

Broadband 101: Funding

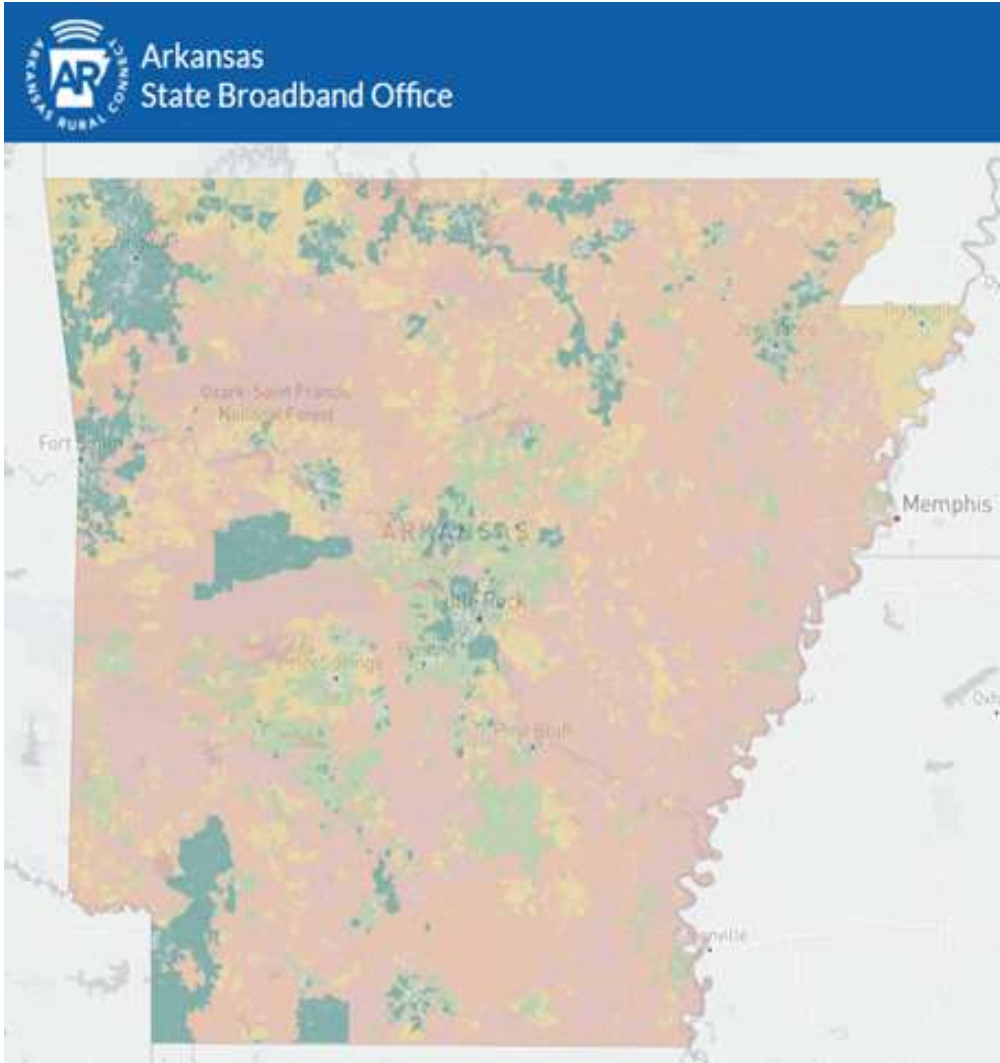
ANDREW COKER

WEST CENTRAL ARKANSAS PDD



Important Concepts

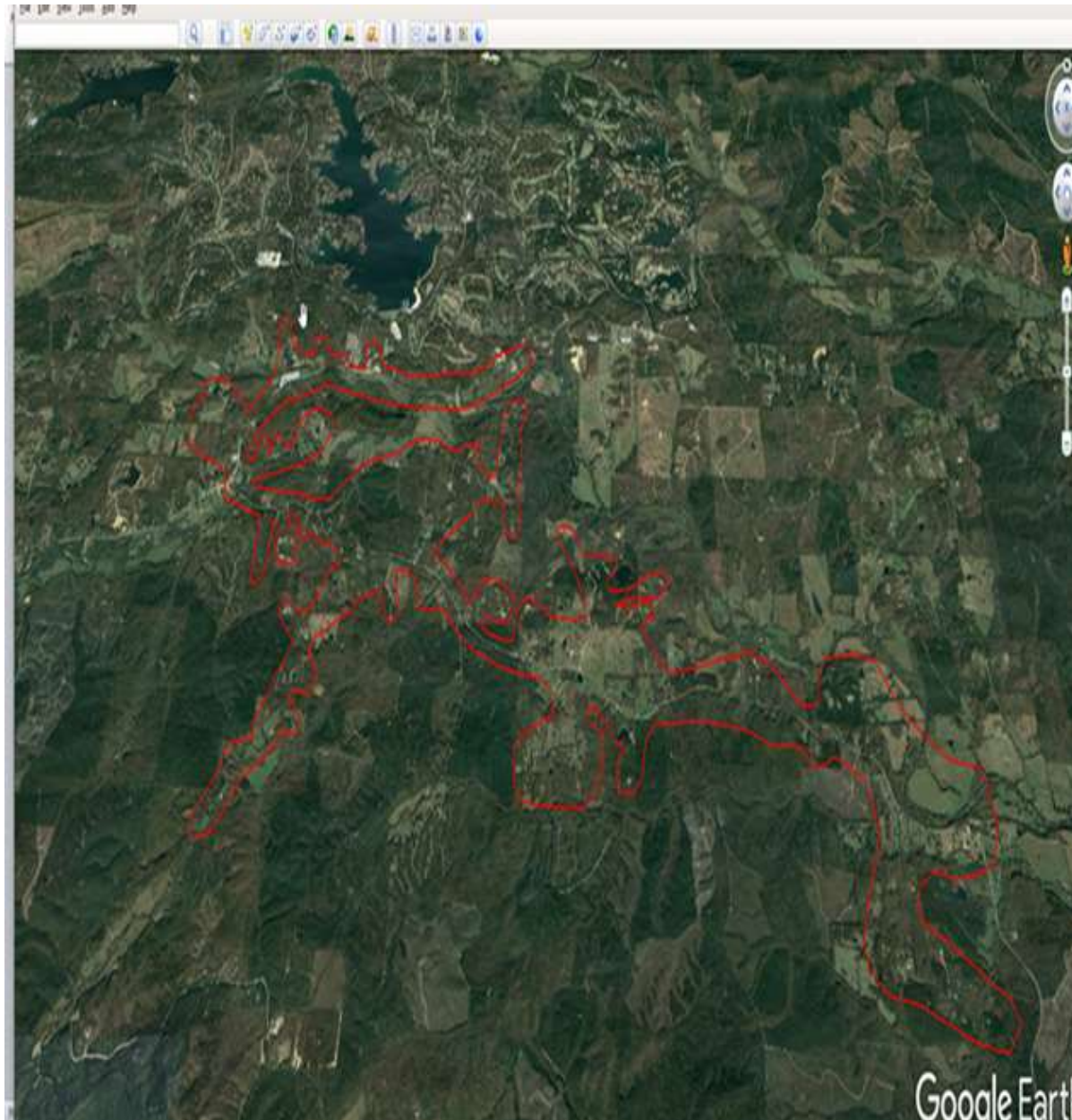
- Speed (download/upload)
- Mbps (megabits per second)
 - 25/3 or 100/100 or 100/20
- Project Footprint (Areas Served)
- Eligibility Maps
- Rurality/Urbanity
- P3 Partnerships (Public-Private)
- ISP (Internet Service Provider)
- FTTH (Fiber to the Home)



Current Reality

Where to Start?

1. Map of area
 - “Project Footprint”
 - Work with local partners to determine where expansion is needed
2. Work with ISP to ensure the area does not have sufficient coverage or access.



Where to Start?

FCC maps are historically unreliable; however, they can start discussions

ISPs in your area should have better, more useful maps

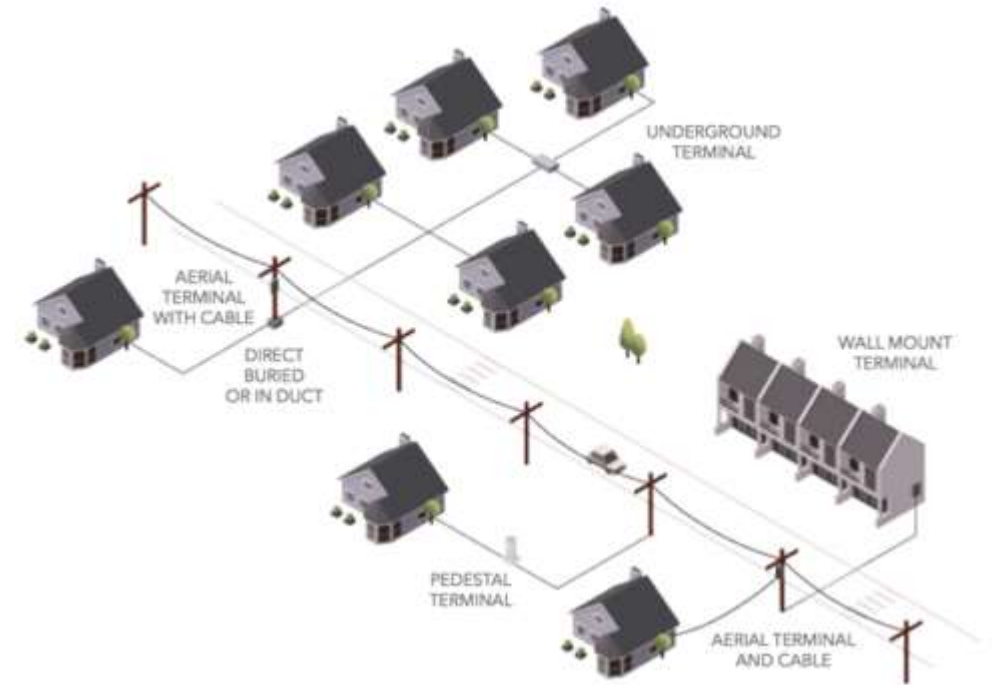
The screenshot shows the FCC Fixed Broadband Deployment website. The top navigation bar includes links for Home, Location Summary (which is highlighted), Area Summary, Area Comparison, Provider Detail, Data Download, and About. The main content area features a map with a search bar at the top showing coordinates 34.482012, -93.048277. A pink location pin is placed on the map. To the right of the map is a sidebar titled 'All Providers Reporting Service' for Census block ID 050510117001038. It includes a color-coded legend for the 'Number of Fixed Residential Broadband Providers' (0 to 12 or more) and a 'Broadband' section with details on Technology (ADSL, Cable, Fiber, Fixed Wireless, Satellite, Other), Speed (25/3 Mbps), and Date (June 2000, latest public release). Below this is a table listing providers and their service details.

Provider	Tech	Down	Up
ViaSat, Inc.	Satellite	100	3
Hughes Network Systems, LLC	Satellite	25	3
CSW Enterprises, Inc.	Fixed Wireless	25	10
AT&T Inc.	ADSL	3	0.384
AT&T Inc.	ADSL	3	0.384
VSAT Systems, LLC	Satellite	2	1.3

Typical Expected Costs

Costs to build FTTH - Rural Areas (Arkansas)

- Average is \$56,029 per mile of FTTH construction
- Average in Rural is 13 homes per mile of construction
- Average cost per home is \$4,081
- Average Cost per Customer at end of 36 months is \$7,407



Source: OFS Optics

American Rescue Plan

- Broadband is a confirmed allowable use.
- 100 mbps ↓ / 100 mbps ↑
 - (*implies fiber optic deployment*)
- Some allowances for geography/topography/excessive costs
 - Must reach at least 100/20 and be scalable to 100/100
- Must be designed to address unserved or underserved areas
 - Underserved - Area with wireline connection worse than 25/3
 - Unserved - Area with no wireline connection (*less common*)



Grants

Arkansas Rural Connect

- Arkansas State Broadband Office
- ISP or Local Government Entity
- Area must be 25/3 or worse to qualify
- Implementation funds
- Use eligibility map

USDA Rural ReConnect Loan and Grant Program

- ISP or Local Government Entity
- > 50,000 population
- Area must be 10/3 or worse to qualify

University of Arkansas Medical Sciences

- Institute for Digital Health and Innovation
- Local Entity
- Funding for due diligence studies/research support



Grants

FCC Rural Digital Opportunity Fund

- Census block eligibility, check eligibility map.
- Area must be 25/3 or worse to qualify
- ISPs



USDA Rural Community Development Initiatives Grant

- “Strategic Development” can be used to justify broadband **feasibility studies**
- Any public body under pop. 50,000
- City of Pine Bluff
- Act 67
- Min. award \$50,000 - Max. award \$250,000



USDA Community Connect Grant

- ISP, Public bodies, nonprofits, and cooperatives eligible
- Areas must be 10/1 speed or worse to be eligible
- Must be rural
- Construction, acquisition, or leasing of facilities, spectrum, land or buildings used to deploy broadband service
 - Cost of providing service to critical facilities for up to 2 years

Grants

Economic Development Administration (EDA)

- Looking for economic development benefit through broadband
- Telehealth and remote learning access
- Focus on expansions to industry areas, central business districts, community facilities, schools etc...



National Telecommunications and Information Administration (NTIA)

- “Covered partnerships” - ISP and unit of government
- Preferred 100/20 speed and ability to scale with other future expansions (e.g. fiber, 5G, etc...)
- Additional funds coming through Bipartisan Infrastructure Investment Act (BIIA)



Wrap Up

Funds are **available** and **abundant**

Public/Private Partnership - Is the ISP reputable, preferably local and financially solvent?

Mapping is **KEY**

FTTH is new preferred build and scalable for future.

Pandemic-induced challenges

- Supply Chain Breakdowns
- Inflationary pressures with Labor and Material
- Labor Shortages of Construction Crews
- Projects take about 40% longer than prior to the pandemic.
- Deep Rural Areas add Substantial Costs

