



Rural Broadband: The Road to 21st Century Economic Growth

**BY MILAD ALEMOHAMMAD
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Rural Broadband: Background



Background



- \$7.2 billion in stimulus money for expanding broadband to unserved and underserved areas

\$4.7 billion to NTIA for Broadband Technology Opportunity Program (BTOP)

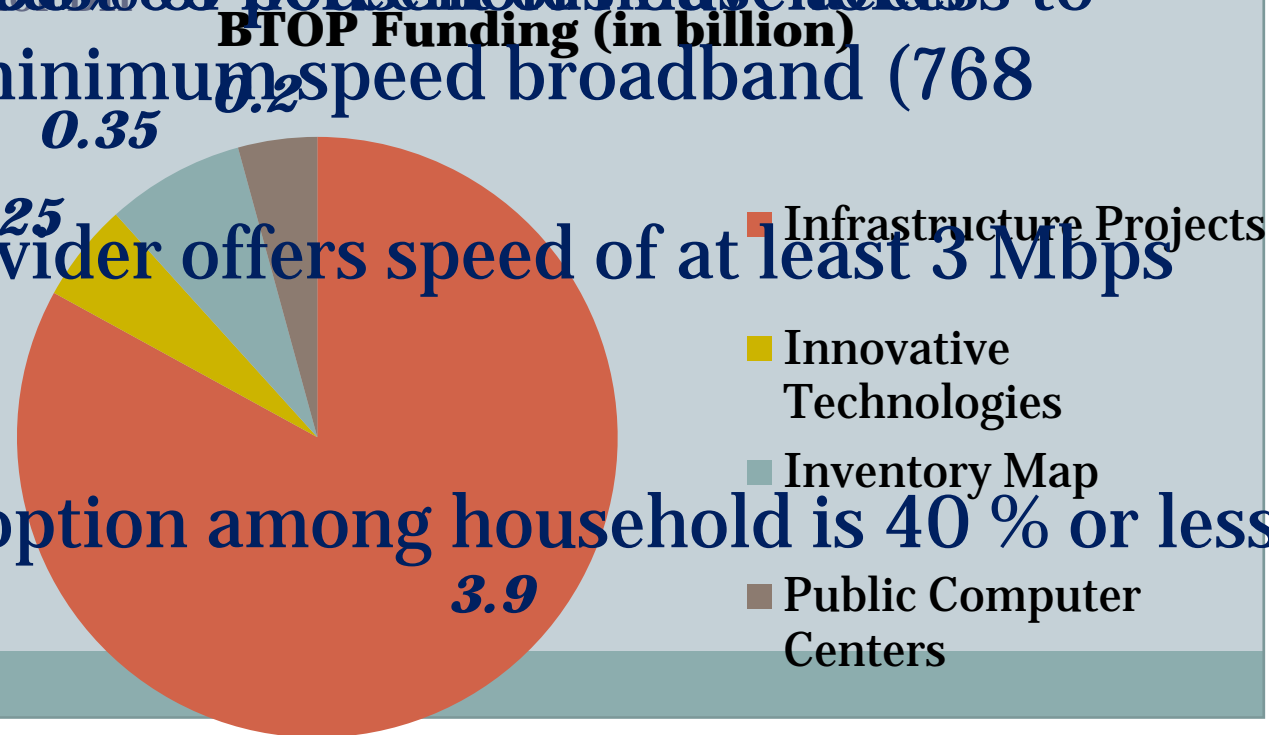
Underserved Area

Area where less than 50% of households have access to broadband to minimum speed broadband (768 Kbps one way)

• No service provider offers speed of at least 3 Mbps downstream

Or

• The rate of adoption among household is 40 % or less



Background: What is Rural?



- **Census Bureau Definition for Rural:**
 - Rural is a territory outside of an urban area
 - Urban area is a region with
 - ✦ Population density of 1000+ people per sq. mile
 - 25 % rural population
 - 97% of U.S. land mass is rural

Internet Network Infrastructure



**Backbone
(Fiber Link)**



Middle Mile



Last Mile

Barriers



Obstacles in distributing funds?

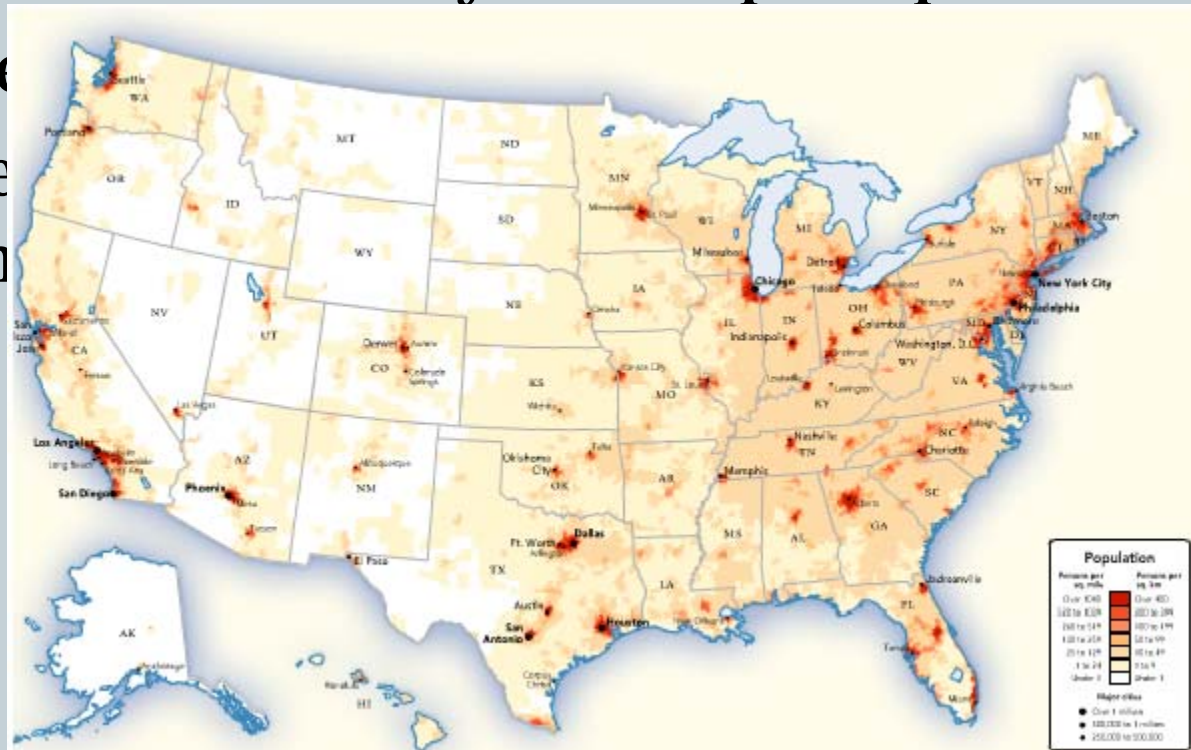


- **No reliable data available from providers**
- **FCC lacks a good criterion for data collection**
- **There are no official data on speed, price, and adoption**

Difficulties in Serving Rural Areas?



- Low population density <1000 per sq. mile
- Lack of e
- 70 perce
- backbone



y from

Broadband and Rural Developments...



Broadband creates platform for new investments in:

- **Financial market: Banks**
- **Farm industries :National Partnership**
- **Non-farm industries : Entrepreneurs**
- **Rural residents become “proconsumer”**

Recommendations



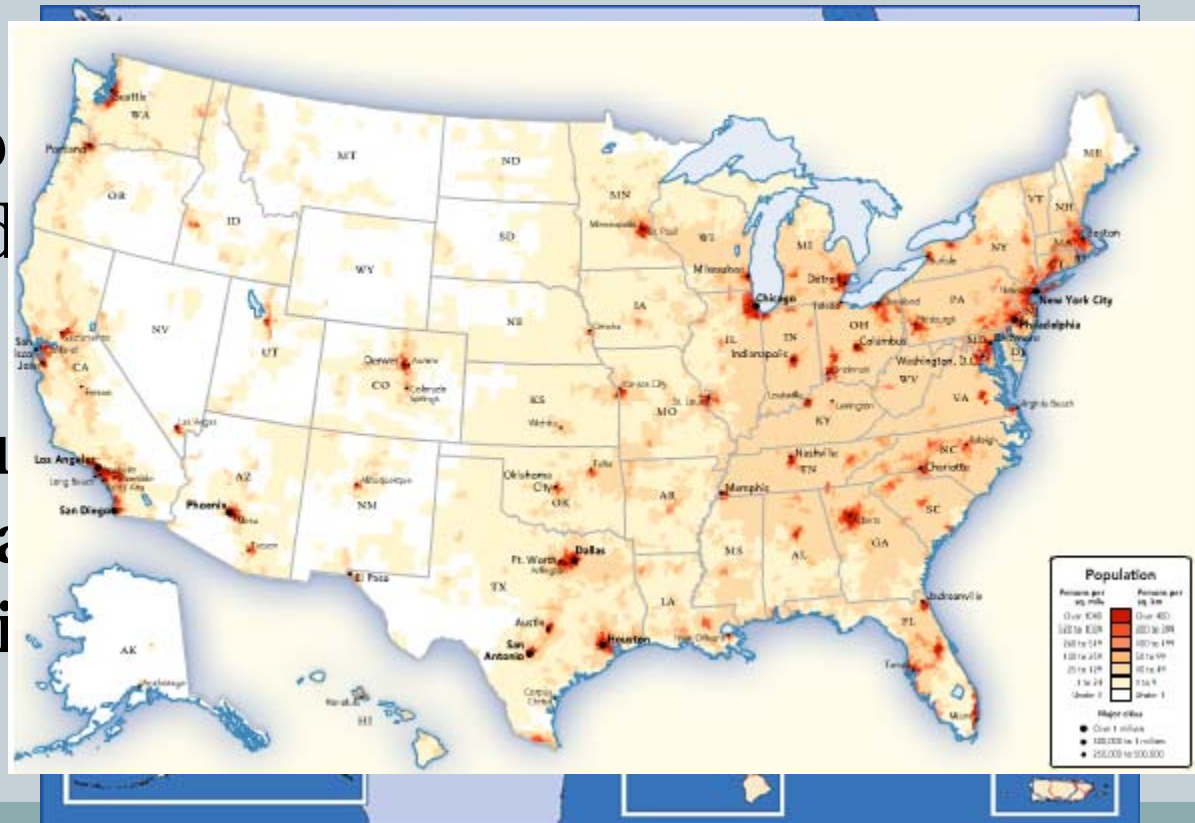
Improve Middle Mile



- 90% of US population lives within 5 mi from National Highway System

- 60% of core fibers under construction

- RUS should transport and construct



ring

f
road

Incentives for Investments



- Last Mile development should be done by private investments
- Congress in next 10 years should provide ...
 - 50% tax breaks for investments in underserved areas
 - 100% tax breaks for investments in unserved areas
- R&D tax breaks can attract companies to rural areas

Collect Data



NTIA and RUS should collect data as soon as possible

- They should set up a website to document broadband adoption and speed
- They should make announcements in local news
- Internet users voluntarily visit the website and carry speed test

Potential Impacts



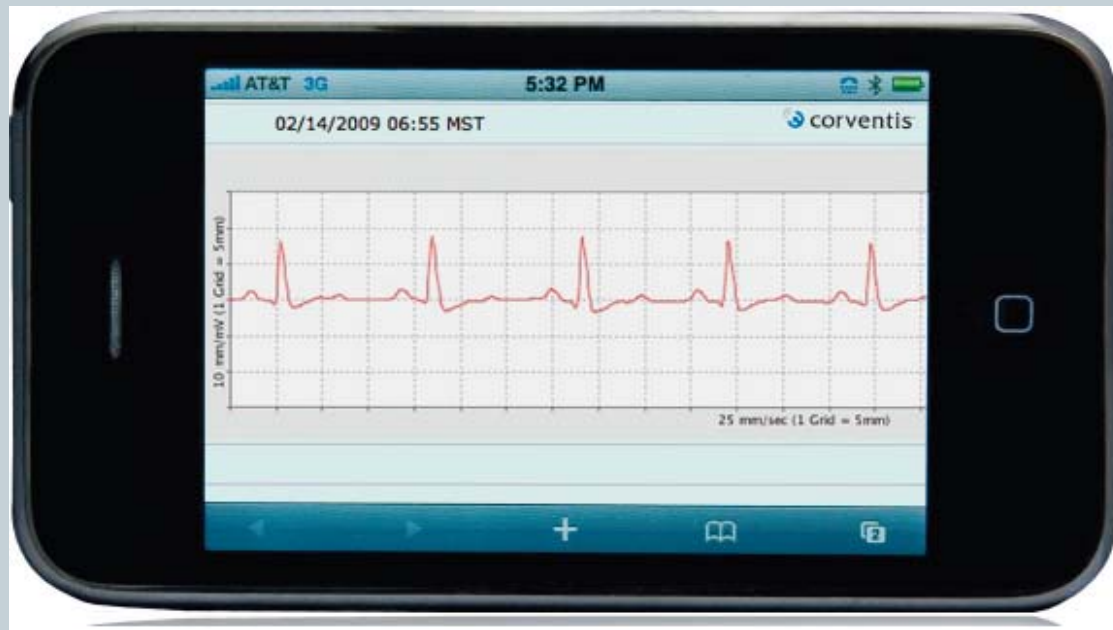
Rural Broadband Offers Opportunity for Competition in Global Market

- Off-shoring STEM jobs have reduced R&D investments in the United States
- Small and mid size companies look into local domestic sourcing
- Small companies can utilize their cost savings toward more R&D investments

Potential Impacts



- Improves Health IT



Q&A

