THE VIEWS EXPRESSED HERE DO NOT NECESSARILY REPRESENT THE POSITION OF THE FEDERAL RESERVE BANK OF MINNEAPOLIS OR THE FEDERAL RESERVE SYSTEM.
Roadmap

• Tribal Broadband 101 & The Affordable Connectivity Program
• Data & Definitions
• Preliminary Results
18 percent of people on Tribal lands did not have broadband Internet access\(^1\)

30 percent of people on rural Tribal lands did not have broadband Internet access\(^1\)

33 percent of people on rural tribal lands did not have home Internet service\(^2\)
  • 21 percentage points higher than households on rural, neighboring non-Tribal lands\(^2\)

1. FCC Form 477 Data, June 2020
2. ACS 2015-2019 Data; Bauer, Feir, & Gregg (2022)
THE AFFORDABLE CONNECTIVITY PROGRAM

Monthly Subsidy for Residential Internet Service

$30 Non-Tribal Lands

$75 Tribal Lands
INTERVIEWS & FOCUS GROUPS WITH TRIBAL DIGITAL NAVIGATORS AND TRIBAL INTERNET SERVICE PROVIDERS

• Tribal IDs

• Enrollment in Tribal Programs

• Boundaries of Tribal Lands

• Ability for ISPs to participate in the program
WHAT DOES TAKE-UP LOOK LIKE ON TRIBAL LANDS?
DATA & DEFINITIONS
DATA SOURCES

USAC Data
- Updated Monthly
- Subscribers (Households) at the Zip Code level
- Does not distinguish between subscribers on tribal lands and those not on tribal lands

Census Bureau Data
- Population (ACS)
- Families’ Income Ratio to Poverty Line (ACS)
- Tiger/Line Shapefiles
- PUMS – State Level
Families at 200% Poverty level

Galperin (2021) State Adjustment Factors

• Qualifying Programs.
  • SNAP
  • Medicaid
  • TANF
  • SSI
  • Lifeline
  • Tribal Head Start
  • And More!
Tribal Zip Codes
- The intersection of American Indian Areas and ZCTAs
- Percentage of overlap (Exploring different definitions, 25%, 50%, 75%)

Neighboring Non-Tribal Zip Codes
- Distance from centroid of tribal zip code to centroid of neighboring non-tribal zip code (Exploring different definitions)

Like Zip Codes
- Comparing similar zip codes between tribal and non-tribal
  - Similarities: population density, percentage in poverty, percentage qualifying for ACP
PRELIMINARY RESULTS
U.S. VERSUS TRIBAL ZIP CODE PARTICIPATION

: Participation in the Affordable Connectivity Program

TRIBAL ZIP CODE DEFINITION

50+%
TRIBAL – NEIGHBORING NON-TRIBAL ZIP CODES

TABLE: PARTICIPATION IN THE AFFORDABLE CONNECTIVITY PROGRAM

<table>
<thead>
<tr>
<th>TRIBAL ZIP CODE DEFINITION</th>
<th>Distance</th>
<th>All</th>
<th>No OTSA</th>
<th>No OTSA, No Navajo</th>
</tr>
</thead>
<tbody>
<tr>
<td>50+%</td>
<td></td>
<td>Tribal</td>
<td>Near</td>
<td>Tribal</td>
</tr>
<tr>
<td></td>
<td>10km*</td>
<td>32.30</td>
<td>40.43</td>
<td>30.88</td>
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<tr>
<td></td>
<td>25km</td>
<td>32.30</td>
<td>30.07</td>
<td>30.88</td>
</tr>
</tbody>
</table>

*p-value < 0.05
Exploring Tribal Zip Codes and Neighboring Non-Tribal Zip Codes

Map of New Mexico: 50% Tribal Lands Definition, 10km and 25km, with Census Places

Legend
- On Rez
- Near Rez 10km
- Near Rez 25km
- Tribal Lands
- Census Places

Example of Zip Code Analysis

October 2023
H. Trostle, MUEP
Data: Census - Places, Tribal Lands, ZCTAs
COMPARING LIKE ZIP CODES

Accounting for:

- Population density
- Share of households without Internet (pre-pandemic)
- Per capita income
- Number of households
- Population of zip
- Share of white population

Take-Up is Higher in Tribal Zip Codes than comparable non-Tribal Zip Codes
POTENTIAL EXPLANATIONS OF FINDINGS

• Border Towns

• Similarities between Tribal Lands and Neighboring Rural Areas

• Tribal ACP Outreach

• The Larger Financial Incentive ($75 instead of $30 monthly)
There is a substantial gap in participation of the ACP between nearby neighboring non-tribal zip codes and tribal zip codes.

Tribal zip codes have more participation in the ACP than comparable non-tribal zip codes.

Participation on tribal lands is higher than the U.S. average.
THE AFFORDABLE CONNECTIVITY PROGRAM STILL DOES NOT REACH EVEN 50% OF ELIGIBLE HOUSEHOLDS
THESE ARE PRELIMINARY RESULTS. FINAL RESULTS SUBJECT TO CHANGE.
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THANK YOU