



**INTERNET
FOR ALL**

Digital Equity Webinar Series: Digital Equity for Small and Rural Communities

June 27, 2024



Housekeeping

Questions

- Type questions in the Q&A box on the right-hand side of the screen.

Presentation

- The presentation, along with a recording of the webinar, will be available on the BroadbandUSA website under Events/Past Events.



Agenda



Welcome and Introduction

Michell Morton, Digital Equity Deputy Director, NTIA

Moderator

Philip Powell, Federal Program Officer, NTIA

Digital Equity for Small and Rural Communities

Colby Hall, Executive Director, Shaping Our Appalachian Region (SOAR)

Welcome to Woodfin

Mayor Jim McAllister, City of Woodfin, North Carolina

**Putting Rural Broadband Infrastructure
Predevelopment and Digital Adoption Together
Programmatically**

Christa Vinson, Senior Program Officer, Broadband & Infrastructure,
Rural LISC
Raegan Larussa, Rural Digital Equity and Capacity Building Assistant,
Rural LISC

Q&A

All

Closing

Philip Powell, Federal Program Officer, NTIA



Digital Equity for Small and Rural Communities

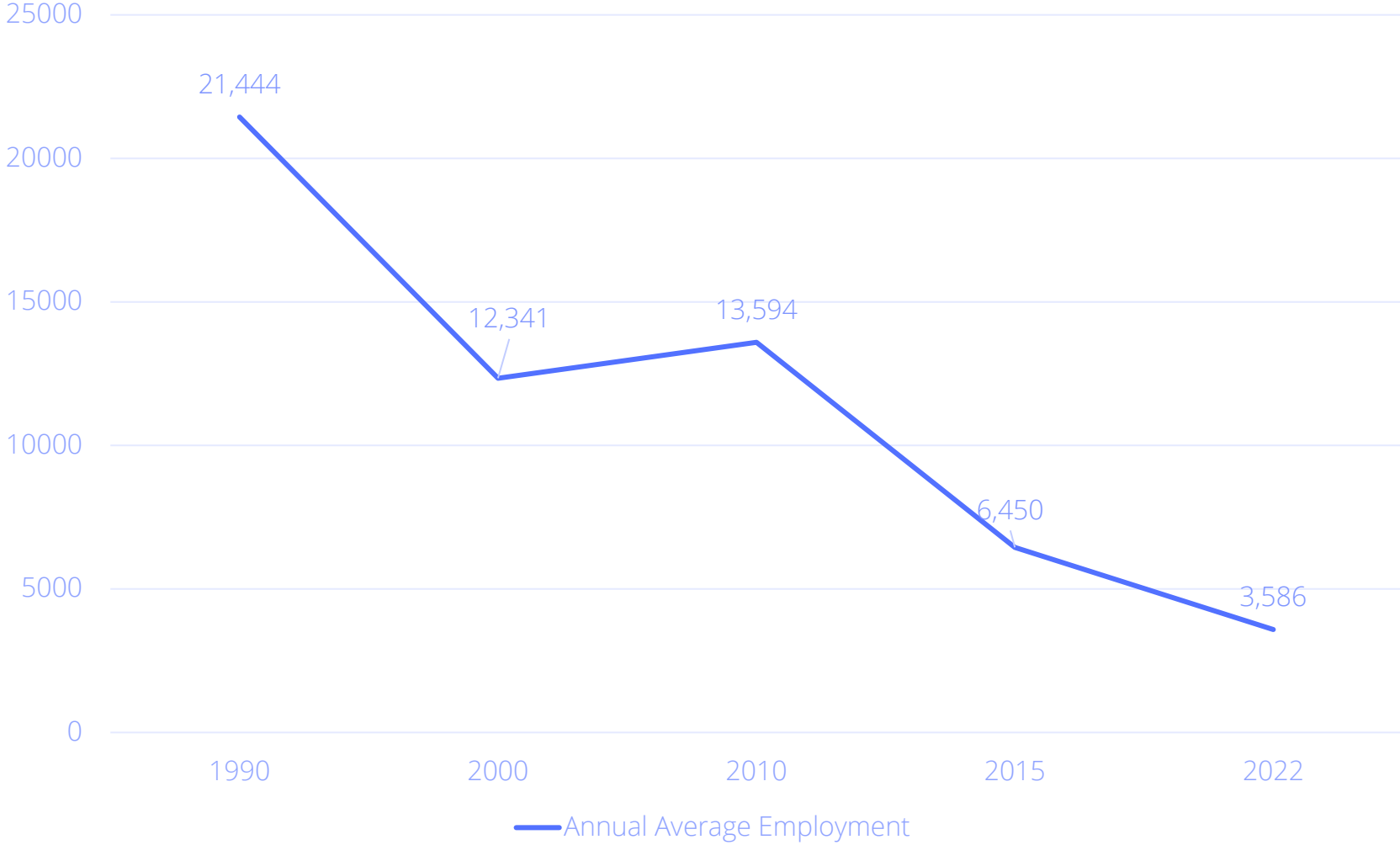
A scenic landscape featuring a river in the foreground, a sandy and rocky shoreline, and a dense forest of green trees covering the hills in the background. The sky is overcast and hazy. The word "SOAR" is written in large, bold, blue letters in the upper right corner.

SOAR

Digital Equity for Small and Rural Communities

June 27th, 2024

Natural Resources and Mining Annual Average Employment





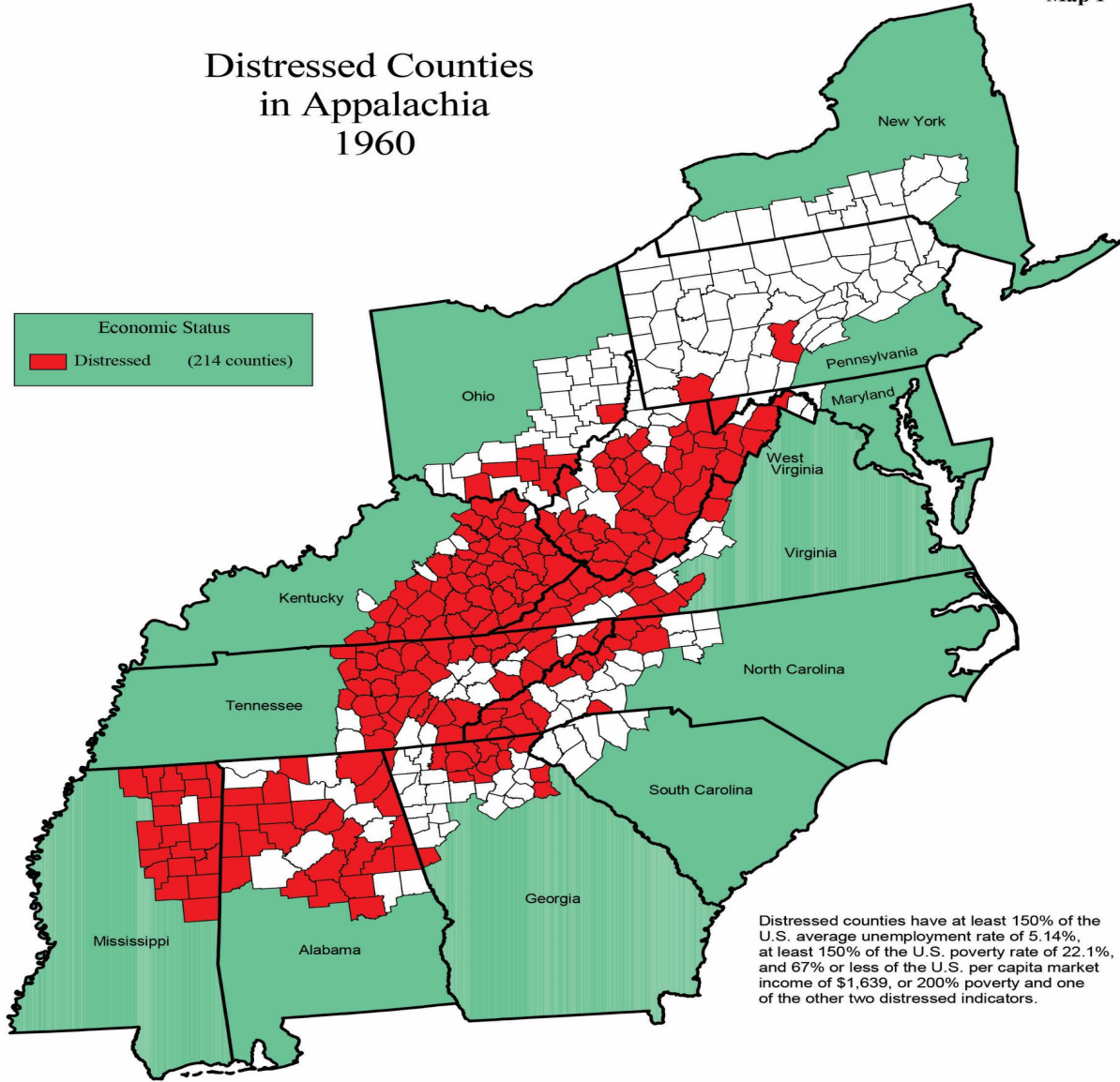
SOAR's Organizational Mission

Be the best performing, highest impact nonprofit in the United States.

Distressed Counties in Appalachia 1960

Map 1

Economic Status
■ Distressed (214 counties)



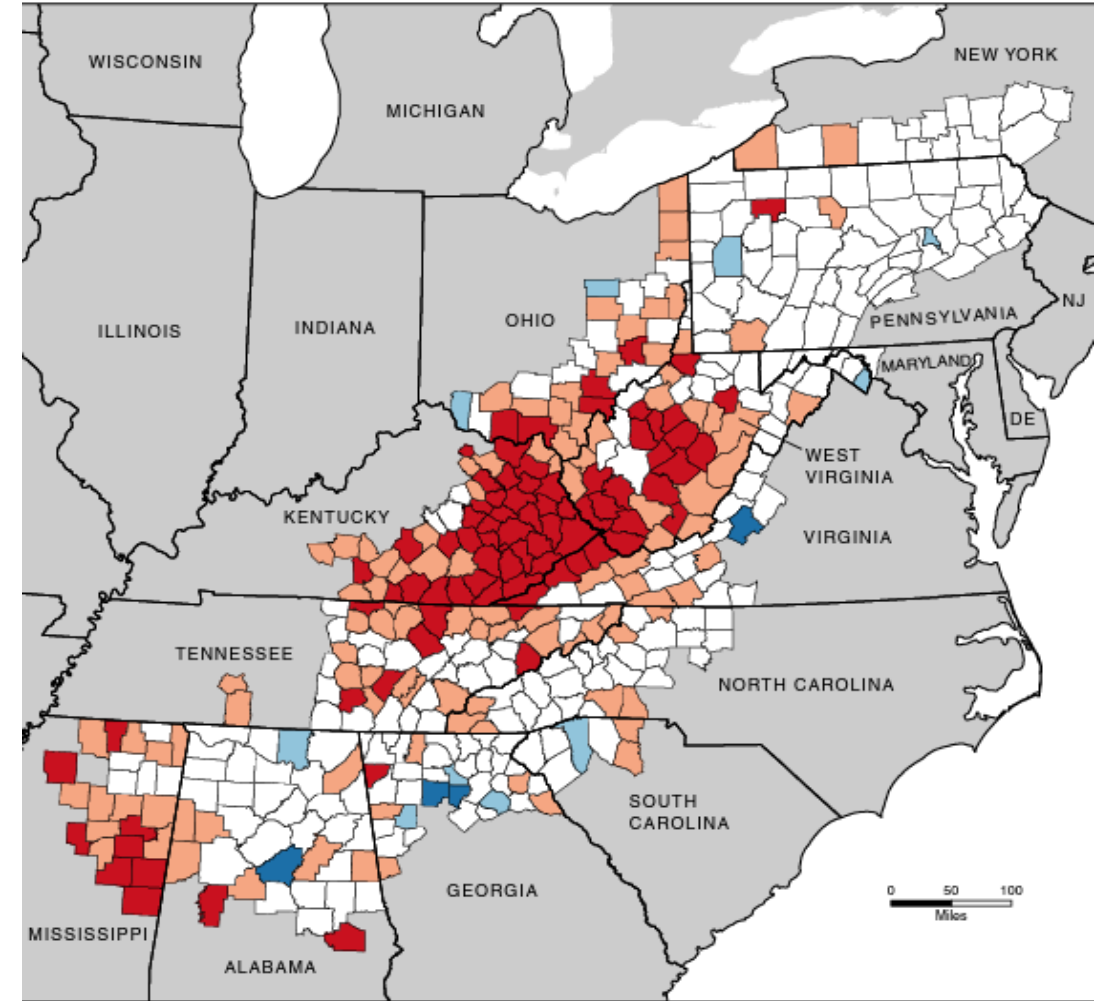
Distressed counties have at least 150% of the U.S. average unemployment rate of 5.14%, at least 150% of the U.S. poverty rate of 22.1%, and 67% or less of the U.S. per capita market income of \$1,639, or 200% poverty and one of the other two distressed indicators.

Data Sources:
 Unemployment: Census data from USDA, Economic Research Service (ERS), 1960;
 Poverty: Office of Economic Opportunity data from USDA, ERS, 1960;
 Income: U.S. Department of Commerce, Bureau of the Census, 1960.



County Economic Status in Appalachia, Fiscal Year 2023

(Effective October 1, 2022 through September 30, 2023)



The Appalachian Regional Commission uses an index-based county economic classification system to identify and monitor the economic status of Appalachian counties. See the reverse side for a description of each economic level.

County Economic Levels

- Distressed (82)
- At-Risk (109)
- Transitional (218)
- Competitive (10)
- Attainment (4)



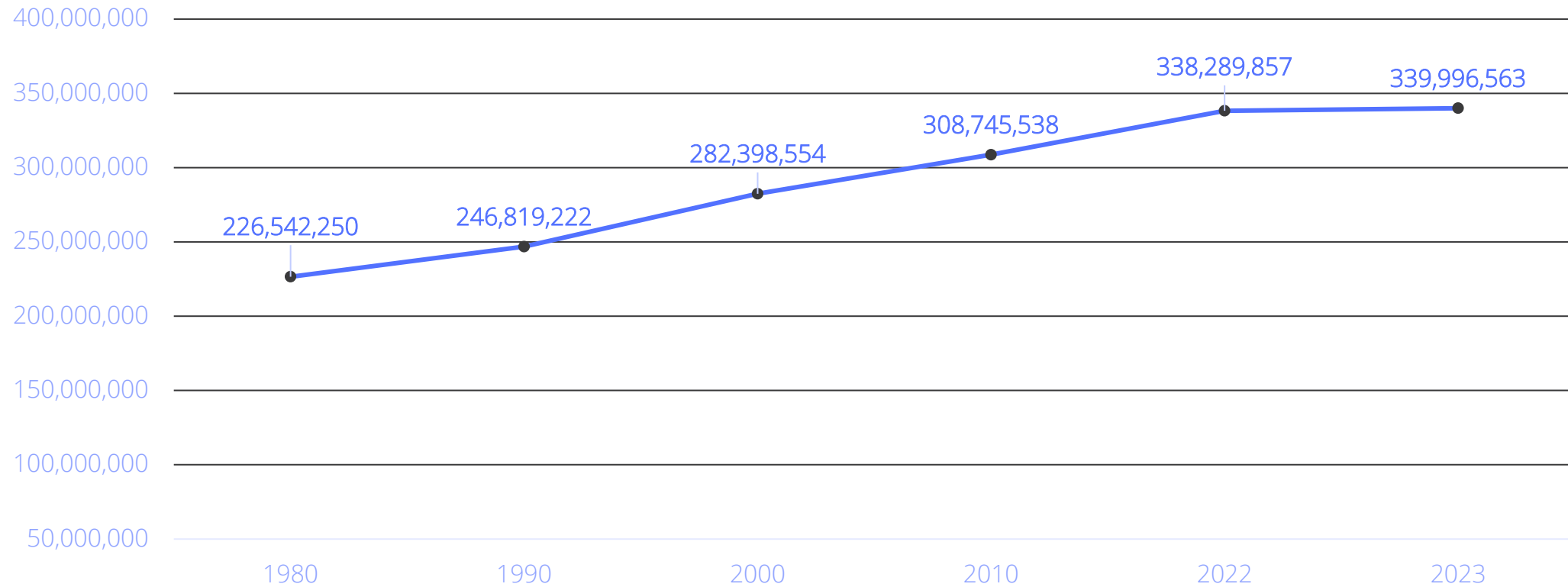
Map Created: June 2022
 Data Sources:
 Unemployment data: U.S. Bureau of Labor Statistics, LAUS, 2018–2020
 Income data: U.S. Bureau of Economic Analysis, LAPI, 2020
 Poverty data: U.S. Census Bureau, American Community Survey, 2016–2020



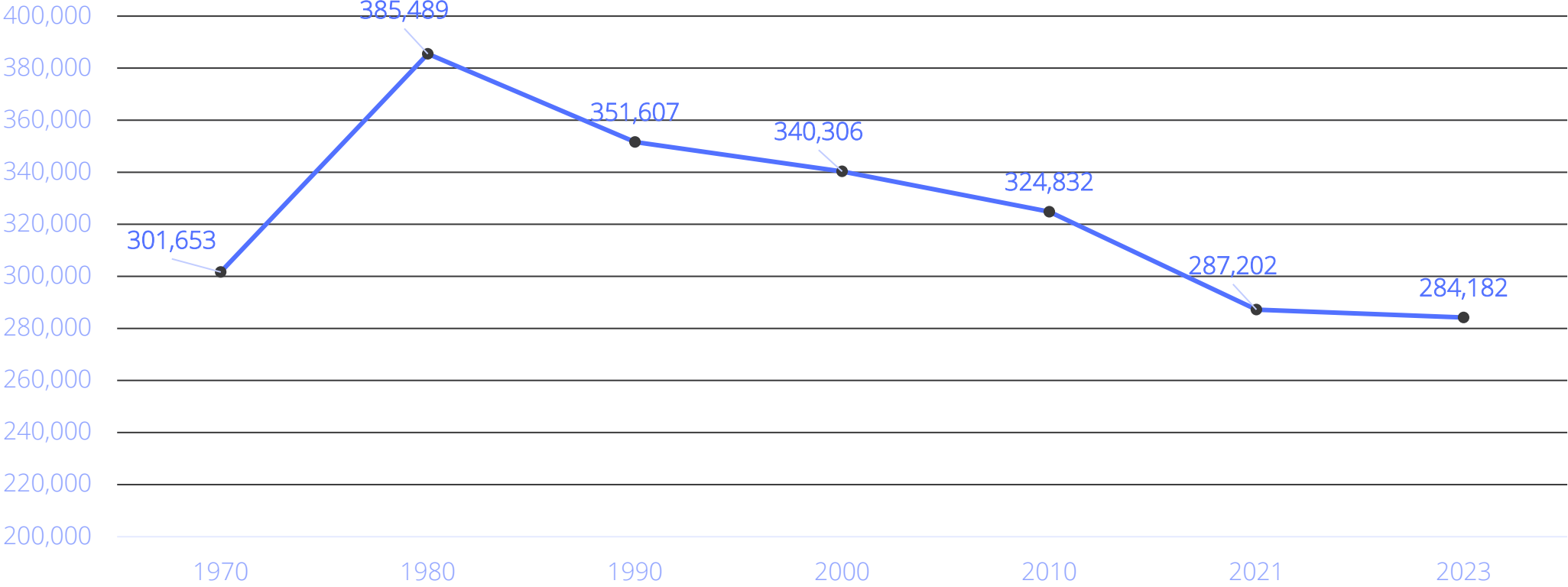
What are our biggest challenges?

Population Loss + Labor Force

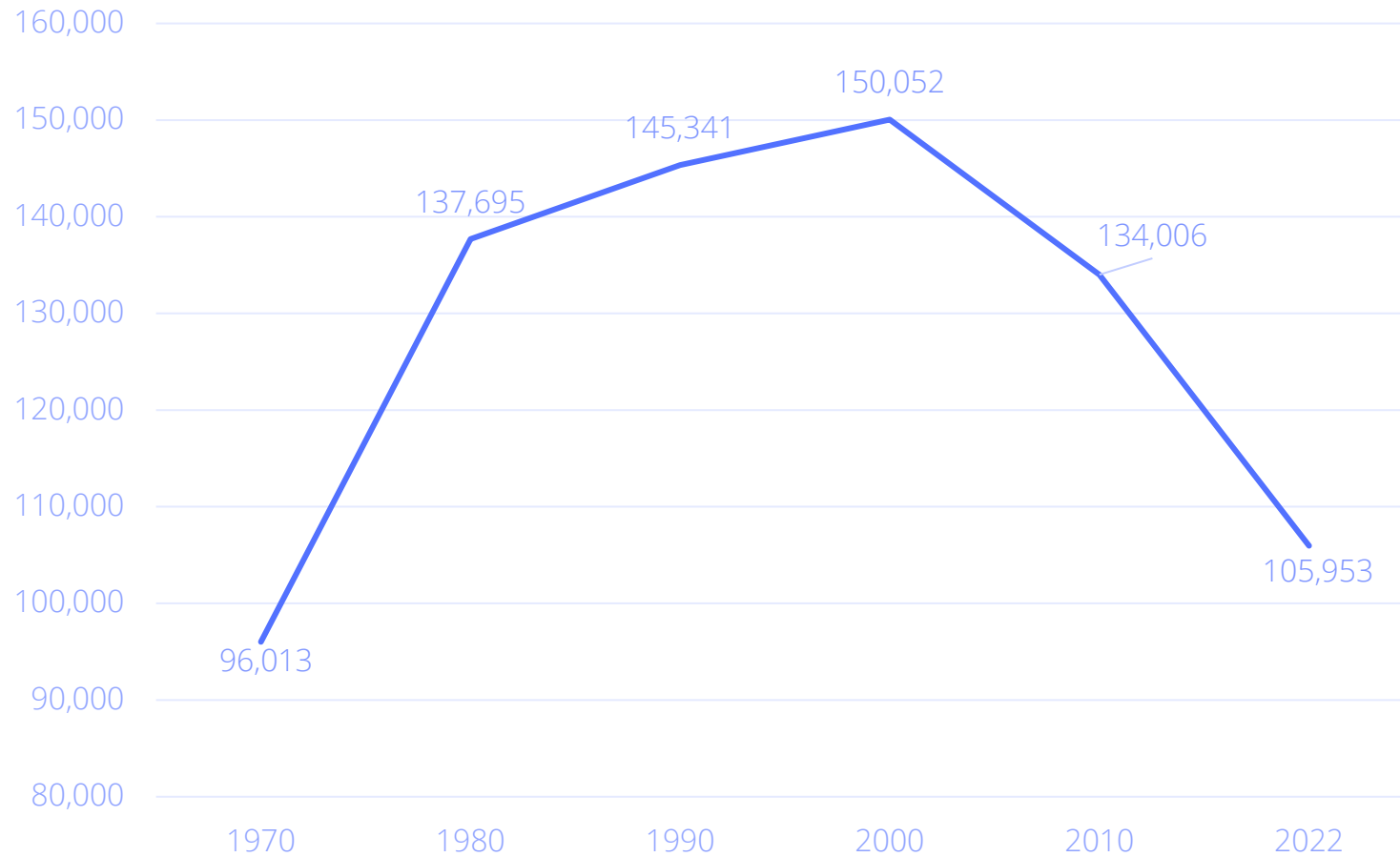
US Population Growth



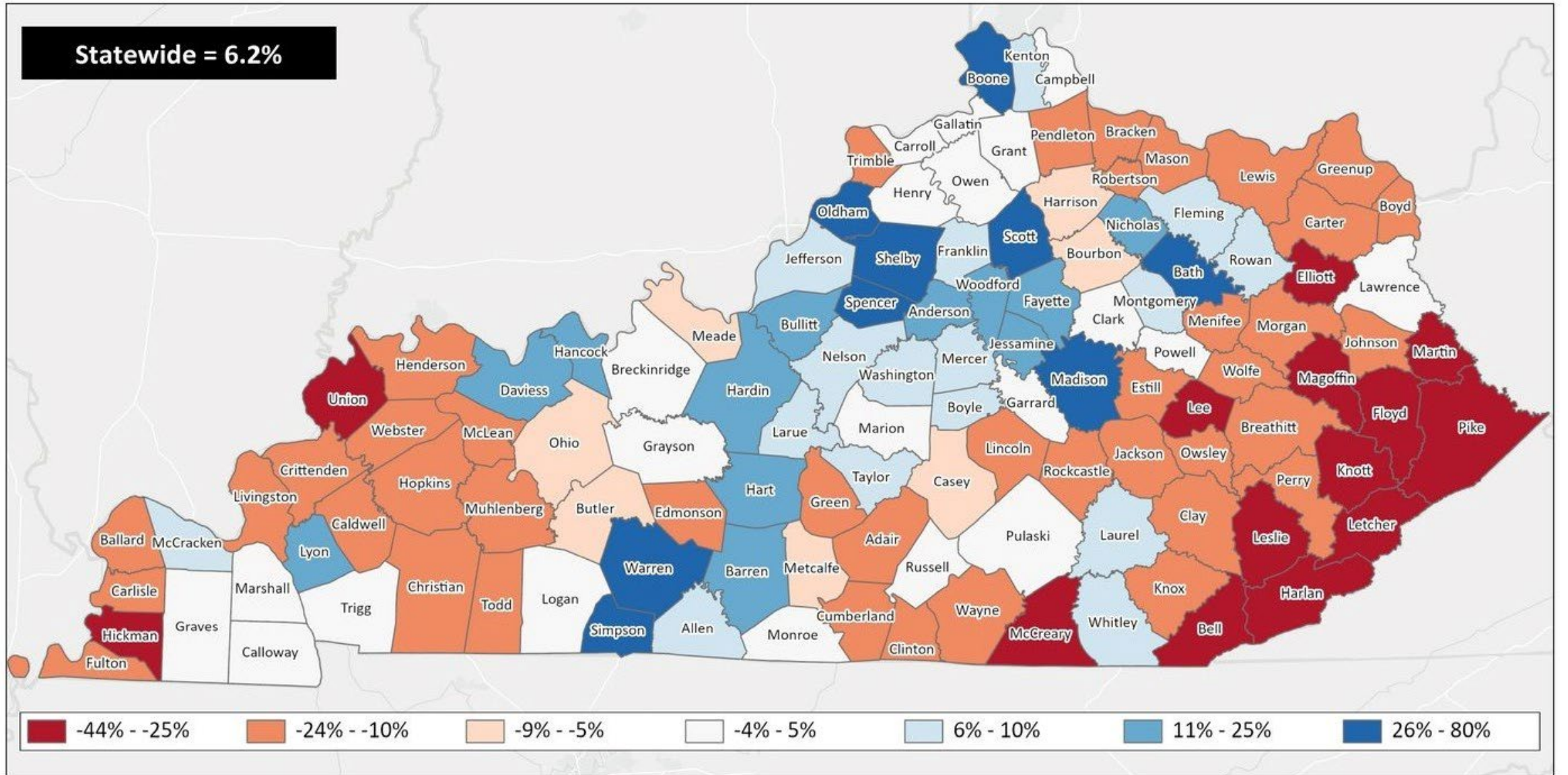
EKY Population Growth



Prime Age Population (25-54-Years-Old)

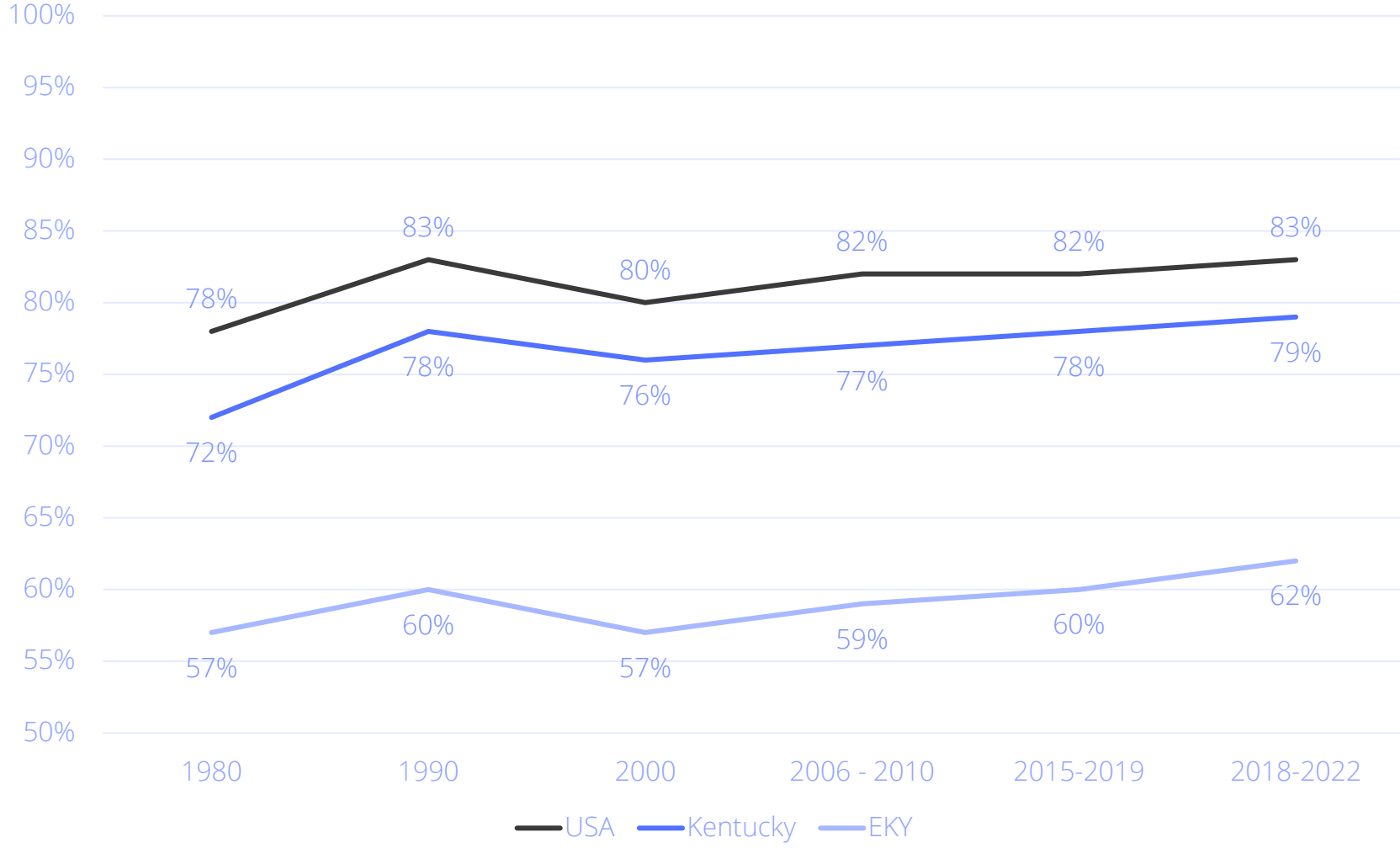


Statewide = 6.2%



Projected Population Change, 2020-2050











Prime Age Employment Rate (25-54)



Prime Age Employment Gap

11,479 Companies Employ Your Workers

Online profiles for your workers mention 11,479 companies as employers, with the top 10 appearing below. In the last 12 months, 903 companies in your area posted job postings, with the top 10 appearing below.

Top Companies	Profiles	Top Companies Posting	Unique Postings
Pikeville Medical Center	748 	Appalachian Regional Healthcare	1,153 
Appalachian Regional Healthcare	567 	Dollar General	445 
Walmart	353 	Pikeville Medical Center	329 
University Of Pikeville	280 	Walmart	238 
Commonwealth of Kentucky	231 	Walgreens Boots Alliance	98 
Kctcs	221 	Bob Evans Restaurants	95 
Pike County Board Of Education	209 	Ky Justice And Public Safety Cab...	90 
McDonald's	186 	Kentucky Community and Techn...	83 
Community Trust Bank	173 	K-Va-T Food Stores	81 
Mountain Comprehensive Care ...	151 	Food City	79 

Current Unique Job Postings

Month	Unique Postings
Jan 2024	697
Dec 2023	584
Nov 2023	559
Oct 2023	717
Sep 2023	699
Aug 2023	781
Jul 2023	796
Jun 2023	643
May 2023	675
Apr 2023	596
Mar 2023	665
Feb 2023	1,079

Education Breakdown

Education Breakdown

Education Level	Unique Postings	% of Total
No Education Listed	4,007	46%
High school or GED	2,521	29%
Associate degree	1,041	12%
Bachelor's degree	1,610	18%
Master's degree	595	7%
Ph.D. or professional degree	203	2%



The region must go all-in on the Internet.

Hundreds of thousands of jobs are already created.

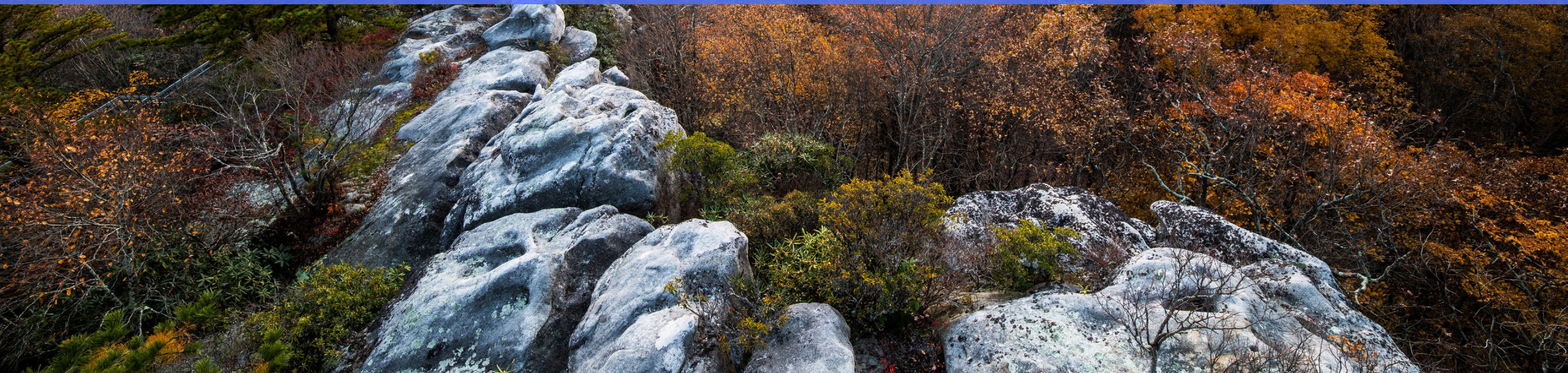
Remote Jobs Found Nationally

- 2,359,235 fully remote and unique jobs posted between January 2023 and 2024
- 134,953 employers
- Median wage across all jobs: \$87,488
 - Calculated from 1,189,735 salary counts
- Median hourly wage across all jobs: \$42.06
- 231,658 fully remote jobs posted in January 2023
- 164,012 fully remote jobs posted in January 2024

Job Title	Unique Postings from Jan 2023 - Jan 2024	Median Posting Duration from Jan 2023 - Jan 2024	Number of Employers Competing from Jan 2023 - Jan 2024	Annual Median Advertised Salary	Salary Observations Count	Hourly Median Advertised Salary	Jan 2023 Unique Postings	Jan 2024 Unique Postings	% Change (Jan 2023 - Jan 2024)
Software Engineers	14,676	27	3,267	\$130,304	7,374	\$62.65	2,084	726	(65%)
Customer Service Representatives	13,987	27	3,262	\$38,528	8,860	\$18.52	1,156	716	(38%)
Project Managers	13,205	27	4,231	\$106,368	6,155	\$51.14	1,174	702	(40%)
Administrative Assistants	8,090	25	3,187	\$46,720	5,578	\$22.46	730	538	(26%)
Sales Representatives	7,967	29	2,000	\$70,016	5,552	\$33.66	505	615	22%
Business Analysts	7,944	26	2,388	\$93,568	3,886	\$44.98	721	411	(43%)
Accountants	7,890	26	2,749	\$69,888	4,712	\$33.60	781	372	(52%)
Account Executives	6,677	28	1,856	\$89,984	3,487	\$43.26	606	571	(6%)
Financial Analysts	6,159	28	1,896	\$82,688	3,480	\$39.75	664	295	(56%)
Data Engineers	5,974	28	1,629	\$129,792	2,726	\$62.40	830	270	(67%)
Account Managers	5,466	28	1,775	\$75,136	3,134	\$36.12	435	447	3%
Data Analysts	5,268	25	1,949	\$92,416	2,555	\$44.43	722	182	(75%)
Product Managers	5,145	29	1,944	\$129,792	2,681	\$62.40	464	265	(43%)
DevOps Engineers	4,896	27	1,430	\$134,912	2,074	\$64.86	636	138	(78%)
Data Scientists	4,718	27	1,449	\$134,912	2,483	\$64.86	402	235	(42%)
Program Managers	4,715	26	1,797	\$109,824	2,318	\$52.80	381	298	(22%)
Tax Managers	4,197	23	434	\$132,864	2,993	\$63.88	1,273	121	(90%)
Mortgage Loan Officers	4,193	32	194	\$214,912	2,560	\$103.32	430	107	(75%)
Real Estate Agents	4,135	29	517	\$109,952	2,890	\$52.86	435	364	(16%)
Mental Health Therapists	4,105	27	267	\$141,184	3,705	\$67.88	274	271	(1%)
Business Development Managers	4,028	28	1,384	\$99,584	2,324	\$47.88	460	336	(27%)
Full Stack Developers	3,973	28	1,248	\$123,776	1,772	\$59.51	568	142	(75%)
Speech Language Pathologists	3,913	29	343	\$98,560	1,875	\$47.38	652	1,107	70%
Software Developers	3,884	29	1,262	\$105,216	1,879	\$50.58	500	213	(57%)
Inside Sales Representatives	3,723	29	1,028	\$59,008	2,472	\$28.37	384	275	(28%)
Business Systems Analysts	3,675	29	1,078	\$98,560	2,012	\$47.38	393	197	(50%)
Solutions Architects	3,613	28	1,226	\$145,152	1,458	\$69.78	373	306	(18%)
Licensed Clinical Social Workers	3,496	27	453	\$100,096	2,621	\$48.12	144	368	156%
Network Engineers	3,473	29	1,277	\$114,944	1,402	\$55.26	304	110	(64%)
Product Testers	3,433	20	11	\$26,000	1,190	\$12.50	248	200	(19%)
Customer Success Managers	3,374	27	1,088	\$95,616	1,370	\$45.97	323	175	(46%)
Executive Assistants	3,367	26	2,089	\$62,592	2,171	\$30.09	331	228	(31%)
Java Developers	3,349	25	967	\$124,672	1,175	\$59.94	364	96	(74%)
Systems Engineers	3,233	29	1,104	\$118,016	1,483	\$56.74	332	196	(41%)
Mental Health Counselors	3,099	25	251	\$117,504	2,168	\$56.49	149	522	250%
Full Stack Software Engineers	3,022	26	709	\$150,272	1,771	\$72.25	767	126	(84%)
Call Center Representatives	3,017	27	604	\$38,528	1,738	\$18.52	474	211	(55%)
.NET Developers	2,960	26	931	\$124,672	1,349	\$59.94	337	193	(43%)
Staff Accountants	2,893	28	1,073	\$67,328	1,643	\$32.37	250	178	(29%)
Marketing Managers	2,888	28	1,160	\$91,392	1,425	\$43.94	282	168	(40%)
Recruiters	2,864	27	910	\$62,336	1,312	\$29.97	368	154	(58%)
IT Project Managers	2,857	24	978	\$123,136	1,377	\$59.20	278	115	(59%)
Scrum Masters	2,840	25	725	\$109,312	1,212	\$52.55	267	130	(51%)
Field Service Technicians	2,801	27	491	\$59,776	1,148	\$28.74	234	353	51%



Thank You



City of Woodfin, North Carolina

WELCOME TO WOODFIN

Jim McAllister, Mayor

WOODFIN, NORTH CAROLINA

Population 8,300

12% of residences mobile homes, most over 25 years old

Biggest LatinX community in the region

Sole public school is Woodfin Elementary, K-4

During Covid shutdown, school lost contact with 60% of kids

Lack of internet in homes, only device school supplied tablet

“Hot Spot” devices not enough juice to support Zoom

Community movement to change situation



WOODFIN
ELEMENTARY SCHOOL

STRATEGY

Partner with Land of Sky Regional Planning Organization

Track record of obtaining grants

Apply for grants to provide device + internet in students' homes

Data needed, so survey designed & event planned

Enough data to be statistically significant!



LAND OF SKY REGIONAL COUNCIL

Woodfin Tech Trailblazer Program Launch

March 28th, 2023

4pm-6pm

Woodfin Elementary School




Join us at our highly anticipated digital opportunity project! Woodfin Elementary has been chosen as the Land of Sky's First Tech Trailblazer Project site. We are working with the Woodfin community to better understand the region's digital access gaps and help close them by giving people access to the tools they need to succeed.



What's a Tech Trailblazer Community?

- Access to High-Speed internet
- Families have access to large screen devices such as laptops
- Affordable internet services solutions
- Knowledge about how to use the internet and device for education, job access, healthcare, socialization, banking, and more!

Why attend?

- Soccer and games for kids 
- Learn about digital opportunities in the community
- Take the survey! 
- Community planning activities
- Hang out with friends
- Participate in games and competitions.
- Register to win one of two free laptops. 

Get started by taking the survey now!



This event is supported by:



Inclusivity and accessibility are our top priorities. Spanish language interpretation will be provided, and we are here to assist with any accommodations you may need.

Survey information is private and confidential. Information will be used for planning purposes.

Please contact Land of Sky in advance at sara@landofsky.org for more information or accommodation needs.

ACTIONS/RESULTS

Step 1: Wire town park next to school with high speed

Step 2: Continue grant application process for residences

LOS working on more public Wi-Fi options

LOS is building a device refurbishment program to get devices into homes

Continue to work with maps that may help some Woodfin residents get
served by Stop Gap or other infrastructure programs

Try to leverage CAI funding for Woodfin residents

Can you help us? Ideas?

Jim McAllister, Mayor

Town of Woodfin

828-367-9809

jmcallister@woodfin-nc.gov

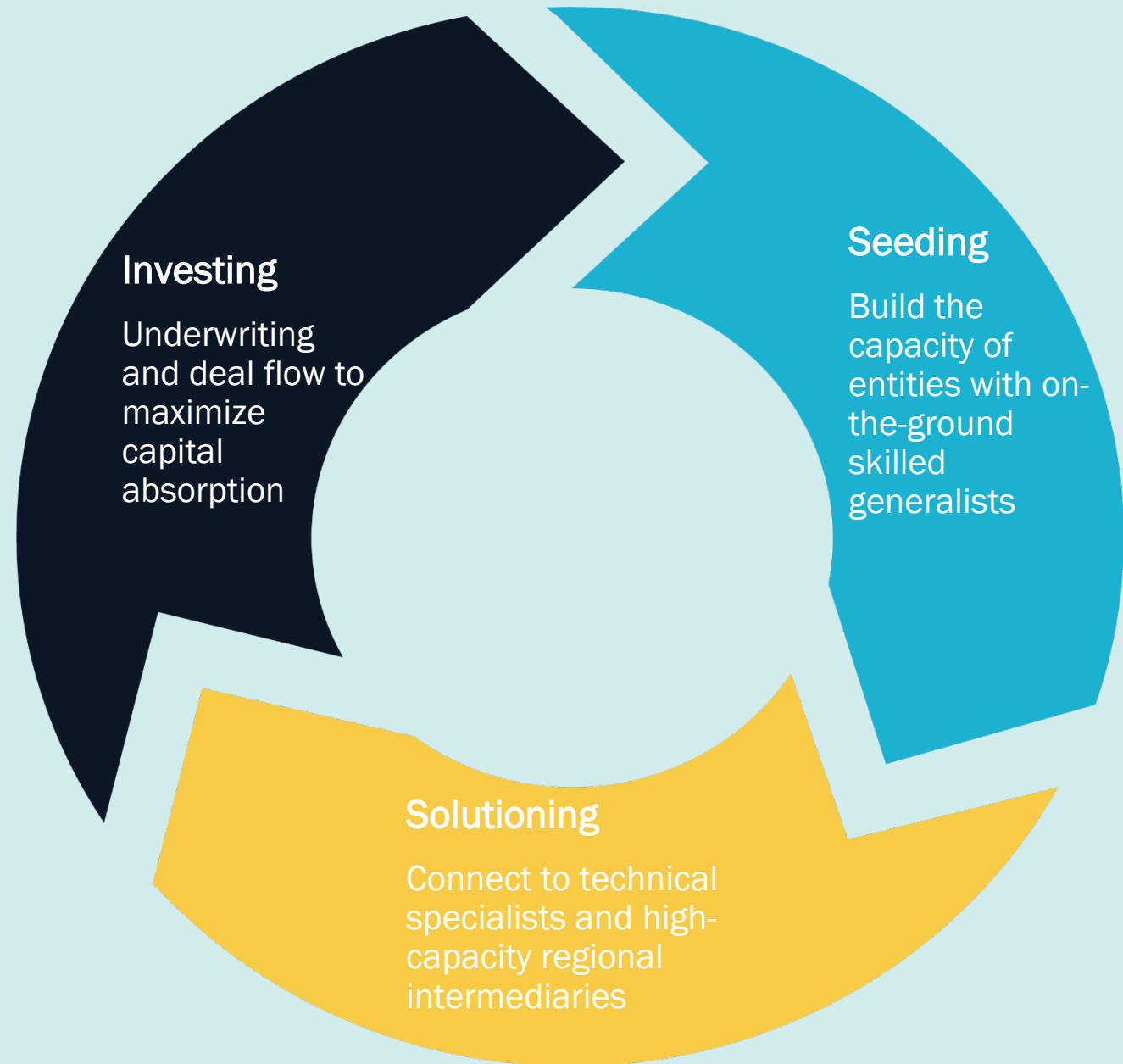
**Putting Rural Broadband Infrastructure
Predevelopment and Digital Adoption
Together Programmatically**

Putting Rural Broadband Infrastructure Predevelopment and Digital Adoption Together Programmatically



A capacity-building framework can unlock investment potential for broadband

*Targeted capital investments paired with capacity-building infusions equip ecosystems to attract and deploy inclusive, community-centered broadband infrastructure. **The virtuous cycle of capacity building pictured right >***



2023 Inquiry Process

Last year, LISC interviewed more than 40 entities representing the telecommunications industry, private funders & impact investors, government agencies, and entities that advocate for at-risk communities

42 Comms
American Association for Public Broadband
Appalachian Regional Commission
Arctaris Impact Fund
Aristotle
Brookings Institution
Capital One
CCG Consulting
CoBank
Connect Humanity
The Enterprise Center
Final Span
HOPE Credit Union
Institute for Local Self Reliance
Just Transition Fund
Kinetic Ventures
Louisiana Broadband Office
Marc McCarty
Media Democracy Fund
Melissa Roberts Chapman
Milken Institute
Mississippi Broadband Office

National Digital Inclusion Alliance
New Markets Support Company
North Carolina Broadband Office
NTCA - The Rural Broadband Association
Open Broadband
Pew Broadband Initiative
RCAC - Rural Community Assistance Corporation
RCAP - Rural Community Assistance Partnership
RCRC - Rural County
Representatives of California
Region 10 Council of Governments
Reid Consulting Group
Richmond Federal Reserve
Student Freedom Initiative
T.L.L. Temple Foundation
Texas Rural Funders
Travois
United Church Homes
US Bank
USDA (Rural Partner Network)
Wisconsin Economic Development

Digital equity contributes to the mission-aligned investors' business case

Small communities that have had poor broadband often lag in digital literacy

Focusing on broadband adoption and use by all segments of a community is a key factor in the investment decision for many organizations – whether for grant, loan or equity investment. **We conclude that a digital literacy program should precede and coordinate with infrastructure construction.**

Digital literacy efforts increase the chance of success for a broadband infrastructure project and can drive the business case for the network operator because providing computers/tablets to homes without devices increases the number of potential subscribers.

Well-designed digital literacy trainings can have community-wide impact; for example, teaching people how to use devices to access resources and better their lives and supporting economic development by emphasizing work-at-home jobs. One hundred good-paying work-at-home jobs can be as impactful as attracting a small factory.

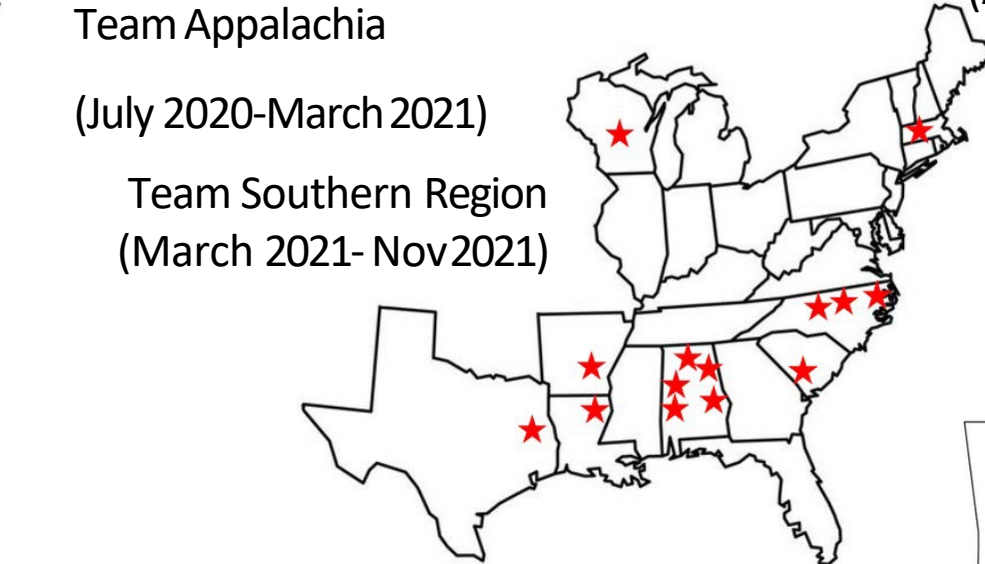
Any deeply anchored community organization is an ally in the effort to increase productive digital participation for all



Team Appalachia
(July 2020-March 2021)



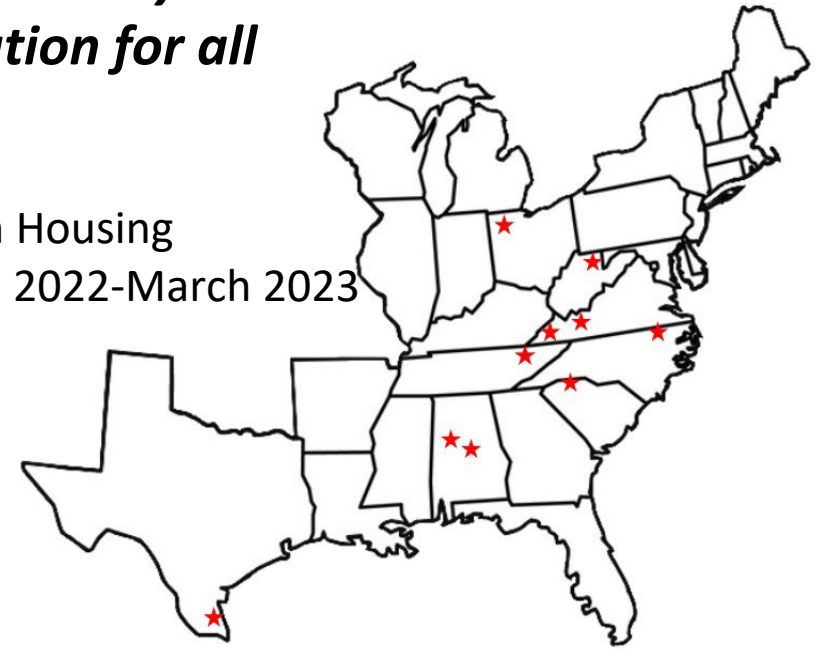
Navajo Nation



Team Southern Region
(March 2021- Nov 2021)



Team Midwest (May 2021- March 2022)



Team Housing
(April 2022-March 2023)



Team Arkansas
Statewide (March 2023-
March 2024)



Team Deep East Texas
(January 2023-August 2024)



BROADBAND & DIGITAL EQUITY MATTER

We are supporting community members in Rockingham and Alamance County with access to internet, devices and digital navigation.

We are charged with the following as part of this partnership.

**EDUCATE & ENROLL
SUPPORT
DEVICE NEEDS**

NC 100



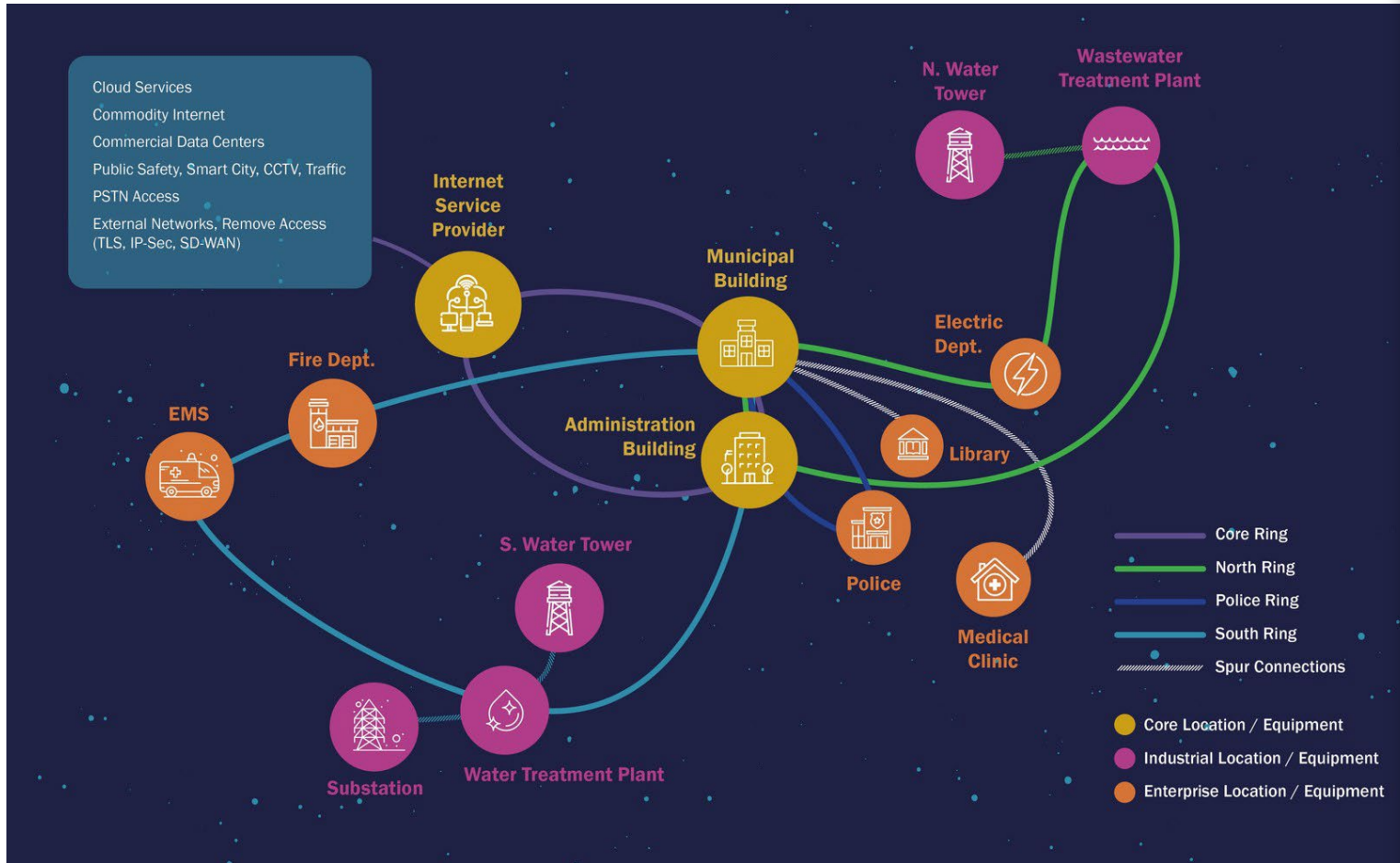
Human Infrastructure Moves Digital

LISC

Infrastructure *Forward* >>>



Broadband Builds Local Capacity



BRIDGING THE DIGITAL DIVIDE

THE ELMORE BOLLING INITIATIVE | **Championing Digital Equity & Inclusion: A Community-Centered Approach for the Alabama Black Belt**

The Elmore Bolling Initiative (TEBI) launched the Black Belt Digital Equity and Inclusion Coalition (BDEIC) in June 2022 to support a community focused and led digital inclusion program for the 17-county Alabama Black Belt region.

Recognizing that digital equity challenges come in many forms—financial, skills, awareness, and access—either to broadband infrastructure, or to the devices and skills needed to utilize online practices effectively, TEBI sought to engage communities at all levels to bring about change.

"We Are Better Together." TEBI is the lead agency convening regional stakeholders for BDEIC, with a vision to advocate and provide affordable internet access for all to live, work, and thrive in the South Central Alabama Black Belt region.

Regional informational meetings were held in November 2022 at the University of West Alabama in Livingston,

AL and at Alabama State University in January 2023, engaging more than 100 community stakeholders.

TEBI's outreach included sharing information in partner newsletters, at city council and county commission meetings, and through emails to targeted groups.

TEBI and its affiliate, GetWiredAlabama, a public-private partnership formed to expand broadband service, participated in all 16 of ADECA's Alabama Community Broadband Technical Assistance Program listening sessions in the Black Belt region in 2023, encouraging participants to take the broadband speed test and survey TEBI commissioned from Broadband Catalysts. Speed test data helps validate internet availability at broadband speeds and is key to the allocation of future public infrastructure capital projects grant awards. ADECA meeting participants were encouraged by TEBI to become community champions and serve as part of BDEIC. TEBI was warmly received at all meetings.

Clockwise: Aretha Dix, State Senator Bobby Singleton, and Jo McCall join ADECA's Hale County Technical Assistance Meeting. Hale County Superintendent Michael C. Ryans addresses attendees at Alabama State. Participants at University of West Alabama BDEIC meeting. Meeting with Bullock County Retirees Association President and Bullock County Chapter of ASU Alumni President James Cooks (second from left).

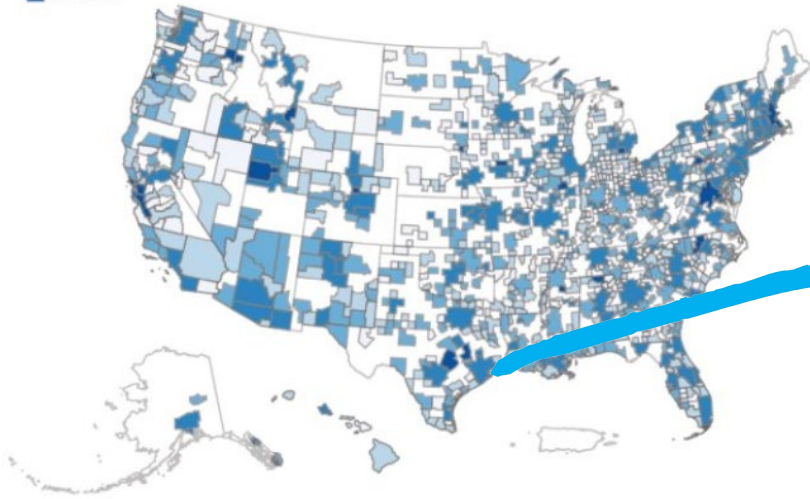




Broadband Key to Local Labor Market Strategy

Percentage of high digital occupations across U.S. metropolitan and micropolitan areas, 2020

% high digital
11% to 17%
17% to 20%
20% to 24%
24% to 30%
30% to 58%



Source: Brookings analysis of O*NET and Lightcast data

Brookings Metro

LevelUp RGV a digital workforce development program



What is LevelUp RGV?

IDRA has received a planning grant from Rural LISC to create an innovative public private partnership that will provide experiential learning opportunities and paid apprenticeships to the students of Rio Grande Valley, starting with Hidalgo, Cameron and Starr Counties. We will educate and train students, who we will call **TechXperts**, to become digital navigators and opportunities to help design and build the region. Together, IDRA along with Pharr.Net, Connect Humanity, Rural Service Center, ARISE Adelante, La Universidad, and other regional workforce partners, we

What will TechXperts Learn?

Curriculum includes but is not limited to:

- Tier 1 tech support IT skills
- Customer Service skills
- Personal Branding
- Digital Citizenship

Contact Now
210-444-1710 ext 1726



Christa Wagner Vinson • You
Senior Program Officer at Local Initiatives Support Corporation (LISC)
3mo •

In an excellent recent report from [The Brookings Institution](#) on why labor market strategies need to focus on broad-based digital skills adoption, Brownsville, TX was called out for landing at the bottom of the nation's "digitalization scale," meaning it has the lowest share of occupations that require higher-level digital skills. But, in just a few years, the region has moved from one of the least connected nationally to entire neighborhoods covered by fiber broadband with a take rate of over 90%, according to folks I talked to in neighboring [City of Pharr, TX](#). That's why I'm so pleased [Rural LISC](#) is supporting the [Intercultural Development Research Association](#) and [Jordana Barton-Garcia](#) in the launch of [LevelUp:RGV](#), a partnership of employers and training organizations making the needed investments in tech-centered roles that will result in a more resilient workforce. Call it a broadband-led workforce development agenda offering a powerful counternarrative to the data in real time!

2 comments • 5 reposts

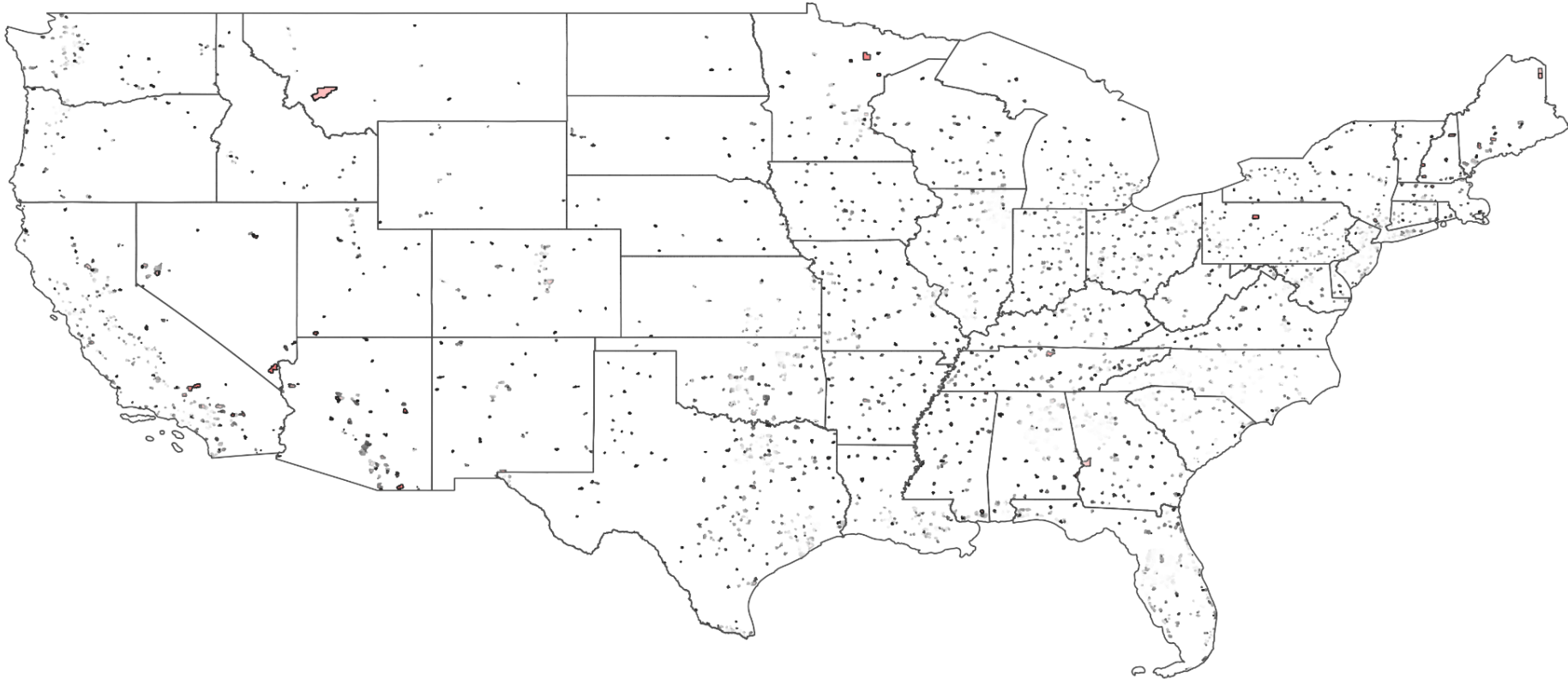
Comment Repost Send
View analytics

Geography of Opportunity

CDFI Priority Places with Population between 5,000 and 25,000

5,000 - 10,000 [1,679] places

10,000 - 25,000 [1,820] places



Shown on map: CDFI Investment Areas indicated are generic proxy census tracts at 80% or less of AMI; used as a proxy for typical mission-aligned investment markets*

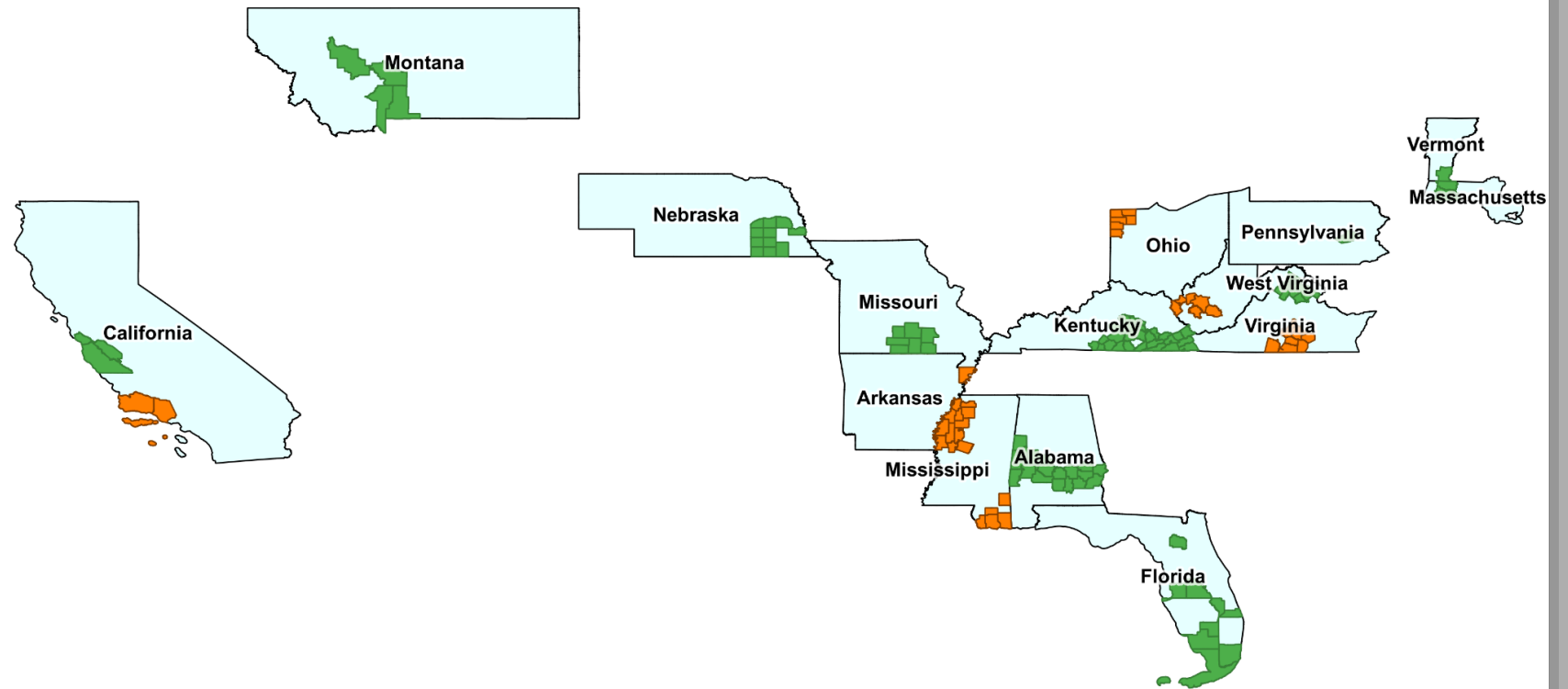
Geography of Opportunity

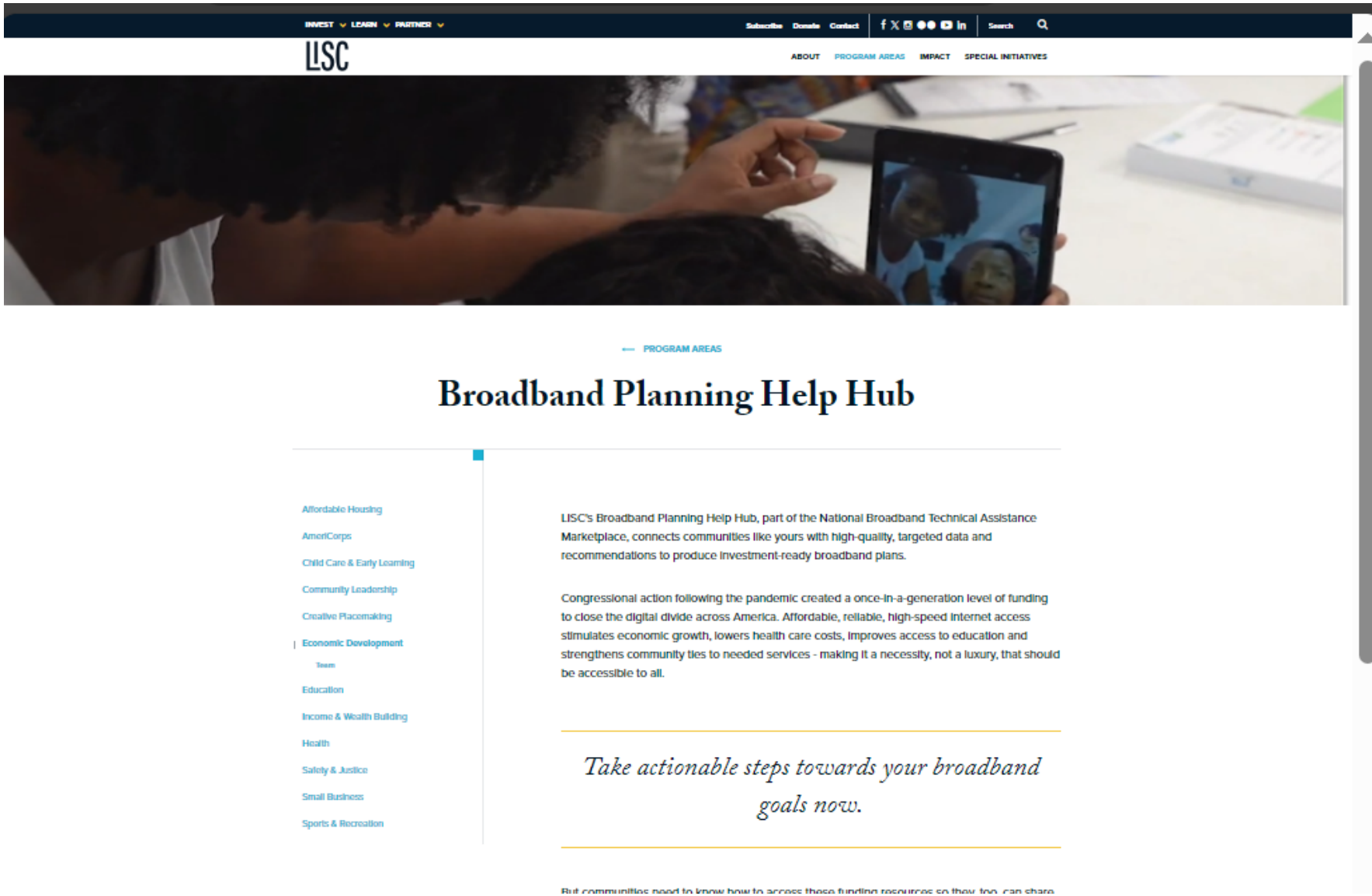
Rural LISC

Deployed \$1.1M in broadband pre-development grants that have leveraged more than \$40M in blended capital for network deployments. Maintains a network of partners with a range of broadband TA needs (shown).

Partner County Technical Assistance (TA) Status

- Low TA [97]
- High TA [48]





National Broadband Technical Assistance Marketplace

LISC is committed to producing broadband predevelopment plans for a select number of underserved communities over the next two years through our newly launched **Broadband Help Hub**.

We hope with help from partners we can further the planning process into financing and implementation.

Christa Vinson
cvinson@lisc.org



Q & A
