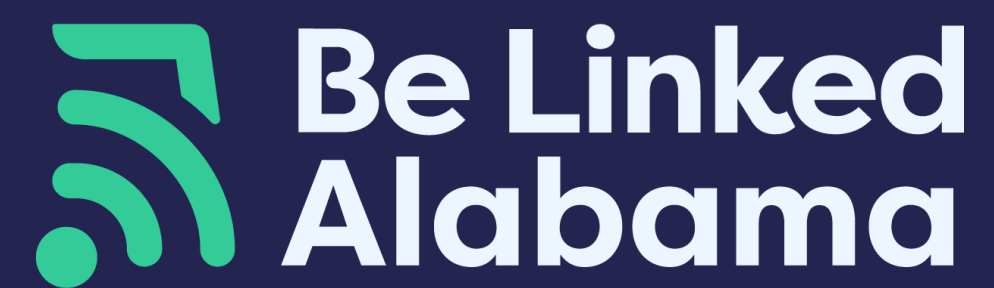


# Montgomery County

## Broadband Profile

July 2023



# Profile Background

This report was prepared by the Alabama Department of Economic and Community Affairs for Montgomery County.

ADECA thanks the elected officials, staff, internet service providers (ISPs), institutions, and residents of Montgomery County for their input and insights.



# Introduction

**ADECA is pleased to present this profile document for Montgomery County. This plan was developed as part of ADECA's Alabama Community Broadband Technical Assistance Program in 2022 and 2023.**

**The profile is based on meetings with County partners, data collected through a phone survey of residents, the Alabama Broadband Map, and a range of federal and other relevant data sets.**



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An executive summary of findings and recommendations.

## 2. Background: The Broadband Market and Ecosystem

Background information on the broadband market and the economics of broadband deployment. This provides a framework to understand broadband deployment challenges and identify potential partners for County efforts.

## 3. Broadband availability and services in Montgomery County

Data that describes the current state of broadband in Montgomery County, including areas that may be eligible for State and federal grant funding.

## 4. Broadband adoption and digital opportunity in Montgomery County

Data regarding the current state of broadband adoption and opportunity in Montgomery County, including issues like affordability, access to devices, and digital skills.

## 5. Local perspectives and input

Feedback shared by potential county partners on the current obstacles to connectivity and the existing digital opportunity programs.

## 6. Opportunities for collaboration and partnerships

Presents a framework for understanding how communities can partner with service providers to mutual benefit.

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# Executive Summary

# Executive Summary

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This section presents an overview summary of ADECA's findings regarding the broadband infrastructure and digital opportunity landscape in Montgomery County. It briefly summarizes the content of the County Broadband Profile, including potential strategies and opportunities to address broadband availability and digital opportunity.



# Background

**This County Broadband Profile results from ADECA's award to Montgomery County of support under the Alabama Community Broadband Technical Assistance Program.**

In 2020 and 2021, ADECA identified an urgent need for broadband planning to address gaps in broadband infrastructure and participation, and to allow communities to plan for grant opportunities.

Through its competitive Technical Assistance Program, ADECA is providing technical assistance for communities seeking to expand broadband infrastructure and services in response to the critical need for internet access. Montgomery County was the first of ten counties to receive technical assistance under this program.

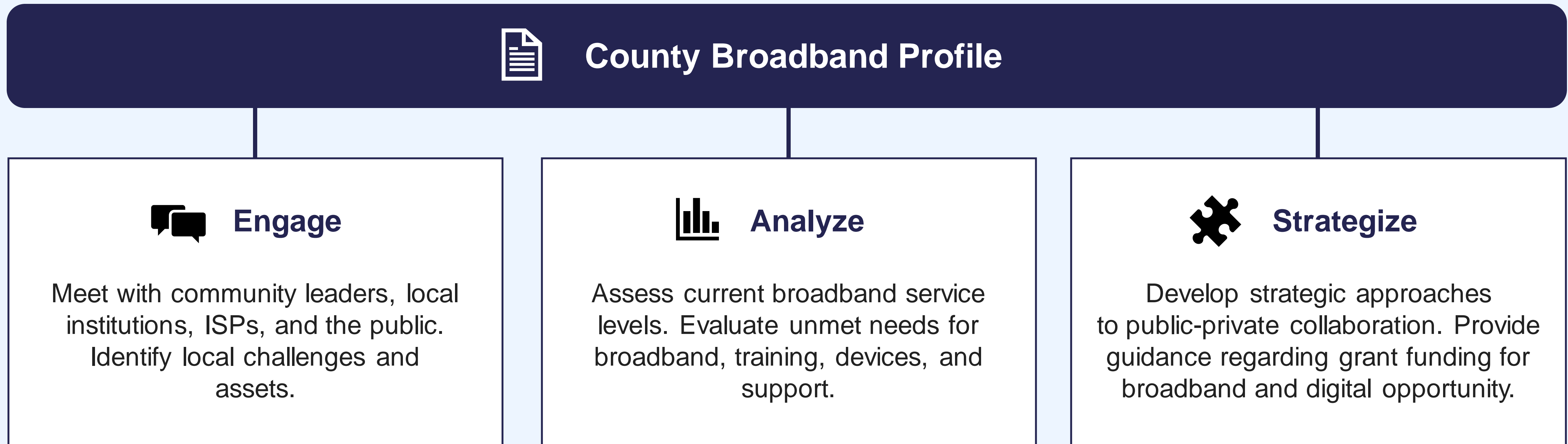
In 2021, ADECA received a grant from the U.S. Economic Development Administration to provide broadband technical assistance for local communities.

The technical assistance – as delivered in this County Broadband Profile – takes a broad view of infrastructure and digital participation needs across the County and provides recommendations for how the County can improve its broadband profile.



# ADECA's Technical Assistance Program

The Technical Assistance Program followed three stages that led to the development of this County Broadband Profile.



# Overview

The current moment presents opportunity to address broadband challenges through state, local, and ISP efforts.



## Awareness of Broadband's Criticality

following the pandemic and widespread adoption of remote work and education.



## State and Federal Funds

available now and in the next few years for infrastructure. Federal funds may be available to help lower-income households afford broadband service.



## Growing Data Needs

resulting from growth in digitalization, online services, streaming, and connected devices.



## ISP Investment Plans

to expand and upgrade current networks through both public grants and private funds, in collaboration with the state and localities.



# ADECA's engagement with Montgomery County

**In-person meetings in the County, along with statewide engagements, will inform ADECA's planning for the upcoming grant programs.**

## Initial collaboration

- ADECA collaborated with Montgomery County leaders to identify participants and coordinate logistics for an on-site meeting. The meeting was designed to share information about the Broadband Equity, Access, and Deployment (BEAD) and Digital Equity programs, understand barriers to broadband, and gather information about current broadband related programs in communities throughout the County.
- ADECA invited 54 people from a pool of government officials, ISPs, and community-based organizations; the public was invited to attend, as well.

## On-site meetings

- ADECA conducted this meeting at the Montgomery County Commission Chambers on December 12, 2022. 43 participants were in attendance, including organizations representing a range of interests.
- Appendix D includes a partial list of organizations that attended the on-site meeting.

## Outcome

- Participants provided insights into their needs specific to their communities and what obstacles to broadband they were experiencing. They also shared programs that are providing an impact on broadband access and equity.



**The meetings in Montgomery County included participation from a range of entities:**

- ISPs
- Elected officials
- Members of the public
- Local non-profit groups
- Anchor institutions such as schools & public safety



# Local perspectives

Partners note barriers and obstacles to broadband opportunity.



## Elected Officials

Noted the primary complaints from the public concern access to devices and lack of connectivity.

Noted the importance and FCC-imposed complexity of FCC map challenges.



## Governments and Anchor Institutions

Expressed interest in expanding device lending programs.



## Community Organizations

Reported challenges with telehealth and telemedicine in rural households because of a lack of broadband access. Noted the criticality of expanding enrollment in the Affordable Connectivity Program.



## Residents

Requested courses to improve digital skills. Concerned about cybersecurity and the need for related digital skills training.

Noted challenges with the cost and availability of broadband and cable TV.

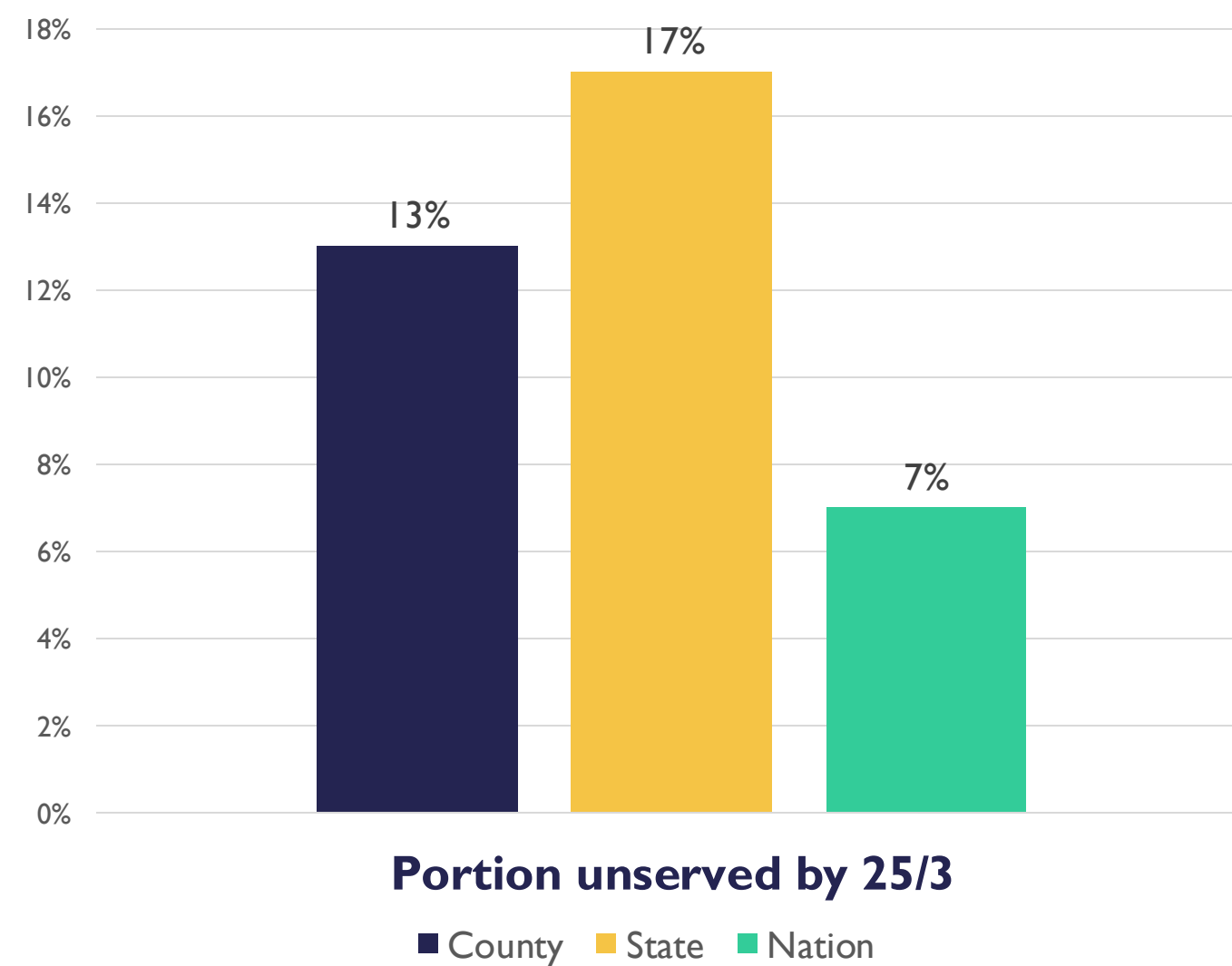


# Summary of findings

Montgomery County performs well relative to other Alabama counties but lags national averages for broadband availability and adoption.

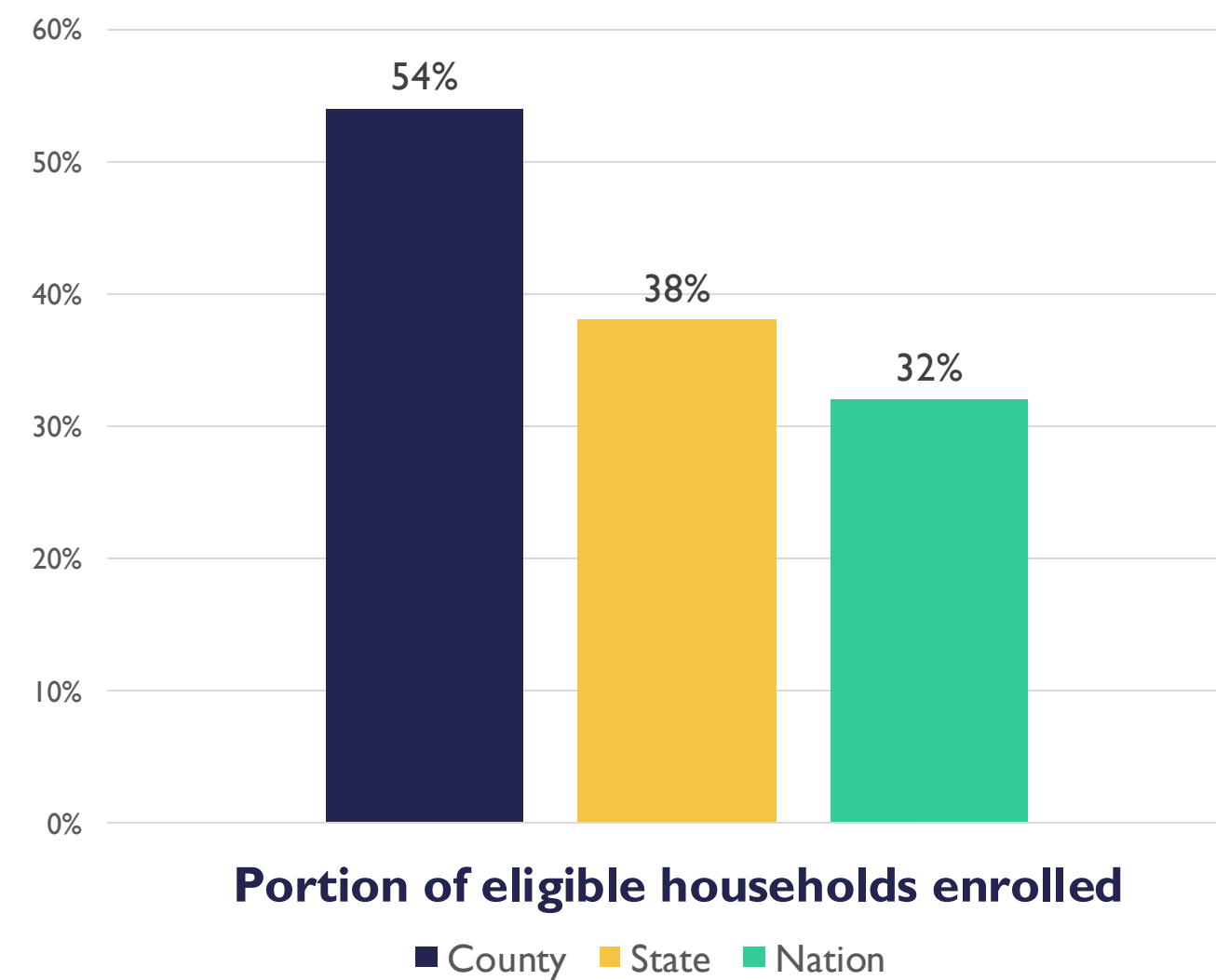
## Availability

The County outperforms the state, but underperforms the nation in availability, with more households unserved by broadband.



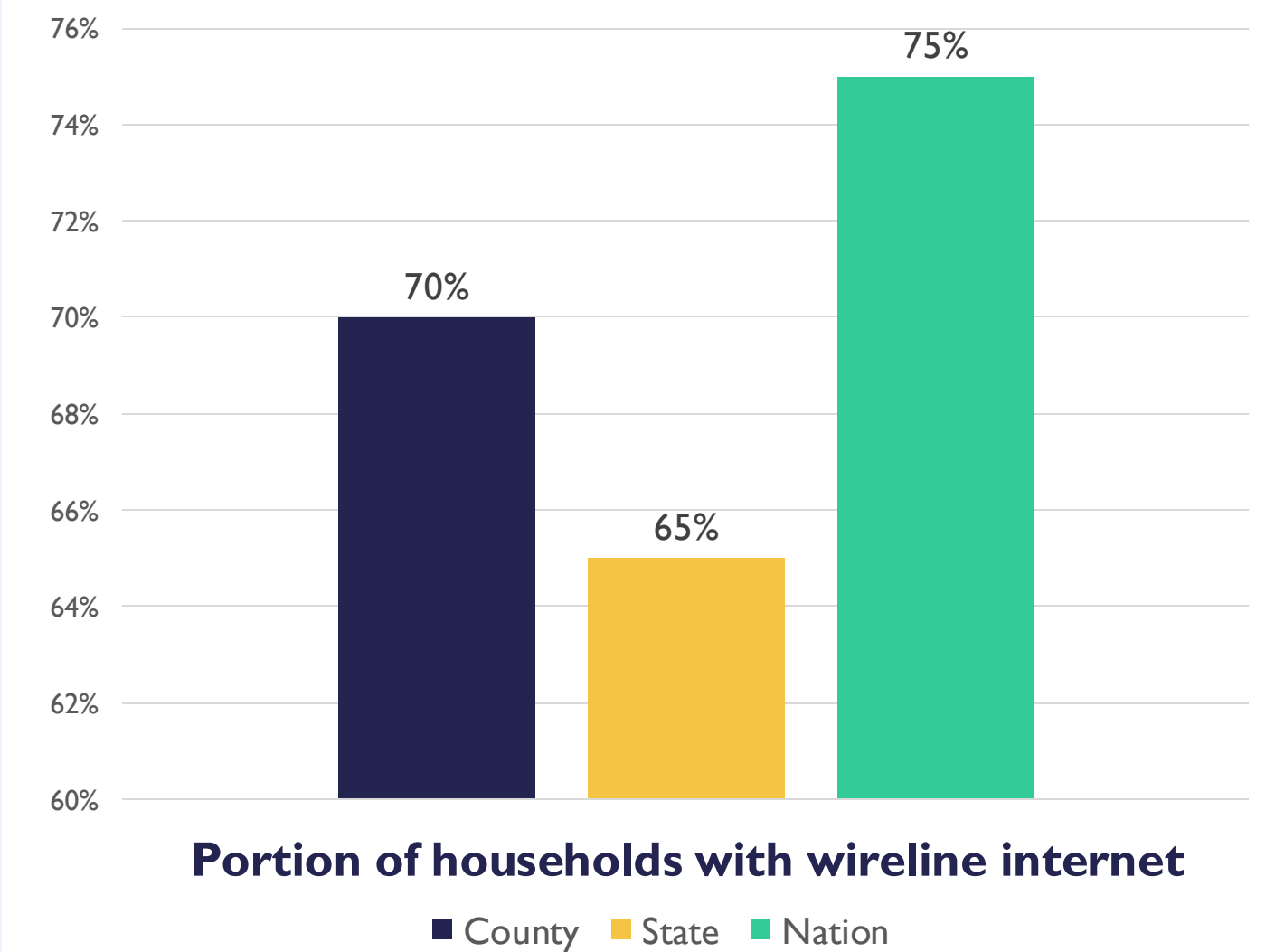
## Federal Subsidy Use

The County leads Alabama and the national average for percentage of eligible households that participate in the federal Affordable Connectivity Program's \$30/month subsidy.



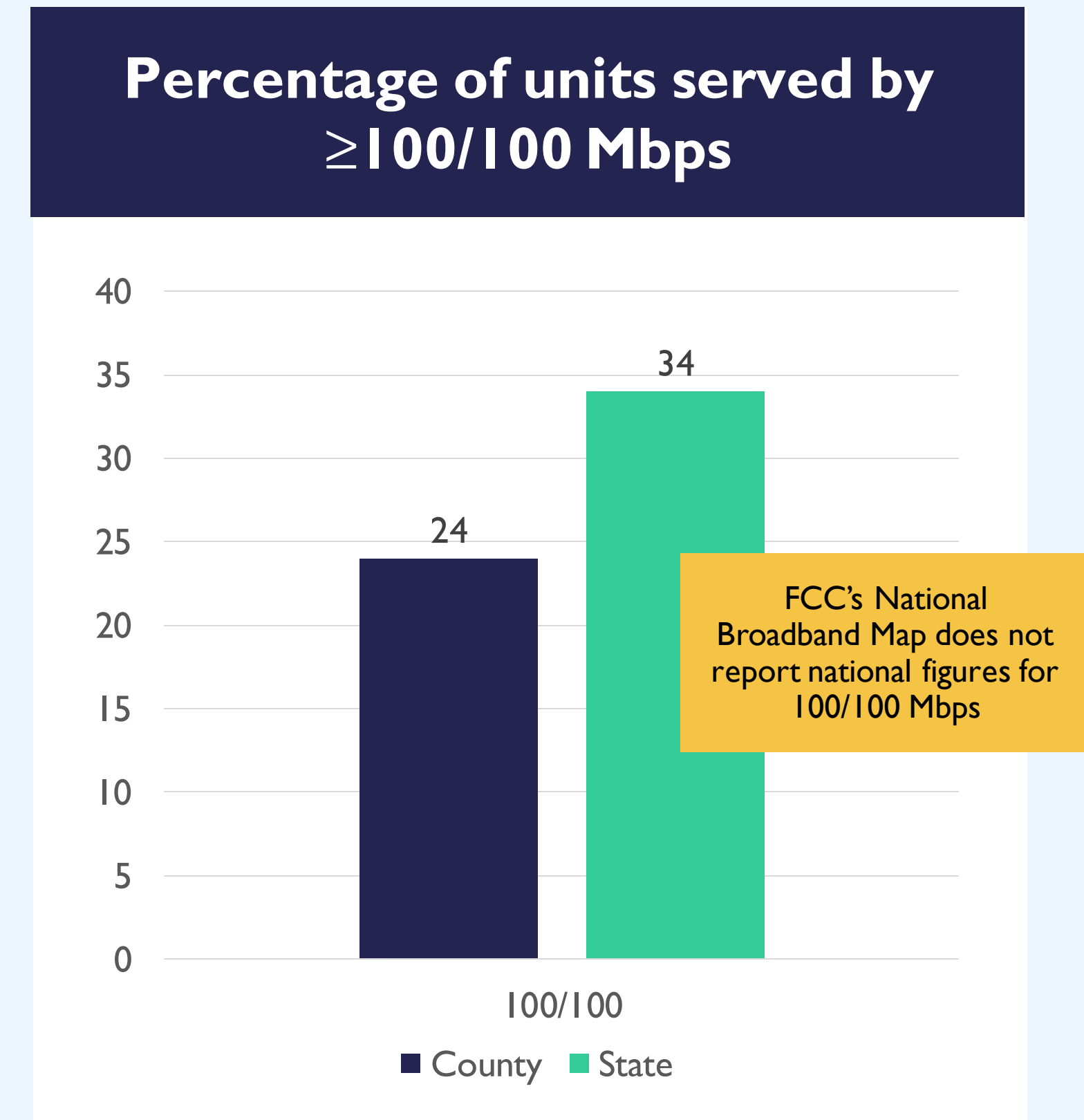
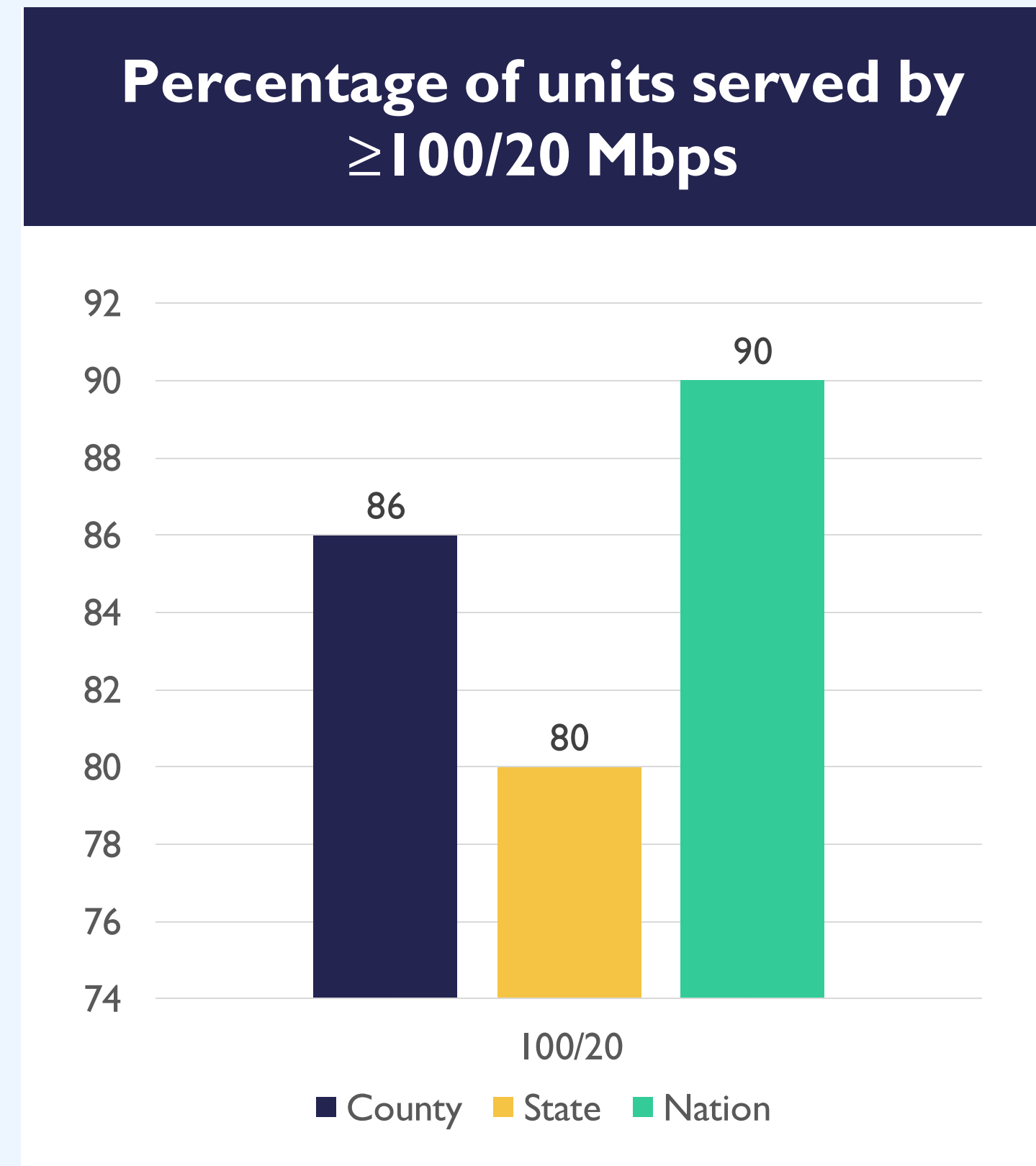
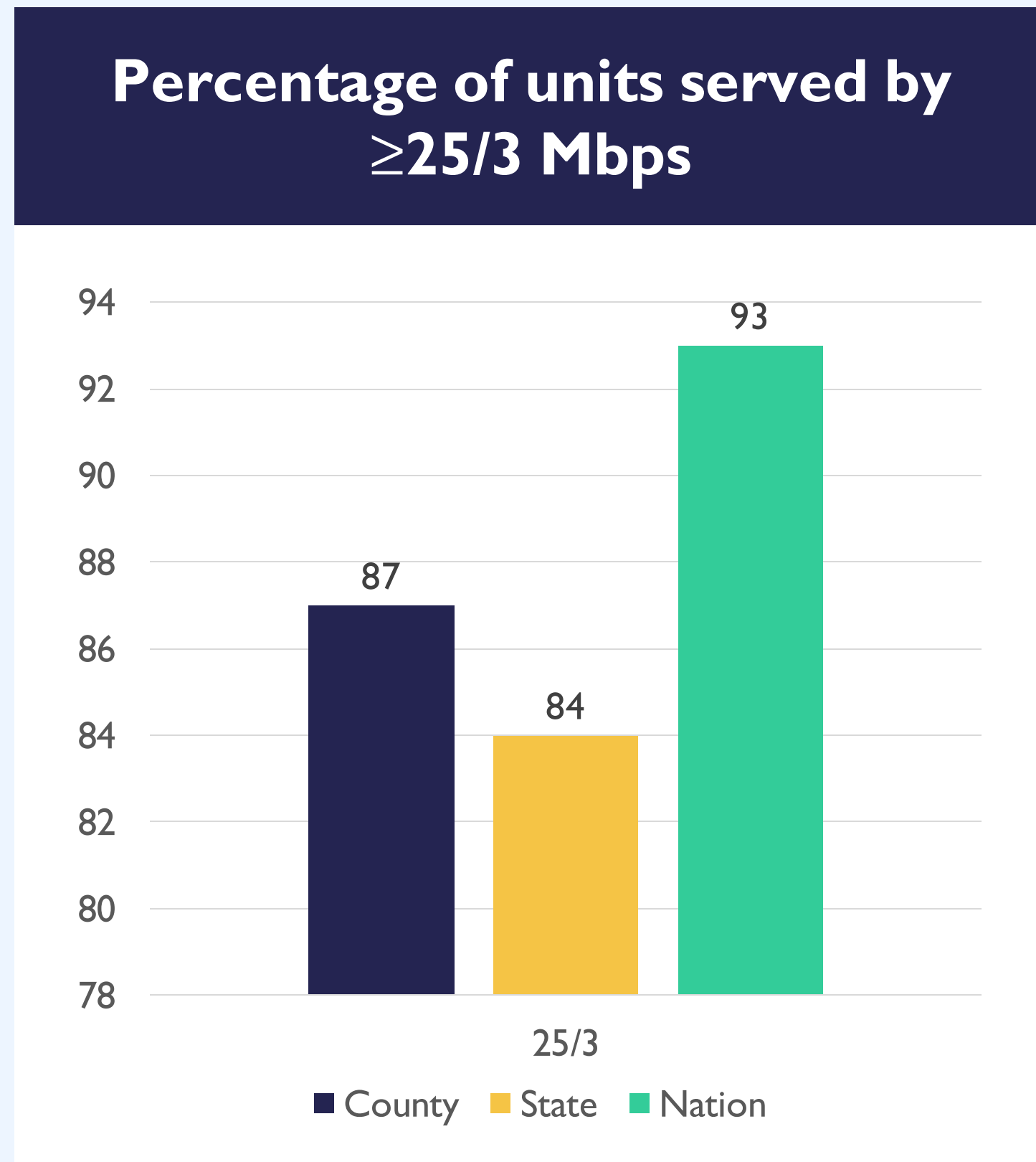
## Broadband Adoption

The County outperforms the state but lags the rest of the U.S. on percentage of households with wireline internet service.



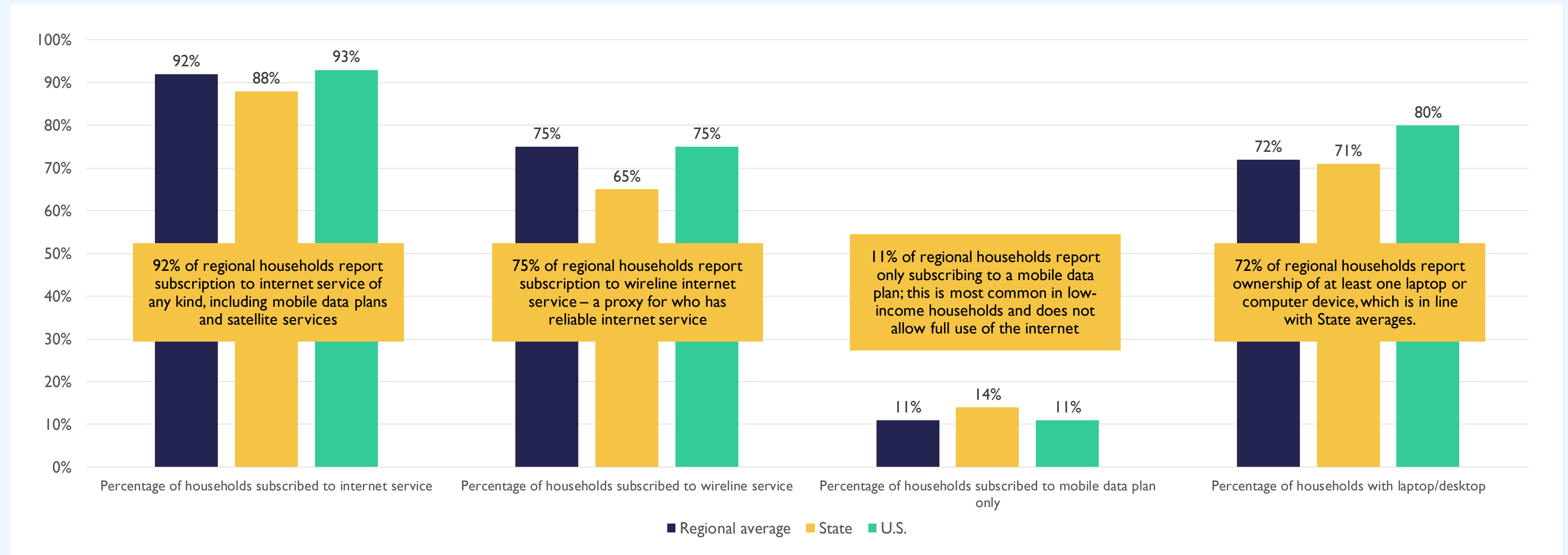
# Findings on availability

Montgomery County outperforms Alabama but lags the U.S. in broadband availability.



# Findings on adoption and use

Montgomery County's region leads the state on all broadband adoption parameters – and generally aligns with national averages other than for access to devices.



# Findings on digital opportunity

## Lower-income residents underperform across four pillars of digital opportunity.

Findings were derived from Census survey data, and ADECA's phone survey of county residents, both of which inquired on residential needs in internet and device access, and confidence in digital skills.



### Broadband Access

Low-income households subscribe to internet at lower rates and report less reliable service. Subsidies available from the federal Affordable Connectivity Program are under-utilized.



### Devices and Tech Support

Low-income, senior, and disabled households lag behind others in device ownership.



### Privacy and Security

Low-income households do not feel confident in their ability to identify fraud and misinformation.



### Digital Skills

Many low-income households are not confident in their ability to use basic digital skills. Senior households lag behind other groups in key digital skills including accessing medical services.

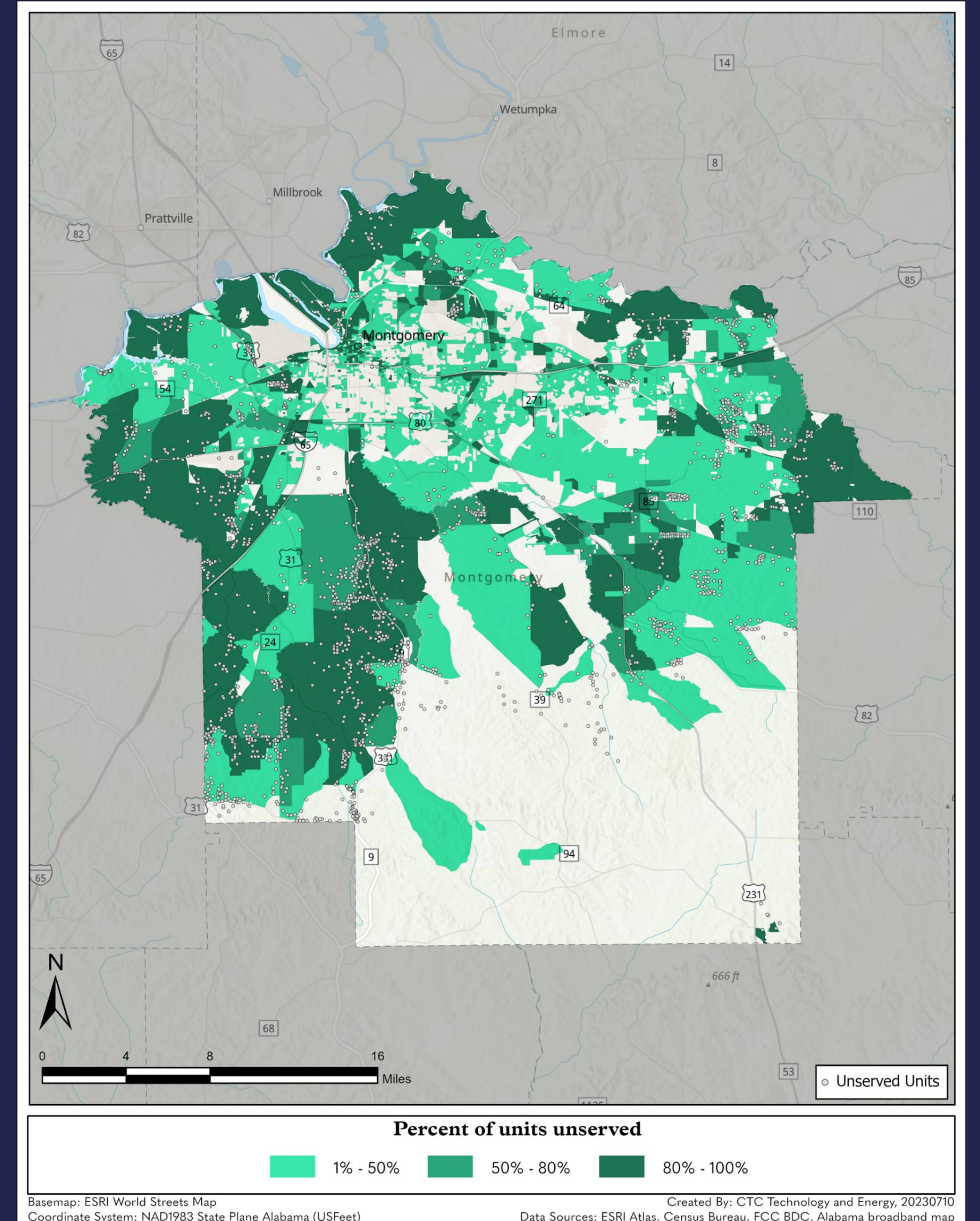


# 13% of county units are *unserved* on the FCC Map

These unserved locations do not have access to an internet service product providing speeds of greater than or equal to 25/3 Mbps.

These areas are the top priority for federal funding under the Infrastructure Investment and Jobs Act, through the Broadband Equity, Access, and Deployment (BEAD) program.

ISPs and policymakers can observe additional address-level data on unserved units on ADECA's Alabama State Broadband Map.

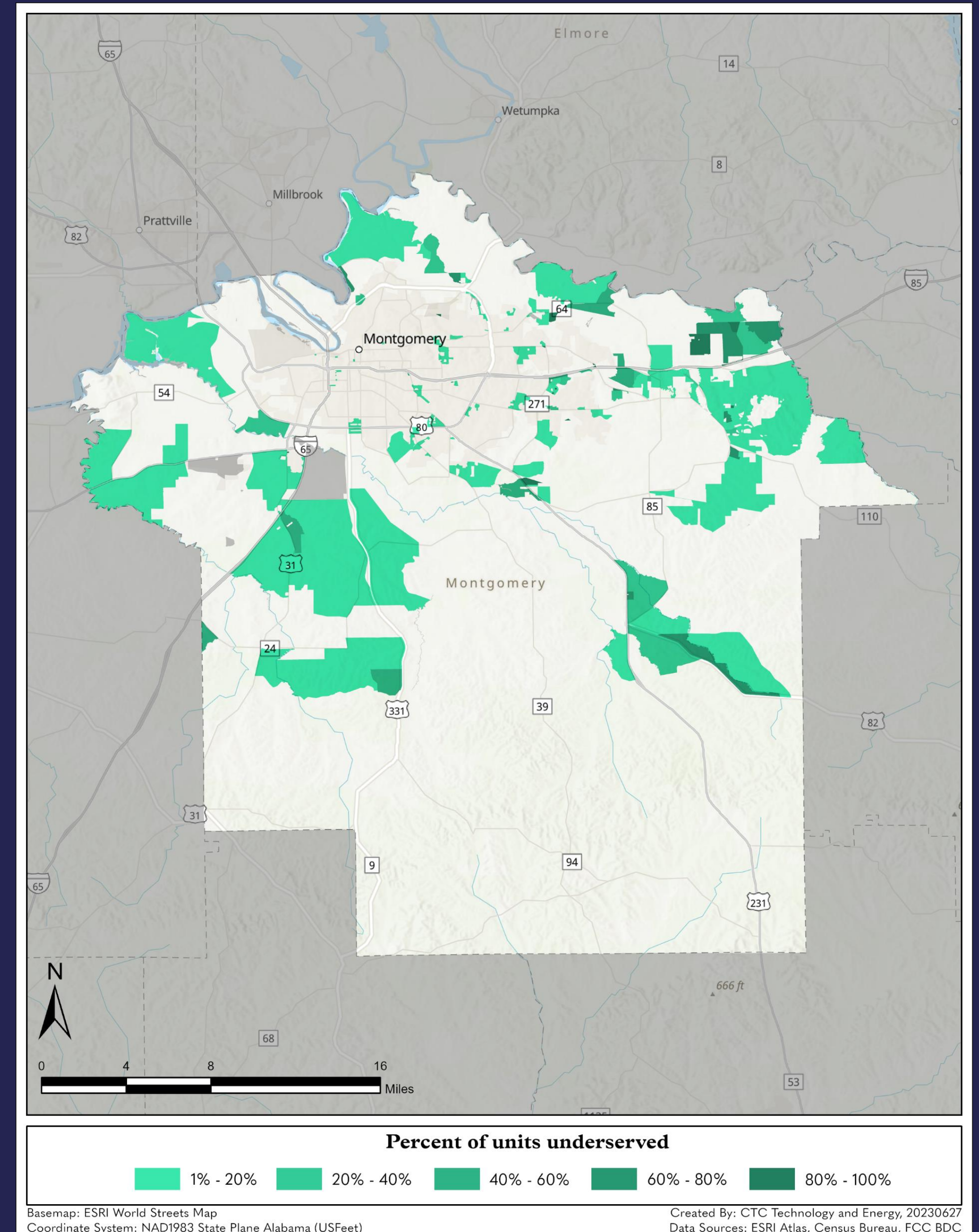


# 1% of county units are underserved on the FCC Map

Under federal rules for the upcoming broadband funding (known as “BEAD”), underserved areas (between 25/3 and 100/20) receive funding as long as unserved areas are connected first.

Addresses are sometimes inaccurately reported as underserved when they are actually unserved if ISPs overstate the capabilities of their networks. This sometimes happens with DSL and fixed wireless/mobile home internet products.

As only a few locations in Montgomery County fall into this federal “underserved” category, Montgomery County can focus on encouraging deployment in unserved areas under both the Alabama and federal maps.



# Summary of strategies

ADECA recommends Montgomery County consider several strategies to prepare for upcoming funding opportunities over the next two years

Challenge	Recommendation	Potential Impacts on:		
		Availability	Affordability	Adoption
Unserviced locations	1. Identify ISPs that commit to meeting County needs and support applications for ADECA broadband infrastructure funds	✓		
Low ISP interest in investing in low-density areas of Montgomery County	2. Consider strategies to attract ISP interest, including modest grants, support for grant applications, and optimized, efficient permitting	✓		
Affordability of internet service and device procurement	3. Develop programs, potentially with schools, libraries, or nonprofits, to help low-income households use federal subsidy programs		✓	✓
Insufficient digital skills among low-income households	4. Support programs, such as those housed by Montgomery County libraries, to help low-income households develop internet skills and access devices			✓
Lack of resources for programs to increase adoption and use	5. Develop local plans to apply for federal Digital Equity grants in 2025			✓



# Strategy: consider programs to improve opportunity

Educational programming and subsidy programs may help lower-income and senior residents.



## Broadband Access

Communicate with ISP partners regarding known service gaps and emerging markets to prioritize infrastructure in areas without reliable service. Partner with ISPs and local organizations to publicize the federal Affordable Connectivity Program to low-income households.



## Devices and Tech Support

Support the library system's current device lending and tech support programs by sharing resources and facilities. Market these programs to likely beneficiaries, such as low-income households that are likely to be enrolled in other government support programs.



## Privacy and Security

Review the digital skills curriculum of County libraries to make sure it educates participants on privacy and security risks.



## Digital Skills

Support County library delivery of digital skills programming by sharing resources, facilities, and providing additional marketing.

Partner with AARP and hospitals to address challenges that seniors face accessing telehealth.



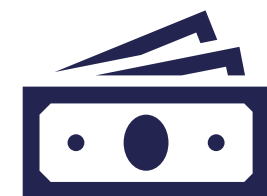
# Overview of ISP market dynamics

ISPs prioritize lower-cost, higher-income areas where returns are high and risk is low. Counties can use proven strategies to improve their attractiveness for private investment.

## Certain areas see low levels of investment because private ISPs choose to invest elsewhere, where return will be greater



Low-density areas are unattractive for investment because there are fewer potential customers available relative to construction costs.

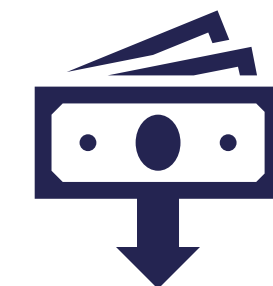


Low-income areas are less attractive for investment because low-income consumers subscribe at lower levels than higher-income households.

## Montgomery County can use proven strategies to help make these areas more attractive to ISPs



ISP revenue opportunity increases in places where counties help low-income consumers access federal broadband subsidies or learn digital skills to use the internet.



ISP costs are reduced in places where counties facilitate ISP deployment or offer grants or access to public assets.



# Strategy: develop public-private collaboration to improve local broadband infrastructure

Working together can enable communities and ISPs to develop win-win outcomes.



Partnerships enable localities to further their broadband goals by working with ISPs



Through efforts or resources, counties can make their community more attractive for private investment and operations



By investing effort and resources, counties can incentivize ISP behavior that meets the community's needs



# Three primary models for public-private collaboration can drive infrastructure deployment

Every community should adopt and refine the approach or approaches that best meets its own needs and goals

1

## Facilitation

1. The community makes investment more attractive for companies
2. Mechanisms include lowering costs and increasing revenues

2

## Grant

1. The community makes a grant to the company
2. The company makes enforceable commitments to build infrastructure and deliver service

3

## Investment

1. The community pays for and owns the network assets
2. The private partner operates the network and provides service to the public

*Any of these models can accommodate collaboration between counties and ISPs to prepare for the funding that ADECA will administer – and to enable the County to support its preferred partner, including through provision of financial support.*



# Strategy: partner with community organizations

**Community organizations are logical partners for digital opportunity efforts such as training and expanding access to devices**

1

In meetings with ADECA, community organizations such as AARP, the library system, and United Way shared their interest in collaborations to develop programs that increase digital skills and device access among their partners, members, and patrons.

2

A wide range of community organizations recognize the importance of local coalitions, including to maximize opportunities for digital equity grant funding from the U.S. Department of Commerce in 2025.

3

ADECA has developed a Community Broadband Organization and Programming Inventory to help identify organizations participating in digital opportunity programming – programs relevant to Montgomery County are tabulated in Appendix C.



# Strategy: prepare for funding opportunities

Montgomery County can take steps to inform ADECA's plans for federal infrastructure and digital opportunity funds – and to benefit from them.

**Ensure service coverage data accurately reflects availability in your county**

- Check the FCC map and challenge if necessary
- Provide data on unserved and underserved locations to the FCC

**Continue to collect Digital Opportunity data to understand your community**

- Understand how many households lack access to broadband because of affordability, language, or other issues — even where it is available
- Use existing data and collect new data to understand challenges

**Develop partnerships with nonprofits for digital opportunity programs**

- Using your data, prioritize areas of effort for your community
- Identify existing Digital Opportunity programs that work and can be expanded — and needs for new programs
- Plan to support State and federal grant applications by local nonprofits or submit your own

**Develop partnerships with ISPs**

- Build partnerships with ISPs that show intent to invest in your County and that have track records
- Plan to support State and federal grant applications by ISPs in return for ISP commitments



# Strategy: prepare for grant opportunities

There are two general types of grants: those for ISPs and those targeted for other parties

## ISP grant opportunities are usually for building network infrastructure in underserved areas

ADECA will administer 3 major grant programs that will enable ISPs to build network infrastructure

1. Last-mile infrastructure to unserved locations – **\$191M in 2023**
2. Middle-mile infrastructure to anchor institutions – **\$245M in 2023**
3. Last-mile infrastructure to unserved addresses – **\$1.4B in 2025**

At the federal level, USDA awards grants to help build network infrastructure in rural and unserved areas.

## Public entities and non-profits typically have access to funding for broadband planning, community owned infrastructure, or addressing digital opportunity needs

The federal Economic Development Administration (EDA) provides comprehensive planning grants that can include broadband planning.

In 2025, the National Telecommunications & Information Administration (NTIA) will offer digital equity grants, enabling counties and non-profits to compete for funding to operate digital opportunity programs.

USDA awards grants for distance learning and telemedicine equipment to public entities, and enables public entities to compete for broadband loans and grants.



## Disclaimer

*This project is sponsored by the National Telecommunications and Information Administration and U.S. Economic Development Administration, U.S. Department of Commerce, under Assistance Listings 11.032, 11.035, and 11.307. This document was prepared by the Alabama Department of Economic and Community Affairs using Federal funds under awards 01-30-DP325, 01-20-B093, and ED22ATL3070004 from the National Telecommunications and Information Administration and U.S. Economic Development Administration, U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the National Telecommunications and Information Administration, U.S. Economic Development Administration, or the U.S. Department of Commerce.*

