22</sup> Ibid