



Broadband Modeling and Engineering Feasibility

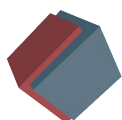
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Missouri Association of
COUNCILS OF GOVERNMENT

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REID
CONSULTING GROUP

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Contents

3	Glossary
4	Executive Summary
6	Background
10	Broadband Coverage Mapping
12	Recommended Solutions
13	Design Recommendations
14	Why Does Broadband Require Subsidy
16	Identifying Project Areas
18	Cost and Estimated Subsidy
20	County Cluster Gap Analysis & Project Recommendations
193	Appendices
194	Appendix 1: Broadband Mapping and Methodology
197	Appendix 2: Budget Projections
199	Appendix 3: FCC Challenge Process
222	Appendix 4: RPC / COG Overview Analysis
288	Appendix 5: Missouri ISP vendors

GLOSSARY

BEAD	The Broadband Equity, Access, and Deployment program, a federal subsidy program that will award up to \$1.7 billion for broadband deployment in Missouri.
cost-to-pass	The cost of installing communication cable along a utility corridor, passing close enough by homes and businesses to allow installation of drop cables to serve those locations.
County Cluster	Designated county groups determined by MACOG and the directors of the Regional Program Councils and Councils of Government for in-depth analysis to identify potential broadband project areas.
funding gap	The difference between the total cost to build a last mile network and the amount an ISP would be willing to invest in that network. As population density and average revenue per user drops, the funding gap rises.
ISP	An acronym for Internet Service Provider.
last mile	The technology that bridges the distance between the Internet service provider's network and the end user (customer).
location	A location in the FCC Fabric which represents a "Broadband Serviceable Location" which consist primarily of households and small businesses.
make-ready	The process and cost of preparing an existing utility corridor for a new communication cable attachment.
Mbps down / download speed	The rate that digital data is transferred from the internet to your computer or device, measured in megabits per second. Download speed affects streaming services, web page load times, and file downloads like images, videos, and device updates.
Mbps up / upload speed	The rate that data is transferred from your computer to the internet, measured in megabits per second. Upload speed is important for video calls, telehealth sessions, remote work and online learning, live gaming, and sending email attachments
middle mile	The communication network segment between the network backbone to a local network.
subsidy	A sum of money from a government or granting agency to offset the cost of installation or deployment of internet infrastructure by a public or private entity.
underserved	Any home or business that has an internet speed of less than 100 Mbps down and 20 Mbps up, often written as 100/20 Mbps.
unserved	Any home or business that has an internet speed of less than 25 Mbps down and 3 Mbps up, often written as 25/3 Mbps.

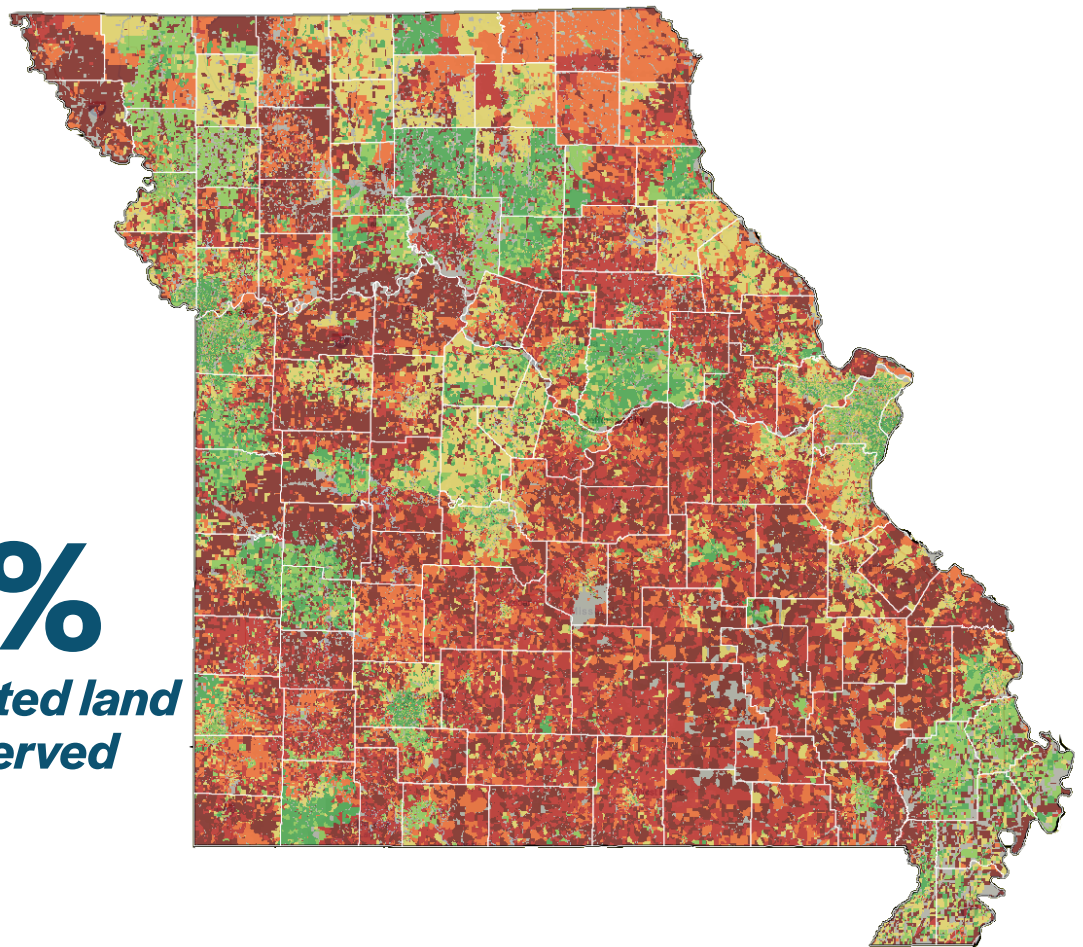
Executive Summary

In spite of past federal attempts to bring broadband to rural America, the digital divide remains a pressing reality for Missourians. According to coverage maps developed by Reid Consulting Group, more than 19% of all locations in the state of Missouri are unable to obtain FCC minimum broadband speeds of 25 Mbps down and 3 Mbps up. This translates to 59% of the populated land in the state.

With internet demand increasing tenfold every decade, Missouri needs a high-capacity network that not only meets today's needs but also has enough capacity and longevity to remain useful in 2055 and beyond.

1.2
MILLION
locations

84%
*of populated land
is underserved*



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

SCOPE

This report examines broadband availability at the state, RPC/COG, and county levels with special focus on 47 rural counties organized into 15 geographic clusters. MACOG created these clusters in consultation with RPC/COG directors to offer planning to counties with significant need, which also may not have benefited from past efforts. The original scope included 42 counties, but two counties were added partway through the engagement, and three additional counties were added outside of the clusters for technical assistance bringing the total to 47.

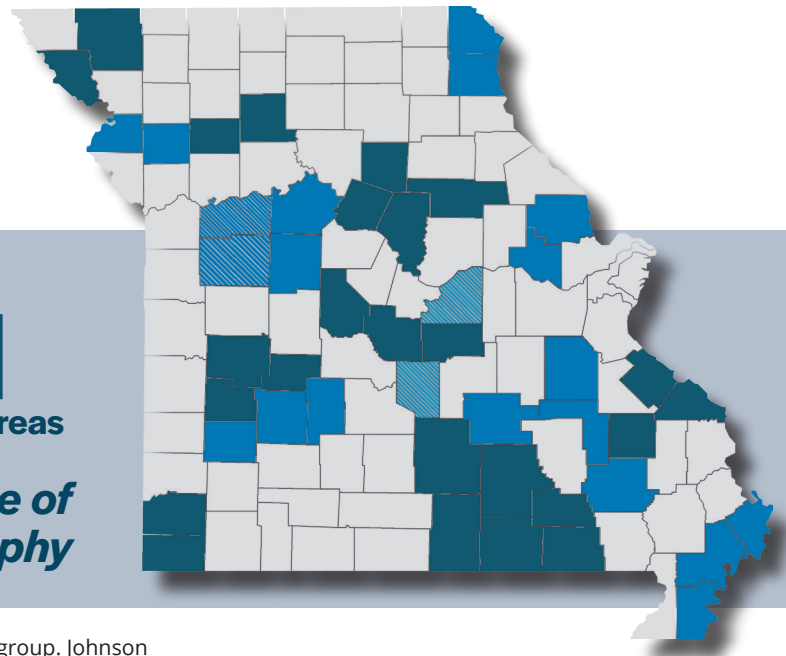
Carrier overstatements of coverage, especially fixed wireless, remain a problem in rural America. In Missouri, our statewide speed test analysis identified 792,000 unserved and significantly underserved locations. Many of these are claimed as served in the FCC's official maps, including 80,000 unserved locations that would be rendered ineligible for future funding. To address this issue, RCG filed 285,000 FCC bulk challenges on behalf of MACOG in two separate rounds, details can be found in [Appendix 3](#).

To help direct funding where it would have the most benefit, RCG overlaid speed ratings with existing grant awards in each rural RPC/COG to identify gaps in coverage. We then conducted detailed analyses for each of the 44 cluster counties, defining project areas and building financial pro formas to estimate the cost to deploy fiber, the anticipated ISP investment, and any resulting funding gap for each area. RCG presented these findings at multiple meetings with RPC/COG directors, the MACOG board, the Missouri Office of Broadband and stakeholders.

County cluster recommendations, RPC/COG gap analyses, and the statewide broadband overview all are detailed in separate sections below. Additional information about our speed rating methodology and FCC challenge process can be found in separate appendices.

43* | **15** | **71**
counties | clusters | project areas

***Representing the full range of
Missouri geography and topography***



*RCG analyzed total of 47 counties, 43 of 47 were part of a cluster group. Johnson, Lafayette, Pulaski, and Osage Counties were under the technical assistance portion of the Scope of Work (indicated with a hash on the map)

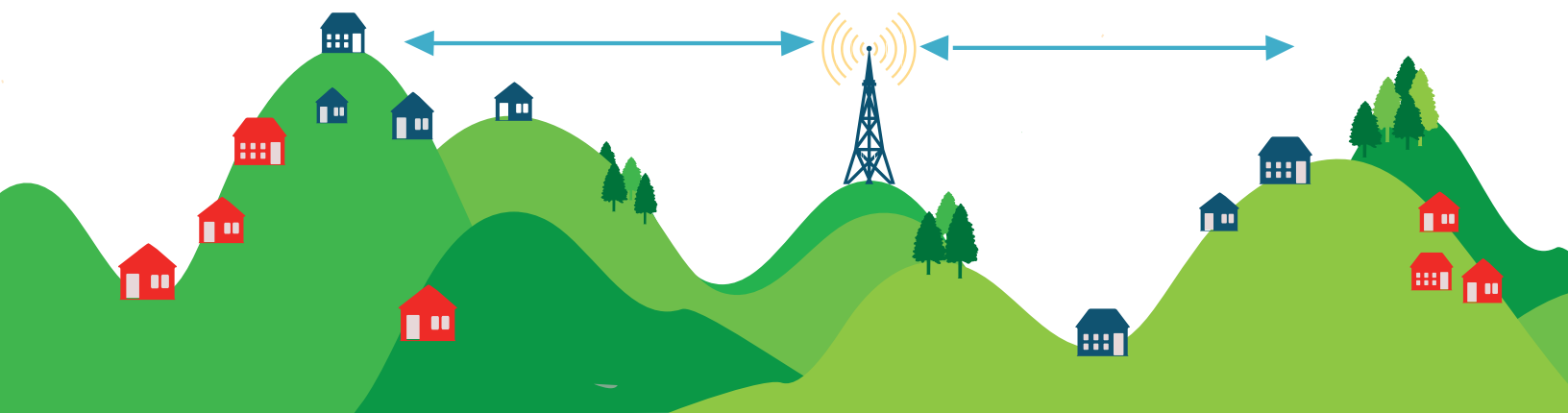
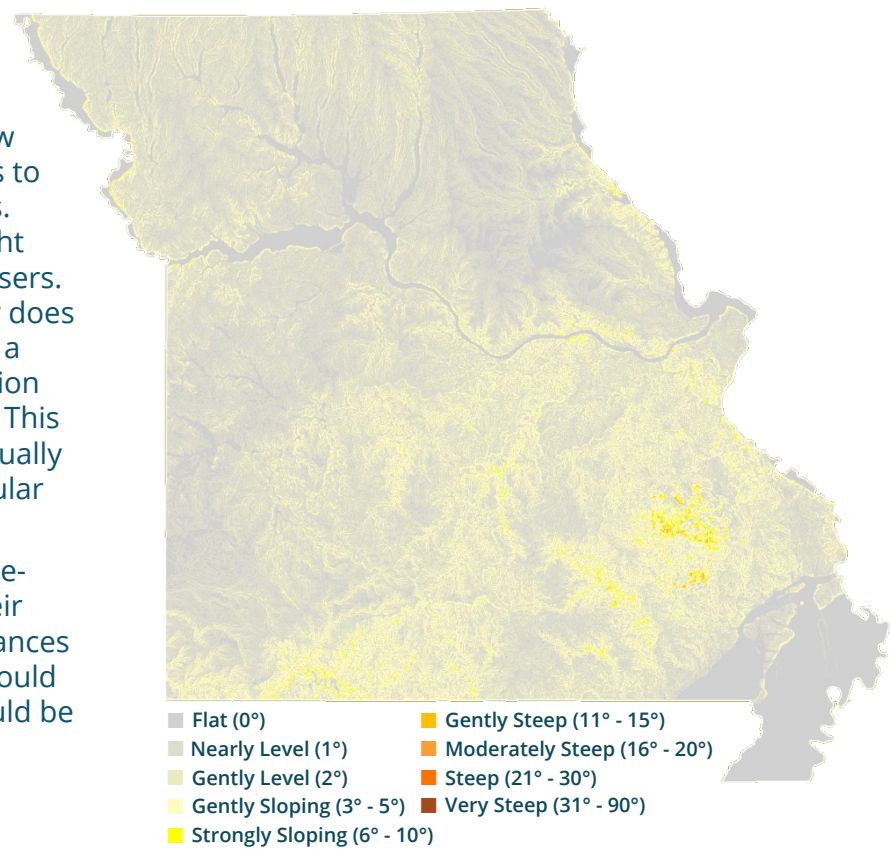
EXISTING INFRASTRUCTURE CHALLENGES


Broadband deployments in Missouri face three significant challenges: rugged terrain, dense canopy cover, and outdated infrastructure.


TERRAIN

The region’s steep hills and narrow valleys present significant barriers to both wireless and wired providers. Wireless coverage uses line-of-sight transmission from tower to end users. If a wireless provider’s transceiver does not have an unobstructed view of a home or business, then that location will not be able to receive service. This “terrain shadow” effect applies equally to fixed wireless Internet and cellular service.

While some vendors claim non-line-of-sight (NLOS) capabilities for their wireless equipment, the circumstances under which such NLOS signals would provide adequate broadband would be exceptionally rare.

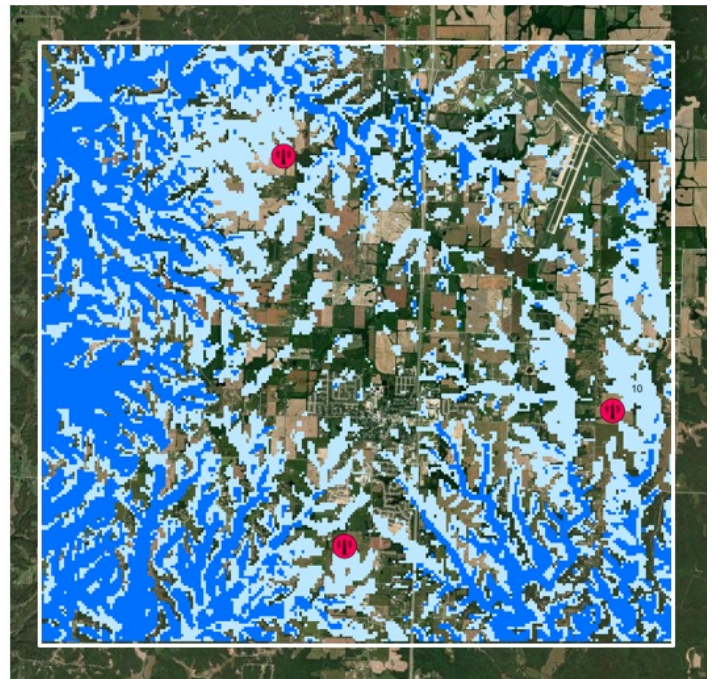


  have unobstructed view (line of sight) of tower likely to receive service

  have an obstructed view due to terrain NOT likely to receive service

As part of the FCC bulk challenge process for fixed wireless, we conducted complex viewshed analysis for representative locations across the state to demonstrate the limitations posed by rugged terrain. We modeled signal propagation from three strategically placed, hypothetical 300-foot towers, color coding the map in areas that would have poor or no signal. These analyses showed that in all but the flattest terrain, many areas would be able to “see” just one tower, and a significant portion of locations would have no service at all.

Wired coverage, whether cable or fiber, also can be challenging to deploy in rugged terrain. With bedrock often close to the surface, providers typically must depend on aerial cable installations. In most cases, this means working with utility companies to attach new cable to existing poles. Although fiber optic cable is lightweight compared to power lines, the additional cable span still represents a significant increase in wind and ice loads on the pole structures.



■ No Line of Site ■ Only 1 Tower Visible
● Tower Location (theoretical)



OUTDATED INFRASTRUCTURE

With the exception of some larger cities and towns, the only presently available infrastructure to carry wired broadband in rural areas is copper telephone cable.

When properly maintained, copper cable can support DSL internet service at speeds that meet the current federal minimum of 25 Mbps down and 3 Mbps up; however, most of the cables in the region were installed over 50 years ago and have seen little maintenance since then. At this point, rural copper cable is in such poor condition that it is unable to support reliable landline telephone service, let alone high-speed broadband.

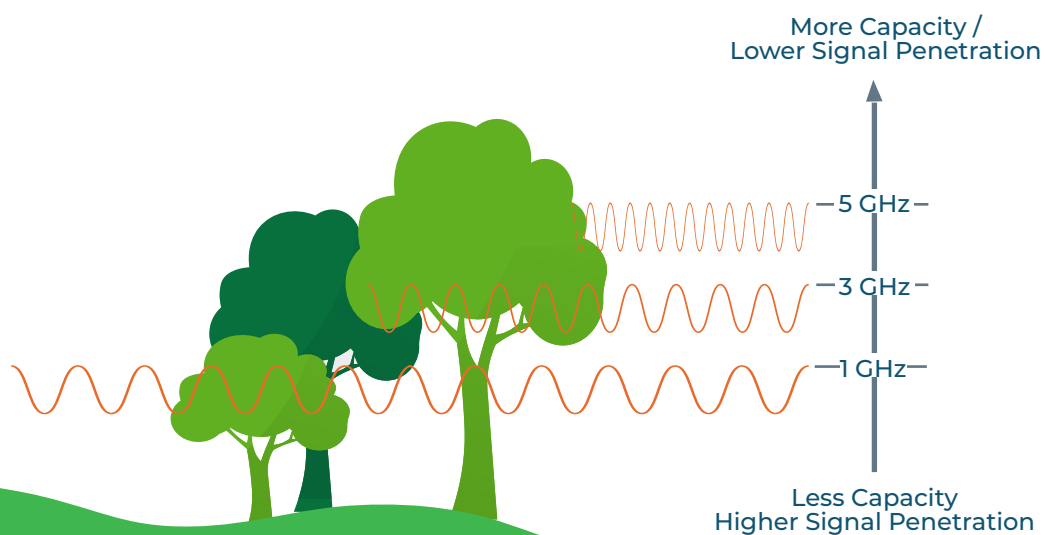
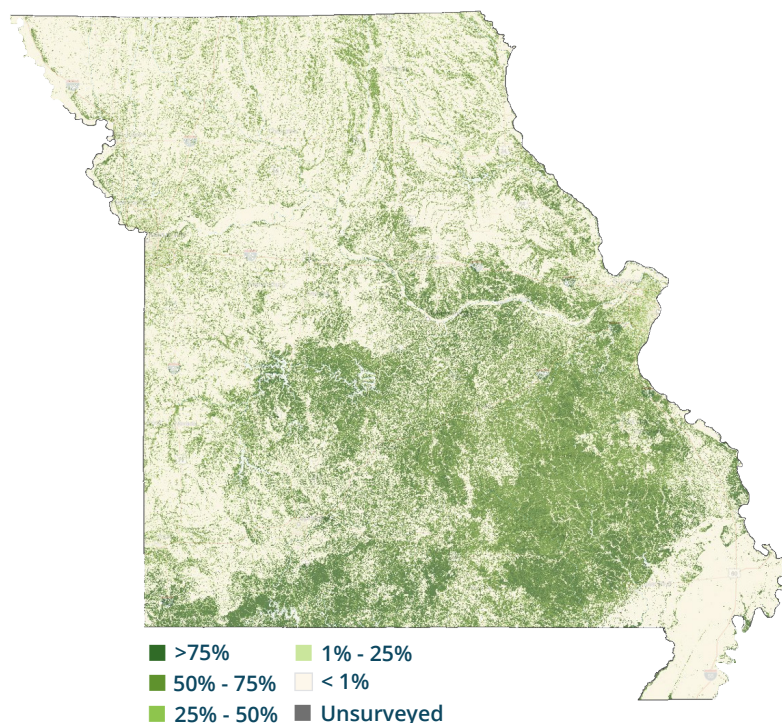
Replacing DSL with fiber has its own challenges. In areas where aerial installation is the preferred option, aging poles may need to be replaced to avoid breaking under the added strain. Also, new cables sometimes cannot be added without violating minimum ground clearance requirements. In this case, the pole ends up needing to be replaced with a taller pole. These “make-ready” costs add up quickly, leaving providers less willing to invest in new cable runs.



CANOPY

Many of the frequencies used by fixed wireless and satellite providers can be attenuated or completely absorbed by the water in tree leaves. First generation, 900 MHz fixed wireless technologies are less susceptible to canopy absorption; however, those frequencies also have limited bandwidth compared to the more popular 2-5 GHz bands. These higher frequencies provide much more capacity, but they also are subject to significant signal loss in heavily forested areas. Satellite services like Starlink that operate at 5 GHz and above can be completely blocked by even a single tree if that tree is in the signal path. Fixed wireless systems capable of delivering reliable service at 10,000 meters in flat, open terrain can be rendered unusable in as little as 100 meters in rugged, densely forested areas.

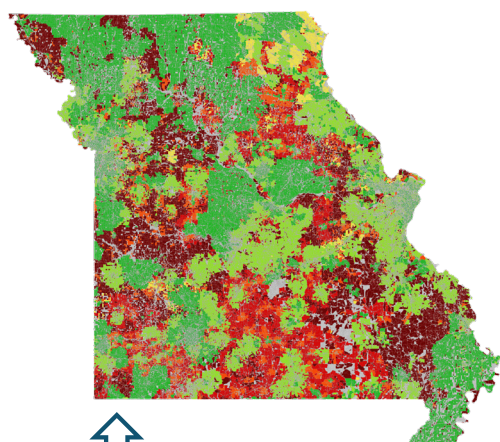
Fixed wireless could be a viable solution in sparsely populated agricultural areas and bottomlands, especially in regions where population density falls below the minimum for a sustainable fiber build. In areas with significant tree canopy or steeper terrain, fiber is a much better option.



Broadband Coverage Mapping

To address broadband availability issues in the region, it is essential to identify the true extent of the problem.

The maps in this report use a rating system developed by Reid Consulting Group that combines four components: Ookla Speedtest Intelligence® data licensed by MACOG for the months of December 2020 through December 2023 with FCC carrier filings of available speeds, carrier reports of actual broadband deployments to USAC (HUBB), RDOF Phase 1 eligibility, and population density. This rating system makes it possible to identify broadband availability at the census block and census block group levels. For additional details on this methodology, see [Appendix 1](#).



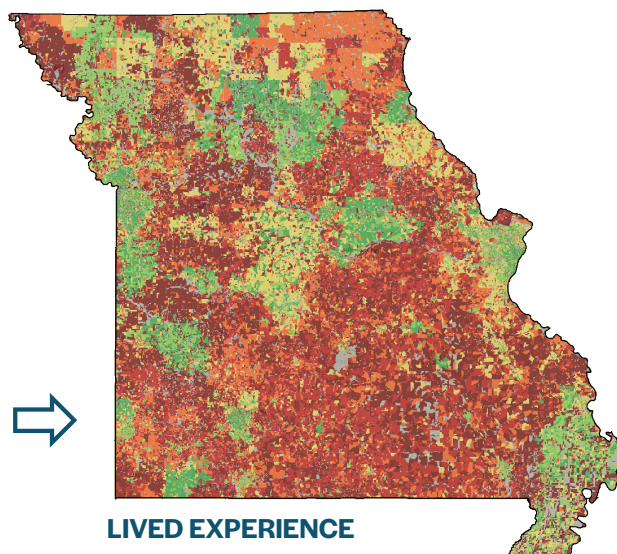
203,590

LOCATIONS UNSERVED

based on unverified carrier claims to the FCC

STATE OF MISSOURI

At the state level, there are 400,027 locations identified as federally unserved, representing 16% of total locations in the state. In comparison, the FCC believes there are only 203,590 unserved locations.



400,027 ⇒

LOCATIONS UNSERVED

based on independent speed test results at maximum speed

LIVED EXPERIENCE

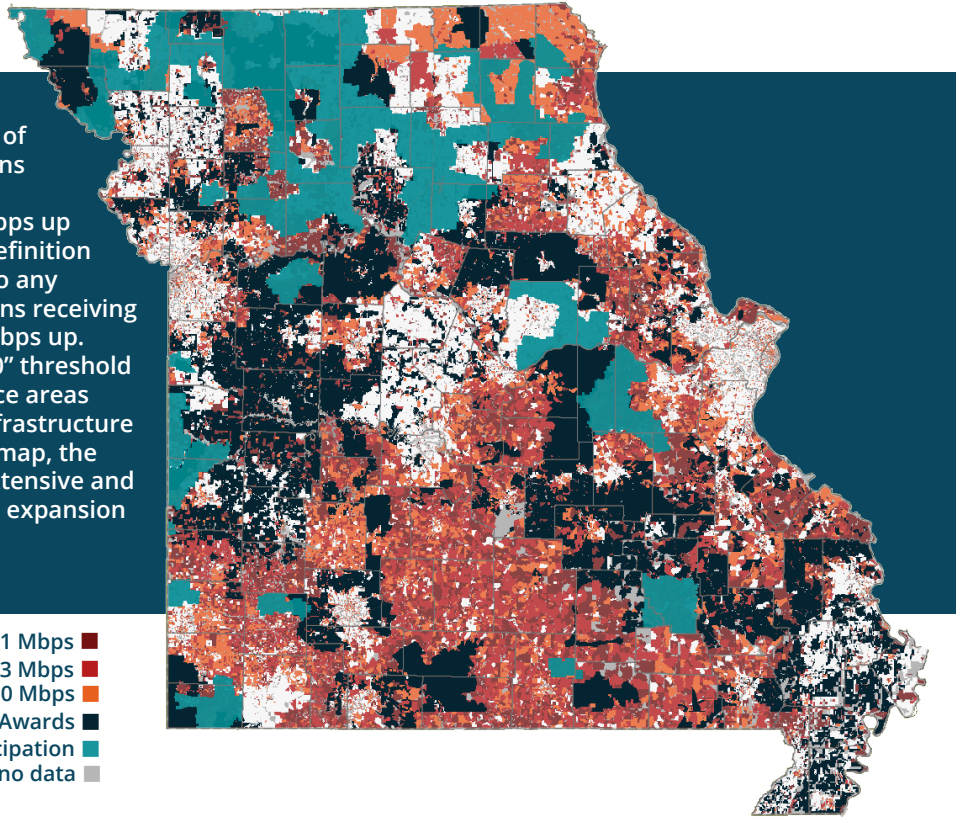
■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

¹ The FCC has acknowledged that their coverage estimates are not accurate and has begun a campaign to improve its maps; however, the new Fabric that was released in anticipation of the BEAD program suffers from the same overstatements and lack of verification as the old Form 477 maps.

BRIDGING THE GAP

RCG recommends a focus on areas of the State “Below 50/10” which means that reliable broadband services at speeds of 50 Mbps down and 10 Mbps up remain unavailable. The Federal definition of “underserved” extends further to any location “Below 100/20,” i.e. locations receiving less than 100 Mbps down and 20 Mbps up. Our analysis finds the “Below 50/10” threshold generates logical, contiguous service areas that remain in dramatic need of infrastructure investment. As you can see in the map, the “Below 50/10” coverage remains extensive and thus warrants focus for broadband expansion

Below 10/1 Mbps ■
Above 10/1; Below 25/3 Mbps ■
Above 25/3; Below 50/10 Mbps ■
Areas with State or Federal Awards ■
Areas with E-ACAM carrier participation ■
null / no data ■



The FCC’s Connect America Model (CAM) is a long-standing subsidy program that pays telecommunications carriers to offer broadband in their landline telephone territories. The original model targeted 10/1 Mbps. The “alternative” model (ACAM) upped that to 25/3 Mbps. The most recent, “enhanced alternative” model (E-ACAM) offers additional subsidy to carriers who agree to increase speeds to 100/20 Mbps. By the late October 2023 deadline, several of the Missouri-based ACAM providers elected to accept the FCC’s E-ACAM offer. As such, these areas become ineligible for BEAD and most other sources of broadband grant funding.

E-ACAM elections will affect 29 project areas in 13 cluster counties, including 10 project areas that have at least 75% of their total area covered by E-ACAM. Because this development came at the end of RCG’s period of performance, there was not enough time to redraw project boundaries and recalculate the financial estimates for those areas. Instead, we have flagged the affected project areas in each county cluster report and have excluded project areas with 75% or more E-ACAM coverage from our summary numbers. Project areas with less than 75% coverage remain in the overall calculations, but it should be noted that actual costs and scope will be lower for those areas once the E-ACAM overlap has been excluded.


Development Districts

There are 19 regional development districts in the state of Missouri. The MACOG-defined county clusters we focus on in this report include counties from 17 of those districts. The only districts not represented are the Mid-America Regional Council and the East-West Gateway Council of Governments, both of which include a significant number of urban locations.


To provide broader context for the cluster reports, we conducted baseline gap analysis for all of the counties in each of the 17 rural development districts. We also provided broadband availability data to the two urban districts.

percentage is of the populated area

RPC / COG	total number of counties	unserved locations	unserved sq. miles	underserved locations	underserved sq. miles	locations per fiber mile
Boonslick	3	18,891	37%	31,430	62%	16
Bootheel	6	11,075	16%	35,226	51%	11
Green Hills	11	17,326	30%	38,078	67%	6
Harry S Truman	4	24,886	26%	54,799	58%	16
Kaysinger	7	33,894	52%	52,807	82%	8
Lk of the Ozarks	4	20,351	24%	61,058	77%	14
Mark Twain	8	18,062	25%	41,153	58%	9
Meramec	8	41,527	39%	75,461	85%	11
Mid-Missouri	6	11,075	11%	35,226	33%	18
Mo-Kan	4	8,097	12%	15,057	25%	16
NE Missouri	6	13,383	45%	23,721	76%	6
NW Missouri	5	10,014	40%	15,970	64%	5
Ozark Foothills	5	18,754	45%	29,998	73%	9
Pioneer Trails	4	23,660	34%	49,884	76%	11
SC Missouri	7	41,374	64%	59,192	93%	8
SE Missouri	7	30,846	25%	75,029	73%	16
SW Missouri	10	66,682	22%	121,888	43%	19



**BELOW
25/3 Mbps**



**BELOW
100/20 Mbps**

Detailed broadband profiles for each Regional Planning Commission and Council of Government can be found in [Appendix 4](#).

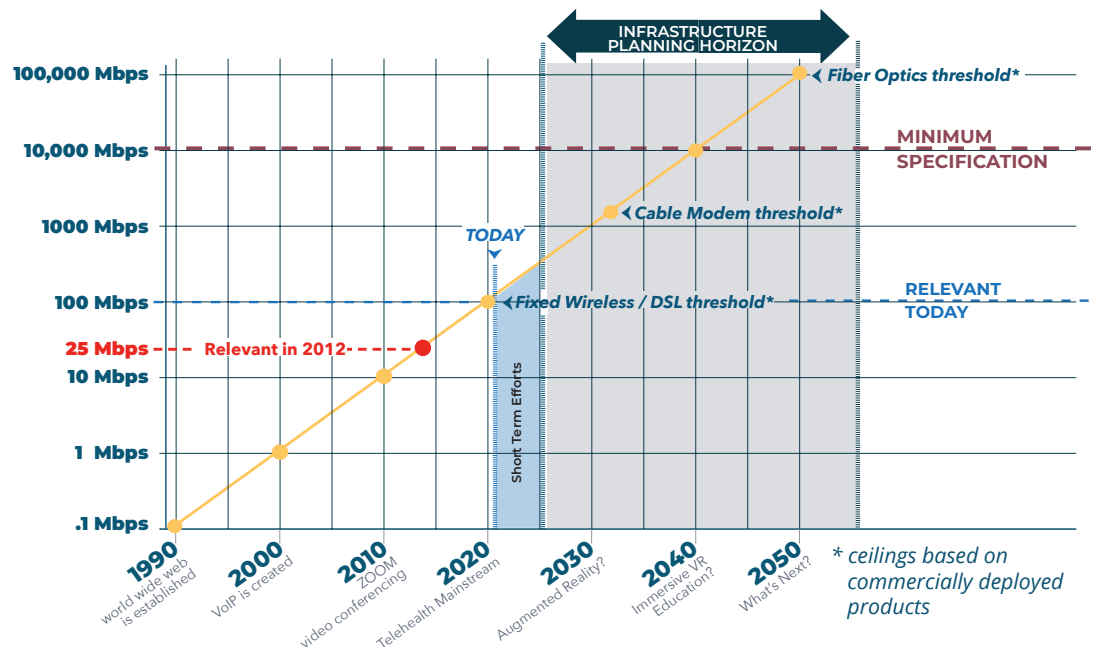
Recommended Solutions

BUILDING FOR THE FUTURE

For planning purposes, broadband deployments must be treated like infrastructure projects. Much like water, sewer, and roads, broadband networks should be designed to last decades rather than years. Networks installed today should utilize technologies, materials, and design specifications that will deliver 30-to-40-year longevity. Networks also should have sufficient capacity to meet not only current needs but also those of 2055.

Given the capital costs and construction requirements for broadband, we recommend a planning window that starts in 2025 and continues through 2055. This timeline assumes a three to four year deployment window which will vary based on project size, supply chain complexities and labor availability.

Since the web was invented in 1990, broadband demand has increased ten-fold every decade.



When home internet first became common, most households connected using landline modems that operated at 56 Kbps (0.056 Mbps). By 2000, speeds had increased to 1 Mbps. A decade later, a well-served household could expect 10 Mbps. The FCC's current 25/3 Mbps threshold was last relevant in 2012, when the average download speed reached 25 Mbps. Currently, someone living in a well-served area can expect at least 100 Mbps down/20 Mbps up.

With remote work and learning, telehealth, and virtual reality quickly becoming mainstream, it is not difficult to imagine the average speed reaching 1,000 Mbps (1 Gbps) ten years from now. In fact, many internet providers already offer 1 Gbps and 2 Gbps plans with business connections and some residential connections routinely operating at 10 Gbps. Some backbone and middle mile networks already operate on 100 Gbps and 400 Gbps connectivity.

CHOOSING THE RIGHT TECHNOLOGY

Currently, a variety of technologies are available to deliver broadband service. Each of these technologies has specific advantages and disadvantages; however, given a 30-year planning window, the most important criteria are speed and longevity. Barring future improvements, fiber optic is the only technology available today that can deliver speeds in excess of 100 Gbps. Most other technologies have a maximum speed of between 100 Mbps and 1,000 Mbps (1 Gbps).

Fixed Wireless

Fixed wireless offers relatively quick deployment times and lower initial costs compared to fiber; however, the technology uses line-of-sight transmission and is limited in its overall bandwidth. In areas with rugged terrain, the service will be unable to reach customers who live in steep valleys with one or more ridges between their location and the provider's tower. Most fixed wireless services top out at 1 Gbps of shared bandwidth. In areas with favorable terrain and a high take-rate, that bandwidth will quickly become oversubscribed. Some manufacturers have begun deploying fixed wireless transceivers and advanced antenna arrays that can reach gigabit speeds, but these technologies remain limited to line-of-sight between the tower and end user. Due to these limitations, fixed wireless deployments make the most sense only in flat areas with extremely low population densities that would be insufficient to support operations of a fiber network.

DSL

DSL theoretically tops out at around 100 Mbps, but those speeds are only achievable if landline telephone cabling is in good condition. Given that most of the copper cabling in the state is 2-3 decades beyond its expected lifespan, DSL providers will be hard pressed to meet even a 25 Mbps threshold.

Fiber to the Home

Fiber optic cabling is the only technology available today that is capable of meeting the 100 Gbps speed threshold predicted for 2055. In fact, 10 Gbps fiber-to-the-home deployments are becoming increasingly common in affluent communities. Fiber does have significant up-front capital costs, but those costs are balanced by low ongoing maintenance and excellent longevity. Researchers have yet to discover an upper speed limit for fiber, meaning that high-quality fiber installed today can support ever-increasing speeds simply by replacing the electronics on each end of that cable.

Cable Modem

Cable TV-based internet services have good download capacity, with many providers offering 1 Gbps and 2 Gbps packages; however, upload capacity can be a problem. Even the fastest cable download packages can struggle to exceed 10 Mbps upload. Thus, areas with existing cable infrastructure may meet current download demand, but the technology will increasingly show its limitations as video conferencing and virtual reality sessions become more common. For most Cable TV systems, a relatively inexpensive upgrade can address the current upload constraints.²

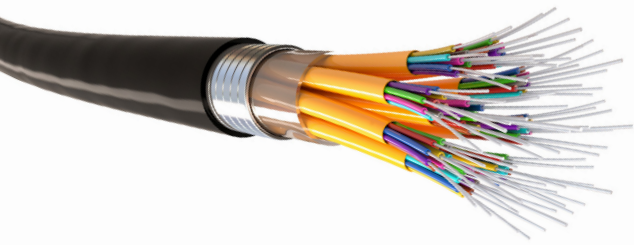
Satellite

Satellite services are capable of providing 100 Mbps, but they have limited expansion capacity. Also, the amount of time it takes for a data signal to reach a high orbit satellite and return to earth can cause poor performance for video conferencing and other services that depend on low latency. Low-orbit services like Starlink solve the latency issue but remain limited in overall capacity. Also, rugged terrain and even moderate foliage can block access to the Starlink signal.

²When deploying in new territories, many cable providers are moving to fiber optic instead of expanding their existing COAX/DOCSIS systems. It also is possible to perform a "high split" upgrade on older cable technology to improve upload capacity.

Design Recommendations

FIBER TO THE HOME



Fiber optic cable currently is one of the longest lasting solutions for broadband delivery. The cable itself can be expected to last upwards of 30 to 40 years, and its speed is limited only by the electronics attached at each end. As electronics improve, an existing fiber network can be repeatedly upgraded simply by replacing those electronics. This is significantly less expensive than replacing or upgrading other forms of cable infrastructure.

HIGH QUALITY : HIGH STRAND COUNT CABLE

All of the budget recommendations in this report assume a fiber network with enough capacity to remain useful in 2055. To build such a network, Reid Consulting Group recommends the use of armored, high strand count cables with:

- A minimum of one dedicated fiber strand per household
- A minimum of 50% additional fiber strands to support population growth and future requirements
- Sufficient extra strands to support cellular tower expansion, 5G, and SmartGrid deployments

These cables should be installed to rigorous industry standards such as the USDA Rural Utility Services specifications.

AERIAL INSTALLATION

[vs]

UNDERGROUND

Burying fiber can avoid utility pole attachment fees and associated make-ready costs required for aerial installations. Such savings in pole-related costs must be weighed against the total cost of going underground. Costs can vary widely based on burial depth, the presence or absence of other underground infrastructure, the need to bore beneath roads, how much rock is encountered, and whether conduit is used versus direct burial. Some parts of the state may lend themselves well to underground installations while others may be cost prohibitive. For areas with a moderate incidence of surface rock, it is estimated that burying fiber in conduit to a depth of three feet (the preferred approach for long term durability) would cost between \$105,000 to \$185,000 per mile in total. In areas with high incidence of surface rock, buried installations become cost prohibitive for last-mile projects. By comparison, aerial fiber over similar quality and durability will cost between \$85,000 and \$120,000 per miles (including the make-ready costs).

Why does broadband require subsidy?

While rugged terrain and a lack of modern infrastructure play a part in perpetuating the digital divide, population density is the main factor that has prevented internet providers from investing in rural locations.

Broadband infrastructure is expensive. High quality, high strand-count fiber optic cable can cost between \$85,000 and \$120,000 per mile to install on existing utility poles. Burying fiber in conduit can increase this cost in some locations to as much as \$185,000 per mile. Given these capital expenses, internet providers typically only deliver service in locations with enough potential customers to recoup those expenses. This fiscal caution can be seen in statewide broadband speed maps.

BUDGET CONSIDERATIONS

COST PER MILE

Building a fiber network involves three basic expenses: preparing utility corridors to support fiber optic cables for aerial installation (make-ready), installing fiber along those corridors, whether aerial or underground (cost-to-pass), and connecting individual homes and businesses to the new fiber (cost-to-serve).

MAKE-READY

As part of any broadband deployment, electric utilities must modify or replace at least some of their poles to accommodate increased cable weight, wind and ice loads, and limited clearance between power lines and aerial communications cabling. These costs vary based on electric provider and the kind of cable being installed. A heavier cable may require more make-ready than a lighter one.

Make-ready costs can vary significantly from one utility provider to another. In this report, we assume a make-ready of \$25K to \$55K per mile to accommodate high strand count cables that require strand-and-lash support. This figure is approximately what it would cost to build an independent communications pole network as a last resort, should ISPs and local utilities be unable to reach an acceptable agreement.

	LOW	HIGH
Make-Ready	\$25,000 ³	\$55,000
Cost to Pass	\$60,000	\$65,000
TOTAL	\$85,000	\$120,000

COST TO PASS

Fiber optic comes in a wide range of styles, from lightweight household drop lines to high-capacity, armored cable sheaths that bundle hundreds of fiber strands together to carry massive amounts of data. Household drop fiber is inexpensive and puts less strain on utility poles, but it has limited capacity. Broadband speeds have increased 10-fold every decade since 1990. To ensure that a fiber network built today remains useful 40 years from now, this report assumes the use of high strand-count cables.

While a provider could deliver rural broadband that meets current state and federal speed requirements using only low strand-count household drop cable, such a network would offer little flexibility to expand services or increase speeds as demand rises. Material and labor costs for high strand-count fiber are estimated at \$60K to \$65K per mile.

³ Some industry groups estimate make-ready as low as \$5,000-10,000 per mile. Such estimates generally either assume the pole owners will make up the difference or that low strand count drop cables are being deployed.

Identifying Project Areas

This report is meant to be a practical planning tool to help local, regional, and state officials advocate for subsidized broadband expansion projects in areas where grant money would have the greatest impact. RCG drew multiple project areas in each cluster county based on broadband availability data, speed ratings, and state/federal award territories as of July 2023.

Developing the cluster county project areas was a three-step process:

Mapping existing broadband availability and federal/state awards.

Conducting gap analysis to identify areas that remain unfunded and either unserved (below 25/3) or significantly underserved (below 50/10).⁴

Drawing project outlines and calculating the total number of locations, businesses, and miles of fiber needed to reach those locations/businesses.

[1]

MAPPING

RCG plotted existing broadband availability at the census block and block group levels using our 6-tier speed rating analysis. We then developed state and federal award layers based on multiple sources, including the FCC, the USDA, the NTIA, and the Missouri Office of Broadband Development. Next, we plotted the locations of all businesses in the rural portions of the state and graded each location's expected broadband demand based on business size and industry sector.⁵ Finally, we obtained an FCC Fabric license on behalf of MACOG to support location-based grant applications and statewide bulk availability challenges.

[2]

GAP ANALYSIS

To identify areas of need that remain unfunded, we superimposed existing award layers on statewide speed ratings using a simplified color scheme. All existing state and federal awards were "blacked out" to make it easy to identify areas that would not be eligible for future funding. We then created multiple speed rating layers that focused on specific levels of need: below 25/3 Mbps, below 50/10 Mbps, and below 100/20 Mbps. These ratings used variations on a single shade of red to make it easier for viewers to see areas of need. RCG conducted this gap analysis at the RPC/COG level and presented our findings to RPC/COG directors, staff, and stakeholders in June 2023.

⁴ For a detailed explanation of our mapping methodology, see [Appendix 1](#).

⁵ Business locations, number of employees, and industry sectors are based on data obtained from Dun & Bradstreet on behalf of MACOG.

[3]

CRITERIA FOR DRAWING PROJECT OUTLINES

During gap analysis, it became clear that 25/3 Mbps and 50/10 Mbps were the most useful thresholds for project planning. Areas below 25/3 typically fall into clear patterns of contiguous blocks that reflect population density and terrain. Bumping the threshold up to 50/10 Mbps expands those footprints and, in some cases, highlights additional areas of poor service in other parts of the county in question. In both cases, the patterns of need remain clear.

At the full federal threshold of 100/20 Mbps, however, many counties saw nearly all of their unfunded territory flagged as underserved. While we are confident that this rating does reflect on-the-ground reality, grant applications in “high-underserved” areas that are above 50/10 but below 100/20 will face more funding challenges than areas below 50/10 Mbps. For example, many high-underserved areas correspond with existing cable providers’ territories. Cable modems are capable of delivering download speeds as high as 2 Gbps, but they struggle to reach even 10 Mbps up. In our mapping scheme, this imbalance results in many cable territories being rated as underserved. While this rating is accurate, cable providers are likely to challenge any grant applications in their service areas. Given the number of locations that remain completely unserved and the clear delineation between 50/10 and 100/20, we chose to focus on the below 25/3 and below 50/10 speed tiers when drawing project outlines.

While a case can be made for including every unfunded location that rates below 50/10 Mbps in any given county, we made the following refinements to our project area criteria:

Separate unserved from underserved *when feasible*

Because the BEAD program prioritizes funding for areas below 25/3 Mbps, in places where it made geographic sense we drew project boundaries to emphasize unserved territory. For example, if an unserved area was bordered by an underserved area that rated above 50/10 but below 25/3, we drew two project outlines, one for the unserved territory and one for the underserved. On the other hand, when unserved and underserved blocks are mixed together, we did not attempt to split them out, instead drawing boundaries based on geographic boundaries like rivers, major highways, or railroad rights of way.

Proximity to Existing Awards

Many existing grants like the FCC’s Rural Digital Opportunity Fund (RDOF) and the USDA’s ReConnect program use census blocks to identify funded locations. Because census block boundaries often follow road centerlines, homes and businesses on one side of a road can be marked as funded while locations on the other side of the road are not. Such unfunded locations would be eligible for additional funding, but they are not attractive project targets for two reasons. First, those locations are likely to be served as part of the existing award recipient’s build out. When an ISP is running fiber along a road to serve homes on one side, it makes financial sense to extend service to the other side of the road, too. Likewise, if a single block with a handful of unfunded locations is completely surrounded by funded territory/roads, it is likely that those locations will be included in the awardee’s build out.

As a general rule, we avoided including these sorts of “funding adjacent” locations in project areas unless those locations’ roads were needed to complete a larger project area.

Accommodate Range of Project Sizes

In some cluster counties, it would have been possible to draw a single project area that would include much or all of the county’s populated acreage. In such cases, we drew multiple smaller project areas that can be mixed and matched depending on the amount of available funding.

Costs and Estimated Subsidy

All of our cost estimates are based on deploying a high quality, high-capacity fiber-to-the-home network with enough capacity to remain useful throughout the network's expected 30- to 40-year lifespan. This includes dedicated strand architecture with each location on its own strand of fiber fed by high strand-count backbone cables with at least 50% excess capacity to accommodate future growth as well as related initiatives like expanded cellular service.

Estimating Distance

Last mile broadband infrastructure typically follows existing roads. Total project cost can be estimated by multiplying make-ready and cost-to-pass by the number of state, county, municipal, township, and unincorporated road miles in unserved census blocks.

Estimating Costs

For each project area, RCG built best- and worst-case financial scenarios for how much it would cost to run a high strand-count fiber network past each potential home/business, how much an internet service provider would be willing to contribute, and the resulting funding gap.

Because utility corridors typically follow roads, the number of road miles in a project area is a good proxy for the number of fiber miles needed. Thus, total cost-to-pass was calculated by multiplying the number of state, county, municipal, local, and unincorporated road miles by the cost-per-mile to install fiber either on utility poles or underground.

Aerial fiber cost figures include \$25K to \$55K per mile for make-ready. In our experience, make-ready can vary significantly from one project to the next based on factors like pole height and span length, average age, and the number of existing cables in the communication and power spaces. In a worst-case scenario, up to three quarters of the poles in a project area could need to be replaced at a cost between \$2,500 and \$5,000 per pole. On the other end of the spectrum, a rural electric co-op deploying fiber on its own utility poles could lower make-ready costs significantly by installing ADSS (All-Dielectric Self-Supporting) fiber in the power space instead of using the communication space. Utility providers operating on their own pole networks also would not incur any pole attachment fees.

Underground costs assume high strand-count fiber buried at 36 inches in conduit. Going underground eliminates make-ready costs and can mitigate some physical risks to the network like wind and ice, but the approach comes with a higher base construction cost. Our base cost estimates assume \$10-12 per foot for directional drilling. This cost rises to \$50 per foot if a rock adder is needed to deal with surface rock. Our estimates assume 10% to 40% surface rock.

Given the unpredictable nature of aerial make-ready and underground boring, we provide a range of possible costs in our overall financial model.

GAP INVESTMENT

Estimating ISP Investment

Internet Service Providers' investment decisions are driven largely by population density and average revenue per user (ARPU). As population density increases, so does an ISP's willingness to invest in an area. Likewise, if an ISP believes that a service area will have a high ARPU, their investment appetite will increase. There are two primary ways to improve ARPU: charging more per month and increasing the overall take-rate. For example, in a rural area with only one provider, take-rate could be 80% or more, and the ISP could charge more per month than they would in an area with multiple competing providers.

To account for this variability, we include low, mid, and high estimates for what an ISP would be willing to invest per location.

BRIDGING THE FUNDING GAP

The digital divide exists in the first place because the cost to pass in low density rural communities is higher than any ISP would be willing to spend to deploy fiber to the home. To bring broadband to such areas, gap investment is needed. Typically, this takes the form of state or federal subsidy.

For each project area in this report, we provide a range of gap investment figures based on combinations of best- and worst-case fiber costs and ISP investment appetite. If fiber costs are low and ISP investment is high, then the gap will be lower. On the other hand, if fiber costs are high and ISP investment is low, then the gap will be higher.

Even for fairly small projects, broadband gap investments can run in the millions or tens of millions of dollars. When considering such large numbers, it is important to remember that broadband is infrastructure. Much like a water, sewer, or road project, a broadband deployment should be treated like the once-in-a-generation investment that it is. When amortized over a fiber network's projected 30-year lifespan and spread across all of locations served, a multi-million-dollar investment can translate to as little as just a few hundred dollars per location per year.

County Cluster Analysis

196

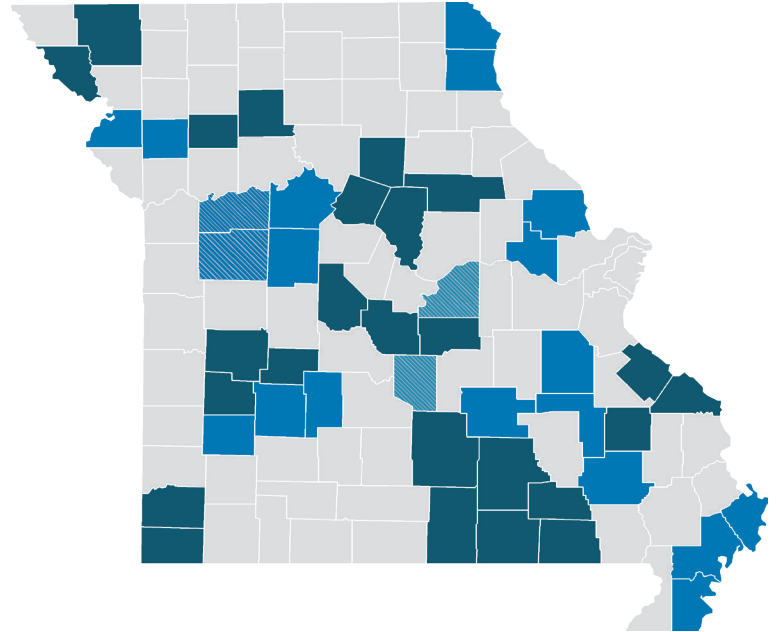
project areas

122,409

locations

16,791

fiber miles



The following section contains detailed project area reports for all 15 county clusters, including three of the five that were added to our analysis as part of the “additional technical assistance” scope of work.⁶

For ease of reading and to facilitate comparison between clusters, each report follows the same format.

Cluster-Wide Context

Map of current broadband speeds in the cluster counties with a red-orange-yellow-green color scheme that ranges from below 10/1 Mbps to above 200/50 Mbps.

Simplified, two-color speed rating map that highlights only the areas with the greatest need: red for below 25/3 and orange for above 25/3 but below 50/10. This page also includes an inset that identifies areas with existing funding.

Composite map that identifies gaps by overlaying the red/orange speed rating scheme with existing funding and proposed project outlines..

County-Specific Data

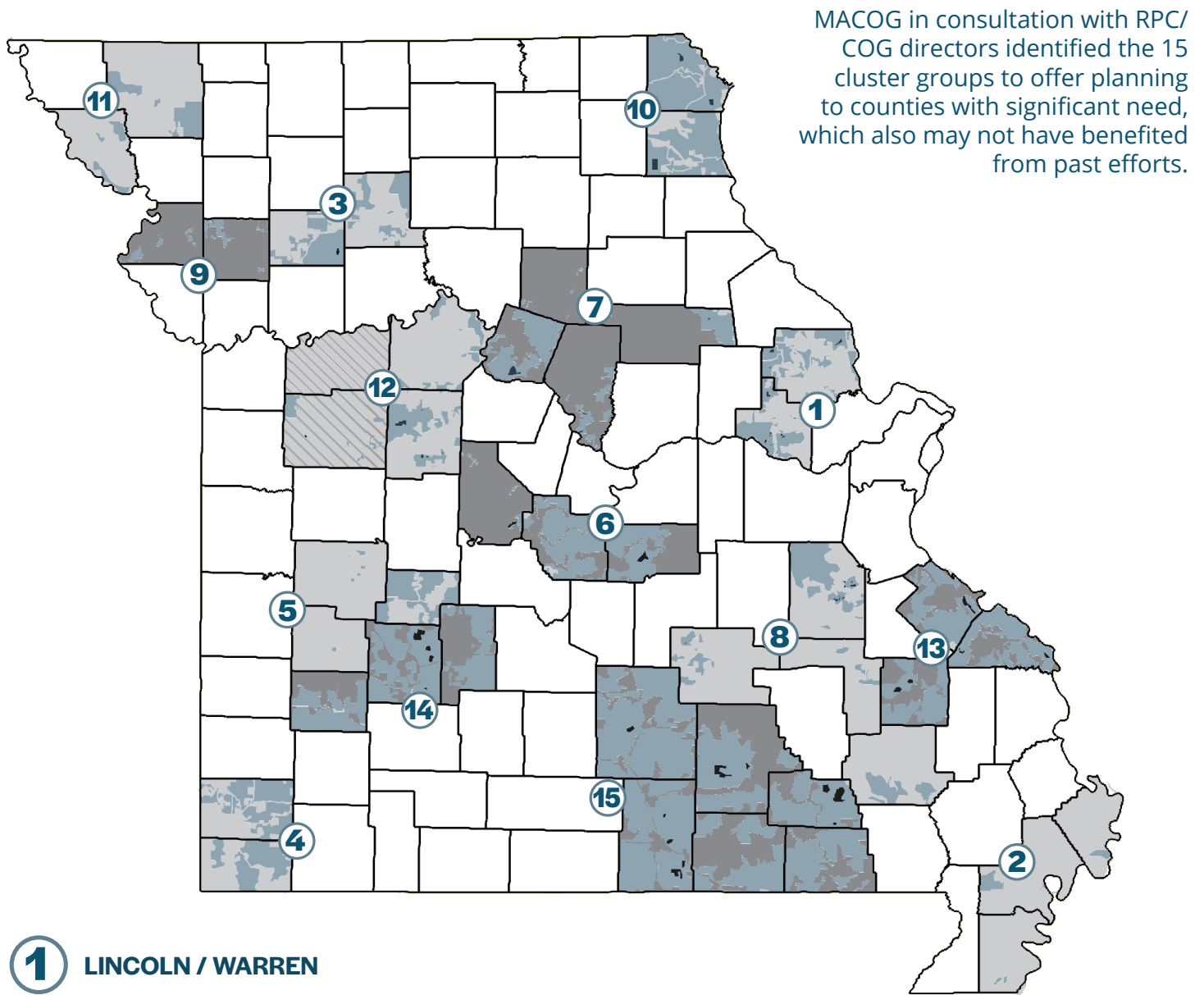
County-level index map with business locations, road centerlines, and numbered project areas. Also includes financial stats for all of the county’s project areas combined.

Project financial pro forma tables that identify ranges for cost-to-pass, expected ISP investment, and funding gaps

**Investment projections for each of the county clusters and potential project areas take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in [Appendix 1 and 2](#)*

⁶ Maries, Johnson, and Lafayette are included. Osage and Pulaski will be delivered under separate cover.

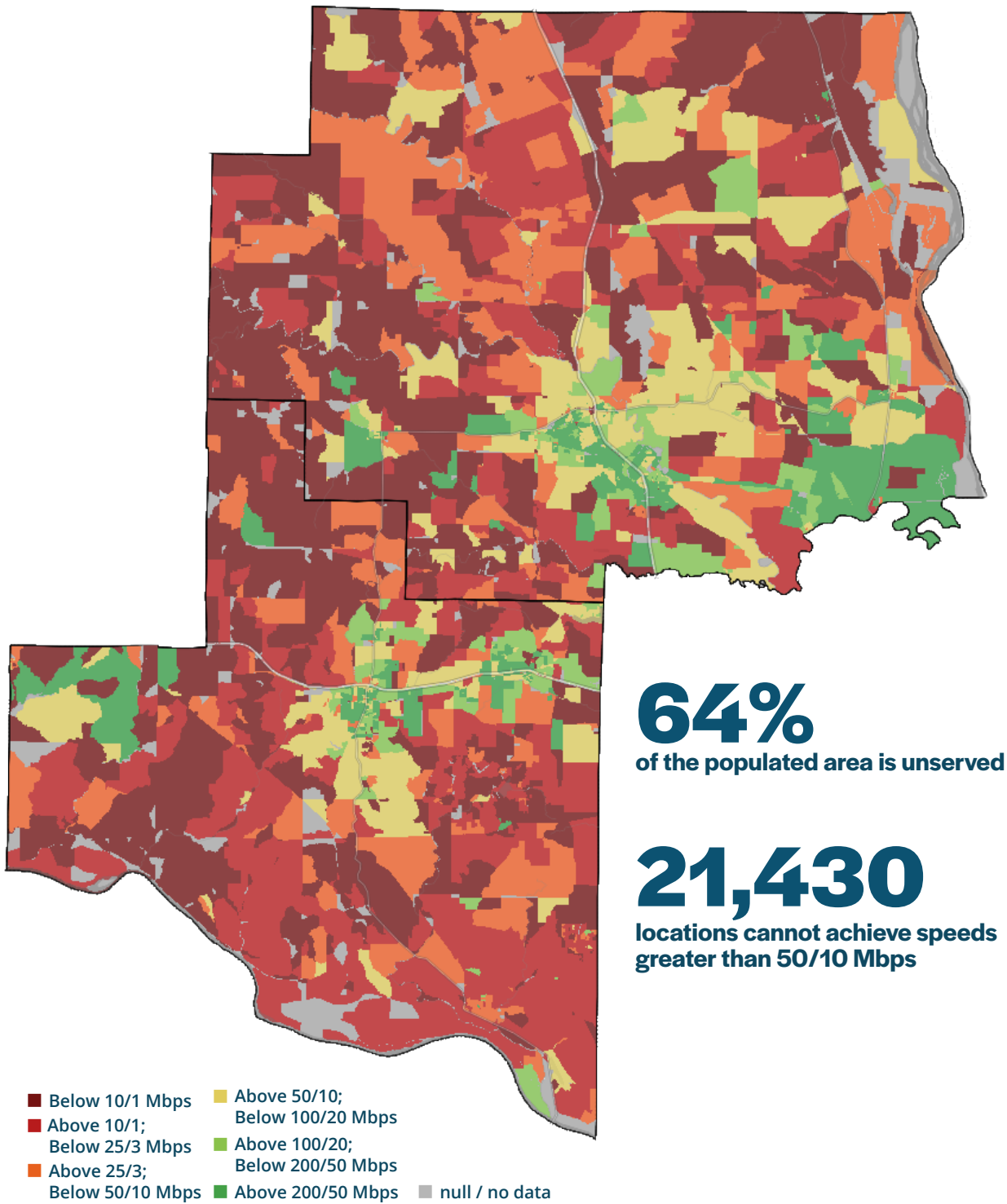
PROJECT AREAS



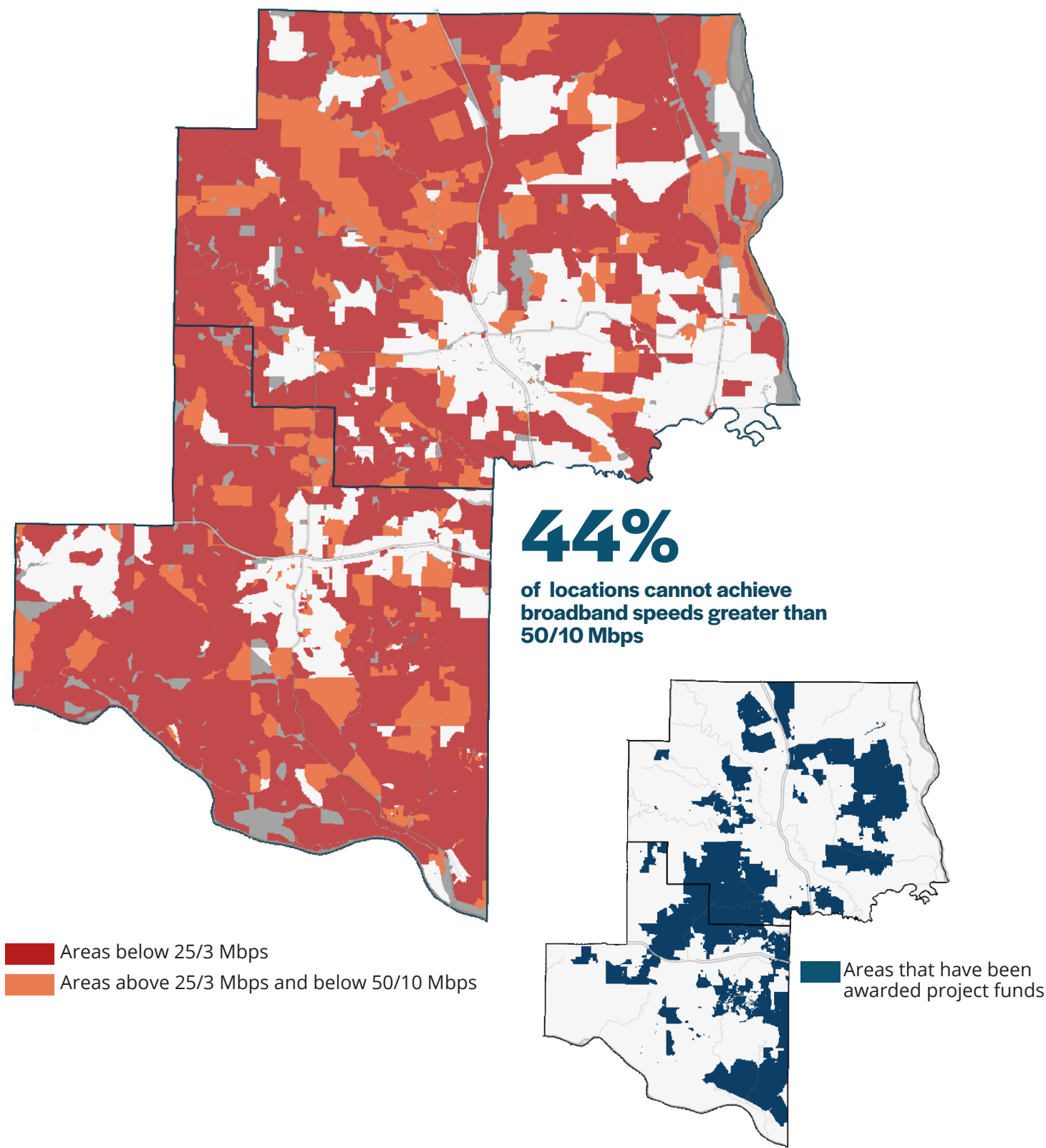
- | | | |
|---|---|---|
| 1 LINCOLN / WARREN | 7 AUDRAIN / RANDOLPH
HOWARD / BOONE | 12 SALINE / PETTIS
JOHNSON* / LAFAYETTE* |
| 2 PEMISCOT / NEW MADRID
MISSISSIPPI | 8 DENT / WASHINGTON
IRON / WAYNE | 13 MADISON
STE. GENEVIEVE / PERRY |
| 3 CALDWELL / LIVINGSTON | 9 CLINTON / BUCHANAN | 14 DADE / POLK / DALLAS |
| 4 NEWTON / MCDONALD | 10 LEWIS / CLARK | 15 TEXAS / HOWELL
SHANNON / OREGON
RIPLEY / CARTER |
| 5 HICKORY / CEDAR
ST. CLAIR | 11 NODAWAY / HOLT | |
| 6 MORGAN / MILLER
MARIES | | |

Lincoln / Warren

Project Cluster - Boonslick Regional Planning Commission



PROJECT PLANNING



Lincoln / Warren

Project Cluster • Boonslick Regional Planning Commission

PROJECT AREAS

7,917

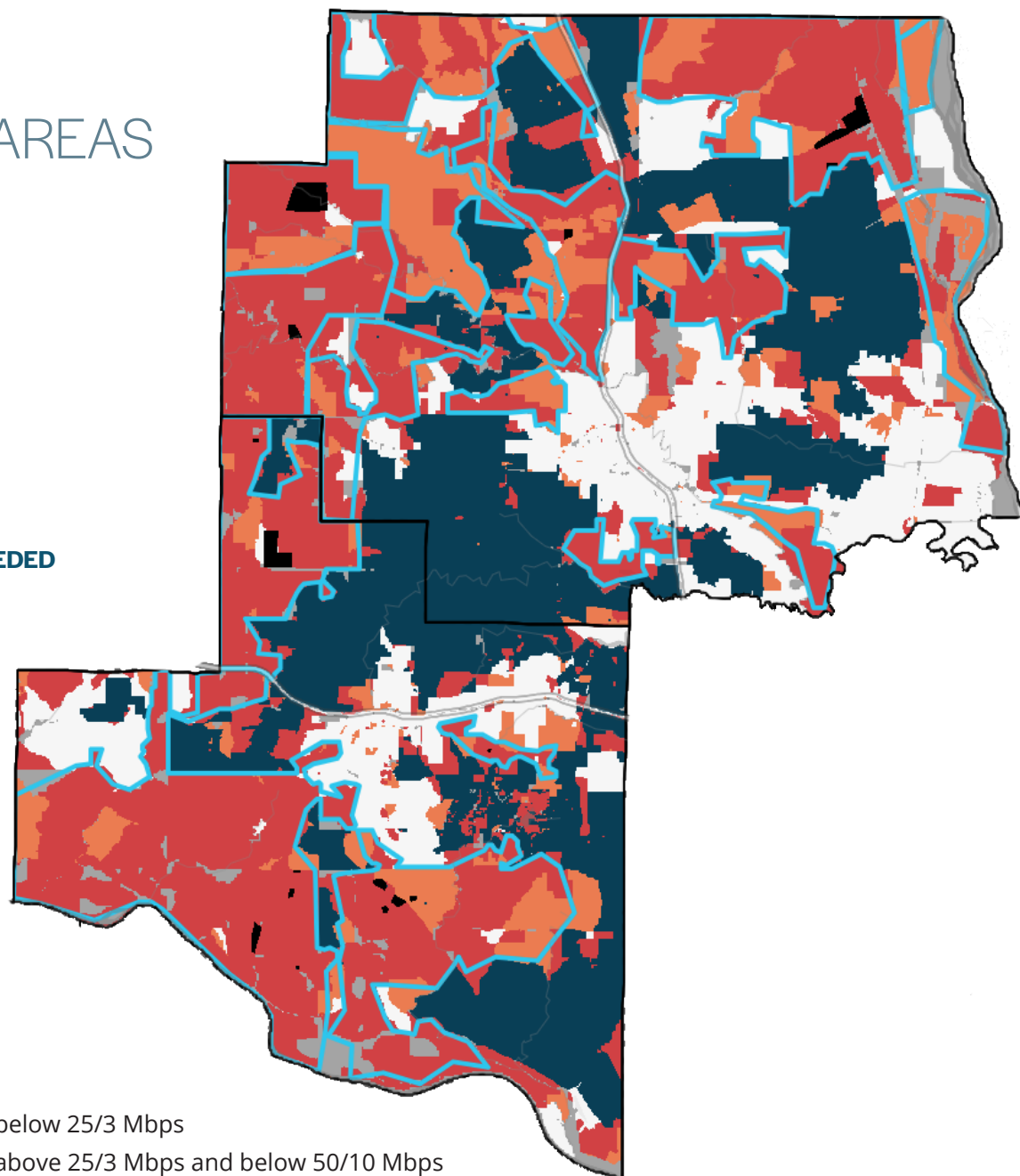
LOCATIONS

2,713

BUSINESSES

810

MILES OF FIBER NEEDED



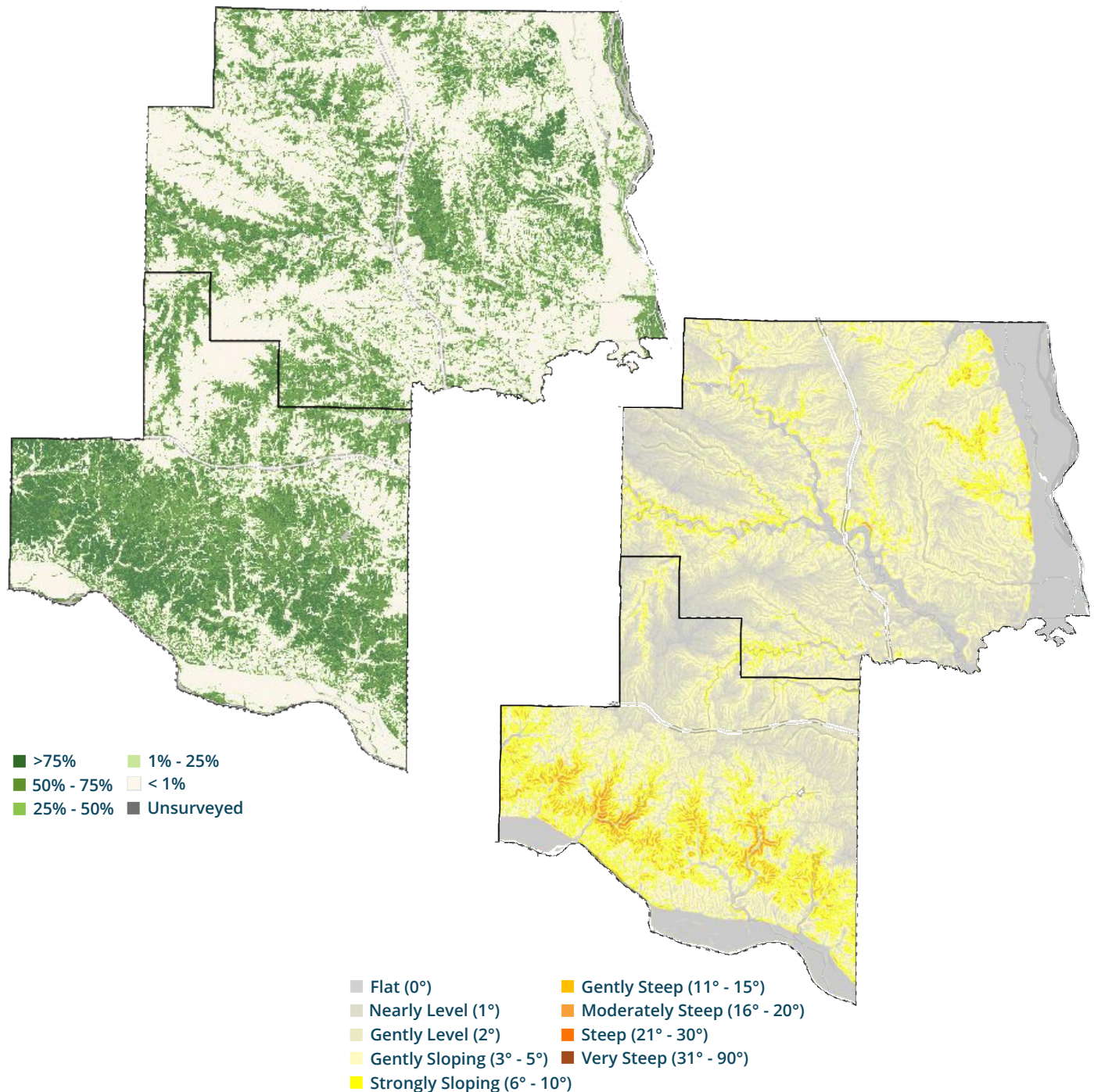
- Areas below 25/3 Mbps
- Areas above 25/3 Mbps and below 50/10 Mbps
- Areas that have been awarded project funds
- Proposed Project Areas

Investment Range = \$72 - \$159 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

PLANNING CONSIDERATIONS

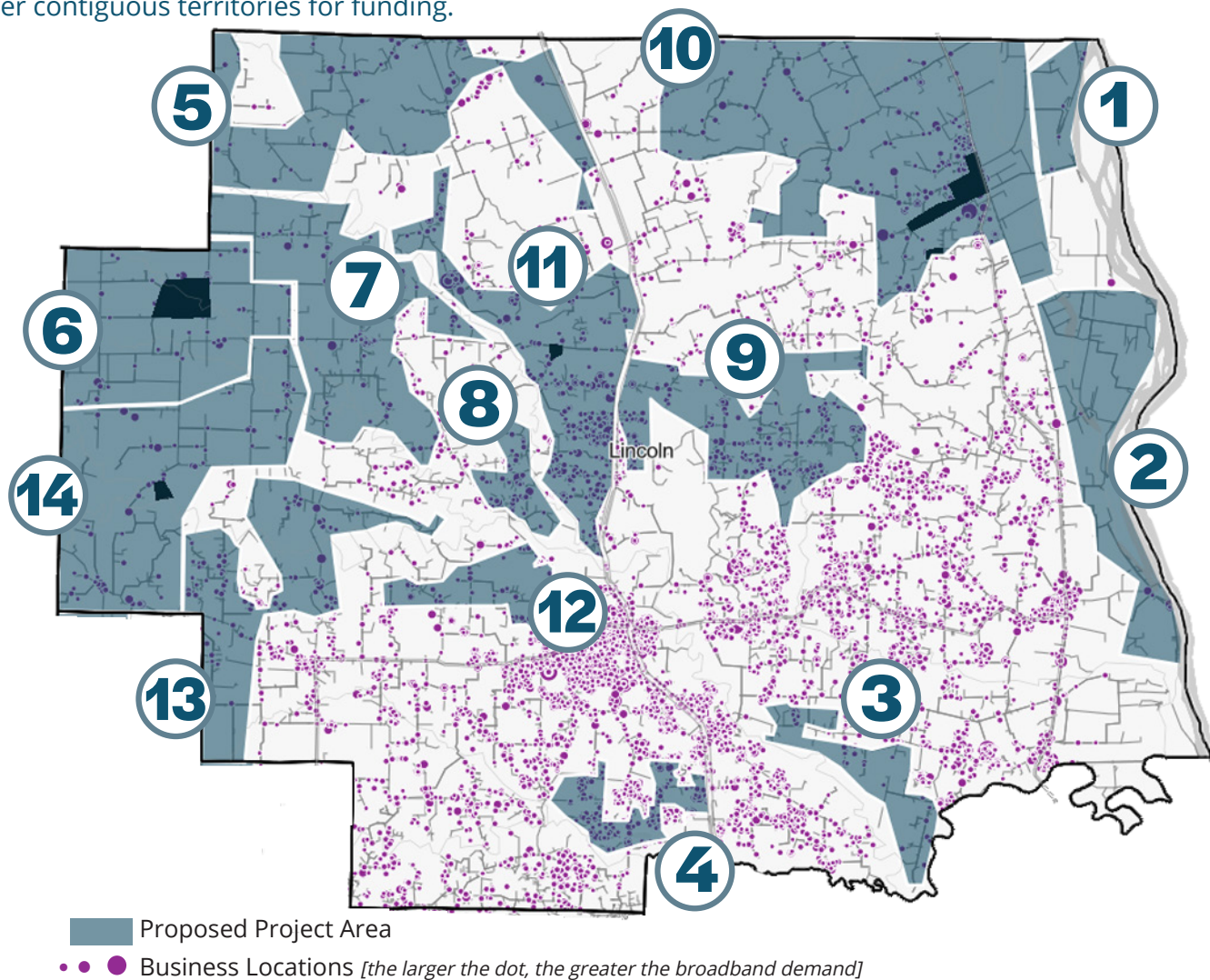
Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



LINCOLN COUNTY

PROJECT AREAS

Much of western Lincoln County currently is un/underserved and unfunded. With a relatively high population density, ISP interest in this territory is likely to be higher than in more sparsely populated parts of the state. Also, this higher density allowed creation of multiple small project areas. Depending on funding sources and ISP investment appetite, multiple small areas can easily be combined to create larger contiguous territories for funding.



531
fiber miles

5,448
locations

1,912
business locations

10.3
locations per mile

INVESTMENT = \$47 - \$104 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

LINCOLN COUNTY

PROJECT DETAILS

1

AERIAL

\$826K - \$1.1M

COST TO PASS

\$198K - \$792K

ISP INVESTMENT

\$34.8K - \$908K

FUNDING GAP

\$6 - \$153

annual cost per location
over 30 years

UNDERGROUND

\$1.1M - \$1.8M

\$198K - \$792K

\$289K - \$1.6M

\$49 - \$4273

9

fiber miles

198
locations

21.3
locations per mile

2

AERIAL

\$2.5M - \$3.3M

COST TO PASS

\$88K - \$352K

ISP INVESTMENT

\$2.1M - \$3.2M

FUNDING GAP

\$808 - \$1,225

annual cost per location
over 30 years

UNDERGROUND

\$3.3M - \$5.5M

\$88K - \$352K

\$2.9M - \$5.4M

\$1,097 - \$2,035

28

fiber miles

88
locations

3.2
locations per mile

3

AERIAL

\$1.1M - \$1.5M

COST TO PASS

\$114K - \$456K

ISP INVESTMENT

\$637K - \$1.4M

FUNDING GAP

\$186 - \$394

annual cost per location
over 30 years

UNDERGROUND

\$1.4M - \$2.4M

\$114K - \$456K

\$975K - \$2.3M

\$285 - \$670

12

fiber miles

114
locations

3.3
locations per mile

4

AERIAL

\$1.7M - \$2.3M

COST TO PASS

\$373K - \$1.5M

ISP INVESTMENT

\$245K - \$1.9M

FUNDING GAP

\$22 - \$174

annual cost per location
over 30 years

UNDERGROUND

\$2.7M - \$3.8M

\$373K - \$1.5M

\$780K - \$3.5M

\$70 - \$308

20

fiber miles

373
locations

19.1
locations per mile

LINCOLN COUNTY

PROJECT DETAILS

5

AERIAL

\$3.9M - \$5.3M

COST TO PASS

\$203K - \$812K

ISP INVESTMENT

\$3.1M - \$5.1M

FUNDING GAP

\$513 - \$831

annual cost per location
over 30 years

UNDERGROUND

\$5.2M - \$8.7M

\$203K - \$812K

\$4.3M - \$8.4M

\$712 - \$1,387

44

fiber miles

203

locations

4.6

locations per mile

6

AERIAL

\$3.7M - \$5M

COST TO PASS

\$177K - \$708K

ISP INVESTMENT

\$3M - \$4.8M

FUNDING GAP

\$570 - \$907

annual cost per location
over 30 years

UNDERGROUND

\$4.9M - \$8.2M

\$177K - \$708K

\$4.2M - \$8M

\$787 - \$1,513

42

fiber miles

177

locations

4.2

locations per mile

7

AERIAL

\$5M - \$6.7M

COST TO PASS

\$251K - \$1M

ISP INVESTMENT

\$4M - \$6.4M

FUNDING GAP

\$529 - \$852

annual cost per location
over 30 years

UNDERGROUND

\$6.5M - \$11M

\$251K - \$1M

\$5.5M - \$10.7M

\$732 - \$1,421

56

fiber miles

251

locations

4.5

locations per mile

LINCOLN COUNTY

PROJECT DETAILS

8

AERIAL

\$1M - \$1.4M

COST TO PASS

\$159K - \$636K

ISP INVESTMENT

\$413 - \$1.2M

FUNDING GAP

\$87 - \$261

annual cost per location
over 30 years

UNDERGROUND

\$1.4M - \$2.3M

\$159K - \$636K

\$736K - \$2.2M

\$154 - \$450

12

fiber miles

159
locations

13.5
locations per mile

9

AERIAL

\$4.4M - \$5.9M

COST TO PASS

\$959K - \$3.8M

ISP INVESTMENT

\$582K - \$5M

FUNDING GAP

\$20 - \$172

annual cost per location
over 30 years

UNDERGROUND

\$5.8M - \$9.7M

\$959K - 3.8M

\$1.9M - \$8.8M

\$68 - \$304

50

fiber miles

959
locations

19.3
locations per mile

10

AERIAL

\$9.4M - \$12.5M

COST TO PASS

\$1.4M - \$5.7M

ISP INVESTMENT

\$3.7M - \$11M

FUNDING GAP

\$85 - \$258

annual cost per location
over 30 years

UNDERGROUND

\$12.3M - \$20.6M

\$1.4M - \$5.7M

\$6.5M - \$19.2M

\$152 - \$446

105

fiber miles

1,434
locations

13.6
locations per mile

11

AERIAL

\$5.3M - \$7M

COST TO PASS

\$822K - \$3.3M

ISP INVESTMENT

\$1.9M - \$6.2M

FUNDING GAP

\$80 - \$252

annual cost per location
over 30 years

UNDERGROUND

\$6.9M - \$11.6M

\$822K - \$3.3M

\$3.6M - \$10.7M

\$146 - \$436

59

fiber miles

822
locations

13.9
locations per mile

LINCOLN COUNTY

PROJECT DETAILS

12

AERIAL

\$1.1M - \$1.4M

COST TO PASS

\$166K - \$664K

ISP INVESTMENT

\$387K - \$1.2M

FUNDING GAP

\$78 - \$249

annual cost per location
over 30 years

UNDERGROUND

\$1.4M - \$2.3M

\$166K - \$664K

\$712K - \$2.2M

\$143 - \$431

12

fiber miles

166
locations

14.0
locations per mile

13

AERIAL

\$3M - \$4M

COST TO PASS

\$285K - \$1.1M

ISP INVESTMENT

\$1.8M - \$3.8M

FUNDING GAP

\$221 - \$440

annual cost per location
over 30 years

UNDERGROUND

\$4M - \$6.7M

\$285K - \$1.1M

\$2.8M - \$6.4M

\$330 - \$745

34

fiber miles

285
locations

8.4
locations per mile

14

AERIAL

\$4.3M - \$5.7M

COST TO PASS

\$219K - \$876K

ISP INVESTMENT

\$3.4M - \$5.5M

FUNDING GAP

\$518 - \$838

annual cost per location
over 30 years

UNDERGROUND

\$5.6M - \$9.4M

\$219K - \$876K

\$4.7M - \$9.2M

\$719 - \$1,399

48

fiber miles

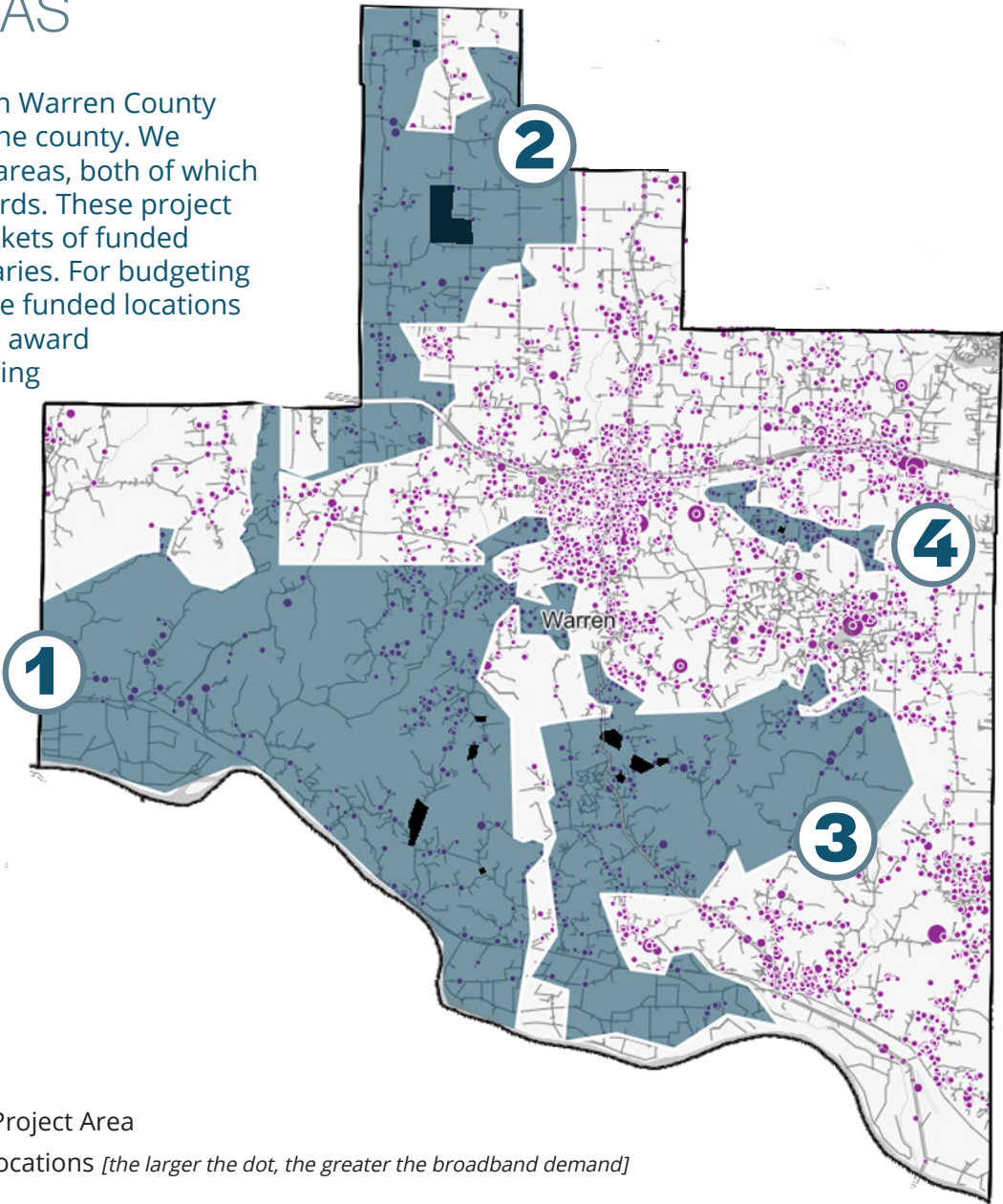
219
locations

4.6
locations per mile

WARREN COUNTY

PROJECT AREAS

The primary areas of need in Warren County fall in the southern part of the county. We identified two large project areas, both of which are adjacent to existing awards. These project areas also include small pockets of funded territory inside their boundaries. For budgeting purposes, we excluded those funded locations from our calculations. While award recipients may wind up serving the surrounding areas, too, there are enough un/underserved locations throughout the project boundaries to justify including them.



279
fiber miles

2,469
locations

801
business locations

4.2
locations per mile

INVESTMENT = \$25 - \$55 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

WARREN COUNTY

PROJECT DETAILS

1

AERIAL

\$12.3M - \$16.4M

COST TO PASS

\$1M - \$4.2M

ISP INVESTMENT

\$8.1M - \$15.4M

FUNDING GAP

\$259 - \$492

annual cost per location
over 30 years

UNDERGROUND

\$16M - \$27M

\$1M - \$4.2M

\$11.9M - \$26M

\$380 - \$830

138
fiber miles

1,041
locations

7.6
locations per mile

2

AERIAL

\$4.1M - \$5.5M

COST TO PASS

\$315K - \$1.3M

ISP INVESTMENT

\$2.9M - \$5.2M

FUNDING GAP

\$304 - \$551

annual cost per location
over 30 years

UNDERGROUND

\$5.4M - \$9.1M

\$315K - \$1.3M

\$4.2M - \$8.8M

\$439 - \$928

46
fiber miles

315
locations

6.8
locations per mile

3

AERIAL

\$7.5M - \$10M

COST TO PASS

\$845K - \$3.4M

ISP INVESTMENT

\$4.1M - \$9.2M

FUNDING GAP

\$162 - \$362

annual cost per location
over 30 years

UNDERGROUND

\$9.8M - \$16.5M

\$845K - \$3.4M

\$6.4M - \$15.6M

\$254 - \$617

84
fiber miles

845
locations

10
locations per mile

4

AERIAL

\$942K - \$1.3M

COST TO PASS

\$268K - \$1.1M

ISP INVESTMENT

\$674K - \$992K

FUNDING GAP

\$84 - \$123

annual cost per location
over 30 years

UNDERGROUND

\$1.2M - \$2M

\$268K - \$1.1M

\$1.1M - \$1.9M

\$20 - \$224

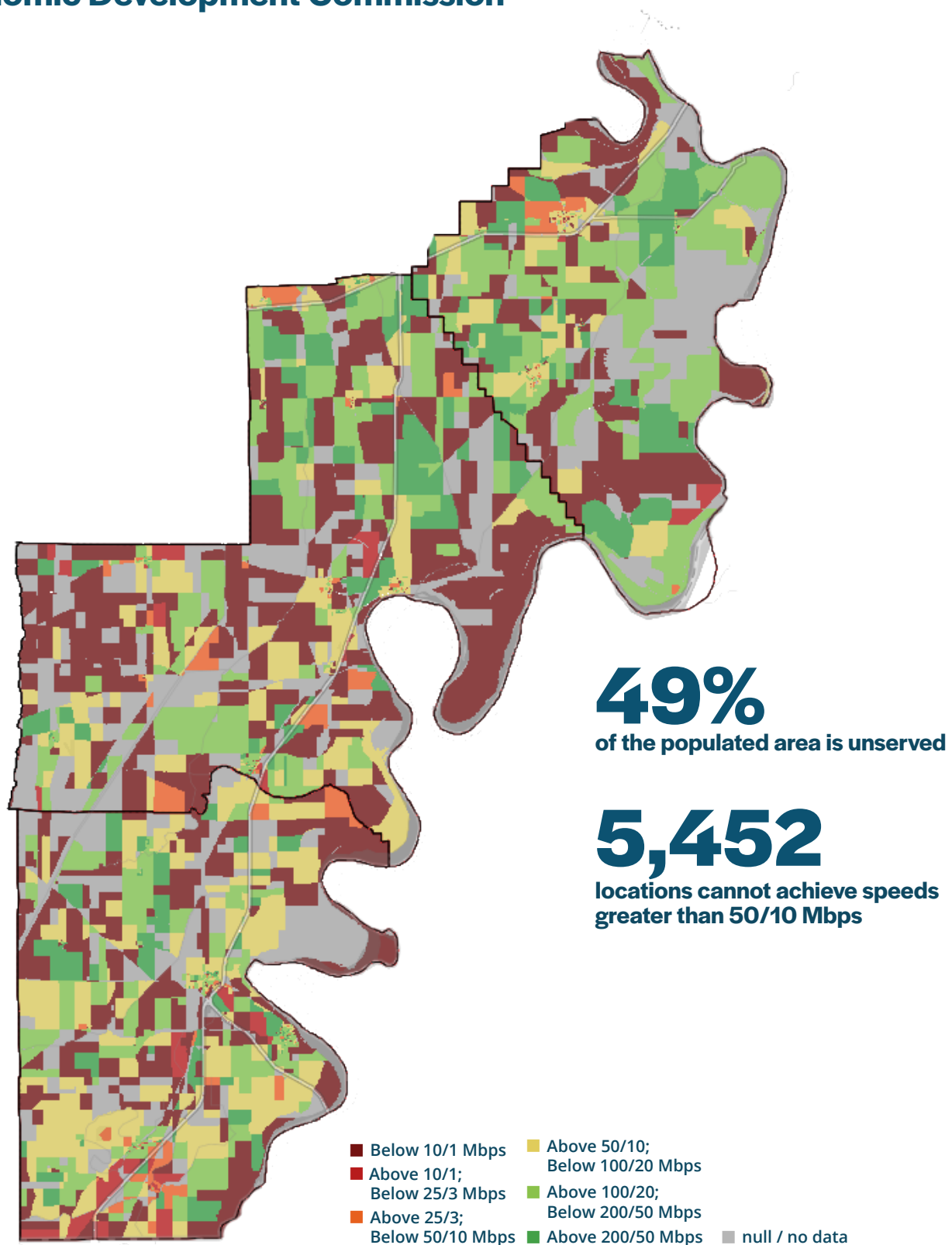
11
fiber miles

268
locations

25.3
locations per mile

Pemiscot/ New Madrid / Mississippi

Project Cluster • Bootheel Regional Planning
Economic Development Commission



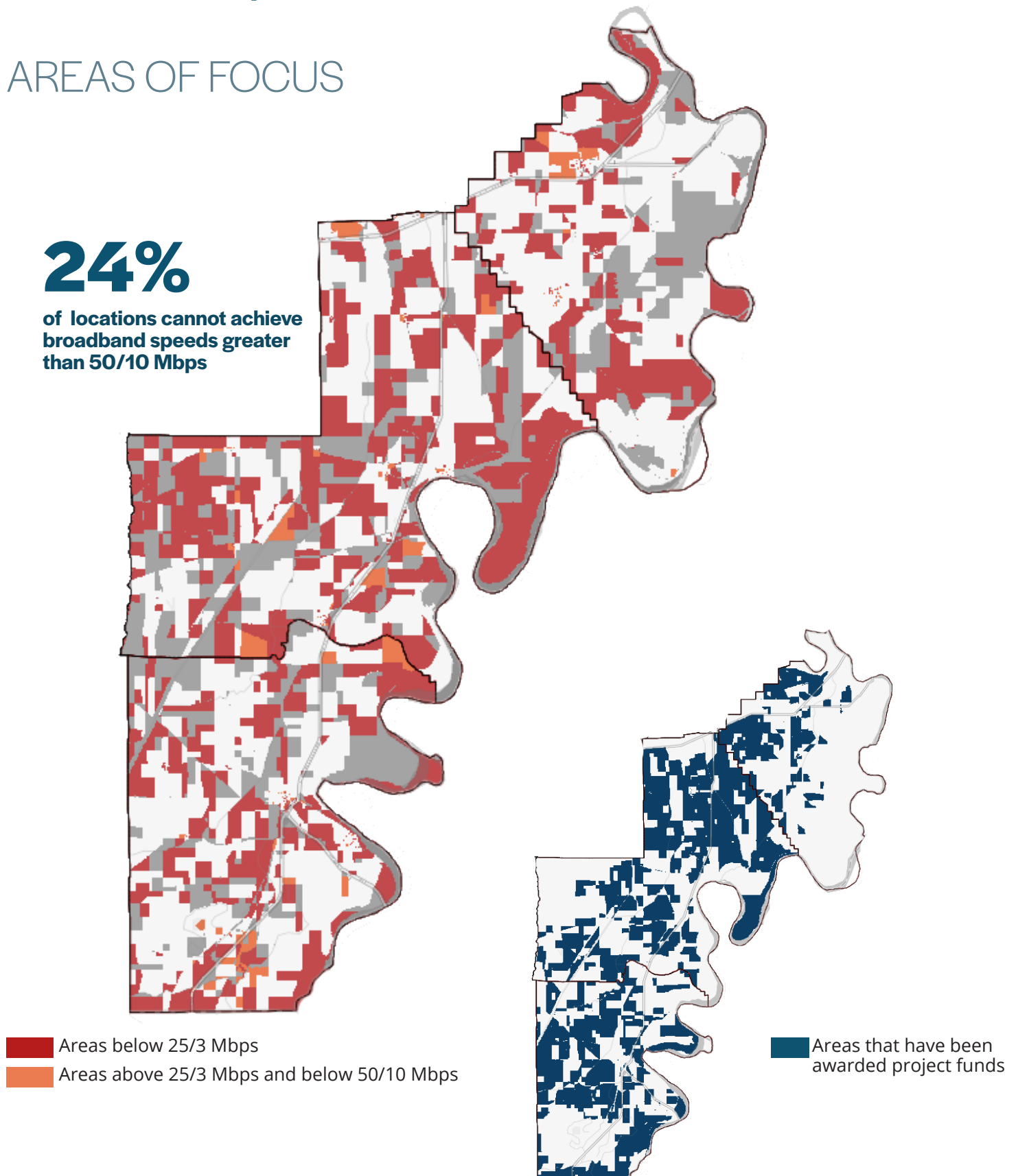
Pemiscot/ New Madrid / Mississippi

Project Cluster • Bootheel Regional Planning
Economic Development Commission

AREAS OF FOCUS

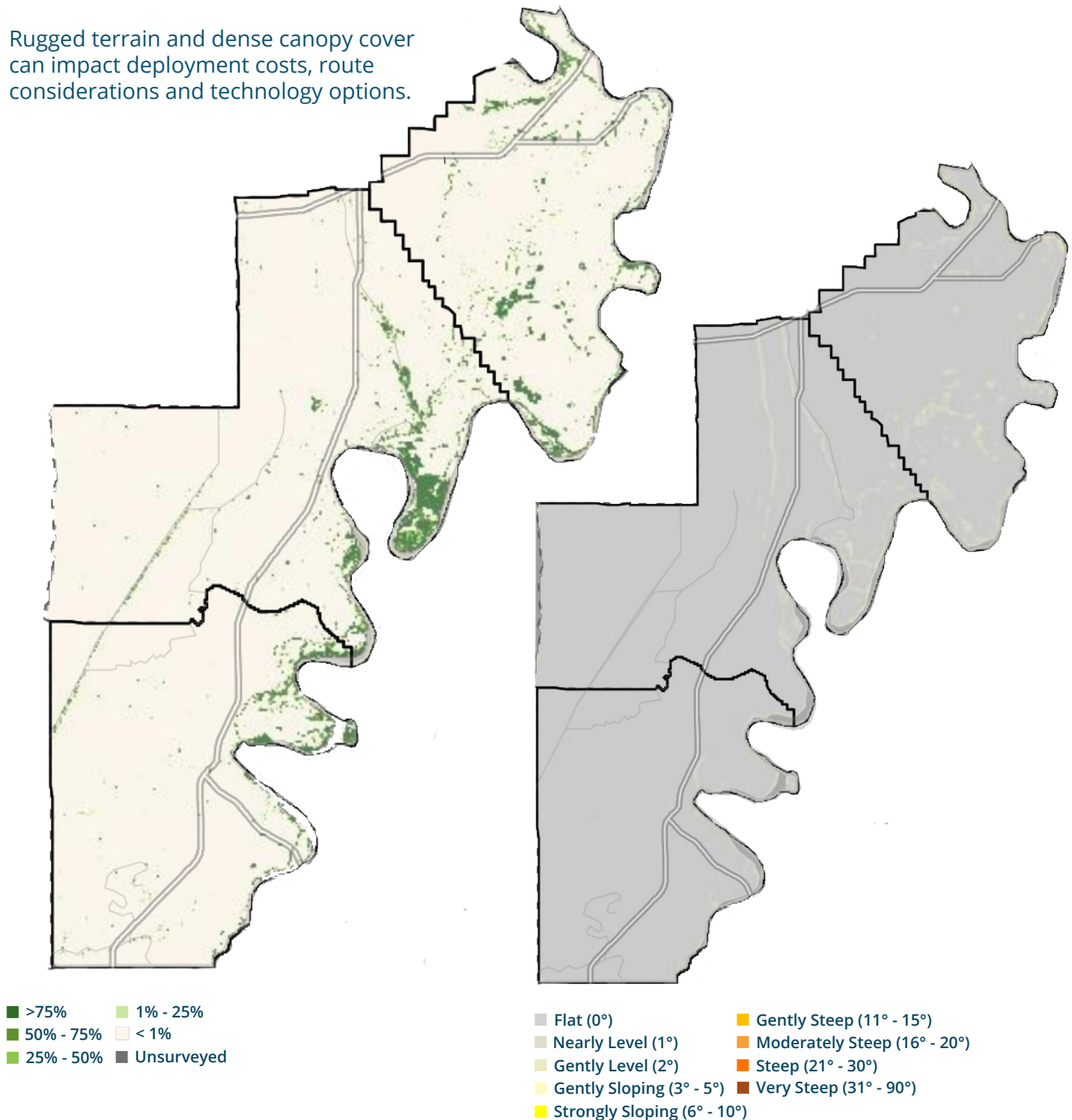
24%

of locations cannot achieve
broadband speeds greater
than 50/10 Mbps



PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Pemiscot/ New Madrid / Mississippi

Project Cluster • Bootheel Regional Planning
Economic Development Commission

PROJECT AREAS

445

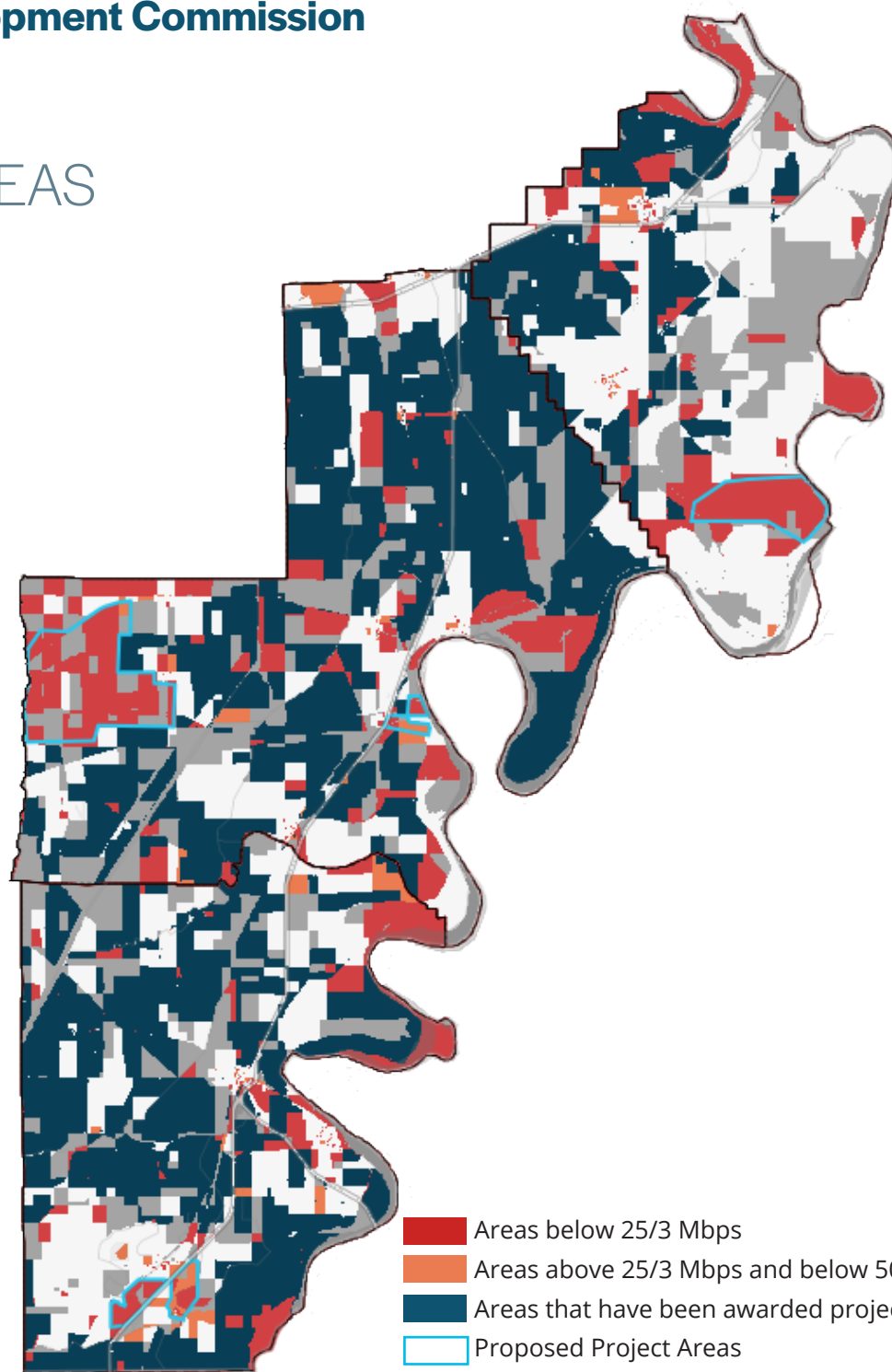
LOCATIONS

85

BUSINESSES

133

MILES OF FIBER NEEDED



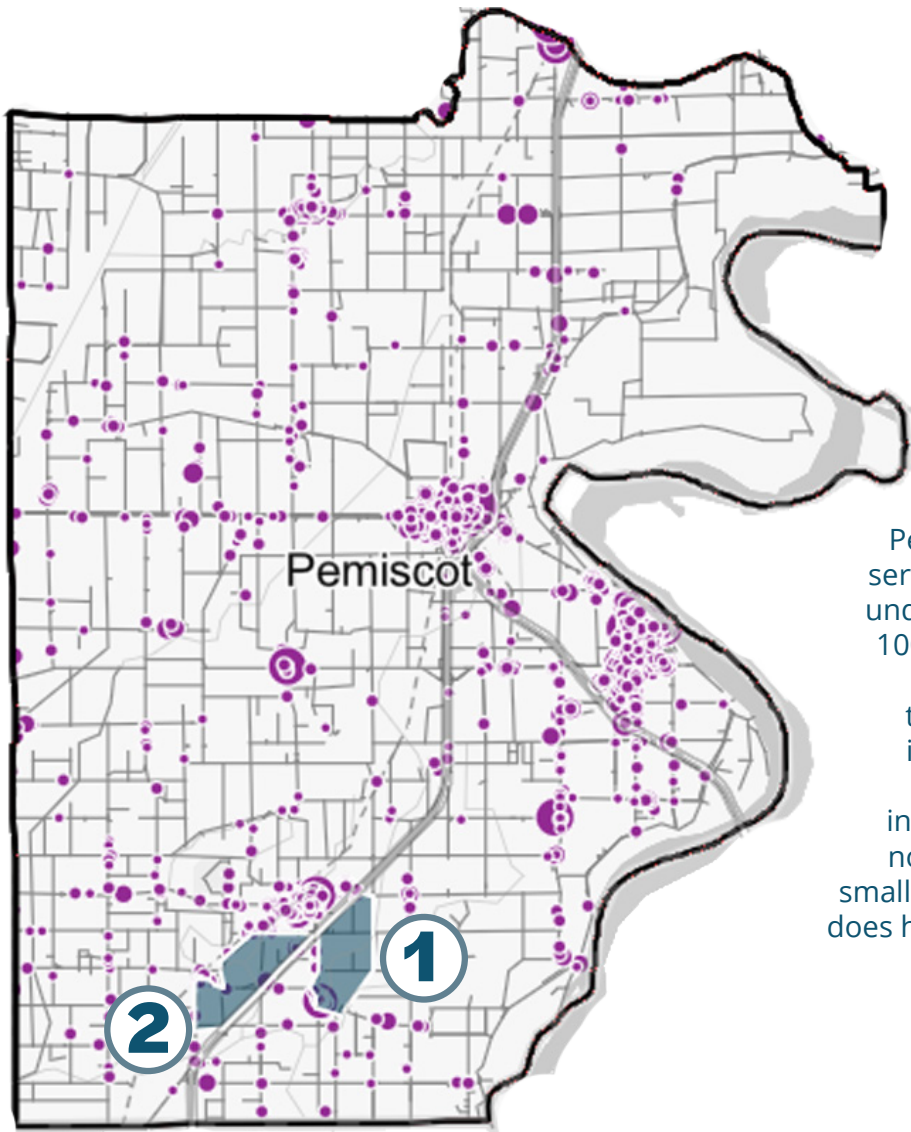
- Areas below 25/3 Mbps
- Areas above 25/3 Mbps and below 50/10 Mbps
- Areas that have been awarded project funds
- Proposed Project Areas

Investment Range = \$11.8 - \$26 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

PEMISCOT COUNTY

PROJECT AREAS



Pemiscot County currently rates as either served (above 100/20 Mbps) or just slightly underserved (above 50/10 Mbps but below 100/20 Mbps). Of the areas that are below 50/10 Mbps, most are already funded-to-served. We identified two small areas in southern Pemiscot that have multiple contiguous blocks rated below 50/10, including the town of Cooter. It should be noted, however, that Cooter includes one small block that tests as served, and the area does have at least one provider who claims to offer fiber to the home.

25
fiber miles

297
locations

63
business locations

12.1
locations per mile

INVESTMENT = \$2.2 - \$4.9 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

PEMISCOT COUNTY

PROJECT DETAILS

1

AERIAL		UNDERGROUND		11 fiber miles	
\$956K - \$1.3M	COST TO PASS	\$1.3M - \$2.1M		230 locations	21.4 locations per mile
\$230K - \$920K	ISP INVESTMENT	\$230K - \$920K			
\$36.8K - \$1M	FUNDING GAP	\$331K - \$1.9M			
\$5 - \$152	annual cost per location over 30 years	\$48 - \$271			

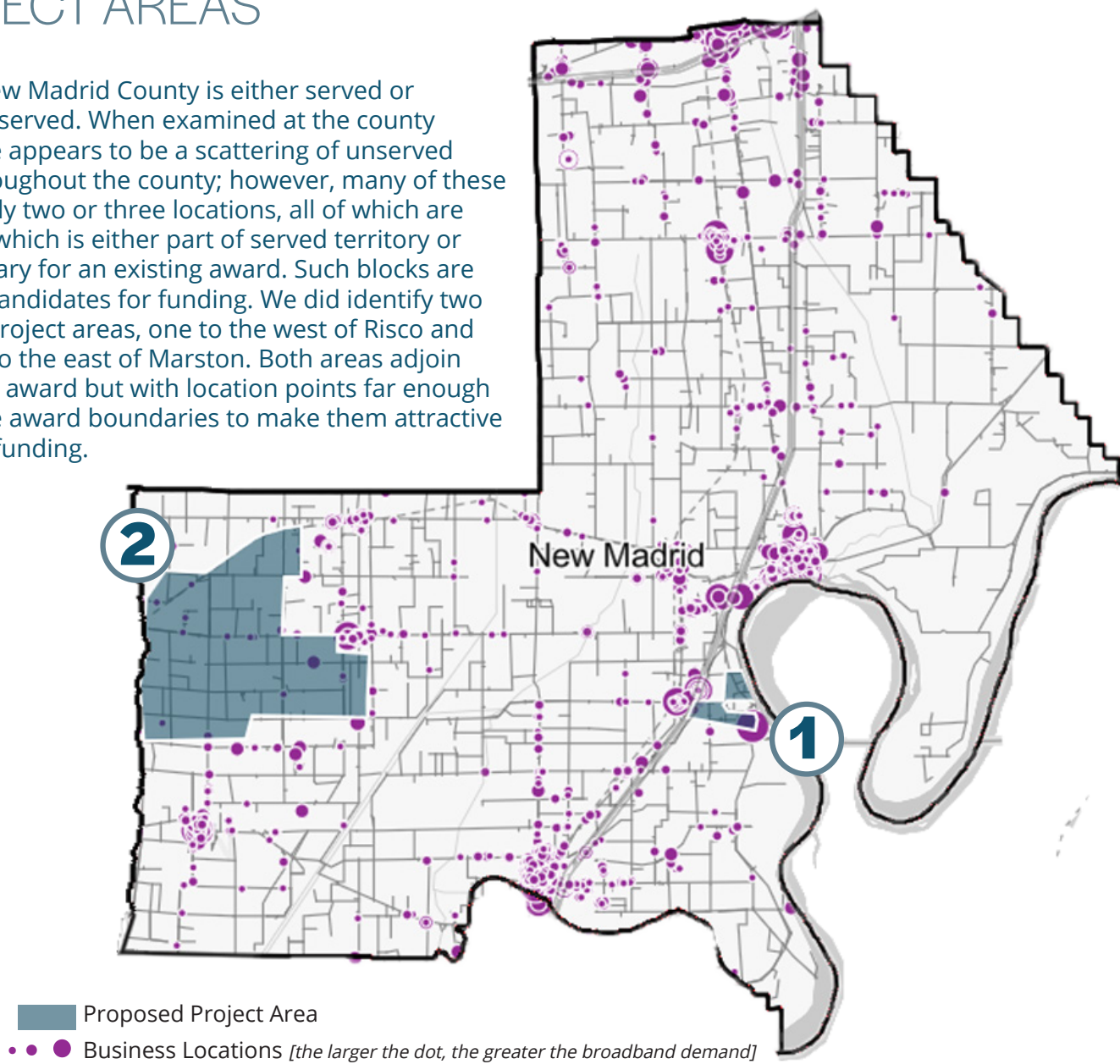
2

AERIAL		UNDERGROUND		14 fiber miles	
\$1.2M - \$1.7M	COST TO PASS	\$1.6M - \$2.7M		67 locations	4.8 locations per mile
\$67K - \$268K	ISP INVESTMENT	\$67K - \$268K			
\$967K - \$1.6M	FUNDING GAP	\$1.3M - \$2.6M			
\$481 - \$788	annual cost per location over 30 years	\$670 - \$1,317			

NEW MADRID COUNTY

PROJECT AREAS

Most of New Madrid County is either served or funded-to-served. When examined at the county level, there appears to be a scattering of unserved blocks throughout the county; however, many of these contain only two or three locations, all of which are on a road which is either part of served territory or the boundary for an existing award. Such blocks are not good candidates for funding. We did identify two potential project areas, one to the west of Risco and the other to the east of Marston. Both areas adjoin an existing award but with location points far enough from those award boundaries to make them attractive for future funding.



83

fiber miles

135

locations

20

business locations

3.5

locations per mile

INVESTMENT = \$7.4 - \$16.2 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

NEW MADRID COUNTY

PROJECT DETAILS

1

AERIAL		UNDERGROUND		15 fiber miles	
\$1.3M - \$1.7M	COST TO PASS	\$1.7M - \$2.9M		29 locations	2.0 locations per mile
\$29K - \$116K	ISP INVESTMENT	\$29K - \$116K			
\$1.2M - \$1.7M	FUNDING GAP	\$1.6M - \$2.8M			
\$1,359 - \$1,962	annual cost per location over 30 years	\$1,819 - \$3,247			

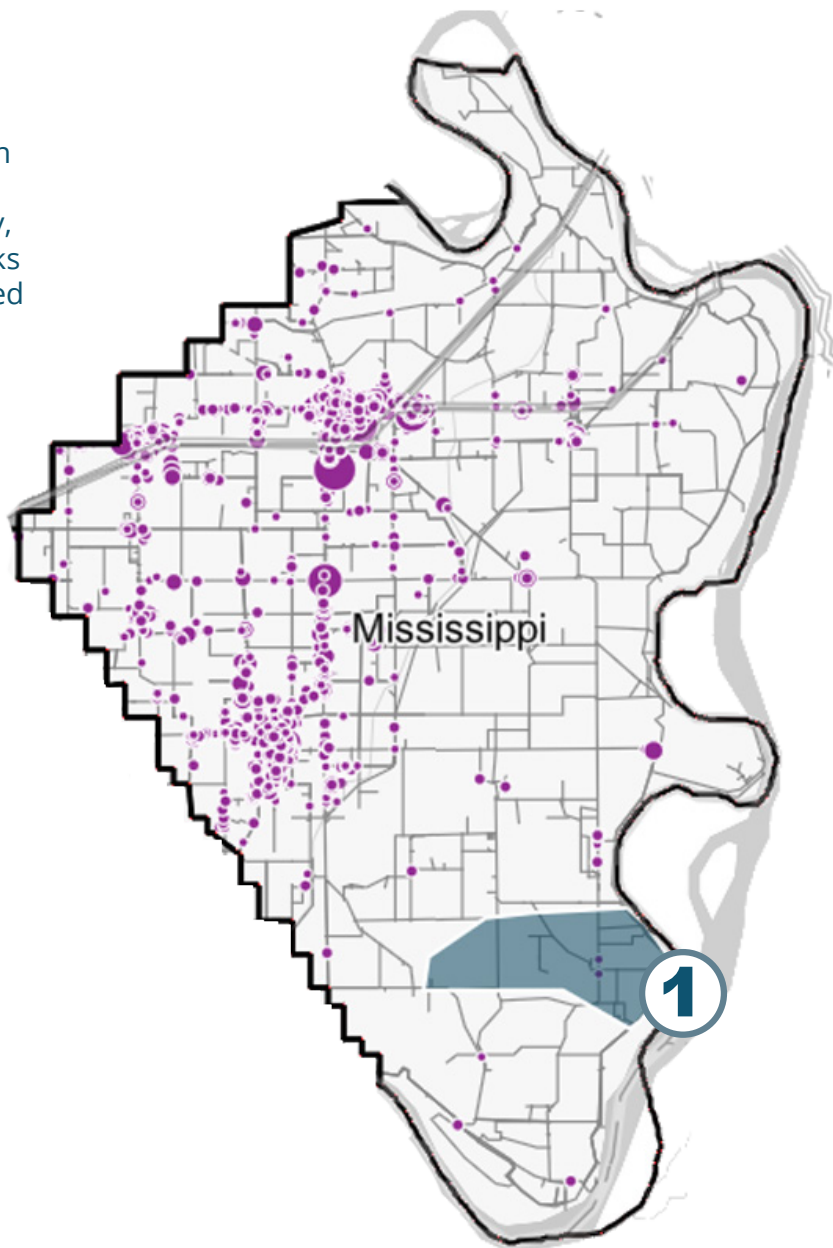
2

AERIAL		UNDERGROUND		68 fiber miles	
\$6M - \$8.1M	COST TO PASS	\$8M - \$13.4M		106 locations	1.6 locations per mile
\$106K - \$404K	ISP INVESTMENT	\$106K - \$404K			
\$5.7M - \$8M	FUNDING GAP	\$7.5M - \$13.3M			
\$1,778 - \$2,522	annual cost per location over 30 years	\$2,366 - \$4,167			

MISSISSIPPI COUNTY

PROJECT AREA

Despite low population density, the eastern two thirds of Mississippi County rates as well served. In the remainder of the county, almost all underserved and unserved blocks have received funding already. We identified one area near Towosahagy State Historic Site as a possibility for future funding; however, with less than one location per mile the area will require at least \$170,000 per location in subsidy. It still may be possible to serve this area, given that it is bordered on the north and south by low density, well served blocks.”



- Proposed Project Area
- • • Business Locations *[the larger the dot, the greater the broadband demand]*

25
fiber miles

13
locations

2
business locations

.5
locations per mile

INVESTMENT = \$2.2 - \$4.9 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

MISSISSIPPI COUNTY

PROJECT DETAILS

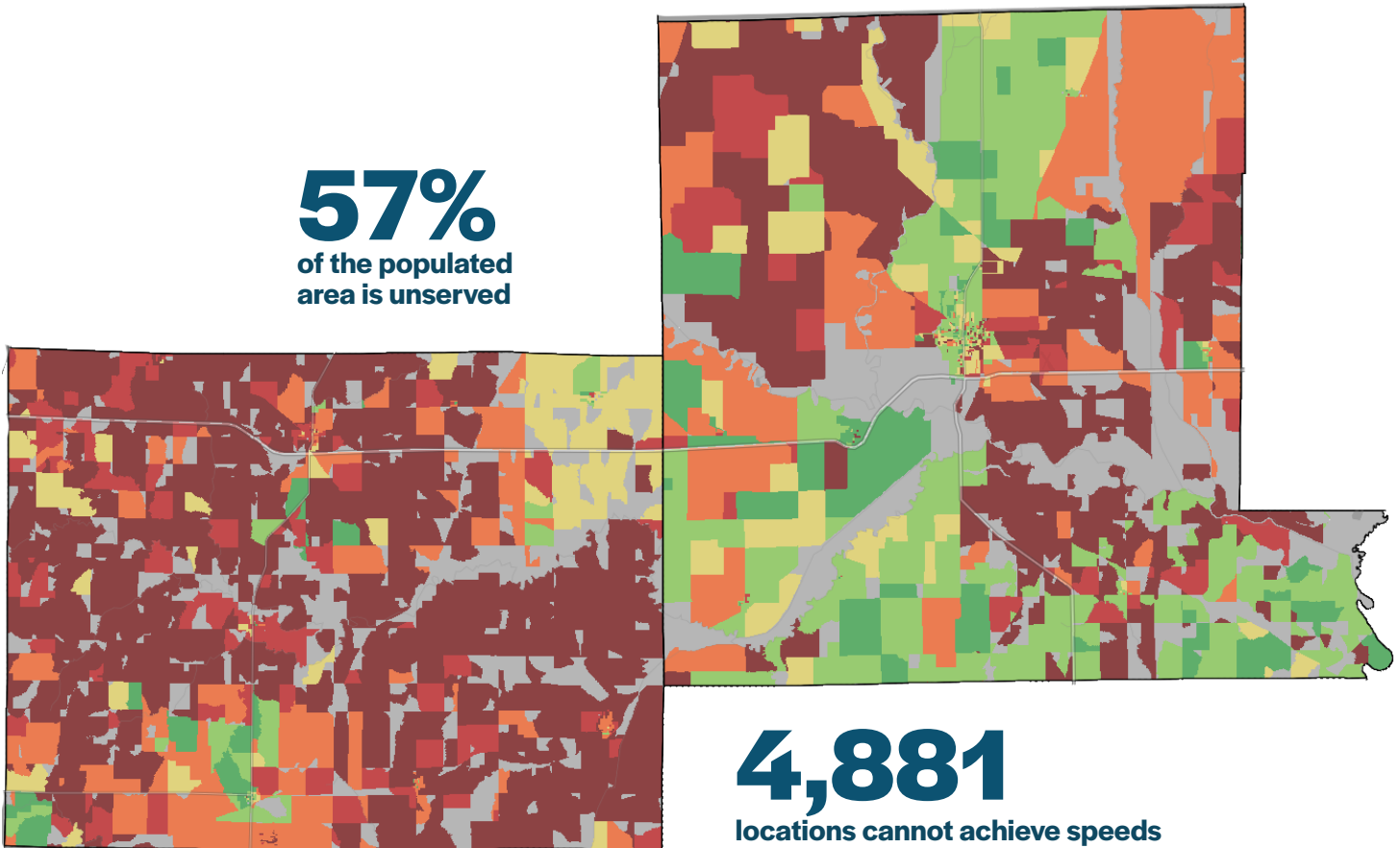
1

AERIAL		UNDERGROUND		25 fiber miles	
\$2.2M - \$3M	COST TO PASS	\$2.9M - \$4.9M		13 locations	.5 locations per mile
\$13K - \$52K	ISP INVESTMENT	\$13K - \$52K			
\$2.2M - \$3M	FUNDING GAP	\$2.9M - \$4.9M			
\$5,576 - \$7,601	annual cost per location over 30 years	\$7,334 - \$12,515			

Caldwell / Livingston

Project Cluster • Green Hills Regional Planning Commission

57%
of the populated
area is unserved



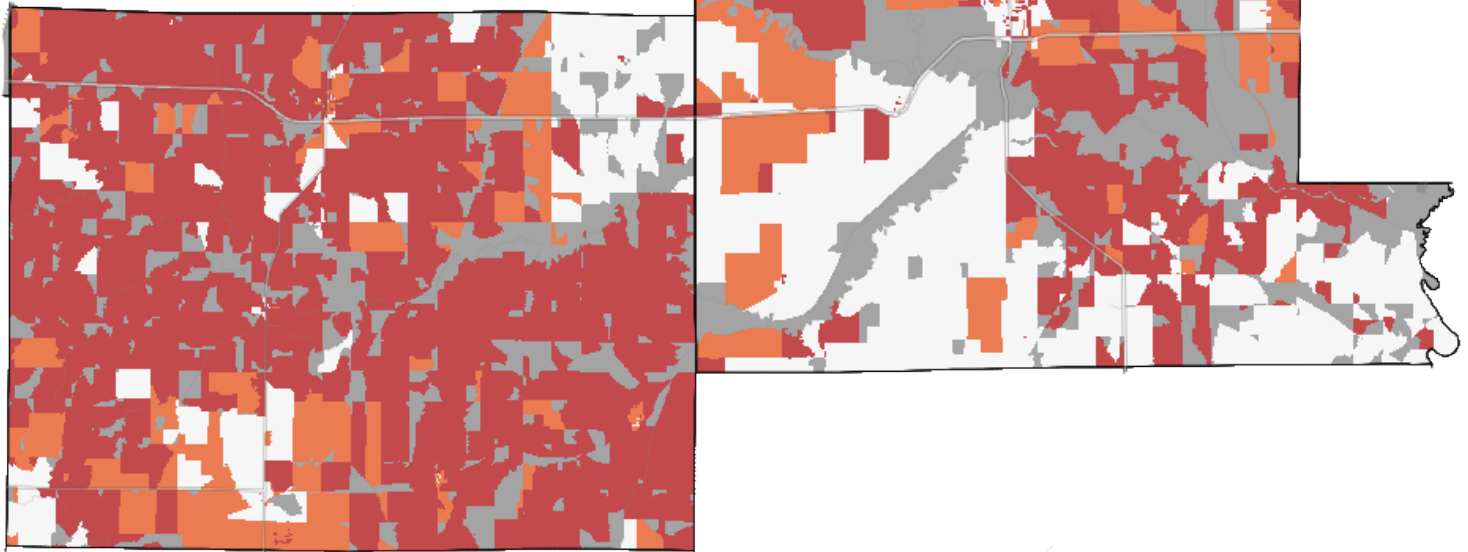
4,881
locations cannot achieve speeds
greater than 25/3 Mbps

■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

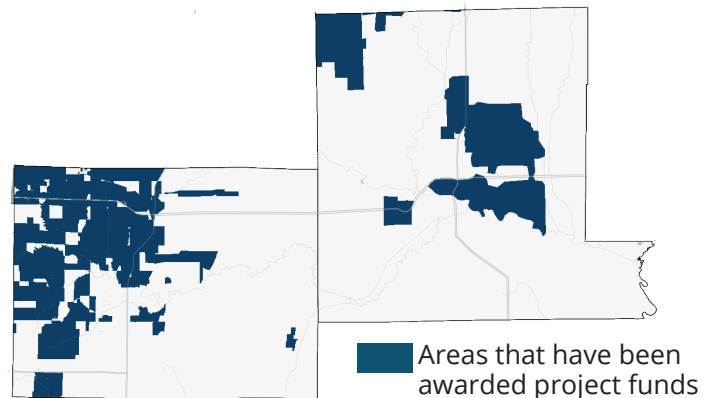
AREAS OF FOCUS

56%

of locations cannot achieve
broadband speeds greater than
50/10 Mbps

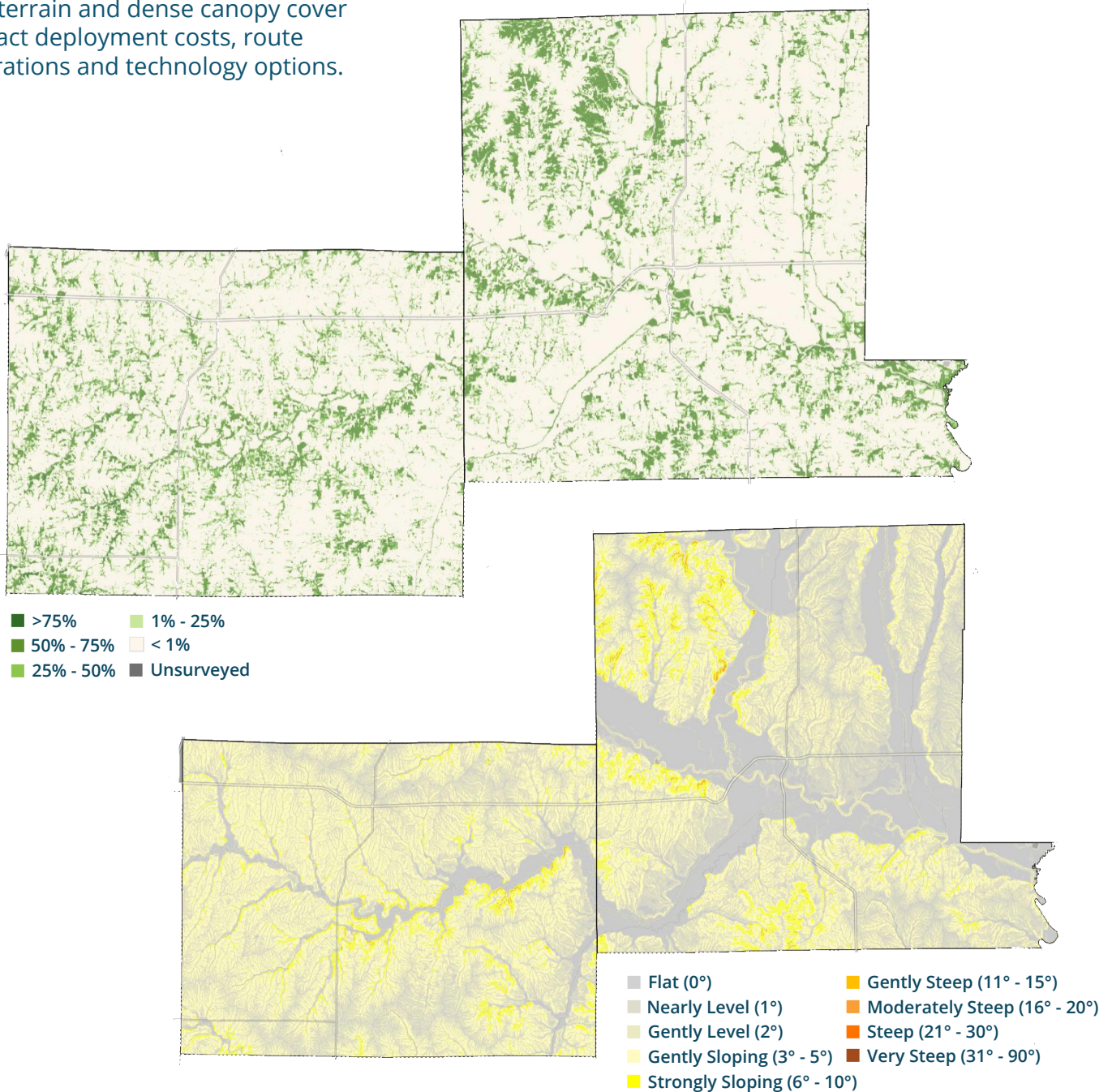


- Areas below 25/3 Mbps
- Areas above 25/3 Mbps and below 50/10 Mbps



PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Caldwell / Livingston

Project Cluster • Green Hills Regional Planning Commission

PROJECT AREAS

2,906

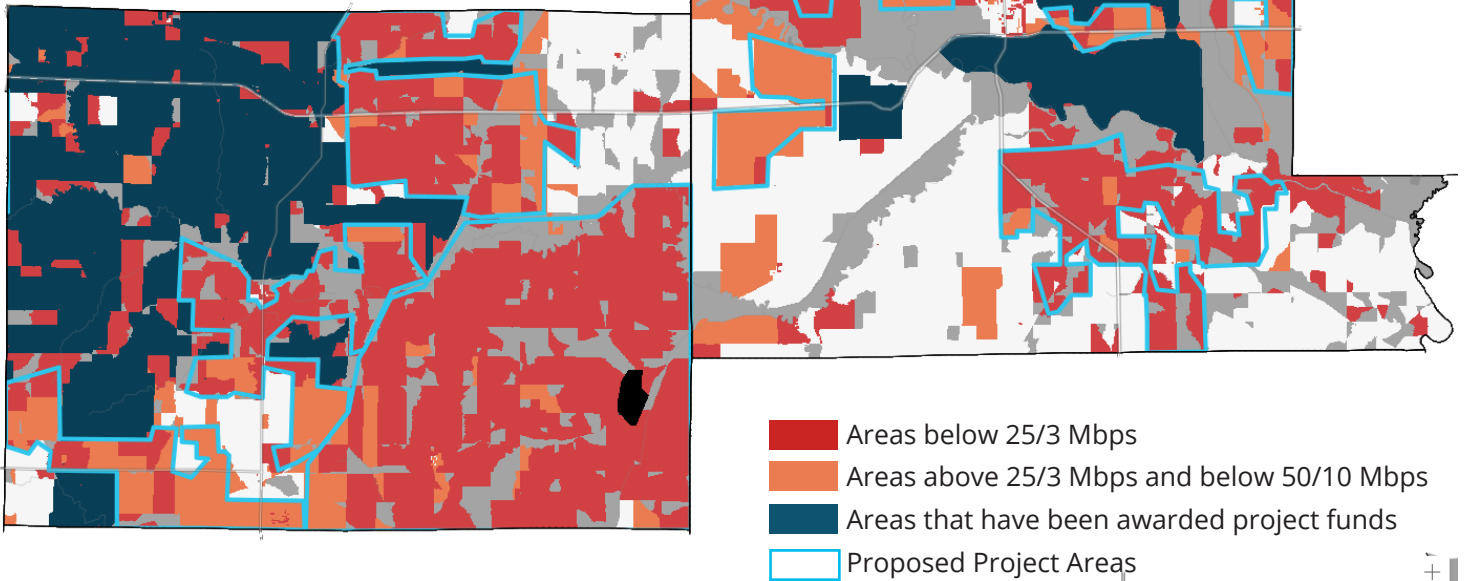
LOCATIONS

916

BUSINESSES

764

MILES OF FIBER NEEDED



Investment Range = \$68 - \$149.5 million[†]

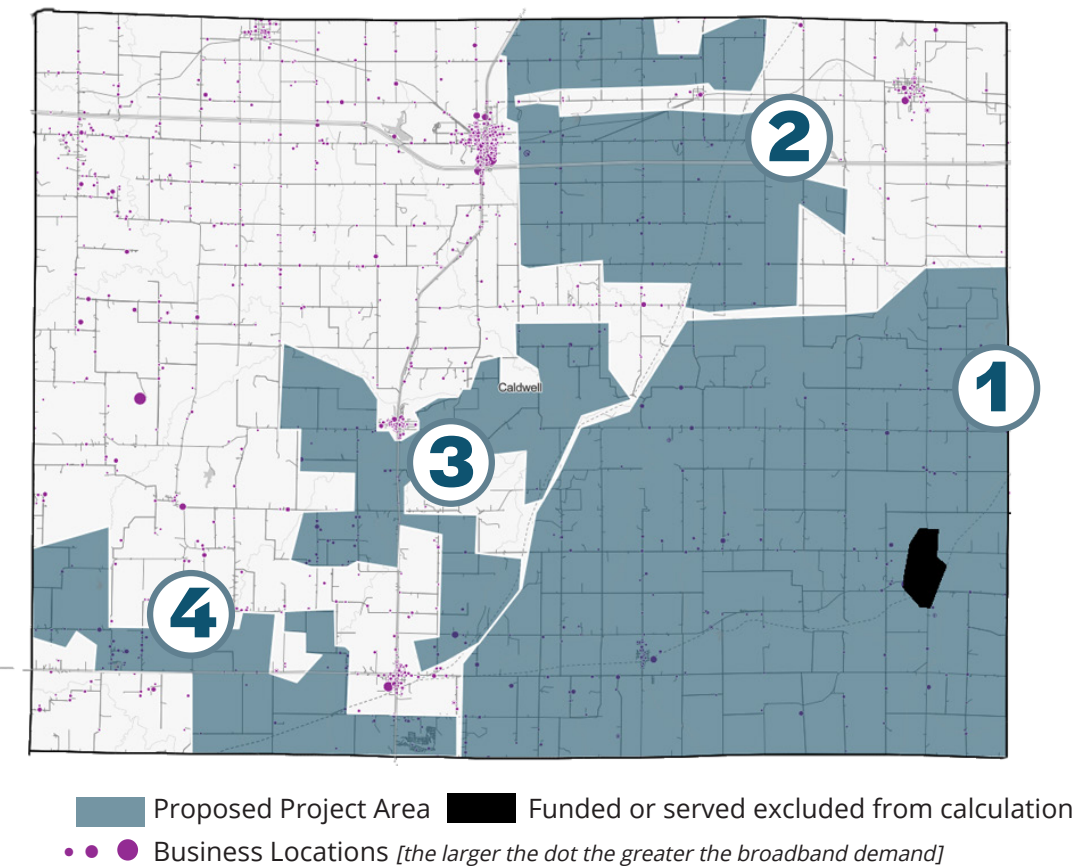
**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

† The Investment range for this cluster area may be lower; due to carrier electing to participate in E-ACAM that can impact eligibility for BEAD funding

CALDWELL COUNTY

PROJECT AREAS

The northwestern portions of Caldwell County currently are funded-to-served, while the areas around Breckenridge and Polo currently test well enough that we do not recommend any funding in those areas. The remaining parts of the county mostly rate below 25/3 Mbps with isolated blocks testing above 25/3 but still below 50/3 Mbps. For ease of planning, we divided this territory into four separate project areas. All of these areas share at least one boundary. If sufficient funding is available, one or more of these areas could be combined to form a single, larger project area. It should be noted that area #1 includes some funded blocks. We excluded those locations from our budget estimates.



441
fiber miles

1,873
locations

529
business locations

4.3
locations per mile

INVESTMENT = \$39 - \$86 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

CALDWELL COUNTY

PROJECT DETAILS

1

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

UNDERGROUND

\$22.2M - \$29.6M

COST TO PASS

\$29M - \$47.6M

\$1.1M - \$4.4M

ISP INVESTMENT

\$1.1M - \$4.4M

\$17.8M - \$28.5M

FUNDING GAP

\$24.6M - \$47.6M

\$546 - \$875

annual cost per location
over 30 years

\$755 - 1,460

249

fiber miles

1,087
locations

4.4

locations per mile

2

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

UNDERGROUND

\$7.7M - \$10.3M

COST TO PASS

\$10.1M - \$17M

\$181K - \$724K

ISP INVESTMENT

\$181K - \$724K

\$7M - \$10.1M

FUNDING GAP

\$9.4M - \$16.8M

\$1,287 - \$1,866

annual cost per location
over 30 years

\$1,724 - \$3,088

87

fiber miles

181
locations

2.1

locations per mile

3

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

UNDERGROUND

\$4.6M - \$6.2M

COST TO PASS

\$6.1M - \$10.2M

\$158K - \$632K

ISP INVESTMENT

\$158K - \$632K

\$4M - \$6M

FUNDING GAP

\$5.4M - \$10M

\$844 - \$1,274

annual cost per location
over 30 years

\$1,145 - \$2,115

52

fiber miles

158
locations

3.0

locations per mile

4

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

UNDERGROUND

\$4.7M - \$6.3M

COST TO PASS

\$6.2M - \$10.4MK

\$447K - \$1.8M

ISP INVESTMENT

\$447K - \$1.8M

\$2.9M - \$5.9M

FUNDING GAP

\$4.4M - \$9.9MK

\$218 - \$436

annual cost per location
over 30 years

\$326 - \$738

53

fiber miles

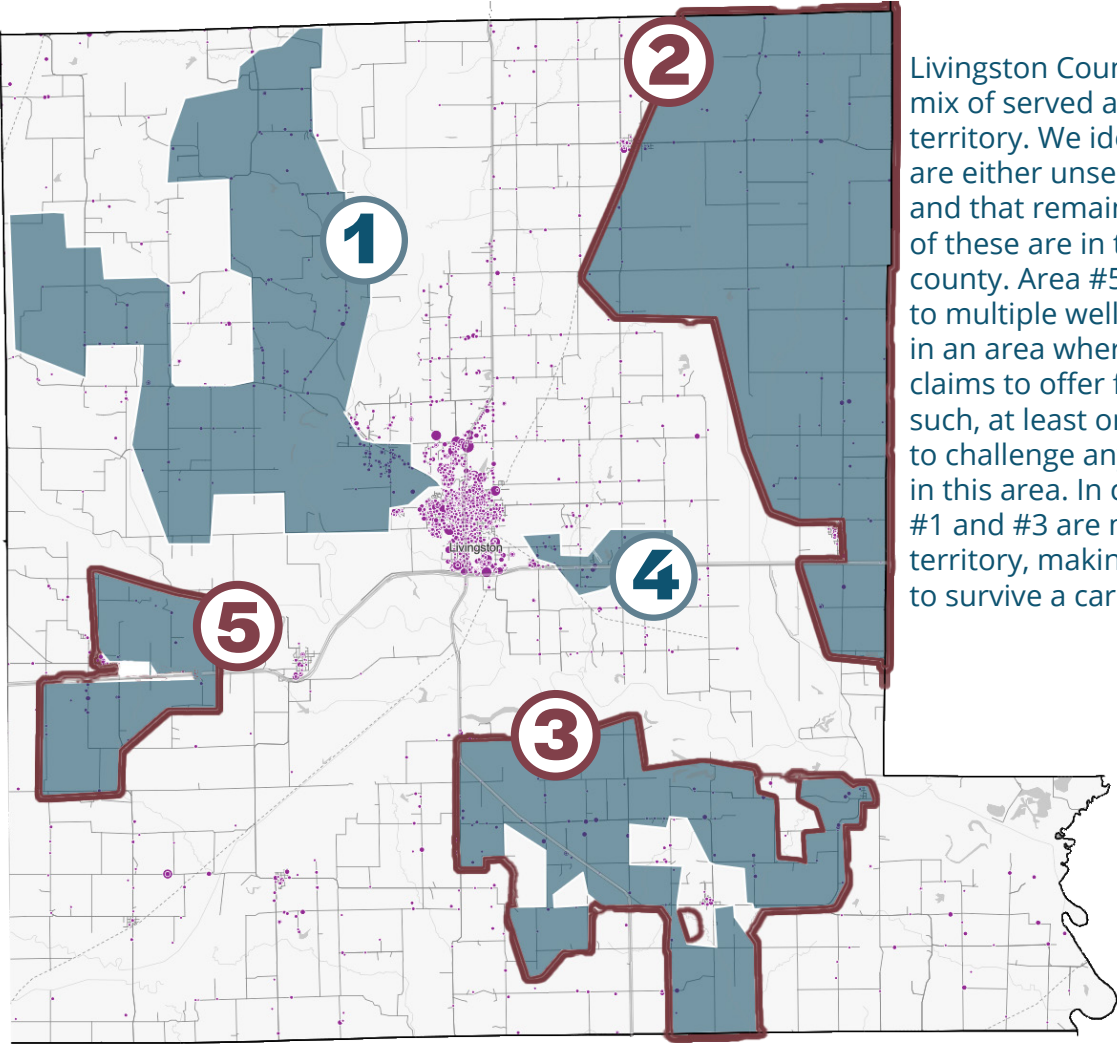
447
locations

8.5

locations per mile

LIVINGSTON COUNTY

PROJECT AREAS



Livingston County includes a significant mix of served and funded-to-served territory. We identified five areas that are either unserved or underserved and that remain unfunded. The largest of these are in the north part of the county. Area #5 in the west is adjacent to multiple well-served blocks and falls in an area where at least one provider claims to offer fiber to the home. As such, at least one provider may attempt to challenge any grant applications in this area. In contrast, project areas #1 and #3 are mostly fixed wireless territory, making them much more likely to survive a carrier challenge.

- Proposed Project Area
- • • Business Locations [the larger the dot the greater the broadband demand]
- # Proposed Project Areas fully impacted by E-ACAM

109
fiber miles

497
locations

198
business locations

4.5
locations per mile

INVESTMENT = \$9.8 - \$21.4 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

LIVINGSTON COUNTY

PROJECT DETAILS

1

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$8.8M - \$11.7M

COST TO PASS

\$440K - \$1.8M

ISP INVESTMENT

\$7M - \$11.3M

FUNDING GAP

\$530 - \$853

annual cost per location
over 30 years

UNDERGROUND

\$11.5M - \$19.2M

\$440K - \$1.8M

\$9.7M - \$18.8M

\$734 - \$1,424

98

fiber miles

440

locations

4.5

locations per mile

2

**This project area has been removed from the county overall calculations due to E-ACAM Carrier participation*

AERIAL

\$9.7M - \$12.9M

COST TO PASS

\$251K - \$1M

ISP INVESTMENT

\$8.6M - \$12.7M

FUNDING GAP

\$1,148 - \$1,680

annual cost per location
over 30 years

UNDERGROUND

\$12.6M - \$21.2M

\$251K - \$1M

\$11.6M - \$21M

\$1,542 - \$2,782

108

fiber miles

251

locations

2.3

locations per mile

3

**This project area has been removed from the county overall calculations due to E-ACAM Carrier participation*

AERIAL

\$7.5M - \$10M

COST TO PASS

\$213K - \$852K

ISP INVESTMENT

\$6.6M - \$9.8M

FUNDING GAP

\$1,035 - \$1,528

annual cost per location
over 30 years

UNDERGROUND

\$9.8M - \$16.4M

\$213K - \$852K

\$8.9M - \$16.2M

\$1,394 - \$2,534

84

fiber miles

213

locations

2.5

locations per mile

LIVINGSTON COUNTY

PROJECT DETAILS

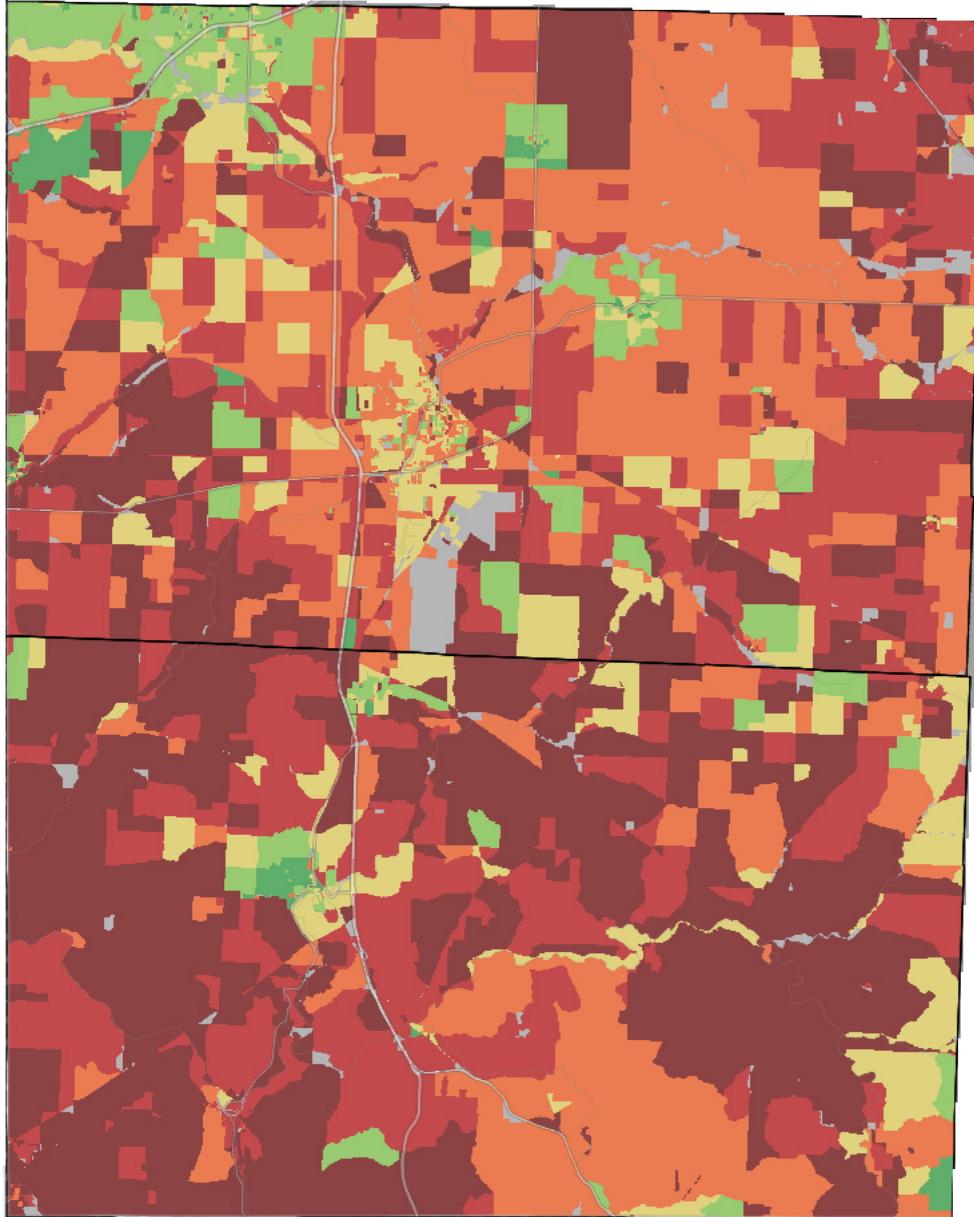
4

AERIAL		UNDERGROUND		11 fiber miles	
\$987K - \$1.3M	COST TO PASS	\$1.3M - \$2.2M		57 locations	5.1 locations per mile
\$57K - \$228K	ISP INVESTMENT	\$57K - \$228K			
\$759M - \$1.3M	FUNDING GAP	\$1M - \$2.1M			
\$444 - \$738	annual cost per location over 30 years	\$622 - \$1,235			

5

**This project area has been removed from the county overall calculations due to E-ACAM Carrier participation*

AERIAL		UNDERGROUND		22 fiber miles	
\$2M - \$2.6M	COST TO PASS	\$2.6M - \$4.3M		72 locations	3.3 locations per mile
\$72K - \$288K	ISP INVESTMENT	\$72K - \$288K			
\$1.7M - \$2.5M	FUNDING GAP	\$2.3M - \$4.2M			
\$770 - \$1,175	annual cost per location over 30 years	\$1,048 - \$1,953			

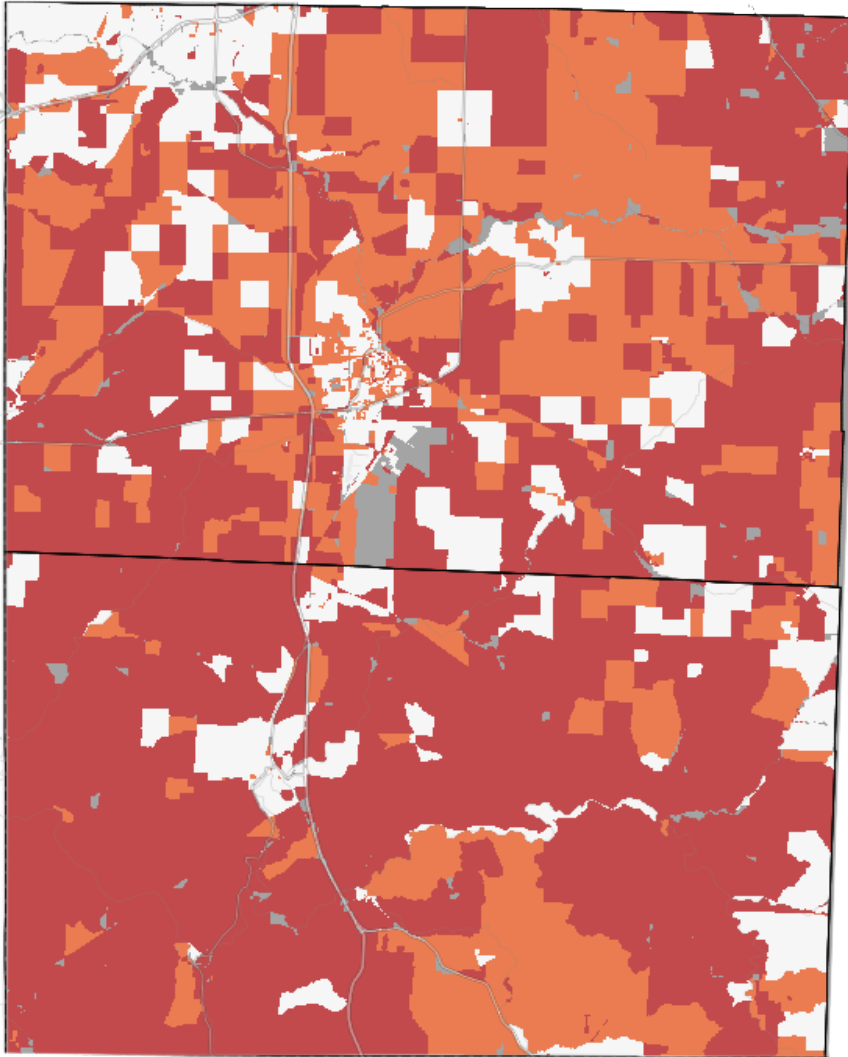


64%
of the populated
area is unserved

14,876
locations cannot
achieve speeds greater
than 25/3 Mbps

- Below 10/1 Mbps
- Above 10/1;
Below 25/3 Mbps
- Above 25/3;
Below 50/10 Mbps
- Above 50/10;
Below 100/20 Mbps
- Above 100/20;
Below 200/50 Mbps
- Above 200/50 Mbps
- null / no data

AREAS OF FOCUS

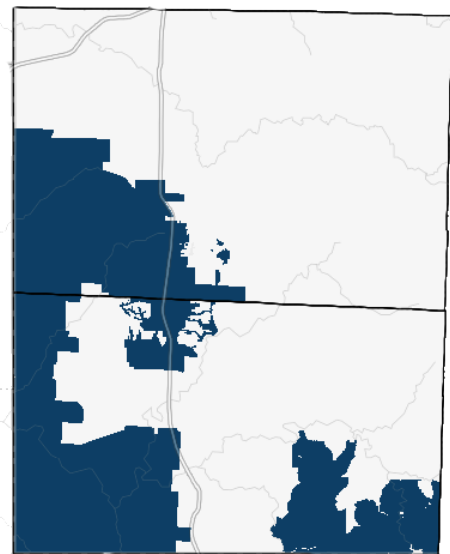


62%

of locations cannot achieve
broadband speeds greater than
50/10 Mbps

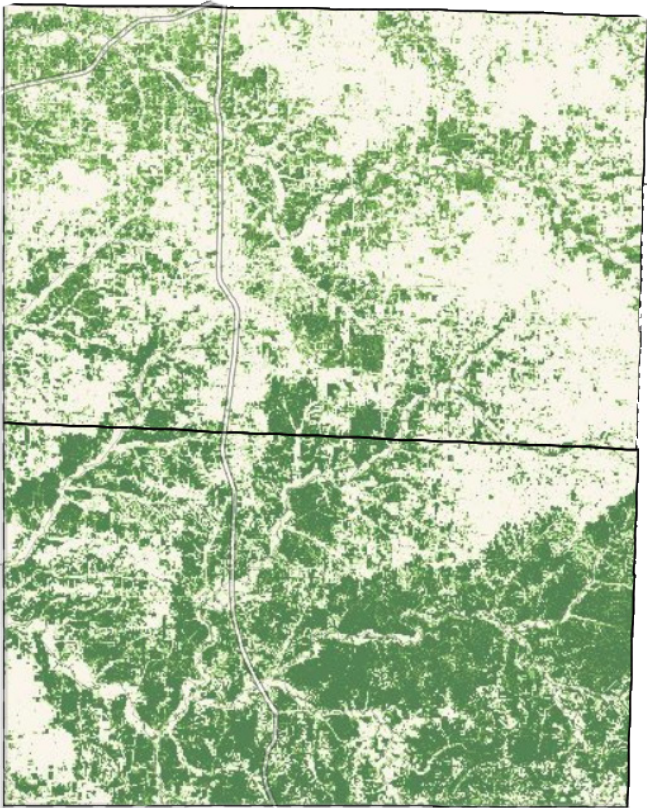
- Areas below 25/3 Mbps
- Areas above 25/3 Mbps and below 50/10 Mbps

Areas that have been
awarded project funds

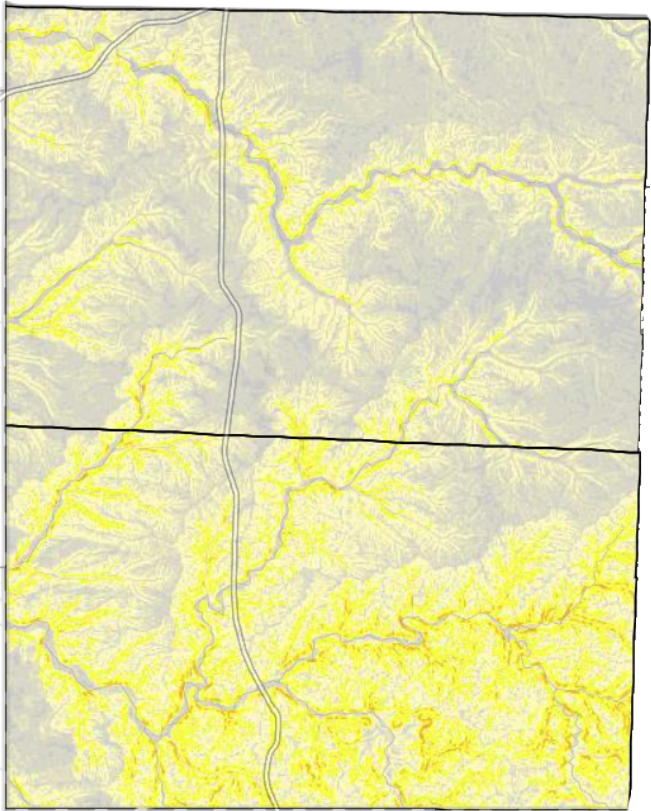


PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



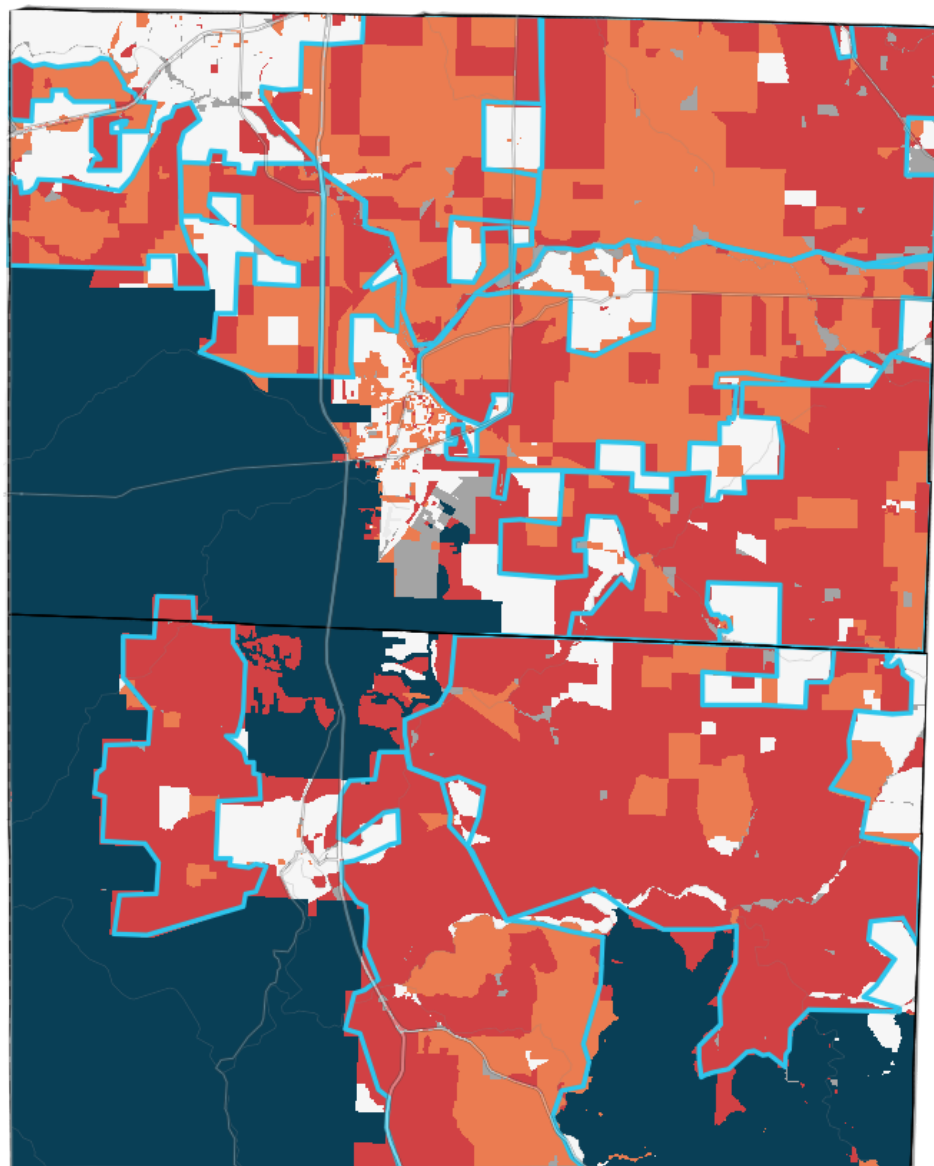
- >75%
- 50% - 75%
- 25% - 50%
- 1% - 25%
- < 1%
- Unsurveyed



- Flat (0°)
- Nearly Level (1°)
- Gently Level (2°)
- Gently Sloping (3° - 5°)
- Strongly Sloping (6° - 10°)
- Gently Steep (11° - 15°)
- Moderately Steep (16° - 20°)
- Steep (21° - 30°)
- Very Steep (31° - 90°)

Newton / McDonald

Project Cluster • Harry S. Truman Coordinating Council



PROJECT AREAS

10,801
LOCATIONS

3,983
BUSINESSES

1,334
MILES OF FIBER NEEDED

Areas below 25/3 Mbps

Areas above 25/3 Mbps and below 50/10 Mbps

Areas that have been awarded project funds

Proposed Project Areas

Investment Range = \$118.8 - \$261 million[†]

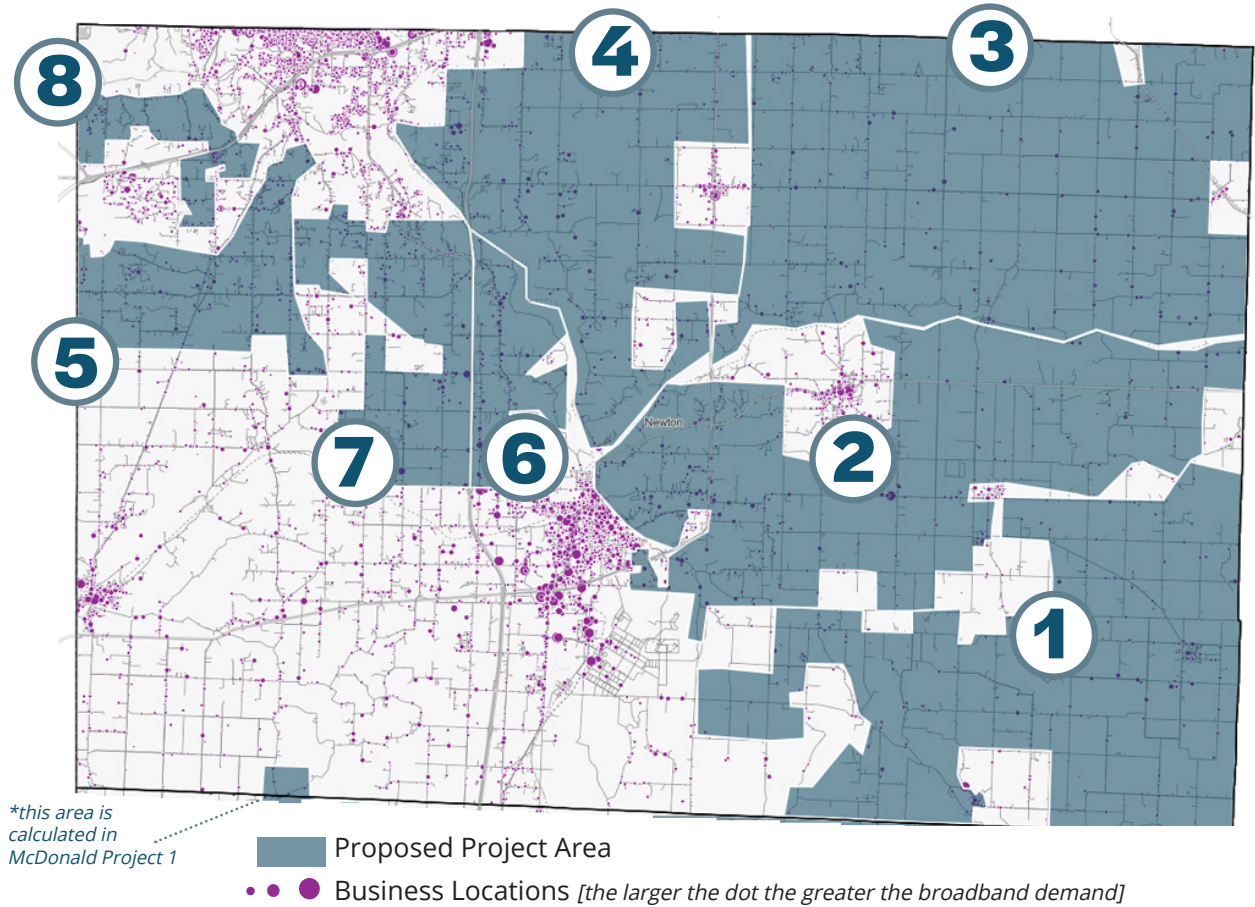
**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

† The Investment range for this cluster area may be lower; due to carrier electing to participate in E-ACAM that can impact eligibility for BEAD funding

NEWTON COUNTY

PROJECT AREAS

Newton County has significant un/underserved territory in the eastern half of the county and to the south of the Joplin metro area, while the southwestern quadrant is funded-to-served. Underserved areas that rate above 25/3 Mbps but below 50/10 Mbps correspond closely with ISP claims of fiber to the home, while areas that rate below 25/3 correspond with territories claimed by either fixed wireless or DSL providers. Four of our project areas include at least some territory that has been claimed as fiber but which rates below 50/10 Mbps. As such, these areas may be more likely to receive carrier challenges during the funding process. The project areas surrounding Diamond and Granby have the highest percentage of claimed fiber while the area in the southeastern corner and the two to the south of Joplin have the least.



852	7,116	2,835	8.3
fiber miles	locations	business locations	locations per mile

INVESTMENT = \$75.9 - \$166.7million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

NEWTON COUNTY

PROJECT DETAILS

1

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$15.3M - \$20.5M

COST TO PASS

\$1M - \$4.2M

ISP INVESTMENT

\$11M - \$19.4M

FUNDING GAP

\$347 - \$610

annual cost per location
over 30 years

UNDERGROUND

\$20M - \$33.6M

\$1M - \$4.2M

\$15.7M - \$32.6M

\$496 - \$1,023

172

fiber miles

1,061
locations

6.2

locations per mile

2

AERIAL

\$15.1M - \$20.2M

COST TO PASS

\$1.5M - \$6M

ISP INVESTMENT

\$9.2M - \$18.7M

FUNDING GAP

\$206 - \$421

annual cost per location
over 30 years

UNDERGROUND

\$19.8M - \$33.2M

\$1.5M - \$6M

\$13.8M - \$31.7M

\$311 - \$713

170

fiber miles

1,482
locations

8.7

locations per mile

3

AERIAL

\$18.9M - \$25.3M

COST TO PASS

\$1.1M - \$4.5M

ISP INVESTMENT

\$14.5M - \$24.2M

FUNDING GAP

\$431 - \$722

annual cost per location
over 30 years

UNDERGROUND

\$24.8M - \$41.6M

\$1.1M - \$4.5M

\$20.3M - \$40.5M

\$605 - \$1,207

213

fiber miles

1,118
locations

5.3

locations per mile

4

AERIAL

\$10.8M - \$14.4M

COST TO PASS

\$1M - \$4.3M

ISP INVESTMENT

\$6.5M - \$13.4M

FUNDING GAP

\$201 - \$413

annual cost per location
over 30 years

UNDERGROUND

\$14.1M - \$23.7M

\$1M - \$4.3M

\$9.8M - \$22.6M

\$304 - \$701

122

fiber miles

1,077
locations

8.9

locations per mile

NEWTON COUNTY

PROJECT DETAILS

5

AERIAL

\$4.4M - \$5.9M

COST TO PASS

\$764K - \$3M

ISP INVESTMENT

\$1.3M - \$5.1M

FUNDING GAP

\$58 - \$223

annual cost per location
over 30 years

UNDERGROUND

\$5.7M - \$9.7M

\$764K - \$3M

\$2.7M - \$8.9M

\$117 - \$387

49
fiber miles

764
locations

15.5
locations per mile

6

AERIAL

\$3.2M - \$4.3M

COST TO PASS

\$410K - \$1.6M

ISP INVESTMENT

\$1.6M - \$3.9M

FUNDING GAP

\$127 - \$315

annual cost per location
over 30 years

UNDERGROUND

\$4.2M - \$7M

\$410K - \$1.6M

\$2.6M - \$6.6M

\$207 - \$539

36
fiber miles

410
locations

11.4
locations per mile

7

AERIAL

\$5.8M - \$7.7M

COST TO PASS

\$815K - \$3.3M

ISP INVESTMENT

\$2.5M - \$6.9M

FUNDING GAP

\$102 - \$281

annual cost per location
over 30 years

UNDERGROUND

\$7.5M - \$12.7M

\$815K - \$3.3M

\$4.3M - \$11.8M

\$175 - \$484

65
fiber miles

815
locations

12.6
locations per mile

8

AERIAL

\$2.4M - \$3.2M

COST TO PASS

\$389K - \$1.6M

ISP INVESTMENT

\$803K - \$2.8M

FUNDING GAP

\$69 - \$237

annual cost per location
over 30 years

UNDERGROUND

\$3.1M - \$5.2M

\$389K - \$1.6M

\$1.5M - \$4.8M

\$131 - \$411

27
fiber miles

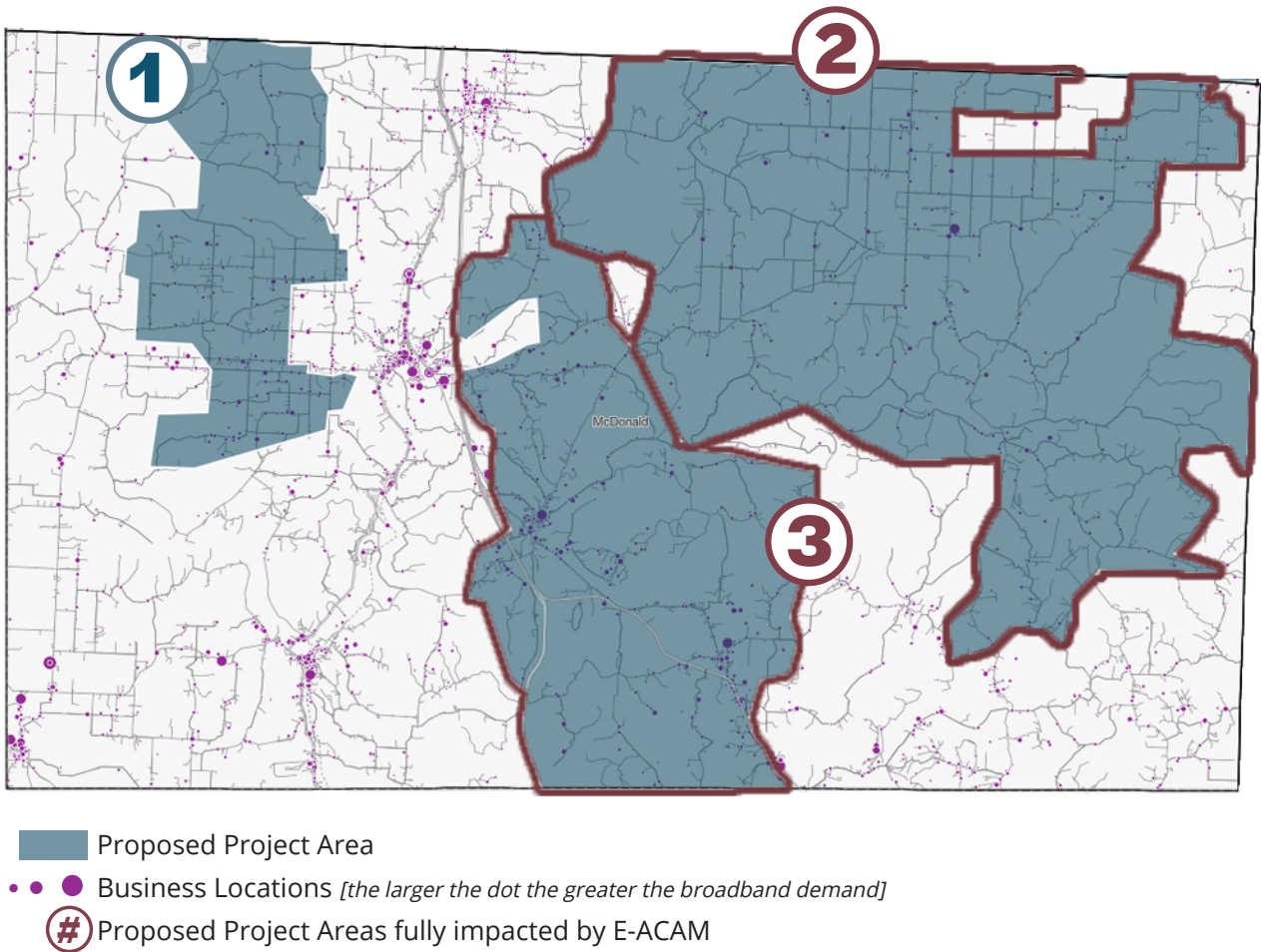
389
locations

14.7
locations per mile

MCDONALD COUNTY

PROJECT AREAS

McDonald County has existing broadband awards in the west and southeastern parts of the county. Of the areas that remain un/underserved and unfunded, the largest are located east of US 71. Project areas #1 and #2 both currently show fixed wireless or DSL as their fastest technologies, while project area #3 includes many locations that were reported to the FCC as offering fiber to the home but which still rate as below 50/10 Mbps. As such, project area #3 may generate carrier challenges during a funding proposal.



77
fiber miles

606
locations

171
business locations

7.9
locations per mile

INVESTMENT = \$6.8 - \$15 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

MCDONALD COUNTY

PROJECT DETAILS

1

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

UNDERGROUND

\$6.9M - \$9.1M

COST TO PASS

\$8.9M - \$15M

\$606K - \$2.4M

ISP INVESTMENT

\$606K - \$2.4M

\$4.4M - \$8.5M

FUNDING GAP

\$6.5M - \$14.4M

\$242 - \$469

annual cost per location
over 30 years

\$358 - \$792

77

fiber miles

606

locations

7.9

locations per mile

2

**This project area has been removed from the county overall calculations due to E-ACAM Carrier participation*

AERIAL

UNDERGROUND

\$21.8M - \$29M

COST TO PASS

\$28.4M - \$47.8M

\$1.6M - \$6.2M

ISP INVESTMENT

\$1.6M - \$6.2M

\$15.5M - \$27.5M

FUNDING GAP

\$22.2M - \$46.2M

\$332 - \$588

annual cost per location
over 30 years

\$475 - \$989

244

fiber miles

1,559

locations

6.4

locations per mile

3

**This project area has been removed from the county overall calculations due to E-ACAM Carrier participation*

AERIAL

UNDERGROUND

\$14.3M - \$19.2M

COST TO PASS

\$18.7M - \$31.5M

\$1.5M - \$6M

ISP INVESTMENT

\$1.5M - \$6M

\$8.3M - \$17.6M

FUNDING GAP

\$12.7M - \$30M

\$181 - \$387

annual cost per location
over 30 years

\$278 - \$657

161

fiber miles

1,520

locations

9.4

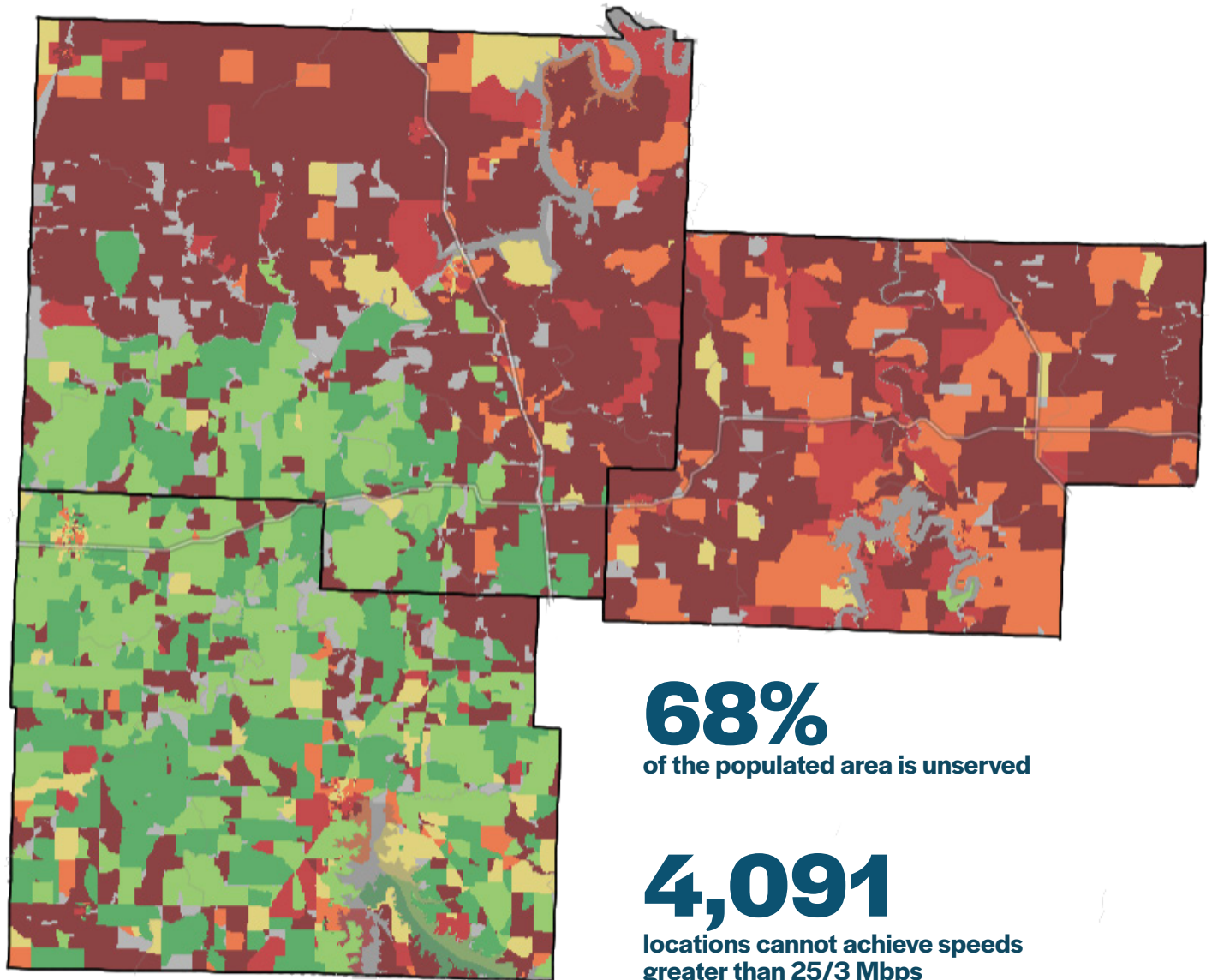
locations per mile

Proposed Project Area

Business Locations [the larger the dot the greater the broadband demand]

Hickory / Cedar / St. Clair

Project Cluster • Kaysinger Basin Regional Planning Commission

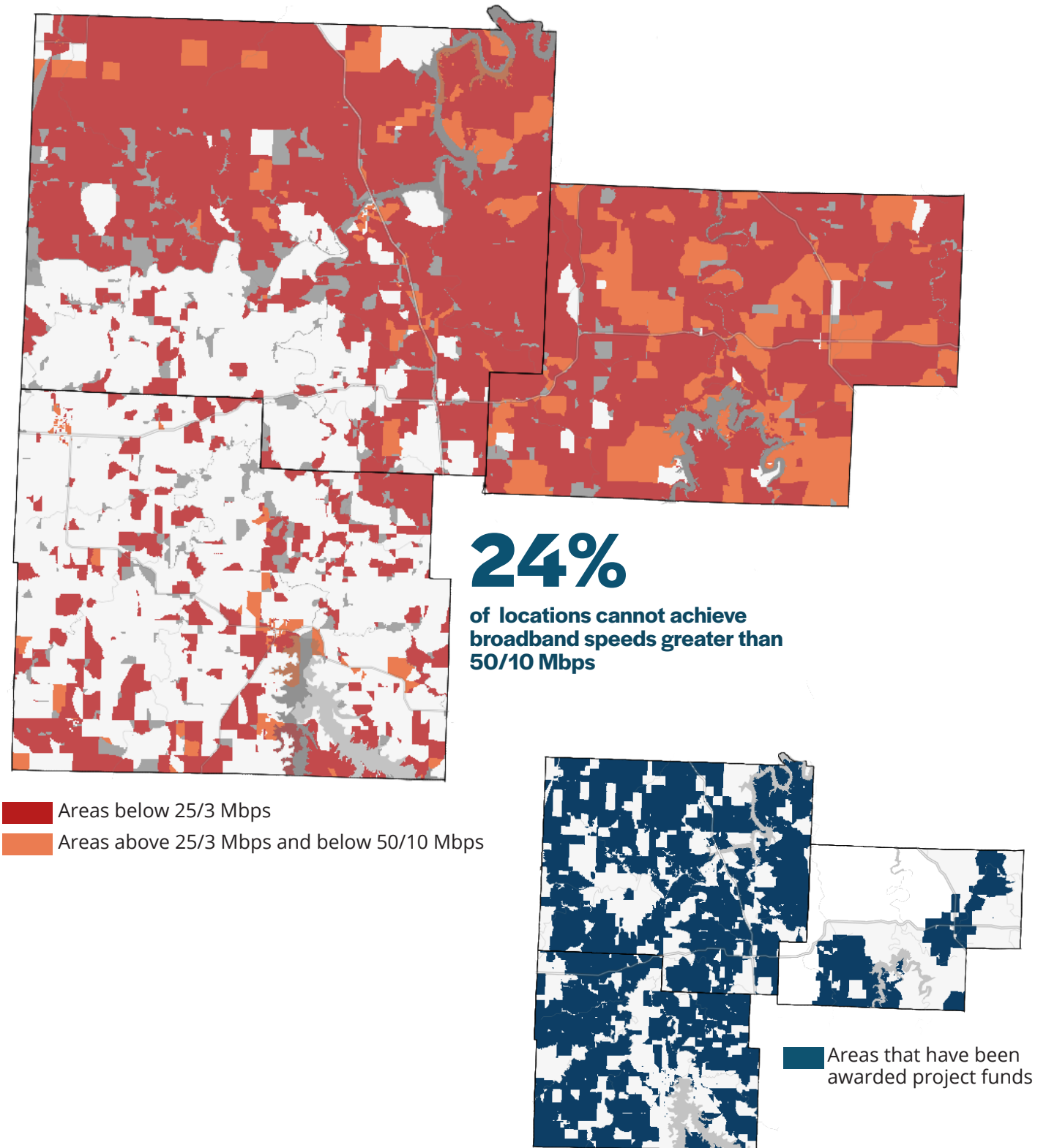


■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

Hickory / Cedar / St. Clair

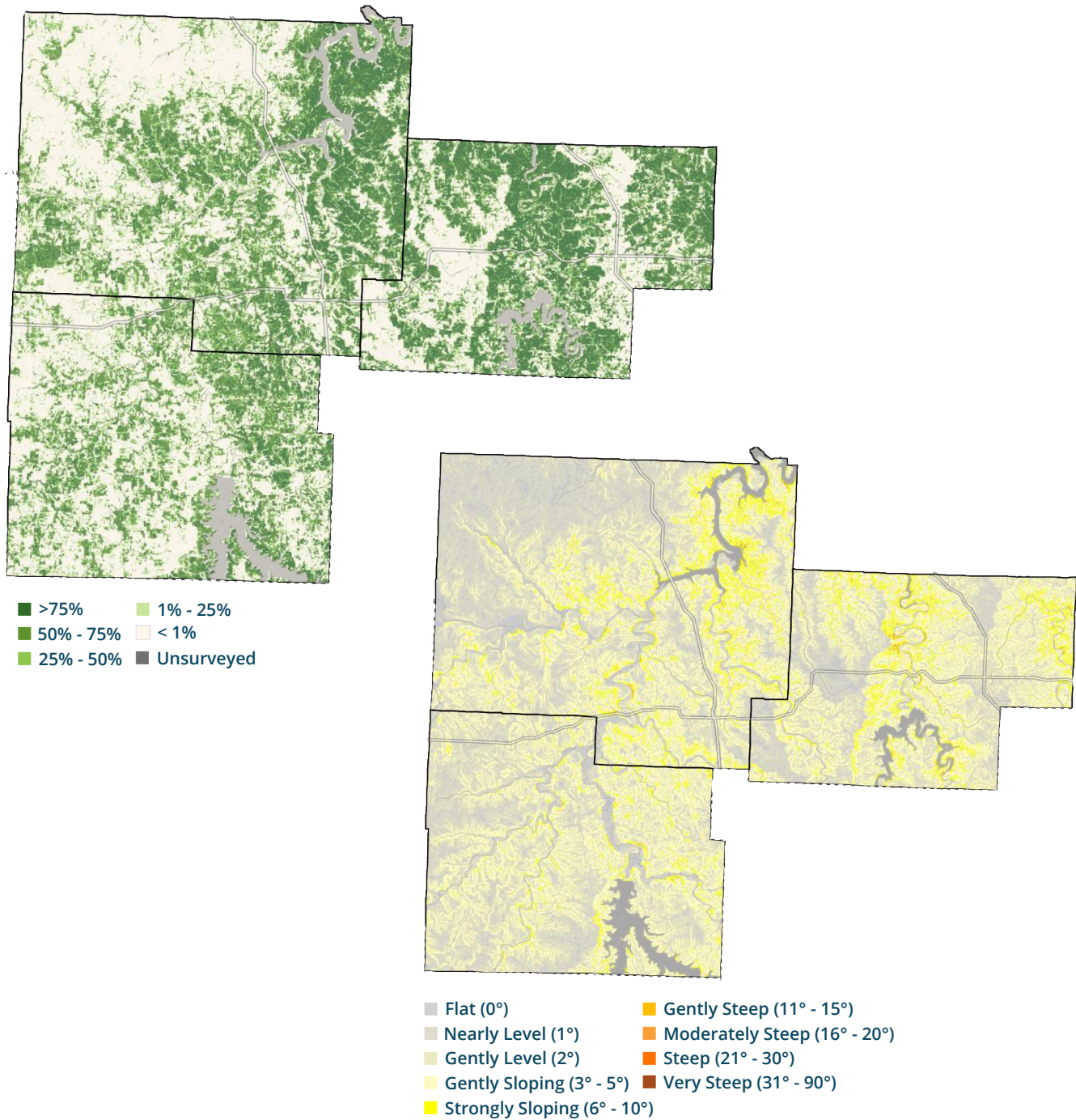
Project Cluster • Kaysinger Basin Regional Planning Commission

AREAS OF FOCUS



PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Hickory / Cedar / St. Clair

Project Cluster • Kaysinger Basin Regional Planning Commission

PROJECT AREAS

6,259

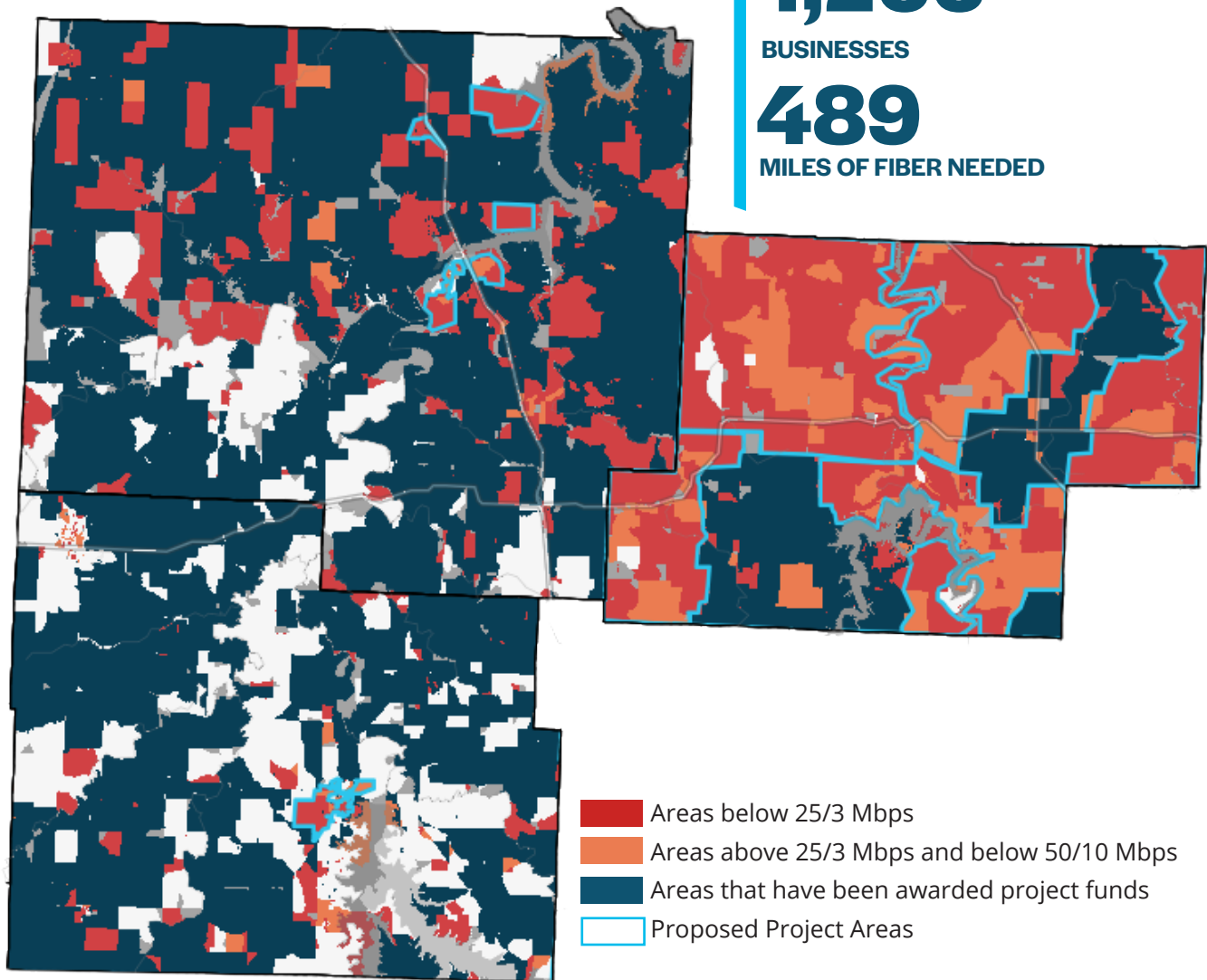
LOCATIONS

1,266

BUSINESSES

489

MILES OF FIBER NEEDED



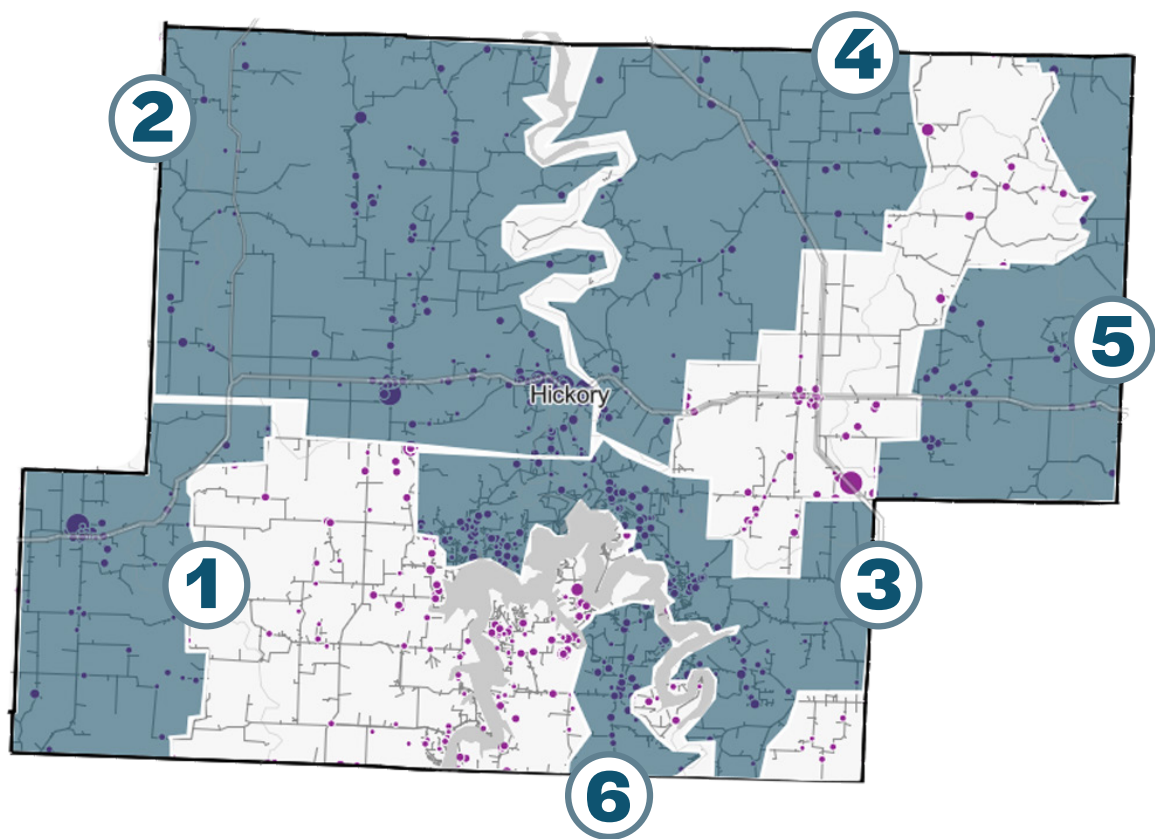
Investment Range = \$43.5 - \$95.6 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

HICKORY COUNTY

PROJECT AREAS

With the exception of funded areas in the northeast and southwest, Hickory County is mostly underserved/unserved. We identified six potential project areas in the county, divided roughly by geographic quadrants and by Pomme de Terre lake and the southern arm of Truman Reservoir. Most of these project areas can be combined with at least one other if funding is available. When considering such combinations, keep in mind that it can be difficult to cross a reservoir or river corridor with fiber. Thus, for example, it may make sense to keep area #6 near Pittsburg as its own project area.



■ Proposed Project Area

● ● ● Business Locations *[the larger the dot the greater the broadband demand]*

433
fiber miles

4,653
locations

656
business locations

10.7
locations per mile

INVESTMENT = \$38.6 - \$84.7million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

HICKORY COUNTY

PROJECT DETAILS

1

AERIAL		UNDERGROUND		60 fiber miles	
\$5.3M - \$7.1M	COST TO PASS	\$7M - \$11.7M		426 locations	7.1 locations per mile
\$426K - \$1.7M	ISP INVESTMENT	\$426K - \$1.7M			
\$3.6M - \$7M	FUNDING GAP	\$5.3M - \$11.3M			
\$283 - \$524	annual cost per location over 30 years	\$412 - \$883			

2

AERIAL		UNDERGROUND		147 fiber miles	
\$13.1M - \$17.5M	COST TO PASS	\$17.1M - \$28.8M		1,207 locations	8.2 locations per mile
\$1.2M - \$4.8M	ISP INVESTMENT	\$1.2M - \$4.8M			
\$8.3M - \$16.3M	FUNDING GAP	\$12.3M - \$27.6M			
\$229 - \$451	annual cost per location over 30 years	\$340 - \$762			

3

AERIAL		UNDERGROUND		98 fiber miles	
\$8.7M - \$11.6M	COST TO PASS	\$11.4M - \$19.1M		1,977 locations	20.2 locations per mile
\$2M - \$7.9M	ISP INVESTMENT	\$2M - \$7.9M			
\$785K - \$9.7M	FUNDING GAP	\$3.5M - \$17.1M			
\$13 - \$163	annual cost per location over 30 years	\$58 - \$289			

HICKORY COUNTY

PROJECT DETAILS

4

AERIAL

\$6.5M - \$8.7M

COST TO PASS

\$451K - \$1.8M

ISP INVESTMENT

\$4.7M - \$8.3M

FUNDING GAP

\$349 - \$612

annual cost per location
over 30 years

UNDERGROUND

\$8.5M - \$14.3M

\$451K - \$1.8M

\$6.7M - \$13.9M

\$497 - \$1,027

73

fiber miles

451

locations

6.2

locations per mile

5

AERIAL

\$3M - \$3.9

COST TO PASS

\$211K - \$844K

ISP INVESTMENT

\$2.1M - \$3.7M

FUNDING GAP

\$332 - \$589

annual cost per location
over 30 years

UNDERGROUND

\$3.9M - \$6.5M

\$211K - \$844K

\$3M - \$6.3M

\$476 - \$990

33

fiber miles

211

locations

6.4

locations per mile

6

AERIAL

\$2M - \$2.6

COST TO PASS

\$381K - \$1.5M

ISP INVESTMENT

\$430K - \$2.2M

FUNDING GAP

\$38 - \$195

annual cost per location
over 30 years

UNDERGROUND

\$2.6M - \$4.3M

\$381K - \$1.5M

\$1M - \$3.9M

\$90 - \$342

22

fiber miles

381

locations

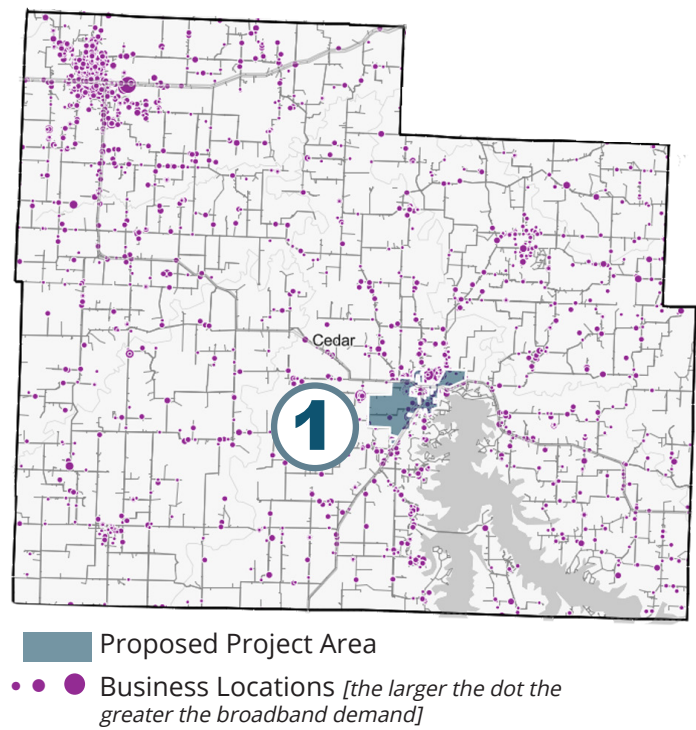
17.3

locations per mile

CEDAR COUNTY

PROJECT AREAS

Cedar County currently is one of the better served rural counties in the state, thanks in large part to a successful RDOF deployment by Connexon. Nearly all of the county now rates above 100/20 Mbps with many locations testing faster than 200/50 Mbps. Much of this change, especially in the southeastern half of the county, took place between May and July 2023. We did identify one small area surrounding the town of Stockton that still tests as underserved; however, this may change in the coming months, considering how quickly the surrounding area has gone from unserved to served.



20
fiber miles

727
locations

307
business locations

36.3
locations per mile

INVESTMENT = \$1.8 - \$2.1 million

1

AERIAL

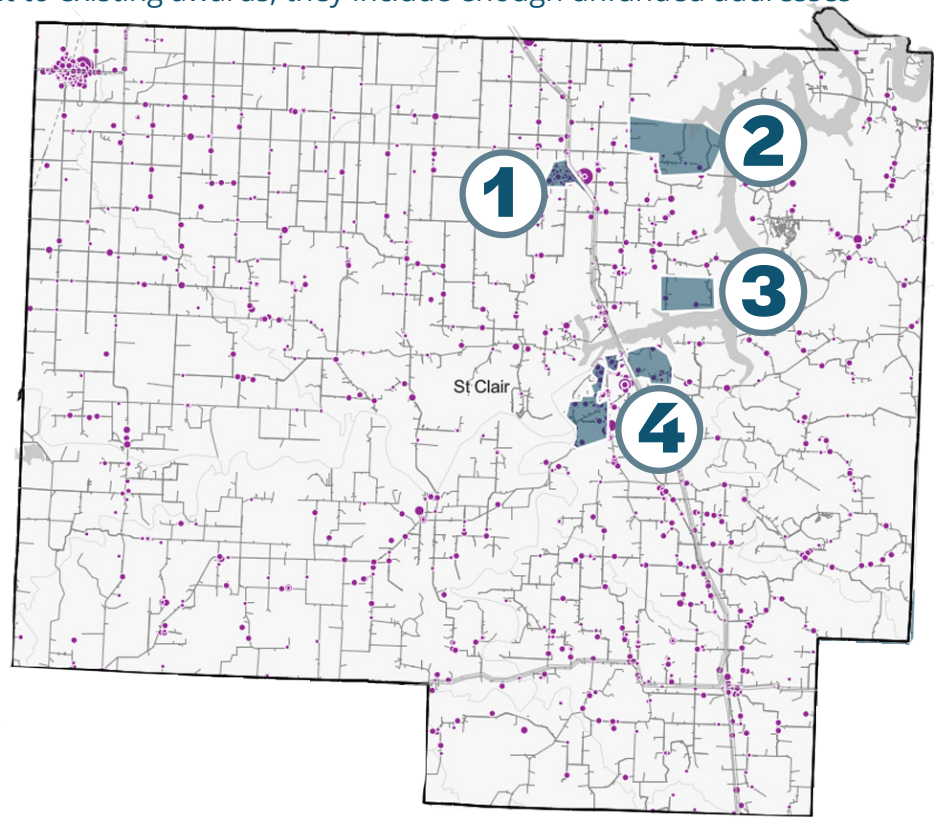
UNDERGROUND

\$1.8M - \$2.4M	COST TO PASS	\$2.3M - \$3.9M
\$727K - \$2.9M	ISP INVESTMENT	\$727K - \$2.9M
\$0 - \$1.7M	FUNDING GAP	\$0 - \$3.2M
\$0 - \$X76	annual cost per location over 30 years	\$0 - \$146

ST. CLAIR COUNTY

PROJECT AREAS

Between a significant amount of existing funding and rural fiber to the home deployments, St. Clair County has only small pockets of remaining need. These include Lowry City and much of Osceola. While Lowry City does include two funded blocks, all of the other blocks there remain below 25/3 Mbps. In Osceola, speed ratings are mixed but remain low enough to justify seeking funding. The other two project areas are along the western shore of Truman Reservoir. While these areas are both adjacent to existing awards, they include enough unfunded addresses to merit a possible funding application. It should be noted, however, that ISPs who receive funds to build in a particular area sometimes will deploy to locations just outside of those boundaries, especially if those locations are along a road that will already be receiving funds. This is why we did not draw small project areas around many of the unfunded blocks in the northern part of the county.



■ Proposed Project Area
● ● ● Business Locations *[the larger the dot the greater the broadband demand]*

35	879	303	24.9
fiber miles	locations	business locations	locations per mile

INVESTMENT = \$3.1 - \$6.9 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

ST. CLAIR COUNTY

PROJECT DETAILS

1

AERIAL

\$1.1M - \$1.5M

COST TO PASS

\$327K - 1.3M

ISP INVESTMENT

\$0 - \$1.2M

FUNDING GAP

\$0 - \$120

annual cost per location
over 30 years

UNDERGROUND

\$1.5M - \$2.5M

\$327K - \$1.3M

\$167K - \$2.2M

\$17 - \$219

13

fiber miles

327

locations

25.8

locations per mile

**In this area, density is high enough that an ISP may be willing to deploy with no subsidy.*

2

AERIAL

\$11K - \$14K

COST TO PASS

\$45K - \$180K

ISP INVESTMENT

\$0

FUNDING GAP

\$0

annual cost per location
over 30 years

UNDERGROUND

\$14K - \$23.5K

\$45K - 180K

\$0

\$0

< 1

fiber miles

45

locations

375

locations per mile

**In this area, density is high enough that an ISP may be willing to deploy with no subsidy.*

3

AERIAL

\$257K - \$344K

COST TO PASS

\$22K - \$88K

ISP INVESTMENT

\$169K - \$322K

FUNDING GAP

\$256 - \$488

annual cost per location
over 30 years

UNDERGROUND

\$334K - \$565K

\$22K - \$88K

\$248K - \$543K

\$376 - \$823

3

fiber miles

22

locations

7.6

locations per mile

4

AERIAL

\$1.8M - \$2.3M

COST TO PASS

\$485K - \$1.9M

ISP INVESTMENT

\$0M - \$1.85M

FUNDING GAP

\$0 - \$127

annual cost per location
over 30 years

UNDERGROUND

\$2.3M - \$3.8M

\$485K - \$1.9M

\$344K - \$3.4M

\$24 - \$230

20

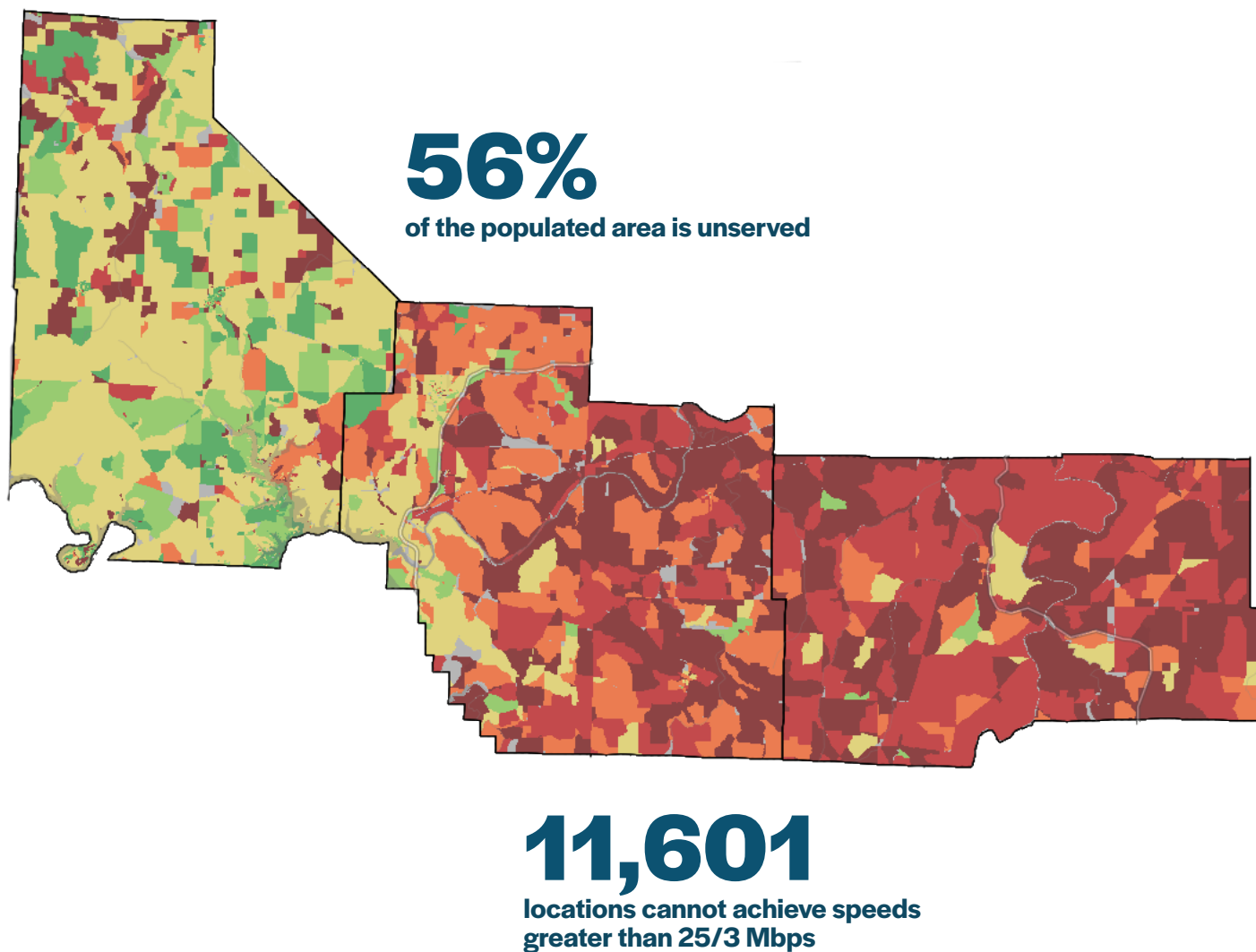
fiber miles

485

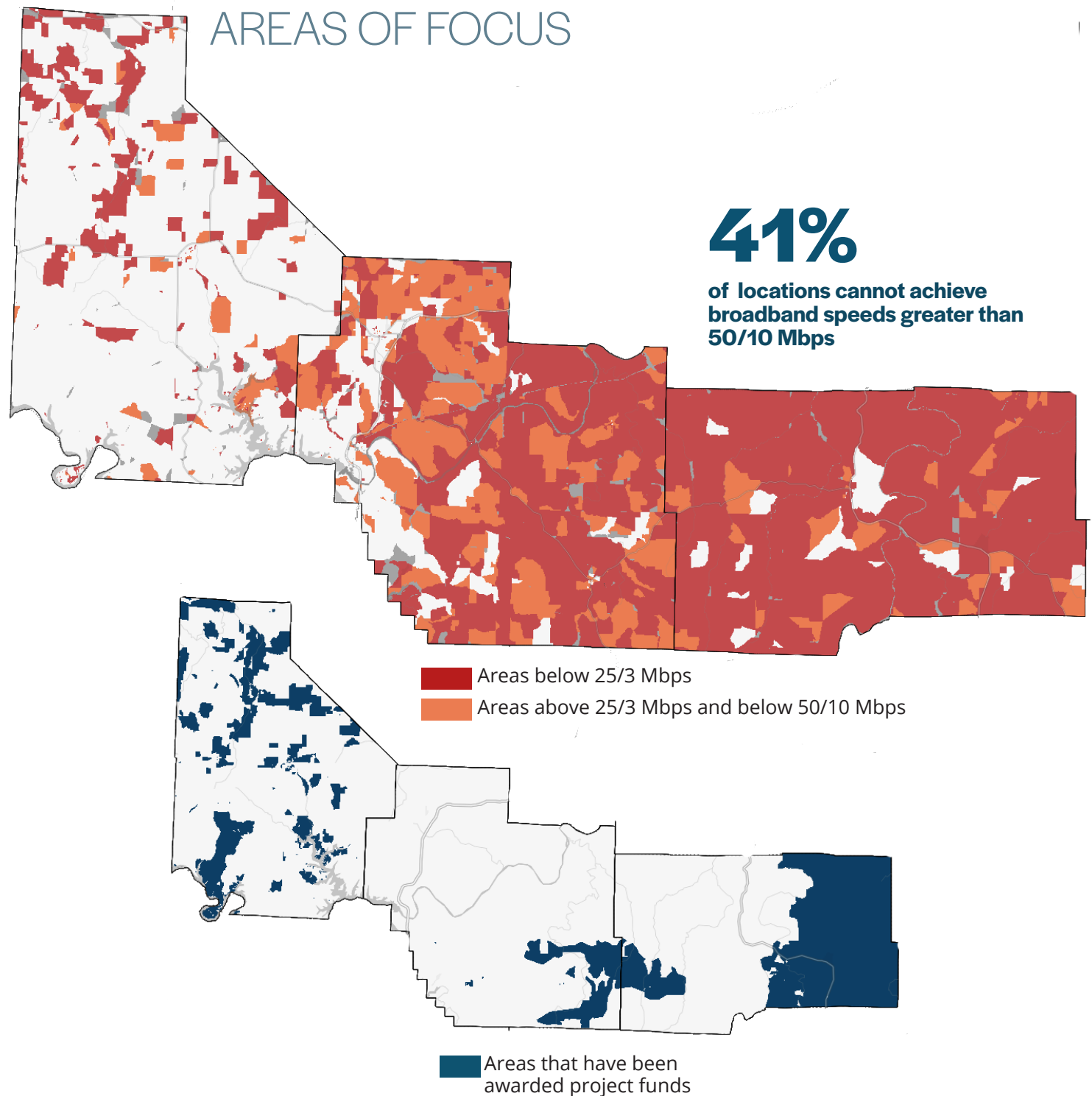
locations

24.7

locations per mile

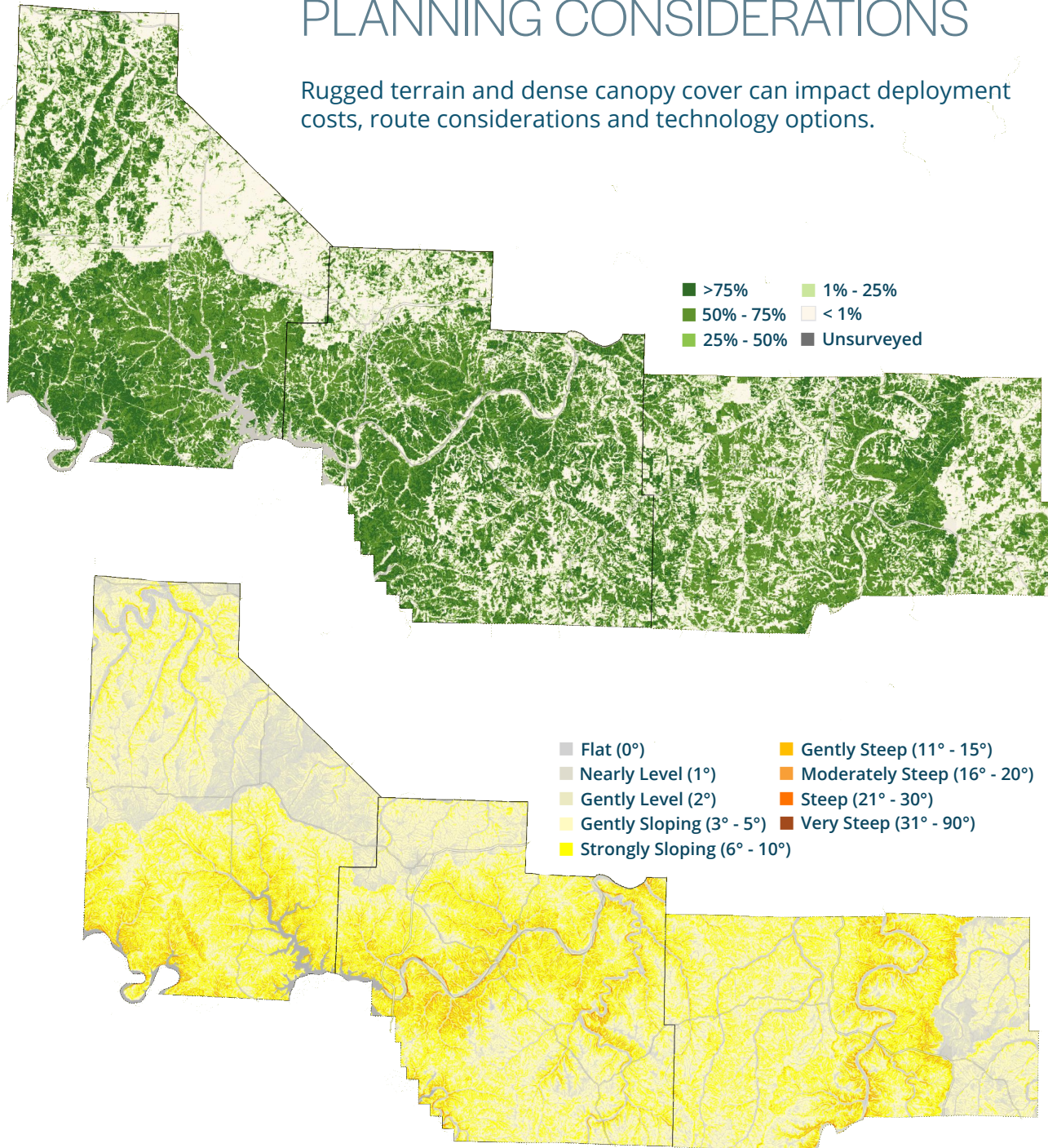


■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

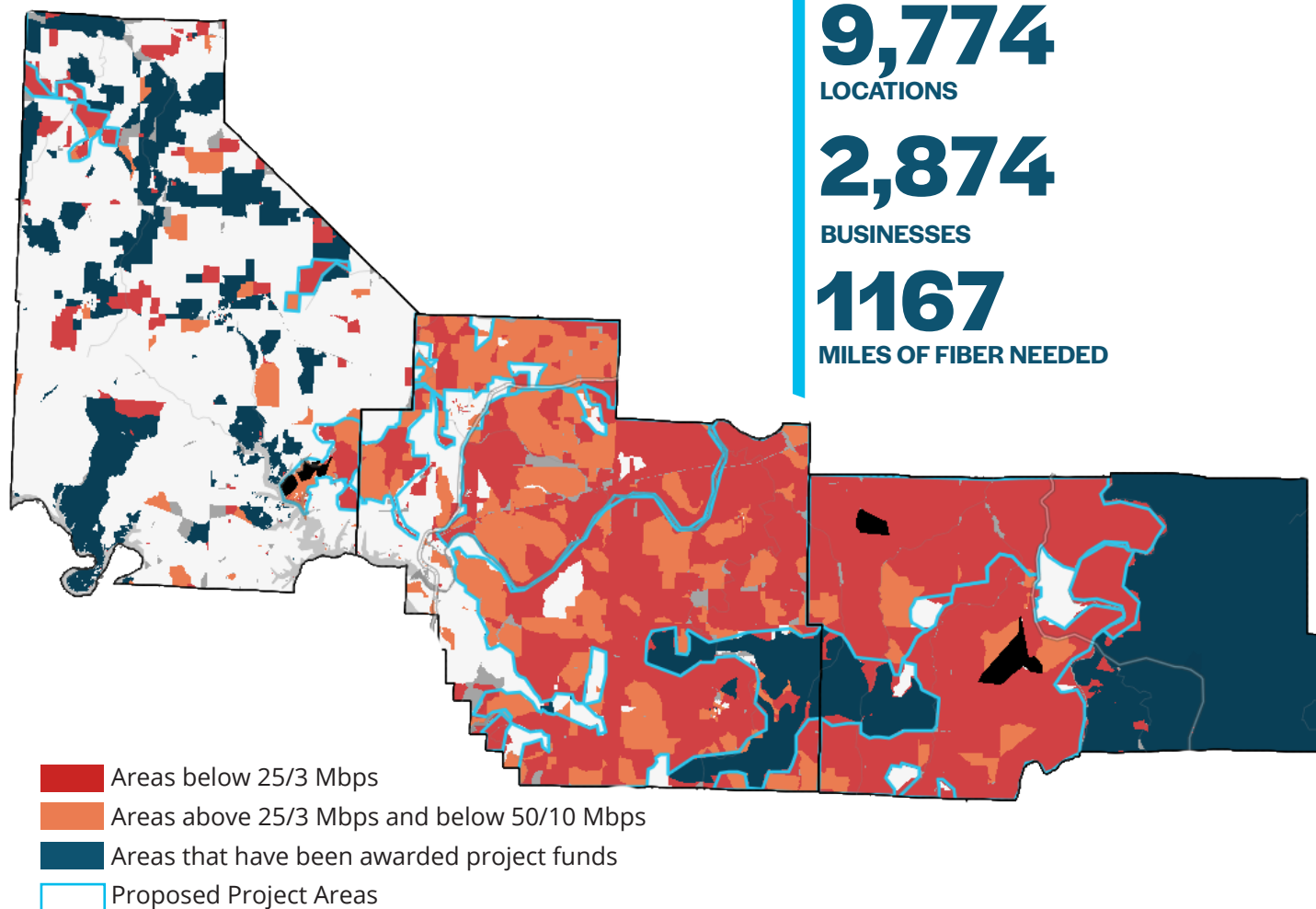


PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



PROJECT AREAS

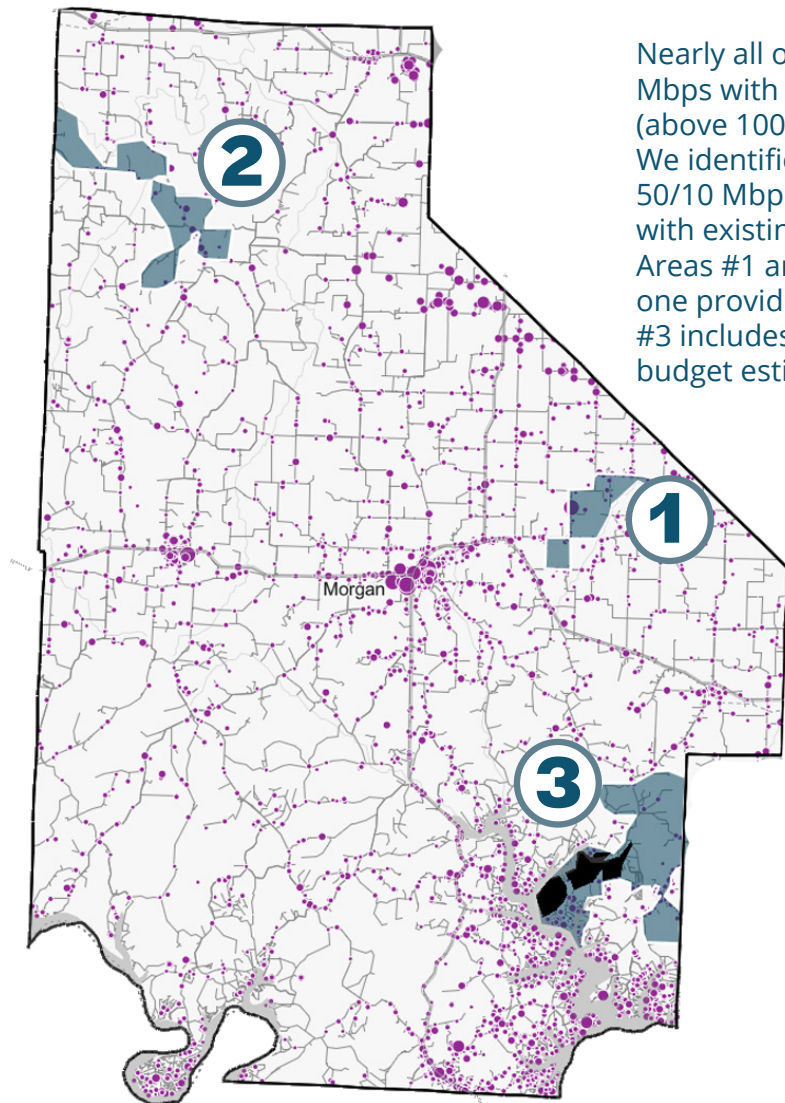


Investment Range = \$104 - \$228.7 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

MORGAN COUNTY

PROJECT AREAS



Nearly all of Morgan County currently rates above 50/10 Mbps with many blocks showing as served or well served (above 100/20 and above 200/50 Mbps respectively). We identified three small project areas that test below 50/10 Mbps. All of these areas are adjacent to blocks with existing funding and/or blocks that rate as served. Areas #1 and #2 are located in territory where at least one provider claims to offer fiber to the home, and area #3 includes some existing funding. When calculating our budget estimates, we excluded those funded areas.

■ Proposed Project Area ■ Funded or served excluded from calculation
● ● ● Business Locations [the larger the dot the greater the broadband demand]

89
fiber miles

1,156
locations

257
business locations

13.1
locations per mile

INVESTMENT = \$7.9 - \$17.3 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

MORGAN COUNTY

PROJECT DETAILS

1

AERIAL		UNDERGROUND		12 fiber miles	
\$1.1M - \$1.4M	COST TO PASS	\$1.4M - \$2.3M		72 locations	6.1 locations per mile
\$72K - \$288K	ISP INVESTMENT	\$72K - \$288K			
\$764K - \$13M	FUNDING GAP	\$1.1M - \$2.3M			
\$353 - 617	annual cost per location over 30 years	\$503 - \$1,036			

2

AERIAL		UNDERGROUND		20 fiber miles	
\$1.7M - \$2.3M	COST TO PASS	\$2.3M - \$3.8M		115 locations	5.9 locations per mile
\$115K - \$460K	ISP INVESTMENT	\$115K - \$460K			
\$1.3M - \$2M	FUNDING GAP	\$1.8M - \$3.7M			
\$372 - \$642	annual cost per location over 30 years	\$527 - \$1,077			

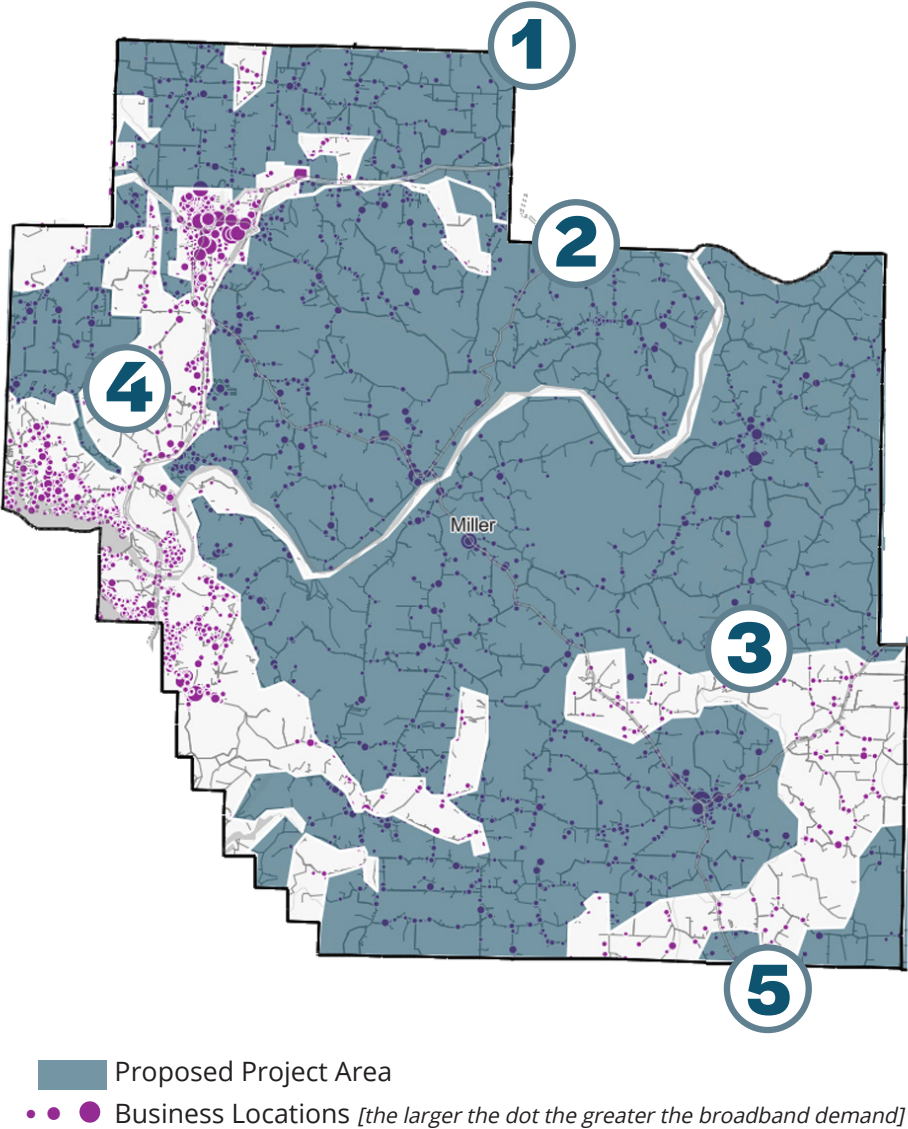
3

AERIAL		UNDERGROUND		57 fiber miles	
\$5.1M - \$6.8M	COST TO PASS	6.6M - \$11.1M		969 locations	17 locations per mile
\$969K - \$3.9M	ISP INVESTMENT	\$969K - \$3.9M			
\$1.2M - \$5.8M	FUNDING GAP	\$2.7M - \$10.2M			
\$41 - \$199	annual cost per location over 30 years	\$94 - \$349			

MILLER COUNTY

PROJECT AREAS

Most of Miller County currently is either unserved or underserved. The primary exception is in the east, where at least one provider claims to offer fiber to the home and where most blocks rate as either served or just slightly underserved. The county features one large existing award in the southeast and a handful of smaller awards near Brumley. We divided the remaining un/underserved/unfunded areas into 5 project outlines, divided by geographic features like the Osage River or existing railway lines. If sufficient funding is available, one or more of these projects could be combined into a larger area.



764
fiber miles

6,040
locations

2,020
business locations

7.9
locations per mile

INVESTMENT = \$68 - \$149.4 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

MILLER COUNTY

PROJECT DETAILS

1

AERIAL

\$10.2M - \$13.6M

COST TO PASS

\$827K - \$3.3M

ISP INVESTMENT

\$6.9M - \$12.8M

FUNDING GAP

\$276 - \$514

annual cost per location
over 30 years

UNDERGROUND

\$13.3M - \$22.3M

\$827K - \$3.3M

\$10M - \$21.5M

\$402 - \$866

114
fiber miles

827
locations

7.2
locations per mile

2

AERIAL

\$15.9M - \$21.3M

COST TO PASS

\$1.6M - \$6.4M

ISP INVESTMENT

\$9.5M - \$19.7M

FUNDING GAP

\$200 - \$412

annual cost per location
over 30 years

UNDERGROUND

\$20.8M - \$35M

\$1.6M - \$6.4M

\$14.4M - \$33.3M

\$303 - \$699

179
fiber miles

1,589
locations

8.9
locations per mile

3

AERIAL

\$36.2M - \$48.3M

COST TO PASS

\$3.1M - \$12.4M

ISP INVESTMENT

\$23.8M - \$45.2M

FUNDING GAP

\$256 - \$487

annual cost per location
over 30 years

UNDERGROUND

\$42.3M - \$79.4M

\$3.1M - \$12.4M

\$34.9M - \$76.4M

\$375 - 821

406
fiber miles

3,098
locations

7.6
locations per mile

MILLER COUNTY

PROJECT DETAILS

4

AERIAL		UNDERGROUND		49 fiber miles	
\$4.4M - \$5.9M	COST TO PASS	\$5.8M - \$9.7M		480 locations	9.7 locations per mile
\$480K - \$1.9M	ISP INVESTMENT	\$480K - \$1.9M			
\$2.5M - \$5.4M	FUNDING GAP	\$3.8M - \$9.2M			
\$172 - \$375	annual cost per location over 30 years	\$266 - \$638			

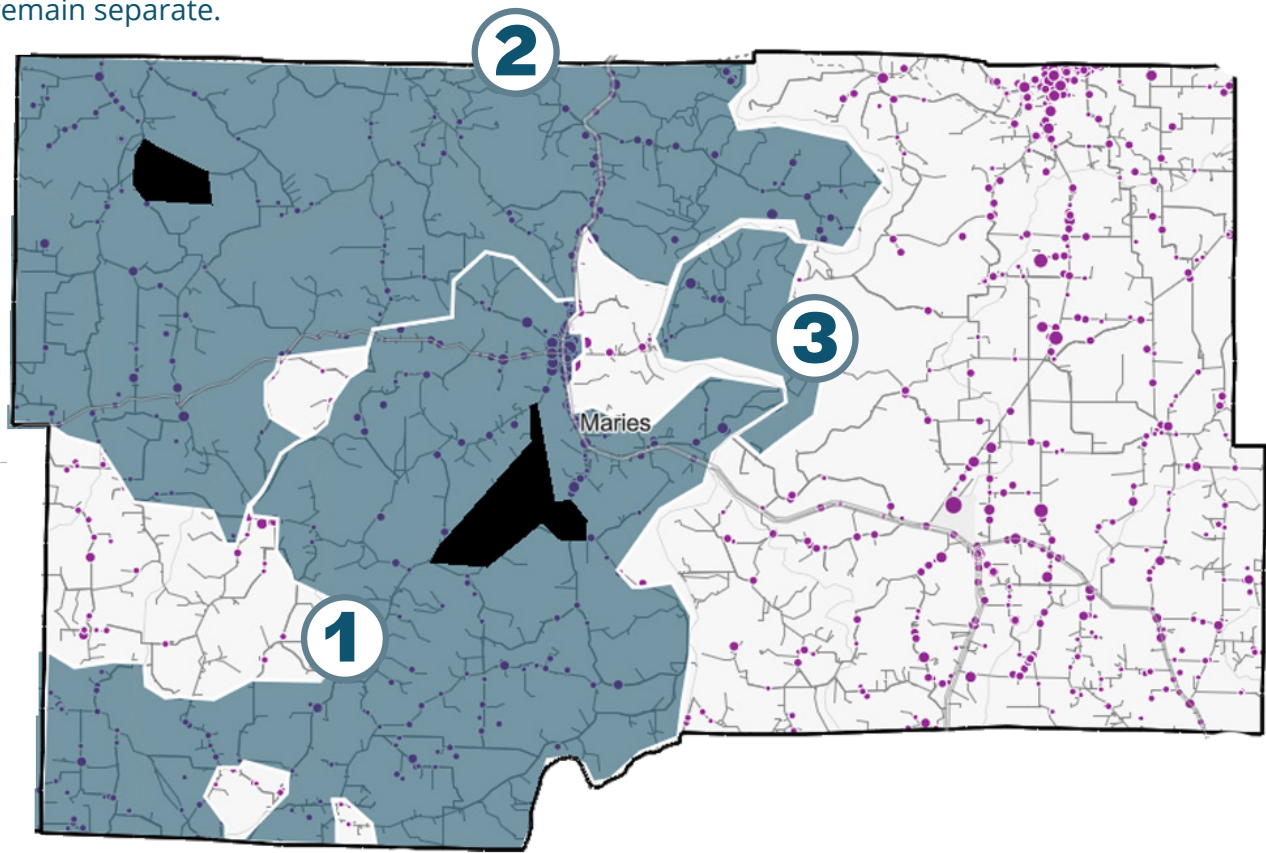
5

AERIAL		UNDERGROUND		16 fiber miles	
\$1.4M - \$1.9M	COST TO PASS	\$1.8M - \$3M		46 locations	3 locations per mile
\$46K - \$184K	ISP INVESTMENT	\$46K - \$184K			
\$1.2M - \$1.8M	FUNDING GAP	\$1.6M - \$3M			
\$870 - \$1,308	annual cost per location over 30 years	\$1,178 - \$2,171			

MARIES COUNTY

PROJECT AREAS

Except for a handful of blocks that rate above 50/10 Mbps, all of Maries County currently is unserved or underserved. Most of the county east of the Gasconade River has already received grant funding. In the west, a few awards will address some of the need; however, large areas remain unserved and unfunded. We divided this territory into 3 project areas. The two larger areas could be combined into a single project; however, depending on the presence or absence of existing river crossings, project 3 may need to remain separate.



■ Proposed Project Area ■ Funded or served excluded from calculation

• • • Business Locations *[the larger the dot the greater the broadband demand]*

317
fiber miles

2,578
locations

597
business locations

8.1
locations per mile

INVESTMENT = \$28.2 - \$62.1 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

MARIES COUNTY

PROJECT DETAILS

1

AERIAL

\$14.7M - \$19.7M

COST TO PASS

\$1.6M - \$6.5M

ISP INVESTMENT

\$8.2M - \$18M

FUNDING GAP

\$167 - \$369

annual cost per location
over 30 years

UNDERGROUND

\$19.3M - \$32.3M

\$1.6M - \$6.5M

\$12.7M - \$30.7M

\$260 - \$628

165

fiber miles

1,631

locations

9.9

locations per mile

2

AERIAL

\$13M - \$17.3M

COST TO PASS

\$878K - \$3.5M

ISP INVESTMENT

\$9.5M - \$16.5M

FUNDING GAP

\$359 - \$625

annual cost per location
over 30 years

UNDERGROUND

\$17M - \$28.5M

\$878K - \$3.5M

\$13.5M - \$27.6M

\$510 - \$1,048

146

fiber miles

878

locations

6

locations per mile

3

AERIAL

\$561K - \$750K

COST TO PASS

\$69K - \$276K

ISP INVESTMENT

\$285K - \$681K

FUNDING GAP

\$138 - \$329

annual cost per location
over 30 years

UNDERGROUND

\$733K - \$1.2M

\$69K - \$276K

\$457K - \$1.2M

\$221 - \$562

6

fiber miles

69

locations

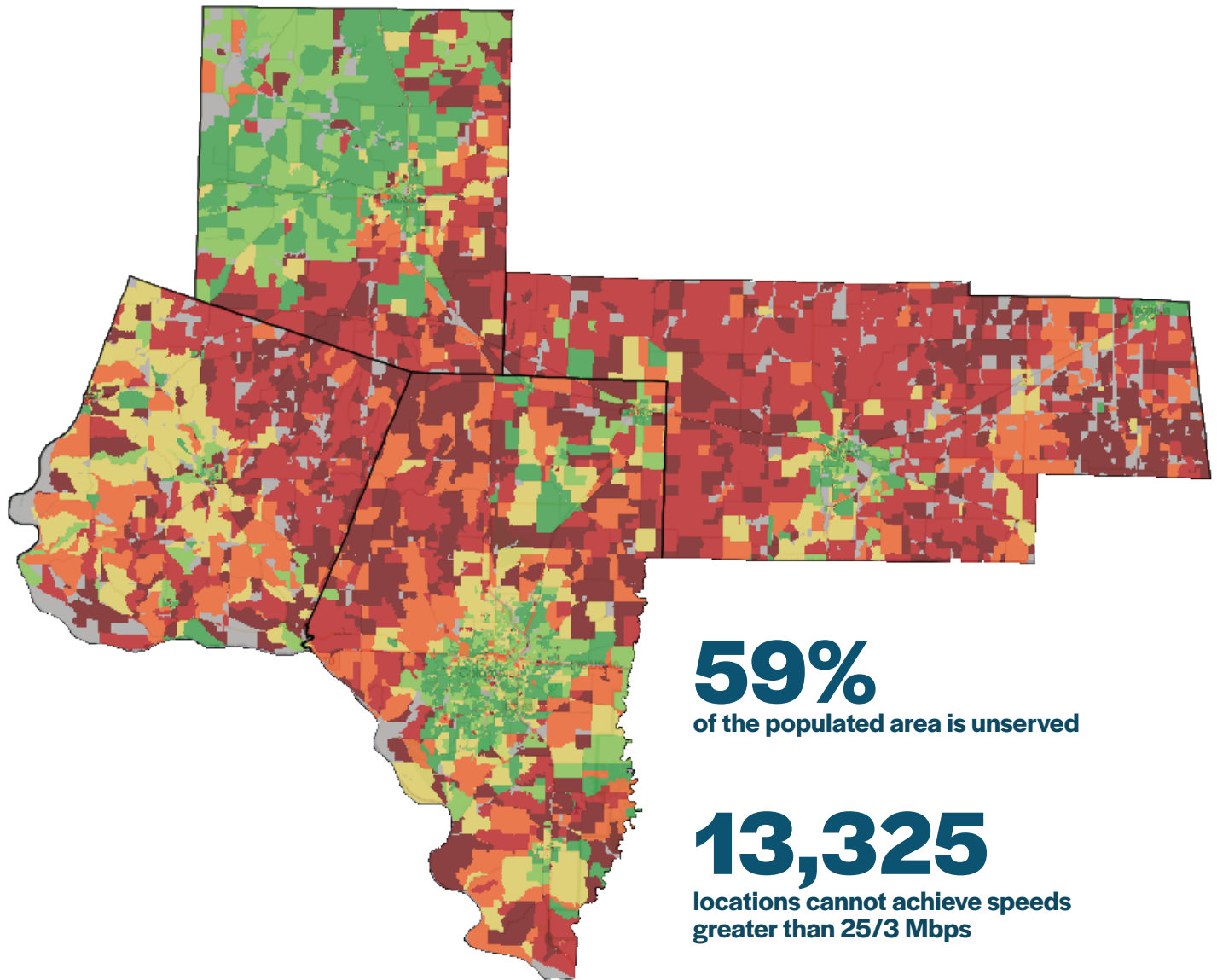
11

locations per mile

Audrain / Randolph / Howard / Boone*

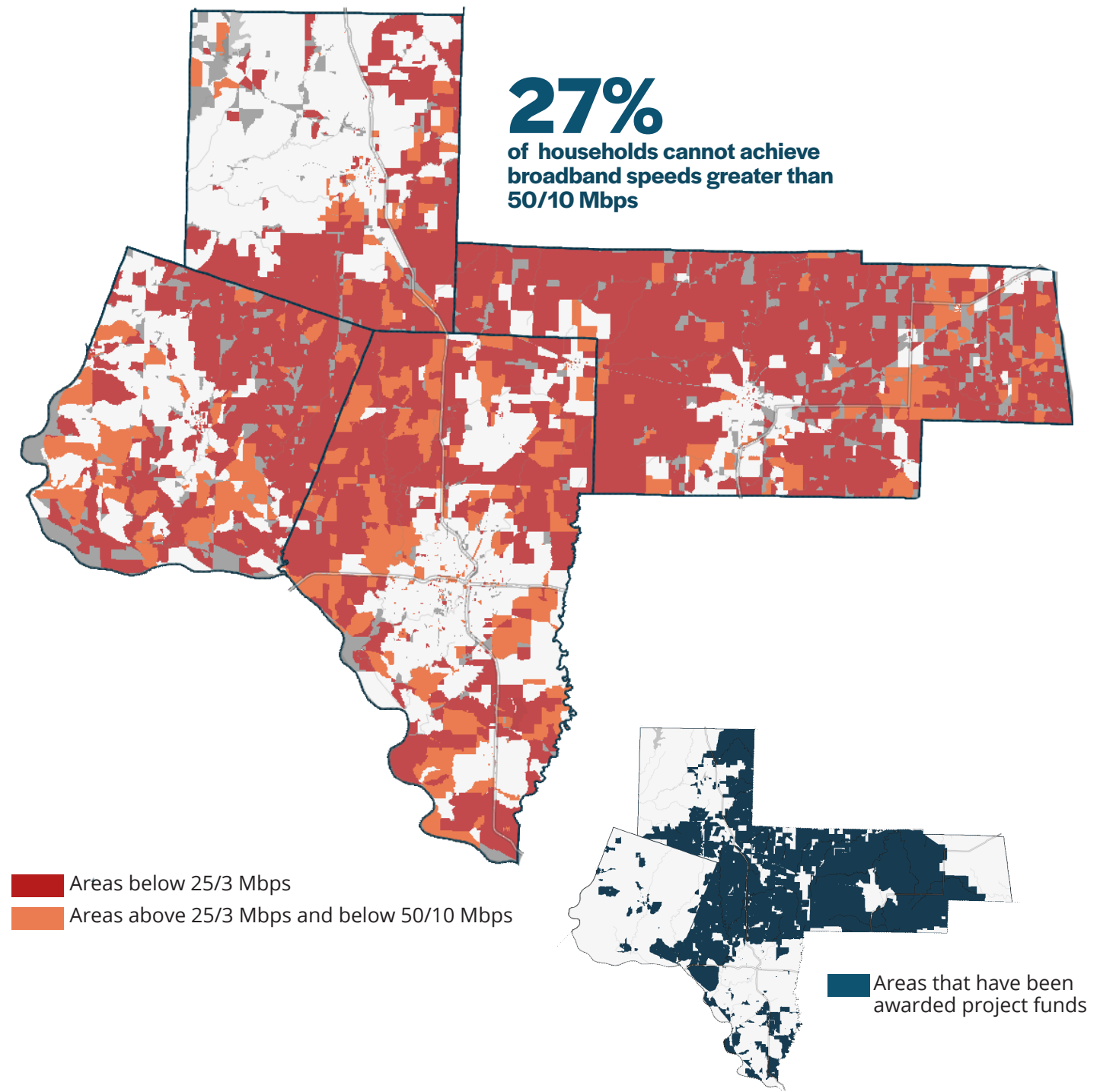
Project Cluster • Mid-Missouri Regional Planning Commission

Mark Twain Regional Council of Governments **non-urban areas*



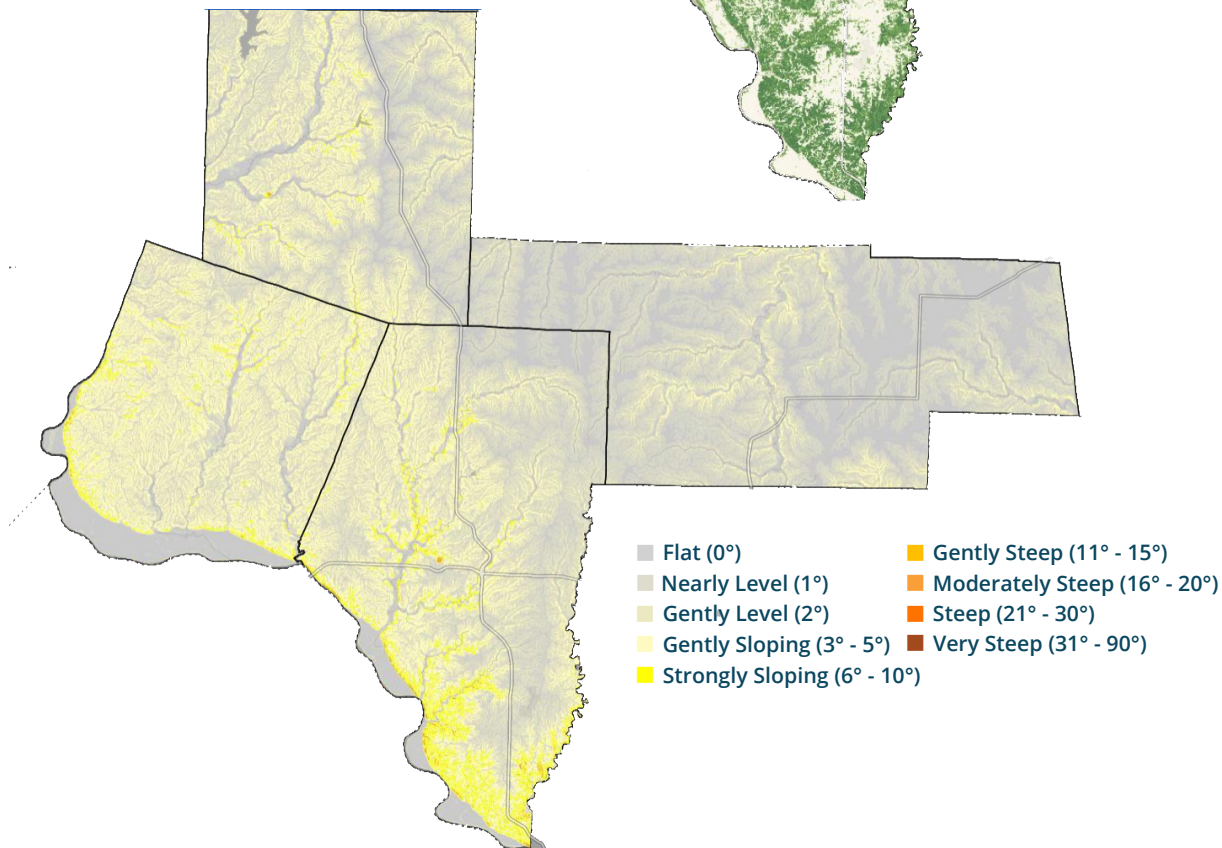
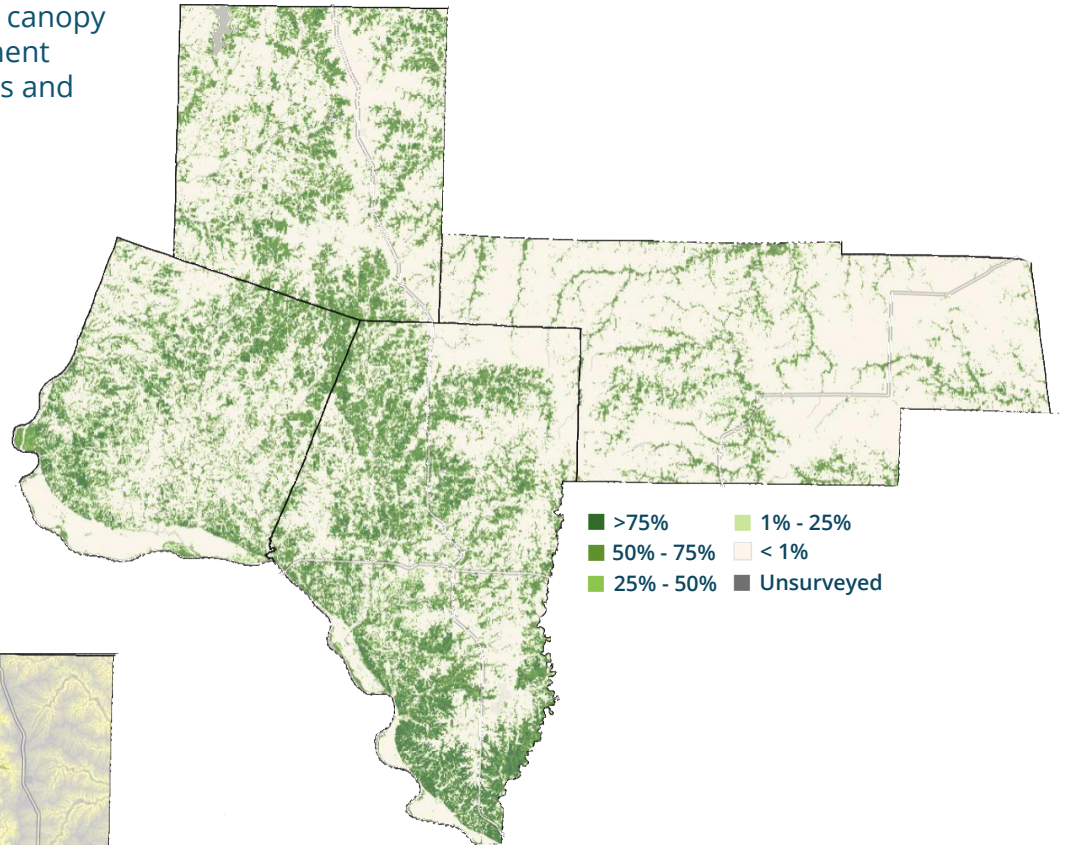
■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

AREAS OF FOCUS



PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Audrain / Randolph / Howard / Boone*

Project Cluster • Mid-Missouri Regional Planning Commission

Mark Twain Regional Council of Governments *non-urban areas

PROJECT AREAS

4,931

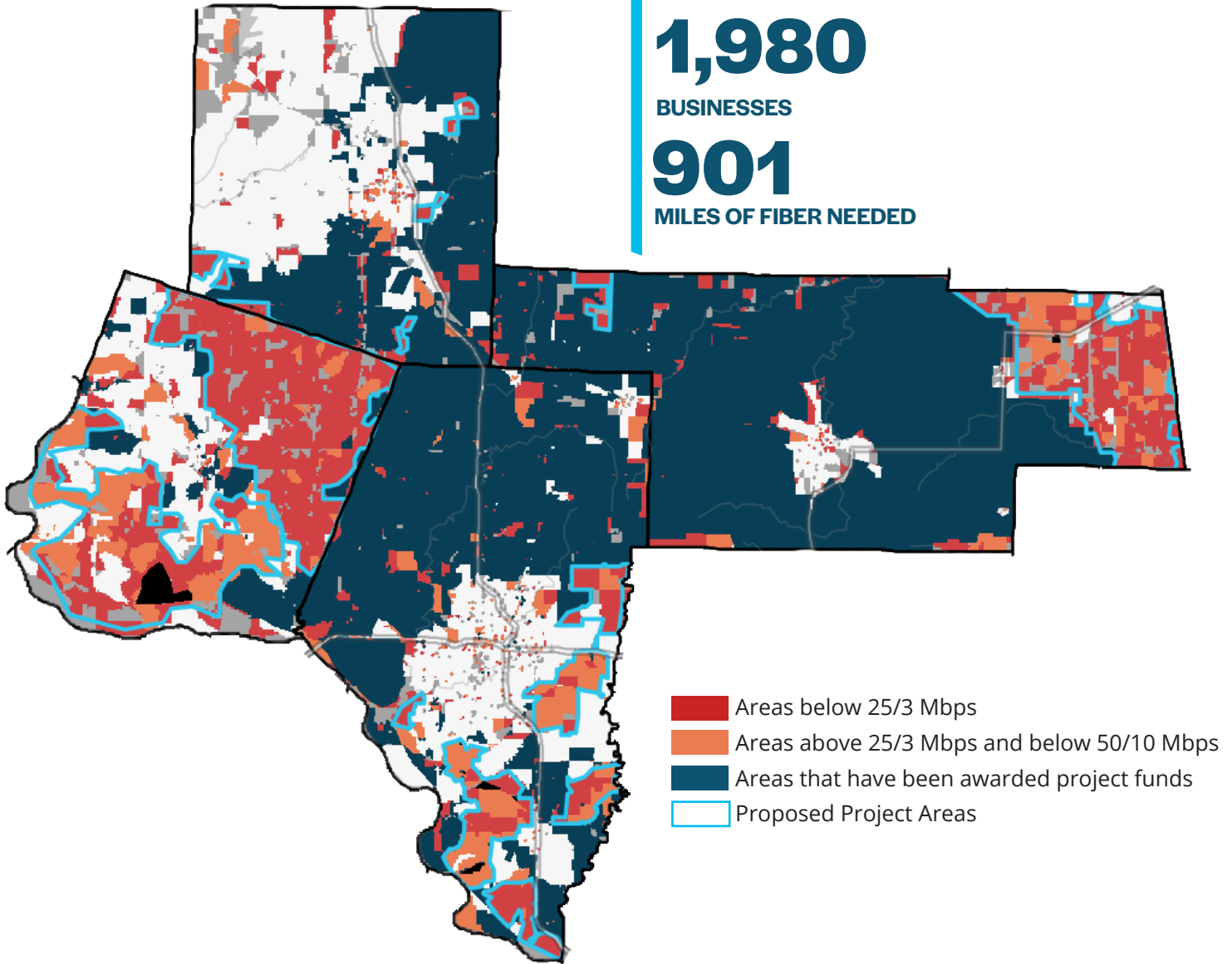
LOCATIONS

1,980

BUSINESSES

901

MILES OF FIBER NEEDED



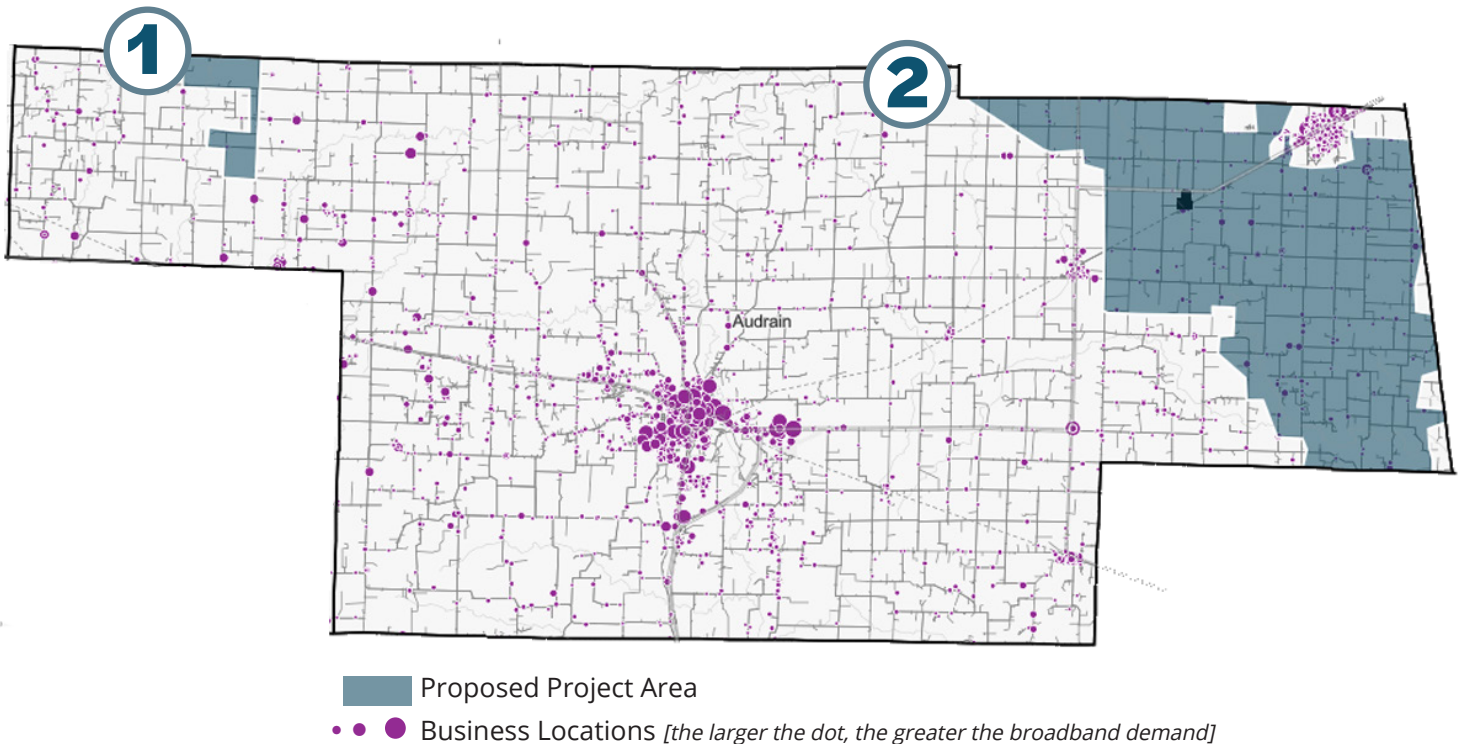
Investment Range = \$80.2- \$176.2 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

AUDRAIN COUNTY

PROJECT AREAS

Nearly all of western and central Audrain County is already funded-to-served. The only significant remaining gap is in the east. In the northwest, we identified one small area that would fill a gap between the funded blocks that surround it. Because most of the locations in this area are along roads that serve as funding boundaries, this area may wind up being served as part of those existing programs. In the east, we identified a much larger project area with a mix of unserved and underserved locations. This area is a better candidate for future funding.



236
fiber miles

667
locations

125
business locations

2.8
locations per mile

INVESTMENT = \$21 - \$46million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

AUDRAIN COUNTY

PROJECT DETAILS

1

AERIAL		UNDERGROUND		16 fiber miles	
\$1.5M - \$1.9M	COST TO PASS	\$1.9M - \$3.2M		24 locations	2.9 locations per mile
\$24K - \$96K	ISP INVESTMENT	\$24K - \$96K			
\$1.3M - \$1.9M	FUNDING GAP	\$1.8M - \$3.2M			
\$1,858 - 2,629	annual cost per location over 30 years	\$2,471 - \$4,343			

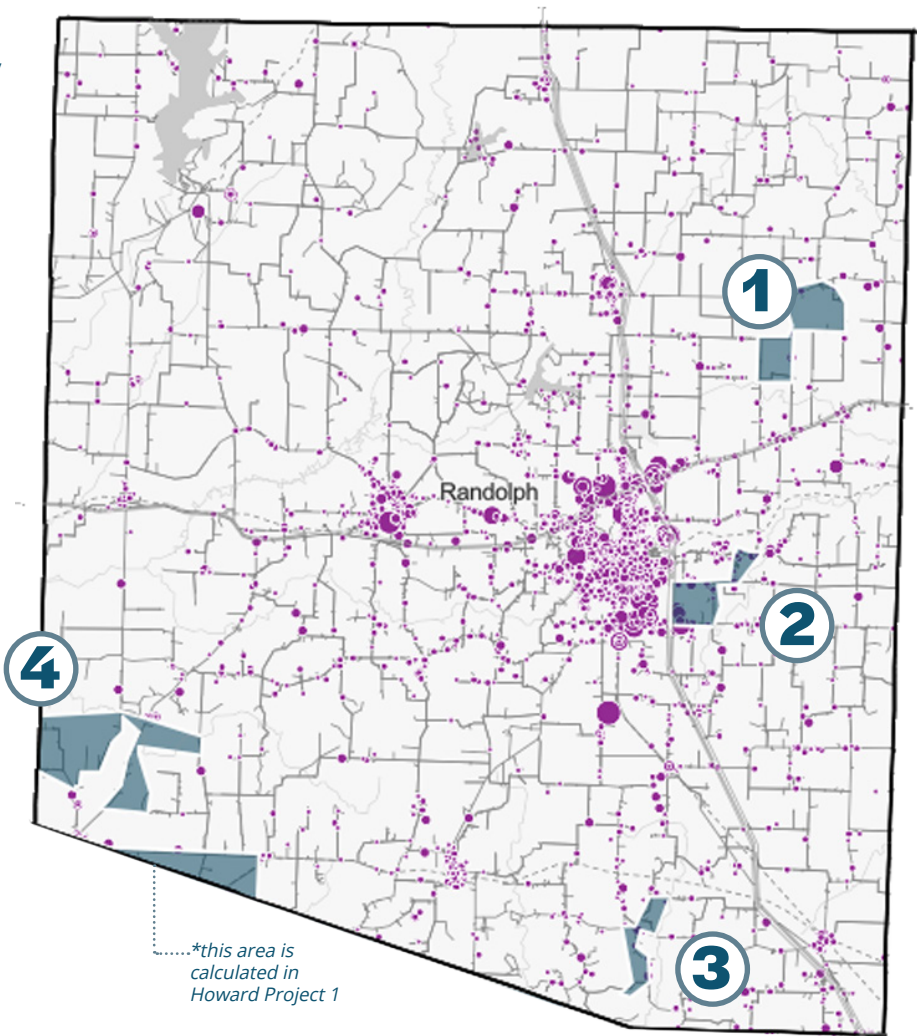
2

AERIAL		UNDERGROUND		220 fiber miles	
\$19.5M - \$26M	COST TO PASS	\$25.5M - \$43M		643 locations	2.9 locations per mile
\$643K - \$2.5M	ISP INVESTMENT	\$643K - \$2.5M			
\$17M - \$25.5M	FUNDING GAP	\$23M - \$25.5M			
\$879 - \$1,321	annual cost per location over 30 years	\$1,191 - \$2,193			

RANDOLPH COUNTY

PROJECT AREAS

Much of Randolph County is already served or funded-to-served, with many blocks showing speeds above 200 Mbps down / 50 Mbps up. In the east and south where speeds are slower, the majority of locations have already received broadband funding. Many of the remaining unfunded areas are single census blocks surrounded by funded territory or by highly rated, served territory. Such blocks are not good candidates for funding, because most or all of the locations in these blocks lie along roads that include funded or served locations. In the first scenario, providers are likely to serve those locations during their funded deployment. In the second, incumbent providers are likely to challenge funding for those locations. RCG identified 4 small project areas that include more than 1 contiguous census block and that have locations on roads that are not all boundaries between funded and unfunded territory.



- Proposed Project Area
- • • Business Locations [the larger the dot, the greater the broadband demand]

32
fiber miles

133
locations

41
business locations

4.2
locations per mile

INVESTMENT = \$2.8 - \$6.2 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

RANDOLPH COUNTY

PROJECT DETAILS

1

AERIAL

\$748K - \$1M

COST TO PASS

\$16K - \$64K

ISP INVESTMENT

\$684K - \$984K

FUNDING GAP

\$1,424 - \$2,049

annual cost per location
over 30 years

UNDERGROUND

\$978K - \$1.6M

\$16K - \$64K

\$914K - \$1.6M

\$1,904 - \$3,390

8

fiber miles

16
locations

1.9
locations per mile

2

AERIAL

\$766K - \$1M

COST TO PASS

\$75K - \$300K

ISP INVESTMENT

\$466K - \$950K

FUNDING GAP

\$207 - \$422

annual cost per location
over 30 years

UNDERGROUND

\$1M - \$1.6M

\$75K - \$300K

\$702K - \$1.6M

\$312 - \$715

9

fiber miles

75
locations

8.7
locations per mile

3

AERIAL

\$428K - \$572K

COST TO PASS

\$24K - \$96K

ISP INVESTMENT

\$332K - \$548K

FUNDING GAP

\$461 - \$762

annual cost per location
over 30 years

UNDERGROUND

\$560K - \$941K

\$24K - \$96K

\$464K - \$917K

\$644 - \$1,273

5

fiber miles

24
locations

5
locations per mile

4

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$858K - \$1.2M

COST TO PASS

\$18K - \$72K

ISP INVESTMENT

\$786K - \$1.13M

FUNDING GAP

\$1,455 - \$2,091

annual cost per location
over 30 years

UNDERGROUND

\$1.1M - \$1.9M

\$18K - \$72K

\$1.1M - \$1.9M

\$1,945 - \$3,458

10

fiber miles

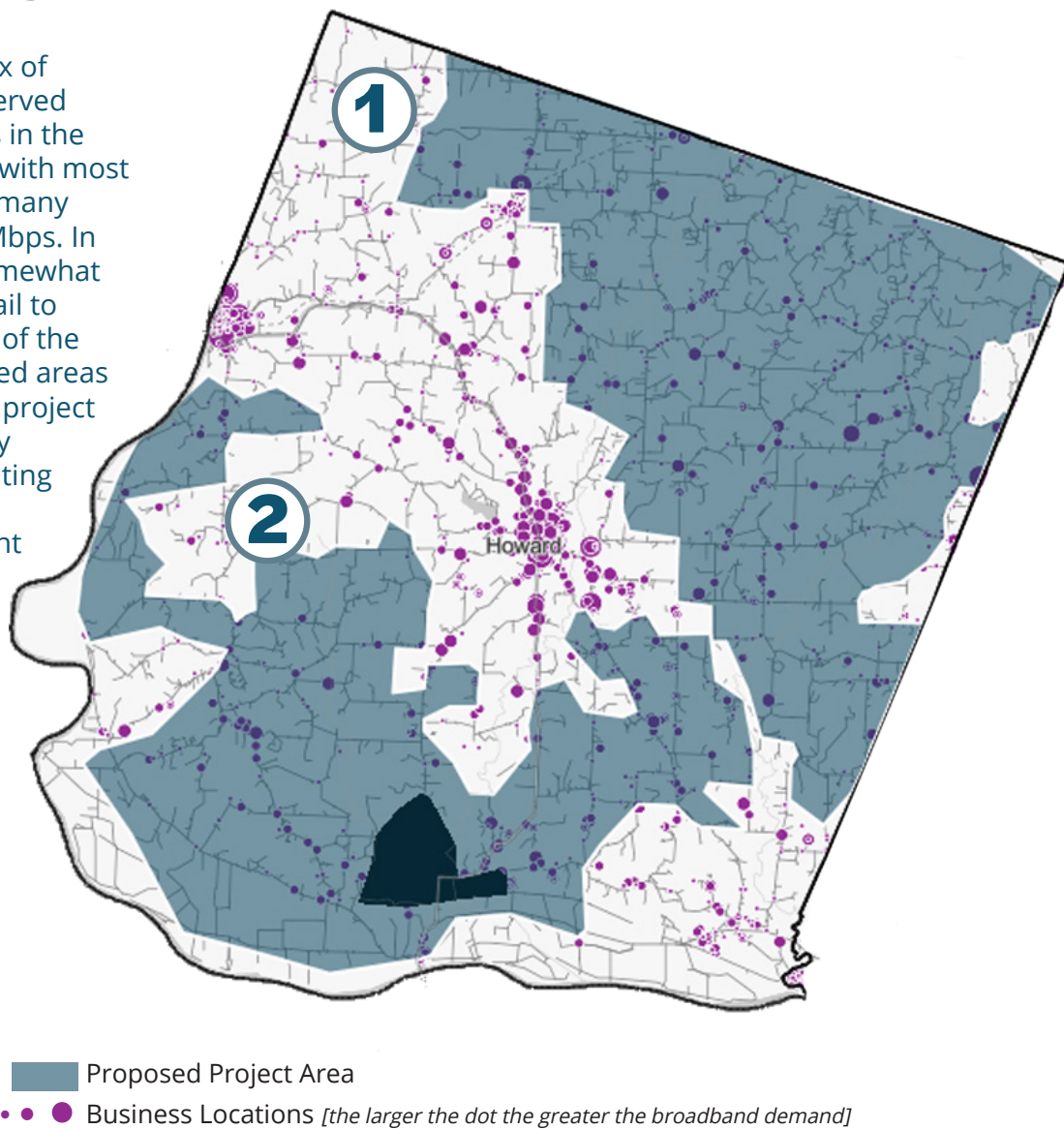
18
locations

1.9
locations per mile

HOWARD COUNTY

PROJECT AREAS

Howard County includes a mix of served and underserved/unserved territory. The greatest need is in the northeast part of the county, with most blocks below 25/3 Mbps and many unable to exceed even 10/1 Mbps. In the southwest, ratings are somewhat better, but many blocks still fail to exceed 50/10 Mbps. While all of the county's underserved/unserved areas could be configured as single project footprint, we split the territory into two areas along speed rating lines. This allows for greater flexibility to meet specific grant thresholds.



427
fiber miles

2,136
locations

663
business locations

4.2
locations per mile

INVESTMENT = \$38 - \$83.5 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

HOWARD COUNTY

PROJECT AREAS

1

AERIAL		UNDERGROUND		222 fiber miles	
\$19.7K - \$26.4M	COST TO PASS	\$25.8M - \$43.4M		811 locations	3.7 locations per mile
\$811K - \$3.2M	ISP INVESTMENT	\$811K - \$3.2M			
\$16.5M - \$25.6M	FUNDING GAP	\$22.6M - \$42.5M			
\$678 - \$1,051	annual cost per location over 30 years	\$927 - \$1,749			

2

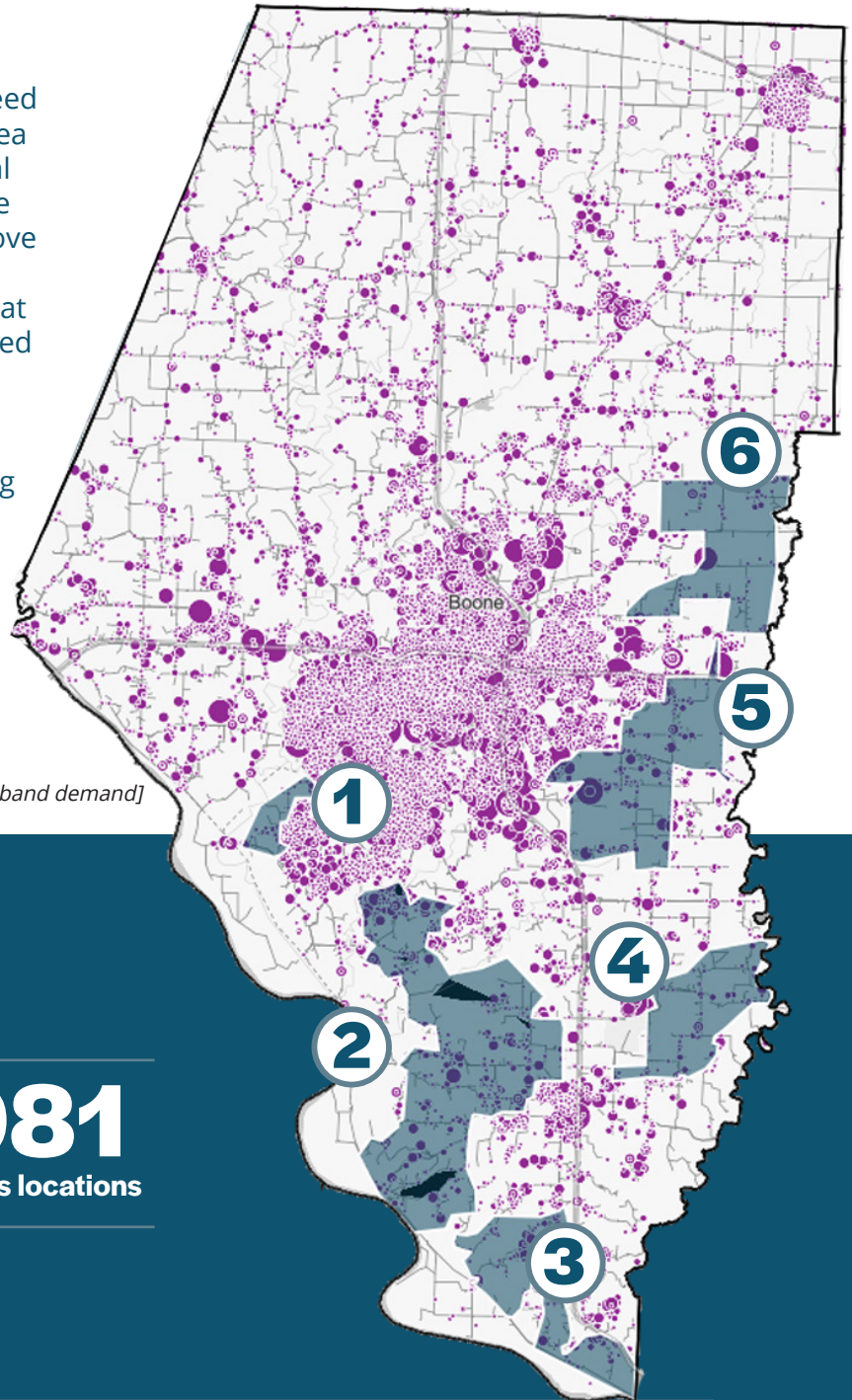
AERIAL		UNDERGROUND		205 fiber miles	
\$18.3M - \$24.4M	COST TO PASS	\$23.9M - \$40.1M		1,325 locations	6.5 locations per mile
\$1.3M - \$5.3M	ISP INVESTMENT	\$1.3M - \$5.3M			
\$13M - \$23.1M	FUNDING GAP	\$18.6M - \$38.8M			
\$326 - \$581	annual cost per location over 30 years	\$467 - \$976			

BOONE COUNTY

PROJECT AREAS

The primary broadband funding gaps in Boone County are in the south. While speed ratings are quite low in the north, that area is already funded-to-served. In the central part of the county, Columbia and its more densely populated surroundings rate above the federal minimum of 100/20 Mbps. In the south, we identified multiple areas that include a mix of unserved and underserved territories and which currently are not funded. Because these areas border existing awards, it is probably that those awardees would be interested in pursuing additional funds to expand their service footprint.

- Proposed Project Area
- • • Business Locations
[the larger the dot the greater the broadband demand]



207
fiber miles

1,995
locations

1,081
business locations

9.7
locations per mile

INVESTMENT = \$18.4 - \$40.4 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

BOONE COUNTY

PROJECT DETAILS

1

AERIAL

\$533K - \$712K

COST TO PASS

\$361K - \$670K

FUNDING GAP

\$43K - \$172K

ISP INVESTMENT

\$280 - \$519

annual cost per location
over 30 years

UNDERGROUND

\$697K - \$1.2M

\$525K - \$1.1M

\$43K - \$172K

\$407 - \$875

6

fiber miles

43

locations

7.2

locations per mile

2

AERIAL

\$6.8M - \$9.1M

COST TO PASS

\$952K - \$3.8M

ISP INVESTMENT

\$3M - \$8M

FUNDING GAP

\$104 - \$283

annual cost per location
over 30 years

UNDERGROUND

\$8.8M - \$14.9M

\$952K - \$3.8M

\$5M - \$13.9M

\$176 - \$487

76

fiber miles

952

locations

12.5

locations per mile

3

AERIAL

\$2.8M - \$3.8M

COST TO PASS

\$311K - \$1.2M

ISP INVESTMENT

\$1.6M - \$3.5M

FUNDING GAP

\$170 - \$372

annual cost per location
over 30 years

UNDERGROUND

\$3.7M - \$6.2M

\$311K - \$1.2M

\$2.5M - \$5.9M

\$263 - \$633

32

fiber miles

311

locations

9.8

locations per mile

BOONE COUNTY

PROJECT DETAILS

4

AERIAL		UNDERGROUND	
\$1.9M - \$2.5M	COST TO PASS	\$2.4M - \$4.1M	<div>21 fiber miles</div> <div>134 locations</div> <div>6.4 locations per mile</div>
\$134K - \$536K	ISP INVESTMENT	\$134K - \$536K	
\$1.3M - \$2.3M	FUNDING GAP	\$1.9M - \$4M	
\$328 - \$583	annual cost per location over 30 years	\$470 - \$980	

5

AERIAL		UNDERGROUND	
\$3.9 - \$5.3M	COST TO PASS	\$5.2M - \$8.7M	<div>45 fiber miles</div> <div>403 locations</div> <div>9 locations per mile</div>
\$403K - \$1.6M	ISP INVESTMENT	\$403K - \$1.6M	
\$2.4M - \$4.9M	FUNDING GAP	\$3.6M - \$8.3M	
\$195 - \$405	annual cost per location over 30 years	\$296 - \$688	

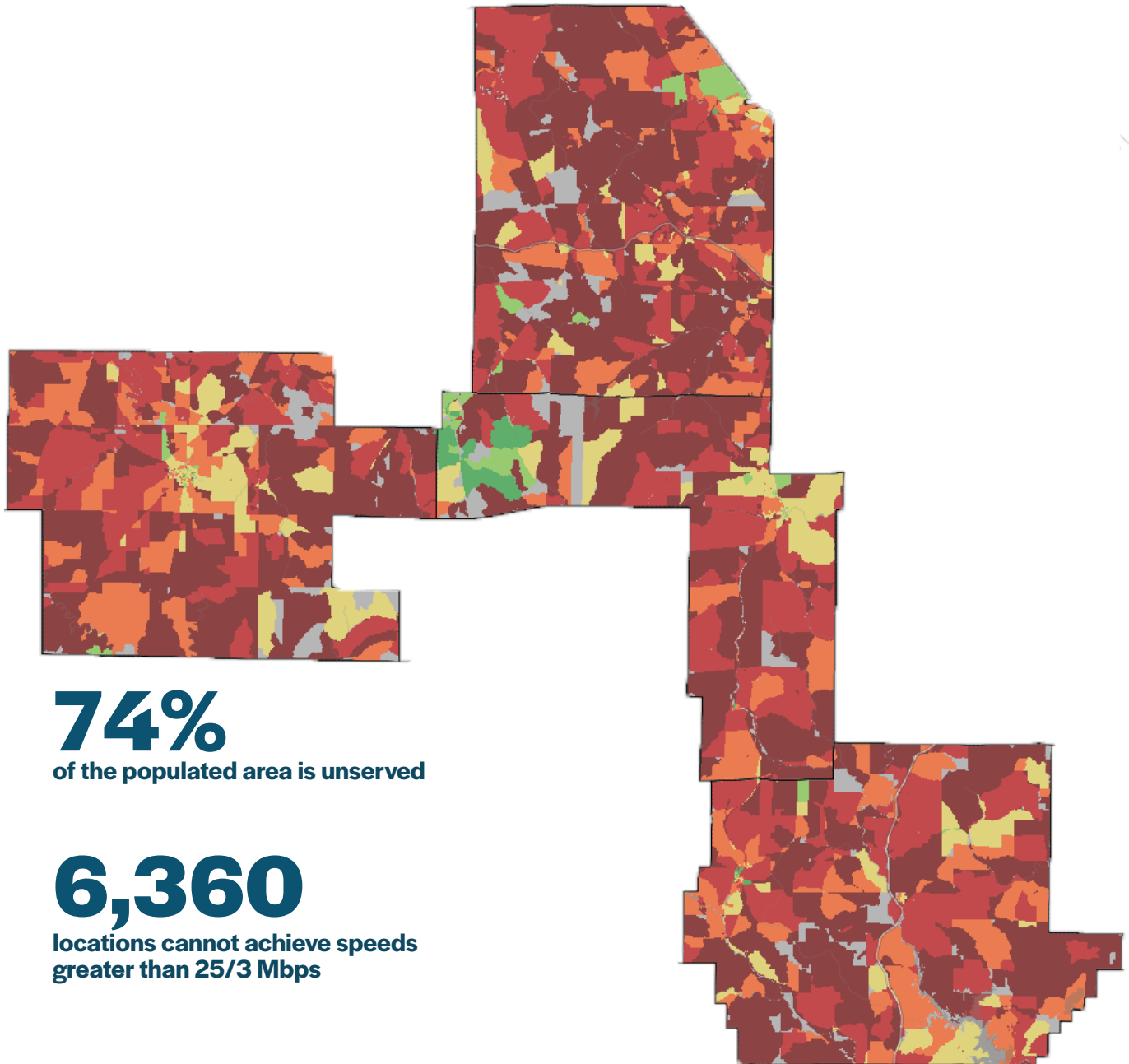
6

AERIAL		UNDERGROUND	
\$2.5M - \$3.3M	COST TO PASS	\$3.2M - \$5.4M	<div>28 fiber miles</div> <div>152 locations</div> <div>5.5 locations per mile</div>
\$152K - \$608K	ISP INVESTMENT	\$152K - \$608K	
\$1.8M - \$3.1M	FUNDING GAP	\$2.6M - \$5.2M	
\$403 - \$684	annual cost per location over 30 years	\$568 - \$11,145	

Dent / Iron / Washington / Wayne

Project Cluster • Meramec - Ozark Foothills- Southeast Missouri

Regional Planning Commissions



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

Dent / Iron / Washington / Wayne

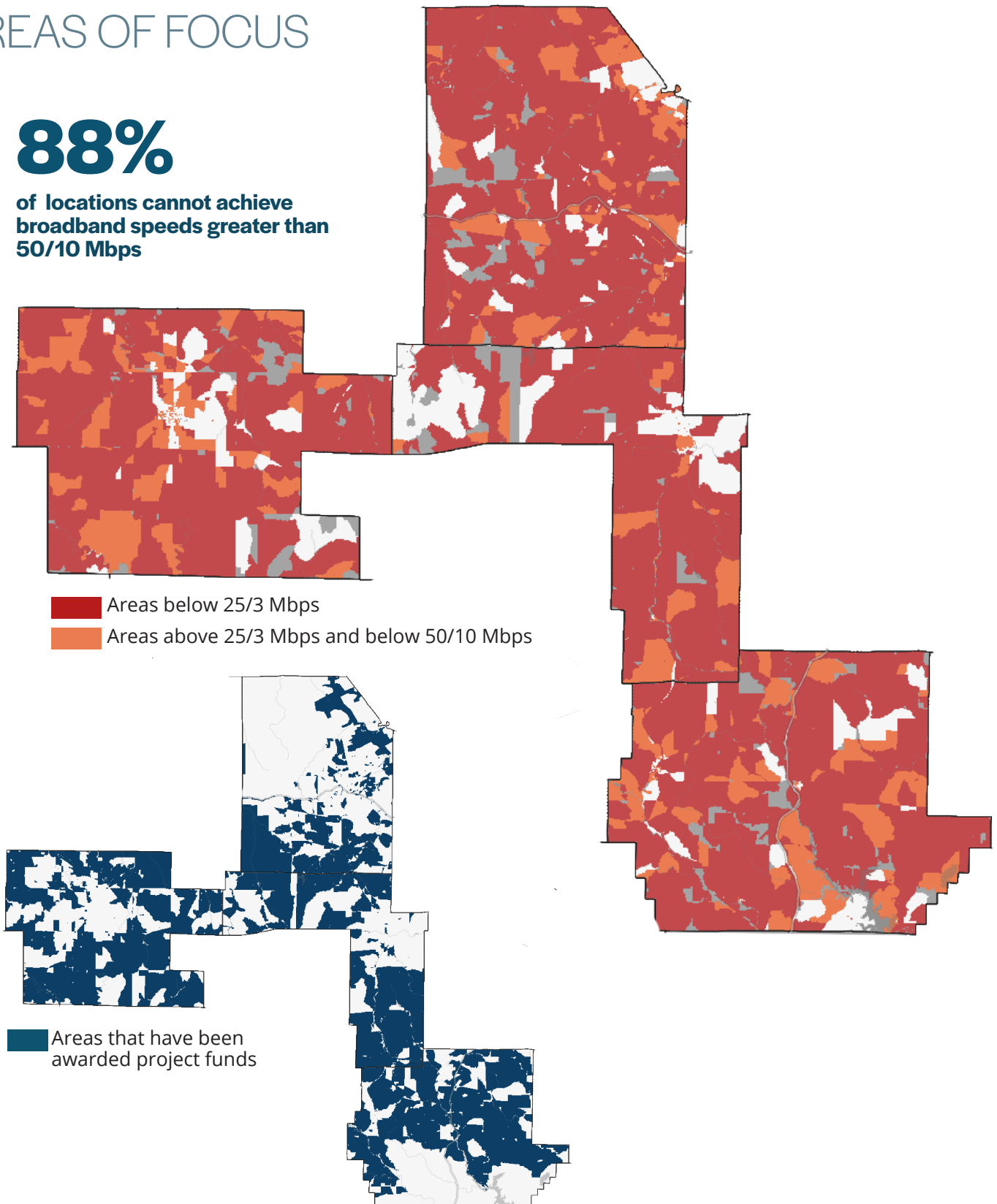
Project Cluster • Meramec - Ozark Foothills- Southeast Missouri

Regional Planning Commissions

AREAS OF FOCUS

88%

of locations cannot achieve
broadband speeds greater than
50/10 Mbps



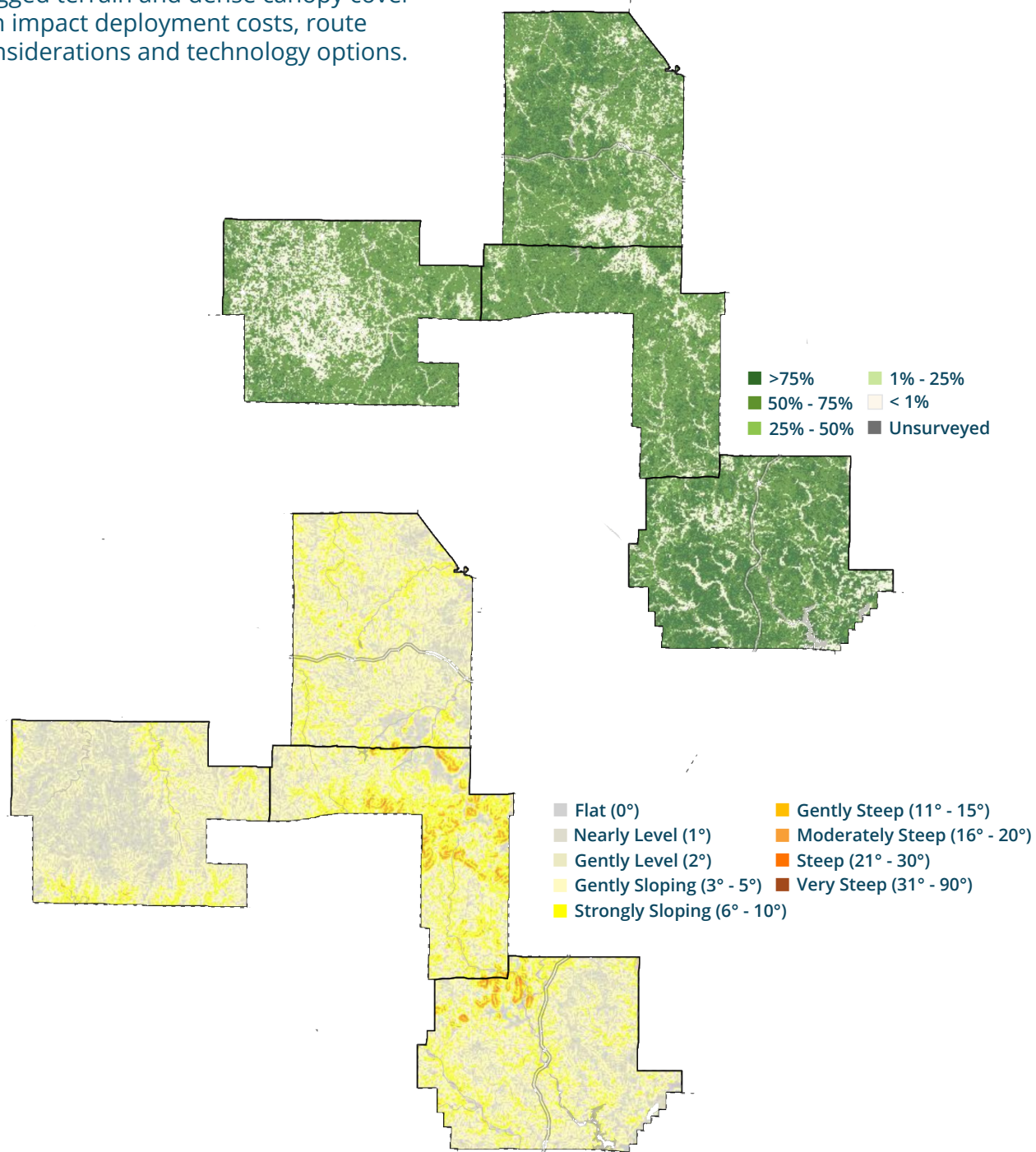
Dent / Iron / Washington / Wayne

Project Cluster - Meramec - Ozark Foothills- Southeast Missouri

Regional Planning Commissions

PLANNING CONSIDERATIONS

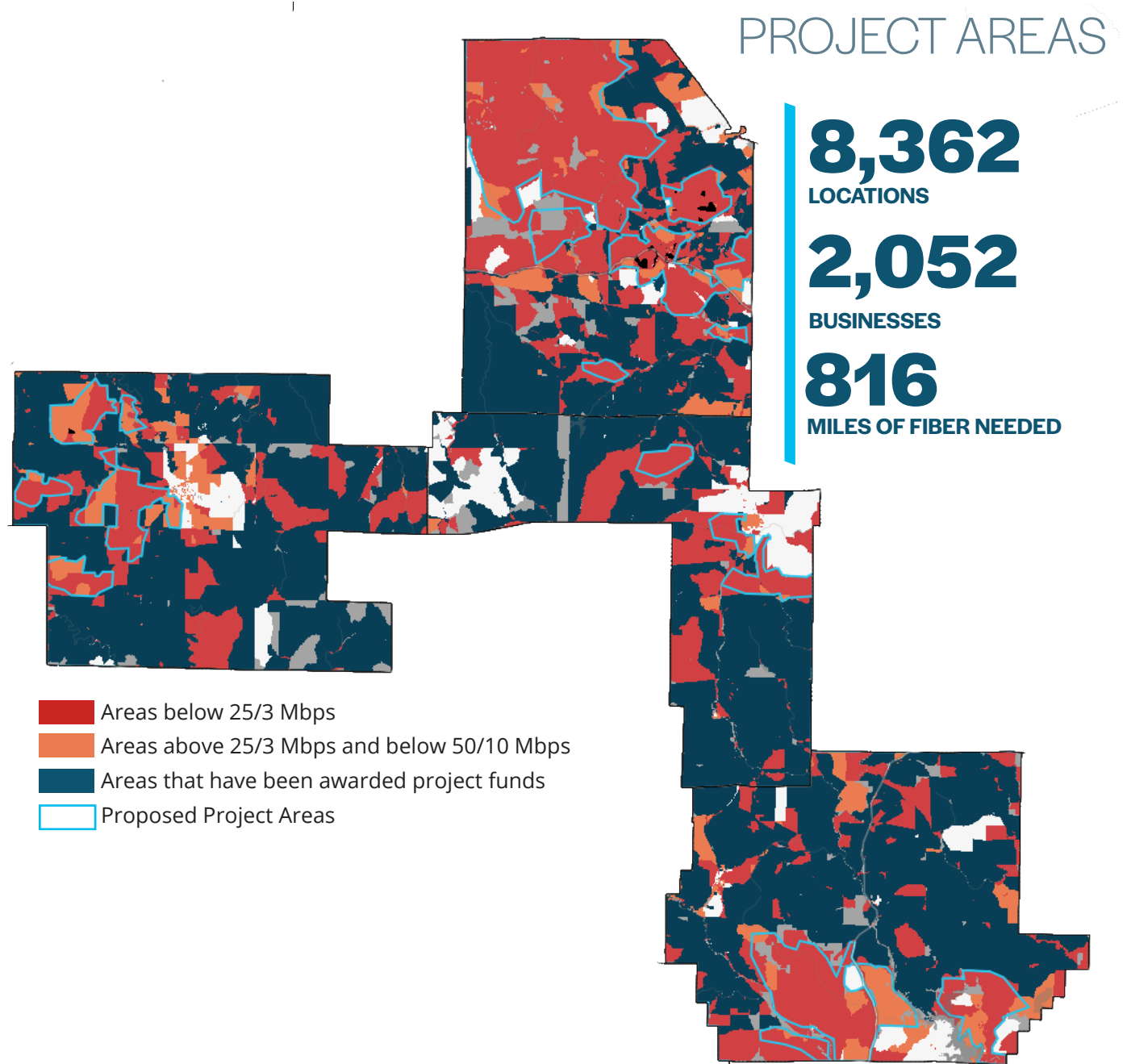
Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Dent / Iron / Washington / Wayne

Project Cluster • Meramec - Ozark Foothills- Southeast Missouri

Regional Planning Commissions



Investment Range = \$73.7 - \$162 million[†]

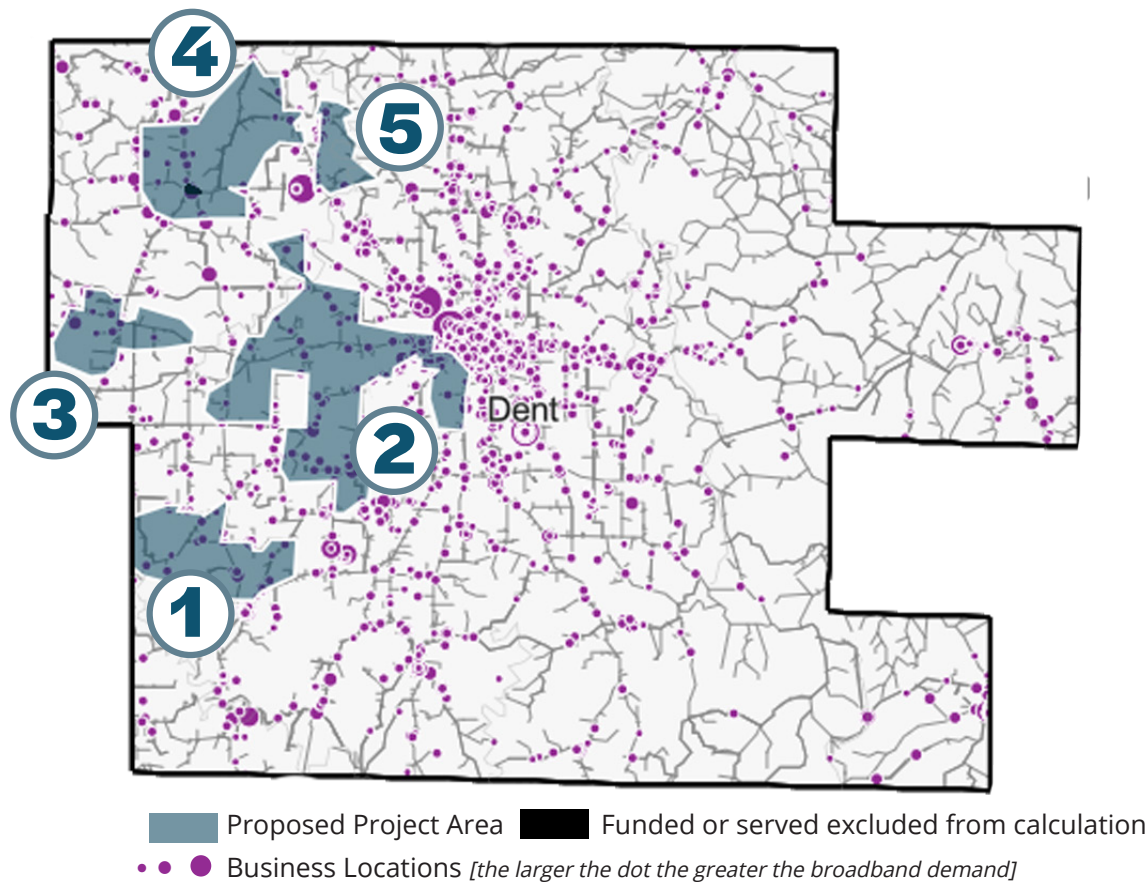
**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

† The Investment range for this cluster area may be lower; due to carrier electing to participate in E-ACAM that can impact eligibility for BEAD funding

DENT COUNTY

PROJECT AREAS

While most of Dent County outside of Salem is unserved or underserved, much of that territory is funded-to-served via multiple existing grant awards. In the eastern half of the county, the blocks that remain unserved and unfunded contain mostly locations that are on roads that are part of existing award boundaries. These locations, while technically eligible for funding, are likely to be served as part of the existing funded deployment. In the west, we identified 5 project areas. Although these areas also are surrounded by existing awards, the population is distributed more evenly with many locations far enough away from boundary roads to merit applying for funding.



98
fiber miles

778
locations

198
business locations

8
locations per mile

INVESTMENT = \$8.7 - \$19.1 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

DENT COUNTY

PROJECT DETAILS

1

AERIAL		UNDERGROUND		16 fiber miles	
\$1.4M - \$1.9M	COST TO PASS	\$1.9M - \$3.1M		112 locations	7 locations per mile
\$112K - \$448K	ISP INVESTMENT	\$112K - \$448K			
\$981K - \$1.8M	FUNDING GAP	\$1.4M - \$3M			
\$292 - \$535	annual cost per location over 30 years	\$423 - \$902			

2

AERIAL		UNDERGROUND		42 fiber miles	
\$3.7M - \$5M	COST TO PASS	\$4.8M - \$8.1M		404 locations	9.7 locations per mile
\$404K - \$1.6M	ISP INVESTMENT	\$404K - \$1.6M			
\$2M - \$4.6M	FUNDING GAP	\$3.2M - \$7.7M			
\$172 - \$375	annual cost per location over 30 years	\$266 - \$638			

3

AERIAL		UNDERGROUND		10 fiber miles	
\$924K - \$1.2M	COST TO PASS	\$1.2 - \$2M		73 locations	7 locations per mile
\$73K - \$292K	ISP INVESTMENT	\$73K - \$292K			
\$632K - \$1.2M	FUNDING GAP	\$916K - \$2M			
\$289 - \$531	annual cost per location over 30 years	\$418 - \$894			

DENT COUNTY

PROJECT DETAILS

4

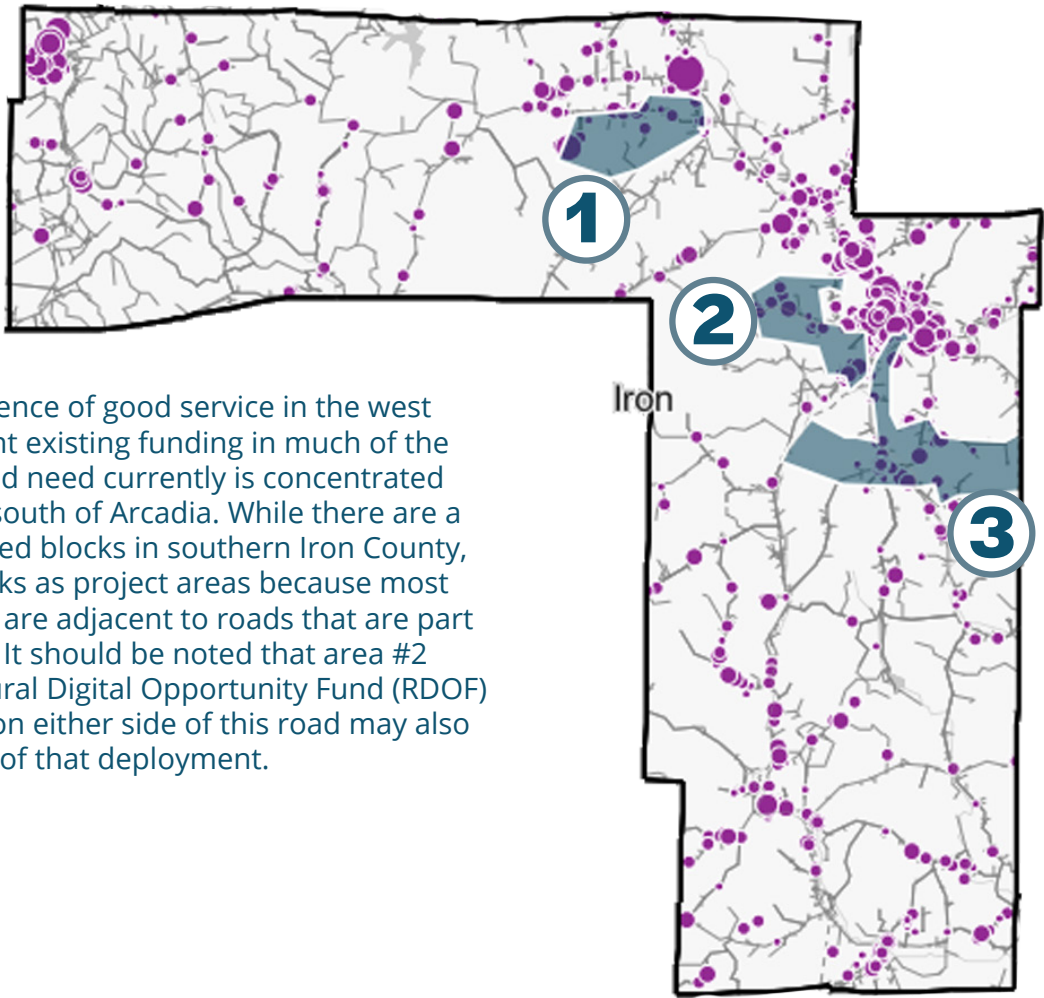
AERIAL		UNDERGROUND		22 fiber miles	
\$2M - \$2.7N	COST TO PASS	\$2.6M - \$4.4M		146 locations	6.5 locations per mile
\$146K - \$584K	ISP INVESTMENT	\$146K - \$584K			
\$1.4M - \$2.5M	FUNDING GAP	\$2M - \$4.1M			
\$320 - \$573	annual cost per location over 30 years	\$459 - \$963			

5

AERIAL		UNDERGROUND		7 fiber miles	
\$633K - \$846K	COST TO PASS	\$828K - \$1.4M		43 locations	6 locations per mile
\$43K - \$172K	ISP INVESTMENT	\$43K - \$172K			
\$461K - \$803K	FUNDING GAP	\$656K - \$1.4M			
\$357 - \$623	annual cost per location over 30 years	\$508 - \$1,045			

IRON COUNTY

PROJECT AREAS



With speed test-backed evidence of good service in the west and northeast, and significant existing funding in much of the rest of the county, broadband need currently is concentrated around Belleview and west/south of Arcadia. While there are a handful of unfunded/unserved blocks in southern Iron County, we did not define those blocks as project areas because most or all of their location points are adjacent to roads that are part of existing award territories. It should be noted that area #2 includes a narrow strip of Rural Digital Opportunity Fund (RDOF) area. As such, the locations on either side of this road may also end up being served as part of that deployment.

- Proposed Project Area
- • • Business Locations *[the larger the dot the greater the broadband demand]*

15
fiber miles

386
locations

113
business locations

25.6
locations per mile

INVESTMENT = \$2.4 - \$5.3 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

IRON COUNTY

PROJECT DETAILS

1

AERIAL

\$617K - \$825K

COST TO PASS

\$120K - \$480K

ISP INVESTMENT

\$137K - \$705K

FUNDING GAP

\$38 - \$196

annual cost per location
over 30 years

UNDERGROUND

\$807K - \$1.4M

\$120K - \$480K

\$327K - \$1.2M

\$91 - \$343

7

fiber miles

120
locations

17.3
locations per mile

2

AERIAL

\$647K - \$865K

COST TO PASS

\$119K - \$476K

ISP INVESTMENT

\$171K - \$746K

FUNDING GAP

\$48 - \$209

annual cost per location
over 30 years

UNDERGROUND

\$846K - \$1.4M

\$119K - \$476K

\$370K - \$1.3M

\$104 - \$365

7

fiber miles

119
locations

16.4
locations per mile

3

AERIAL

\$1.1M - \$1.5M

COST TO PASS

\$147K - \$588K

ISP INVESTMENT

\$556K - \$1.4M

FUNDING GAP

\$126 - \$313

annual cost per location
over 30 years

UNDERGROUND

\$1.5M - \$2.5M

\$147K - \$588K

\$907K - \$2.4M

\$206 - \$537

13

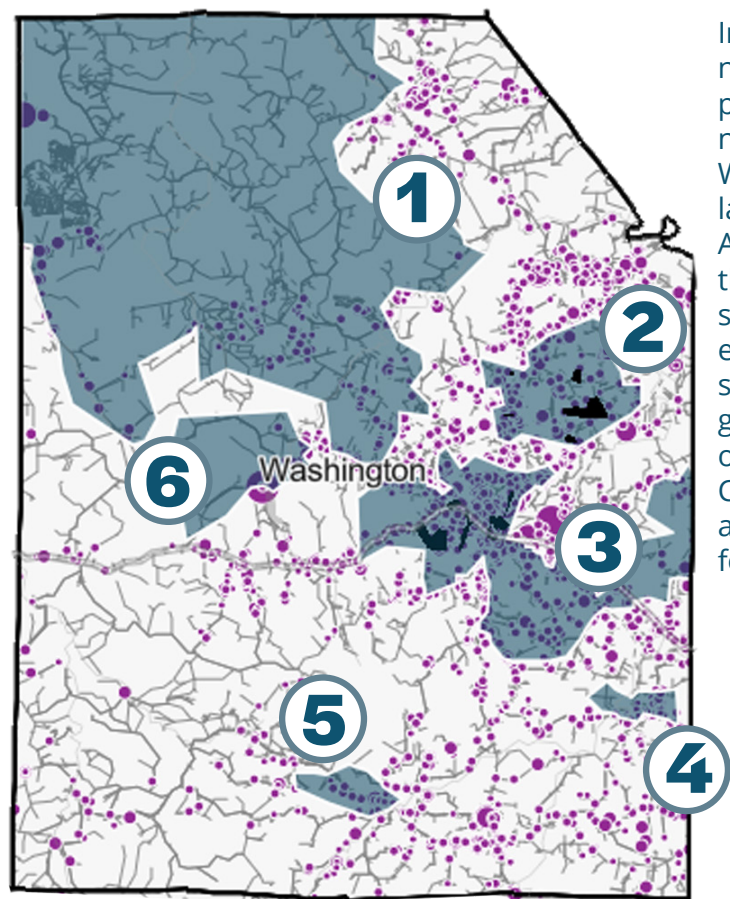
fiber miles

147
locations

11.4
locations per mile

WASHINGTON COUNTY

PROJECT AREAS



In Washington County, the largest areas of need are in the northwestern and east-central parts of the county. Most of the southern and northeastern blocks are already funded-to-served. We identified 6 potential project areas, with the largest encompassing most of the northwest. Area #3, which includes Potosi, and area #2 to the northeast of Potosi both include multiple small existing award areas. Those locations were excluded from our budget calculations. The smaller areas in the south were designed to fill gaps between existing award territories. Given the overall patchwork nature of awards in Washington County, it is hard to predict whether existing awardees will apply for funds to expand their footprint or challenge competing applications.

- Proposed Project Area
- Funded or served excluded from calculation
- ● Business Locations *[the larger the dot the greater the broadband demand]*

498
fiber miles

5,365
locations

1,521
business locations

10.8
locations per mile

INVESTMENT = \$44.3 - \$97.3 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

WASHINGTON COUNTY

PROJECT DETAILS

1

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$25.9M - \$34.6M

COST TO PASS

\$1.5M - \$6M

ISP INVESTMENT

\$19.9M - \$33.1M

FUNDING GAP

\$443 - \$738

annual cost per location
over 30 years

UNDERGROUND

\$33.9M - \$56.9M

\$1.5M - \$6M

\$27.M - \$55.4M

\$621 - \$1,234

291

fiber miles

1,497

locations

5.1

locations per mile

2

AERIAL

\$3.9M - \$5.2M

COST TO PASS

\$592K - \$2.4M

ISP INVESTMENT

\$1.5M - \$4.6M

FUNDING GAP

\$84 - \$258

annual cost per location
over 30 years

UNDERGROUND

\$5.1M - \$8.5M

\$592K - \$2.4M

\$2.7M - \$7.9M

\$151 - \$445

44

fiber miles

592

locations

13.6

locations per mile

3

AERIAL

\$10.5M - \$14M

COST TO PASS

\$2.8M - \$11M

ISP INVESTMENT

\$0 - \$11.3M

FUNDING GAP

\$0 - \$136

annual cost per location
over 30 years

UNDERGROUND

\$13.7M - \$23M

\$2.8M - \$11M

\$2.7M - \$20.3M

\$32 - \$245

118

fiber miles

2,758

locations

23.4

locations per mile

**In this area, density is high enough that an ISP may be willing to deploy with no subsidy.*

WASHINGTON COUNTY

PROJECT DETAILS

4

AERIAL		UNDERGROUND		16 fiber miles	
\$1.4M - \$1.9M	COST TO PASS	\$1.9M - \$3.1M		295 locations	18.5 locations per mile
\$295K - \$1.2M	ISP INVESTMENT	\$295K - \$1.2M			
\$240K - \$1.6M	FUNDING GAP	\$677K - \$2.8M			
\$27 - \$181	annual cost per location over 30 years	\$76 - \$319			

5

AERIAL		UNDERGROUND		8 fiber miles	
\$686K - \$918K	COST TO PASS	\$897K - \$1.5M		170 locations	22 locations per mile
\$170K - \$680K	ISP INVESTMENT	\$170K - \$680K			
\$6.2K - \$748K	FUNDING GAP	\$217K - \$1.3M			
\$1 - \$147	annual cost per location over 30 years	\$43 - \$262			

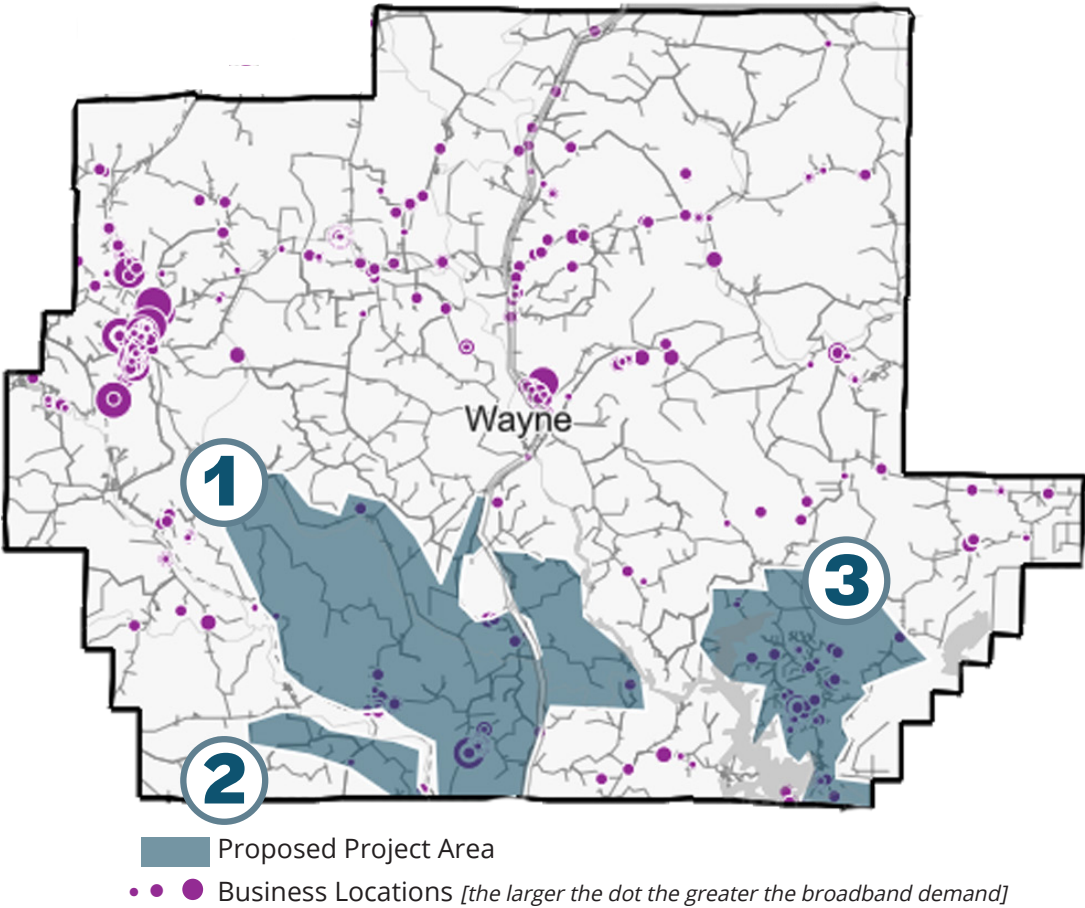
6

AERIAL		UNDERGROUND		22 fiber miles	
\$1.9M - \$2.6M	COST TO PASS	\$2.5M - \$4.3M		53 locations	2.4 locations per mile
\$53K - \$212K	ISP INVESTMENT	\$53K - \$212K			
\$1.8M - \$2.5M	FUNDING GAP	\$2.3M - \$4.2M			
\$1,087 - \$1,599	annual cost per location over 30 years	\$1,463 - \$2,650			

WAYNE COUNTY

PROJECT AREAS

Most of northern and central Wayne County is already funded-to-served. Blocks that currently do not have funding are surrounded by existing awards, with many locations close enough to the boundaries that they will likely be served as part of the subsidized deployment. In the south, however, we identified 3 areas of need that currently are unfunded. Area #2 is defined separately from area #1 due to the presence of the Black River. If reasonable fiber crossings are available in or near the project area, then it could be combined with area #1. Area #3 has the highest population density, making it the most attractive to ISPs; however, it also is an area where at least one provider claims to already provide cable modem services.



206
fiber miles

1,833
locations

220
business locations

8.9
locations per mile

INVESTMENT = \$18.4 - \$40.3 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

WAYNE COUNTY

PROJECT DETAILS

1

AERIAL

\$10.7M - \$14.3M

COST TO PASS

\$526K - \$2.1M

ISP INVESTMENT

\$8.6M - \$13.8M

FUNDING GAP

\$544 - \$872

annual cost per location
over 30 years

UNDERGROUND

\$14M - \$23.5M

\$526K - \$2.1M

\$11.9M - \$23M

\$752 - \$1,455

120
fiber miles

526
locations

4.4
locations per mile

2

AERIAL

\$972K - \$1.3M

COST TO PASS

\$57K - \$228K

ISP INVESTMENT

\$744K - \$1.2K

FUNDING GAP

\$435 - \$727

annual cost per location
over 30 years

UNDERGROUND

\$1.3M - \$2.1M

\$57K - \$228K

\$1M - \$2.1M

\$610 - \$1,216

11
fiber miles

57
locations

5.2
locations per mile

3

AERIAL

\$6.7M - \$9M

COST TO PASS

\$1.3M - \$5M

ISP INVESTMENT

\$1.7M - \$7.7M

FUNDING GAP

\$45 - \$206

annual cost per location
over 30 years

UNDERGROUND

\$8.8M - \$14.7M

\$1.3M - \$5M

\$3.8M - \$13.5M

\$100 - \$359

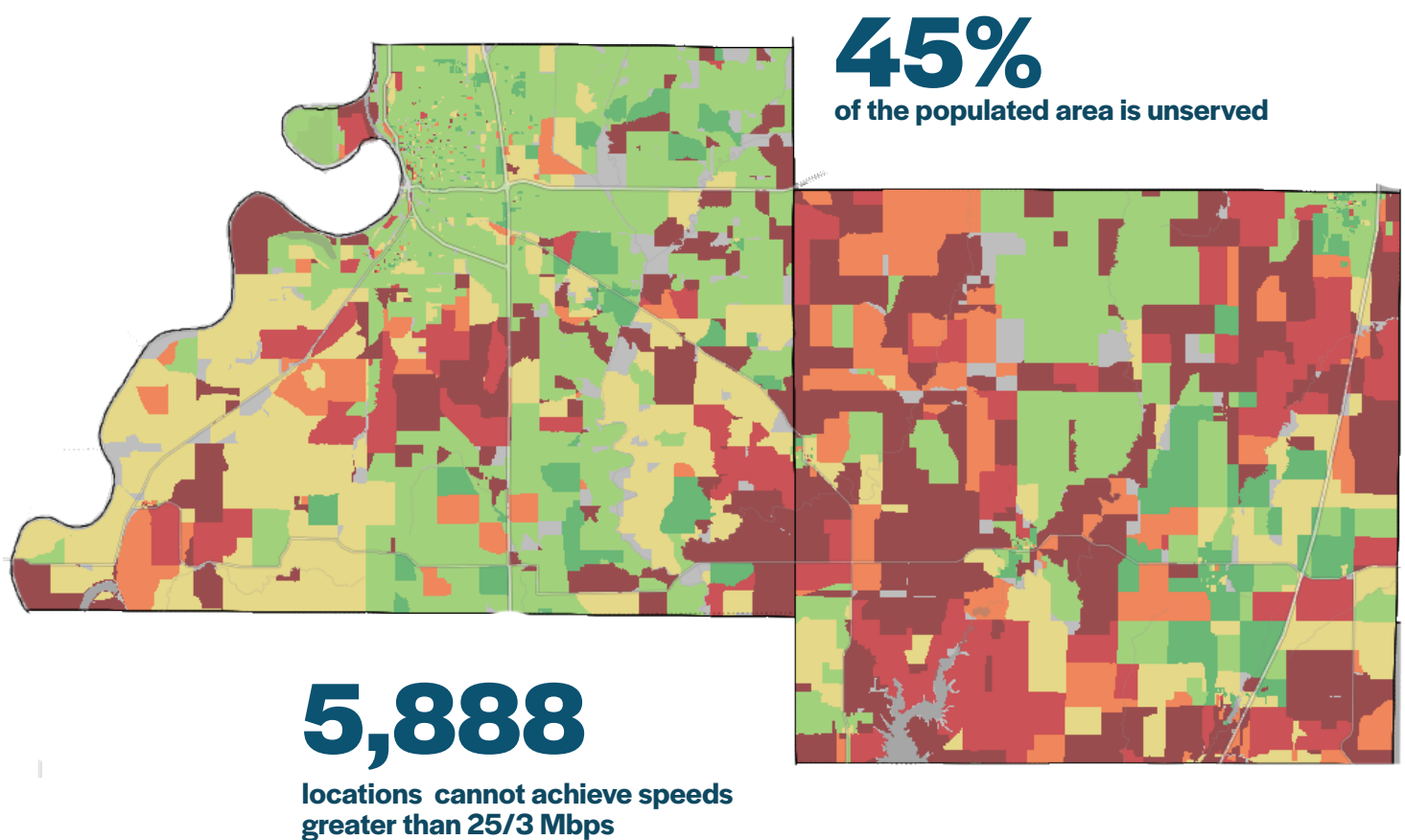
76
fiber miles

1,250
locations

16.6
locations per mile

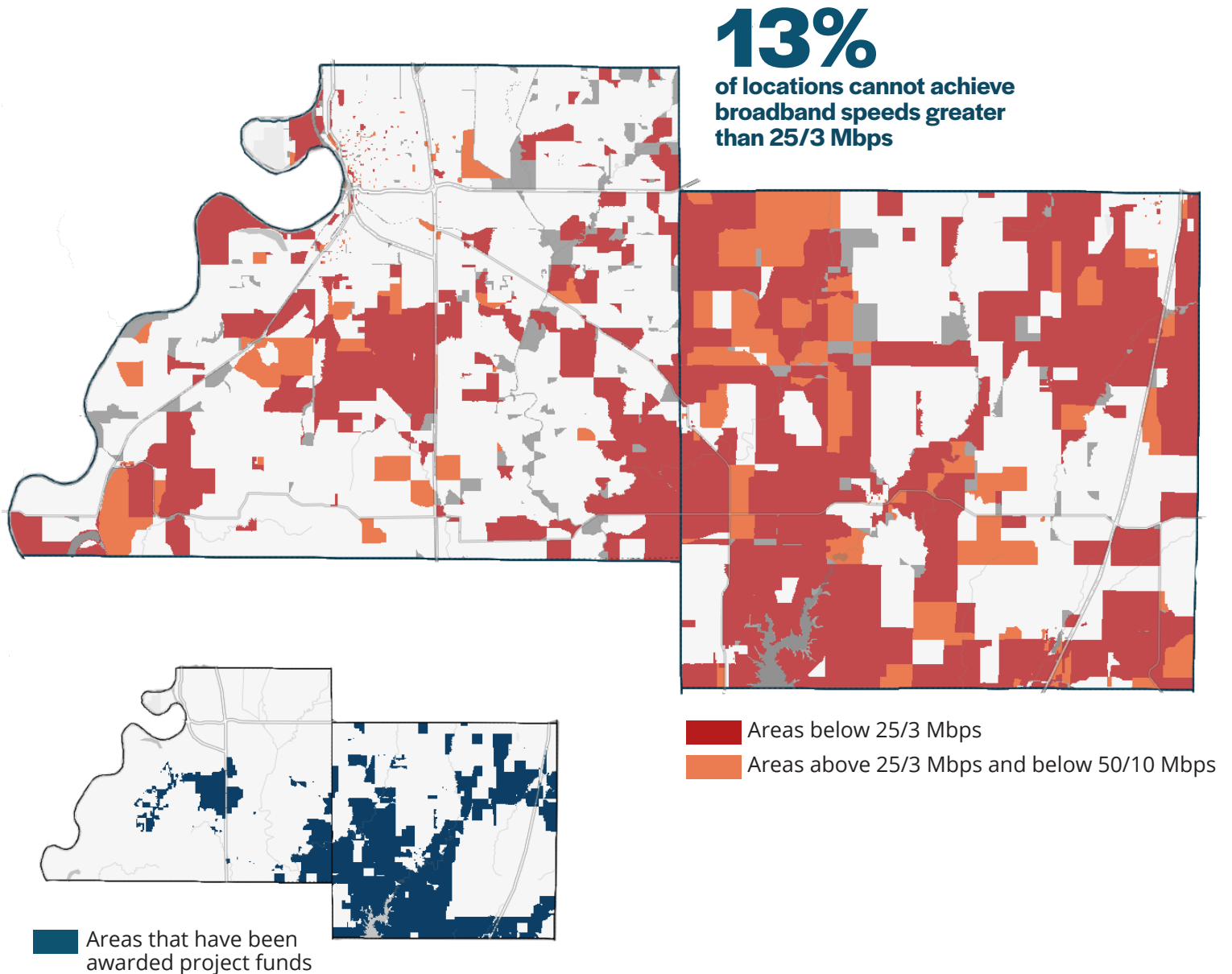
Clinton / Buchanan

Project Cluster • Mo-Kan Economic and Community
Development Organization



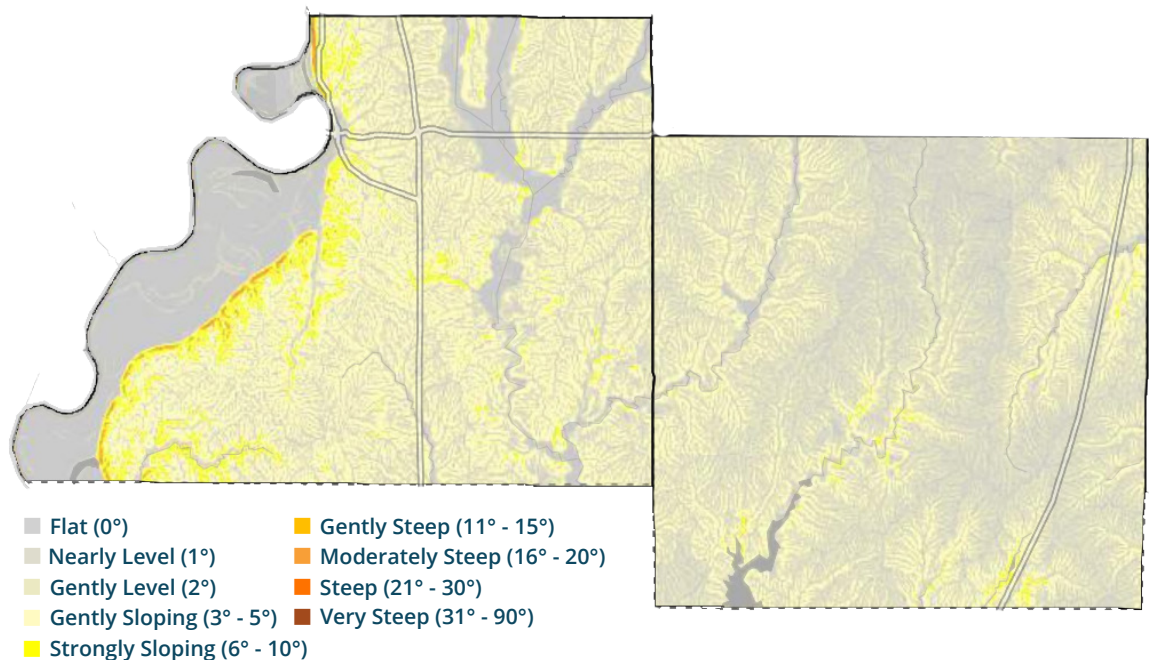
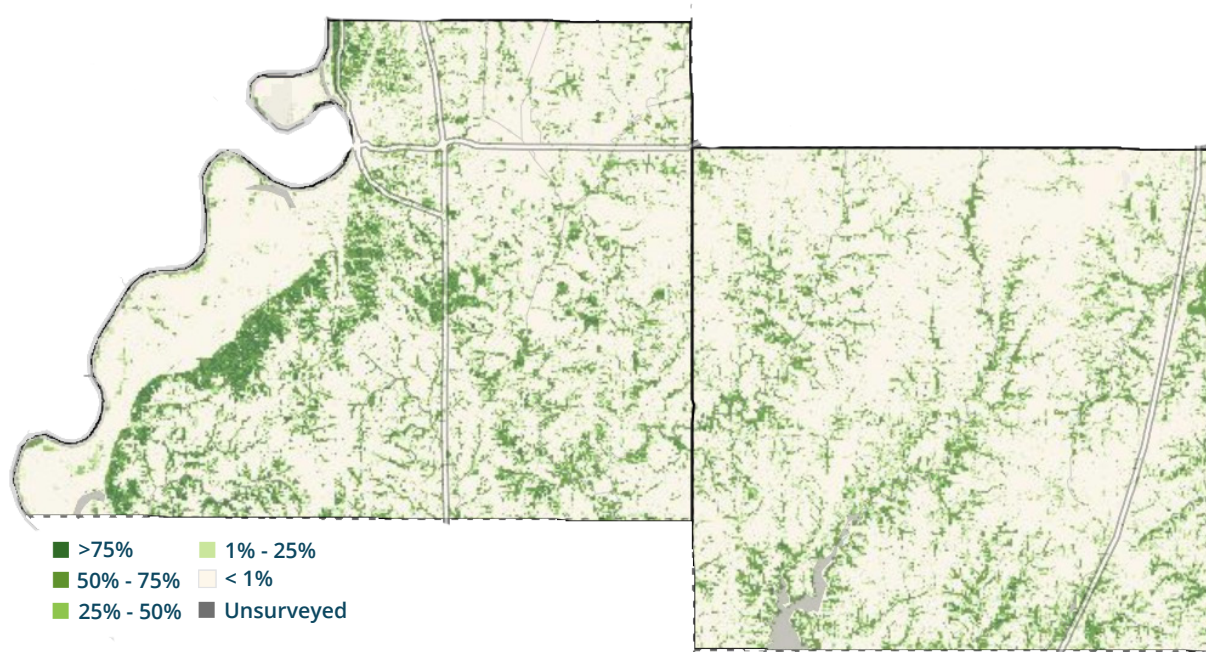
Below 10/1 Mbps Above 10/1; Below 25/3 Mbps Above 25/3; Below 50/10 Mbps Above 50/10; Below 100/20 Mbps Above 100/20; Below 200/50 Mbps Above 200/50 Mbps
■ null / no data

AREAS OF FOCUS



PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Clinton / Buchanan

Project Cluster • Mo-Kan Economic and Community
Development Organization

PROJECT AREAS

892

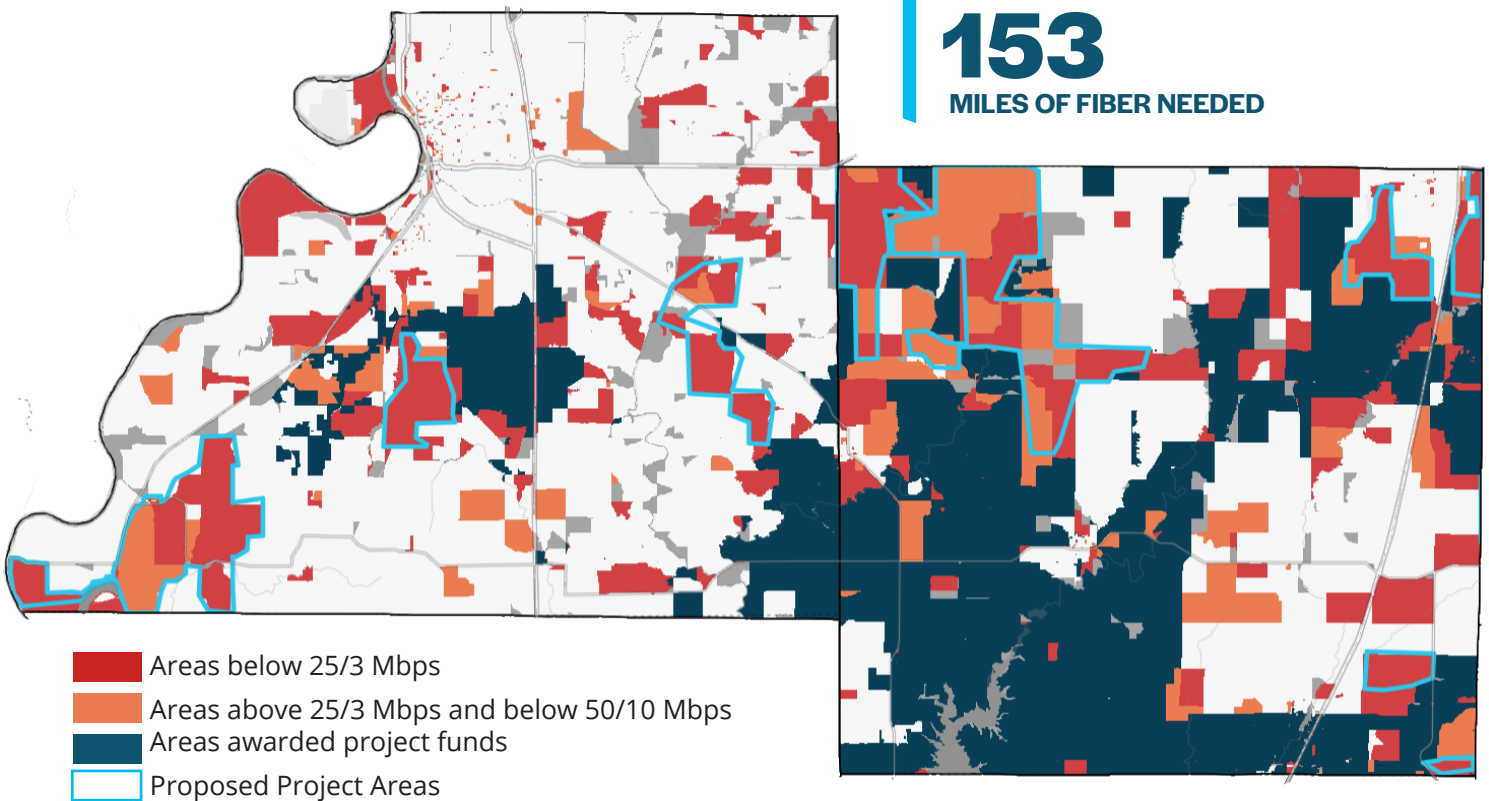
LOCATIONS

364

BUSINESSES

153

MILES OF FIBER NEEDED



- Areas below 25/3 Mbps
- Areas above 25/3 Mbps and below 50/10 Mbps
- Areas awarded project funds
- Proposed Project Areas

Investment Range = \$13.6 - \$29.9 million[†]

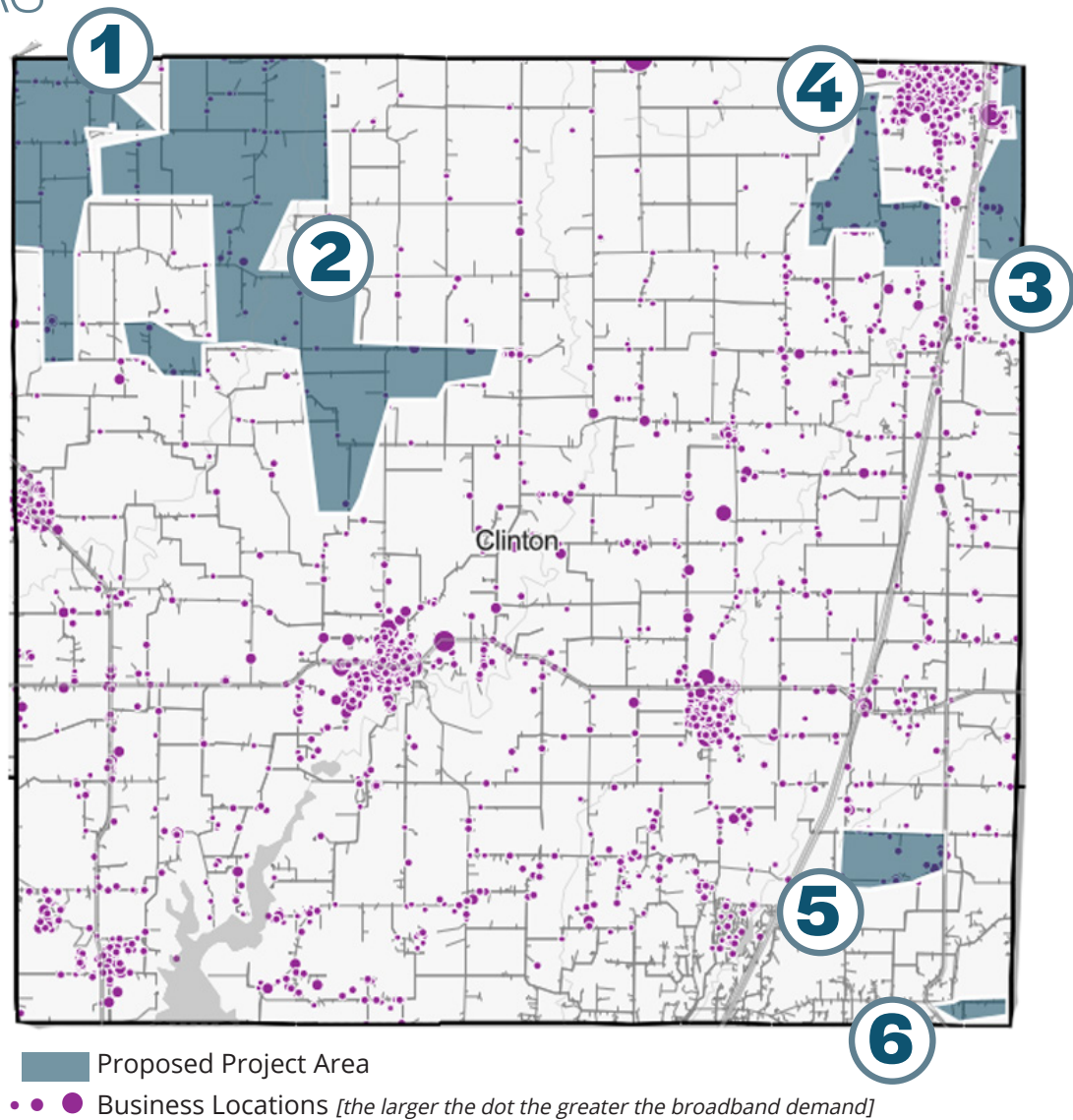
**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

† The Investment range for this cluster area may be lower; due to carrier electing to participate in E-ACAM that can impact eligibility for BEAD funding

CLINTON COUNTY

PROJECT AREAS

Much of the eastern half of Clinton County currently rates as served or well-served. Unserved and underserved areas in the southwest and northeast quadrants are mostly funded-to-served. The area with the greatest remaining need is in the northwest. We identified two project areas in this quadrant, one primarily unserved and the other primarily underserved. The two could be combined into a single, larger project area depending on available funding. We also identified several smaller project areas in the west that are adjacent to existing awards. Depending on the awardee’s strategy, these areas could be included in that provider’s footprint.



82
fiber miles

387
locations

211
business locations

4.7
locations per mile

INVESTMENT = \$7.2 - \$16 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

CLINTON COUNTY

PROJECT DETAILS

1

AERIAL		UNDERGROUND
\$1.6M - \$2.1M	COST TO PASS	\$2M - \$3.5M
\$107K - \$428K	ISP INVESTMENT	\$107K - \$428K
\$1.2M - \$2M	FUNDING GAP	\$1.7 - \$3.4M
\$361 - \$628	annual cost per location over 30 years	\$513 - \$1,053

18
fiber miles

107
locations

6
locations per mile

2

AERIAL		UNDERGROUND
\$3.7M - \$4.9M	COST TO PASS	\$4.8M - \$8.1M
\$125K - \$500K	ISP INVESTMENT	\$125K - \$500K
\$3.2M - \$4.8M	FUNDING GAP	\$4.3M - \$8M
\$847 - \$1,277	annual cost per location over 30 years	\$1,148 - \$2,120

41
fiber miles

125
locations

3
locations per mile

3

AERIAL		UNDERGROUND
\$254K - \$340K	COST TO PASS	\$333K - \$559K
\$33K - \$132K	ISP INVESTMENT	\$33K - \$132K
\$123K - \$307K	FUNDING GAP	\$201K - \$526K
\$124 - \$310	annual cost per location over 30 years	\$203 - \$1532

3
fiber miles

33
locations

11.5
locations per mile

CLINTON COUNTY

PROJECT DETAILS

4

AERIAL

\$1M - \$1.4M

COST TO PASS

\$56K - \$224K

ISP INVESTMENT

\$810K - \$1.3M

FUNDING GAP

\$482 - \$790

annual cost per location
over 30 years

UNDERGROUND

\$1.4M - \$2.3M

\$56K - \$224K

\$1.1M - \$2.2M

\$672 - \$1,320

12

fiber miles

56
locations

4.8

locations per mile

5

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$539K - \$721K

COST TO PASS

\$34K - \$136K

ISP INVESTMENT

\$403K - \$687K

FUNDING GAP

\$395 - \$674

annual cost per location
over 30 years

UNDERGROUND

\$705K - \$1.2M

\$34K - \$136K

\$569K - \$1.1M

\$558 - \$1,129

6

fiber miles

34
locations

5.6

locations per mile

6

AERIAL

\$164K - \$219K

COST TO PASS

\$32K - \$128K

ISP INVESTMENT

\$36K - \$187K

FUNDING GAP

\$37 - \$195

annual cost per location
over 30 years

UNDERGROUND

\$214K - \$360K

\$32K - \$128K

\$86K - \$328K

\$90 - \$342

2

fiber miles

32
locations

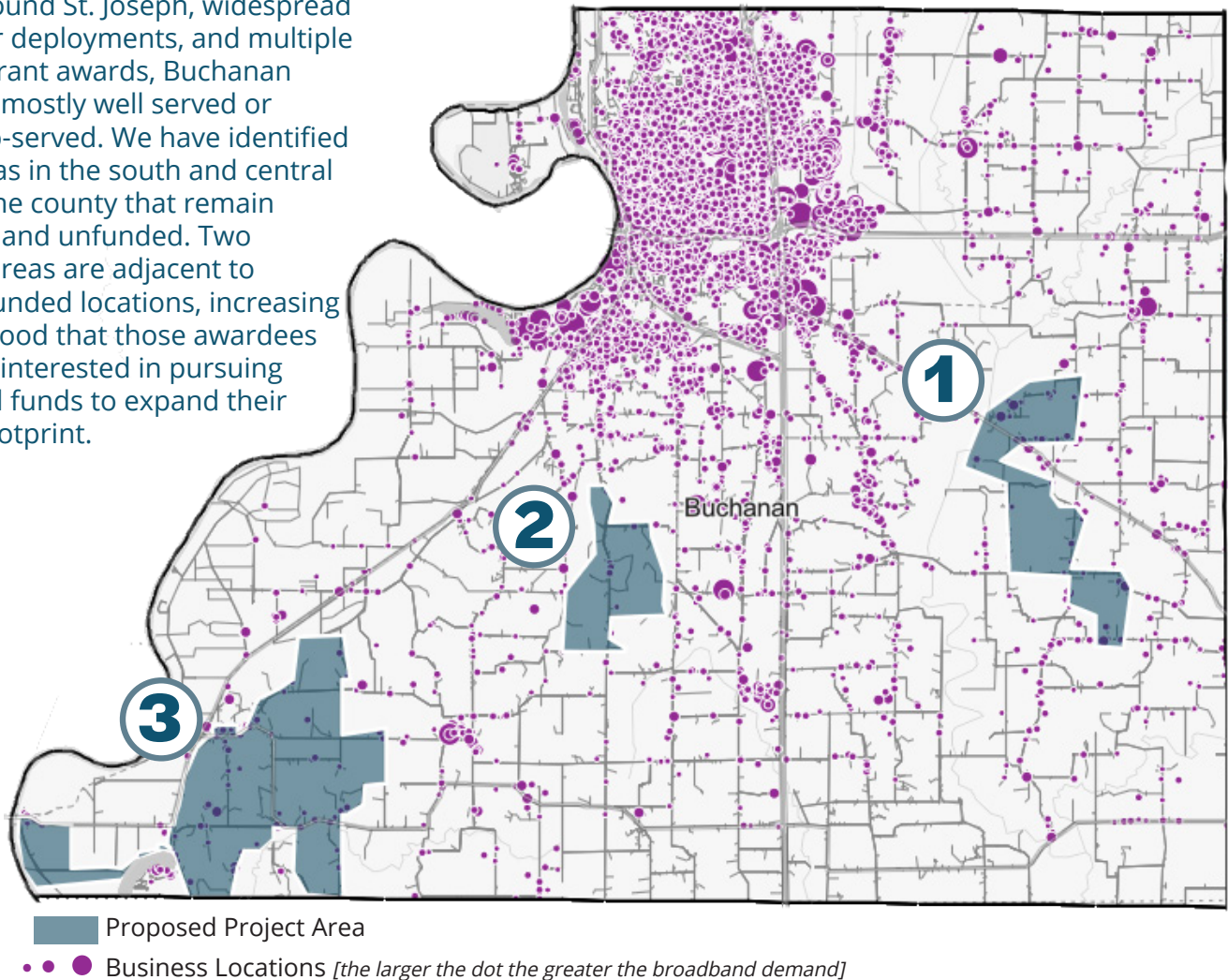
17.4

locations per mile

BUCHANAN COUNTY

PROJECT AREAS

Between the highly populated areas in and around St. Joseph, widespread rural fiber deployments, and multiple existing grant awards, Buchanan County is mostly well served or funded-to-served. We have identified three areas in the south and central parts of the county that remain unserved and unfunded. Two of these areas are adjacent to existing funded locations, increasing the likelihood that those awardees would be interested in pursuing additional funds to expand their service footprint.



71
fiber miles

505
locations

153
business locations

7.1
locations per mile

INVESTMENT = \$6.3 - \$14 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

BUCHANAN COUNTY

PROJECT DETAILS

1

AERIAL

\$1.6M - \$2.1M

COST TO PASS

\$117K - \$468K

ISP INVESTMENT

\$1.1M - \$2M

FUNDING GAP

\$320 - \$573

annual cost per location
over 30 years

UNDERGROUND

\$2M - \$3.5M

\$117K - \$468K

\$1.6M - \$3.4M

\$459 - \$962

18

fiber miles

117

locations

6.5

locations per mile

2

AERIAL

\$598K - \$800K

COST TO PASS

\$43K - \$172K

ISP INVESTMENT

\$426K - \$756K

FUNDING GAP

\$330 - \$587

annual cost per location
over 30 years

UNDERGROUND

\$782K - \$1.3M

\$43K - \$172K

\$610K - \$1.3M

\$473 - \$986

7

fiber miles

43

locations

6.4

locations per mile

3

AERIAL

\$4.2M - \$5.5M

COST TO PASS

\$345K - \$1.4M

ISP INVESTMENT

\$2.8M - \$5.2M

FUNDING GAP

\$268 - \$503

annual cost per location
over 30 years

UNDERGROUND

\$5.4M - \$9.1M

\$345K - \$1.4M

\$4M - \$8.8M

\$391-\$848

47

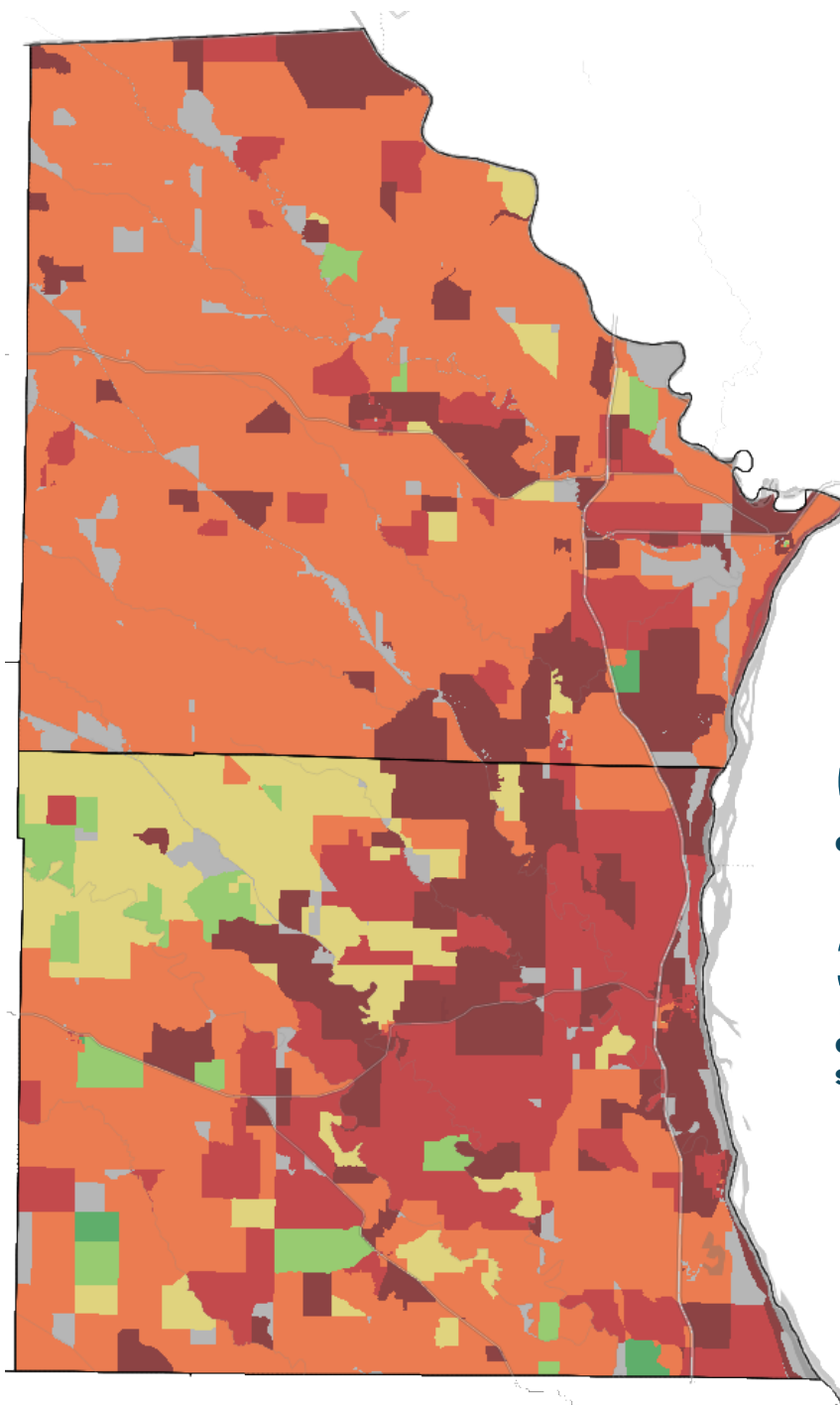
fiber miles

345

locations

7.4

locations per mile



66%

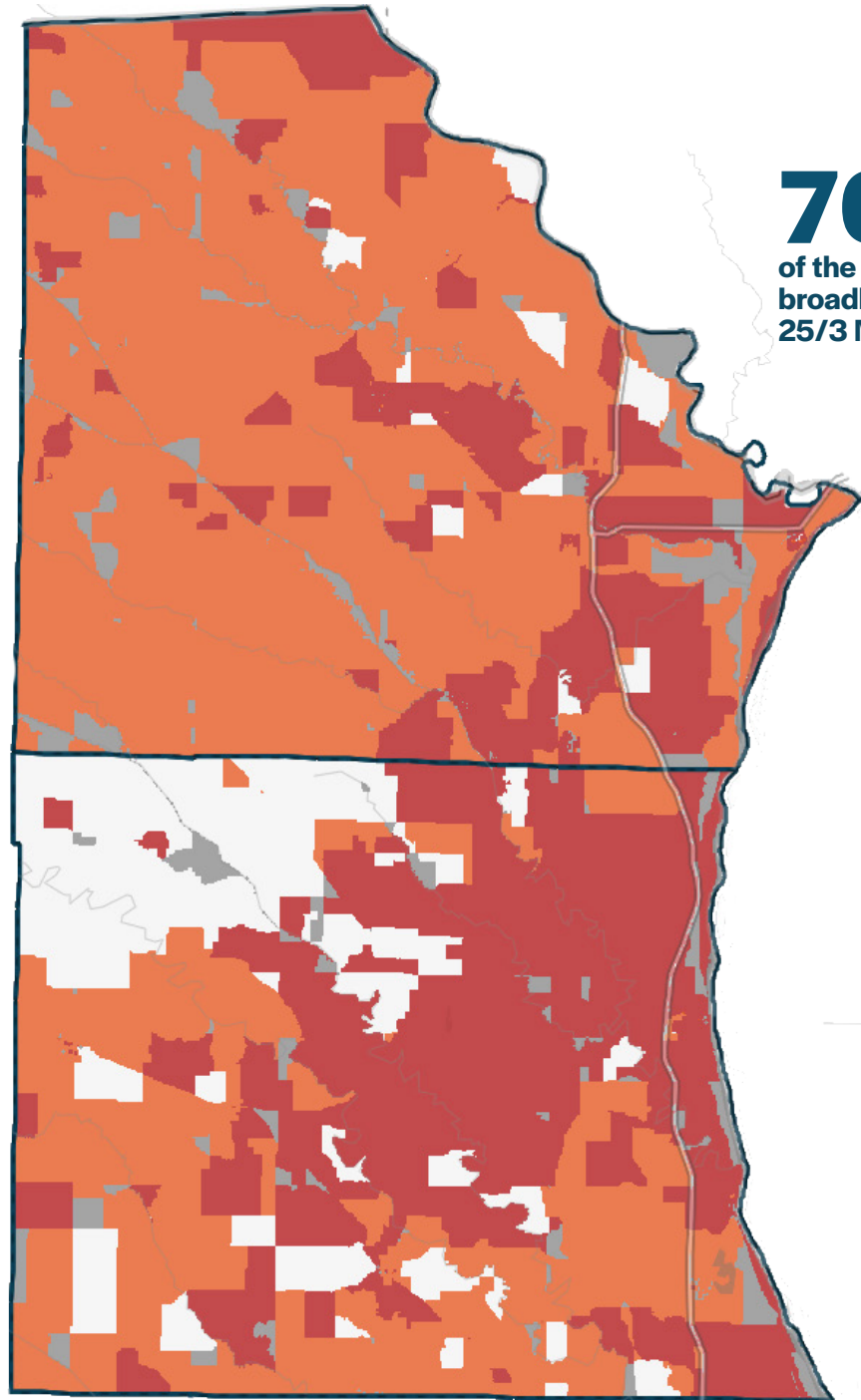
of the populated area is unserved

34,012

of the locations cannot achieve
speeds greater than 25/3 Mbps

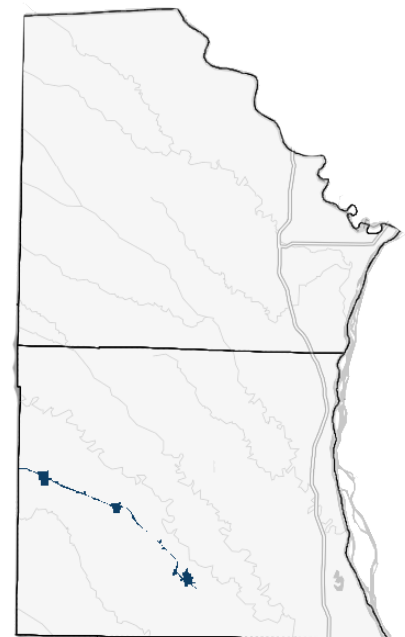
■ Below 10/1 Mbps ■ Above 10/1; ■ Above 25/3; ■ Above 50/10; ■ Above 100/20; ■ Above 200/50 Mbps
■ null / no data ■ Below 25/3 Mbps ■ Below 50/10 Mbps ■ Below 100/20 Mbps ■ Below 200/50 Mbps

AREAS OF FOCUS



76%

of the locations cannot achieve
broadband speeds greater than
25/3 Mbps

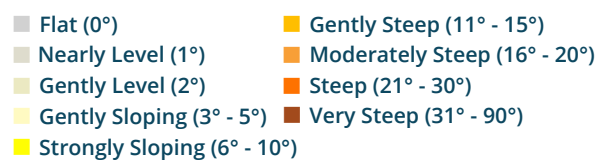
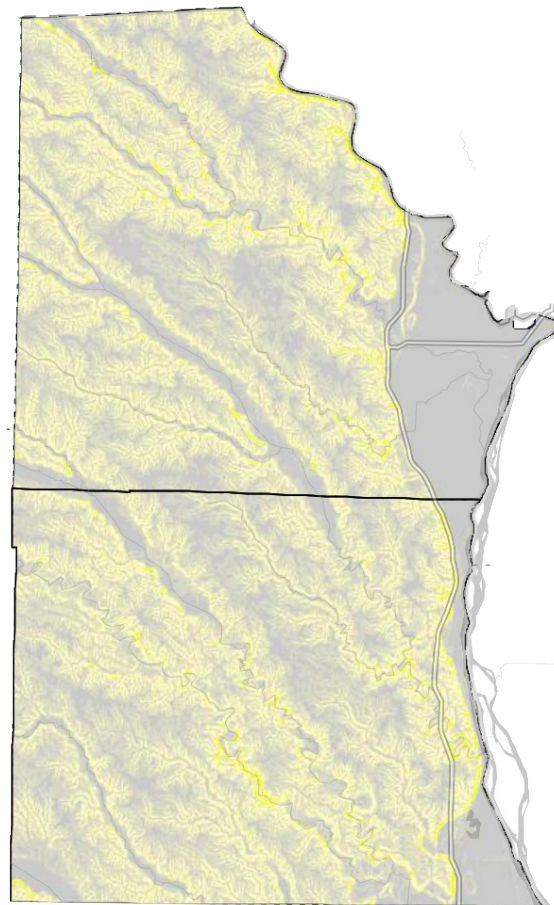
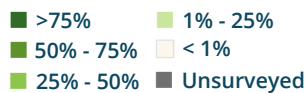
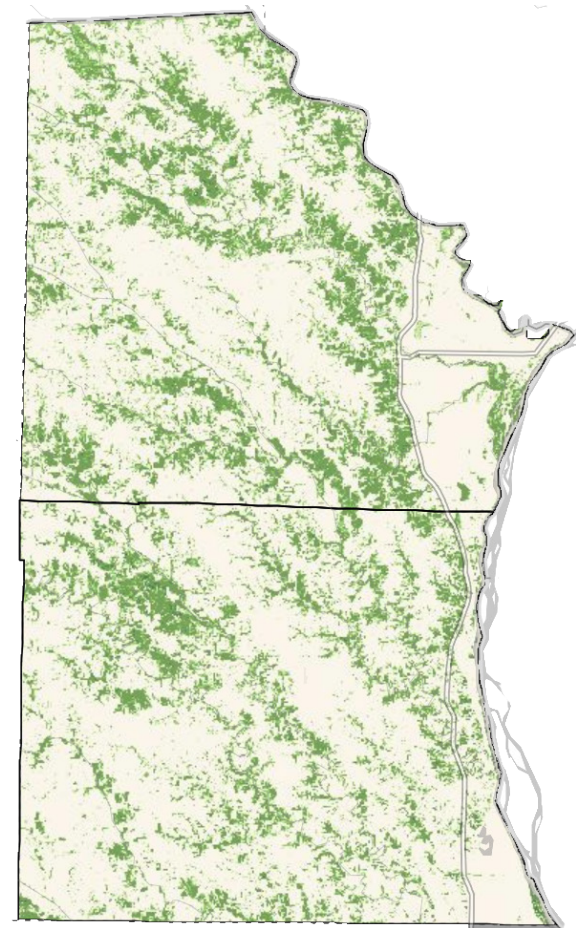


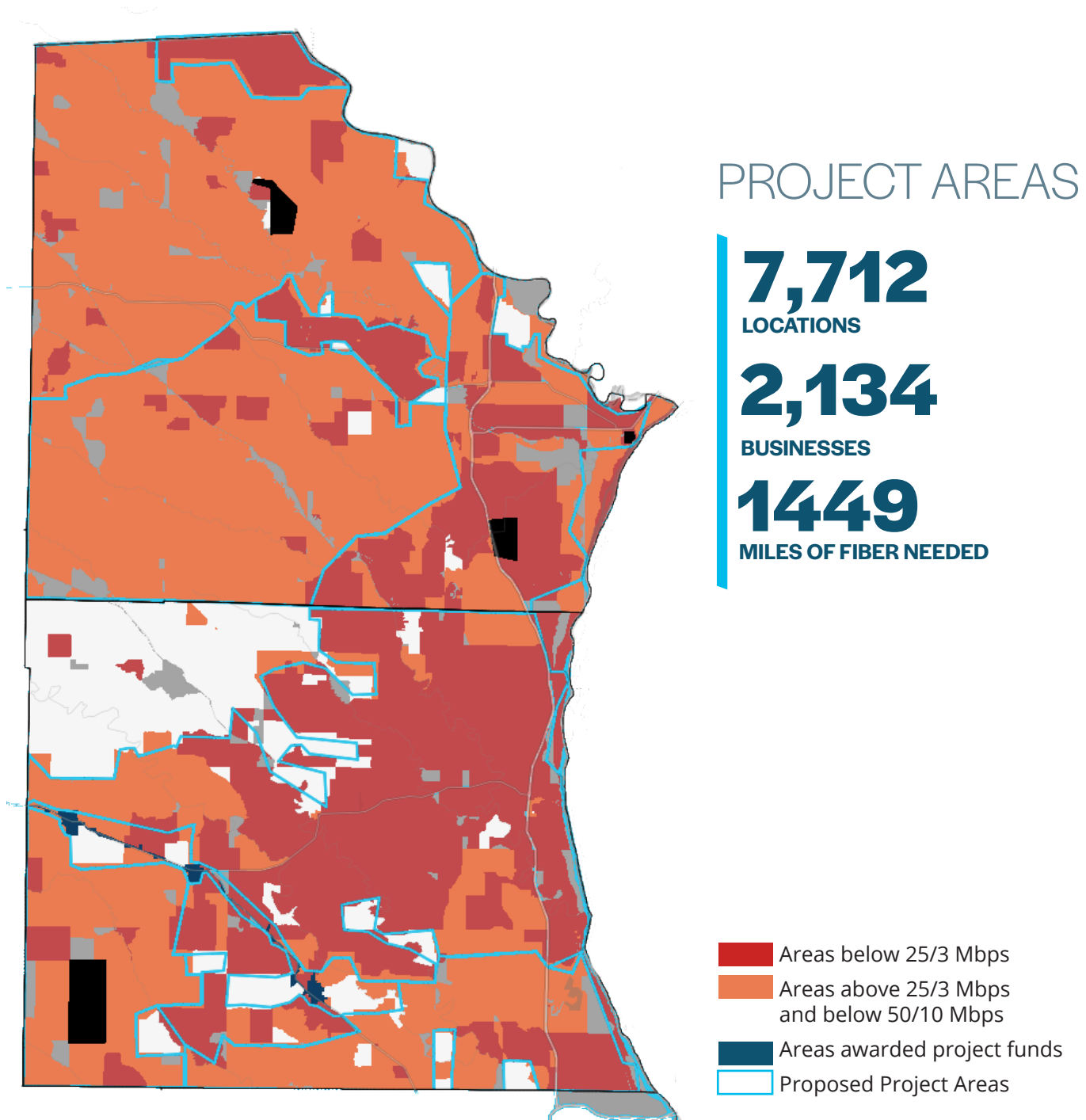
- Areas below 25/3 Mbps
- Areas above 25/3 Mbps and below 50/10 Mbps

Areas that have been
awarded project funds

PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.





Investment Range = \$129 - \$283.4 million

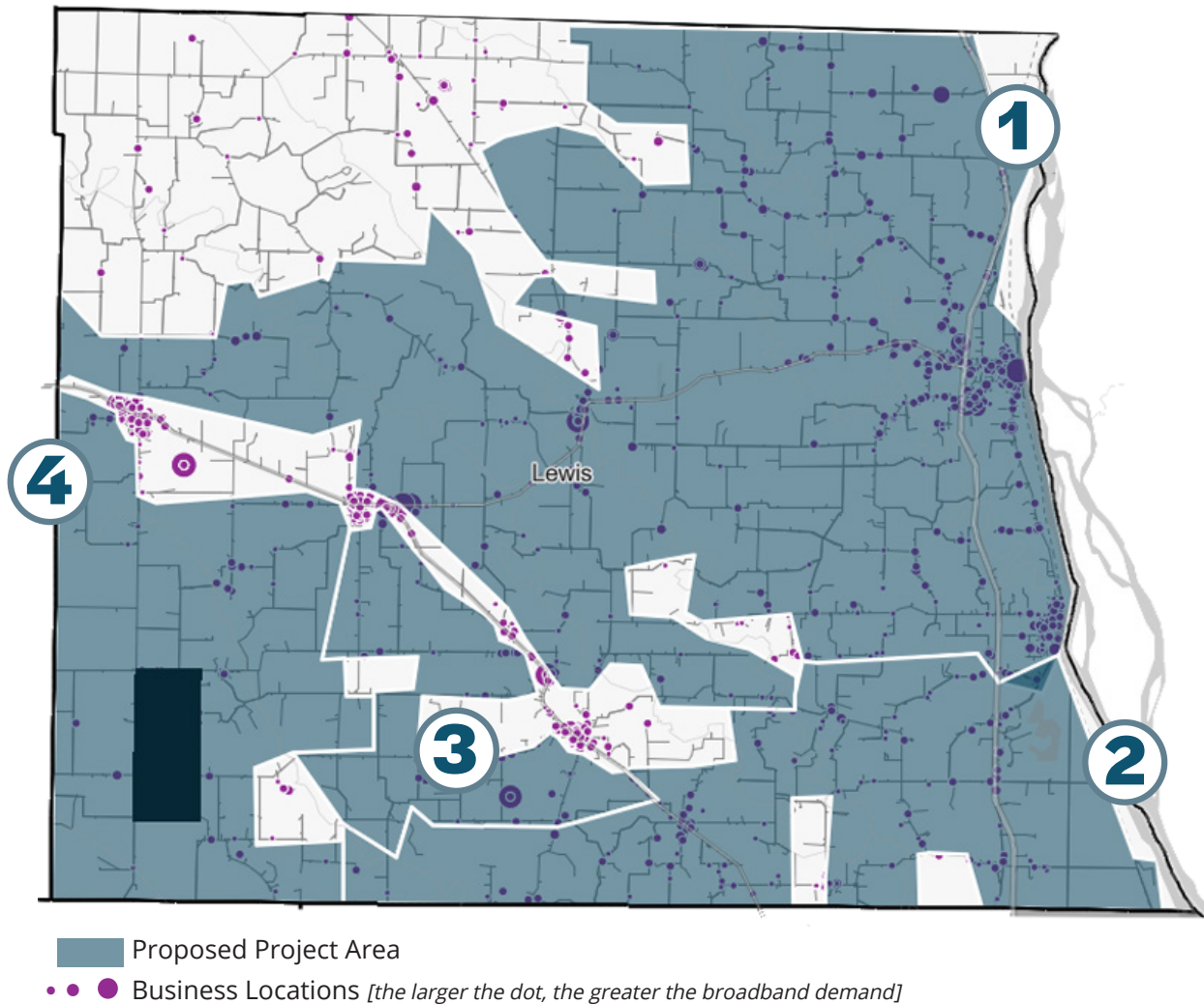
**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

† The Investment range for this cluster area may be lower; due to carrier electing to participate in E-ACAM that can impact eligibility for BEAD funding

LEWIS COUNTY

PROJECT AREAS

Approximately three quarters of Lewis County’s area rates as underserved or unserved. The greatest need can be found in the northeast and central parts of the county where most blocks have speed ratings below 25/3 Mbps and many are unable to reach 10/1 Mbps. The southern part of the county is significantly underserved, with most blocks rating below 50/10 Mbps.



528
fiber miles

3,465
locations

1,145
business locations

6.6
locations per mile

INVESTMENT = \$54.2 - \$120million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

LEWIS COUNTY

PROJECT DETAILS

1

**This project area may be marginally impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$33.4M - \$44.6M

COST TO PASS

\$2.6M - \$10.6M

ISP INVESTMENT

\$22.8M - \$41.9M

FUNDING GAP

\$286 - \$528

annual cost per location
over 30 years

UNDERGROUND

\$43.6M - \$73.3M

\$2.6M - \$10.6M

\$33M - \$70.6M

\$416 - \$889

375

fiber miles

2,648

locations

7.1

locations per mile

2

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$9.4M - \$12.5M

COST TO PASS

\$634K - \$2.5M

ISP INVESTMENT

\$6.8M - \$11.9M

FUNDING GAP

\$359 - \$626

annual cost per location
over 30 years

UNDERGROUND

\$12.3M - \$20.6M

\$634K - 2.5M

\$9.7M - \$19.9M

\$511 - \$1,050

105

fiber miles

634

locations

6.0

locations per mile

3

**This project area may be marginally impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$4.3M - \$5.7M

COST TO PASS

\$183K - \$732K

ISP INVESTMENT

\$3.6M - \$5.6M

FUNDING GAP

\$648 - \$1,012

annual cost per location
over 30 years

UNDERGROUND

\$5.6M - \$9.4M

\$183K - \$732K

\$4.9M - \$9.3M

\$889 - \$1684

48

fiber miles

183

locations

3.8

locations per mile

4

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$7.2M - \$9.6M

COST TO PASS

\$192K - \$768K

ISP INVESTMENT

\$6.4M - \$9.4M

FUNDING GAP

\$1,117 - \$1,638

annual cost per location
over 30 years

UNDERGROUND

\$9.4M - \$15.8M

\$192K - \$768K

\$8.7M - \$15.6M

\$1502 - \$2,714

81

fiber miles

192

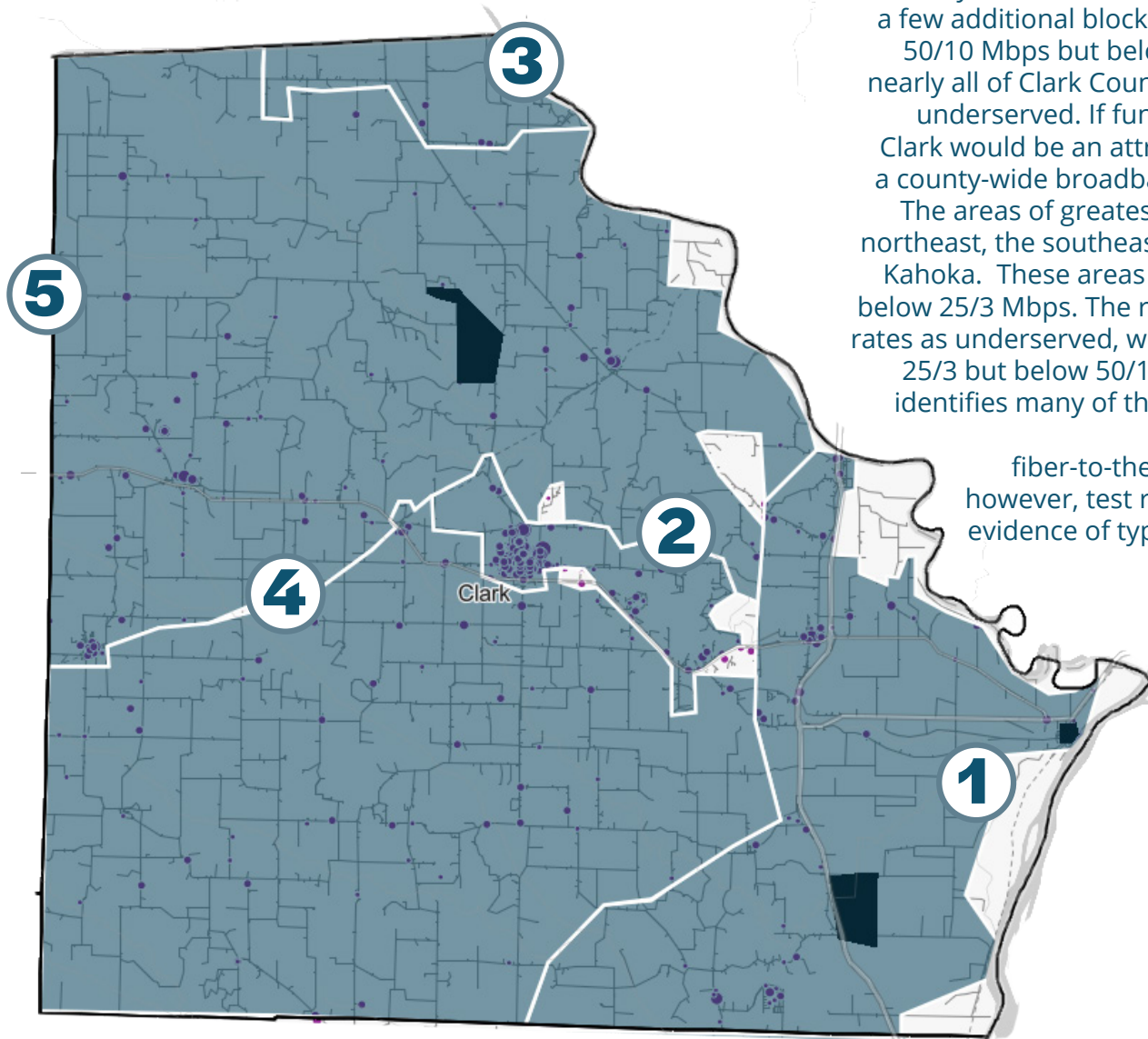
locations

2.4

locations per mile

CLARK COUNTY

PROJECT AREAS



With only a handful of served blocks and a few additional blocks that rate above 50/10 Mbps but below 100/20 Mbps, nearly all of Clark County is significantly underserved. If funding is available, Clark would be an attractive option for a county-wide broadband deployment. The areas of greatest need are in the northeast, the southeast, and in/around Kahoka. These areas consistently rate below 25/3 Mbps. The rest of the county rates as underserved, with speeds above 25/3 but below 50/10 Mbps. The FCC identifies many of these underserved areas as having fiber-to-the-home available; however, test results show little evidence of typical fiber speeds

840
fiber miles

4,055
locations

940
business locations

4.8
locations per mile

INVESTMENT = \$74 - \$164 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

CLARK COUNTY

PROJECT DETAILS

1

**This project area may be marginally impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$16.4M - \$22M

COST TO PASS

\$989K - \$4M

ISP INVESTMENT

\$12.5M - \$21M

FUNDING GAP

\$420 - \$707

annual cost per location
over 30 years

UNDERGROUND

\$21.5M - \$36.1M

\$989K - \$4M

\$17.5M - \$35M

\$591 - \$1,183

185
fiber miles

989
locations

5.4
locations per mile

2

AERIAL

\$5.1M - \$6.9M

COST TO PASS

\$1.3M - \$5.1M

ISP INVESTMENT

\$42K - \$5.6M

FUNDING GAP

\$1 - \$146

annual cost per location
over 30 years

UNDERGROUND

\$6.7M - \$11.3M

\$1.3M - \$5.1M

\$1.6M - \$10M

\$42 - \$262

58
fiber miles

1,275
locations

22.1
locations per mile

3

AERIAL

\$2M - \$2.7M

COST TO PASS

\$78K - \$312K

ISP INVESTMENT

\$1.7M - \$2.6M

FUNDING GAP

\$733 - \$1,125

annual cost per location
over 30 years

UNDERGROUND

\$2.7M - \$4.5M

\$78K - \$312K

\$2.3M - \$4.4M

\$1,000 - \$1,871

23
fiber miles

78
locations

3.4
locations per mile

CLARK COUNTY

PROJECT DETAILS

4

*This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.

AERIAL		UNDERGROUND		271 fiber miles	
\$24M - \$32.2M	COST TO PASS	\$31.5M - \$53M		686 locations	2.5 locations per mile
\$686K - \$2.7M	ISP INVESTMENT	\$686K - \$2.7M			
\$21.3M - \$31.5M	FUNDING GAP	\$28.7M - \$52.2M			
\$1,307 - \$1,531	annual cost per location over 30 years	\$1,397 - \$2,538			

5

*This project area may be marginally impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.

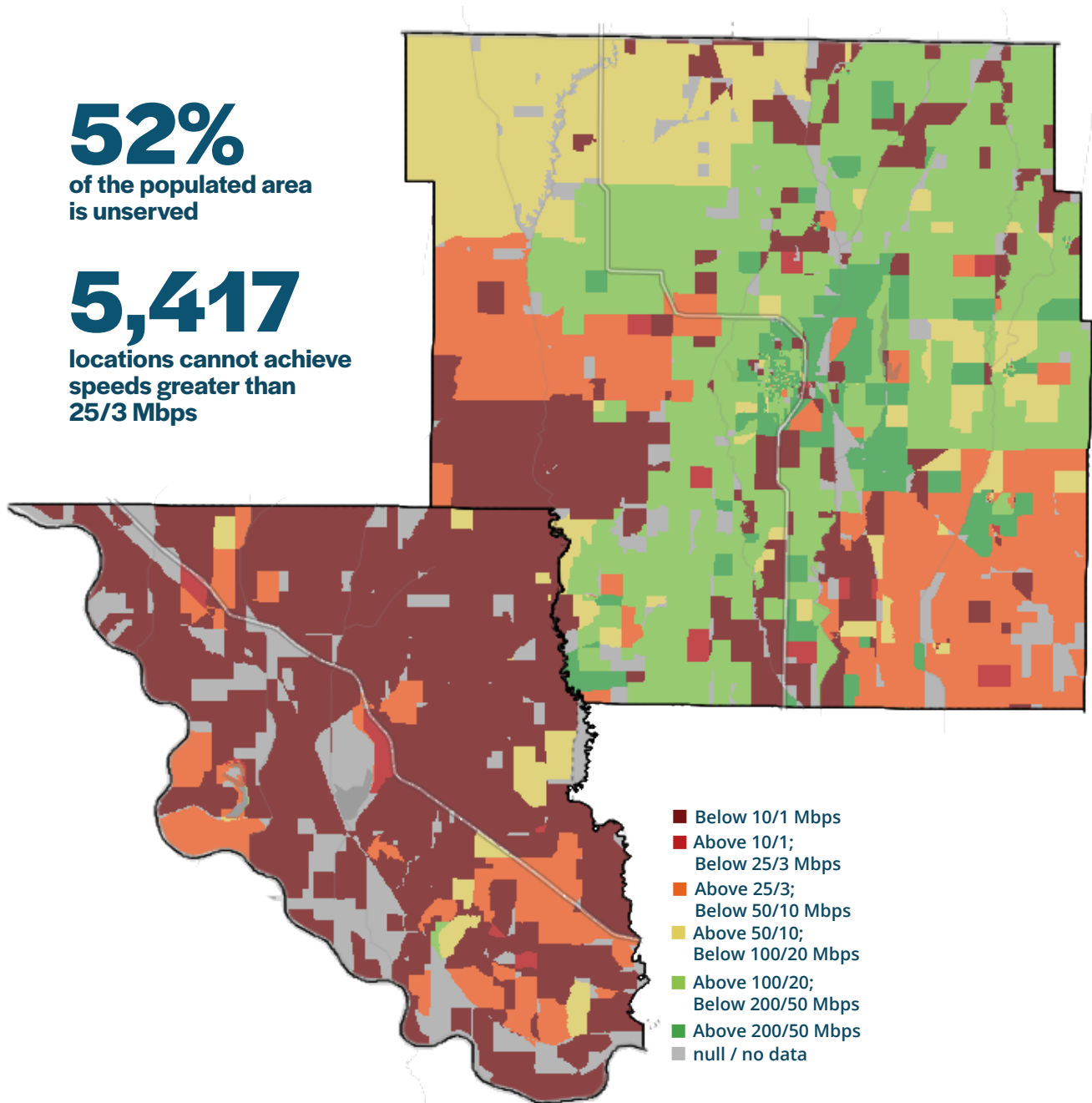
AERIAL		UNDERGROUND		304 fiber miles	
\$27M - \$36.2M	COST TO PASS	\$35.4M - \$59.5M		1,027 locations	3.4 locations per mile
\$1M - \$4.1M	ISP INVESTMENT	\$1M - \$4.1M			
\$22.9 - \$35.2M	FUNDING GAP	\$31.3M - \$58.5M			
\$746 - \$1,142	annual cost per location over 30 years	\$1,016 - \$1,899			

52%

of the populated area
is unserved

5,417

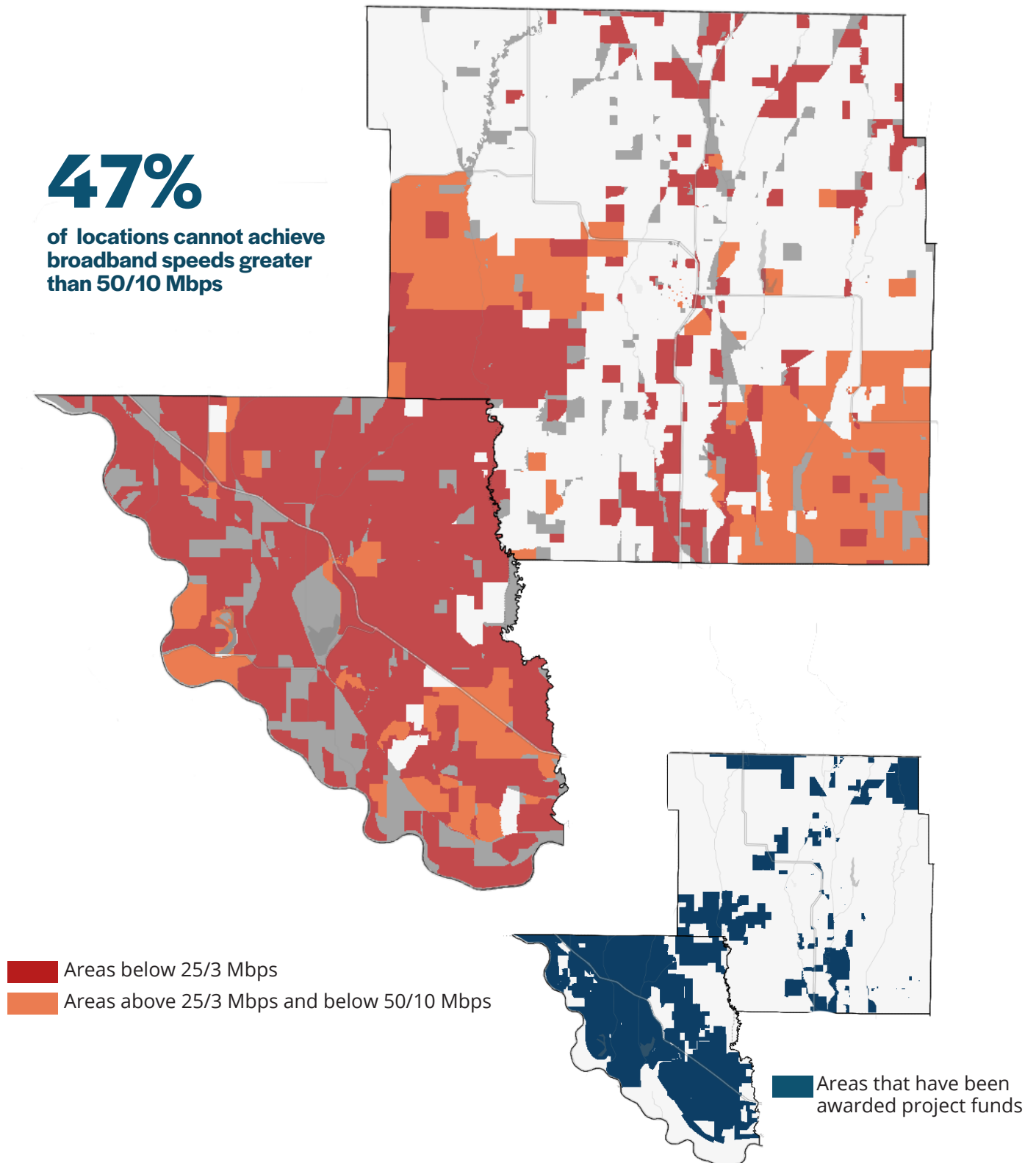
locations cannot achieve
speeds greater than
25/3 Mbps



AREAS OF FOCUS

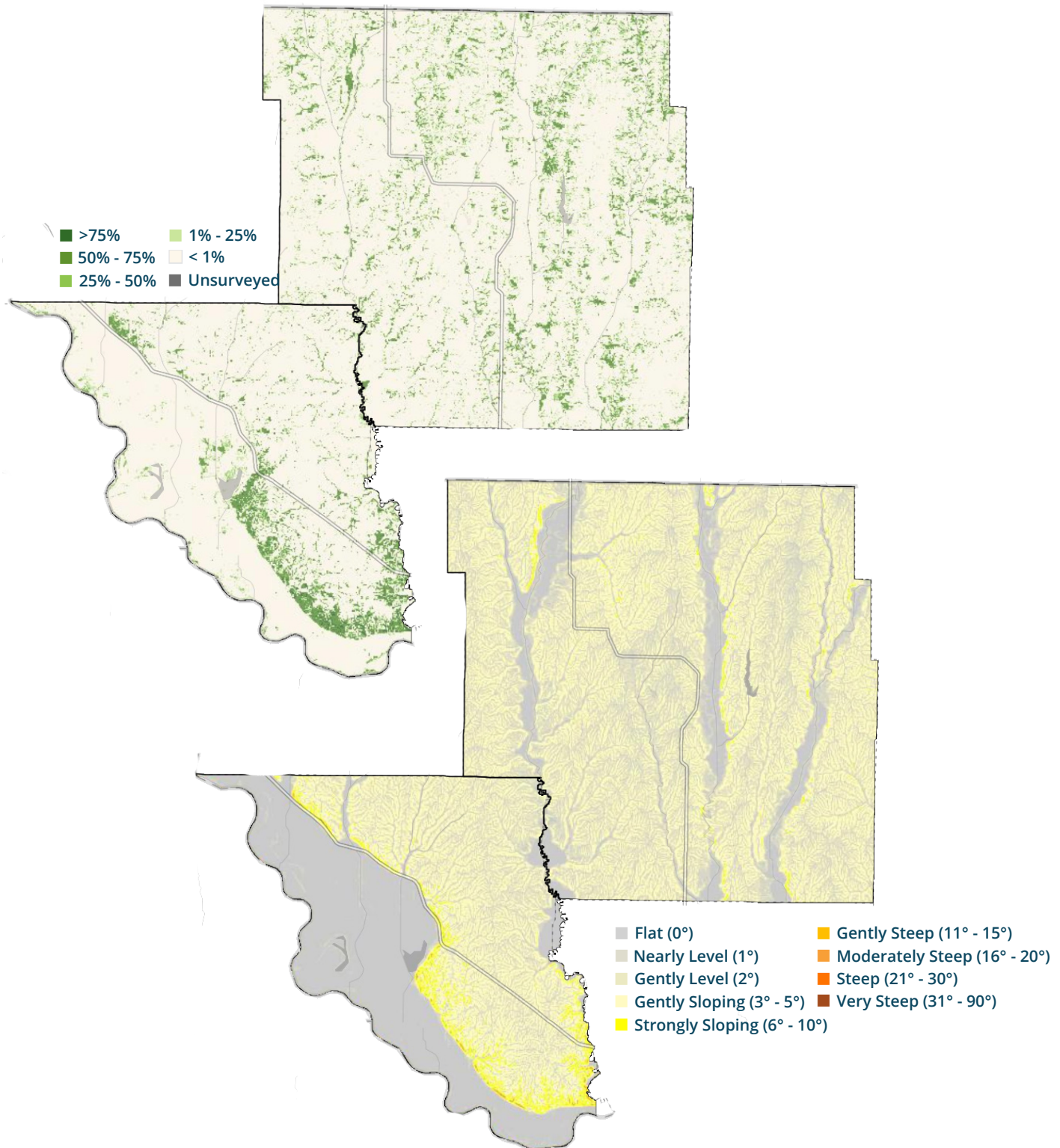
47%

of locations cannot achieve
broadband speeds greater
than 50/10 Mbps



PLANNING CONSIDERATIONS

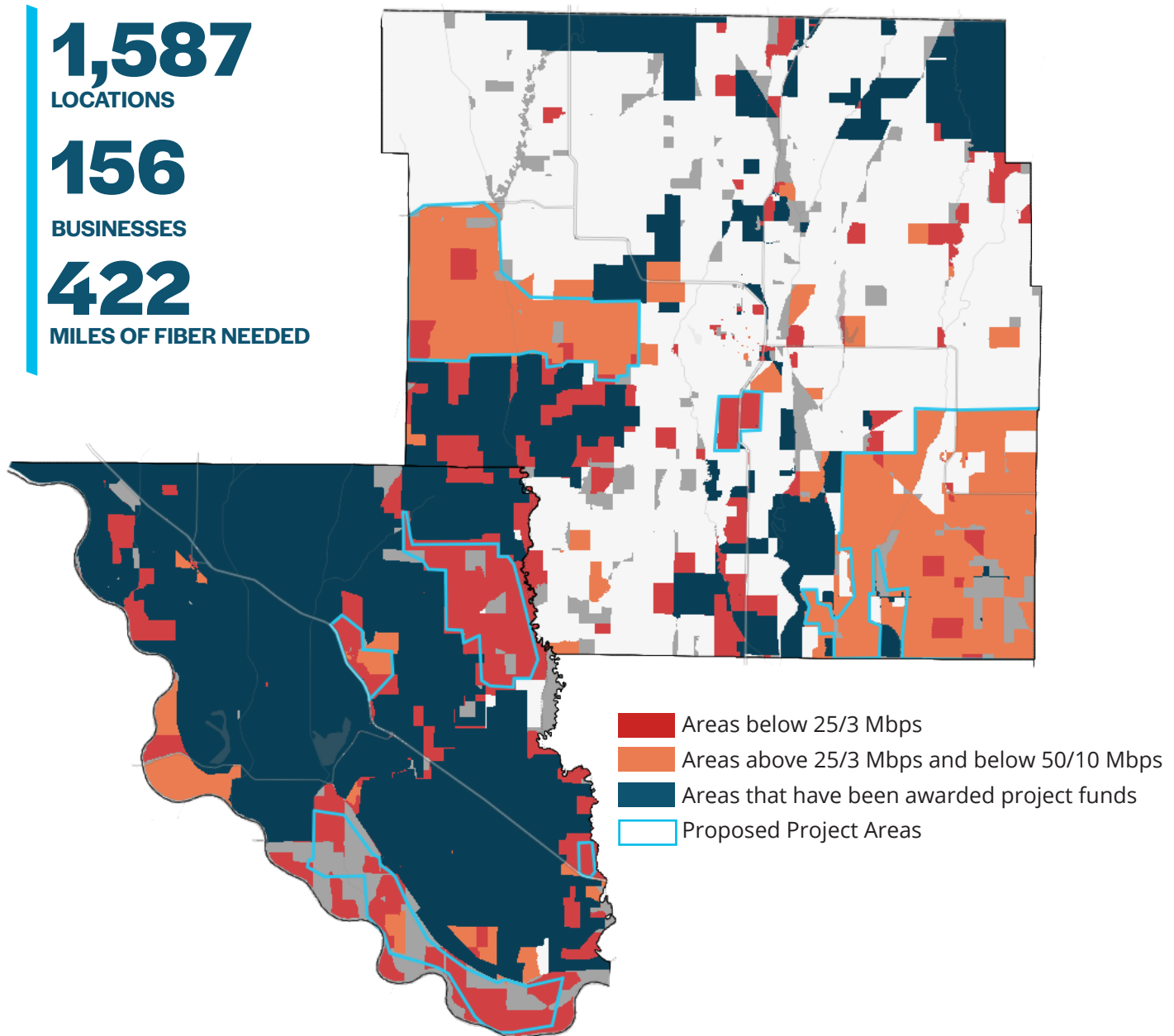
Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Nodaway / Holt

Project Cluster • Northwest Missouri Regional Council of Governments

PROJECT AREAS



Investment Range = \$37.5 - \$82.5 million[†]

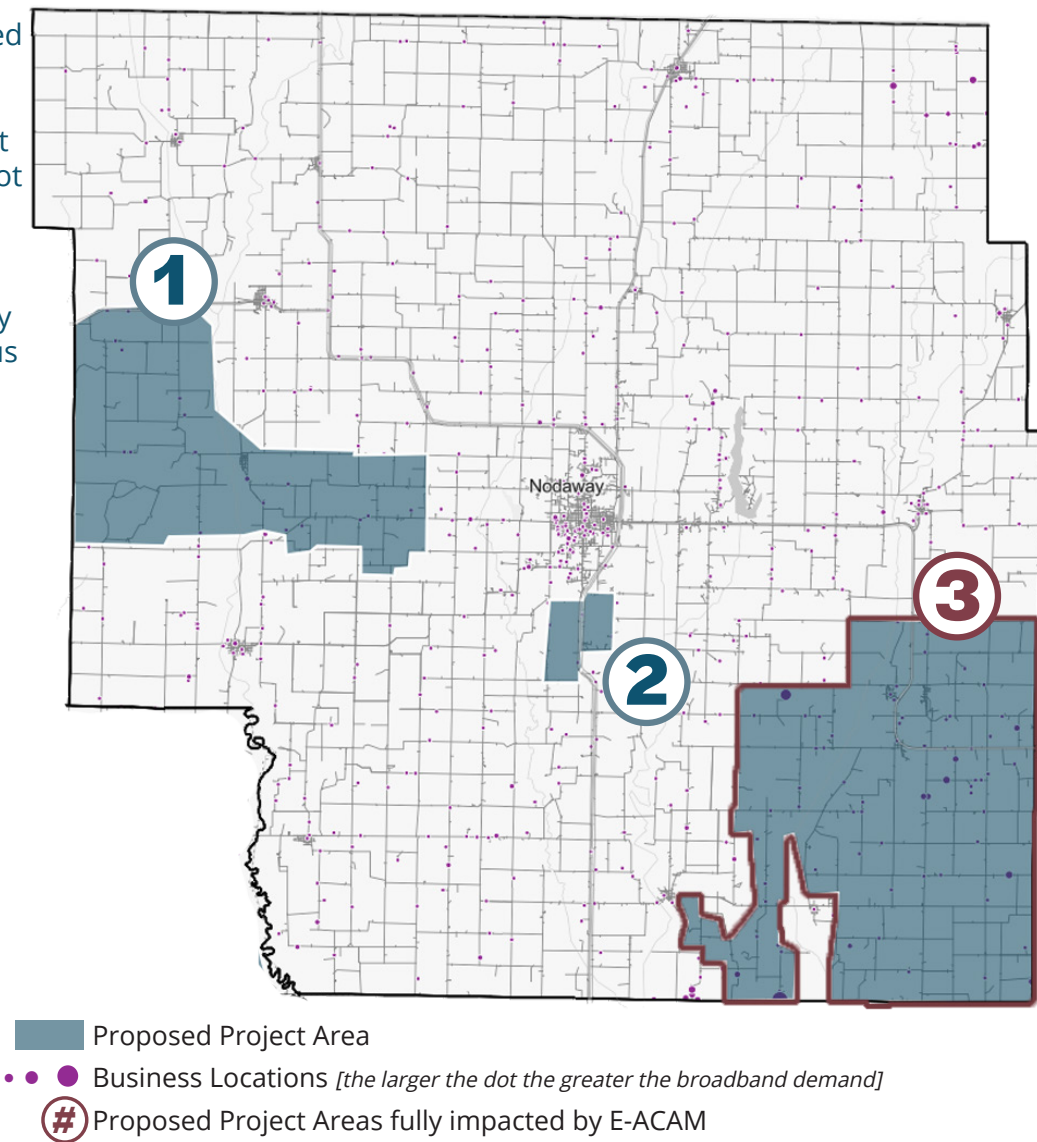
*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

† The Investment range for this cluster area may be lower; due to carrier electing to participate in E-ACAM that can impact eligibility for BEAD funding

NODAWAY COUNTY

PROJECT AREAS

Most of Nodaway County currently rates as either served (above 100/20 Mbps) or just slightly underserved, with speeds above 50/10 Mbps but below 100/20 Mbps. We do not recommend seeking funding in these areas. The parts of Nodaway that currently rate as unserved are all covered by existing grant awards and thus also do not need additional funding. We identified three areas that rate below 50/10 Mbps, one in the west, one in the southeast, and one small area just south of Maryville. It should be noted that all of these areas have at least one provider who claims to offer fiber to the home in spite of the low-speed test results. Those providers may challenge any grant applications in those areas.



102
fiber miles

246
locations

25
business locations

2.4
locations per mile

INVESTMENT = \$9.1 - \$20 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

NODAWAY COUNTY

PROJECT DETAILS

1

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL		UNDERGROUND		88 fiber miles	
\$7.8M - \$10.5M	COST TO PASS	\$10.2M - \$17M		167 locations	1.9 locations per mile
\$167K - \$668K	ISP INVESTMENT	\$167K - \$668K			
\$7.2M - \$10.3M	FUNDING GAP	\$9.6M - \$17M			
\$1,429 - \$2,056	annual cost per location over 30 years	\$1,910 - \$3,401			

2

AERIAL		UNDERGROUND		14 fiber miles	
\$1.2M - \$1.6M	COST TO PASS	\$1.6M - \$2.7M		79 locations	5.7 locations per mile
\$79K - \$316K	ISP INVESTMENT	\$79K - \$316K			
\$907K - \$1.6M	FUNDING GAP	\$1.3M - \$2.6M			
\$383 - \$657	annual cost per location over 30 years	\$542 - \$1,101			

3

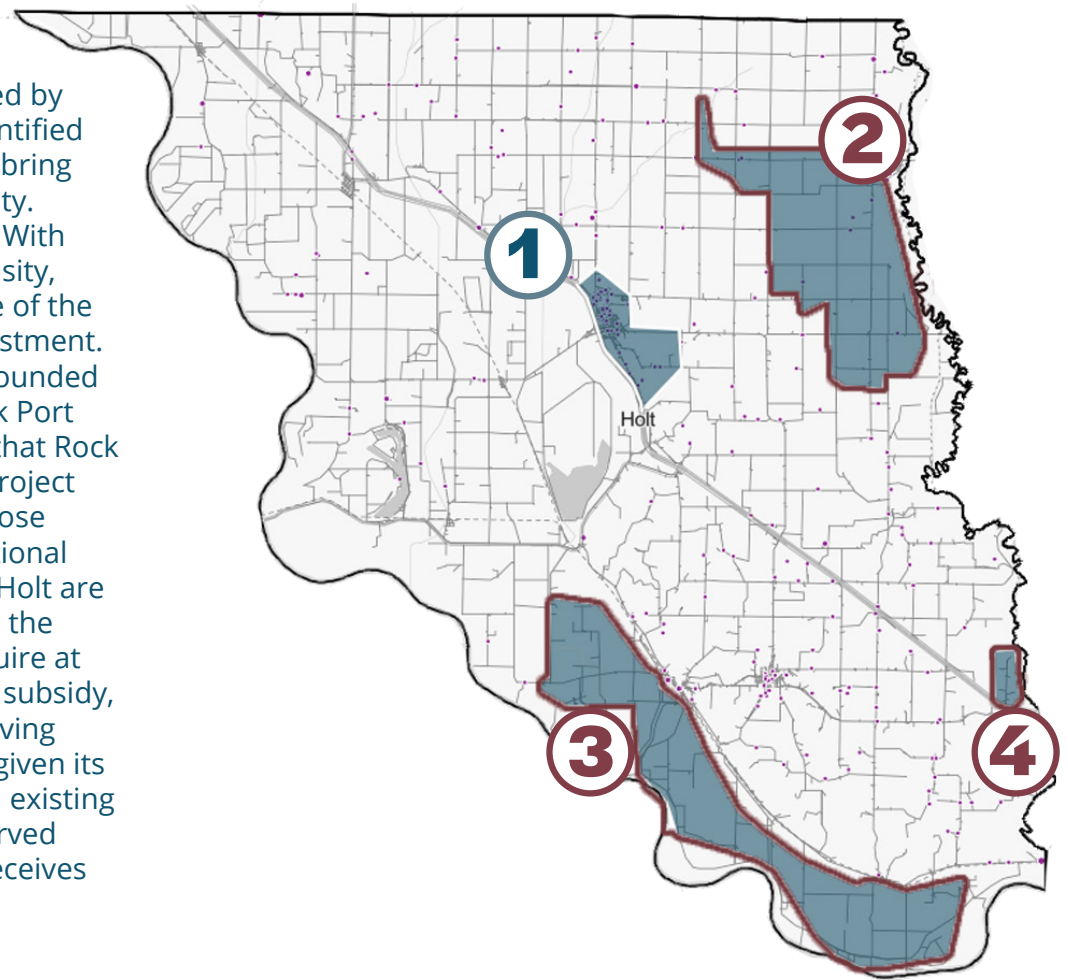
**This project area has been removed from the county overall calculations due to E-ACAM Carrier participation*

AERIAL		UNDERGROUND		196 fiber miles	
\$17.4M - \$23.3M	COST TO PASS	\$22.8M - \$37.7M		549 locations	2.8 locations per mile
\$549K - \$2.2M	ISP INVESTMENT	\$549K - \$2.2M			
\$15.2M - \$22.7M	FUNDING GAP	\$20.6M - \$37.7M			
\$923 - \$1,379	annual cost per location over 30 years	\$1,249 - \$2,289			

HOLT COUNTY

PROJECT AREAS

Much of Holt County is covered by existing grant awards. We identified four project areas that would bring service to the rest of the county. Area #1 includes Mound City. With relatively high population density, this will be the most attractive of the four areas for private ISP investment. Given that Mound City is surrounded by a ReConnect award to Rock Port Telephone, we would expect that Rock Port would likely bid on any project proposals. They also may choose to serve the city without additional subsidy. The other 3 areas in Holt are low density. Area 3, located in the south along the river, will require at least \$124,000 per location in subsidy, such a high cost will make serving this area a challenge. Area 4, given its small size and proximity to an existing award, could end up being served when the adjacent territory receives its subsidized deployment.



- Proposed Project Area
- Business Locations *[the larger the dot the greater the broadband demand]*
- # Proposed Project Areas fully impacted by E-ACAM

29
fiber miles

675
locations

44
business locations

23.4
locations per mile

INVESTMENT = \$2.6 - \$5.6 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

HOLT COUNTY

PROJECT DETAILS

1

*In this area, density is high enough that an ISP may be willing to deploy with no subsidy.

AERIAL

UNDERGROUND

\$2.6M - \$3.4M

COST TO PASS

\$3.4M - \$5.6M

\$675K - \$2.7M

ISP INVESTMENT

\$675K - \$2.7M

\$0 - \$2.8M

FUNDING GAP

\$652K - \$5M

\$0 - \$136

annual cost per location
over 30 years

\$32 - \$245

29

fiber miles

675

locations

23.4

locations per mile

2

*This project area has been removed from the county overall calculations due to E-ACAM Carrier participation

AERIAL

UNDERGROUND

\$4M - \$5.3M

COST TO PASS

\$5.2M - \$8.7M

\$73K - \$292K

ISP INVESTMENT

\$73K - \$292K

\$3.7M - \$5.2M

FUNDING GAP

\$4.9M - \$8.7M

\$1,681 - \$2,393

annual cost per location
over 30 years

\$2,240 - \$3,955

45

fiber miles

73

locations

1.6

locations per mile

3

*This project area has been removed from the county overall calculations due to E-ACAM Carrier participation

AERIAL

UNDERGROUND

\$4.4M - \$5.8M

COST TO PASS

\$5.7M - \$9.6M

\$35K - \$140K

ISP INVESTMENT

\$35K - \$140K

\$4.2M - \$5.8M

FUNDING GAP

\$5.6M - \$9.5M

\$4,014 - \$5,512

annual cost per location
over 30 years

\$5,291 - \$9,082

49

fiber miles

35

locations

.7

locations per mile

4

*This project area has been removed from the county overall calculations due to E-ACAM Carrier participation

AERIAL

UNDERGROUND

\$174K - \$232K

COST TO PASS

\$227K - \$381K

\$9K - \$36K

ISP INVESTMENT

\$9K - \$36K

\$138K - \$223K

FUNDING GAP

\$191K - \$372K

\$509 - \$826

annual cost per location
over 30 years

\$707 - \$1,379

2

fiber miles

9

locations

4.6

locations per mile

Saline / Pettis / Johnson / Lafayette

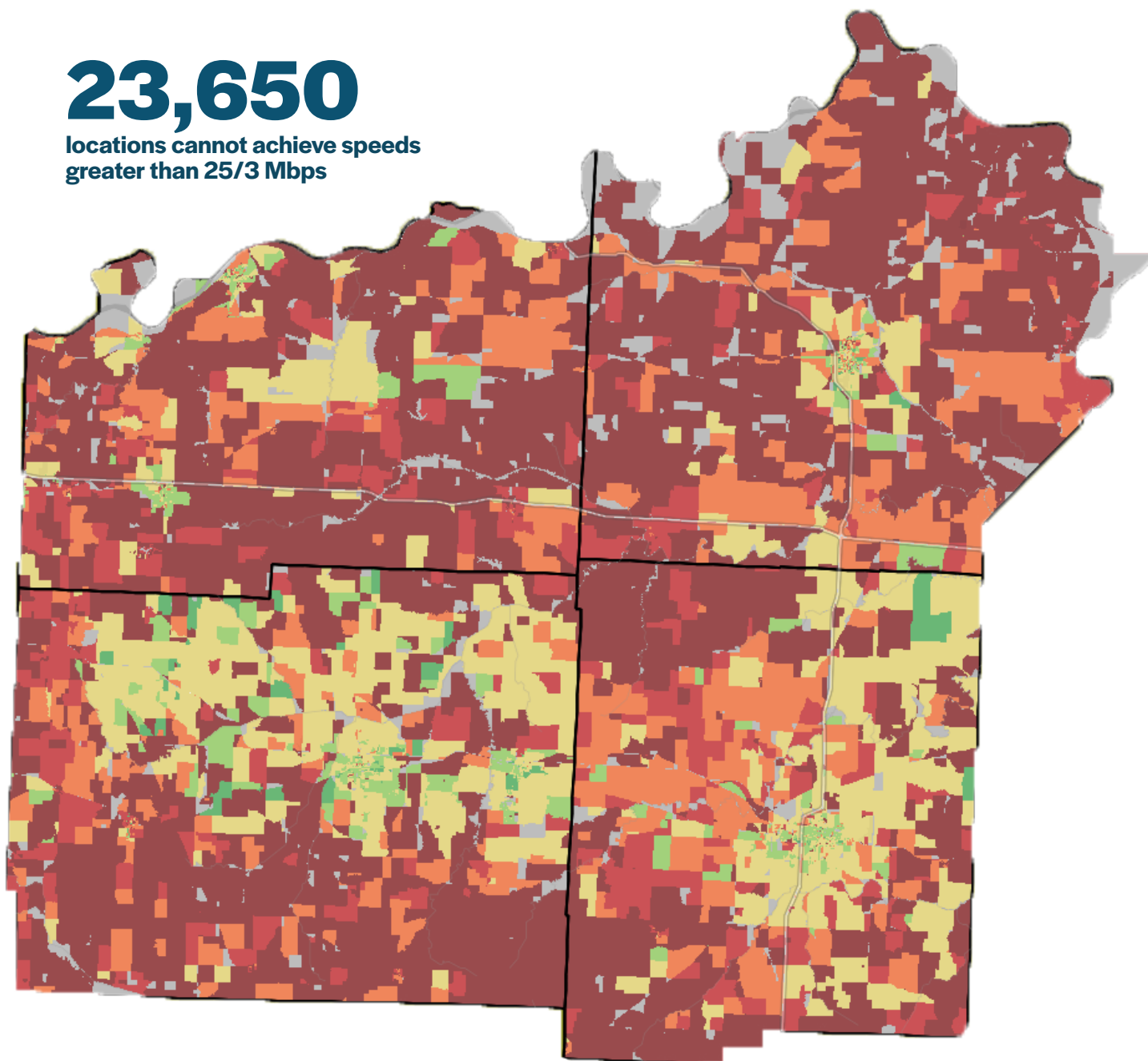
Project Cluster • Pioneer Trails Regional Planning Commission

37%

of the populated area is unserved

23,650

locations cannot achieve speeds greater than 25/3 Mbps

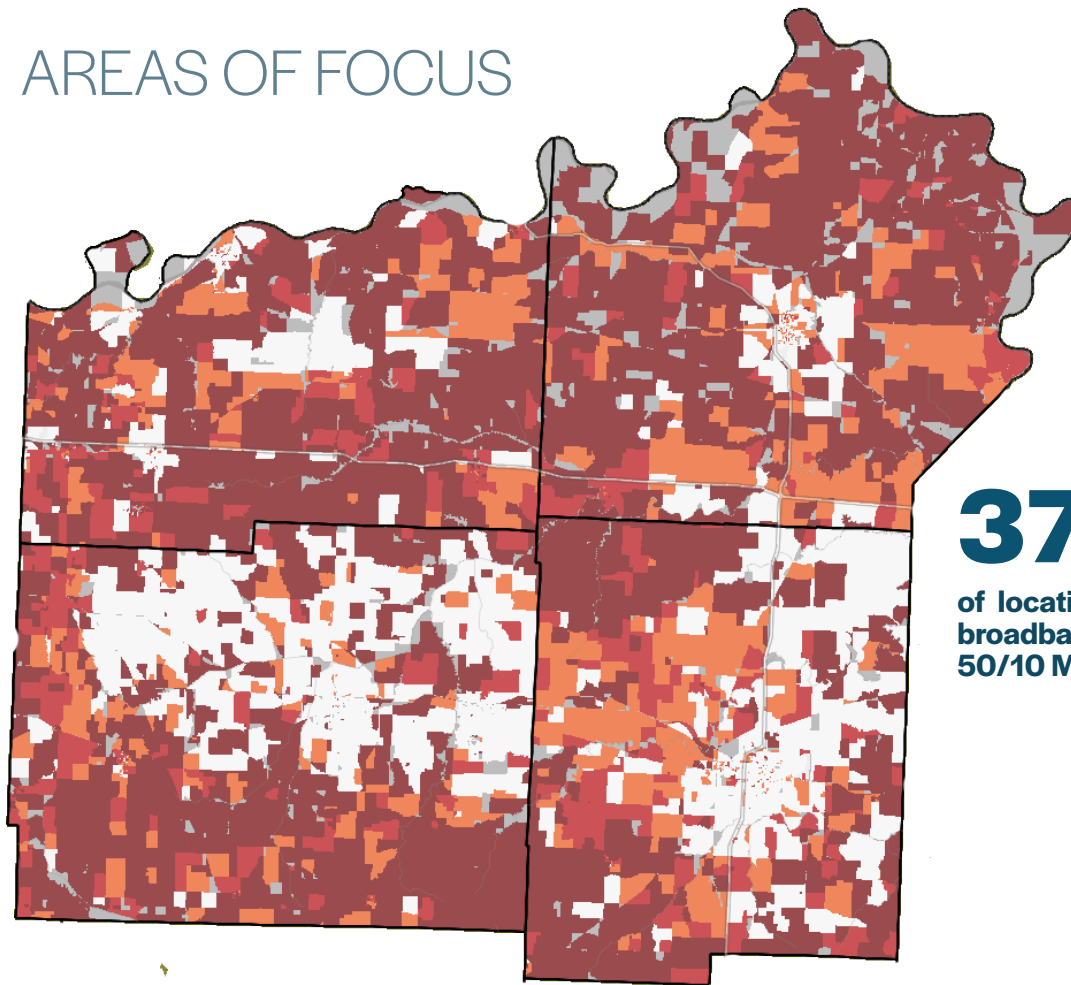


■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

Saline / Pettis / Johnson / Lafayette

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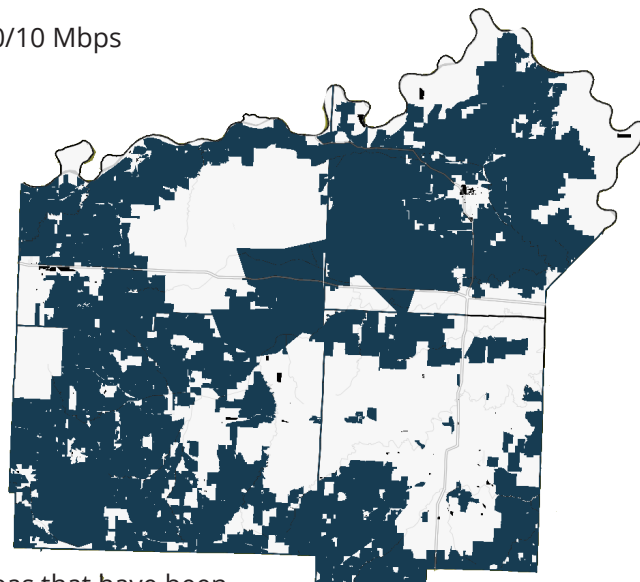
AREAS OF FOCUS



37%

of locations cannot achieve
broadband speeds greater than
50/10 Mbps

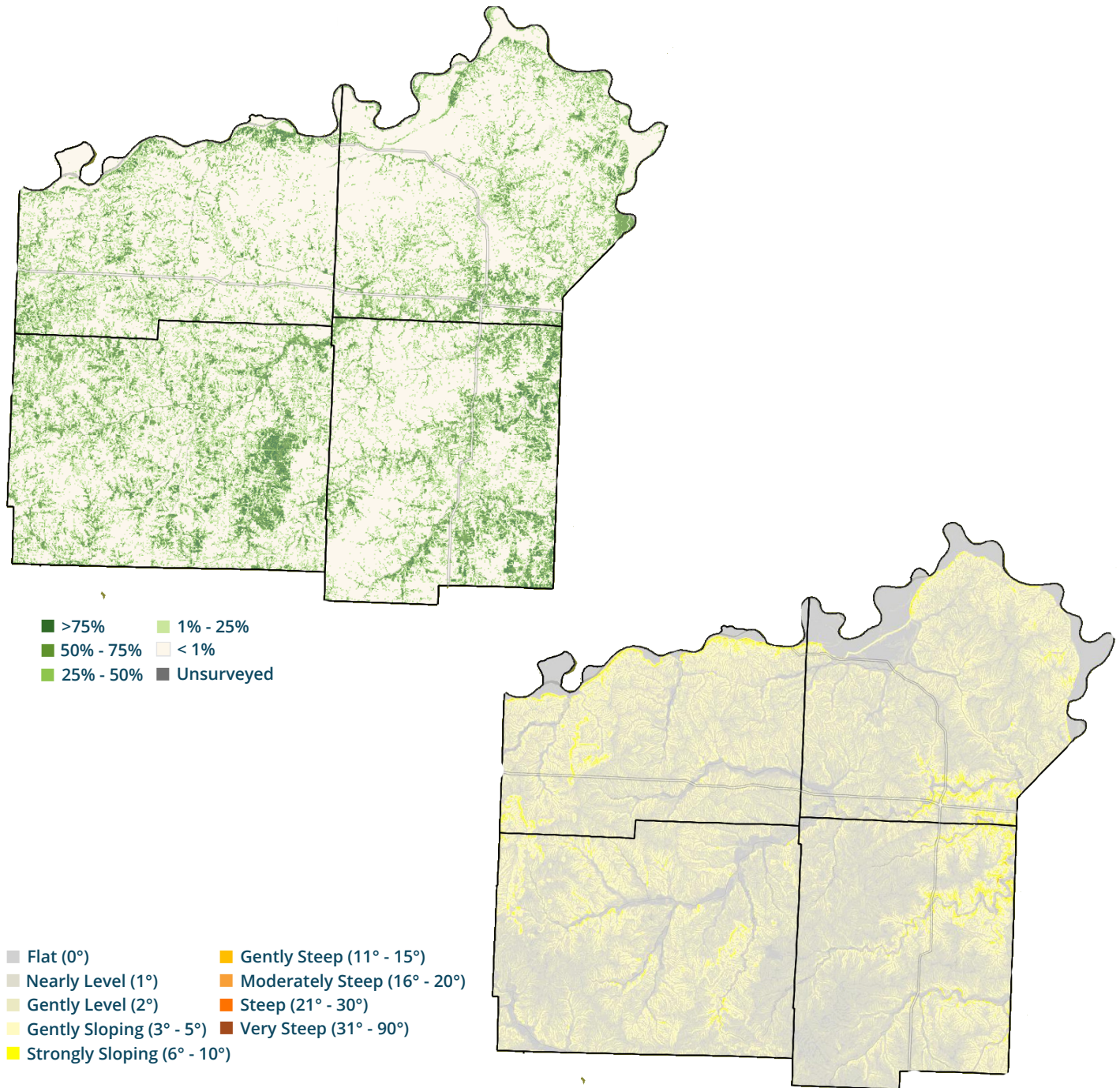
- Areas below 25/3 Mbps
- Areas above 25/3 Mbps and below 50/10 Mbps



Areas that have been
awarded project funds

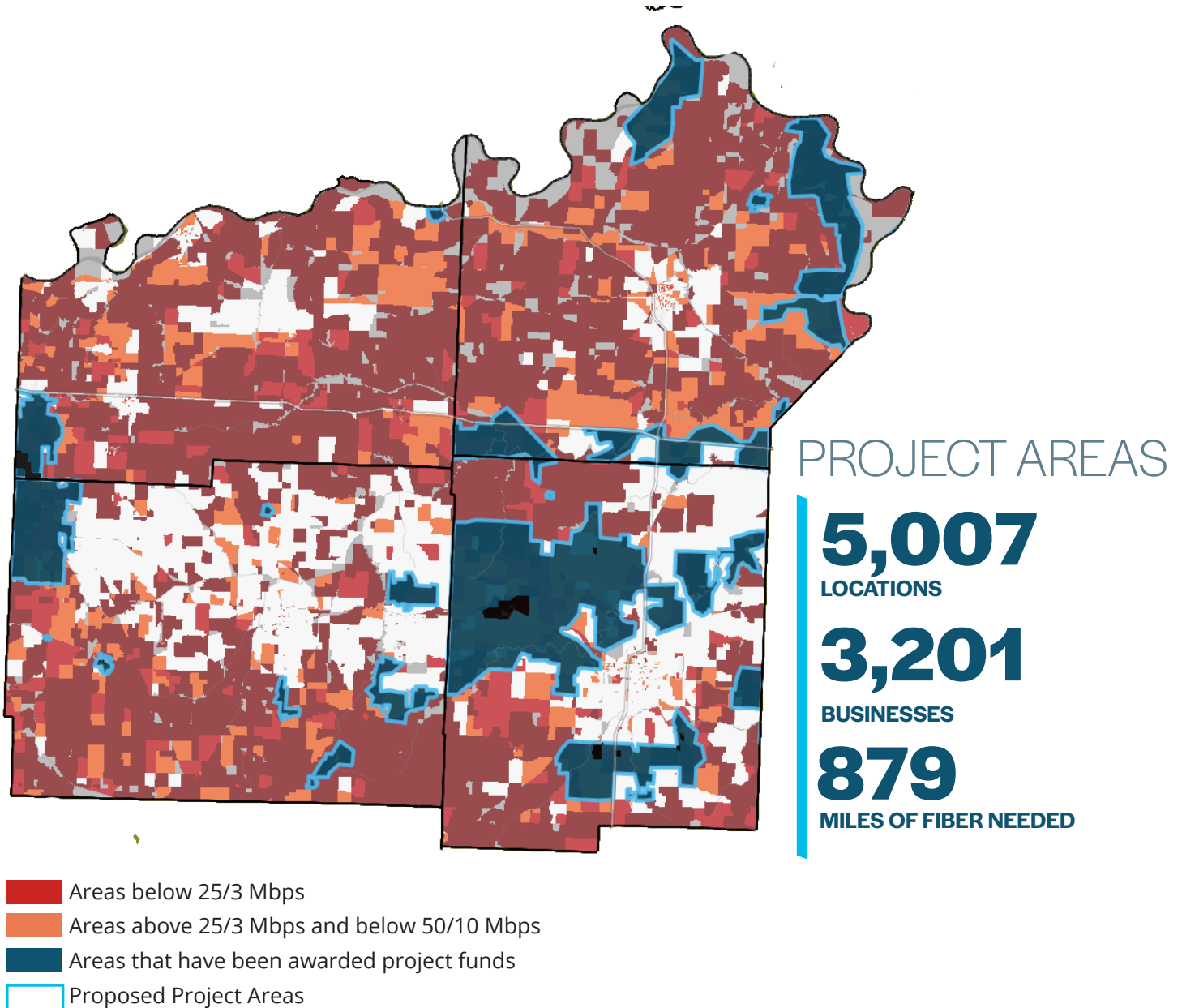
PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Saline / Pettis / Johnson / Lafayette

Project Cluster - Northwest Missouri Regional Council of Governments



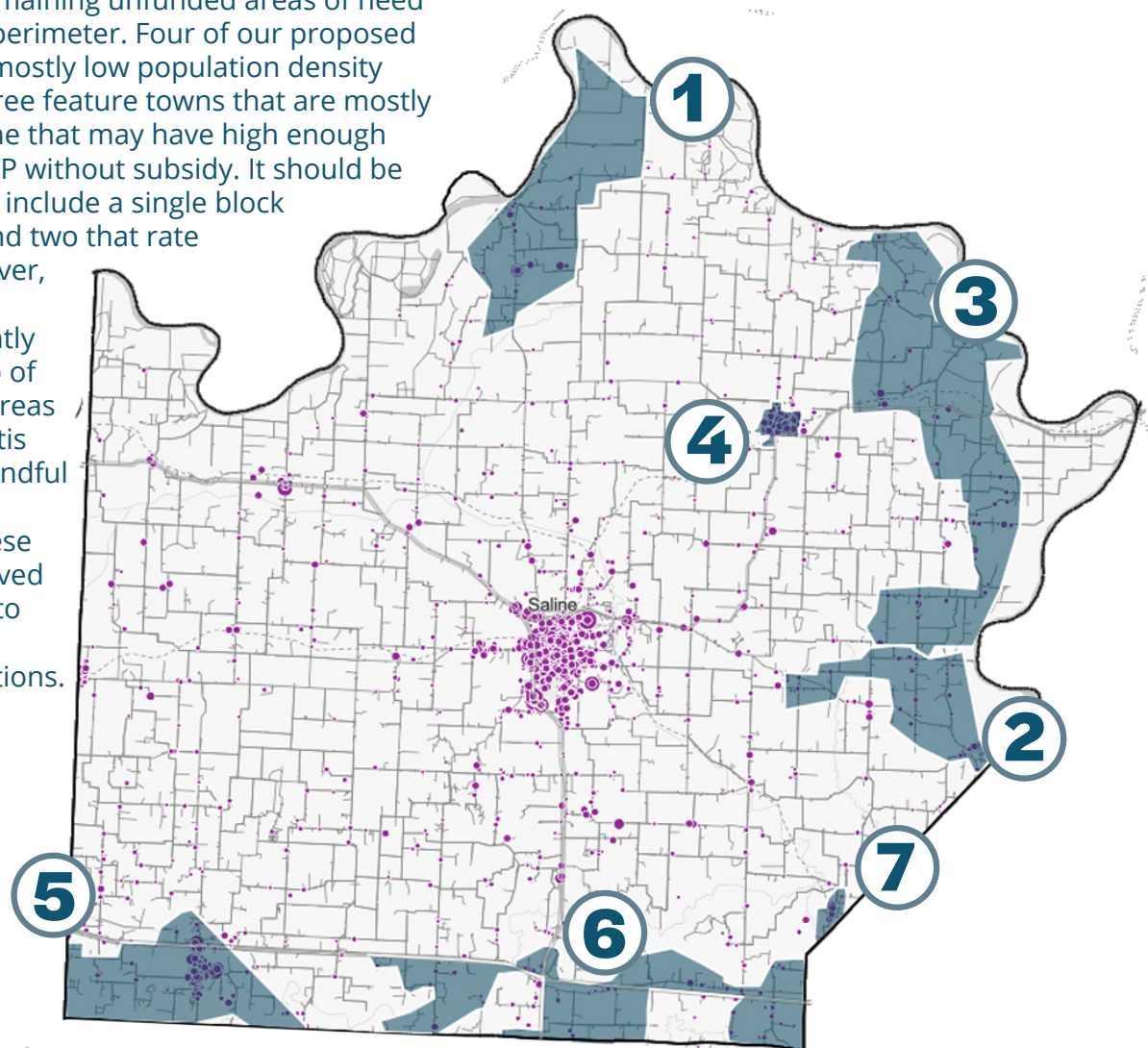
Investment Range = \$80.2 - \$176.2 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

SALINE COUNTY

PROJECT AREAS

The vast majority of Saline County currently is funded-to-served. Most of the remaining unfunded areas of need lie along the county's perimeter. Four of our proposed project areas include mostly low population density territory. The other three feature towns that are mostly unserved, including one that may have high enough density to attract an ISP without subsidy. It should be noted that Slater does include a single block that rates as served and two that rate as underserved; however, the rest of the blocks in Slater are consistently below 10/1 Mbps. Two of the southern project areas extend briefly into Pettis County to pick up a handful of locations/roads just across the border. These locations can be removed from the project area to accommodate county-specific funding limitations.



296
fiber miles

2,832
locations

778
business locations

9.6
locations per mile

INVESTMENT = \$26 - \$58 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

SALINE COUNTY

PROJECT DETAILS

1

AERIAL		UNDERGROUND	
\$3.6M - \$4.9M	COST TO PASS	\$4.7M - \$8M	
\$157K - \$628K	ISP INVESTMENT	\$157K - \$628K	
\$3M - \$4.7M	FUNDING GAP	\$4.1M - \$7.8M	
\$636 - \$996	annual cost per location over 30 years	\$873 - \$1,658	

41
fiber miles

157
locations

3.9
locations per mile

2

AERIAL		UNDERGROUND	
\$2.4M - \$3.1M	COST TO PASS	\$3M - \$5.2M	
\$205K - \$820K	ISP INVESTMENT	\$205K - \$820K	
\$1.5M - \$2.9M	FUNDING GAP	\$2.3M - \$5M	
\$248 - \$477	annual cost per location over 30 years	\$366 - \$806	

26
fiber miles

205
locations

7.8
locations per mile

3

AERIAL		UNDERGROUND	
\$7M - \$9.4M	COST TO PASS	\$9.2M - \$15.5M	
\$324K - \$1.3M	ISP INVESTMENT	\$325K - \$1.3M	
\$5.7M - \$9M	FUNDING GAP	\$7.9M - \$15.1M	
\$591 - \$935	annual cost per location over 30 years	\$814 - \$1,558	

79
fiber miles

324
locations

4.1
locations per mile

SALINE COUNTY

PROJECT DETAILS

4

AERIAL

\$2M - \$2.7M

COST TO PASS

\$974K - \$3.9M

ISP INVESTMENT

\$0* - \$1.7M

FUNDING GAP

\$0 - \$174

annual cost per location
over 30 years

UNDERGROUND

\$2.7M - \$4.5M

\$974K - \$3.9M

\$0* - \$3.5M

\$0 - \$119

23

fiber miles

974

locations

42.9

locations per mile

**In this area, density is high enough that an ISP may be willing to deploy with no subsidy.*

5

AERIAL

\$4.4M - \$5.8M

COST TO PASS

\$878K - \$3.5M

ISP INVESTMENT

\$858K - \$5M

FUNDING GAP

\$33 - \$188

annual cost per location
over 30 years

UNDERGROUND

\$5.7M - \$9.6M

\$878K - \$3.5M

\$2.2M - \$8.7M

\$84 - \$331

49

fiber miles

878

locations

17.9

locations per mile

6

AERIAL

\$6.3M - \$8.5M

COST TO PASS

\$171K - \$684K

ISP INVESTMENT

\$5.6M - \$8.3M

FUNDING GAP

\$1,095 - \$1,610

annual cost per location
over 30 years

UNDERGROUND

\$8.2M - \$13.9M

\$171K - \$684K

\$7.6M - \$13.7M

\$1,474 - \$2,667

71

fiber miles

171

locations

2.4

locations per mile

7

AERIAL

\$612K - \$819K

COST TO PASS

\$123K - \$492K

ISP INVESTMENT

\$120K - \$695K

FUNDING GAP

\$33 - \$189

annual cost per location
over 30 years

UNDERGROUND

\$800K - \$1.4M

\$123K - \$492K

\$309K - \$1.2M

\$84 - \$331

7

fiber miles

123

locations

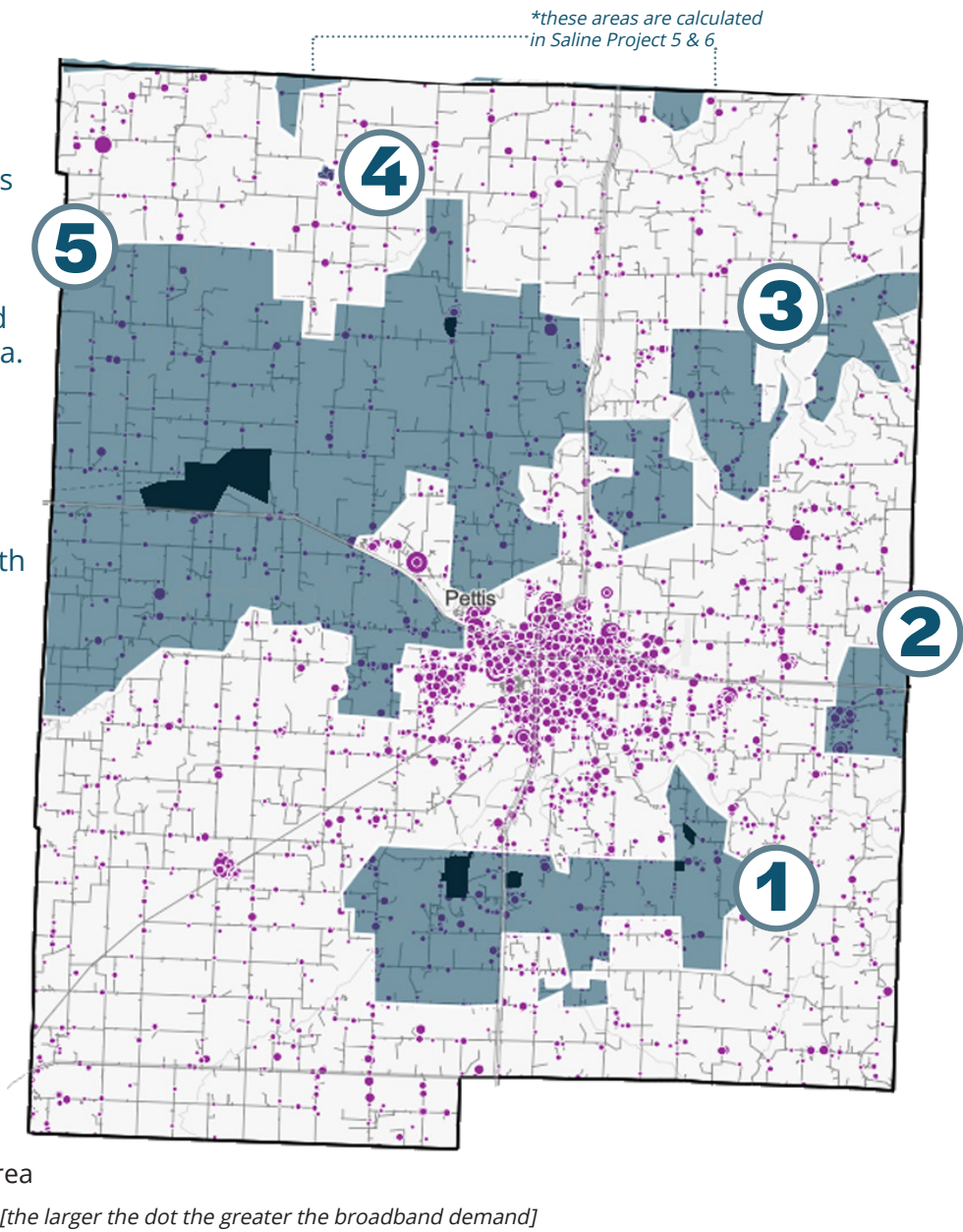
17.9

locations per mile

PETTIS COUNTY

PROJECT AREAS

Project areas in Pettis County include several low-density rural territories with small existing awards inside their boundaries. To ensure accurate calculations, we excluded those award inholdings from our budget estimates. We also identified Houstonia as a potential project area. The town currently is surrounded by blocks that were awarded to Charter as part of the Rural Digital Opportunity Fund (RDOF). As such, Charter is likely to have interest in serving Houstonia in conjunction with its RDOF deployment.



433
fiber miles

2,728
locations

978
business locations

6.3
locations per mile

INVESTMENT = \$38.6 - \$84.8 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

PETTIS COUNTY

PROJECT DETAILS

1

AERIAL

\$6.6M - \$8.9M

COST TO PASS

\$519K - \$2M

ISP INVESTMENT

\$4.5M - \$8.3M

FUNDING GAP

\$292 - \$536

annual cost per location
over 30 years

UNDERGROUND

\$8.7M - \$14.6M

\$519K - \$2M

\$6.6M - \$14M

\$423 - \$902

74

fiber miles

519

locations

7

locations per mile

2

AERIAL

\$2M - \$2.6M

COST TO PASS

\$315K - \$1.3M

ISP INVESTMENT

\$698K - \$2.3M

FUNDING GAP

\$74 - \$244

annual cost per location
over 30 years

UNDERGROUND

\$2.6M - \$4.3M

\$315K - \$1.3M

\$1.3M - \$4M

\$138 - \$422

22

fiber miles

315

locations

14.3

locations per mile

3

AERIAL

\$3.3M - \$4.5M

COST TO PASS

\$199K - \$796K

ISP INVESTMENT

\$2.6M - \$4.3M

FUNDING GAP

\$427 - \$716

annual cost per location
over 30 years

UNDERGROUND

\$4.4M - \$7.4M

\$199K - \$796K

\$3.6M - \$7.2M

\$599 - \$1,198

38

fiber miles

199

locations

5.3

locations per mile

PETTIS COUNTY

PROJECT DETAILS

AERIAL

COST TO PASS

ISP INVESTMENT

FUNDING GAP

annual cost per location
over 30 years

\$0 - \$191

fiber miles

locations

locations per mile

**In this area, density is high enough that an ISP may be willing to deploy with no subsidy.*

AERIAL

COST TO PASS

ISP INVESTMENT

FUNDING GAP

annual cost per location
over 30 years

\$592 - \$1,186

fiber miles

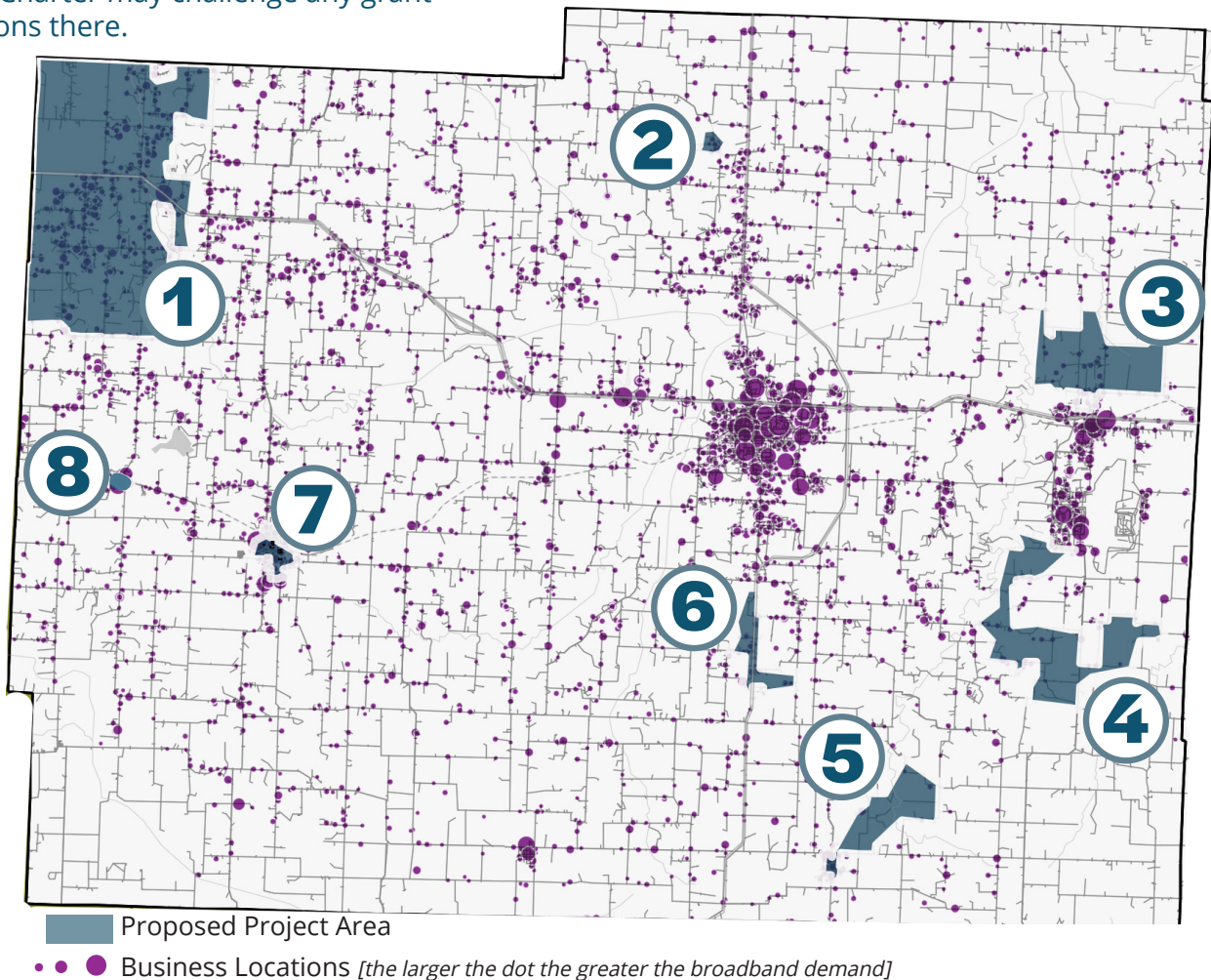
locations

locations per mile

JOHNSON COUNTY

PROJECT AREAS

Much of Johnson County is funded-to-served via a Rural Digital Opportunity Fund (RDOF) award to Charter Communications. In the remaining unfunded and un/underserved territory, we identified 8 potential project areas. All of these include at least some blocks where the only currently claimed technology is fixed wireless. The largest project area is in the northwest. The rest are evenly distributed throughout the rural parts of the county. Four include towns or villages that are surrounded by Charter RDOF territory: Kingsville, Leeton, Fayetteville, and Holden. Charter is likely to be interested in applying for additional funds to serve these towns. Because several streets in Holden are already covered by RDOF funding, Charter may challenge any grant applications there.



81
fiber miles

1,206
locations

1,083
business locations

16.6
locations per mile

INVESTMENT = \$ 14.4 - 31.7 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

JOHNSON COUNTY

PROJECT DETAILS

1

AERIAL

\$7.2M - \$9.7M

COST TO PASS

\$1.2M - \$4.8M

ISP INVESTMENT

\$2.4M - \$8.5M

FUNDING GAP

\$66 - \$234

annual cost per location
over 30 years

UNDERGROUND

\$9.5M - \$15.9M

\$1.2M - \$4.8M

\$4.6M - \$14.7M

\$128 - \$406

81

fiber miles

1,206

locations

14.9

locations per mile

2

AERIAL

\$142K - \$190K

COST TO PASS

\$28K - \$112K

ISP INVESTMENT

\$30.4K - \$162K

FUNDING GAP

\$36 - \$193

annual cost per location
over 30 years

UNDERGROUND

\$186K - \$313K

\$28K - \$112K

\$74K - \$285K

\$88 - \$339

2

fiber miles

28

locations

17.5

locations per mile

3

AERIAL

\$1.5M - \$2.1M

COST TO PASS

\$127K - \$508K

ISP INVESTMENT

\$1M - \$2M

FUNDING GAP

\$268 - \$504

annual cost per location
over 30 years

UNDERGROUND

\$2M - \$3.4M

\$127K - \$508K

\$1.5M - \$3.2M

\$392 - \$850

17

fiber miles

127

locations

7.4

locations per mile

4

AERIAL

\$1.8M - \$2.4M

COST TO PASS

\$108K - \$432K

ISP INVESTMENT

\$1.4M - \$2.3M

FUNDING GAP

\$419 - \$750

annual cost per location
over 30 years

UNDERGROUND

\$2.4M - \$3.9M

\$108K - \$432K

\$1.9M - \$13.8M

\$589 - \$1,180

20

fiber miles

108

locations

5.4

locations per mile

JOHNSON COUNTY

PROJECT DETAILS

5

AERIAL

\$1.3M - \$1.8M

COST TO PASS

\$294K - \$1.8M

ISP INVESTMENT

\$168K - \$1.5M

FUNDING GAP

\$19 - \$170

annual cost per location
over 30 years

UNDERGROUND

\$10.7M - \$17.9M

\$374K - \$1.5M

\$9.2M - \$17.5M

\$816 - \$1,562

15

fiber miles

294
locations

19.5
locations per mile

6

AERIAL

\$612K - \$819K

COST TO PASS

\$100K - \$400K

ISP INVESTMENT

\$212K - \$719K

FUNDING GAP

\$71 - \$240

annual cost per location
over 30 years

UNDERGROUND

\$801K - \$1.4M

\$100K - \$400K

\$401K - \$1.3M

\$134 - \$415

7

fiber miles

100
locations

14.5
locations per mile

7

AERIAL

\$1.6M - \$2.1M

COST TO PASS

\$754K - \$3M

ISP INVESTMENT

\$0 - \$1.4M

FUNDING GAP

\$0 - \$60

annual cost per location
over 30 years

UNDERGROUND

\$2.1M - \$3.5M

\$754K - \$3M

\$0 - \$2.7M

\$0 - \$120

18

fiber miles

754
locations

42.6
locations per mile

**In this area, density is high enough that an ISP may be willing to deploy with no subsidy.*

8

AERIAL

\$213K - \$286K

COST TO PASS

\$71K - \$284K

ISP INVESTMENT

\$0 - \$215K

FUNDING GAP

\$0 - \$101

annual cost per location
over 30 years

UNDERGROUND

\$278K - \$469K

\$71K - \$284K

\$0 - \$398K

\$0 - \$187

2

fiber miles

71
locations

29.6
locations per mile

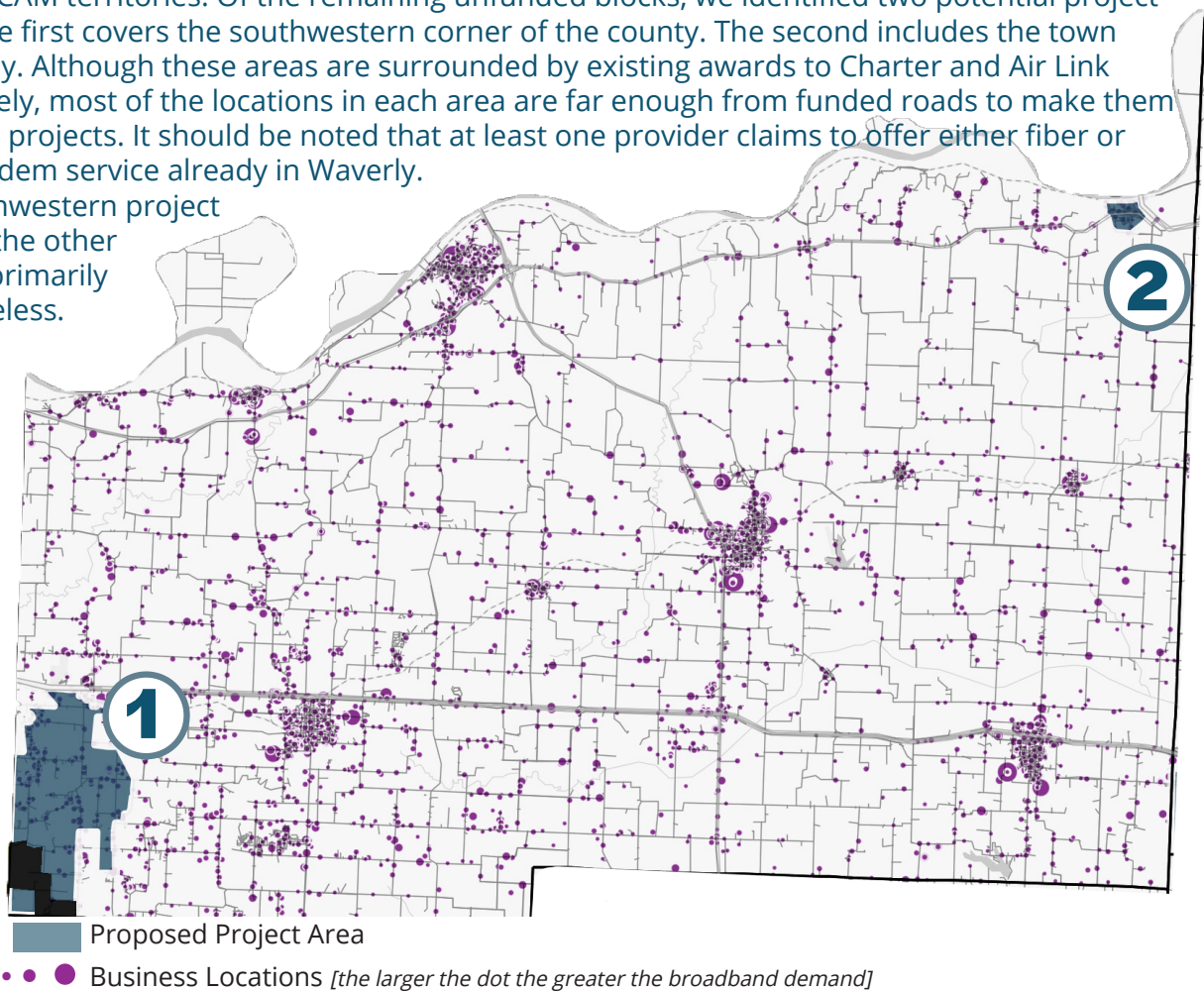
**In this area, density is high enough that an ISP may be willing to deploy with no subsidy.*

LAFAYETTE COUNTY

PROJECT AREAS

Almost all of Lafayette County is funded-to-served via a combination of Rural Digital Opportunity Fund (RDOF) awards to Charter, Air Link, and TurboNet, a state award to Alma Communications, and two recent E-ACAM commitments by Alma and Citizens Telephone to deploy 100/20 services in their ACAM territories. Of the remaining unfunded blocks, we identified two potential project areas. The first covers the southwestern corner of the county. The second includes the town of Waverly. Although these areas are surrounded by existing awards to Charter and Air Link respectively, most of the locations in each area are far enough from funded roads to make them attractive projects. It should be noted that at least one provider claims to offer either fiber or cable modem service already in Waverly.

The southwestern project area, on the other hand, is primarily fixed wireless.



63
fiber miles

1,073
locations

362
business locations

17.1
locations per mile

INVESTMENT = \$5.6 - 12.3 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

LAFAYETTE COUNTY

PROJECT DETAILS

1

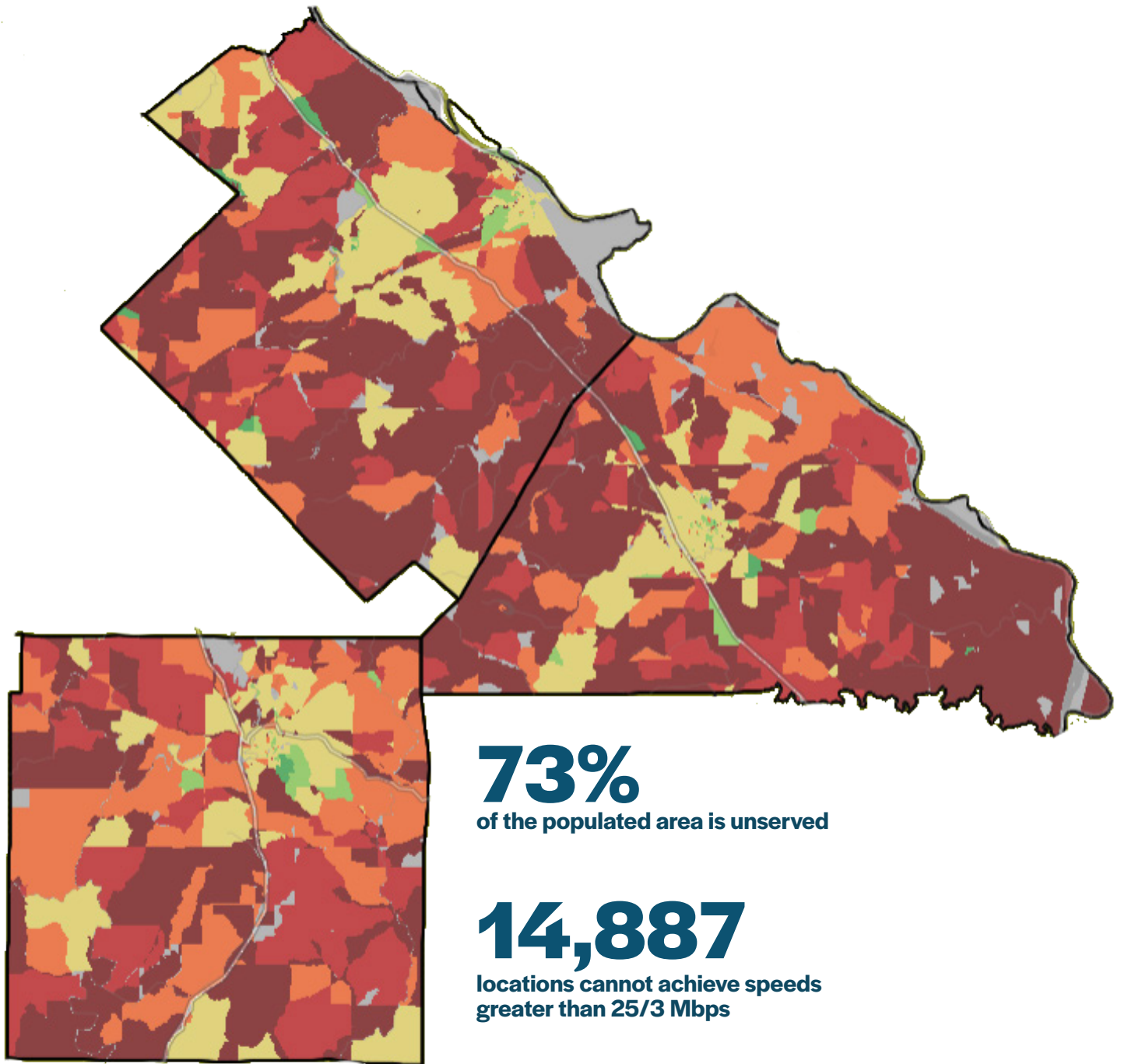
AERIAL		UNDERGROUND		50 fiber miles	
\$4.5M - \$6M	COST TO PASS	\$5.9M - \$9.9M		681 locations	13.5 locations per mile
\$681K - \$2.7M	ISP INVESTMENT	\$681K - \$2.7M			
\$1.8M - \$5.3M	FUNDING GAP	\$3.1M - \$9.2M			
\$86 - \$260	annual cost per location over 30 years	\$154 - \$449			

2

AERIAL		UNDERGROUND		12 fiber miles	
\$1.1M - \$1.5M	COST TO PASS	\$1.4M - \$2.4M		392 locations	31.9 locations per mile
\$392K - \$1.6M	ISP INVESTMENT	\$392K - \$1.6M			
\$0 - \$1.1M	FUNDING GAP	\$0 - \$2M			
\$0 - \$91	annual cost per location over 30 years	\$0 - \$171			

Madison / Ste Genevieve / Perry

Project Cluster • Southeast Missouri Regional Planning Commission

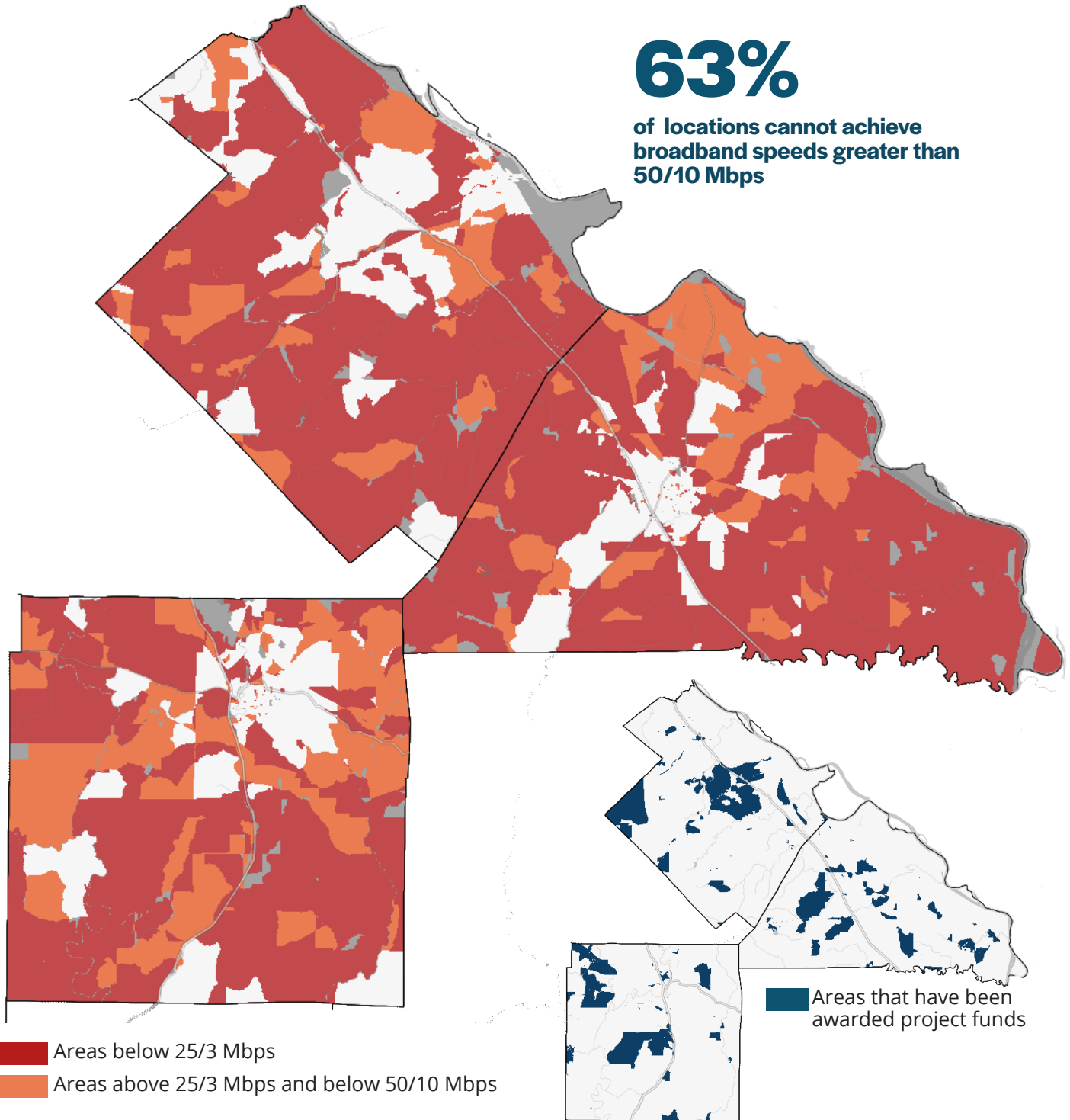


■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

AREAS OF FOCUS

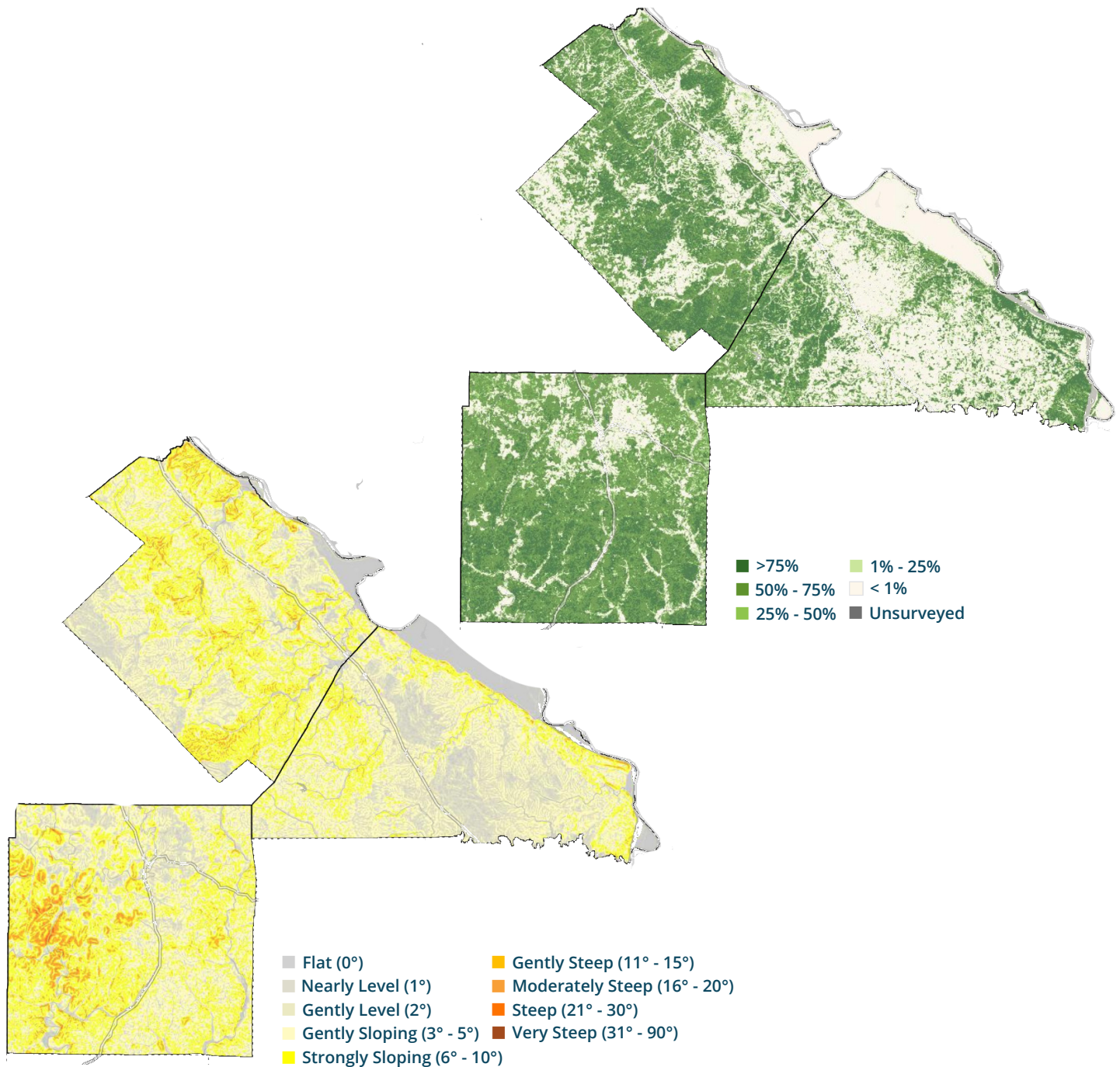
63%

**of locations cannot achieve
broadband speeds greater than
50/10 Mbps**



PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Madison / Ste Genevieve / Perry

Project Cluster • Southeast Missouri Regional Planning Commission

PROJECT AREAS

11,566

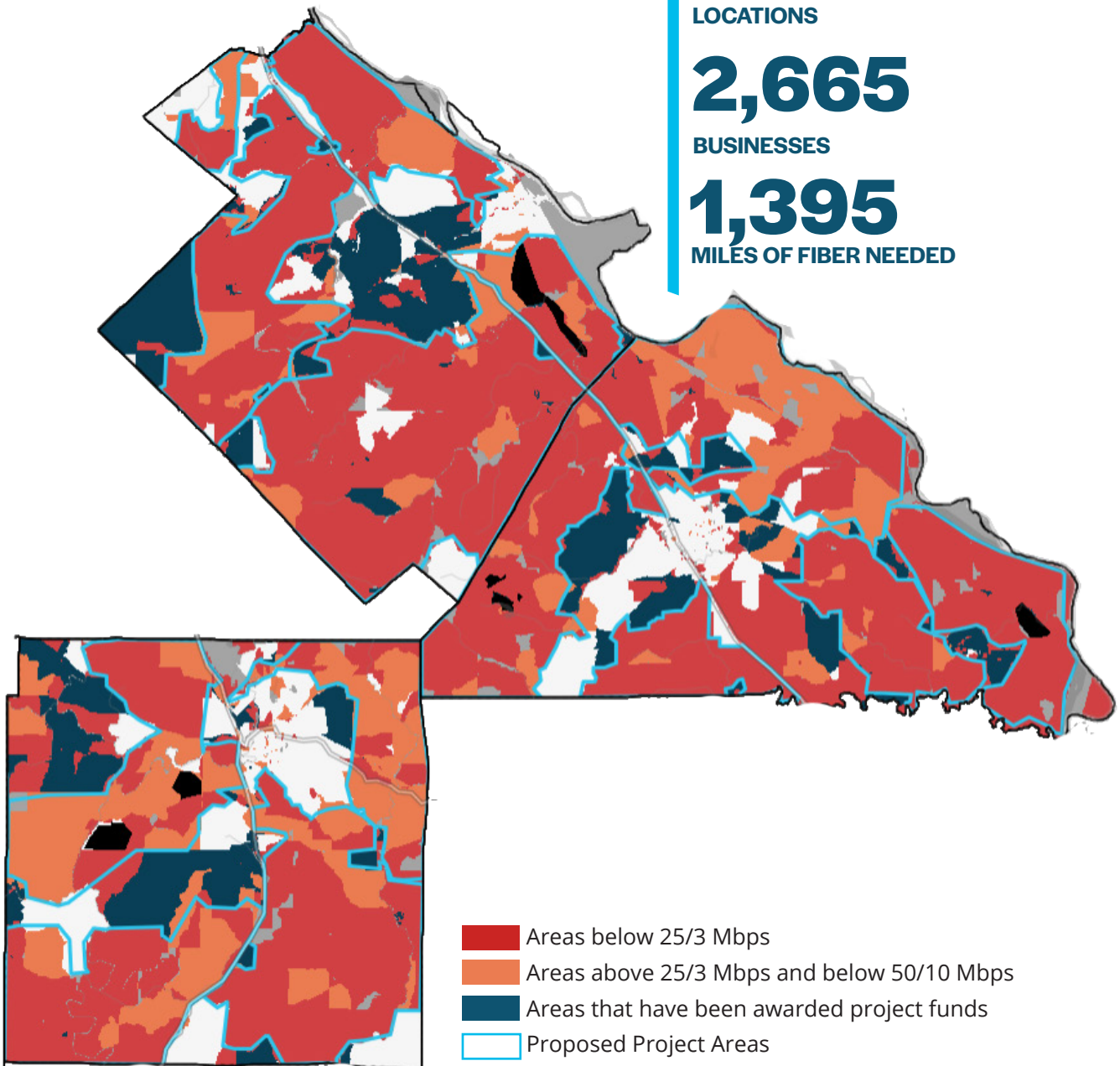
LOCATIONS

2,665

BUSINESSES

1,395

MILES OF FIBER NEEDED



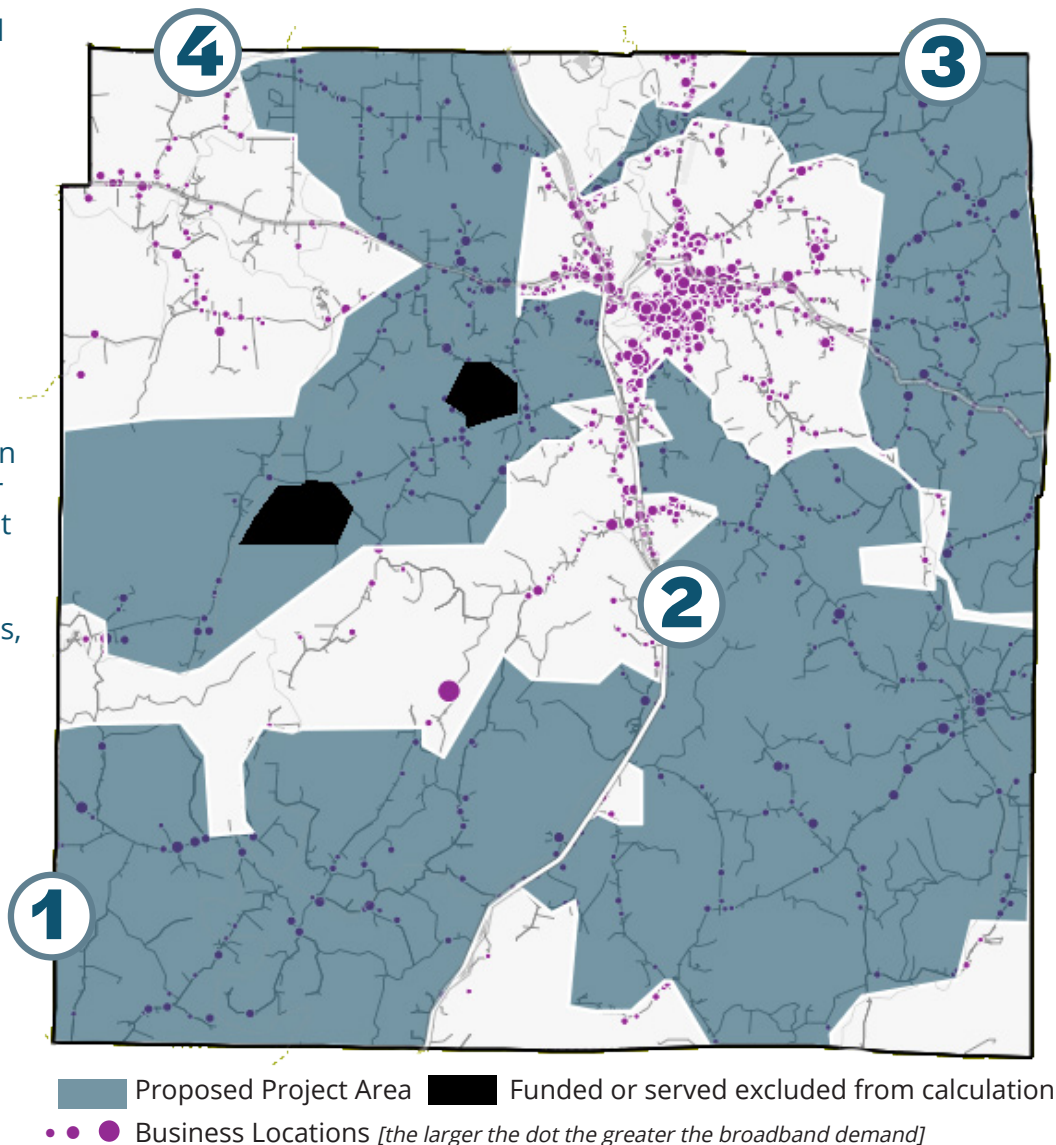
Investment Range = \$124.2 - \$273 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

MADISON COUNTY

PROJECT AREAS

Although Madison County currently has multiple funded areas, much need remains. We have defined four project areas, three of which are contiguous and could be combined to create a single larger project footprint. We did not include the un/underserved locations in the northwest corner of the county due to their proximity to existing funded areas. Many of these locations fall on roads that are boundaries for existing awards, while the rest are on roads that can only be accessed by passing through funded territory. In both cases, it is likely that those locations will be served as part of an existing funded project.



345
fiber miles

2,435
locations

599
business locations

7.1
locations per mile

INVESTMENT = \$30.7 - \$67.5 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

MADISON COUNTY

PROJECT DETAILS

1

AERIAL

\$8.1M - \$10.9M

COST TO PASS

\$374K - \$1.5M

ISP INVESTMENT

\$6.7M - \$10.5M

FUNDING GAP

\$592 - \$937

annual cost per location
over 30 years

UNDERGROUND

\$10.7M - \$17.9M

\$374K - \$1.5M

\$9.2M - \$17.5M

\$816 - \$1,562

92

fiber miles

374

locations

4.1

locations per mile

2

AERIAL

\$9.3M - \$12.4M

COST TO PASS

\$806K - \$3.2M

ISP INVESTMENT

\$6M - \$11.6M

FUNDING GAP

\$251 - \$480

annual cost per location
over 30 years

UNDERGROUND

\$12M - \$20.4M

\$806K - \$3.2M

\$8.9M - \$19.6M

\$369 - \$810

104

fiber miles

806

locations

7.7

locations per mile

3

AERIAL

\$5.7M - \$7.6M

COST TO PASS

\$586K - \$2.3M

ISP INVESTMENT

\$3.4M - \$7M

FUNDING GAP

\$191 - \$400

annual cost per location
over 30 years

UNDERGROUND

\$7.5M - \$12.5M

\$586K - \$2.3M

\$5.1M - \$12M

\$291 - \$680

64

fiber miles

586

locations

9.1

locations per mile

4

AERIAL

\$7.6M - \$10.1M

COST TO PASS

\$669K - \$2.7M

ISP INVESTMENT

\$4.9M - \$9.4M

FUNDING GAP

\$243 - \$470

annual cost per location
over 30 years

UNDERGROUND

\$9.9M - \$16.6M

\$669K - \$2.7M

\$7.2M - \$16M

\$359 - \$795

85

fiber miles

669

locations

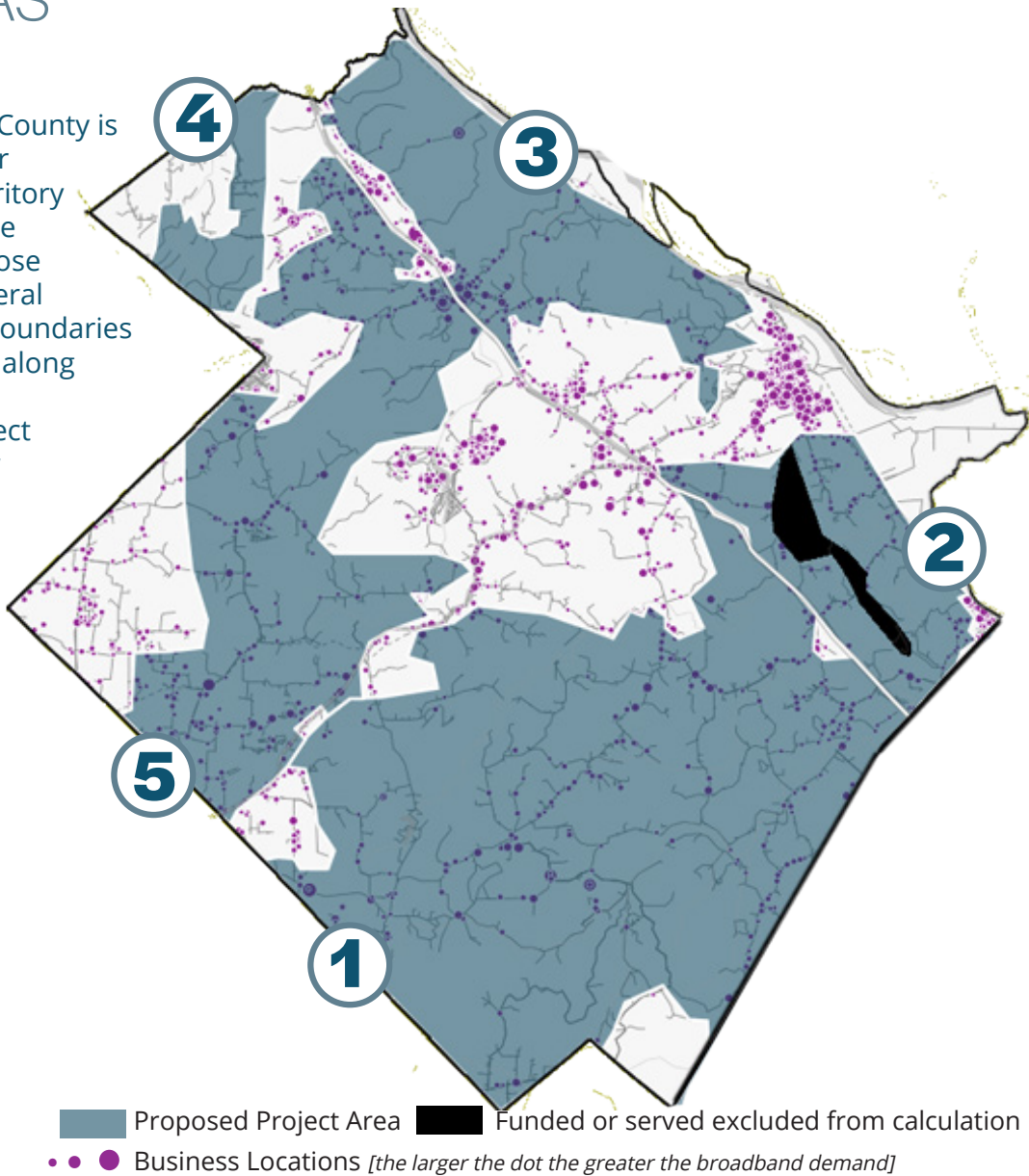
7.9

locations per mile

STE. GENEVIEVE COUNTY

PROJECT AREAS

Much of rural Ste. Genevieve County is currently rated as unserved or underserved. Most of this territory could be configured as a single large project; however, we chose to break this area up into several smaller projects with logical boundaries along major highways and/or along corridors that are already funded-to-served. These project areas can be kept separate or combined based on available funding. In cases where an existing award falls inside a project boundary, we have excluded those funded locations from our budget estimates.



443	5,575	1,085	12.6
fiber miles	locations	business locations	locations per mile

INVESTMENT = \$39.4 - \$86.7 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

STE. GENEVIEVE COUNTY

PROJECT DETAILS

1

AERIAL

\$16.5M - \$22M

COST TO PASS

\$2M - \$8.2M

ISP INVESTMENT

\$8.3M - \$20M

FUNDING GAP

\$135 - \$325

annual cost per location
over 30 years

UNDERGROUND

\$21.6M - \$36.3M

\$2M - \$8.2M

\$13.4M - \$34.3M

\$217 - \$555

186

fiber miles

2,056
locations

11.1
locations per mile

2

AERIAL

\$4.9M - \$6.5M

COST TO PASS

\$633K - \$2.5M

ISP INVESTMENT

\$2.4M - \$5.9M

FUNDING GAP

\$124 - \$311

annual cost per location
over 30 years

UNDERGROUND

\$6.4M - \$10.8M

\$633K - \$2.5M

\$3.9M - \$10.1M

\$203 - \$533

55

fiber miles

633
locations

11.5
locations per mile

3

AERIAL

\$5.8M - \$7.7M

COST TO PASS

\$763K - \$3M

ISP INVESTMENT

\$2.7M - \$6.9M

FUNDING GAP

\$118 - \$303

annual cost per location
over 30 years

UNDERGROUND

\$7.5M - \$12.6M

\$763K - \$3M

\$4.5M - \$11.9M

\$195 - \$519

65

fiber miles

763
locations

11.8
locations per mile

ST. GENEVIEVE COUNTY

PROJECT DETAILS

4

AERIAL		UNDERGROUND		18 fiber miles	
\$1.6M - \$2.2M	COST TO PASS	\$2.1M - \$3.6M		283 locations	15.5 locations per mile
\$283K - \$1.1M	ISP INVESTMENT	\$283K - \$1.1M			
\$487K - \$1.9M	FUNDING GAP	\$986K - \$3.3M			
\$57 - \$222	annual cost per location over 30 years	\$116 - \$386			

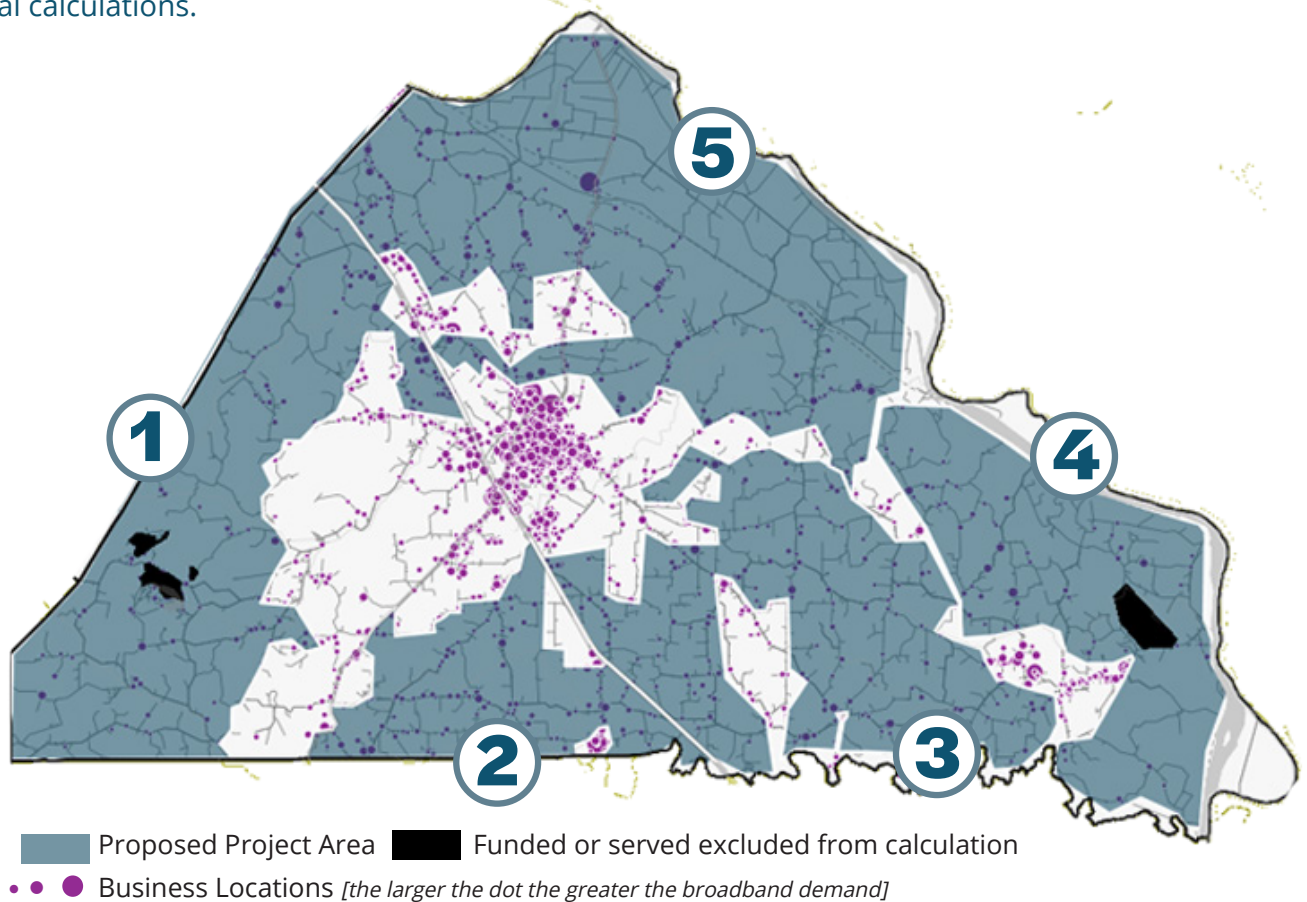
5

AERIAL		UNDERGROUND		120 fiber miles	
\$10.6M - \$14.2M	COST TO PASS	\$13.9M - \$23.4M		1,840 locations	15.4 locations per mile
\$1.8M - \$7.4M	ISP INVESTMENT	\$1.8M - \$7.4M			
\$3.3M - \$12.4M	FUNDING GAP	\$6.6M - \$21.6M			
\$60 - \$225	annual cost per location over 30 years	\$119 - \$390			

PERRY COUNTY

PROJECT AREAS

With the exception of Perryville and some of the rural areas surrounding the city, most of Perry County is unserved/underserved and unfunded. To provide flexibility in planning, we have broken this territory into multiple project areas. If sufficient funding is available, the county can combine two or more projects into a single larger proposal. In cases where an existing award falls entirely within a project's boundaries, we have excluded those funded locations from our financial calculations.



608
fiber miles

3,556
locations

981
business locations

5.9
locations per mile

INVESTMENT = \$54 - \$118.9 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

PERRY COUNTY

PROJECT DETAILS

1

AERIAL

\$11M - \$14.7M

COST TO PASS

\$1M - \$4M

ISP INVESTMENT

\$6.9M - \$13.7M

FUNDING GAP

\$225 - \$446

annual cost per location
over 30 years

UNDERGROUND

\$14.4M - \$24M

\$1M - \$4M

\$10.3M - \$23.1M

\$336 - \$755

124
fiber miles

1,020
locations

8.3
locations per mile

2

AERIAL

\$5.4M - \$7.3M

COST TO PASS

\$431K - \$1.7M

ISP INVESTMENT

\$3.7M - \$6.8M

FUNDING GAP

\$287 - \$528

annual cost per location
over 30 years

UNDERGROUND

\$7.1M - \$11.9M

\$431K - \$1.7M

\$5.4M - \$11.5M

\$416 - \$890

61
fiber miles

431
locations

7.1
locations per mile

3

AERIAL

\$10.7M - \$14.2M

COST TO PASS

\$732K - \$2.9M

ISP INVESTMENT

\$7.7M - \$13.5M

FUNDING GAP

\$352 - \$615

annual cost per location
over 30 years

UNDERGROUND

13.9M - \$23.4M

732K - \$2.9M

\$11M - \$22.7M

\$501 - \$1,033

120
fiber miles

732
locations

6.1
locations per mile

PERRY COUNTY

PROJECT DETAILS

4

AERIAL

\$7.3M - \$9.8M

COST TO PASS

\$318K - \$1.3M

ISP INVESTMENT

\$6M - \$9.5M

FUNDING GAP

\$633 - \$991

annual cost per location
over 30 years

UNDERGROUND

\$9.6M - \$16M

\$318K - \$1.3M

\$8.3M - 15.7M

\$869 - \$1,650

82

fiber miles

318

locations

3.9

locations per mile

5

AERIAL

\$19.7M - \$26.3M

COST TO PASS

\$1M - \$4.2M

ISP INVESTMENT

\$15.5M - \$25.3M

FUNDING GAP

\$489 - \$799

annual cost per location
over 30 years

UNDERGROUND

\$25.8M - \$43.3M

\$1M - \$4.2M

\$21.5M - \$42.2M

\$681 - \$1,335

221

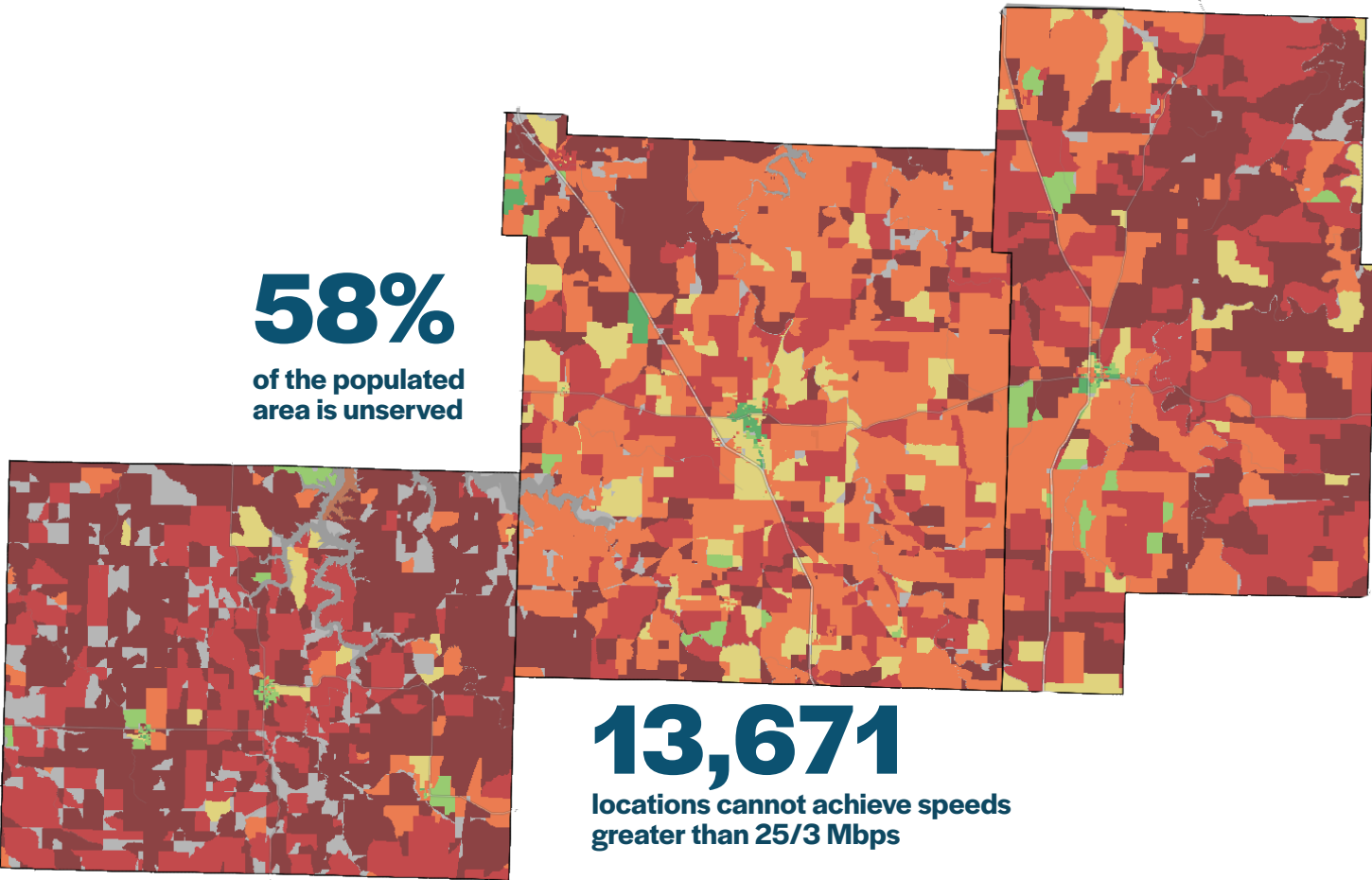
fiber miles

1,055

locations

4.8

locations per mile

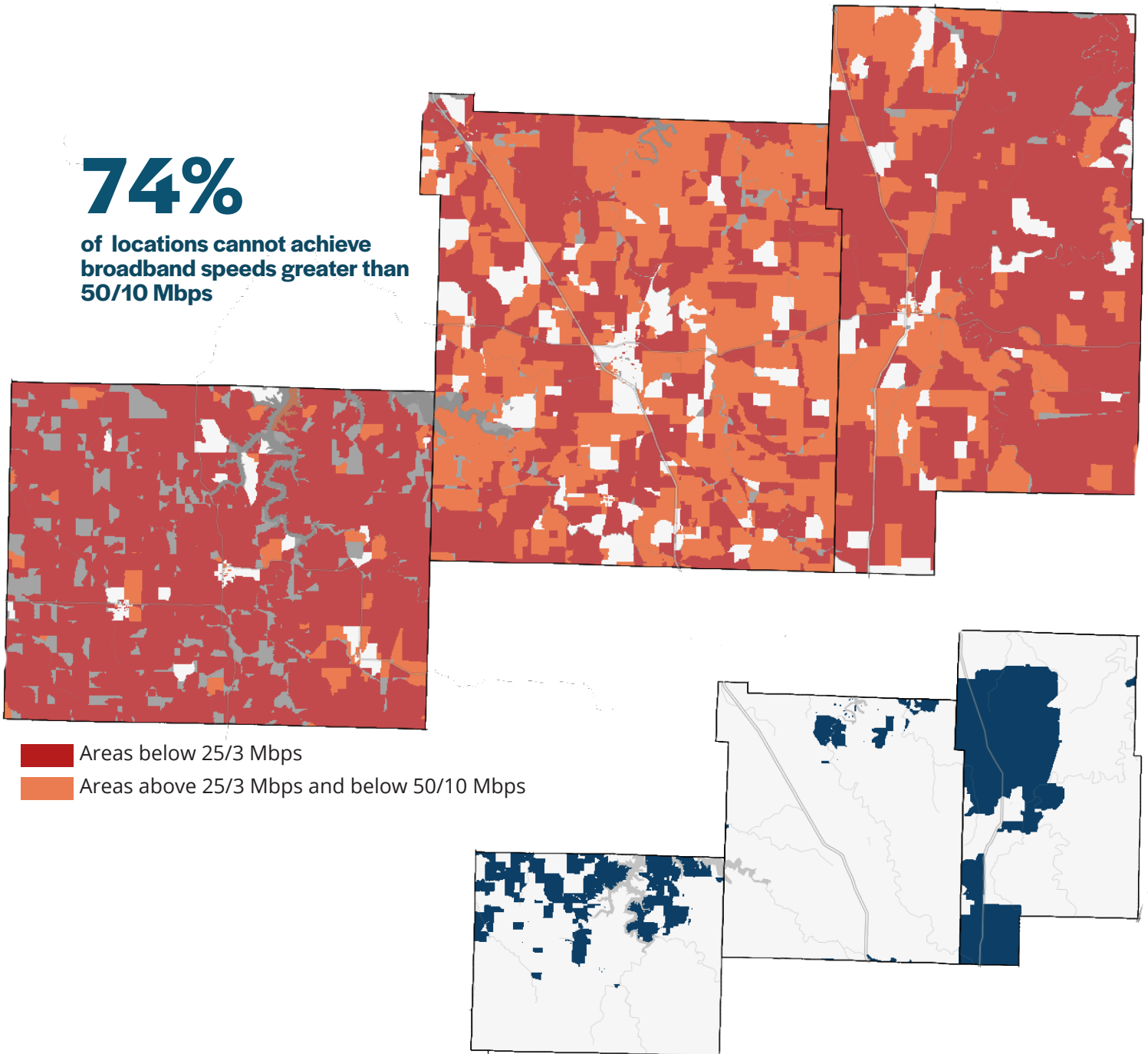


Below 10/1 Mbps	Above 10/1; Below 25/3 Mbps	Above 25/3; Below 50/10 Mbps	Above 50/10; Below 100/20 Mbps	Above 100/20; Below 200/50 Mbps	Above 200/50 Mbps
■ null / no data					

AREAS OF FOCUS

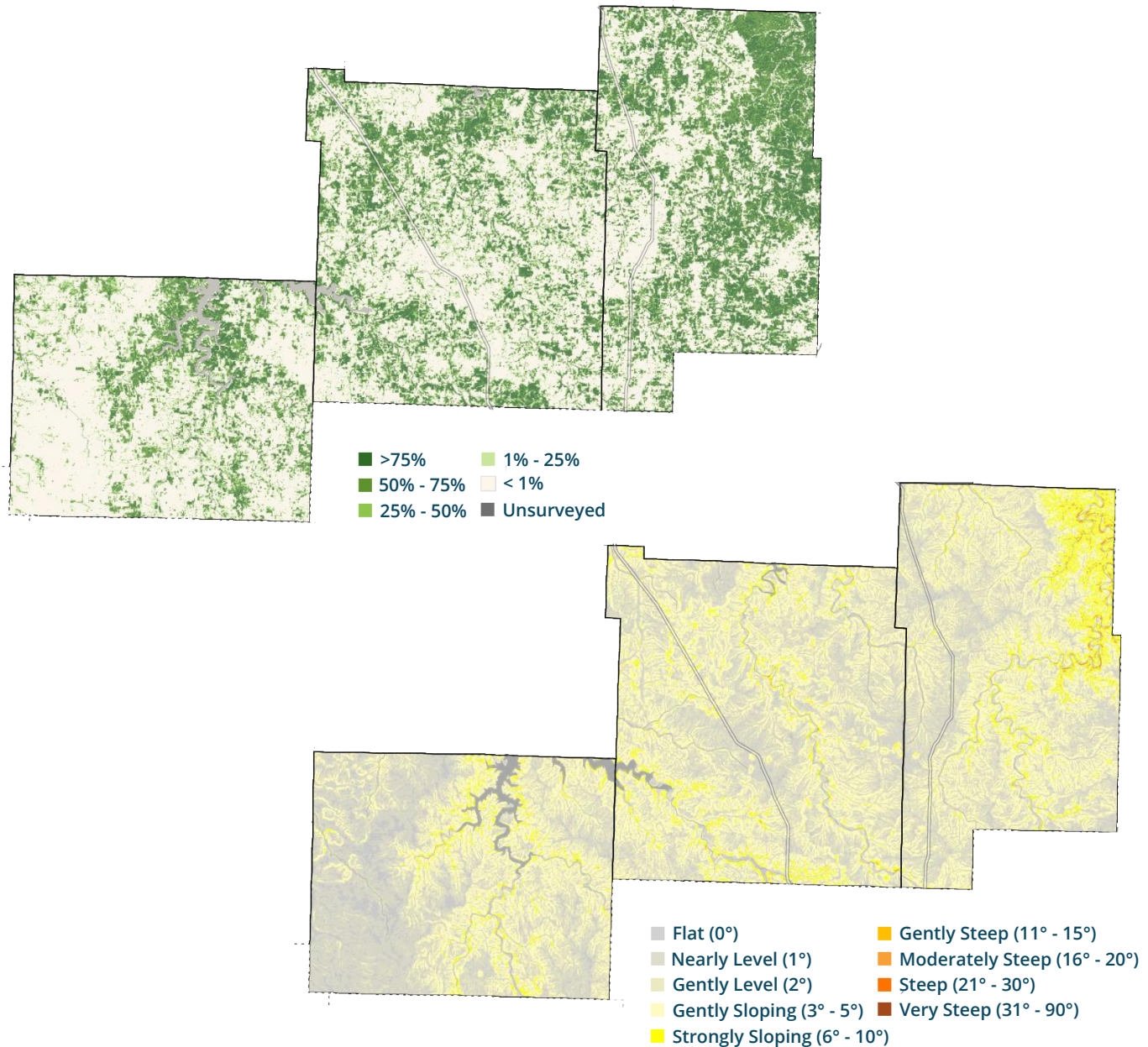
74%

of locations cannot achieve
broadband speeds greater than
50/10 Mbps



PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



PROJECT AREAS

12,840

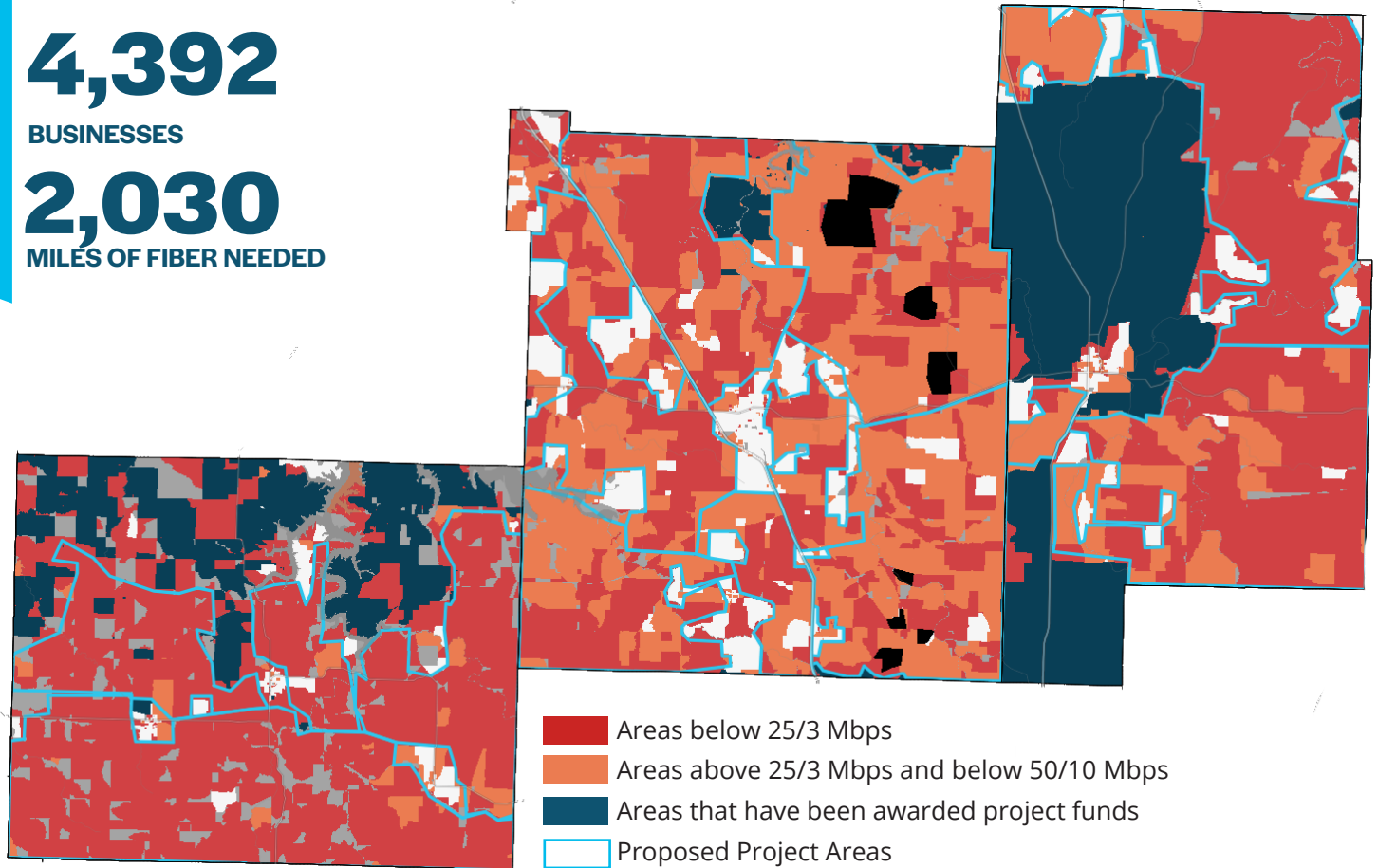
LOCATIONS

4,392

BUSINESSES

2,030

MILES OF FIBER NEEDED



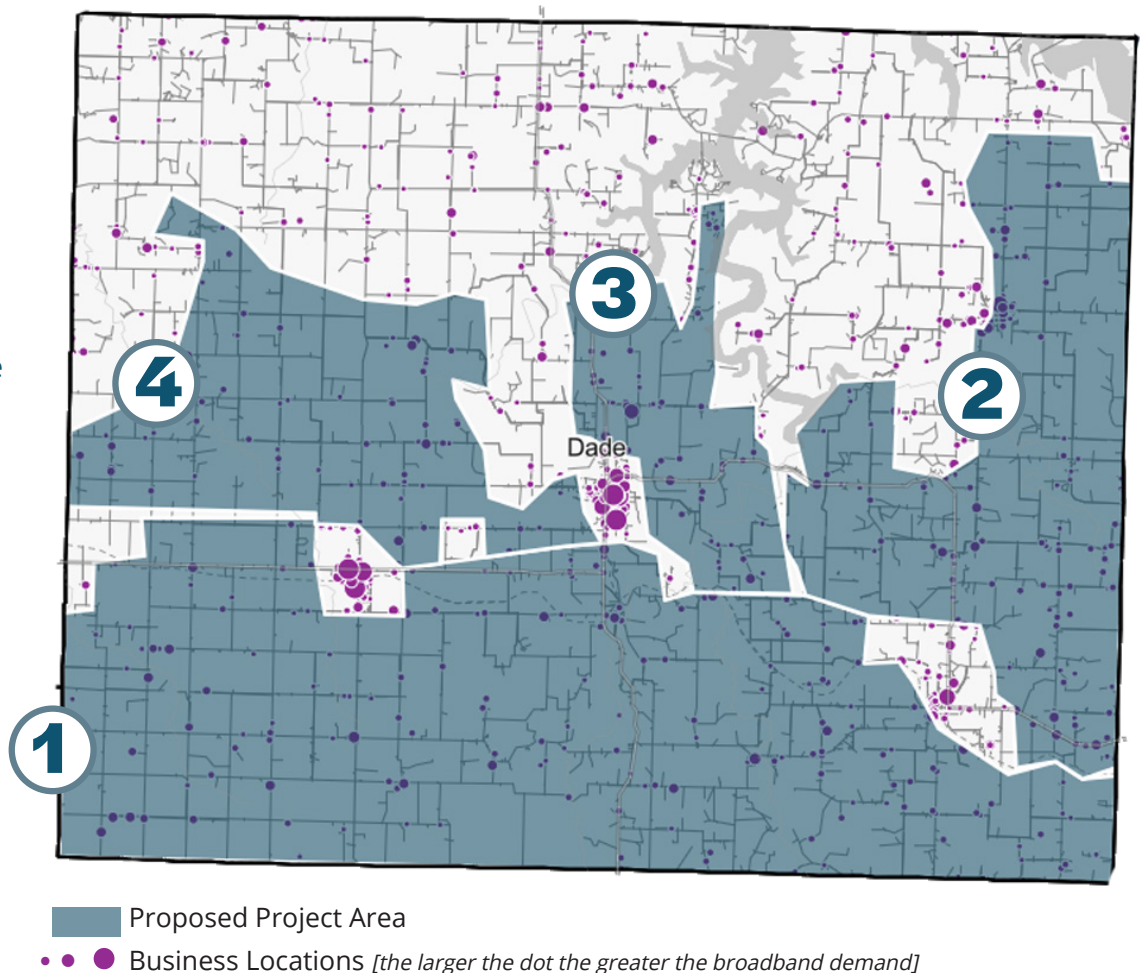
Investment Range = \$180.7 - \$397 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

DADE COUNTY

PROJECT AREAS

With the exception of higher population density communities like Lockwood, Greenfield, and Everton, the majority of Dade County is unserved. South and central Dade include large, continuous areas that rate below 25/3 Mbps punctuated by a handful of blocks that are above 25/3 but still below 50/10 Mbps. To aid in planning, we divided these areas into 4 project areas. If sufficient funding is available, these can be combined into one or more larger project proposals. It should be noted that, while the northern part of the county appears to have much unserved/unfunded territory, all of the locations in the unfunded blocks are on roads that serve as funding boundaries. In such cases, the funded provider is likely to serve both sides of the road.



557
fiber miles

1,881
locations

551
business locations

3.4
locations per mile

INVESTMENT = \$49.6 - \$109million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

DADE COUNTY

PROJECT DETAILS

1

AERIAL

\$26.7M - \$35.7M

COST TO PASS

\$822K - \$3.3M

ISP INVESTMENT

\$23.4M - \$34.9M

FUNDING GAP

\$949 - \$1,414

annual cost per location
over 30 years

UNDERGROUND

\$34.9M - \$58.7M

\$822K - \$3.3M

\$31.6M - \$57.9M

\$1,283 - \$2,346

300

fiber miles

822

locations

2.7

locations per mile

2

AERIAL

\$11.2M - \$14.9M

COST TO PASS

\$550K - \$2.2M

ISP INVESTMENT

\$9M - \$14.4M

FUNDING GAP

\$543 - \$871

annual cost per location
over 30 years

UNDERGROUND

\$14.6M - \$24.5M

\$550K - \$2.2M

\$12.4M - \$24M

\$751 - \$1,453

125

fiber miles

550

locations

4.4

locations per mile

3

AERIAL

\$3.8M - \$5.1M

COST TO PASS

\$251K - \$1M

ISP INVESTMENT

\$2.8M - \$4.9M

FUNDING GAP

\$377 - \$649

annual cost per location
over 30 years

UNDERGROUND

\$5M - \$8.4M

\$251K - \$1M

\$4M - \$8.2M

\$534 - \$1,088

43

fiber miles

251

locations

5.8

locations per mile

4

AERIAL

\$7.9M - \$10.6M

COST TO PASS

\$258K - \$1M

ISP INVESTMENT

\$6.9M - \$10.3M

FUNDING GAP

\$888 - \$1,332

annual cost per location
over 30 years

UNDERGROUND

\$10.3M - \$17.4M

\$258K - \$1M

\$9.3M - \$17.1M

\$1,202 - \$2,211

89

fiber miles

258

locations

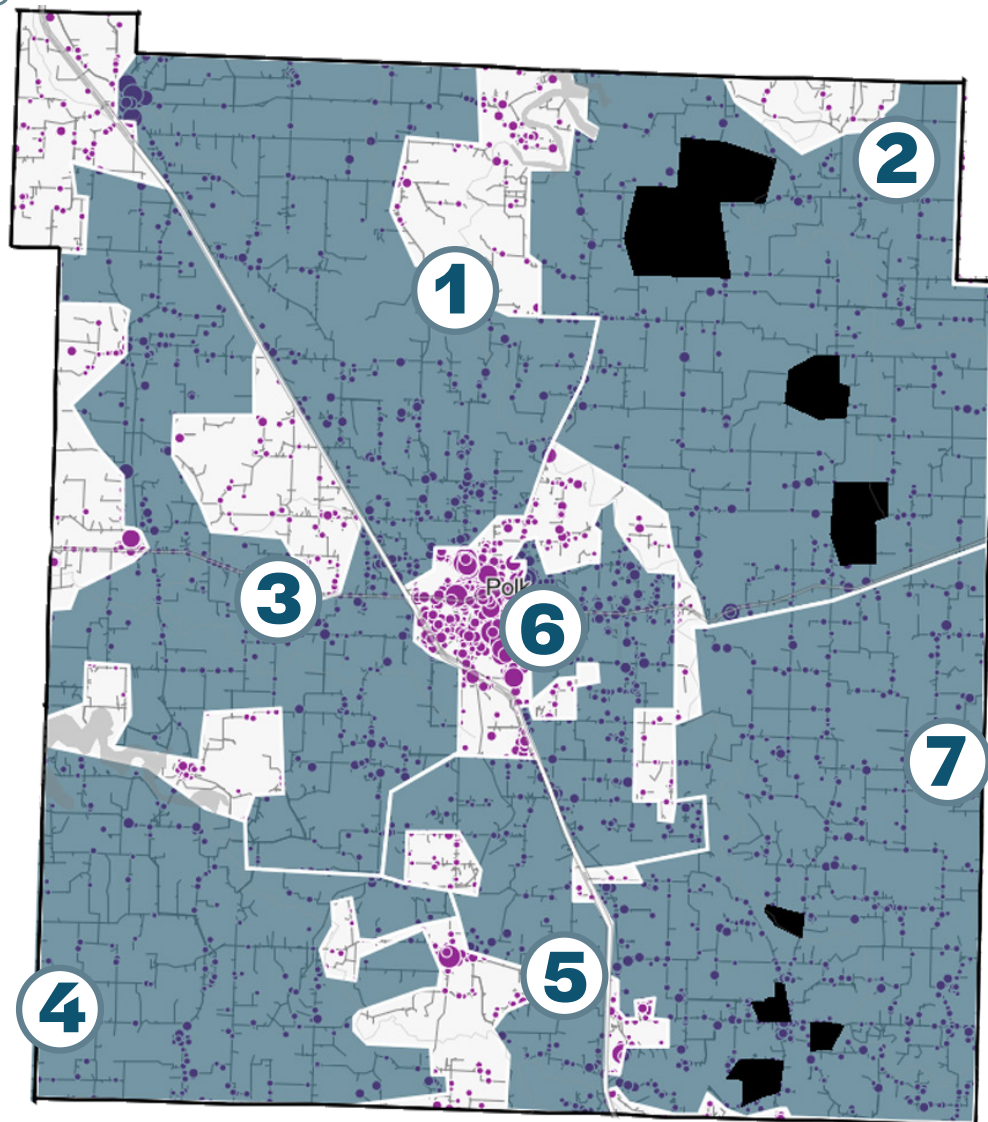
2.9

locations per mile

POLK COUNTY

PROJECT AREAS

Other than the areas around Bolivar, Morrisville, and Fair Play, much of Polk County is underserved, with speeds above 25/3 Mbps but below 50/10 Mbps. Mixed in among these areas are multiple blocks that rate below 25/3 Mbps with some unable to achieve 10/1 Mbps. With only a handful of funded-to-served locations, we chose to break the county up into multiple adjacent project areas. Should sufficient funding be available, these could be combined to create one or more larger project areas. The two project areas on the eastern side of the county include several small, funded territories. We excluded the locations in these areas from our budget estimates.



Proposed Project Area
 Funded or served excluded from calculation

••• Business Locations *[the larger the dot the greater the broadband demand]*

1,005
fiber miles

7,801
locations

2,772
business locations

7.8
locations per mile

INVESTMENT = \$89.4m - \$196.5 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

POLK COUNTY

PROJECT DETAILS

1

AERIAL

\$15.1M - \$20.2M

COST TO PASS

\$1.7M - \$6.7M

ISP INVESTMENT

\$8.4M - \$18.5M

FUNDING GAP

\$169 - \$371

annual cost per location
over 30 years

UNDERGROUND

\$19.8M - \$33.2M

\$1.7M - \$6.7M

\$13M - \$31.5M

\$262 - \$631

170

fiber miles

1,667

locations

9.8

locations per mile

2

AERIAL

\$19.6M - \$26.2M

COST TO PASS

\$1.2M - \$4.6M

ISP INVESTMENT

\$15M - \$25M

FUNDING GAP

\$434 - \$725

annual cost per location
over 30 years

UNDERGROUND

\$25.6M - \$43M

\$1.2M - \$4.6M

\$21M - \$41.9M

\$609 - \$1,213

220

fiber miles

1,152

locations

5.2

locations per mile

3

AERIAL

\$13.6M - \$18.2M

COST TO PASS

\$959K - \$3.8M

ISP INVESTMENT

\$9.8M - \$17.3M

FUNDING GAP

\$341 - \$600

annual cost per location
over 30 years

UNDERGROUND

\$17.8M - \$30M

\$959K - \$3.8M

\$14M - \$29M

\$487 - \$1,008

153

fiber miles

959

locations

6.3

locations per mile

4

AERIAL

\$12M - \$16M

COST TO PASS

\$710K - \$2.8M

ISP INVESTMENT

\$9.1M - \$15.3M

FUNDING GAP

\$429 - \$718

annual cost per location
over 30 years

UNDERGROUND

\$15.7M - \$26.3M

\$710K - \$2.8M

\$12.8M - \$25.6M

\$602 - \$1,202

135

fiber miles

710

locations

5.3

locations per mile

POLK COUNTY

PROJECT DETAILS

5

AERIAL

\$5.5M - \$7.4M

COST TO PASS

\$461K - \$1.8M

ISP INVESTMENT

\$3.7M - \$6.9M

FUNDING GAP

\$265 - \$499

annual cost per location
over 30 years

UNDERGROUND

\$7.2M - \$12.1M

\$461K - \$1.8M

\$5.4M - \$11.7M

\$388 - \$842

62

fiber miles

461

locations

7.4

locations per mile

6

AERIAL

\$5.4M - \$7.2M

COST TO PASS

\$876K - \$3.5M

ISP INVESTMENT

\$1.9M - \$6.3M

FUNDING GAP

\$71 - \$240

annual cost per location
over 30 years

UNDERGROUND

\$7M - \$11.8M

\$876K - \$3.5M

\$3.5M - \$10.9M

\$134 - \$416

60

fiber miles

876

locations

14.5

locations per mile

7

AERIAL

\$18.2M - \$24.3M

COST TO PASS

\$2M - \$7.9M

ISP INVESTMENT

\$10.3M - \$23.4M

FUNDING GAP

\$174 - \$377

annual cost per location
over 30 years

UNDERGROUND

\$23.8M - \$40M

\$2M - \$7.9M

\$15.9M - \$38M

\$268 - \$641

205

fiber miles

1,976

locations

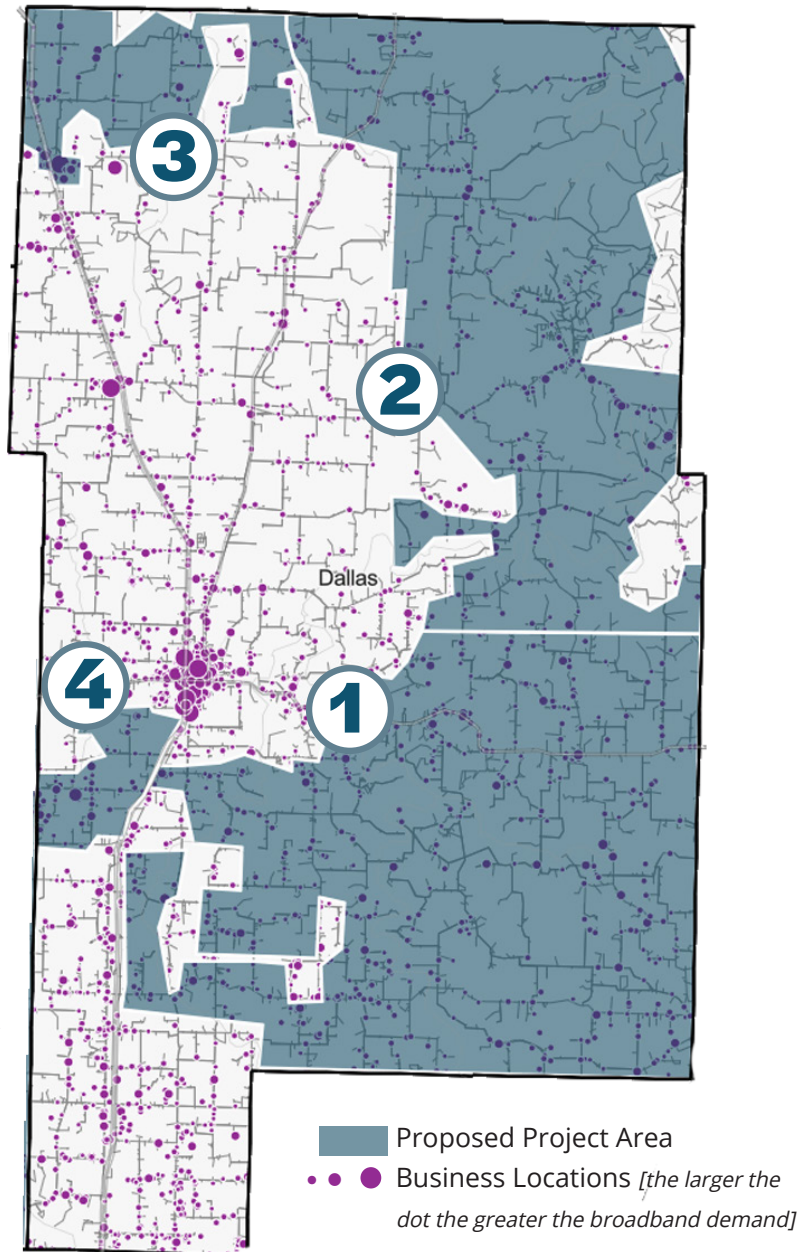
9.7

locations per mile

DALLAS COUNTY

PROJECT AREAS

Most of the unserved/underserved areas in the western half of Dallas County are covered by two large existing awards; however, significant need remains in the east. We defined a total of four project areas in the county, two large outlines in the east and two smaller areas in the west. Of the two eastern project areas, area #2 has a higher percentage of unserved vs underserved territory. All four areas share at least one boundary. With sufficient funding, some or all of the areas could be combined into a single larger project.



468
fiber miles

3,158
locations

1,069
business locations

6.7
locations per mile

INVESTMENT = \$41.7 - \$91.6 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

DALLAS COUNTY

PROJECT DETAILS

1

AERIAL

\$22.2M - \$29.7M

COST TO PASS

\$1.8M - \$7M

ISP INVESTMENT

\$15M - \$27.9M

FUNDING GAP

\$284 - \$525

annual cost per location
over 30 years

UNDERGROUND

\$29M - \$48.8M

\$1.8M - \$7M

\$22M - \$47M

\$413 - \$884

249

fiber miles

1,771

locations

7.1

locations per mile

2

AERIAL

\$14.2M - \$19M

COST TO PASS

\$895K - \$3.6M

ISP INVESTMENT

\$10.6M - \$18M

FUNDING GAP

\$394 - \$671

annual cost per location
over 30 years

UNDERGROUND

\$18.5M - \$31.1M

\$895K - \$3.6M

\$14.9M - \$30.2M

\$556 - \$1,125

159

fiber miles

895

locations

5.6

locations per mile

3

AERIAL

\$3.7M - \$5M

COST TO PASS

\$379K - \$1.5M

ISP INVESTMENT

\$2.2M - \$4.6M

FUNDING GAP

\$194 - \$404

annual cost per location
over 30 years

UNDERGROUND

\$4.9M - \$8.2M

\$379K - \$1.5M

\$3.3M - \$7.8M

\$295 - \$686

42

fiber miles

379

locations

9.1

locations per mile

4

AERIAL

\$1.6M - \$2.2M

COST TO PASS

\$113K - \$452K

ISP INVESTMENT

\$1.2M - \$2M

FUNDING GAP

\$344 - \$604

annual cost per location
over 30 years

UNDERGROUND

\$2.1M - \$3.6M

\$113K - \$452K

\$1.7M - \$3.4M

\$491 - \$1,015

18

fiber miles

113

locations

6.2

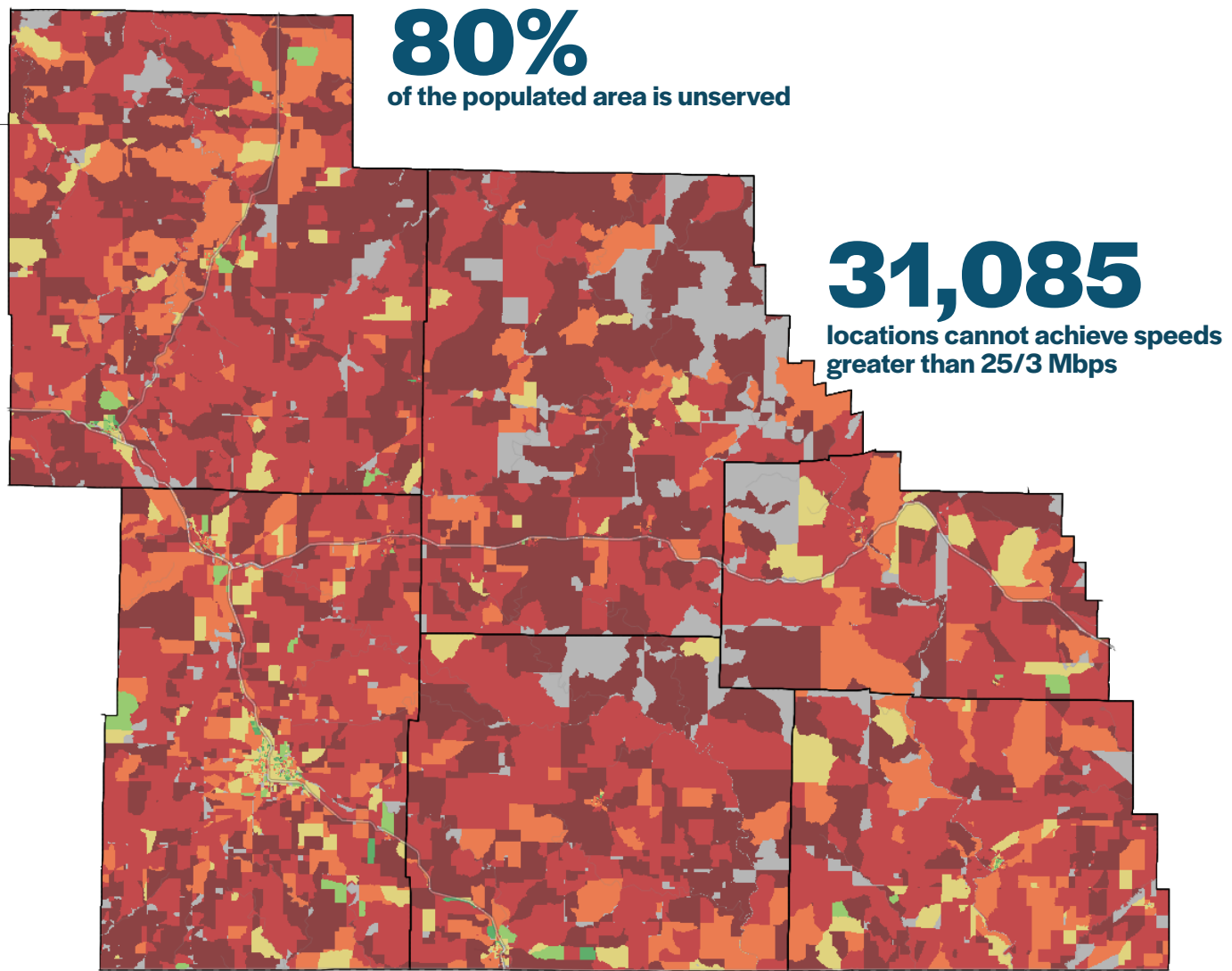
locations per mile

Texas / Howell / Shannon

Oregon / Ripley / Carter

Project Cluster • South Central Ozark Council of Governments

Ozark Foothills Regional Planning Commission



Below 10/1 Mbps Above 10/1; Below 25/3 Mbps Above 25/3; Below 50/10 Mbps Above 50/10; Below 100/20 Mbps Above 100/20; Below 200/50 Mbps Above 200/50 Mbps
null / no data

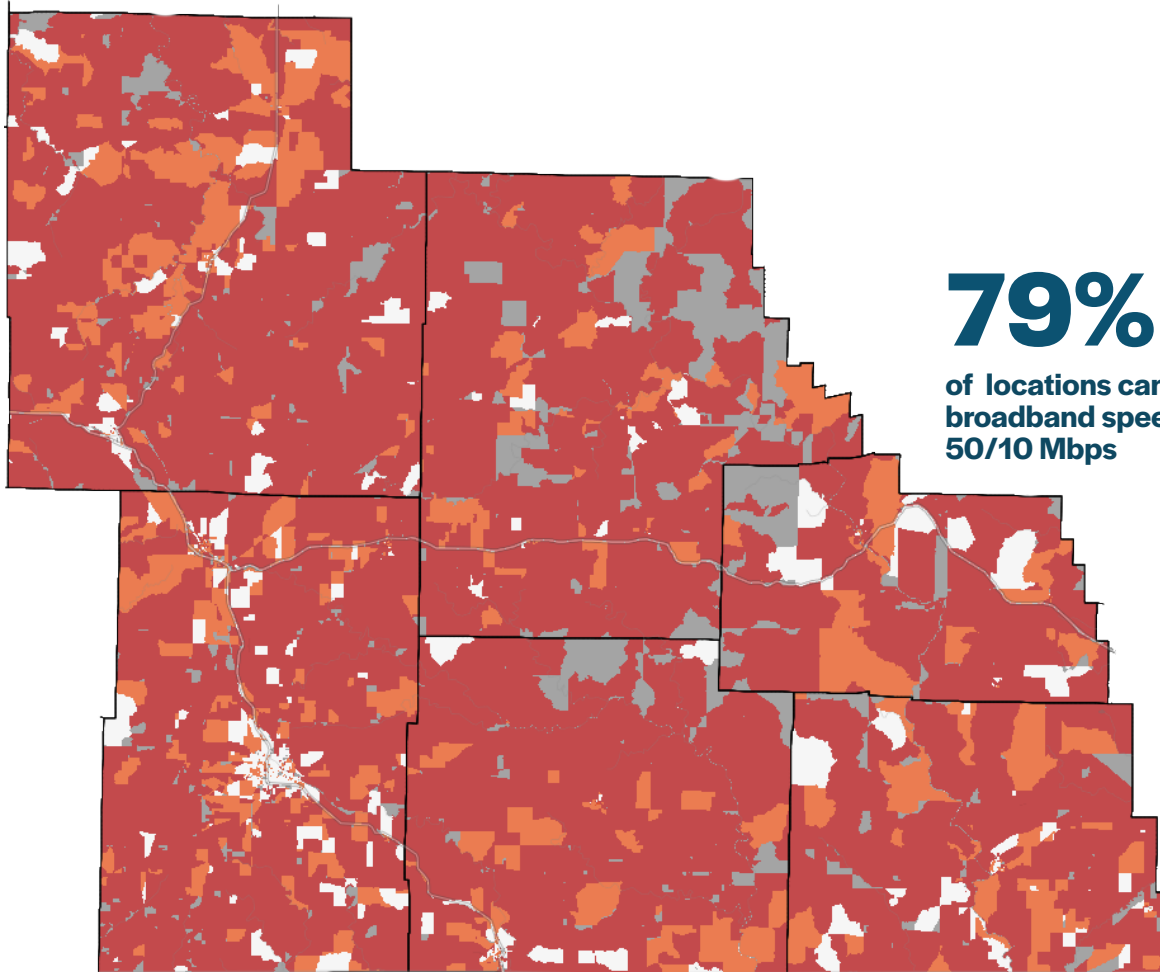
Texas / Howell / Shannon

Oregon / Ripley / Carter

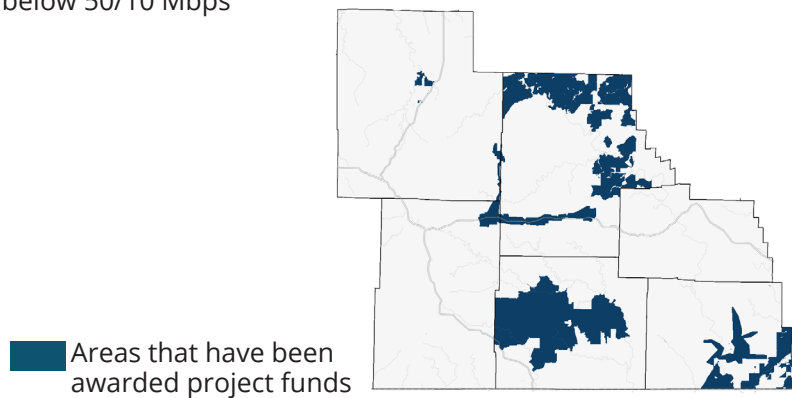
Project Cluster • South Central Ozark Council of Governments

Ozark Foothills Regional Planning Commission

AREAS OF FOCUS

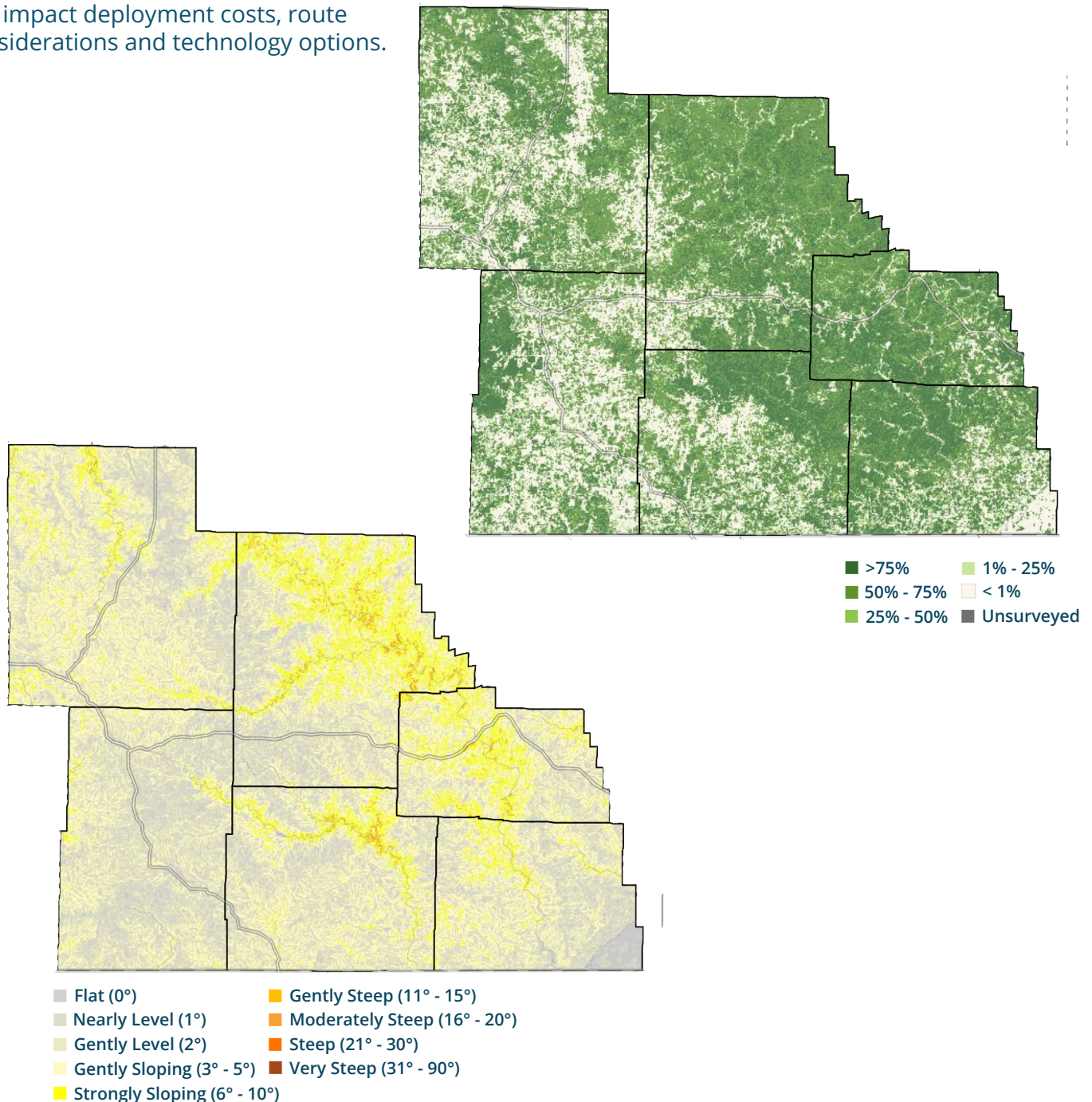


- Areas below 25/3 Mbps
- Areas above 25/3 Mbps and below 50/10 Mbps



PLANNING CONSIDERATIONS

Rugged terrain and dense canopy cover can impact deployment costs, route considerations and technology options.



Texas / Howell / Shannon

Oregon / Ripley / Carter

Project Cluster - South Central Ozark Council of Governments

Ozark Foothills Regional Planning Commission

PROJECT AREAS

28,578

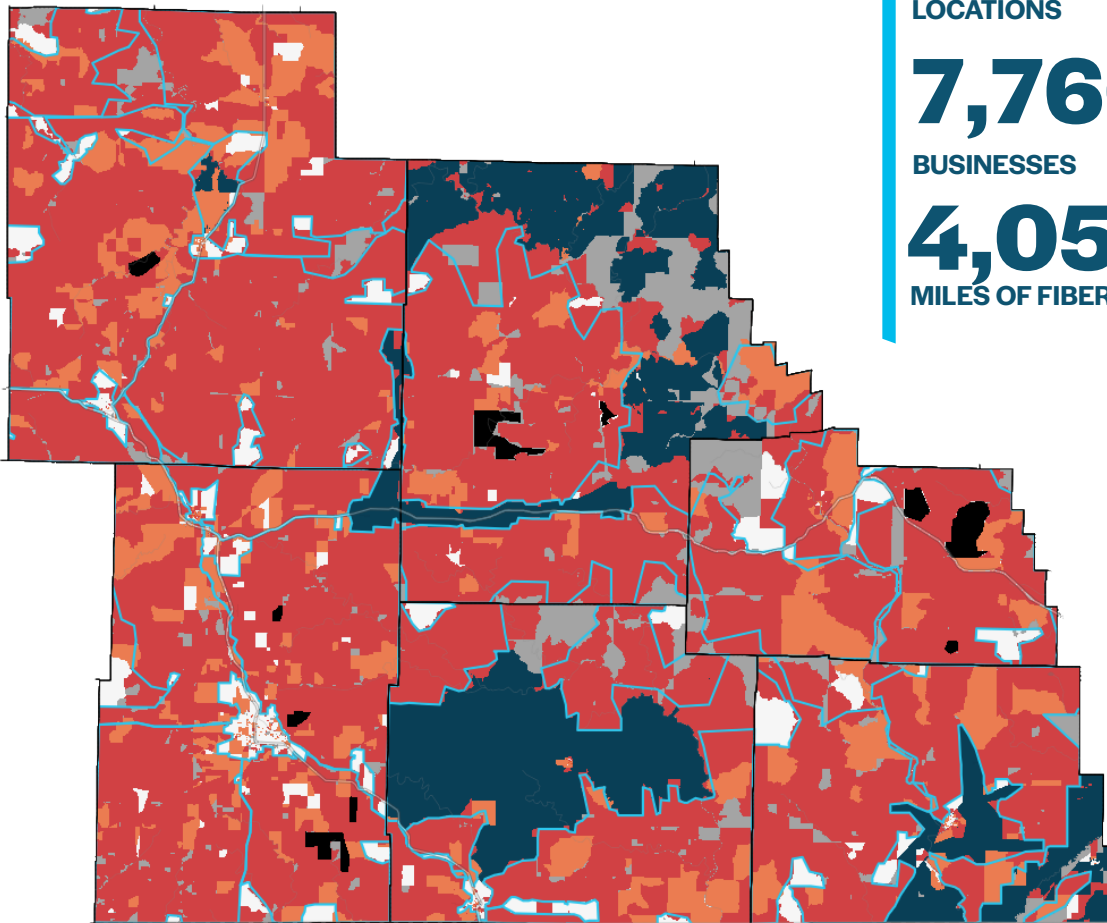
LOCATIONS

7,760

BUSINESSES

4,053

MILES OF FIBER NEEDED



- Areas below 25/3 Mbps
- Areas above 25/3 Mbps and below 50/10 Mbps
- Areas that have been awarded project funds
- Proposed Project Areas

Investment Range = \$360.7 - \$792.7 million[†]

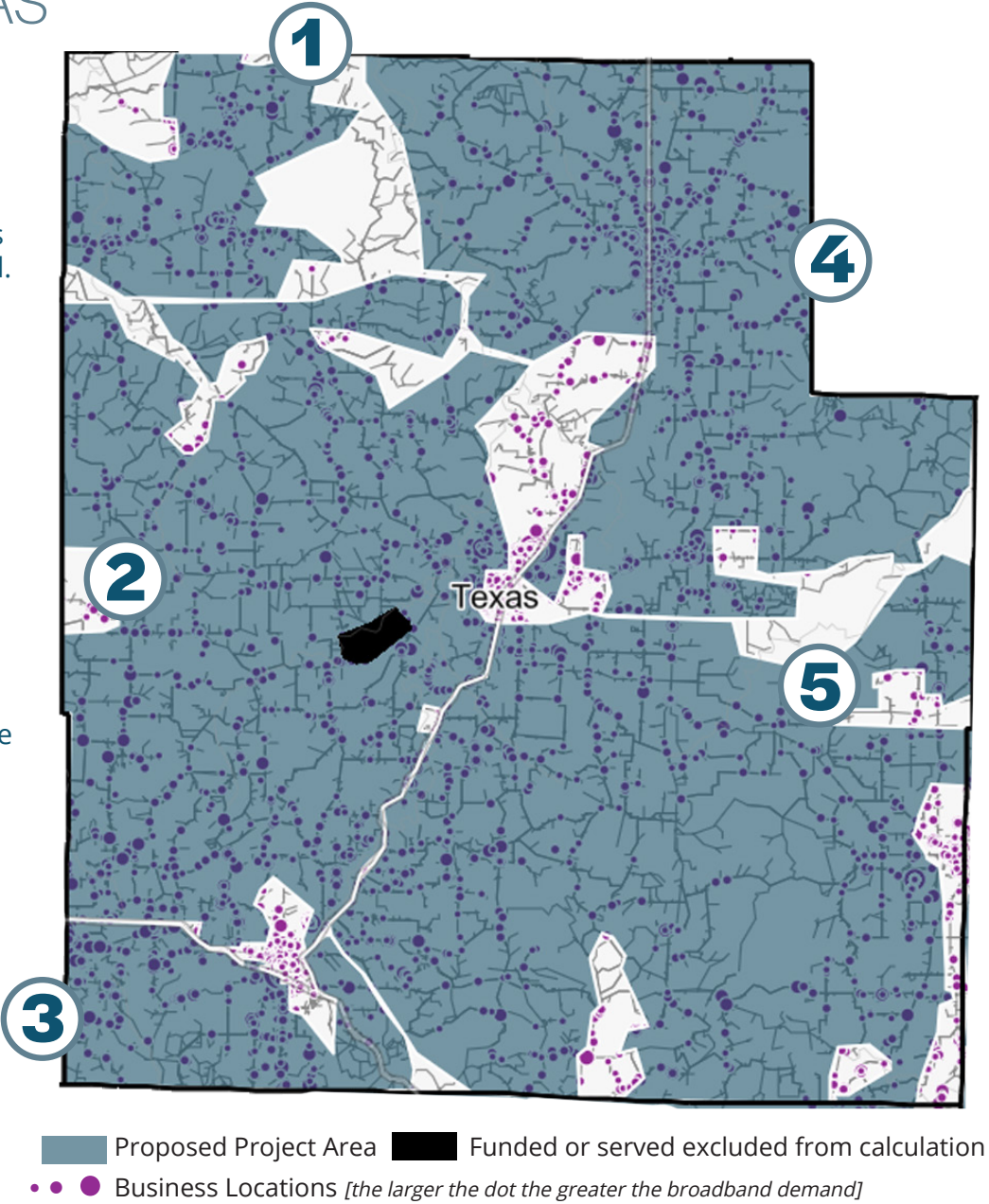
**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

† The Investment range for this cluster area may be lower; due to carriers electing to participate in E-ACAM that can impact eligibility for BEAD funding

TEXAS COUNTY

PROJECT AREAS

With the exceptions of towns like Cabool and Houston and a handful of existing awards that will bring broadband to specific areas, Texas County is mostly unserved/underserved. Given the scope of the need, we divided the county up into 5 project areas. If sufficient funding is available, one or more of these areas can be combined to create a larger project area. Project areas #2, #3, and #4 include some blocks where one or more providers claim to offer cable modem service, with the rest of the territory claimed only by fixed wireless providers. Areas #1 and #5 have no cable providers.



1,374
fiber miles

8,920
locations

2,822
business locations

6.5
locations per mile

INVESTMENT = \$122.3 - \$268.8 million

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*

TEXAS COUNTY

PROJECT DETAILS

1

AERIAL

\$8.2M - \$10.9M

COST TO PASS

\$859K - \$3.4M

ISP INVESTMENT

\$4.7M - \$10M

FUNDING GAP

\$182 - \$389

annual cost per location
over 30 years

UNDERGROUND

\$10.6M - \$17.9M

\$859K - \$3.4M

\$7.2M - \$17M

\$280 - \$667

92

fiber miles

859

locations

9.4

locations per mile

2

AERIAL

\$36.2M - \$48.4M

COST TO PASS

\$2.3M - \$9.2M

ISP INVESTMENT

\$27M - \$46.1M

FUNDING GAP

\$393 - \$671

annual cost per location
over 30 years

UNDERGROUND

\$47.3M - \$79.5M

\$2.3M - \$9.2M

\$38.2M - \$77.4M

\$555 - \$1,124

407

fiber miles

2,291

locations

5.6

locations per mile

3

AERIAL

\$10.3M - \$13.8M

COST TO PASS

\$756K - \$3M

ISP INVESTMENT

\$7.3M - \$13M

FUNDING GAP

\$320 - \$573

annual cost per location
over 30 years

UNDERGROUND

\$13.5M - \$22.6M

\$756K - \$3M

\$10.4M - \$21.8M

\$460 - \$963

116

fiber miles

756

locations

6.5

locations per mile

TEXAS COUNTY

PROJECT DETAILS

4

AERIAL		UNDERGROUND		341 fiber miles	
\$30.3M - \$40.6M	COST TO PASS	\$39.7M - \$66.7M		3,072 locations	9 locations per mile
\$3M - \$12.3M	ISP INVESTMENT	\$3M - \$12.3M			
\$18M - \$37.5M	FUNDING GAP	\$27.4M - \$63.6M			
\$196 - \$407	annual cost per location over 30 years	\$297 - \$690			

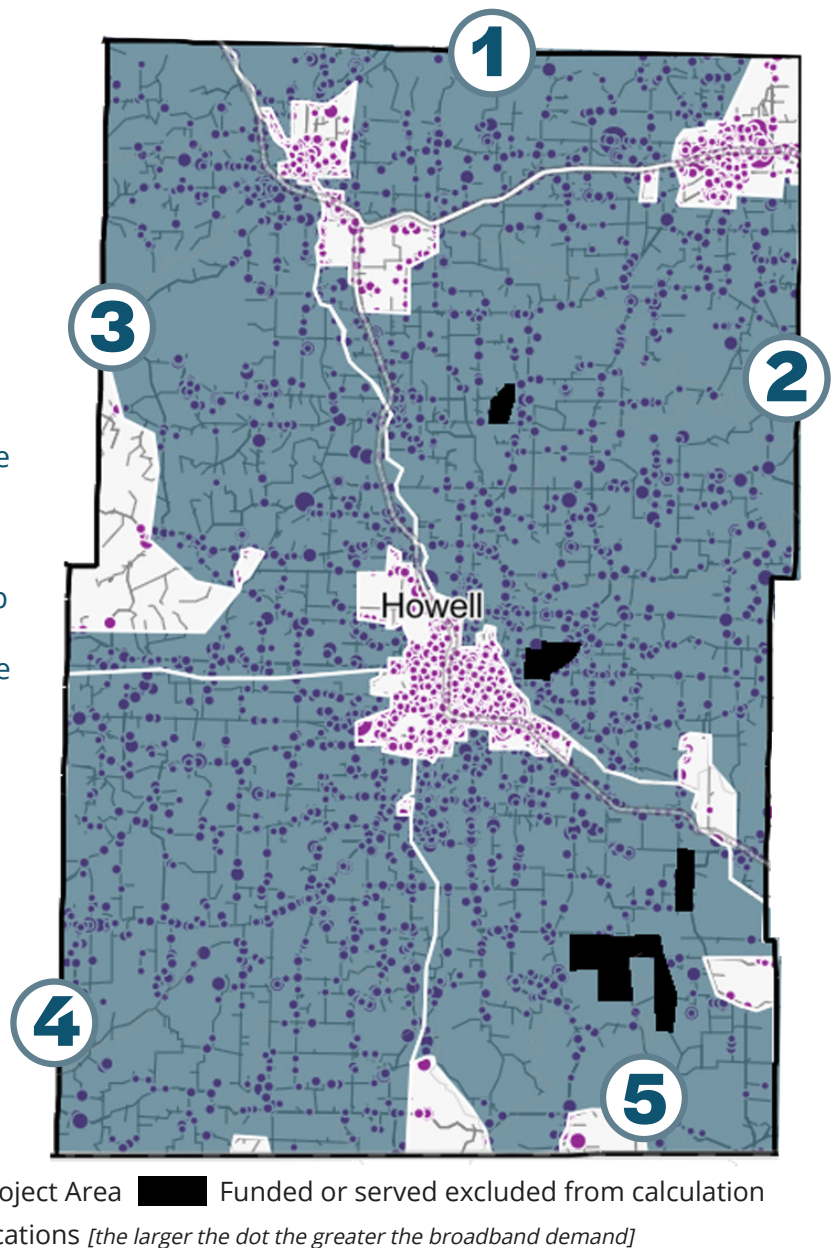
5

AERIAL		UNDERGROUND		420 fiber miles	
\$37.4M - \$50M	COST TO PASS	\$48.9M - \$82.1M		1,942 locations	4.6 locations per mile
\$1.9M - \$7.8M	ISP INVESTMENT	\$1.9M - \$7.8M			
\$29.6M - \$48M	FUNDING GAP	\$41.1M - \$80.1M			
\$508 - \$824	annual cost per location over 30 years	\$705 - \$1,376			

HOWELL COUNTY

PROJECT AREAS

Most of Howell County is currently rated as either underserved or unserved. Exceptions include the areas around Willow Springs and West Plains as well as a handful of rural blocks that rate above 50/10 Mbps. To allow flexibility with planning, we have divided the county into 5 project areas. If sufficient funding is available, one or more of these areas can be combined to create a larger project area. Project areas #2 and #5 include a few blocks that rate above 100/20 Mbps. We have excluded those locations from our budget estimates, as they would not be eligible for funding. Area 2 has some overlap with E-ACAM commitments. That area was not excluded from our estimates due to time constraints.



824
fiber miles

9,707
locations

3,119
business locations

11.8
locations per mile

INVESTMENT = \$73.3 - \$161.2 million[†]

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

† The Investment range for this cluster area may be lower; due to carriers electing to participate in E-ACAM that can impact eligibility for BEAD funding

HOWELL COUNTY

PROJECT DETAILS

1

AERIAL

\$11.4M - \$15.3M

COST TO PASS

\$814K - \$3.3M

ISP INVESTMENT

\$8.2M - \$14.5M

FUNDING GAP

\$335 - \$592

annual cost per location
over 30 years

UNDERGROUND

\$15M - \$25.1M

\$814K - \$3.3M

\$11.7M - \$24.3M

\$479 - \$995

128

fiber miles

814

locations

6.3

locations per mile

2

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$4.9M - \$6.6M

COST TO PASS

\$3.1M - \$12.5M

ISP INVESTMENT

\$0 - \$3.5M

FUNDING GAP

\$0 - \$37

annual cost per location
over 30 years

UNDERGROUND

\$6.4M - \$10.8M

\$3.1M - \$12.5M

\$0 - \$7.7M

\$0 - \$82

55

fiber miles

3,126

locations

56.5

locations per mile

3

AERIAL

\$8.2M - \$11M

COST TO PASS

\$1.9M - \$7.5M

ISP INVESTMENT

\$665K - \$9M

FUNDING GAP

\$12 - \$161

annual cost per location
over 30 years

UNDERGROUND

\$10.7M - \$18M

\$1.9M - \$7.5M

\$3.2M - \$16M

\$57 - \$286

92

fiber miles

1,875

locations

20.4

locations per mile

HOWELL COUNTY

PROJECT DETAILS

4

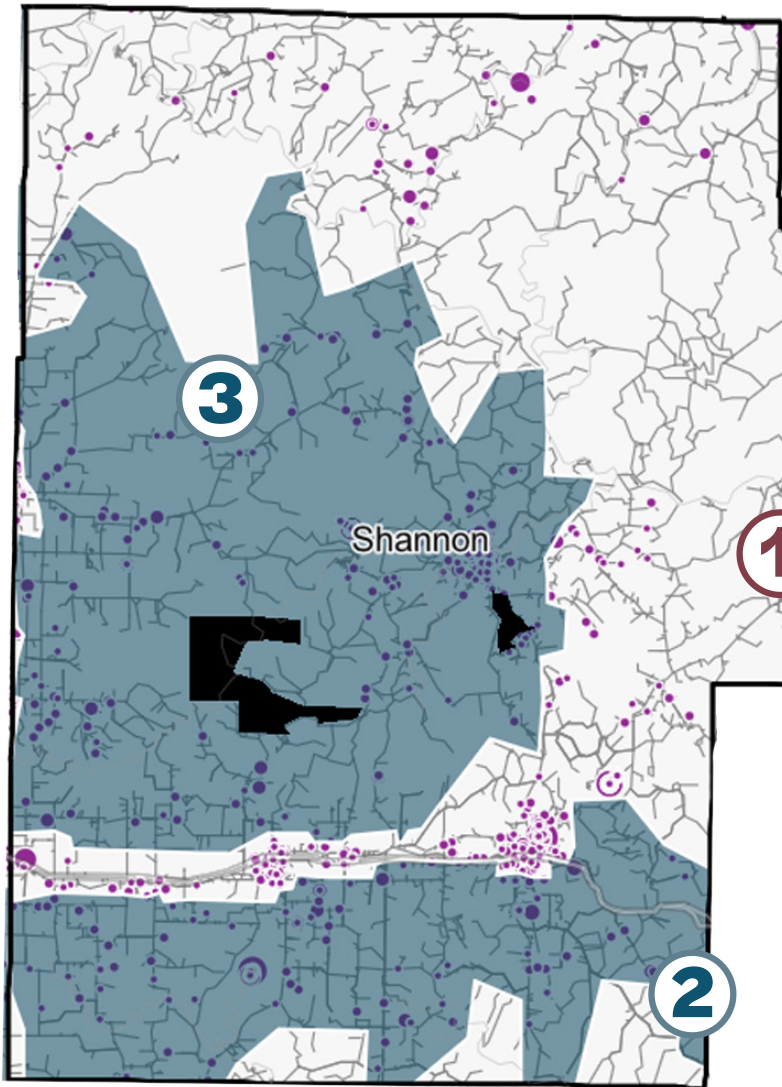
AERIAL		UNDERGROUND		329 fiber miles	
\$29.3M - \$39.2M	COST TO PASS	\$38.3M - \$64.4M		2,372 locations	7.2 locations per mile
\$2.4M - \$9.5M	ISP INVESTMENT	\$2.4M - \$9.5M			
\$20M - \$36.8M	FUNDING GAP	\$28.9M - \$62M			
\$278 - \$517	annual cost per location over 30 years	\$405 - \$871			

5

AERIAL		UNDERGROUND		219 fiber miles	
\$19.5M - \$26.1M	COST TO PASS	\$25.5M - \$42.9M		1,520 locations	6.9 locations per mile
\$1.5M - \$6.1M	ISP INVESTMENT	\$1.5M - \$6.1M			
\$13.4M - \$24.6M	FUNDING GAP	\$19.5M - \$41.4M			
\$295 - \$539	annual cost per location over 30 years	\$427 - \$908			

SHANNON COUNTY

PROJECT AREAS



Shannon County faces a significant broadband need. Except in areas where funding has already been awarded, all of the county is unserved or underserved. With low population density across much of the county, we divided the unfunded, un/underserved areas into three project areas, one in the south, one in the east, and one in the central west. Project #3, in the central west, includes some funded territory within its boundaries. Because those locations would not be eligible for additional funding, we did not include them in the budget estimates for that project area.

- Proposed Project Area
- Business Locations *[the larger the dot the greater the broadband demand]*
- Proposed Project Areas fully impacted by E-ACAM

557
fiber miles

2,384
locations

597
business locations

4.3
locations per mile

INVESTMENT = \$49.6 - \$109 million[†]

**Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).*
† The Investment range for this cluster area may be lower; due to carrier selecting to participate in E-ACAM that can impact eligibility for BEAD funding

SHANNON COUNTY

PROJECT DETAILS

1

**This project area has been removed from the county overall calculations due to E-ACAM Carrier participation*

AERIAL		UNDERGROUND		35 fiber miles	
\$3.1M- \$4.1M	COST TO PASS	\$4M- \$6.8M		47 locations	1.3 locations per mile
\$47K - \$188K	ISP INVESTMENT	\$47K - \$188K			
\$2.9M - \$4.1M	FUNDING GAP	\$3.9M - \$6.8M			
\$2,065 - \$2,906	annual cost per location over 30 years	\$2,742 - \$4,798			

2

AERIAL		UNDERGROUND		211 fiber miles	
\$18.8M- \$25.2M	COST TO PASS	\$24.6M - \$41.4M		659 locations	3.1 locations per mile
\$659K - \$2.6M	ISP INVESTMENT	\$659K - \$2.6M			
\$16.2M - \$24.5M	FUNDING GAP	\$22M - \$40.7M			
\$819 - \$1,239	annual cost per location over 30 years	\$1,112 - \$2,059			

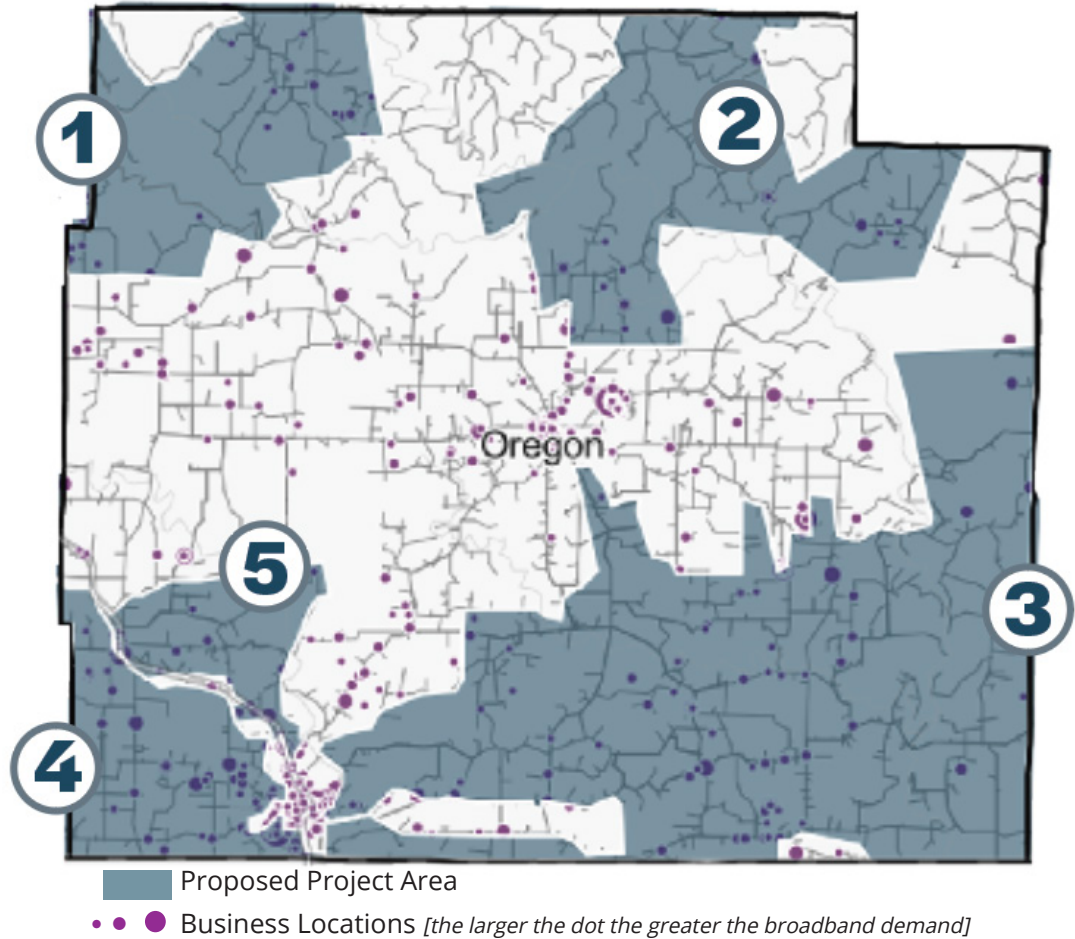
3

AERIAL		UNDERGROUND		345 fiber miles	
\$30.7M- \$41.1M	COST TO PASS	\$40.2M - \$67.6M		1,725 locations	5 locations per mile
\$1.7M - \$6.9M	ISP INVESTMENT	\$1.7M - \$6.9M			
\$23.8M - \$39.4M	FUNDING GAP	\$33.3M - \$65.8M			
\$461 - \$761	annual cost per location over 30 years	\$643 - \$1,272			

OREGON COUNTY

PROJECT AREAS

Central Oregon County currently is funded-to-served through a January 2023 state ARPA grant. To the north and south of this award territory, however, significant need remains. In the sparsely populated northern third of the county, we identify two project areas, both of which are below 25/3 Mbps. Between them, these projects include nearly all of the locations in this part of the county. In the south, we identified 3 more project areas that include a mix of unserved and underserved blocks (below 50/10 Mbps). Given sufficient funding, these could be combined into a single larger area.



452
fiber miles

2,363
locations

299
business locations

5.2
locations per mile

INVESTMENT = \$40.2 - \$88.4 million[†]

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).
† The Investment range for this cluster area may be lower; due to carriers electing to participate in E-ACAM that can impact eligibility for BEAD funding

OREGON COUNTY

PROJECT DETAILS

1

**This project area may be partially impacted by E-ACAM Carrier participation, and some locations may not be eligible for BEAD funding.*

AERIAL

\$2.8M - \$3.8M

COST TO PASS

\$187K - \$748K

ISP INVESTMENT

\$2.1M - \$3.6M

FUNDING GAP

\$368 - \$636

annual cost per location
over 30 years

UNDERGROUND

\$3.7M - \$6.2M

\$187K - \$748K

\$2.9M - \$6M

\$522 - \$1,067

32

fiber miles

187

locations

5.9

locations per mile

2

AERIAL

\$7.4M - \$9.9M

COST TO PASS

\$198K - \$792K

ISP INVESTMENT

\$6.6M - \$9.7M

FUNDING GAP

\$1,115 - \$1,636

annual cost per location
over 30 years

UNDERGROUND

\$9.7M - \$16.3M

\$198K - \$792K

\$8.9M - \$16.1M

\$1,500 - \$2,711

83

fiber miles

198

locations

2.4

locations per mile

3

AERIAL

\$21M - \$28.1M

COST TO PASS

\$1.1M - \$4.5M

ISP INVESTMENT

\$16.5M - \$27M

FUNDING GAP

\$492 - \$803

annual cost per location
over 30 years

UNDERGROUND

\$27.5M - \$46.1M

\$1.1M - \$4.5M

\$23M - \$45M

\$684 - \$1,341

236

fiber miles

1,119

locations

4.7

locations per mile

OREGON COUNTY

PROJECT DETAILS

4

AERIAL

\$5.6M - \$7.5M

COST TO PASS

\$17K - \$2M

ISP INVESTMENT

\$3.5M - \$7M

FUNDING GAP

\$228 - \$450

annual cost per location
over 30 years

UNDERGROUND

\$7.3M - \$12.3M

\$17K - \$2M

\$5.3M - \$11.8M

\$339 - \$761

63

fiber miles

517

locations

8.2

locations per mile

5

AERIAL

\$3.4M - \$4.5

COST TO PASS

\$342K - \$1.4M

ISP INVESTMENT

\$2M - \$4.2M

FUNDING GAP

\$197 - \$409

annual cost per location
over 30 years

UNDERGROUND

\$4.5M - \$7.5M

\$342K - \$1.4M

\$3.1M - \$7.1M

\$299 - \$694

38

fiber miles

342

locations

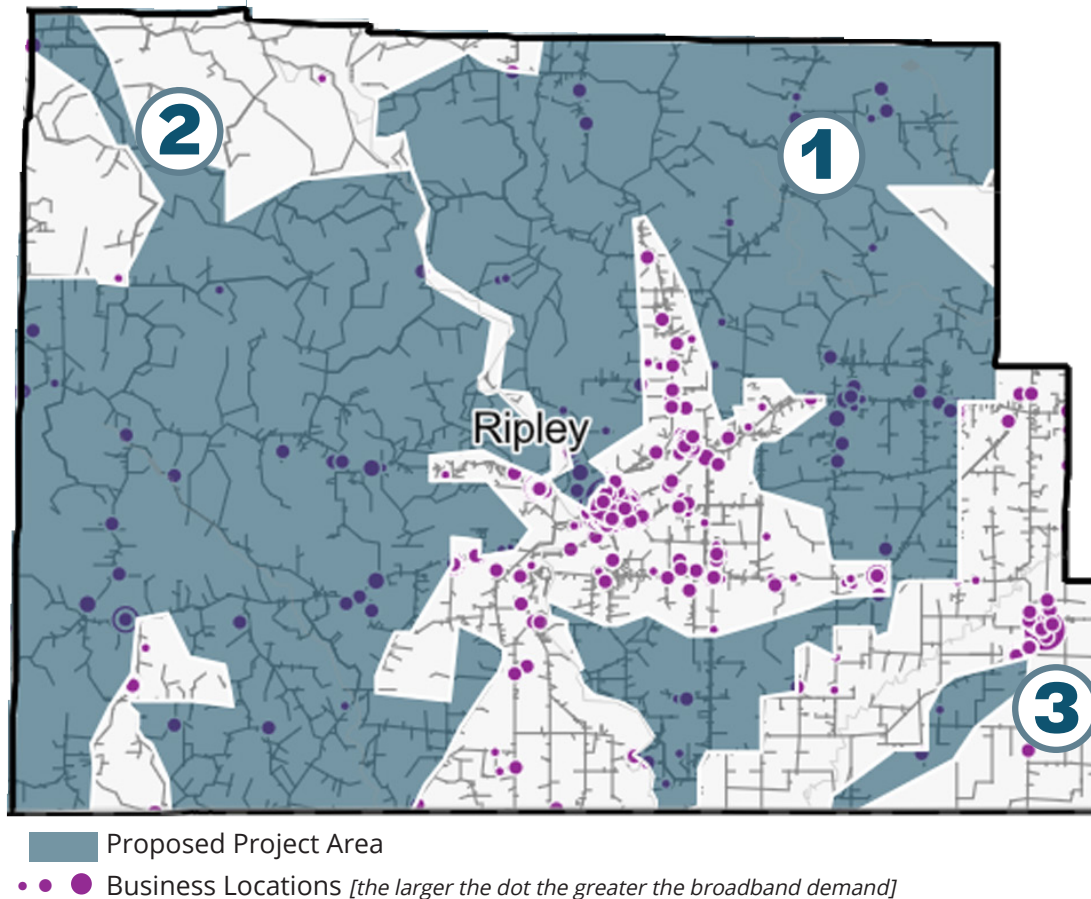
9

locations per mile

RIPLEY COUNTY

PROJECT AREAS

The majority of western and northeastern Ripley County remains unserved/underserved and unfunded. In the southeast, Rural Digital Opportunity Fund (RDOF) awards should address much of the underserved territory there, while a state award surrounding much of Doniphan will serve portions of the county's central region. We defined two large project areas, one on each side of the Current River, and a third small area that would address a sparsely populated section in the far southeast. It should be noted that we did not include the underserved blocks immediately outside of Doniphan because those locations are likely to be served as part of the state-funded project that surrounds the city.



357
fiber miles

2,099
locations

227
business locations

5.9
locations per mile

INVESTMENT = \$31.8 - \$69.8 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

RIPLEY COUNTY

PROJECT DETAILS

1

AERIAL

\$13.3M - \$17.8M

COST TO PASS

\$1.4M - \$5.4M

ISP INVESTMENT

\$8M - \$16.5M

FUNDING GAP

\$196 - \$407

annual cost per location
over 30 years

UNDERGROUND

\$17.4M - \$29.3M

\$1.4M - \$5.4M

\$12M - \$27.9M

\$297 - \$691

150
fiber miles

1,347
locations

9
locations per mile

2

AERIAL

\$17.7M - \$23.6M

COST TO PASS

\$729K - \$2.9M

ISP INVESTMENT

\$14.7M - \$22.9M

FUNDING GAP

\$674 - \$1,046

annual cost per location
over 30 years

UNDERGROUND

\$23.1M - \$38.8M

\$729K - \$2.9M

\$20.2M - \$38.1M

\$922 - \$1,741

198
fiber miles

729
locations

3.7
locations per mile

3

AERIAL

\$791K - \$1.1M

COST TO PASS

\$23K - \$92K

ISP INVESTMENT

\$699K - \$1M

FUNDING GAP

\$1,013 - \$1,500

annual cost per location
over 30 years

UNDERGROUND

\$1M - \$1.7M

\$23K - \$92K

\$943K - \$1.7M

\$1,366 - \$2,487

9
fiber miles

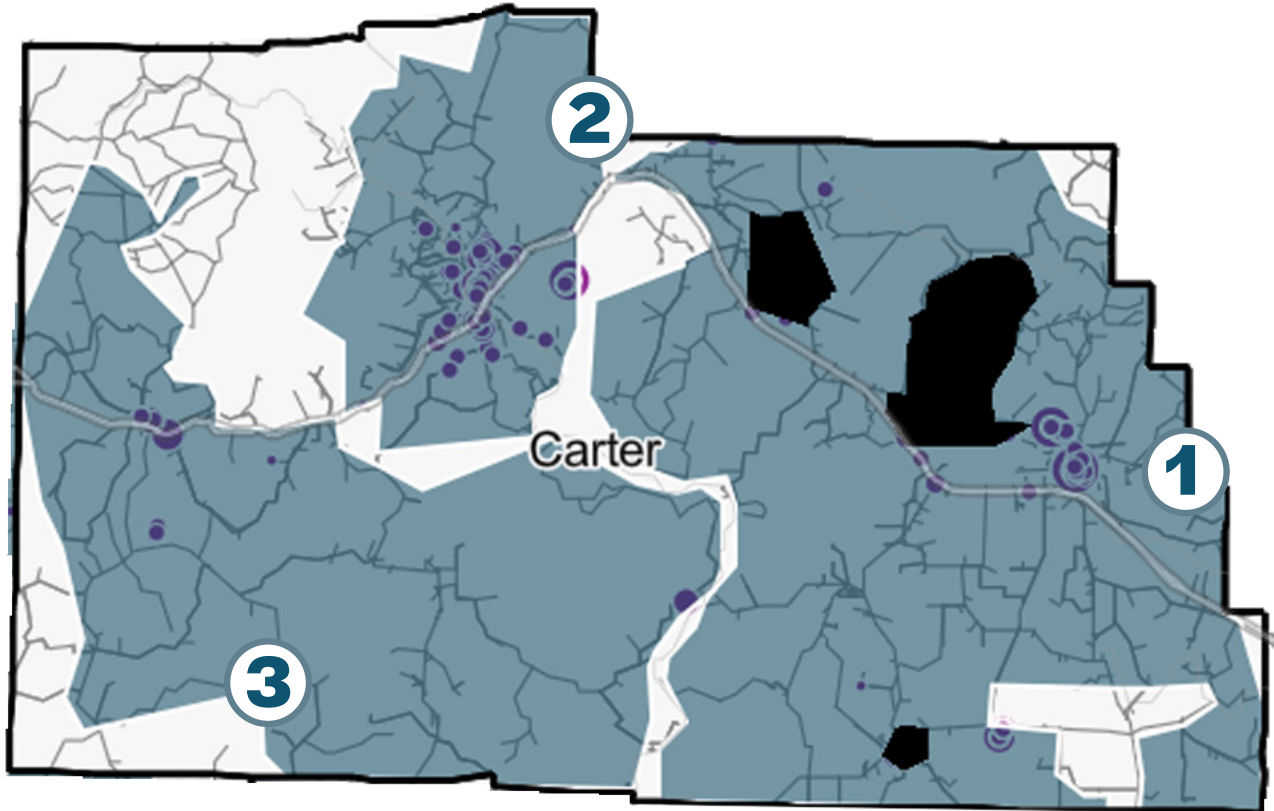
23
locations

2.6
locations per mile

CARTER COUNTY

PROJECT AREAS

Most of Carter County, including Van Buren, is currently rated as either underserved or unserved, with many blocks unable to obtain speeds above 25/3 Mbps. The only town that includes any served blocks above 100/20 Mbps is Grandin in the southwest part of the county. Carter County currently has no existing state or federal grant awards. In order to make the most of future grant possibilities, we divided the county into 3 project areas that focus only on speeds below 50/10 Mbps. In project area #1, we excluded 3 sections where speed ratings were above 50/10 but below 100/20 Mbps. These locations are not included in our budget estimate.



■ Proposed Project Area ■ Funded or served excluded from calculation
• • • Business Locations [the larger the dot the greater the broadband demand]

454
fiber miles

3,058
locations

692
business locations

6.7
locations per mile

INVESTMENT = \$40.4 - \$88.9 million

*Investment projections take into account the total number of fiber miles, deployment type [aerial or underground] and the computation of low, mid and high project cost. A full explanation of our methodology and calculation tables can be found in the [Appendix 1 and 2](#).

CARTER COUNTY

PROJECT DETAILS

1

AERIAL

\$24.4M - \$32.7M

COST TO PASS

\$1.6M - \$6.5M

ISP INVESTMENT

\$17.9M - \$31M

FUNDING GAP

\$364 - \$632

annual cost per location
over 30 years

UNDERGROUND

\$31.9M - \$53.7M

\$1.6M - \$6.5M

\$25.4M - \$52M

\$517 - \$1,060

274

fiber miles

1,636

locations

6

locations per mile

2

AERIAL

\$9.9M - \$13.3M

COST TO PASS

\$1.2M - \$4.6M

ISP INVESTMENT

\$5.3M - \$12.1M

FUNDING GAP

\$155 - \$352

annual cost per location
over 30 years

UNDERGROUND

\$13M - \$21.9M

\$1.2M - \$4.6M

\$8.4M - \$20.7M

\$244 - \$600

111

fiber miles

1,147

locations

10.3

locations per mile

3

AERIAL

\$6.1M - \$8.2M

COST TO PASS

\$275K - \$1.1M

ISP INVESTMENT

\$5M - \$7.9M

FUNDING GAP

\$606 - \$955

annual cost per location
over 30 years

UNDERGROUND

\$8M - \$13.4M

\$275K - \$1.1M

\$6.9M - \$13.1M

\$834 - \$1,592

69

fiber miles

275

locations

4

locations per mile

Appendices

194	Appendix 1: Broadband Mapping and Methodology
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197	Appendix 2: Budget Projections
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199	Appendix 3: FCC Challenge Process
-----	-----------------------------------

222	Appendix 4: RPC / COG Overview Analysis
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223	Boonslick Regional Planning Commission
227	Bootheel Regional Planning & Economic Development Commission
230	Green Hills Regional Planning Commission
234	Harry S. Truman Coordinating Council
238	Kaysinger Basin Regional Planning Commission
242	lake of the Ozarks Council of Local Governments
245	Mark Twain Regional Council of Governments
249	Meramec Regional Planning Commission
253	Mid-Missouri Regional Planning Commission
257	Mo-Kan Regional Council
261	Northeast Missouri Regional Planning Commission
265	Northwest Missouri Regional Council of Governments
269	Ozark Foothills Regional Planning Commission
273	Pioneer Trails Regional Planning Commission
277	South Central Ozark Council of Governments
281	Southeast Missouri Regional Planning & Economic Dev Comm
284	Southwest Missouri Council of Governments

288	Appendix 5: Missouri Provider Tables
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APPENDIX 1

Broadband Mapping and Methodology

ABOUT THE MAPPING

Statewide, Regional, and County profiles were created under contract by Reid Consulting Group, LLC. for Missouri Association of Councils of Government (MACOG).

Broadband coverage maps are based on a rating system developed by Reid Consulting Group, LLC. Data sources include Ookla Speedtest Intelligence® data licensed by MACOG for the months of December 2020 through December 2023, carrier filings of available speeds with the FCC, carrier reports of actual broadband deployments to USAC (HUBB), RDOF Phase 1 eligibility, and population density.

Unserved and underserved ratings are color coded at the census block and block group level:

- **Dark Red:** Below 10/1 Mbps
- **Red:** Above 10/1; Below 25/3 Mbps
- **Orange:** Above 25/3; Below 50/10 Mbps
- **Yellow:** Above 50/10; Below 100/20 Mbps
- **Light Green:** Above 100/20; Below 200/50 Mbps
- **Green:** Above 200/50 Mbps
- **Grey:** Areas with no data/ speedtests submitted / no population

We conducted analysis of the raw Ookla® data for the months of December 2020 through July 2023, applying the following filters:

Filter

Include desktop, iOS, and Android app results*

Exclude results with GPS precision of greater than 200 meters**

Include only results from fixed broadband providers

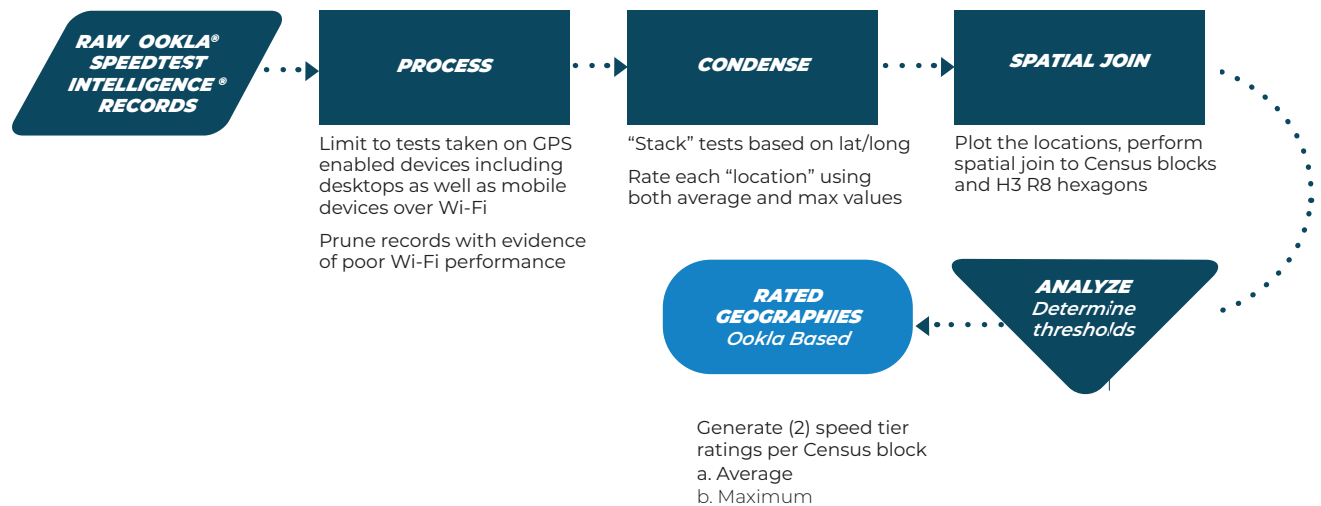
**iOS and Android results were included only if the device was connected to wi-fi during the speed test.*

*** To protect consumer privacy, Ookla® limits location precision to +/-100 meters. As a result, a single location may include multiple households and many individual tests.*

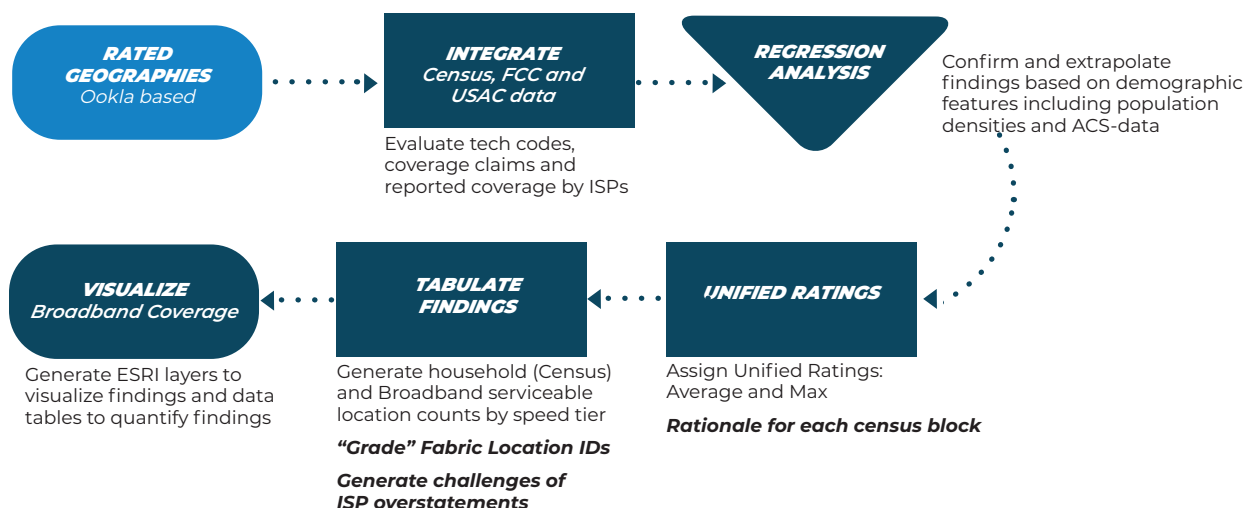
ANALYZING THE DATA

Using the Ookla® results we rated each location based on the maximum of up/down speeds for all tests at that location. We then graded census blocks based on the median up/down rating of all locations within each block. Block-by-block ratings were further refined based on RDOF eligibility, past HUBB deployments, and Form 477/ Fabric availability data. For blocks with no Ookla test results, extrapolated ratings were assigned where possible via comparative analysis of population density, block group ratings, FCC Fabric, HUBB data, and RDOF Phase 1 awards. Areas that could not be assigned an extrapolated rating are shown in gray on the map.

Generating Speed Ratings



Layering Additional Data Sources



BUSINESS BROADBAND OPPORTUNITY INDEX

Business demand for broadband varies based on company size and economic sector. The more employees at any given business location, the greater the demand will be for that location. Certain types of businesses also tend to consume more bandwidth regardless of size. For example, a medical clinic with 50 employees will need significantly more capacity than a construction contractor of similar size.

When planning for broadband expansion, it is important to consider the effect businesses have on overall need. The presence of a high-demand business or multiple businesses of any size in a particular area may make that area significantly more attractive to a broadband provider than the surrounding population density would predict.

The Business Broadband Opportunity Index helps planners visualize this economic impact by mapping the location of every business (as identified by Dun & Bradstreet) with a dot size proportional to that business' expected broadband demand. The larger the dot, the greater the demand. Calculations are as follows:

OPPORTUNITY INDEX = BUSINESS SIZE * INDEX MULTIPLIER

Category	Multiplier
Healthcare	5
Education & Libraries	5
Telecom and IT	5
Banking and Finance	5
Professional Services	4
Publishers	4
Real Estate	3
Hospitality	3
Non-Profit	3
Wholesalers	2
Dealers and Retail	2
Transportation	2
Childcare	2
Sports, Music & Arts	2
Religious and Fraternal	2
Manufacturing	2
Printing	2
Restaurants & Food	2
Farming	1
Hunting, Fishing	1
Energy	1
Raw Materials	1
Contractors	1
Textiles	1
Unclassified	1

Business Size

Number of employees as reported in Dun & Bradstreet. If count is blank, assume 1 employee.

Index Multiplier

A number from 1-5 based on industry sector.

On the Map

The greater the demand, the bigger the dot. To aid with visualization, comparative rankings from 1 to 10 are also assigned.

APPENDIX 2

Budget Projections

The budget is based on a fiber-to-the-home network with enough capacity to meet demand for the next 30 years. Expected investments and the funding gap will vary based on the area to be served, the population density, and the presence or absence of other services.

COST ESTIMATES

Investment Range

The Project Cluster Investment Range represents the lowest cost to the highest cost of to serve the total number of locations that are identified as below 50/10 Mbps in the entire County Cluster. In most cases the lowest cost represents aerial fiber deployment and the highest cost represents underground fiber deployment. For the individual counties, it is the average of the lowest and highest cost of each project area.

The total cost for each project area is the sum of make-ready and cost-to-pass multiplied by the number of unserved state, county, township, and unincorporated road miles. Estimated cost of electronics also is considered on a location-count basis.

$$\text{Unserved Miles} * (\text{Make-Ready} + \text{Cost-to-Pass}) \\ + (\text{Number of locations} * \text{Network electronics})$$

$$\text{Fiber Miles to Reach Target} * \text{Cost per Mile} = \text{Cost to Pass}$$

ISP Investment

This is the total an internet provider can spend to install fiber and still make a profit, estimated between \$1000 and \$4000 per household. As population density goes down, costs go up while expected investment remains the same.

$$\text{Households in Service Area} * \text{Investment per household}$$

Funding Gap

The funding gap is the difference between the total cost of the project and the available or anticipated private investment. For an internet service offering to be sustainable, grant or other public funding must be used to close this gap.

$$\text{Funding Gap} = \text{Total Projected Cost} - \text{ISP Investment}$$

30 Year Annual Cost

The 30 year amortized gap per household is calculated by dividing the funding gap by the total number of locations in the project area, then dividing the resulting figure by 30.

$$\text{Gap per location} = (\text{Funding Gap} \div \text{Number of households}) \div 30 \text{ years}$$

Fiber Miles

Fiber distance is based on the number of unserved state, county, local municipal and unincorporated road miles within the county.

Locations per Mile

Total number of unserved households divided by the number of unserved state, county, township, and unincorporated road miles.

APPENDIX 3

Challenge Process

Reid Consulting Group filed multiple rounds of FCC bulk challenges on behalf of MACOG. These challenges included addresses from across the state and targeted exaggerated claims from DSL providers and licensed fixed wireless carriers. Justification for these challenges combined knowledge of existing infrastructure with statistical analysis of crowdsourced speed test data. Because the FCC does not consider speed test data alone to be a valid basis for challenge, we cited our speed test analysis only as corroborating evidence to our primary infrastructure arguments. Those arguments were as follows:

DSL Cable Plant in Disrepair

DSL service, not only in rural Missouri but also across the rest of rural America, is delivered via twisted pair copper telephone cables that were originally installed in the 1940s-1960s. Most of those cables remain in service today. When delivered over well-maintained lines, DSL is capable of delivering reliable broadband service; however, almost all of our country's landline copper telephone cables are 50+ years old. With a useful lifespan of just 30 years, those cables are no longer to deliver reliable telephone service, let alone broadband.

Based on the decrepit condition of the country's twisted pair landline infrastructure, we challenged any location where a DSL provider claimed speeds above 25/3 Mbps.

Speed Rating Threshold

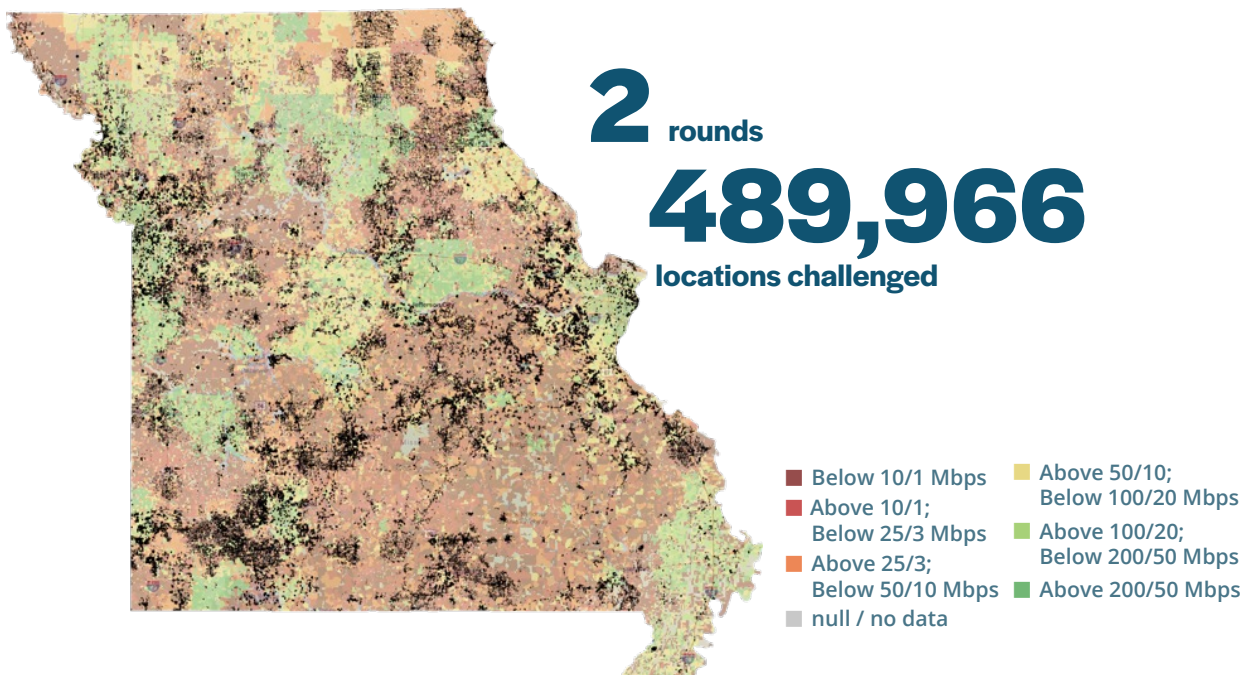
For all technologies, we only challenged locations where our maps showed speeds were below 25/3 Mbps and carrier claims were at least two speed tiers higher. For example, in our first round of fixed wireless challenges, we challenged nearly 48,000 locations that were claimed to be between 100/20 and 200/50 Mbps but which tested below 25/3 Mbps. An additional 27,000+ locations had no test results above 10/1 Mbps. The FCC does not accept this sort of analysis as a challenge justification. We included the data with our challenges anyway, to provide corroboration of our primary justifications and to ensure that the stark difference between carrier claims and citizen reality was documented in public record via the FCC Docket.

Fixed Wireless not a Mass Market Solution

Fixed wireless providers have significantly overstated their technology's geographic coverage and its ability to provide speeds above 100/20 Mbps at mass market take-rates. Our bulk challenge justification cited two specific justifications:

Overly optimistic signal propagation model: Fixed wireless carriers draw a 5-mile radius around each of their macro-towers and claim to offer 100/20 (or in some cases, gigabit speeds) to every location within that radius. Because fixed wireless requires line-of-sight transmission, such coverage is possible only in flat terrain. In hilly areas, particularly the steep terrain of the Ozarks, many subscribers will be unable to “see” a fixed wireless tower. To demonstrate just how widespread this problem can be, we conducted detailed, multi-tower viewshed analyses of multiple areas in the state, each representative of the kind of terrain found in that part of the state. Our analysis showed that even moderately rolling terrain included at least some signal shadows. In steep terrain, more locations were without signal than with. To make matters worse, frequencies above 3 GHz are readily absorbed by the water in tree leaves. These microwave band frequencies are now the most popular fixed wireless frequencies, in part because as frequencies rise, so does theoretical data capacity. With much of the southern part of the state heavily forested, signal attenuation makes fixed wireless even less viable.

Limited bandwidth on macro sites: Even if signal propagation were not an issue, bandwidth still would be a problem. For fixed wireless to be a mass-market solution, it must be able to support speeds of at least 100/20 Mbps for 80% of the locations within its coverage radius. Small cell wireless technology is capable of meeting this standard, but all of the providers in Missouri are using only macro towers. For macro-tower fixed wireless, all customers share bandwidth on the same transceiver or, in the best case, on a handful of directional transceivers that divide that tower's territory into quadrants. These transceivers are capable of delivering 100/20 Mbps to a small number of subscribers simultaneously, but if hundreds of subscribers were to connect at the same time, that tower's limited bandwidth would quickly be oversubscribed.



CHALLENGES GROUPED BY RATING

Missouri Combined Challenges | Round 1

ISP Reported	Max observed	Rating Delta	Location Count	Challenge Status
6, Above 200/50	1, Below 10/1	5	1,243	Challenged
6, Above 200/50	2, Above 10/1; Below 25/3	4	2,776	Challenged
5. Above 100/20; Below 200/50	1, Below 10/1	4	27,545	Challenged
5. Above 100/20; Below 200/50	2, Above 10/1; Below 25/3	3	47,880	Challenged
4. Above 50/10; Below 100/20	1, Below 10/1	3	6,109	Challenged
4. Above 50/10; Below 100/20	2, Above 10/1; Below 25/3	2	15,658	Challenged
3. Above 25/3; Below 50/10	1, Below 10/1	2	60,546	Challenged
3. Above 25/3; Below 50/10	2, Above 10/1; Below 25/3	1	124,639	Not Challenged
Locations with a Rating Delta of 2 or higher			161,757	Challenged
Locations with a Rating Delta of 1			124,639	Not Challenged

Missouri Fixed Wireless

ISP Reported	Max observed	Rating Delta	Location Count	Challenge Status
6, Above 200/50	1, Below 10/1	5	1,182	Challenged
6, Above 200/50	2, Above 10/1; Below 25/3	4	2,537	Challenged
5. Above 100/20; Below 200/50	1, Below 10/1	4	26,302	Challenged
5. Above 100/20; Below 200/50	2, Above 10/1; Below 25/3	3	44,930	Challenged
4. Above 50/10; Below 100/20	1, Below 10/1	3	2,727	Challenged
4. Above 50/10; Below 100/20	2, Above 10/1; Below 25/3	2	7,741	Challenged
3. Above 25/3; Below 50/10	1, Below 10/1	2	43,362	Challenged
3. Above 25/3; Below 50/10	2, Above 10/1; Below 25/3	1	92,144	Not Challenged
Locations with a Rating Delta of 2 or higher			128,781	Challenged
Locations with a Rating Delta of 1			92,144	Not Challenged

Missouri DSL

ISP Reported	Max observed	Rating Delta	Location Count	Challenge Status
6, Above 200/50	1, Below 10/1	5	61	Challenged
6, Above 200/50	2, Above 10/1; Below 25/3	4	239	Challenged
5. Above 100/20; Below 200/50	1, Below 10/1	4	1,243	Challenged
5. Above 100/20; Below 200/50	2, Above 10/1; Below 25/3	3	2,950	Challenged
4. Above 50/10; Below 100/20	1, Below 10/1	3	3,382	Challenged
4. Above 50/10; Below 100/20	2, Above 10/1; Below 25/3	2	7,917	Challenged
3. Above 25/3; Below 50/10	1, Below 10/1	2	17,184	Challenged
3. Above 25/3; Below 50/10	2, Above 10/1; Below 25/3	1	32,495	Not Challenged
Locations with a Rating Delta of 2 or higher			32,976	Challenged
Locations with a Rating Delta of 1			32,495	Not Challenged

Missouri Combined Challenges | Round 2

ISP Reported	Max observed	Rating Delta	Location Count	Challenge Status
6, Above 200/50	1, Below 10/1	5	31,510	Challenged
6, Above 200/50	2, Above 10/1; Below 25/3	4	29,801	Challenged
6, Above 200/50	3, Above 25/3; Below 50/10	3	68,770	Challenged
5, Above 100/20; Below 200/50	1, Below 10/1	4	44,655	Challenged
5, Above 100/20; Below 200/50	2, Above 10/1; Below 25/3	3	46,371	Challenged
5, Above 100/20; Below 200/50	3, Above 25/3; Below 50/10	2	51,870	Challenged
4, Above 50/10; Below 100/20	1, Below 10/1	3	6,136	Challenged
4, Above 50/10; Below 100/20	2, Above 10/1; Below 25/3	2	7,681	Challenged
3, Above 25/3; Below 50/10	1, Below 10/1	2	41,415	Challenged
3, Above 25/3; Below 50/10	2, Above 10/1; Below 25/3	1	48,398	Not Challenged
Totals			328,209	Challenged
			48,398	Not Challenged

Missouri Fixed Wireless Challenges | Round 2

ISP Reported	Max observed	Rating Delta	Location Count	Challenge Status
6, Above 200/50	1, Below 10/1	5	810	Challenged
6, Above 200/50	2, Above 10/1; Below 25/3	4	2,450	Challenged
5, Above 100/20; Below 200/50	1, Below 10/1	4	30,521	Challenged
5, Above 100/20; Below 200/50	2, Above 10/1; Below 25/3	3	30,065	Challenged
4, Above 50/10; Below 100/20	1, Below 10/1	3	3,673	Challenged
4, Above 50/10; Below 100/20	2, Above 10/1; Below 25/3	2	3,420	Challenged
3, Above 25/3; Below 50/10	1, Below 10/1	2	25,400	Challenged
3, Above 25/3; Below 50/10	2, Above 10/1; Below 25/3	1	26,683	Not Challenged
Totals			96,339	Challenged
			26,683	Not Challenged

Missouri DSL Challenges | Round 2

ISP Reported	Max observed	Rating Delta	Location Count	Challenge Status
6, Above 200/50	1, Below 10/1	5	497	Challenged
6, Above 200/50	2, Above 10/1; Below 25/3	4	774	Challenged
5, Above 100/20; Below 200/50	1, Below 10/1	4	921	Challenged
5, Above 100/20; Below 200/50	2, Above 10/1; Below 25/3	3	1,531	Challenged
4, Above 50/10; Below 100/20	1, Below 10/1	3	2,463	Challenged
4, Above 50/10; Below 100/20	2, Above 10/1; Below 25/3	2	4,261	Challenged
3, Above 25/3; Below 50/10	1, Below 10/1	2	16,015	Challenged
3, Above 25/3; Below 50/10	2, Above 10/1; Below 25/3	1	21,715	Not Challenged
Totals			26,462	Challenged
			21,715	Not Challenged

Missouri Fiber Challenges | Round 2

ISP Reported	Max observed	Rating Delta	Location Count	Challenge Status
6, Above 200/50	1, Below 10/1	5	24,189	Challenged
6, Above 200/50	2, Above 10/1; Below 25/3	4	18,746	Challenged
6, Above 200/50	3, Above 25/3; Below 50/10	3	45,664	Challenged
5, Above 100/20; Below 200/50	1, Below 10/1	4	1,925	Challenged
5, Above 100/20; Below 200/50	2, Above 10/1; Below 25/3	3	2,074	Challenged
5, Above 100/20; Below 200/50	3, Above 25/3; Below 50/10	2	5,861	Challenged
Totals			98,459	Challenged

Missouri Cable Modem Challenges | Round 2

ISP Reported	Max observed	Rating Delta	Location Count	Challenge Status
6, Above 200/50	1, Below 10/1	5	6,014	Challenged
6, Above 200/50	2, Above 10/1; Below 25/3	4	7,831	Challenged
6, Above 200/50	3, Above 25/3; Below 50/10	3	23,106	Challenged
5, Above 100/20; Below 200/50	1, Below 10/1	4	11,288	Challenged
5, Above 100/20; Below 200/50	2, Above 10/1; Below 25/3	3	12,701	Challenged
5, Above 100/20; Below 200/50	3, Above 25/3; Below 50/10	2	46,009	Challenged
Totals			106,949	Challenged

CHALLENGES BY COUNTY ROUND TWO

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Adair County	59	45	150	144	18	23	359	173	716	518	2205
Cable								111	115	359	585
Sparklight								111	115	359	585
DSL			4								4
Mark Twain Rural Telephone Company			4								4
Fiber					18	22	359	62	601	159	1221
Bluebird Network LLC								9	6	58	73
Mark Twain Rural Telephone Company					15	22	359	3		1	400
Northeast Missouri Rural Telecommunications					3			45	595	77	720
Socket Telecom, LLC								5		23	28
Fixed Wireless	59	45	146	144		1					395
Mark Twain Communications Company	30	45	121	143		1					340
T-Mobile US				1							1
UNITED STATES CELLULAR CORPORATION	29		25								54
Andrew County	34	2	2		82	91	127	552	111	445	1446
Cable					53	42	127				222
Optimum					53	42	127				222
DSL	17		2								19
Brightspeed	16										16
Windstream Missouri, Inc.	1		2								3
Fiber								552	111	445	1108
Bluebird Network LLC								15	1	3	19
United Fiber								537	110	442	1089
Fixed Wireless	17	2			29	49					97
Mercury Broadband	6	2			20	28					56
T-Mobile US	11				9	21					41
Atchison County	154							78	519	981	1732
DSL	145										145
Brightspeed	1										1
Rock Port Telephone Company	144										144
Fiber								78	519	981	1578
IAMO Telephone Company								3	53	319	375
Midwest Data Center								75	304	33	412
Rock Port Telephone Company									162	629	791
Fixed Wireless	9										9
T-Mobile US	9										9
Audrain County	200	6	3	7	185	142	424	150	110	237	1464
Cable					132	68	314				514
Charter Communications Inc					132	68	314				514
DSL	19		2	4		5			2		32
Brightspeed	17										17
Windstream Missouri, Inc.	2		2	4		5			2		15
Fiber					27	25	110	150	108	237	657
Air Link Rural Broadband, LLC					19	8	82				109
Bluebird Network LLC							1	17	26	42	86
Callabyte								9	10	7	26
Charter Communications Inc					6	12	6	1	11	1	37
Kingdom Telephone Co									4	6	10
OREGON TELEPHONE CORPORATION								5	7	103	115
PHYNX								104	40	74	218
Ralls Technologies, L.L.C.					2	5	21				28
Socket Telecom, LLC								13	1	4	18
Windstream Missouri, Inc.								1	9		10
Fixed Wireless	181	6	1	3	26	44					261
T-Mobile US	86	6			20	44					156
UNITED STATES CELLULAR CORPORATION	85				6						91
VERIZON	7										7
Windstream Missouri, Inc.	3		1	3							7
Barry County	377	3	14	37	87	81	56	129	249	754	1787
Cable					38	28	56	15	27	104	268
Cox Communications						5					5
MCC Missouri LLC								15	27	104	146
Optimum					38	23	56				117
DSL	117		13	37	9	40		12	12		240
Brightspeed	107		2								109
Windstream Missouri, Inc.	10		11	37	9	40		12	12		131
Fiber								102	210	650	962
BarryElectricCooperative								98	199	639	936
MISSOURI TELECOM								4	11	11	26
Fixed Wireless	260	3	1		40	13					317
T-Mobile US	21				11	4					36
UNITED STATES CELLULAR CORPORATION	202				8						210
VERIZON	12										12
Windstream Missouri, Inc.	20		1								21
Wisper ISP, LLC	5	3			21	9					38
Barton County	90	6	11	20	82	199		161	98	131	798
Cable								118	42	88	248
MCC Missouri LLC								118	42	88	248
DSL	2		2	10	22	20		26	15		97
Windstream Missouri, Inc.	2		2	10	22	20		26	15		97
Fiber								17	41	43	101
Craw Kan Telephone Cooperative Inc								5	35	43	83
K-PowerNet LLC								12	6		18
Fixed Wireless	88	6	9	10	60	179					352
T-Mobile US	31	1			52	93					177
UNITED STATES CELLULAR CORPORATION	25										25
VERIZON	18										18
Windstream Missouri, Inc.	14		9	10							33

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Wisper ISP, LLC		5			8	86					99
Bates County	1007		8	7	38	16		223	97	220	1616
Cable								85	88	133	306
MCC Missouri LLC								85	88	133	306
DSL	969		8	7							984
Brightspeed	33										33
Consolidated Communications	10		8	7							25
Craw Kan Telephone Cooperative Inc	156										156
Fastwyre Broadband	770										770
Fiber								138	9	87	234
Bluebird Network LLC								3			3
Conexon Connect LLC								69	9	14	92
Craw Kan Telephone Cooperative Inc								38		53	91
Fidelity								28		20	48
Fixed Wireless	38				38	16					92
T-Mobile US	23				11	14					48
VERIZON	7										7
Wisper ISP, LLC	8				27	2					37
Benton County	672	48	1	1	158	77		228	81	187	1453
DSL	68		1	1							70
Brightspeed	68		1								69
Windstream Missouri, Inc.				1							1
Fiber								228	81	187	496
Co-Mo Connect								228	81	187	496
Fixed Wireless	604	48			158	77					887
Liberty Link	10					2					12
T-Mobile US	138	48			108	75					369
UNITED STATES CELLULAR CORPORATION	353				35						388
VERIZON	1										1
Wisper ISP, LLC	102				15						117
Bollinger County	16				67	15	1	20		3	122
Cable					13						13
Charter Communications Inc					13						13
Fiber					22	2	1	20		3	48
Charter Communications Inc					22	2	1				25
GoSEMO, LLC								19		3	22
Sho-Me Technologies, LLC								1			1
Fixed Wireless	16				32	13					61
T-Mobile US	11										11
VERIZON	5										5
Wisper ISP, LLC					32	13					45
Boone County	652	148	41	58	658	1172	673	308	749	1766	6225
Cable					51	155	567	49	300	628	1750
Charter Communications Inc					49	143	528	2	12	39	773
MCC Missouri LLC					2	12	39	47	288	589	977
DSL	403		40	58							501
Brightspeed	399		40	58							497
Socket Telecom, LLC	4										4
Fiber					36	22	106	259	449	1138	2010
Air Link Rural Broadband, LLC					31		58	1			90
Bluebird Network LLC							8	29	38	200	275
Brightspeed					1			7	29	31	68
Callabyte								6	1		7
Chariton Valley Communication Corporation								3	1		4
Charter Communications Inc							10	33	9	18	122
PHYNX									16	27	43
Socket Telecom, LLC					4	12	7	204	346	828	1401
Fixed Wireless	249	148	1		571	995					1964
iZones	23	144	1		442	918					1528
T-Mobile US	122	4			114	77					317
UNITED STATES CELLULAR CORPORATION	104				15						119
Buchanan County	300	77			1430	503	385	372	86	189	3342
Cable					262	76	385				723
Optimum					262	76	385				723
DSL	12										12
Brightspeed	12										12
Fiber								372	86	189	647
Bluebird Network LLC								46	5	65	116
United Fiber								326	81	124	531
Fixed Wireless	288	77			1168	427					1960
Mercury Broadband	143	77			944	402					1566
T-Mobile US	129				205	21					355
VERIZON	16				15						31
Wisper ISP, LLC					4	4					8
Butler County	55	15	2	16	548	411	244	161	259	765	2476
Cable					18	34	244	136	230	725	1387
BOYCOM CABLEVISION INC.					18	34	244	13	128	378	815
Sparklight								123	102	347	572
DSL	5		1	14	13	19		15	18		85
Windstream Missouri, Inc.	5		1	14	13	19		15	18		85
Fiber								10	11	40	61
Arrowhead Broadband									2	8	10
Big River Broadband								10	5	10	25
BOYCOM CABLEVISION INC.									4	22	26
Fixed Wireless	50	15	1	2	517	358					943
T-Mobile US	5				24						29
VERIZON	20				1						21
Windstream Missouri, Inc.	24		1	1		1					27
Wisper ISP, LLC	1	15		1	492	357					866
Caldwell County	357	10	1	1	181	196		99	250	411	1506
DSL	192		1	1							194

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Brightspeed	61		1	1							63
Green Hills Technologies	131										131
Fiber											760
Bluebird Network LLC								99	250	411	91
Brightspeed								10	61	20	1
Grand River Mutual Telephone Corporation									1		16
Green Hills Technologies								1	1	14	652
Fixed Wireless	165	10			181	196		88	187	377	552
Mercury Broadband	8	10			55	57					130
T-Mobile US	144				123	139					406
VERIZON	13				3						16
Callaway County	32	3	9	4	107	30	178	242	185	768	1558
Cable					78	11	178	8	24	1	300
Charter Communications Inc					78	11	178				267
MCC Missouri LLC								8	24	1	33
DSL				2							2
Kingdom Telephone Co				2							2
Fiber					1			234	161	767	1163
Bluebird Network LLC								1	5	8	14
Callabyte								109	93	355	557
Charter Communications Inc					1			2		1	4
Kingdom Telephone Co								34	47	212	293
Socket Telecom, LLC								88	16	191	295
Fixed Wireless	32	3	9	2	28	19					93
T-Mobile US	26				3	11					40
UNITED STATES CELLULAR CORPORATION	1				1						2
VERIZON	4		9	2							15
Wisper ISP, LLC	1	3			24	8					36
Camden County	123	71			326	590	480	82	34	72	1778
Cable					45	96	475	29		3	648
Cable America								29		3	32
Charter Communications Inc					45	96	475				616
DSL	67										67
Brightspeed	23										23
OREGON TELEPHONE CORPORATION	44										44
Fiber						1	5	53	34	69	162
Charter Communications Inc						1	4			2	7
Co-Mo Connect								53	34	66	153
Sho-Me Technologies, LLC							1			1	2
Fixed Wireless	56	71			281	493					901
T-Mobile US	31	1			21	1					54
UNITED STATES CELLULAR CORPORATION	7				6						13
Wisper ISP, LLC	18	70			254	492					834
Cape Girardeau County	70				289	126	543	124	24	56	1232
Cable					163	116	530				809
Charter Communications Inc					163	116	530				809
Fiber					21	3	13	124	24	56	241
Big River Broadband								3	1	11	15
Charter Communications Inc					21	2	13	1	2		39
GoSEMO, LLC								88	11	27	126
Ritter Communications						1		32	10	18	61
Fixed Wireless	70				105	7					182
T-Mobile US	55				10	6					71
VERIZON	15										15
Wisper ISP, LLC					95	1					96
Carroll County	377							212	247	224	1060
Cable								120	182	98	400
MCC Missouri LLC								120	182	98	400
DSL	368										368
Brightspeed	67										67
Green Hills Technologies	301										301
Fiber								92	65	126	283
Bluebird Network LLC								42	3	10	55
Chariton Valley Telephone Corporation								24	15	23	62
Green Hills Technologies								26	47	93	166
Fixed Wireless	9										9
T-Mobile US	9										9
Carter County	87		3	6	48	105	36	7	6		298
Cable					36	97	35				168
BOYCOM CABLEVISION INC.					36	97	35				168
DSL	4		3	6	8	8		5	6		40
Brightspeed	4										4
Windstream Missouri, Inc.			3	6	8	8		5	6		36
Fiber								1	2		3
McCormack Networks								1	2		3
Fixed Wireless	83				4						87
T-Mobile US					4						4
UNITED STATES CELLULAR CORPORATION	83										83
Cass County	532	74	345	318	448	623	1085	417	401	571	4814
Cable					116	236	1073	114		71	1610
Charter Communications Inc					12	49	356				417
Fidelity					33	92	369				494
MCC Missouri LLC								94		59	153
Xfinity					71	95	348	20		12	546
DSL	278		228	139	3	5					653
AT&T Inc	17		8	26	3	5					59
Brightspeed	79		3	1							83
Consolidated Communications	111		159	105							375
MoKan Dial, Inc.	71		58	7							136
Fiber					3	19	12	303	401	500	1238
AT&T Inc								2	4	174	180

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Charter Communications Inc					2	19	12	97	231	159	520
Conexon Connect LLC					1			204	149	88	442
Google Fiber									17	72	89
UPN										7	7
Fixed Wireless	254	74	117	179	326	363					1313
Liberty Link	17				6						23
T-Mobile US	142	2	27	8	68	70					317
VERIZON	52	35	67	155	36	23					368
Wisper ISP, LLC	43	37	23	16	216	270					605
Cedar County	186	9	43	53	61	66	371	160	20	33	1002
Cable					29	39	371				439
Fidelity					29	39	371				439
DSL	10		10	38	8	19		12	2		99
Brightspeed	8										8
Windstream Missouri, Inc.	2		10	38	8	19		12	2		91
Fiber								148	18	33	199
Conexon Connect LLC								148	18	33	199
Fixed Wireless	176	9	33	15	24	8					265
Click Computers Inc.	38	8	27	14	15	7					109
T-Mobile US	21										21
VERIZON	32										32
Windstream Missouri, Inc.	85	1	6	1		1					94
Wisper ISP, LLC					9						9
Chariton County	307		16	7	66	32		243	89	92	852
Cable								6	23	30	59
MCC Missouri LLC								6	23	30	59
DSL			5	5	27	32		43	11		123
Windstream Missouri, Inc.			5	5	27	32		43	11		123
Fiber					35			194	55	62	346
Air Link Rural Broadband, LLC					35						35
Chariton Valley Communication Corporation								138	47	18	203
Chariton Valley Telephone Corporation								56	8	44	108
Fixed Wireless	307		11	2	4						324
T-Mobile US	114				2						116
UNITED STATES CELLULAR CORPORATION	135				2						137
VERIZON	17										17
Windstream Missouri, Inc.	41		11	2							54
Christian County	482	16	15	33	366	416	801	456	689	361	3635
Cable					267	285	801	41	6	112	1512
Cable America					149	61	315			58	583
MCC Missouri LLC								41	6	54	101
Optimum					118	224	486				828
DSL	201		15	32	2	9					259
AT&T Inc	47		13	26	2	9					97
Brightspeed	154		2	6							162
Fiber								42	35	249	326
AT&T Inc									8	45	53
Brightspeed									1		1
K-PowerNet LLC										46	46
Sho-Me Technologies, LLC										1	1
Total HighSpeed Internet Solutions								42	26	157	225
Fixed Wireless	281	16		1	97	122		373	648		1538
T-Mobile US	215				60	96		6			377
UNITED STATES CELLULAR CORPORATION	4										4
VERIZON	47							3			50
Wisper ISP, LLC	7	1			36	25			1		70
WON Communications LLC	8	15		1	1	1		364	647		1037
Clark County	713	417	629	419	497	484	523	531	545	465	5223
DSL	151			1							152
Brightspeed	151			1							152
Fiber					17	23	523	531	545	465	2104
Bluebird Network LLC								29	80	62	171
Mark Twain Rural Telephone Company					17	23	521			6	567
Northeast Missouri Rural Telecommunications							2	7	9	381	399
yondoo Broadband, LLC								495	456	16	967
Fixed Wireless	562	417	629	418	480	461					2967
FullSpeed LLC	125		36		2						163
Mark Twain Communications Company	161	175	370	332	103	88					1229
T-Mobile US	136	242	127	86	286	373					1250
UNITED STATES CELLULAR CORPORATION	140		96		89						325
Clay County	918	286	587	518	1696	1112	1080	2257	949	2791	12194
Cable					155	359	1045	604	54	402	2619
Charter Communications Inc					155	359	1045				1559
MCC Missouri LLC								604	54	402	1060
DSL	133		63	194	41	35					466
AT&T Inc	49		39	194	41	35					358
Brightspeed	65		2								67
Consolidated Communications	19		22								41
Fiber					26	34	35	1653	892	2389	5029
AT&T Inc						1		8	70	107	186
Bluebird Network LLC								30	20	73	123
Charter Communications Inc					19	31	31	225	49	263	618
Consolidated Communications									1		1
Google Fiber							1	68	136	597	802
Intercept Wireless; Intercept Fiber								4	3	50	57
KC Fiber								6		6	12
United Fiber					7	1	3	1312	605	1293	3221
UPN						1			8		9
Fixed Wireless	785	286	524	324	1474	684			3		4080
Intercept Wireless; Intercept Fiber	66		15		4						85
T-Mobile US	347	40	101	45	581	165					1279

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
VERIZON	269	66	319	232	236	91			2		1215
Wisper ISP, LLC	103	180	89	47	653	428			1		1501
Clinton County	485	49	51	10	370	235		818	401	589	3008
Cable								20	38	88	146
MCC Missouri LLC								20	38	88	146
DSL	128										128
Brightspeed	128										128
Fiber					9	13		798	363	501	1684
Bluebird Network LLC								20	4	23	47
Charter Communications Inc					9	7		39	7		62
Grand River Mutual Telephone Corporation								11	49	51	111
United Fiber						6		728	303	427	1464
Fixed Wireless	357	49	51	10	361	222					1050
Mercury Broadband	12	45			97	122					276
T-Mobile US	298	1	10	1	164	26					500
VERIZON	46	3	41	7	8	3					108
Wisper ISP, LLC	1			2	92	71					166
Cole County	252	234	20	38	608	1421	392	193	683	1244	5085
Cable					80	418	392	94	314	747	2045
MCC Missouri LLC					3	10	36	91	304	711	1155
Optimum					77	408	356	3	10	36	890
DSL	33		7	38		1					79
AT&T Inc				6		1					7
Brightspeed	33		7	32							72
Fiber								99	369	497	965
AT&T Inc									1	1	2
Bluebird Network LLC								19	50	79	148
Brightspeed									1	7	8
Callabyte								20	72	112	204
Co-Mo Connect								37	72	77	186
Socket Telecom, LLC								23	173	221	417
Fixed Wireless	219	234	13		528	1002					1996
T-Mobile US	83	7			35	28					153
UNITED STATES CELLULAR CORPORATION	68		1		31						100
VERIZON	9		9		10						28
Wisper ISP, LLC	59	227	3		452	974					1715
Cooper County	128		9	109	44	1		341	41	855	1528
DSL	38		8	109							155
Brightspeed	5										5
Otelco Mid-Missouri LLC	33		8	109							150
Fiber								341	41	855	1237
Bluebird Network LLC								18	6	104	128
Co-Mo Connect								269	22	178	469
Otelco Mid-Missouri LLC										7	7
Socket Telecom, LLC								54	13	532	599
UPN										34	34
Fixed Wireless	90		1		44	1					136
T-Mobile US	72				44	1					117
VERIZON			1								1
Wisper ISP, LLC	18										18
Crawford County	473	38	89	127	139	220	351	7	37	101	1582
Cable					30	47	329				406
Charter Communications Inc					30	46	315				391
Fidelity						1	14				15
DSL	402		3	3							408
Brightspeed	172		3	3							178
Fidelity Telephone LLC	40										40
Steelville Telephone Exchange, Inc.	190										190
Fiber					2	4	22	7	37	101	173
Charter Communications Inc					2	4	21			1	28
Sho-Me Technologies, LLC								1			1
Steelville Telephone Exchange, Inc.							1	6	37	100	144
Fixed Wireless	71	38	86	124	107	169					595
BlueBit Networks	44	5	70	112	21	13					265
T-Mobile US	20				2						22
Wisper ISP, LLC	7	33	16	12	84	156					308
Dade County	104		1	2	1	9	1	145	30	167	460
Cable								145	29	167	341
MCC Missouri LLC								145	29	167	341
DSL	59		1								60
Brightspeed	59		1								60
Fiber					1	8	1		1		11
Miller Telephone Company					1	8	1				10
SpringNet									1		1
Fixed Wireless	45			2		1					48
T-Mobile US	3					1					4
UNITED STATES CELLULAR CORPORATION	22										22
VERIZON	20										20
Windstream Missouri, Inc.				2							2
Dallas County	279	6	9	5	441	636		19	94	442	1931
DSL	233		9	5							247
Brightspeed	233		9	5							247
Fiber								19	94	442	555
Fidelity								11	65	418	494
Total HighSpeed Internet Solutions								8	29	24	61
Fixed Wireless	46	6			441	636					1129
T-Mobile US	37				60	47					144
UNITED STATES CELLULAR CORPORATION	3										3
VERIZON	1										1
Wisper ISP, LLC	5	6			381	589					981

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Davies County	193	35	33	78	364	300		107	165	611	1886
DSL	69		13	51	78	25		68	20		324
Grand River Mutual Telephone Corporation	56										56
Windstream Missouri, Inc.	13		13	51	78	25		68	20		268
Fiber								39	145	611	795
Bluebird Network LLC								5	3		75
Grand River Mutual Telephone Corporation								6	11		37
Green Hills Technologies									21		182
Mid-States Services, LLC								25	110	361	496
United Fiber								3		2	5
Fixed Wireless	124	35	20	27	286	275					767
Mercury Broadband	14	23	4	4	253	253					551
T-Mobile US	48	3	2		16	18					87
VERIZON	8				1						9
Windstream Missouri, Inc.	54	9	14	23	16	4					120
DeKalb County	118	16		1	251	81		496	130	180	1273
Cable								33	31	48	112
MCC Missouri LLC								33	31	48	112
DSL	63			1	4						68
Brightspeed	62										62
Windstream Missouri, Inc.	1			1	4						6
Fiber								463	99	132	694
Bluebird Network LLC								29	21	10	60
United Fiber								434	78	122	634
Fixed Wireless	55	16			247	81					399
Mercury Broadband	7	16			201	57					281
T-Mobile US	44				45	24					113
VERIZON	1										1
Windstream Missouri, Inc.	3				1						4
Dent County	200	8	5	1	198	176	851				1439
Cable					58	72	851				981
Fidelity					58	72	851				981
DSL	144		5	1							150
Brightspeed	125		5	1							131
Steelville Telephone Exchange, Inc.	19										19
Fixed Wireless	56	8			140	104					308
UNITED STATES CELLULAR CORPORATION	44				12						56
Wisper ISP, LLC	12	8			128	104					252
Douglas County	287	50			346	313		176	88	490	1750
Cable								176	88	490	754
MCC Missouri LLC								176	88	490	754
DSL	33										33
Brightspeed	33										33
Fixed Wireless	254	50			346	313					963
UNITED STATES CELLULAR CORPORATION	189				62						251
VERIZON	3										3
Wisper ISP, LLC	62	50			284	313					709
Dunklin County	28							1012	848	1485	3373
Cable								404	491	768	1663
Ritter Communications								64	11	34	109
Sparklight								340	480	734	1554
Fiber								608	357	717	1682
empower, delivered by CECC								1		12	13
FDF Communications									1	2	3
Kennett City Light Gas and Water								187	316	549	1052
MCEC Fiber								2			2
PD Fiber, LLC								418	40	154	612
Fixed Wireless	28										28
VERIZON	28										28
Franklin County	1110	159	124	118	856	1647	1217	23	149	130	5533
Cable					202	431	1182				1815
Charter Communications Inc					196	418	1092				1706
Fidelity					6	13	90				109
DSL	748		33	21	15	5					822
AT&T Inc	32		33	21	15	5					106
Fidelity Telephone LLC	716										716
Fiber					23	27	35	23	149	130	387
Bluebird Network LLC										6	6
Charter Communications Inc					23	27	35	2	10	3	100
Fidelity								17	13	27	57
Fidelity Telephone LLC								4	45	83	132
Sho-Me Technologies, LLC									1		1
UPN									80	11	91
Fixed Wireless	362	159	91	97	616	1184					2509
BlueBit Networks	22	6	25	44							97
T-Mobile US	200	57	9	1	258	298					823
VERIZON	82	2	54	47	16	6					207
Wisper ISP, LLC	58	94	3	5	342	880					1382
Gasconade County	401		1	2	16	15		35	183	330	983
Cable								5	11	40	56
MCC Missouri LLC								5	11	40	56
DSL	359		1	2							362
Brightspeed	230		1	2							233
Fidelity Telephone LLC	129										129
Fiber					1			30	172	290	493
Brightspeed					1						1
Callabyte								18	35	40	93
Fidelity									3	7	10
Fidelity Telephone LLC								12	134	243	389
Fixed Wireless	42				15	15					72
T-Mobile US	33				15	15					63
UNITED STATES CELLULAR CORPORATION	2										2

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
VERIZON	7										7
Gentry County	150		11	21	96	63		484	157	774	1756
Cable								65	51	317	433
MCC Missouri LLC								65	51	317	433
DSL	25		9	21	12	14		11	5		97
Grand River Mutual Telephone Corporation	22										22
Windstream Missouri, Inc.	3		9	21	12	14		11	5		75
Fiber								408	101	457	966
Bluebird Network LLC								28	1	27	56
Grand River Mutual Telephone Corporation								17	9	19	45
United Fiber								363	91	411	865
Fixed Wireless	125		2		84	49					260
Mercury Broadband					1						1
T-Mobile US	125				83	49					257
Windstream Missouri, Inc.			2								2
Greene County	537	136	45	250	925	784		2206	2176	5881	12940
Cable								490	790	3257	4537
Cable America								112	243	1131	1486
MCC Missouri LLC								378	547	2126	3051
DSL	108		45	250	16	77					496
AT&T Inc	104		41	246	16	77					484
Choctaw Telephone Company	4		2	4							10
Windstream Missouri, Inc.			2								2
Fiber								1556	1227	2624	5407
AT&T Inc								19	55	279	353
Bluebird Network LLC								32	14	266	312
Net Vision Communications								1			1
Sho-Me Technologies, LLC									1	2	3
SpringNet								142	341	1296	1779
Total HighSpeed Internet Solutions								1362	816	781	2959
Fixed Wireless	429	136			909	707		160	159		2500
T-Mobile US	290	6			126	62		10	8		502
UNITED STATES CELLULAR CORPORATION	36				2			12			50
VERIZON	46				7						53
Wisper ISP, LLC	36	88			758	629		15	8		1534
WON Communications LLC	21	42			16	16		123	143		361
Grundy County	220				3	2		144	131	1450	1950
DSL	210										210
Grand River Mutual Telephone Corporation	210										210
Fiber								144	131	1450	1725
Bluebird Network LLC								17	21	121	159
Grand River Mutual Telephone Corporation								35	31	243	309
Mid-States Services, LLC								92	79	1086	1257
Fixed Wireless	10				3	2					15
T-Mobile US	8				3	2					13
VERIZON	2										2
Harrison County	356		1		20			126	191	889	1583
Cable								17	57	44	118
MCC Missouri LLC								17	57	44	118
DSL	319										319
Grand River Mutual Telephone Corporation	319										319
Fiber								109	134	845	1088
Grand River Mutual Telephone Corporation								109	134	845	1088
Fixed Wireless	37		1		20						58
T-Mobile US	19				16						35
VERIZON	17				4						21
Windstream Missouri, Inc.	1		1								2
Henry County	463		3	3	199	409	246	5	14	40	1382
Cable					27	37	244				308
Charter Communications Inc					27	37	244				308
DSL	150		3	3							156
Brightspeed	149		2	3							154
Consolidated Communications	1		1								2
Fiber					2	2	2	5	14	40	65
Bluebird Network LLC								5	10	21	36
Charter Communications Inc					2	2	2				6
Socket Telecom, LLC									4	15	19
UPN										4	4
Fixed Wireless	313				170	370					853
Liberty Link	231				149	366					746
T-Mobile US	52				21	4					77
VERIZON	30										30
Hickory County	347	31	4	3	512	174					1071
DSL	186		4	3							193
Brightspeed	186		4	3							193
Fixed Wireless	161	31			512	174					878
T-Mobile US	146				46						192
VERIZON	2										2
Wisper ISP, LLC	13	31			466	174					684
Holt County	816		190	8	132			695	14	318	2173
DSL	517		190	8							715
Brightspeed	64		1								65
Fastwyre Broadband	253										253
Oregon Farmers Mutual Telephone Company	200		189	8							397
Fiber								695	14	318	1027
Bluebird Network LLC								1			1
Midwest Data Center								685	14	313	1012
United Fiber								9		5	14
Fixed Wireless	299				132						431
T-Mobile US	299				132						431
Howard County	61		2	36	300	228	324	426	114	154	1645

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
DSL	20		1	2							23
Brightspeed	20		1	2							23
Fiber					299	228	324	426	114	154	1545
Air Link Rural Broadband, LLC					285	227	324	208	87	12	1143
Bluebird Network LLC					1			19	2	18	40
Chariton Valley Telephone Corporation						1		2			3
Socket Telecom, LLC					13			197	25	124	359
Fixed Wireless	41		1	34	1						77
iZones			1	34							35
T-Mobile US					1						1
UNITED STATES CELLULAR CORPORATION	34										34
VERIZON	7										7
Howell County	1054	544	3	13	770	1784	780	115	544	643	6250
Cable					22	161	780	71	243	568	1845
Cable America								71	243	568	882
Fidelity					22	161	780				963
DSL	271		3	13							287
Brightspeed	271		3	13							287
Fiber								44	301	75	420
Bluebird Network LLC								22	123	38	183
Current High Speed								13	166	28	207
Fidelity									8	3	11
LTD Broadband								1		2	3
NEXT, Powered by NAEC, LLC								7	2	2	11
Sho-Me Technologies, LLC								1	2	2	5
Fixed Wireless	783	544			748	1623					3698
Peace Valley Telephone	17										17
T-Mobile US	91	23			45	51					210
UNITED STATES CELLULAR CORPORATION	569				51						620
VERIZON	17				1						18
Wisper ISP, LLC	89	521			651	1572					2833
Iron County	95		1	1	58	39	163		1		358
Cable					50	37	162				249
Charter Communications Inc					50	37	162				249
DSL	86		1	1							88
Brightspeed	83		1	1							85
Steelville Telephone Exchange, Inc.	3										3
Fiber							1		1		2
Charter Communications Inc							1				1
Steelville Telephone Exchange, Inc.									1		1
Fixed Wireless	9				8	2					19
T-Mobile US	9				8	2					19
Jackson County	1126	167	735	780	2031	1844	5884	1128	1153	4131	18979
Cable					1260	1280	5793	87	33	71	8524
Charter Communications Inc					886	632	3366				4884
Everfast Fiber					14	39	43				96
Xfinity					360	609	2384	87	33	71	3544
DSL	292		250	325	71	72					1010
AT&T Inc	128		244	323	70	72					837
Brightspeed	164		6	2	1						173
Fiber					53	65	91	1035	1120	4060	6424
AT&T Inc					4	12	5	145	352	997	1515
Bluebird Network LLC						2	5	66	27	89	189
Charter Communications Inc					49	50	76	9	31	31	246
Everfast Fiber								4	15	108	127
Google Fiber							3	781	575	2806	4165
UPN						1	2	30	120	29	182
Fixed Wireless	834	167	485	455	647	427		6			3021
T-Mobile US	549	38	110	57	436	277		4			1471
VERIZON	267	112	358	388	133	67		2			1327
Wisper ISP, LLC	18	17	17	10	78	83					223
Jasper County	399	170	2	1	407	405		675	556	4551	7166
Cable								513	423	1812	2748
MCC Missouri LLC								139	122	480	741
Sparklight								374	301	1332	2007
DSL	32										32
Brightspeed	32										32
Fiber								162	133	2739	3034
Bluebird Network LLC								26	32	114	172
Carthage Water and Electric Plant								89	64	2423	2576
Craw Kan Telephone Cooperative Inc								30	26	155	211
Granby Telephone Company								17	11	43	71
GTC Broadband Inc										4	4
Fixed Wireless	367	170	2	1	407	405					1352
Aire Internet		1	2	1							4
Rise Broadband	130				33						163
T-Mobile US	90	9			59	62					220
UNITED STATES CELLULAR CORPORATION	65				35						100
VERIZON	10										10
Wisper ISP, LLC	72	160			280	343					855
Jefferson County	465	136	188	175	1272	1188	2258	55	15	134	5886
Cable					292	310	2227				2829
Charter Communications Inc					292	310	2227				2829
DSL	52		46	110	13	42					263
AT&T Inc	52		46	110	13	42					263
Fiber					8	7	31	55	15	134	250
AT&T Inc							1	18	1	95	115
Charter Communications Inc					8	7	30			8	53
Lightwave Communications llc								37	14	31	82
Fixed Wireless	413	136	142	65	959	829					2544
T-Mobile US	189	38	35	15	102	158					537

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
VERIZON	122	18	95	46	94	19					394
Wisper ISP, LLC	102	80	12	4	763	652					1613
Johnson County	992	228	8	4	872	841	160	190	128	215	3638
Cable					67	47	153				267
Charter Communications Inc					67	47	153				267
DSL	268		8	4							280
Brightspeed	262		4	2							268
Consolidated Communications	6		4	2							12
Fiber					19	27	7	190	128	215	586
Bluebird Network LLC						2		42	81	53	178
Charter Communications Inc					19	25	7	130	25	109	315
Liberty Link								12	15	38	65
Socket Telecom, LLC								6	2	15	23
UPN									5		5
Fixed Wireless	724	228			786	767					2505
GoNetSpeed : Otelco : I-Land Internet	38				2						40
Liberty Link	298	53			341	325					1017
T-Mobile US	347	141			264	338					1090
VERIZON	13				3						16
Wisper ISP, LLC	28	34			176	104					342
Knox County	13		72	353	7	4	713	4	10	273	1449
DSL	1		31	309							341
Mark Twain Rural Telephone Company	1		31	309							341
Fiber					7	4	713	4	10	273	1011
Mark Twain Communications Company								2	10	105	117
Mark Twain Rural Telephone Company					7	4	707			26	744
Northeast Missouri Rural Telecommunications							6	2		142	150
Fixed Wireless	12		41	44							97
Mark Twain Communications Company			41	44							85
UNITED STATES CELLULAR CORPORATION	12										12
Laclede County	604	154	1	3	380	674	1092	1	40		2949
Cable					95	153	1092		38		1378
Cable America									38		38
Fidelity					95	153	1092				1340
DSL	292		1	3							296
Brightspeed	249		1	3							253
OREGON TELEPHONE CORPORATION	43										43
Fiber								1	2		3
Brightspeed								1			1
OREGON TELEPHONE CORPORATION									1		1
Sho-Me Technologies, LLC									1		1
Fixed Wireless	312	154			285	521					1272
T-Mobile US	74	4			40	58					176
UNITED STATES CELLULAR CORPORATION	198				14						212
VERIZON	9										9
Wisper ISP, LLC	31	150			231	463					875
Lafayette County	969	32	243	682	838	2044	1414	95	162	294	6773
Cable					710	1975	1386				4071
Charter Communications Inc					1						1
Citizens Cablevision Inc					440	1738	981				3159
Optimum					160	45	293				498
Xfinity					109	192	112				413
DSL	631		221	623							1475
Brightspeed	255		1	3							259
Citizens Telephone Company of Higginsville Misso	376		220	620							1216
Fiber					17	15	28	95	162	294	611
Bluebird Network LLC						1		54	123	56	234
Charter Communications Inc					16	13	2	2	1		34
Citizens Telephone Company of Higginsville Missouri								35	37	236	308
Socket Telecom, LLC					1			4		2	7
TurboNet						1	26		1		28
Fixed Wireless	338	32	22	59	111	54					616
T-Mobile US	253	2	2	2	86	52					397
VERIZON	82	30	20	57	8	2					199
Wisper ISP, LLC	3				17						20
Lawrence County	667	69	84	69	700	583	679	189	219	217	3476
Cable					86	110	190	89	104	195	774
MCC Missouri LLC								89	104	195	388
Optimum					86	110	190				386
DSL	134		77	63	10	65		6	56		411
Brightspeed	63			6							69
Choctaw Telephone Company	70		74	2							146
Consolidated Communications, Fidium				1							1
Windstream Missouri, Inc.	1		3	54	10	65		6	56		195
Fiber					178	157	489	94	59	22	999
Choctaw Telephone Company					1						1
K-PowerNet LLC								4		1	5
Miller Telephone Company					177	157	489				823
MISSOURI TELECOM								13	5	6	24
Total HighSpeed Internet Solutions								77	54	15	146
Fixed Wireless	533	69	7	6	426	251					1292
Aire Internet			7	6							13
T-Mobile US	252	62			125	119					558
UNITED STATES CELLULAR CORPORATION	231				51						282
VERIZON	10										10
Wisper ISP, LLC	40	7			250	132					429
Lewis County	455	532	105	99	341	778	399	403	1186	74	4372
DSL	127		32	2							161
Brightspeed	85										85
Mark Twain Communications Company	42										42
Mark Twain Rural Telephone Company			32	2							34

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Fiber					42	2	399	403	1186	74	2106
Bluebird Network LLC								31	93	12	136
Mark Twain Communications Company								3	2	23	28
Mark Twain Rural Telephone Company					42	2	399			8	451
yondoo Broadband, LLC								369	1091	31	1491
Fixed Wireless	328	532	73	97	299	776					2105
Mark Twain Communications Company	35	16	69	97							217
T-Mobile US	138	516	4		214	776					1648
UNITED STATES CELLULAR CORPORATION	155				85						240
Lincoln County	767	156	38	42	1641	1366	249	826	177	174	5436
Cable					156	116	226				498
Charter Communications Inc					156	116	226				498
DSL	246		25	25	36	23		22	25		402
Brightspeed	239		1	1							241
Consolidated Communications, Fidum								1			1
Windstream Missouri, Inc.	7		24	24	36	23		21	25		160
Fiber					31	4	23	804	152	174	1188
Bluebird Network LLC					1		1	11	31	24	68
Brightspeed									24	9	33
Charter Communications Inc					30	4	22	1	2	9	68
Gateway Fiber								10	44	118	172
Socket Telecom, LLC								11	27	14	52
yondoo Broadband, LLC								771	24		795
Fixed Wireless	521	156	13	17	1418	1223					3348
T-Mobile US	432	1	3		656	197					1289
VERIZON	11		6	7	4	4					32
Windstream Missouri, Inc.	18	3	1	5		1					28
Wisper ISP, LLC	60	152	3	5	758	1021					1999
Linn County	35		29	1	78	18	30	158	76	68	493
Cable					36	13	30	11		1	91
MCC Missouri LLC								11		1	12
Optimum					36	13	30				79
DSL	23		23	1	37	5		21	3		113
Green Hills Technologies	15										15
Windstream Missouri, Inc.	8		23	1	37	5		21	3		98
Fiber								126	73	67	266
Chariton Valley Communication Corporation								87	31	63	181
Chariton Valley Telephone Corporation								26	15	4	45
Grand River Mutual Telephone Corporation								13	27		40
Fixed Wireless	12		6		5						23
T-Mobile US	7				5						12
Windstream Missouri, Inc.	5		6								11
Livingston County	180				337	247	339	96	137	502	1838
Cable					334	241	339				914
Zito Media					334	241	339				914
DSL	107										107
Grand River Mutual Telephone Corporation	1										1
Green Hills Technologies	106										106
Fiber								96	137	502	735
Bluebird Network LLC								19	24	27	70
Grand River Mutual Telephone Corporation									4	135	139
Green Hills Technologies								23	101	323	447
Mid-States Services, LLC								7		1	8
Socket Telecom, LLC								47	8	16	71
Fixed Wireless	73				3	6					82
Green Hills Technologies	52										52
T-Mobile US	19				3	6					28
VERIZON	2										2
Macon County	62		2		2		1	62	57	98	284
Cable								23	14	23	60
Sparklight								23	14	23	60
DSL	17										17
Brightspeed	17										17
Fiber					2		1	39	43	75	160
Bluebird Network LLC									3	14	17
Chariton Valley Communication Corporation								22	8	38	68
Chariton Valley Telephone Corporation								17	32	23	72
Mark Twain Rural Telephone Company					2		1				3
Fixed Wireless	45		2								47
Mark Twain Communications Company	28		2								30
UNITED STATES CELLULAR CORPORATION	14										14
VERIZON	3										3
Madison County	112	9	2		444	139	181	1			888
Cable					75	7	163				245
Charter Communications Inc					75	7	163				245
DSL	10		2								12
Brightspeed	10		1								11
Windstream Missouri, Inc.			1								1
Fiber					18		18	1			37
Charter Communications Inc					18		18				36
Sho-Me Technologies, LLC								1			1
Fixed Wireless	102	9			351	132					594
T-Mobile US	67				52	1					120
Wisper ISP, LLC	35	9			299	131					474
Maries County	262	23	18	43	682	780		6	37		1851
DSL	224		18	43	6	38		4	37		370
Brightspeed	218		13	3							234
Windstream Missouri, Inc.	6		5	40	6	38		4	37		136
Fiber								2			2
GTECH Fiber LLC								1			1
Sho-Me Technologies, LLC								1			1

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Fixed Wireless	38	23			676	742					1479
UNITED STATES CELLULAR CORPORATION	21				5						26
Windstream Missouri, Inc.	5				7						12
Wisper ISP, LLC	12	23			664	742					1441
Marion County	81	155	156	494	111	342	905	33	61	74	2412
Cable					58	257	593				908
Charter Communications Inc					58	257	593				908
DSL	3		71	173							247
Brightspeed	2										2
Mark Twain Rural Telephone Company	1		71	173							245
Fiber					34	49	312	33	61	74	563
Adams Telsystems Inc.								6			6
Bluebird Network LLC						2		11	20	36	69
Chariton Valley Communication Corporation					1	1	2	15	35	31	85
Charter Communications Inc							1	1	6	2	10
Mark Twain Rural Telephone Company					20	46	308			5	379
Ralls Technologies, L.L.C.					13		1				14
Fixed Wireless	78	155	85	321	19	36					694
Mark Twain Communications Company	38	150	71	316	2	6					583
T-Mobile US	23	5	4	5	14	30					81
UNITED STATES CELLULAR CORPORATION	16		8		3						27
VERIZON	1		2								3
McDonald County	497		39	19	28	3	31	211	586	460	1874
Cable					4		31	67	20	88	210
Cox Communications					4		31				35
MCC Missouri LLC								67	20	88	175
DSL	474		39	19	12	3		4			551
Le-Ru Telephone Company	452		1								453
McDonald County Telephone and Internet	4										4
OREGON TELEPHONE CORPORATION			2	1	2	1					6
OREGON TELEPHONE CORPORATION	15		25	12		2					54
Windstream Missouri, Inc.	3		11	6	10			4			34
Fiber								140	566	372	1078
BarryElectricCooperative								1		19	20
K-PowerNet LLC										7	7
Le-Ru Telephone Company								1	2	2	5
McDonald County Telephone and Internet								120	529	318	967
OREGON TELEPHONE CORPORATION								5	1		6
OzarksGo								13	34	26	73
Fixed Wireless	23				12						35
T-Mobile US	23				12						35
Mercer County	1							67	47	246	361
Fiber								67	47	246	360
Grand River Mutual Telephone Corporation								67	47	246	360
Fixed Wireless	1										1
VERIZON	1										1
Miller County	423	112	36	56	1160	974	260	30	45	25	3121
Cable					93	67	259				419
Charter Communications Inc					93	67	259				419
DSL	24		27	56	42	82		28	44		303
Brightspeed	2										2
Windstream Missouri, Inc.	22		27	56	42	82		28	44		301
Fiber					2	9	1	2	1	25	40
Charter Communications Inc					2	9	1				12
Co-Mo Connect								1		21	22
Sho-Me Technologies, LLC								1		4	5
Windstream Missouri, Inc.									1		1
Fixed Wireless	399	112	9		1023	816					2359
T-Mobile US	3				5						8
UNITED STATES CELLULAR CORPORATION	120		2		90						212
VERIZON	26		4		16						46
Windstream Missouri, Inc.	93		1		48						142
Wisper ISP, LLC	157	112	2		864	816					1951
Mississippi County	96				445	179	365	200	4	48	1337
Cable					294	124	365				783
Charter Communications Inc					294	124	365				783
Fiber					13	2		200	4	48	267
Charter Communications Inc					10	2		3			15
GoSEMO, LLC					3			197	4	48	252
Fixed Wireless	96				138	53					287
T-Mobile US	92				136	53					281
VERIZON	4										4
Wisper ISP, LLC					2						2
Moniteau County	91	1	32	13	31	10		394	77	142	791
DSL	15		1								16
Brightspeed	8		1								9
Otelco Mid-Missouri LLC	7										7
Fiber								394	77	142	613
Co-Mo Connect								394	77	142	613
Fixed Wireless	76	1	31	13	31	10					162
T-Mobile US	33				17	1					51
UNITED STATES CELLULAR CORPORATION	42				4						46
VERIZON			31	13							44
Wisper ISP, LLC	1	1			10	9					21
Monroe County	271	15	45	61	217	92	542	20	51	29	1343
Cable					81	77	253				411
Charter Communications Inc					81	77	253				411
DSL	24		8	1	6	14		1	51		105
Brightspeed	22										22
Windstream Missouri, Inc.	2		8	1	6	14		1	51		83
Fiber					125	1	289	19		29	463

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Bluebird Network LLC								9		12	21
Chariton Valley Communication Corporation								2		2	4
Chariton Valley Telephone Corporation								8		15	23
Charter Communications Inc					16		13				29
Ralls Technologies, L.L.C.					109	1	276				386
Fixed Wireless	247	15	37	60	5						364
Mark Twain Communications Company	5	15	9	56	3						88
T-Mobile US	11		5		2						18
UNITED STATES CELLULAR CORPORATION	145		1								146
VERIZON	20		1								21
Windstream Missouri, Inc.	66		21	4							91
Montgomery County	49		24	9	91	154	164	74	104	203	872
Cable					28	96	163				287
Charter Communications Inc					28	96	163				287
DSL	23		19	4	54	23		17	31		171
Brightspeed	12										12
OREGON TELEPHONE CORPORATOIN	2										2
Windstream Missouri, Inc.	9		19	4	54	23		17	31		157
Fiber					1		1	57	73	203	335
Bluebird Network LLC								8	12	25	45
Callabyte								33	20	39	92
Charter Communications Inc					1		1			3	5
Kingdom Telephone Co								4	26	43	73
OREGON TELEPHONE CORPORATION								1			1
OREGON TELEPHONE CORPORATOIN									3	1	4
PHYNX								9	9	83	101
Windstream Missouri, Inc.								2	3	9	14
Fixed Wireless	26		5	5	8	35					79
T-Mobile US	15				8	35					58
Windstream Missouri, Inc.	11		5	5							21
Morgan County	267	20	6	2	254	107	29	707	135	325	1852
Cable					3	8	29				40
Charter Communications Inc					3	8	29				40
DSL	30		6	2	13	5		13	4		73
Brightspeed	25										25
Otelco Mid-Missouri LLC	5										5
Windstream Missouri, Inc.			6	2	13	5		13	4		43
Fiber								694	131	325	1150
Co-Mo Connect								694	131	325	1150
Fixed Wireless	237	20			238	94					589
T-Mobile US	116	6			59	16					197
UNITED STATES CELLULAR CORPORATION	79				28						107
VERIZON					1						1
Wisper ISP, LLC	42	14			150	78					284
New Madrid County	140				301	24	362	586	139	206	1758
Cable					243	23	359	65	69	82	841
Charter Communications Inc					243	23	359				625
Sparklight								65	69	82	216
Fiber					6		3	521	70	124	724
BPS Telephone Company								2	7	33	42
Charter Communications Inc					5		3	1			9
GoSEMO, LLC					1			222	6	6	235
PD Fiber, LLC								296	57	85	438
Fixed Wireless	140				52	1					193
T-Mobile US	108				52	1					161
VERIZON	32										32
Newton County	512	185	33	45	492	1199	1601	345	366	1768	6546
Cable					97	145	1601	37	115	362	2357
MCC Missouri LLC							1	13	36	188	238
Optimum					97	145	1600			1	1843
Sparklight								24	79	173	276
DSL	95		33	45	30	53		30	38		324
Brightspeed	5			1							6
Le-Ru Telephone Company	70										70
OREGON TELEPHONE CORPORATION	13		5	6		1					25
Windstream Missouri, Inc.	7		28	38	30	52		30	38		223
Fiber								278	213	1406	1897
BarryElectricCooperative								4	5	14	23
Bluebird Network LLC									3	14	17
FIBER COMMUNICATIONS of COLUMBUS										2	2
Granby Telephone Company								265	178	1315	1758
GTC Broadband Inc								2	10	36	48
K-PowerNet LLC								7	16		23
Le-Ru Telephone Company										25	25
Optimum									1		1
Fixed Wireless	417	185			365	1001					1968
T-Mobile US	87	5			19	26					137
UNITED STATES CELLULAR CORPORATION	282				26						308
VERIZON	13				2						15
Wisper ISP, LLC	35	180			318	975					1508
Nodaway County	441				49	5	90	340	54	800	1779
Cable					42	5	90				137
Optimum					42	5	90				137
DSL	410										410
Brightspeed	9										9
Fastwyre Broadband	361										361
Grand River Mutual Telephone Corporation	40										40
Fiber								340	54	800	1194
Bluebird Network LLC								3			3
Grand River Mutual Telephone Corporation								26	25	275	326
IAMO Telephone Company								3		135	138

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
United Fiber								308	29	390	727
Fixed Wireless	31				7						38
T-Mobile US	31				7						38
Oregon County	374		4	11	40	91	373	288	271	742	2194
Cable					32	79	373				484
Fidelity					32	79	373				484
DSL	70		4	11	8	12		5	25		135
Brightspeed	67			1							68
Windstream Missouri, Inc.	3		4	10	8	12		5	25		67
Fiber								283	246	742	1271
Current High Speed								91	56	308	455
LTD Broadband								180	190	431	801
NEXT, Powered by NAEC, LLC								9		1	10
Windstream Missouri, Inc.								3		2	5
Fixed Wireless	304										304
T-Mobile US	5										5
UNITED STATES CELLULAR CORPORATION	286										286
VERIZON	13										13
Osage County	236	33	11	8	603	682		131	256	553	2513
Cable					1			129	254	548	932
Cable America								129	254	548	932
Optimum					1						1
DSL	123		11	8	1						143
AT&T Inc					1						1
Brightspeed	123		11	8							142
Fiber						1		2	2	5	10
Mid MO Micro Computers						1					1
Sho-Me Technologies, LLC								2	2	5	9
Fixed Wireless	113	33			601	681					1428
UNITED STATES CELLULAR CORPORATION	47				14						61
VERIZON	48				4						52
Wisper ISP, LLC	18	33			583	681					1315
Ozark County	443	4	1	2	47	32		34	16	2	581
DSL	81		1	2							84
Brightspeed	81		1	2							84
Fiber								34	16	2	52
NEXT, Powered by NAEC, LLC								33	16		49
Sho-Me Technologies, LLC								1		2	3
Fixed Wireless	362	4			47	32					445
T-Mobile US	6										6
UNITED STATES CELLULAR CORPORATION	327				1						328
VERIZON	28										28
Wisper ISP, LLC	1	4			46	32					83
Pemiscot County	54							815	338	529	1736
Cable								360	104	280	744
MCC Missouri LLC								359	32	236	627
Sparklight								1	72	44	117
DSL	25										25
BPS Telephone Company	25										25
Fiber								455	234	249	938
BPS Telephone Company								59	201	159	419
MCEC Fiber								1			1
PD Fiber, LLC								395	33	90	518
Fixed Wireless	29										29
T-Mobile US	4										4
VERIZON	25										25
Perry County	8		6	1	650	345	122				1132
Cable					91	47	98				236
Charter Communications Inc					91	47	98				236
Fiber					38	21	24				83
Charter Communications Inc					38	21	24				83
Fixed Wireless	8		6	1	521	277					813
BLIP Networks			3	1	8						12
T-Mobile US	6				1	1					8
VERIZON	1										1
Wisper ISP, LLC	1		3		512	276					792
Pettis County	902	28	5	10	588	193	748	165	65	382	3086
Cable					88	64	745				897
Charter Communications Inc					82	64	635				781
Citizens Cablevision Inc					6		110				116
DSL	180		5	10	1	1					197
AT&T Inc	11		2	10	1	1					25
Brightspeed	164		1								165
Otelco Mid-Missouri LLC	5		2								7
Fiber					1	2	3	165	65	382	618
Bluebird Network LLC								46	15	127	188
Charter Communications Inc					1	2	2			14	19
Co-Mo Connect								63	15	48	126
Socket Telecom, LLC							1	16	17	89	123
Wisper ISP, LLC								40	18	104	162
Fixed Wireless	722	28			498	126					1374
GoNetSpeed : Otelco : I-Land Internet	4				4						8
Liberty Link	10				6	21					37
T-Mobile US	188	17			199	56					460
UNITED STATES CELLULAR CORPORATION	205				94						299
VERIZON	5										5
Wisper ISP, LLC	310	11			195	49					565
Phelps County	839	124	59	33	937	1137	1675	251	360	294	5709
Cable					330	586	1674	165	225	206	3186
Cable America					208	421	484	165	225	206	1709
Charter Communications Inc					31	39	133				203

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Fidelity					91	126	1057				1274
DSL	414		1	3	2	4		1	2		427
Brightspeed	414		1	2							417
Windstream Missouri, Inc.				1	2	4		1	2		10
Fiber						1	1	85	133	88	308
Brightspeed									1	1	2
Charter Communications Inc						1	1				2
Fidelity										1	1
GTECH Fiber LLC								79	129	47	255
Socket Telecom, LLC								5	2	39	46
Steelville Telephone Exchange, Inc.								1	1		2
Fixed Wireless	425	124	58	30	605	546					1788
BlueBit Networks	15		49	21	19	9					113
T-Mobile US	137	59			27	97					320
UNITED STATES CELLULAR CORPORATION	177				35						212
VERIZON	53										53
Wisper ISP, LLC	43	65	9	9	524	440					1090
Pike County	1321	251	3	10	2367	731	368	1389	472	195	7107
Cable					965	228	149				1342
Charter Communications Inc					965	228	149				1342
DSL	1		1	9	1	13		1	3		29
AT&T Inc	1										1
Windstream Missouri, Inc.			1	9	1	13		1	3		28
Fiber					178	106	219	1388	469	195	2555
Bluebird Network LLC					13	8	2	104	40	25	192
Charter Communications Inc					73	35	28	234	151	94	615
Ralls Technologies, L.L.C.					8	37	189	96	4	15	349
yondoo Broadband, LLC					84	26		954	274	61	1399
Fixed Wireless	1320	251	2	1	1223	384					3181
T-Mobile US	504				282	2					788
UNITED STATES CELLULAR CORPORATION	370				183						553
VERIZON	1				1						2
Windstream Missouri, Inc.	10		2	1							13
Wisper ISP, LLC	435	251			757	382					1825
Platte County	151	24	100	91	290	323	509	390	290	521	2689
Cable					40	80	496				616
Charter Communications Inc					40	80	496				616
DSL	89		18	29	22	2					160
AT&T Inc	14		18	28	22	2					84
Brightspeed	75			1							76
Fiber					6	16	13	390	290	521	1236
AT&T Inc								1		1	2
Bluebird Network LLC								7	5	4	16
Charter Communications Inc					6	14	12	3	4	11	50
Google Fiber							1	12	40	172	225
United Fiber								367	236	333	936
UPN						2			5		7
Fixed Wireless	62	24	82	62	222	225					677
Mercury Broadband	5	6	6	4	106	59					186
T-Mobile US	28		1	3	33	15					80
VERIZON	23	5	72	50	10	12					172
Wisper ISP, LLC	6	13	3	5	73	139					239
Polk County	153	85	73	241	263	569		300	1723	59	3466
DSL	62		29	158	38	197		35	46		565
Brightspeed	38			2							40
Windstream Missouri, Inc.	24		29	156	38	197		35	46		525
Fiber								29	50	59	138
Total HighSpeed Internet Solutions								26	2	8	36
Windstream Missouri, Inc.								3	48	51	102
Fixed Wireless	91	85	44	83	225	372		236	1627		2763
VERIZON	3							1			4
Windstream Missouri, Inc.	79	2	41	67	2	2		9	15		217
Wisper ISP, LLC	3	6		2	197	369		25	1		603
WON Communications LLC	6	77	3	14	26	1		201	1611		1939
Pulaski County	325	91	13	87	537	1084	8	374	1225	4197	7941
Cable								336	1091	4089	5516
Cable America								336	1091	4089	5516
DSL	124		12	86	16	117		35	79		469
Brightspeed	119										119
Windstream Missouri, Inc.	5		12	86	16	117		35	79		350
Fiber						2	8	3	55	108	176
Brightspeed						2	8			1	11
GTECH Fiber LLC								2	29	81	112
Windstream Missouri, Inc.								1	26	26	53
Fixed Wireless	201	91	1	1	521	965					1780
T-Mobile US	49				16	7					72
UNITED STATES CELLULAR CORPORATION	105				20						125
VERIZON	6										6
Windstream Missouri, Inc.	12			1	4						17
Wisper ISP, LLC	29	91	1		481	958					1560
Putnam County		3				5		3	379	1681	2071
Fiber								3	379	1681	2063
Grand River Mutual Telephone Corporation								3		3	6
Northeast Missouri Rural Telecommunications									379	1678	2057
Fixed Wireless		3				5					8
T-Mobile US		3				5					8
Ralls County	71	22	11	47	100	314	958	27	33	39	1622
Cable					4		4				8
Charter Communications Inc					4		4				8
DSL	20					1					21
Brightspeed	14										14

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
OREGON TELEPHONE CORPORATION	6					1					6
Windstream Missouri, Inc.						313	954	27	33	39	1461
Fiber					95						
Bluebird Network LLC					2	3	2	9	9	7	32
Charter Communications Inc					2				1		3
OREGON TELEPHONE CORPORATION						4	9		2	6	21
Ralls Technologies, L.L.C.					91	306	943	18	20	25	1403
Windstream Missouri, Inc.									1	1	2
Fixed Wireless	51	22	11	47	1						132
Mark Twain Communications Company	3	22	8	47							80
T-Mobile US	5				1						6
UNITED STATES CELLULAR CORPORATION	43		3								46
Randolph County	312				65	89	187	111	92	334	1190
Cable					56	87	187				330
Charter Communications Inc					56	87	187				330
DSL	10										10
Brightspeed	10										10
Fiber					4	2		111	92	334	543
Bluebird Network LLC								21	13	38	72
Chariton Valley Communication Corporation								27		13	40
Chariton Valley Telephone Corporation								10	12	100	122
Charter Communications Inc					4	2					6
PHYNX								34	40	108	182
Socket Telecom, LLC								19	27	75	121
Fixed Wireless	302				5						307
T-Mobile US	17				4						21
UNITED STATES CELLULAR CORPORATION	273				1						274
VERIZON	12										12
Ray County	512	28	18	44	475	319	2	315	219	1193	3125
Cable								238	105	639	982
MCC Missouri LLC								238	105	639	982
DSL	343		1								344
Brightspeed	152		1								153
Green Hills Technologies	191										191
Fiber							2	77	114	554	747
Bluebird Network LLC								1	4	8	13
Grand River Mutual Telephone Corporation										3	3
Green Hills Technologies								8	38	145	191
TurboNet							2				2
United Fiber								68	72	392	532
UPN										6	6
Fixed Wireless	169	28	17	44	475	319					1052
Intercept Wireless; Intercept Fiber	15				2						17
T-Mobile US	24	17			5	22					68
VERIZON	111		14	29	21	15					190
Wisper ISP, LLC	19	11	3	15	447	282					777
Reynolds County	78		2	5	192	676	146	39	12	57	1207
Cable					2		2				4
BOYCOM CABLEVISION INC.					2		2				4
DSL	74		2	5		2					83
Brightspeed	74		2	1							77
Windstream Missouri, Inc.				4		2					6
Fiber					190	674	144	39	12	57	1116
McCormack Networks					190	674	144	39	12	54	1113
Windstream Missouri, Inc.										3	3
Fixed Wireless	4										4
T-Mobile US	3										3
UNITED STATES CELLULAR CORPORATION	1										1
Ripley County	50		27	154	55	369	255	28	217	30	1185
Cable					29	232	255			1	517
BOYCOM CABLEVISION INC.					29	232	255			1	517
DSL	9		27	154	26	137		20	167		540
Windstream Missouri, Inc.	9		27	154	26	137		20	167		540
Fiber								8	50	29	87
Windstream Missouri, Inc.								8	50	29	87
Fixed Wireless	41										41
UNITED STATES CELLULAR CORPORATION	23										23
VERIZON	10										10
Windstream Missouri, Inc.	8										8
Saline County	356	1	42	95	1452	864	1447	402	175	1627	6461
Cable					1276	809	1442				3527
Citizens Cablevision Inc					1017	674	336				2027
Zito Media					259	135	1106				1500
DSL	238		42	95	12	40					427
AT&T Inc	5		28	67	12	40					152
Brightspeed	14		1	1							16
Otelco Mid-Missouri LLC	219		13	27							259
Fiber					3	1	5	402	175	1627	2213
Air Link Rural Broadband, LLC					3	1	5				22
Bluebird Network LLC								19	11	128	158
Co-Mo Connect										8	8
Marshall Municipal Utilities								370	157	1227	1754
Otelco Mid-Missouri LLC									7	264	271
Fixed Wireless	118	1			161	14					294
T-Mobile US	104				150	11					265
VERIZON	14										14
Wisper ISP, LLC		1			11	3					15
Schuyler County	3		2	1	17	9	280	346	12	406	1076
Fiber								280	346	12	406
CITIZENS MUTUAL TELEPHONE										13	13
Mark Twain Rural Telephone Company							280			9	289

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Northeast Missouri Rural Telecommunications								346	12	384	742
Fixed Wireless	3		2	1	17	9					32
Mark Twain Communications Company			2	1	17	9					29
UNITED STATES CELLULAR CORPORATION	3										3
Scotland County	10		186	38	11	2	32	9	507	1701	2496
Fiber					11	2	32	9	507	1701	2262
CITIZENS MUTUAL TELEPHONE										3	3
Mark Twain Rural Telephone Company					11	2	31			1	45
Northeast Missouri Rural Telecommunications							1	9	507	1697	2214
Fixed Wireless	10		186	38							234
Mark Twain Communications Company	10		186	38							234
Scott County	108				349	186	783	349	4	117	1896
Cable					253	127	783				1163
Charter Communications Inc					253	127	783				1163
Fiber					12	1		349	4	117	483
Charter Communications Inc					10	1		4			15
GoSEMO, LLC					2			345	4	117	468
Fixed Wireless	108				84	58					250
T-Mobile US	107				84	58					249
VERIZON	1										1
Shannon County	842	75	1	1	342	143	16			2	1422
DSL	85		1	1							87
Brightspeed	85		1	1							87
Fiber							4	16		2	22
McCormack Networks							4	16			20
Sho-Me Technologies, LLC										2	2
Fixed Wireless	757	75			342	139					1313
T-Mobile US	15				8						23
UNITED STATES CELLULAR CORPORATION	627				104						731
VERIZON	3										3
Wisper ISP, LLC	112	75			230	139					556
Shelby County	153	3	121	165	34	86	284	8	95	52	1001
Cable					32	77	228				337
Charter Communications Inc					32	77	228				337
DSL	26		121	111							258
Brightspeed	26										26
Mark Twain Rural Telephone Company			121	111							232
Fiber					2	6	56	8	95	52	219
Bluebird Network LLC								3	53	24	80
Chariton Valley Communication Corporation								5	15	22	42
Charter Communications Inc						1					1
Mark Twain Communications Company									27	4	31
Mark Twain Rural Telephone Company					2	5	56			2	65
Fixed Wireless	127	3		54		3					187
Mark Twain Communications Company	82			54							136
T-Mobile US	1	3				3					7
UNITED STATES CELLULAR CORPORATION	44										44
St. Charles County	447	47	193	220	336	409	973	106	291	1352	4374
Cable					218	219	951	4	210	1131	2733
Cable America							24	4	210	1107	1345
Charter Communications Inc					218	219	927			24	1388
DSL	147		22	42	25	6					242
AT&T Inc	16		18	32	25	6					97
Brightspeed	123		4	10							137
OREGON TELEPHONE CORPORATION	8										8
Fiber					12	60	22	102	81	221	498
AT&T Inc								50	11	85	146
Bluebird Network LLC							4	15	23	48	90
Brightspeed						3		1	2	2	8
Charter Communications Inc					11	57	17	28	37	28	178
Gateway Fiber							1	5	7	48	61
i3 Broadband										10	10
OREGON TELEPHONE CORPORATION									1		1
Socket Telecom, LLC					1			3			4
Fixed Wireless	300	47	171	178	81	124					901
T-Mobile US	164	6	14	10	37	63					294
VERIZON	130	21	144	164	20	13					492
Wisper ISP, LLC	6	20	13	4	24	48					115
St. Clair County	248		1		19			134	378	352	1132
Cable								38	378	295	711
MCC Missouri LLC								38	378	295	711
DSL	220		1								221
Brightspeed	220		1								221
Fiber								96		57	153
Conexon Connect LLC								82		1	83
K-PowerNet LLC								14		56	70
Fixed Wireless	28				19						47
VERIZON	28										28
Wisper ISP, LLC					19						19
St. Francois County	123	23	13	14	951	573	1043	217	57	168	3182
Cable					269	268	1036				1573
Charter Communications Inc					269	268	1036				1573
DSL	18		13	14	2	7					54
AT&T Inc	18		13	14	2	7					54
Fiber					35	7	7	217	57	168	491
Aptitude Internet LLC						1		13	5	18	37
AT&T Inc								13	1	15	29
Charter Communications Inc					35	6	7	191	51	135	425
Fixed Wireless	105	23			645	291					1064
T-Mobile US	78				46	5					129
VERIZON	7				1						8

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Wisper ISP, LLC	20	23			598	286					927
St. Louis city	163	70	237	163	808	557	3223	210	119	801	6351
Cable					495	378	3201				4074
Charter Communications Inc					495	378	3201				4074
DSL	4		82	79	37	49					251
AT&T Inc	4		82	79	37	49					251
Fiber					5	5	22	175	106	801	1114
AT&T Inc								80	69	583	732
Bluebird Network LLC							3	13	8	15	39
Charter Communications Inc					5	5	19	2	4	12	47
Stratus Networks, Inc.								80	25	191	296
Fixed Wireless	159	70	155	84	271	125		35	13		912
T-Mobile US	102	24	72	15	186	109		16			524
VERIZON	57	45	82	69	85	15		19	13		385
Wisper ISP, LLC		1	1			1					3
St. Louis County	696	142	520	555	1106	1391	6611	275	290	1989	13575
Cable					779	905	6557			39	8280
Cable America							17			22	39
Charter Communications Inc					779	905	6540			17	8241
DSL	107		309	358	78	80		1			933
AT&T Inc	107		309	358	78	80					932
Consolidated Communications, Fidum								1			1
Fiber					25	6	54	274	290	1950	2599
AT&T Inc								272	273	1885	2430
Bluebird Network LLC							3		13	22	38
Charter Communications Inc					25	6	51	2	4	6	94
i3 Broadband										37	37
Fixed Wireless	589	142	211	197	224	400					1763
T-Mobile US	355	43	82	28	132	247					887
VERIZON	216	64	128	166	23	29					626
Wisper ISP, LLC	18	35	1	3	69	124					250
Ste. Genevieve County	412	21	1		952	303	189	544	325	142	2889
Cable					15		161				176
Charter Communications Inc					15		161				176
Fiber					197	27	28	544	325	142	1263
Aptitude Internet LLC					48	9		109	248	28	442
AT&T Inc								2	1	1	4
Charter Communications Inc					149	18	28	430	76	113	814
Lightwave Communications llc								3			3
Fixed Wireless	412	21	1		740	276					1450
T-Mobile US	380	5			268	139					792
VERIZON	7		1		3						11
Wisper ISP, LLC	25	16			469	137					647
Stoddard County	73				83	7	3	370	136	407	1079
Cable					9			95	62	252	418
Charter Communications Inc					9						9
Sparklight								95	62	252	409
DSL	2										2
BPS Telephone Company	2										2
Fiber					1		3	275	74	155	508
BPS Telephone Company								18	47	99	164
Charter Communications Inc					1		2			1	4
GoSEMO, LLC							1	257	27	55	340
Fixed Wireless	71				73	7					151
T-Mobile US	45				73	7					125
VERIZON	26										26
Stone County	1189	145	10	24	269	657	100	72	53	263	2782
Cable					18	13	100	69	35	222	457
MCC Missouri LLC								69	35	222	326
Optimum					18	13	100				131
DSL	408		10	24	2	5					449
AT&T Inc	10		6	11	2	5					34
Brightspeed	398		4	13							415
Fiber								3	18	41	62
AT&T Inc									1		1
Brightspeed										1	1
K-PowerNet LLC										11	11
Sho-Me Technologies, LLC									1	1	2
Total HighSpeed Internet Solutions								3	16	28	47
Fixed Wireless	781	145			249	639					1814
T-Mobile US	125	9			86	103					323
UNITED STATES CELLULAR CORPORATION	624				9						633
VERIZON	21				1						22
Wisper ISP, LLC	11	136			153	536					836
Sullivan County	48		19	18	9	20		65	525	473	1177
DSL	3		7	16	4	7		1	2		40
Windstream Missouri, Inc.	3		7	16	4	7		1	2		40
Fiber								64	523	473	1060
Bluebird Network LLC								5	2	8	15
Grand River Mutual Telephone Corporation								12	6	14	32
Northeast Missouri Rural Telecommunications								44	513	432	989
Windstream Missouri, Inc.								3	2	19	24
Fixed Wireless	45	12	2	5	13						77
T-Mobile US	5			4	13						22
UNITED STATES CELLULAR CORPORATION	19			1							20
Windstream Missouri, Inc.	21		12	2							35
Taney County	458	256	2	12	485	970	649	52	51	122	3057
Cable					115	139	648	46	49	122	1119
MCC Missouri LLC						1	1	46	48	121	217
Optimum					115	138	647		1	1	902
DSL	173		2	12							187

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Brightspeed	173		2	12							187
Fiber								1	6	2	9
Brightspeed								1	6		7
Sho-Me Technologies, LLC										2	2
Fixed Wireless	285	256			370	831					1742
T-Mobile US	22	4			7	35					68
UNITED STATES CELLULAR CORPORATION	184				48						232
VERIZON	26										26
Wisper ISP, LLC	53	252			315	796					1416
Texas County	1223	144	1	3	632	283		409	314	1723	4732
Cable								407	312	1719	2438
Cable America								372	303	1679	2354
MCC Missouri LLC								35	9	40	84
DSL	259		1	3							263
Brightspeed	259		1	3							263
Fiber								2	2	4	8
Sho-Me Technologies, LLC								2	2	4	8
Fixed Wireless	964	144			632	283					2023
T-Mobile US	70				33						103
UNITED STATES CELLULAR CORPORATION	746				109						855
VERIZON	12				1						13
Wisper ISP, LLC	136	144			489	283					1052
Vernon County	665	2		1	383	318	899	154	16	30	2468
Cable					71	94	899				1064
Fidelity					71	94	899				1064
DSL	643			1							644
Brightspeed	134			1							135
Fastwyre Broadband	509										509
Fiber								154	16	30	200
Bluebird Network LLC								1	2	18	21
Conexon Connect LLC								131	12	1	144
Craw Kan Telephone Cooperative Inc								22	2	10	34
MISSOURI TELECOM										1	1
Fixed Wireless	22	2			312	224					560
VERIZON	22										22
Wisper ISP, LLC		2			312	224					538
Warren County	488	42	6	20	235	666	343	39	105	138	2082
Cable					71	229	334	5	46	2	687
Cable America								5	46	2	53
Charter Communications Inc					71	229	334				634
DSL	221		1	6							228
Brightspeed	221		1	6							228
Fiber					11	41	9	34	59	136	290
Bluebird Network LLC								1	33	18	52
Brightspeed										1	1
Callabyte								7		5	12
Charter Communications Inc					11	41	8			1	61
Gateway Fiber							1	22	26	97	146
Kingdom Telephone Co										2	2
Socket Telecom, LLC								4		12	16
Fixed Wireless	267	42	5	14	153	396					877
T-Mobile US	255	28			131	161					575
VERIZON	5	7	5	14							31
Wisper ISP, LLC	7	7			22	235					271
Washington County	580	86	11	61	373	576	2	656	907	100	3352
Cable					4	22	2				28
Charter Communications Inc					4	22	2				28
DSL	565		10	15							590
Brightspeed	491		10	15							516
Fidelity Telephone LLC	54										54
Steelville Telephone Exchange, Inc.	20										20
Fiber								656	907	100	1663
yondoo Broadband, LLC								656	907	100	1663
Fixed Wireless	15	86	1	46	369	554					1071
BlueBit Networks	1	6	1	20	1	25					54
T-Mobile US	9	3		4	15	21					52
Wisper ISP, LLC	5	77		22	353	508					965
Wayne County	4		33	100	92	232	203	49	126	184	1023
Cable					46	119	201	1		2	369
BOYCOM CABLEVISION INC.					46	119	201	1		2	369
DSL	4		33	100	46	112		37	70		402
Windstream Missouri, Inc.	4		33	100	46	112		37	70		402
Fiber							1	2	11	56	182
McCormack Networks							1	2			3
Windstream Missouri, Inc.								11	56	182	249
Webster County	767	369	4	10	1042	1823		270	357	448	5090
Cable								122	276	438	836
MCC Missouri LLC								122	276	438	836
DSL	249		4	10							263
Brightspeed	249		4	10							263
Fiber								148	81	10	239
Sho-Me Technologies, LLC								2	4	2	8
Total HighSpeed Internet Solutions								146	77	8	231
Fixed Wireless	518	369			1042	1823					3752
T-Mobile US	157	53			173	159					542
UNITED STATES CELLULAR CORPORATION	247				111						358
VERIZON	20				1						21
Wisper ISP, LLC	94	316			757	1664					2831
Worth County	3		17	2	12			84	57	279	454
DSL	3		17	2	12						57
Windstream Missouri, Inc.	3		17	2	12						57

CONTINUED FROM PREVIOUS PAGE

Provider Claimed Speed	Above 25/3; Below 50/10		Above 50/10; Below 100/20		Above 100/20; Below 200/50			Above 200/50			Total Locations
Maximum Speed Test at Location	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	Below 10/1	Above 10/1; Below 25/3	Above 25/3; Below 50/10	
Fiber								61	57	279	397
Grand River Mutual Telephone Corporation								6	49	212	267
United Fiber								55	8	67	130
Wright County	593	77	3	8	156	241		155	638	1205	3076
Cable								151	634	1199	1984
Cable America								69	560	1151	1780
MCC Missouri LLC								82	74	48	204
DSL	99		3	8							110
Brightspeed	99		3	8							110
Fiber								4	4	6	14
Sho-Me Technologies, LLC								2	1	1	4
Steelville Telephone Exchange, Inc.								2	3	5	10
Fixed Wireless	494	77			156	241					968
T-Mobile US	25	1			14	1					41
UNITED STATES CELLULAR CORPORATION	415				35						450
VERIZON	7										7
Wisper ISP, LLC	47	76			107	240					470
Grand Total	41415	6902	6136	7681	44655	46322	51870	31489	29833	68759	335062

APPENDIX 4

RPC Overview Broadband Profiles

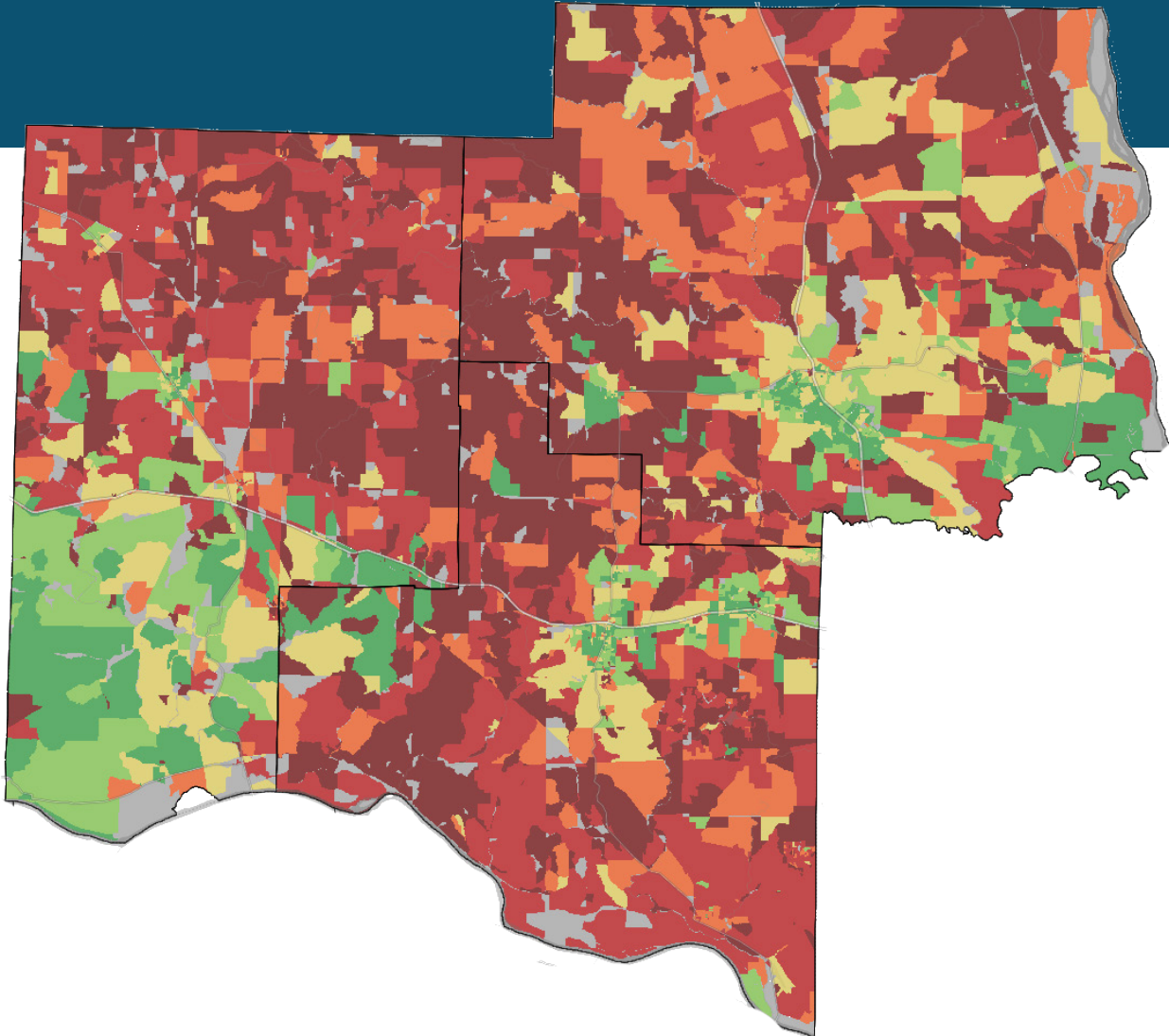
In this section you will see a regional overview of broadband availability in the 17 Regional Planning Commissions and Councils of Government that were included in the project scope.

In June of 2023, RCG held individual stakeholder meetings with each group and presented a broadband analysis overview including:

- Gap Analysis and Regional Statistics
- Terrain and Canopy Profile
- Existing Awards
- Business Locations
- Top Technologies
- Existing State and Federal Awards

After the presentations to each group concluded, the Regional Planning Commissions and Councils of Government received high-resolution, layered PDFs of the maps presented in the meeting to inform planning and discussions.

50% – 24,709 | **2,213**
locations without access to 50/10 Mbps | *miles of fiber needed*



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

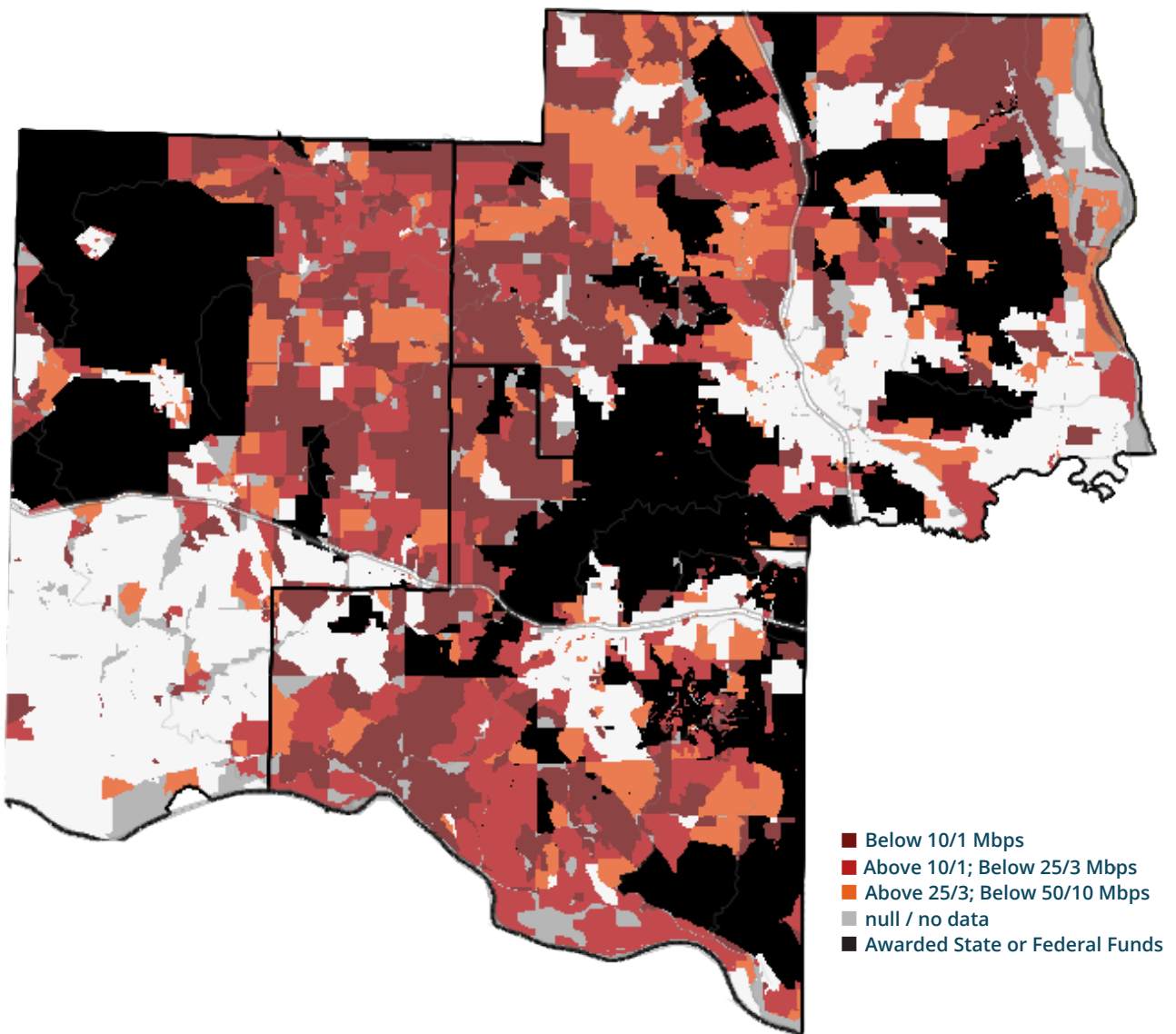
*Coverage ratings reflect multiple sources, including Ookla Speedtest Intelligence® data licensed by MACOG for the months of December 2020 through July 2023. See Appendix 1 for detailed methodology

FUNDED AREAS

The state of Missouri received federal funding from USDA ReConnect, The Rural Digital Opportunity Fund, and the NTIA. Additional funds from the state were awarded to providers from the Missouri Broadband CARES program, American Rescue Plan Act (ARPA), and the state broadband grant program.

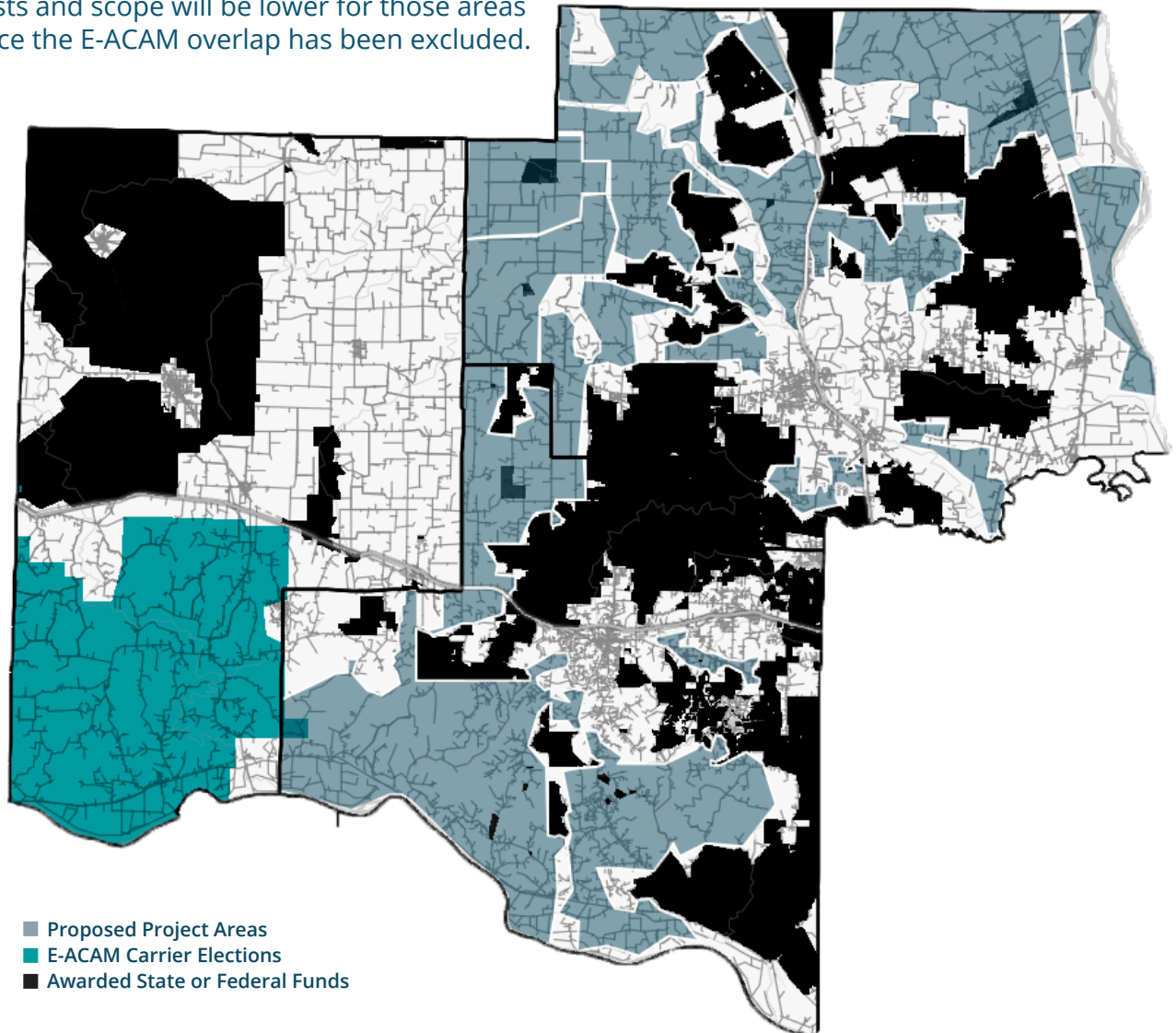
Blocked out areas show existing federal and state awards that were not in default at the time of this report. The remaining areas in red and orange are below 25/3 and 50/10 Mbps respectively and were the areas of focus for the county cluster project planning.

While the Federal definition of “underserved” applies to any location below 100/20, the below 50/10 threshold generates logical, contiguous service areas that remain in dramatic need of infrastructure investment.



The FCC's Connect America Model (CAM) is a long-standing subsidy program that pays telecommunications carriers to offer broadband in their landline telephone territories. The original model targeted 10/1 Mbps. The "alternative" model (ACAM) upped that to 25/3 Mbps. The most recent, "enhanced alternative" model (E-ACAM) offers additional subsidy to carriers who agree to increase speeds to 100/20 Mbps. By the late October 2023 deadline, several of the Missouri-based ACAM providers elected to accept the FCC's E-ACAM offer. As such, these areas become ineligible for BEAD and most other sources of broadband grant funding.

E-ACAM elections will affect 29 project areas in 13 cluster counties, including 10 project areas that have at least 75% of their total area covered by E-ACAM. Because this development came at the end of RCG's period of performance, there was not enough time to redraw project boundaries and recalculate the financial estimates for those areas. Instead, we have flagged the affected project areas in each county cluster report and have excluded project areas with 75% or more E-ACAM coverage from our summary numbers. Project areas with less than 75% coverage remain in the overall calculations, but it should be noted that actual costs and scope will be lower for those areas once the E-ACAM overlap has been excluded.

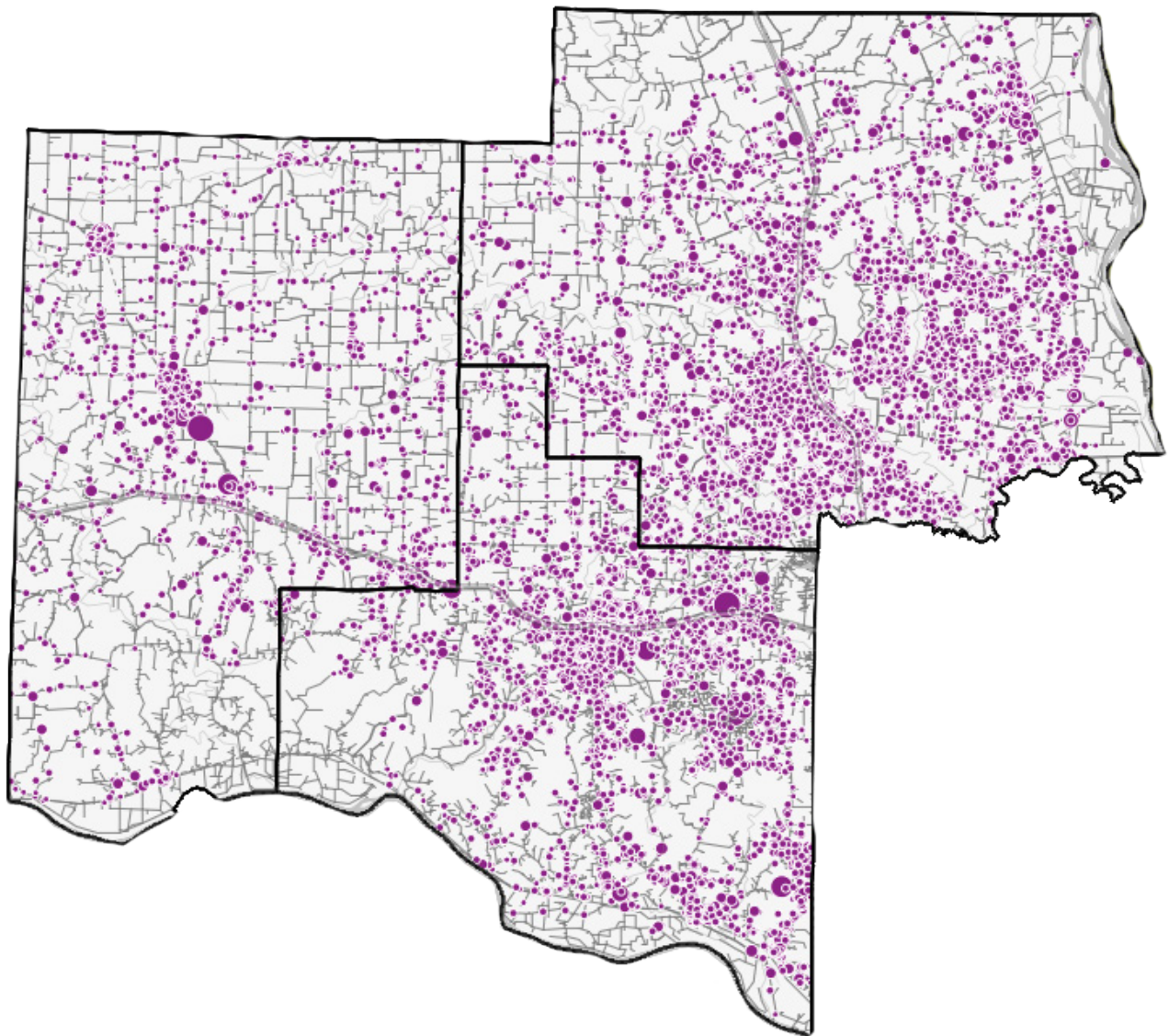


BUSINESS OPPORTUNITY AREAS

Business demand for broadband varies based on company size and economic sector.

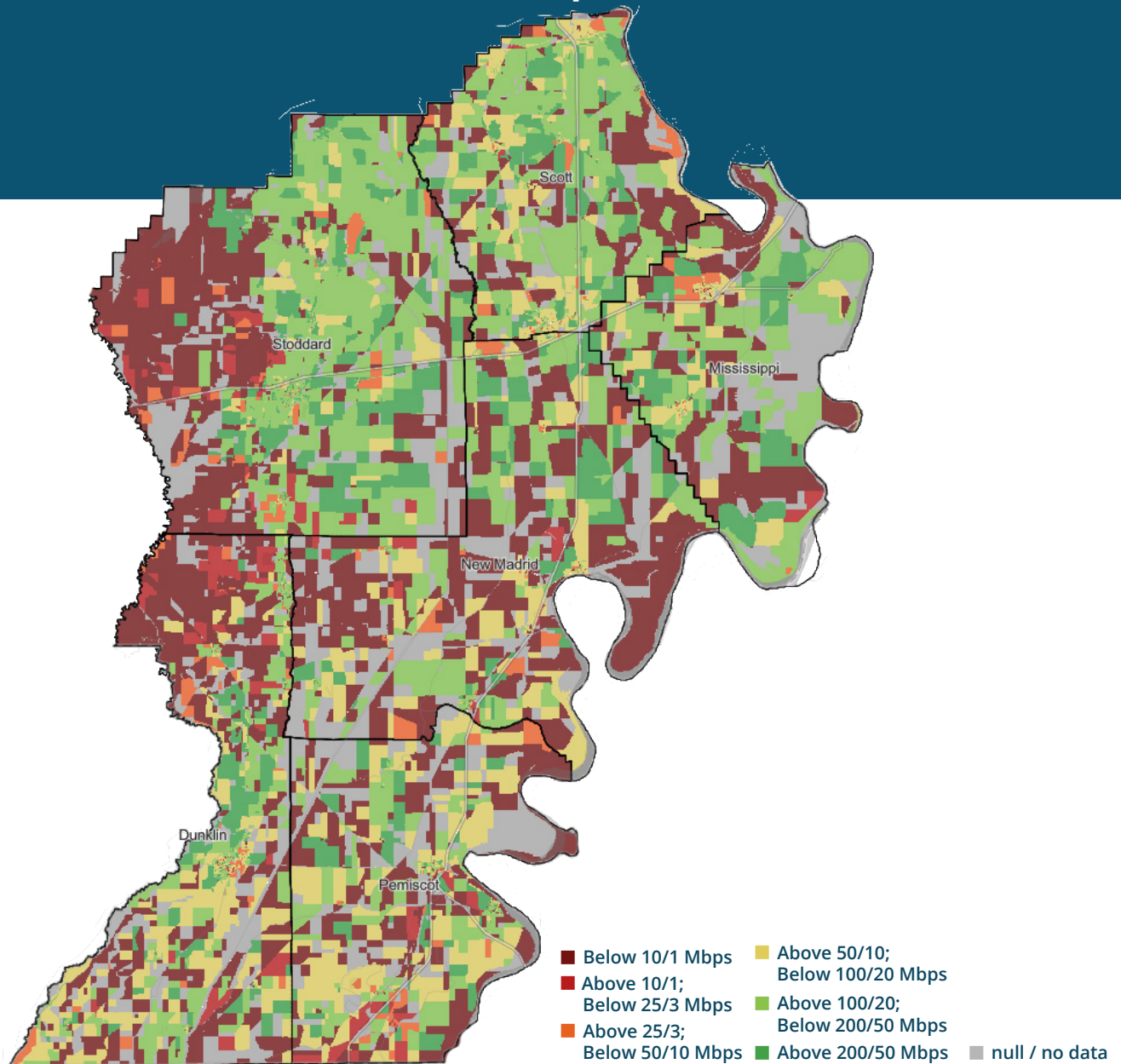
The greater the demand, the bigger the dot. The presence of a high-demand business or multiple businesses of any size will make that area significantly more attractive to a broadband provider.

*See “Business Broadband Opportunity Index” in Appendix 1 for a detailed explanation of how dot size was determined



• • • Business Locations *[the larger the dot the greater the broadband demand]*

23% – 14,897 | **2,400**
locations without access to 50/10 Mbps | *miles of fiber needed*



*Coverage ratings reflect multiple sources, including Ookla Speedtest Intelligence® data licensed by MACOG for the months of December 2020 through July 2023. See Appendix 1 for detailed methodology

FUNDED AREAS

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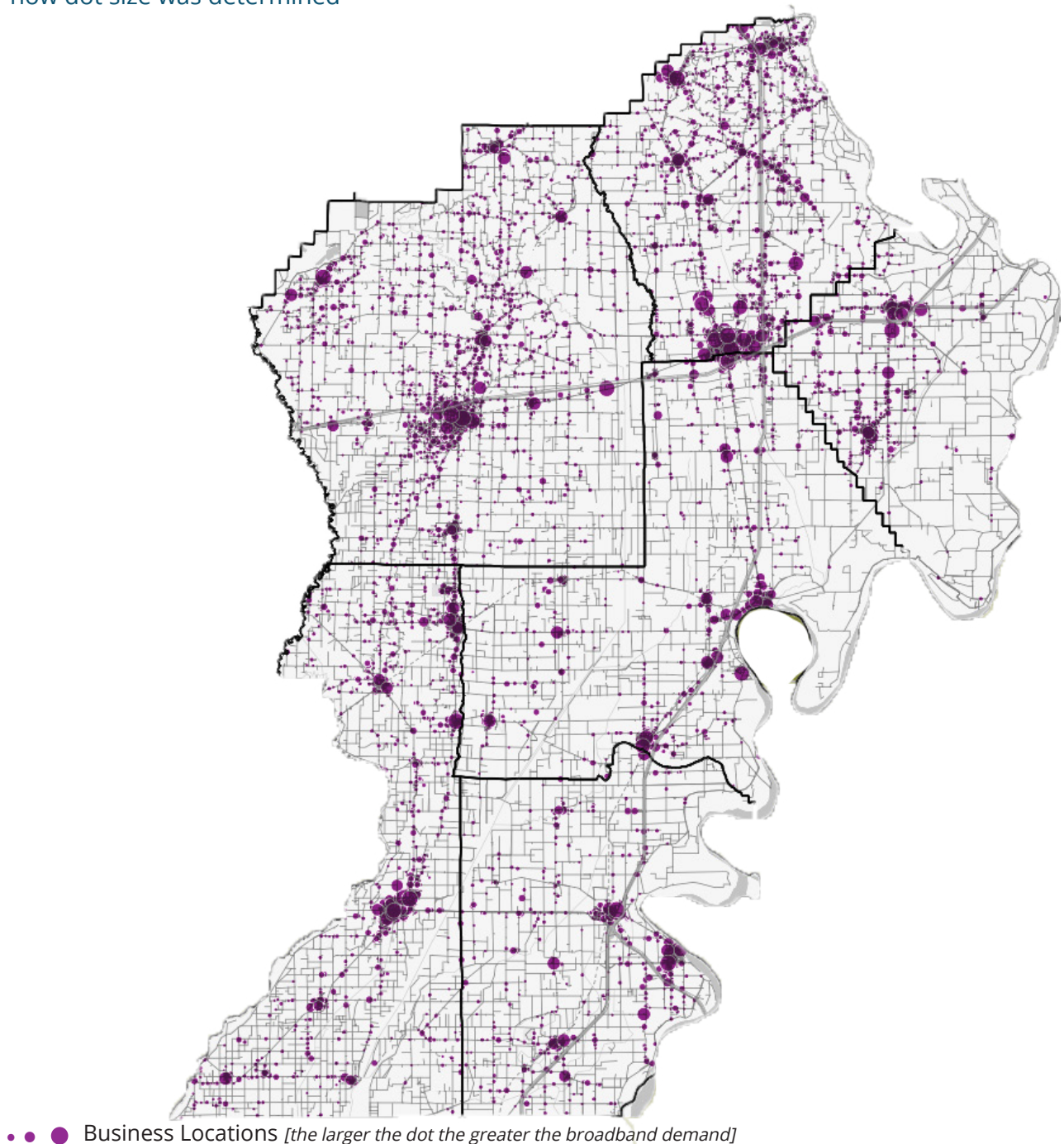


■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Awarded State or Federal Funds
■ null / no data

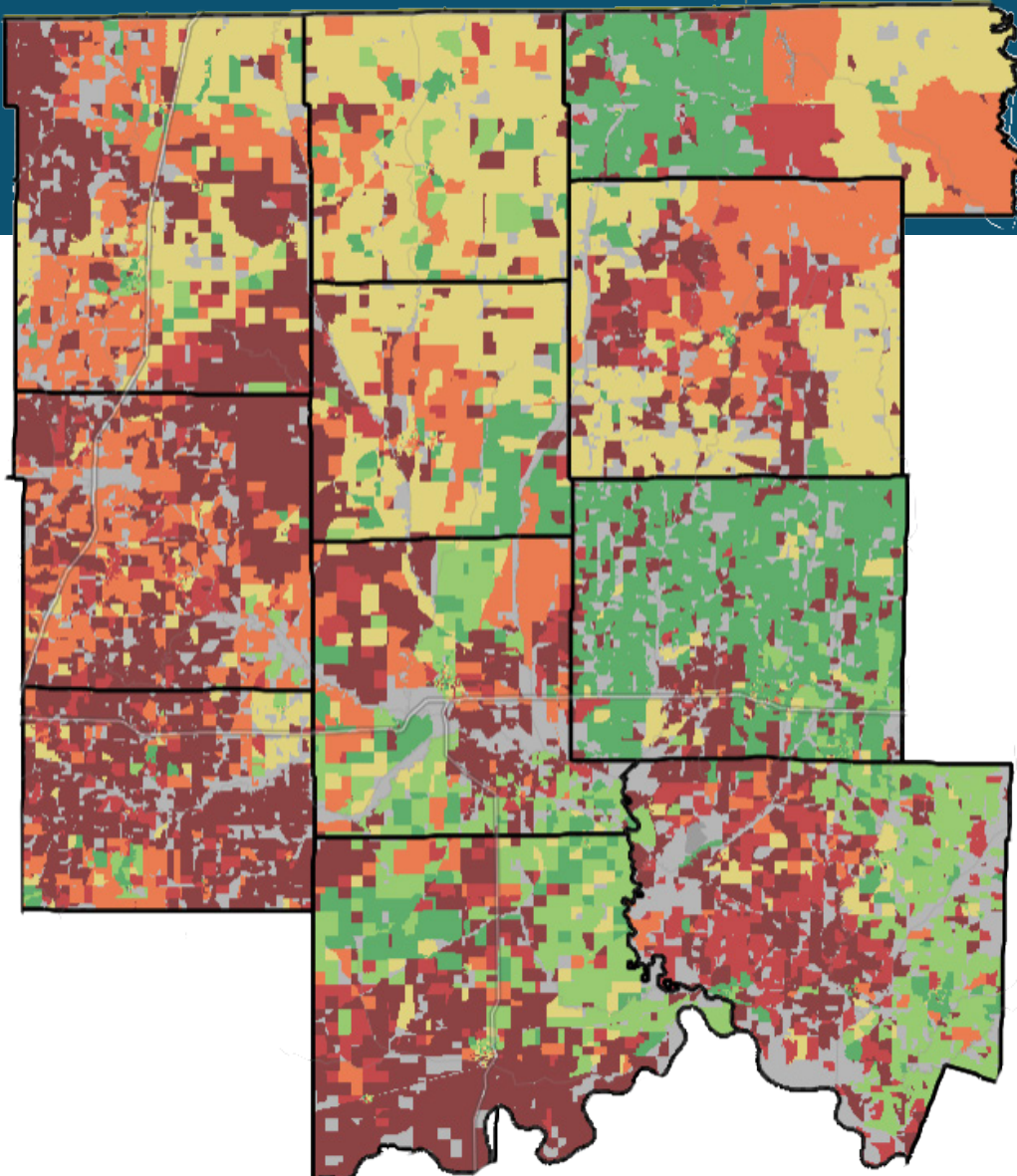
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45% — 25,857 | **5,803**
locations without access to 50/10 Mbps | *miles of fiber needed*



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

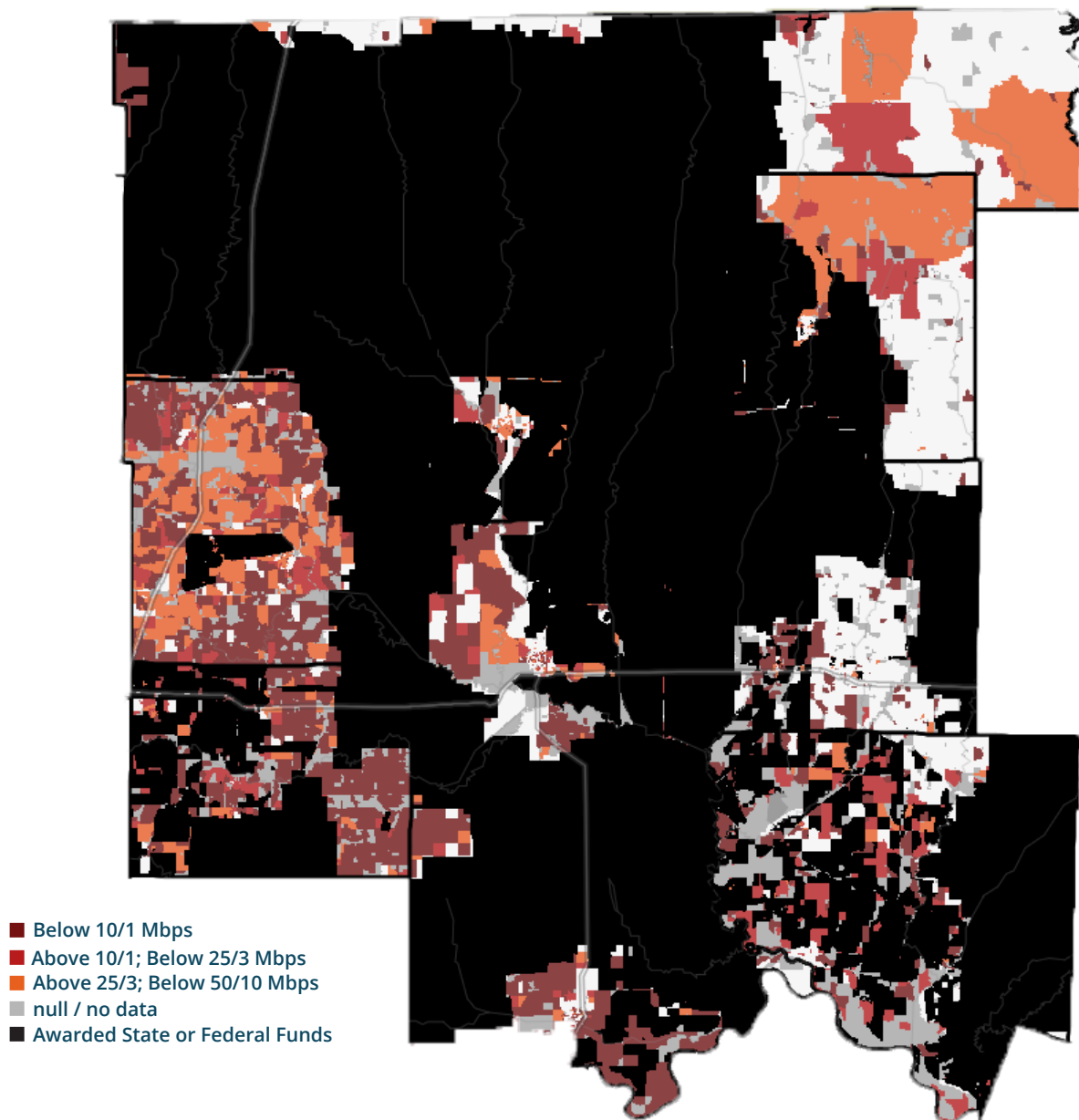
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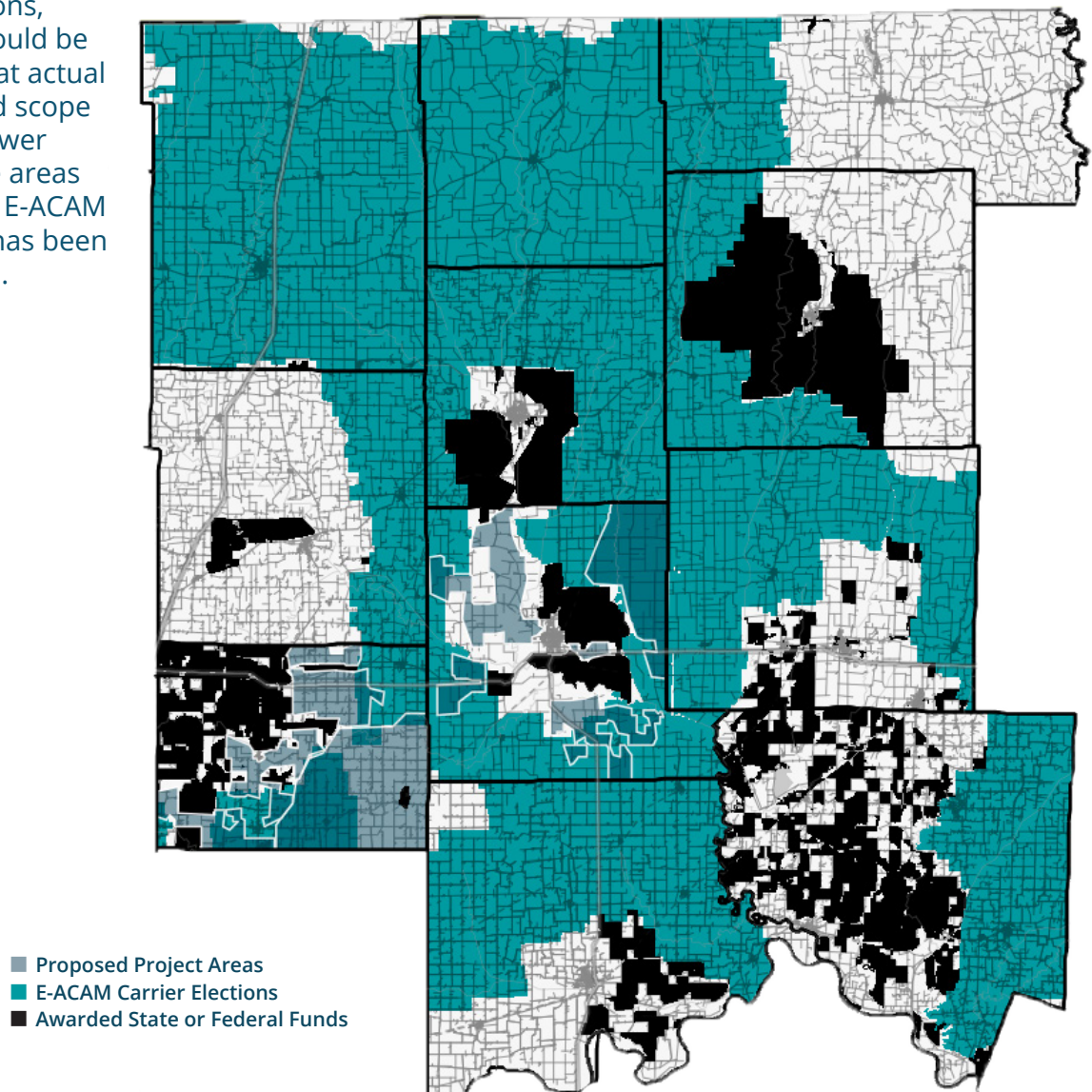
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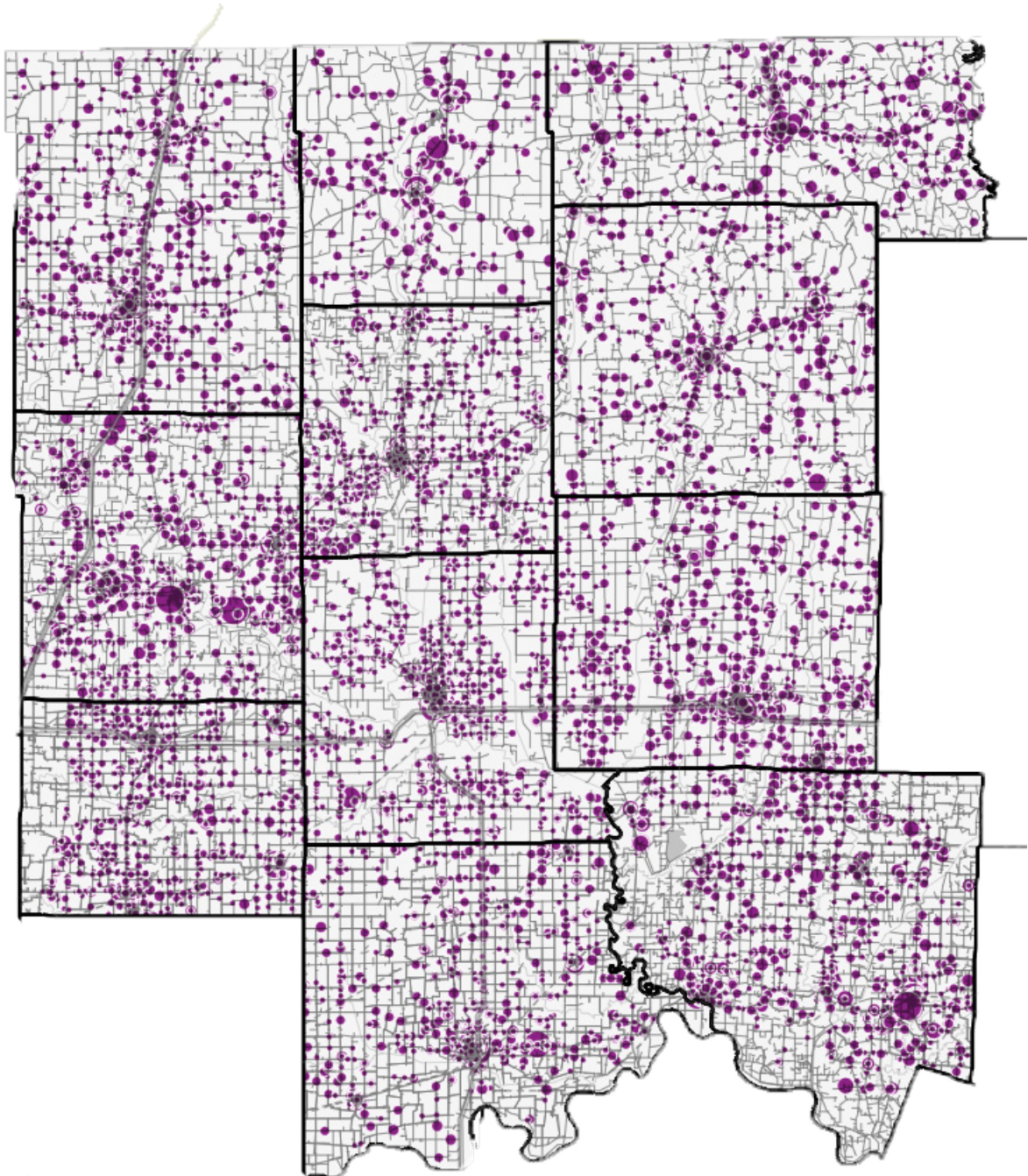
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• • • Business Locations *[the larger the dot the greater the broadband demand]*

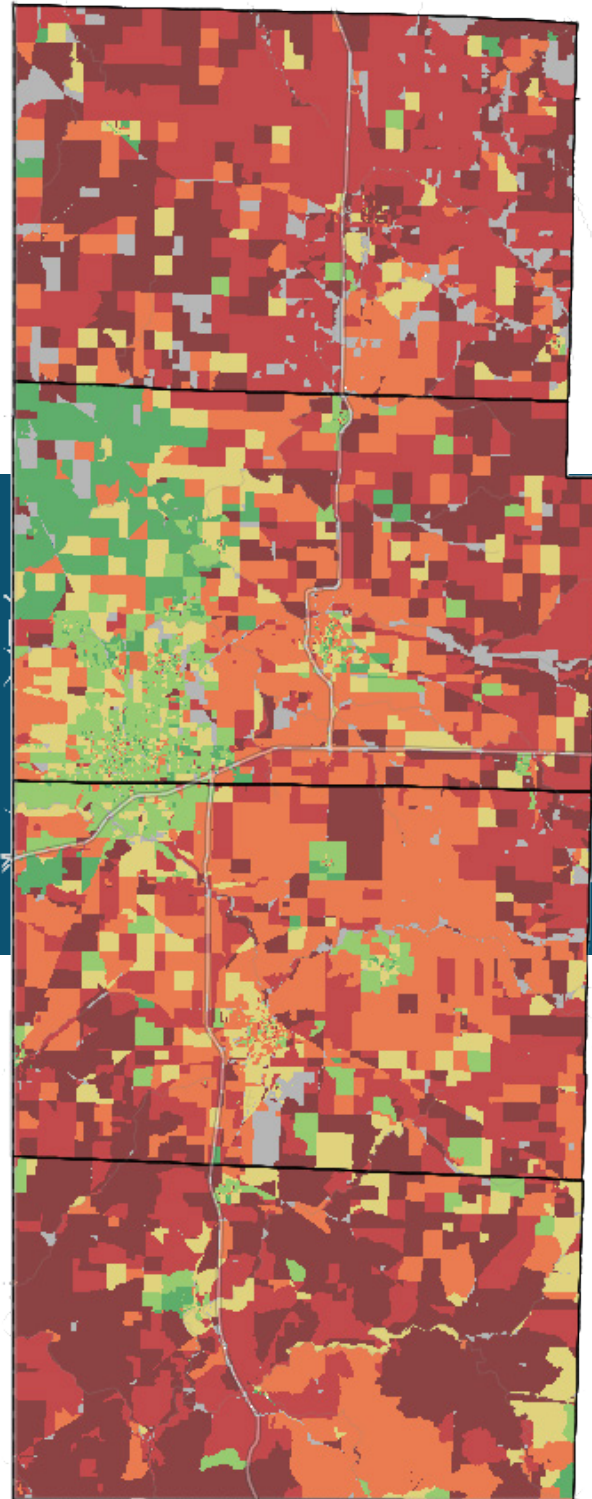
45% – 41,000

locations without access to 50/10 Mbps

4,052

miles of fiber needed

- Below 10/1 Mbps
- Above 10/1;
Below 25/3 Mbps
- Above 25/3;
Below 50/10 Mbps
- Above 50/10;
Below 100/20 Mbps
- Above 100/20;
Below 200/50 Mbps
- Above 200/50 Mbps
- null / no data



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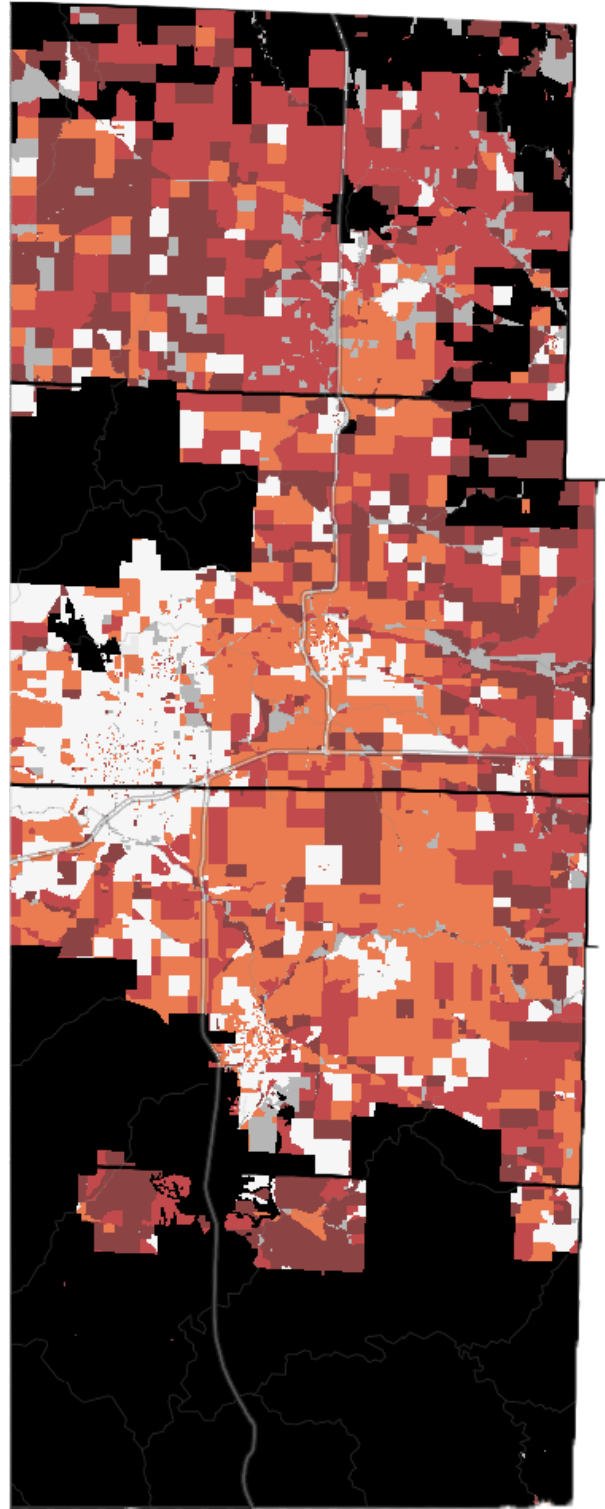
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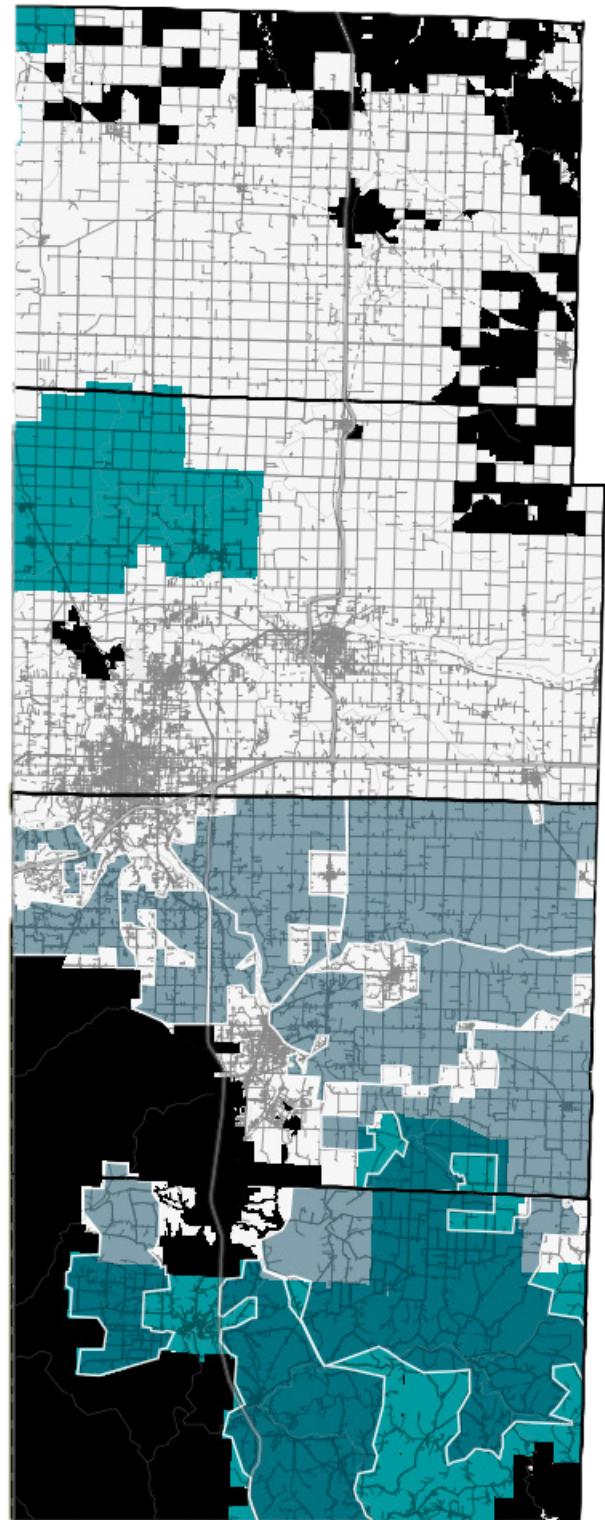
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- Above 10/1; Below 25/3 Mbps
- Above 25/3; Below 50/10 Mbps
- null / no data
- Awarded State or Federal Funds



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- Proposed Project Areas
- E-ACAM Carrier Elections
- Awarded State or Federal Funds

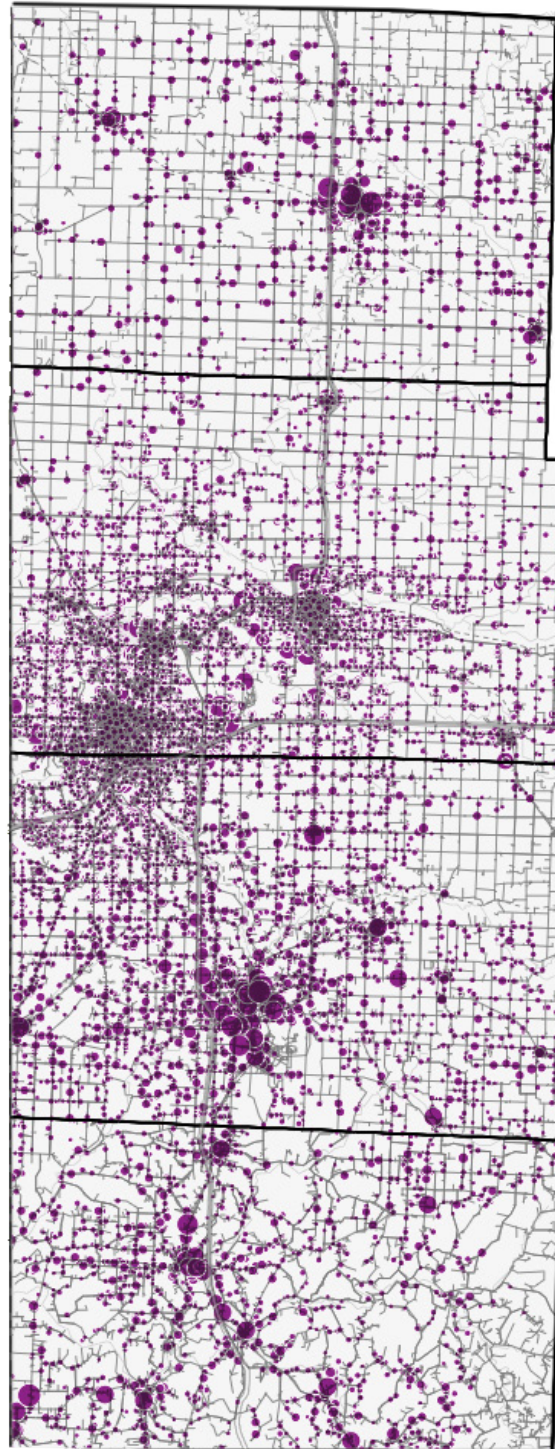


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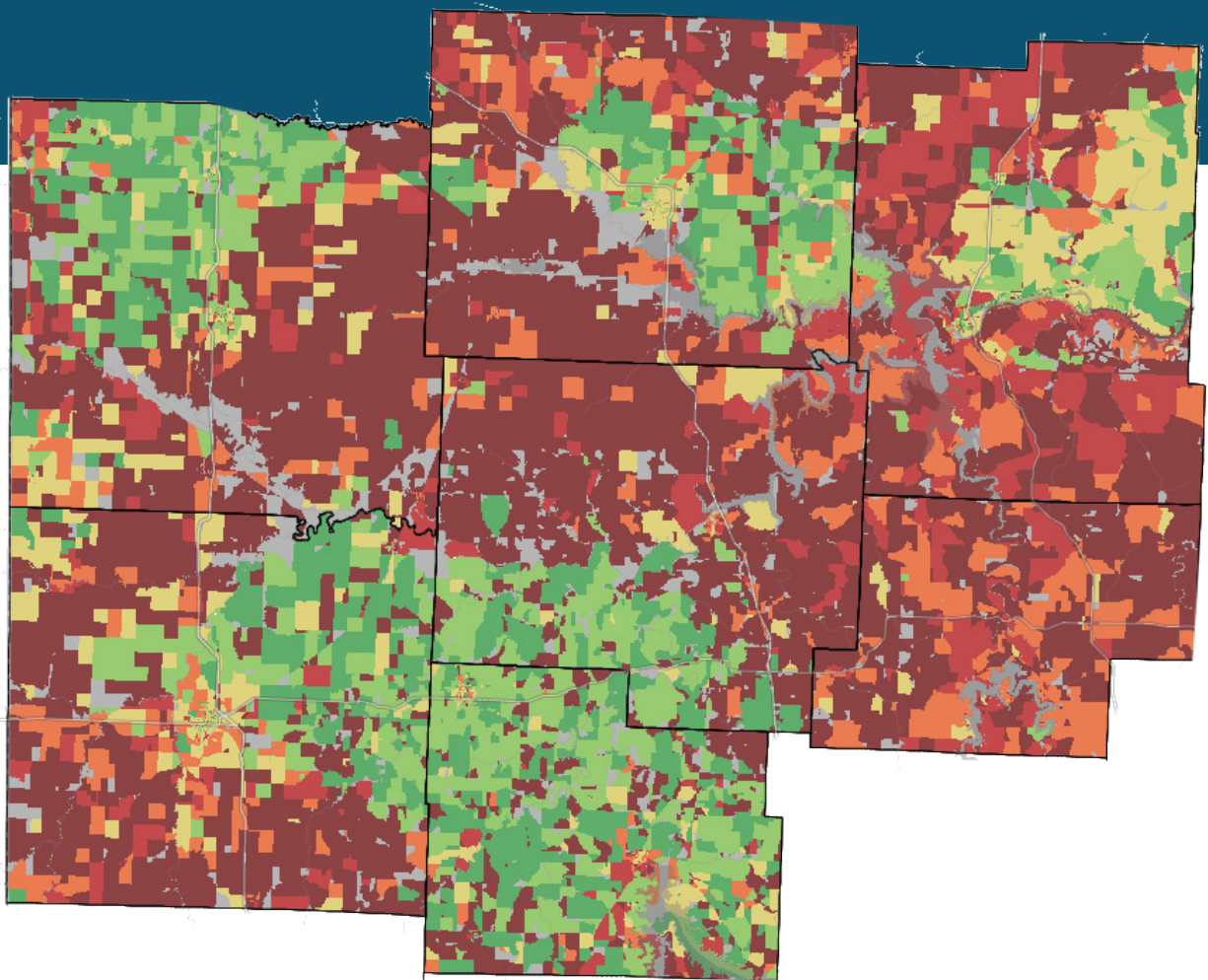


• • • Business Locations *[the larger the dot the greater the broadband demand]*

Kaysinger Basin

Regional Planning Commission

66% — **42,252** | **5,762**
locations without access to 50/10 Mbps | *miles of fiber needed*



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

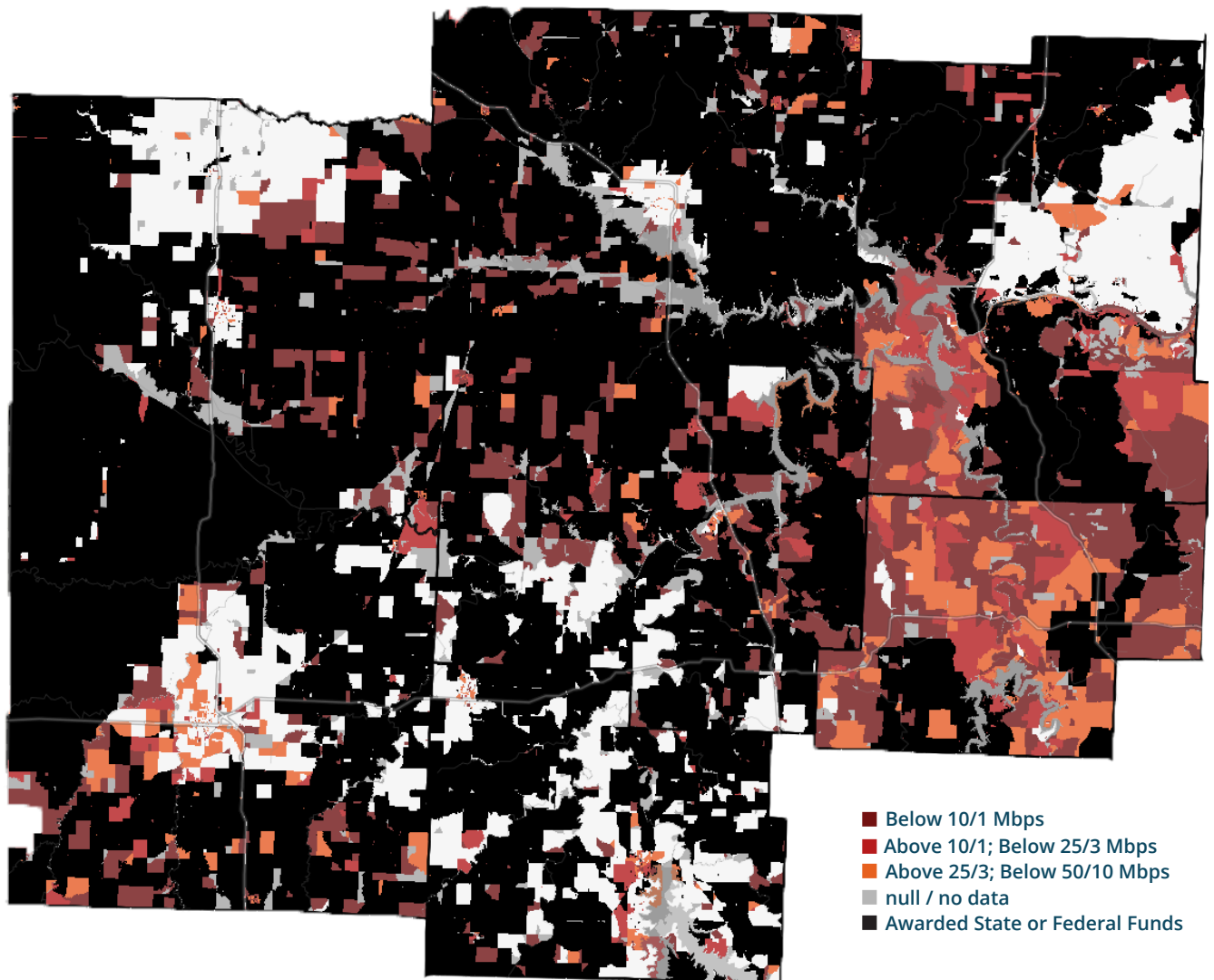
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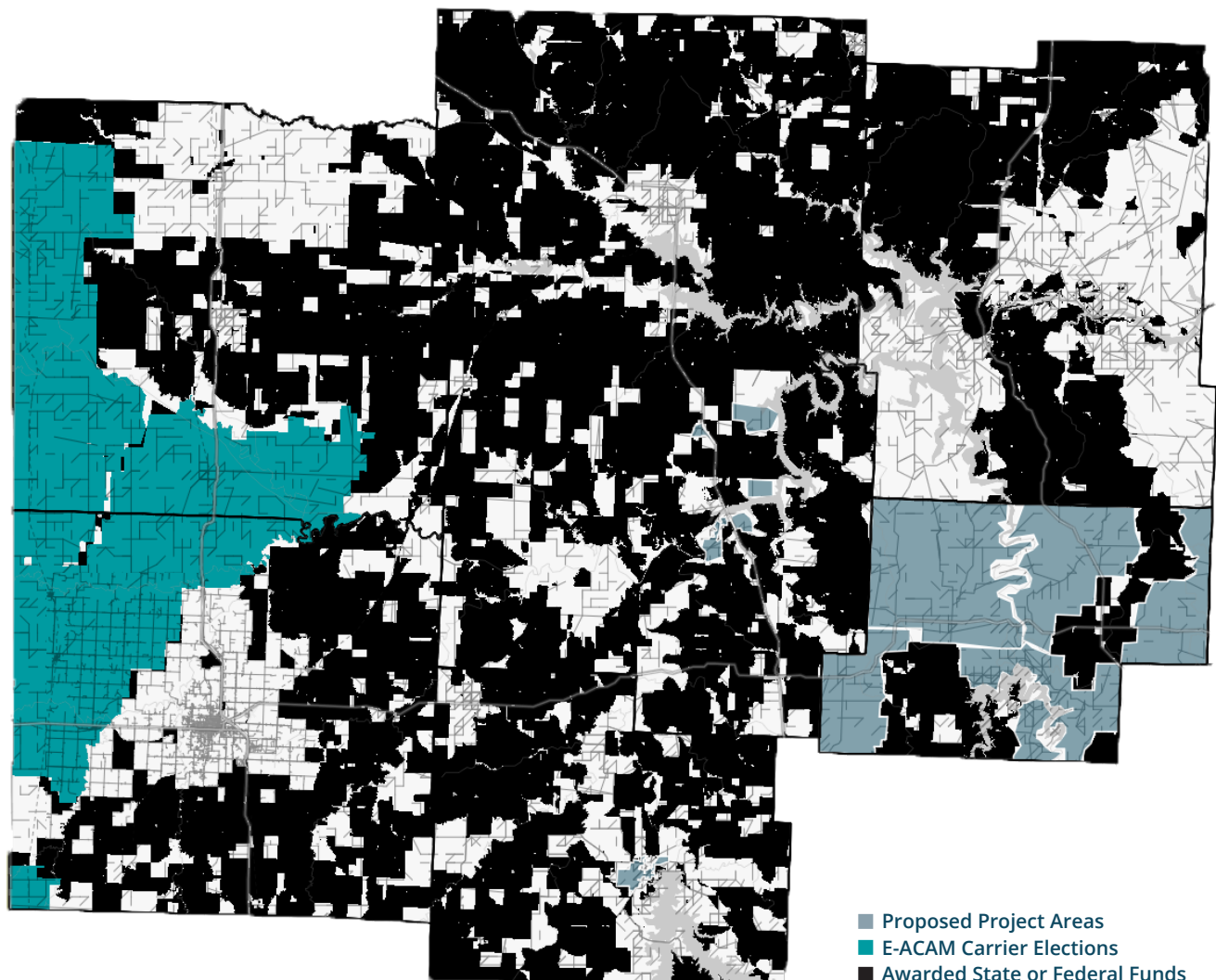
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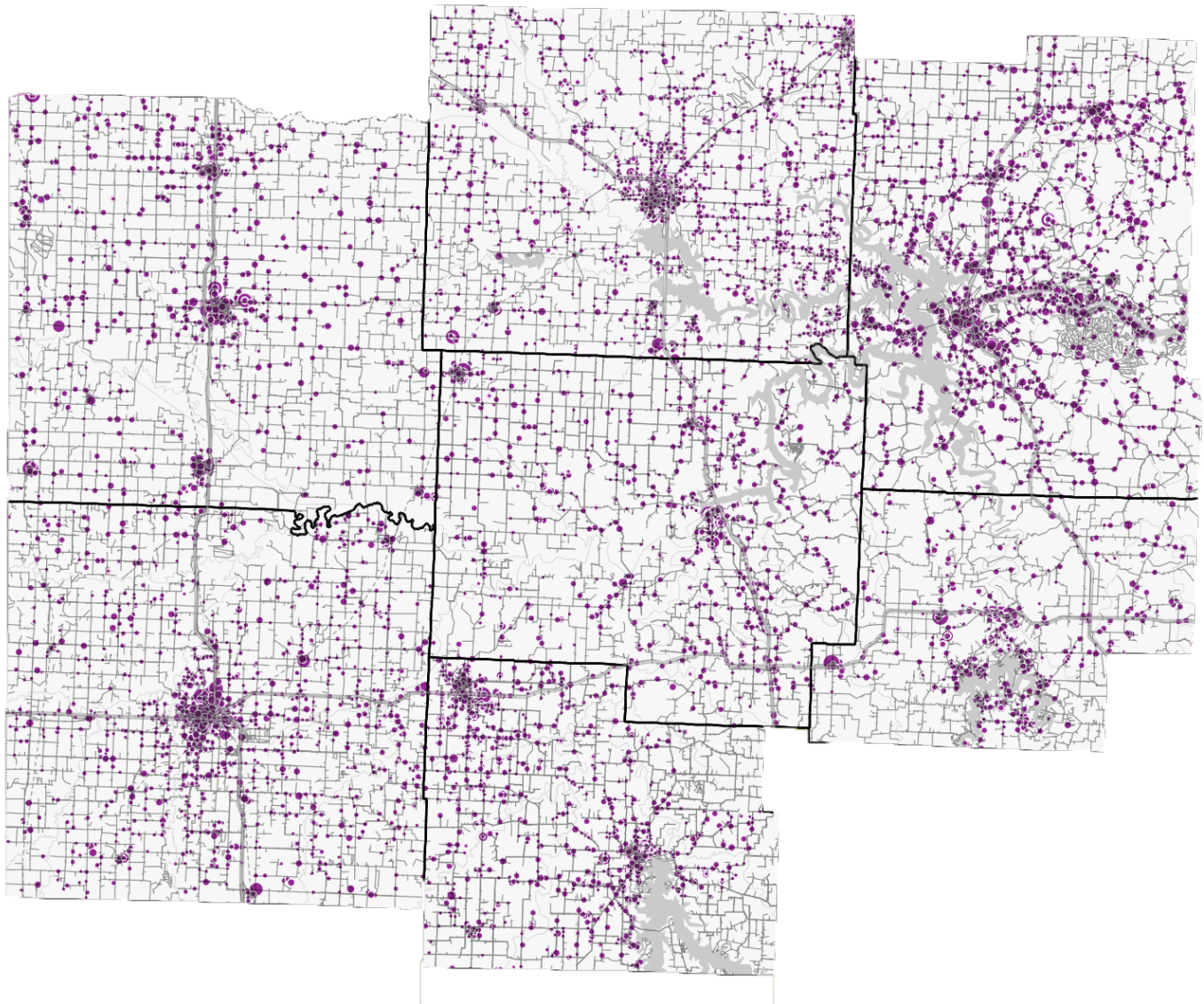


BUSINESS OPPORTUNITY AREAS

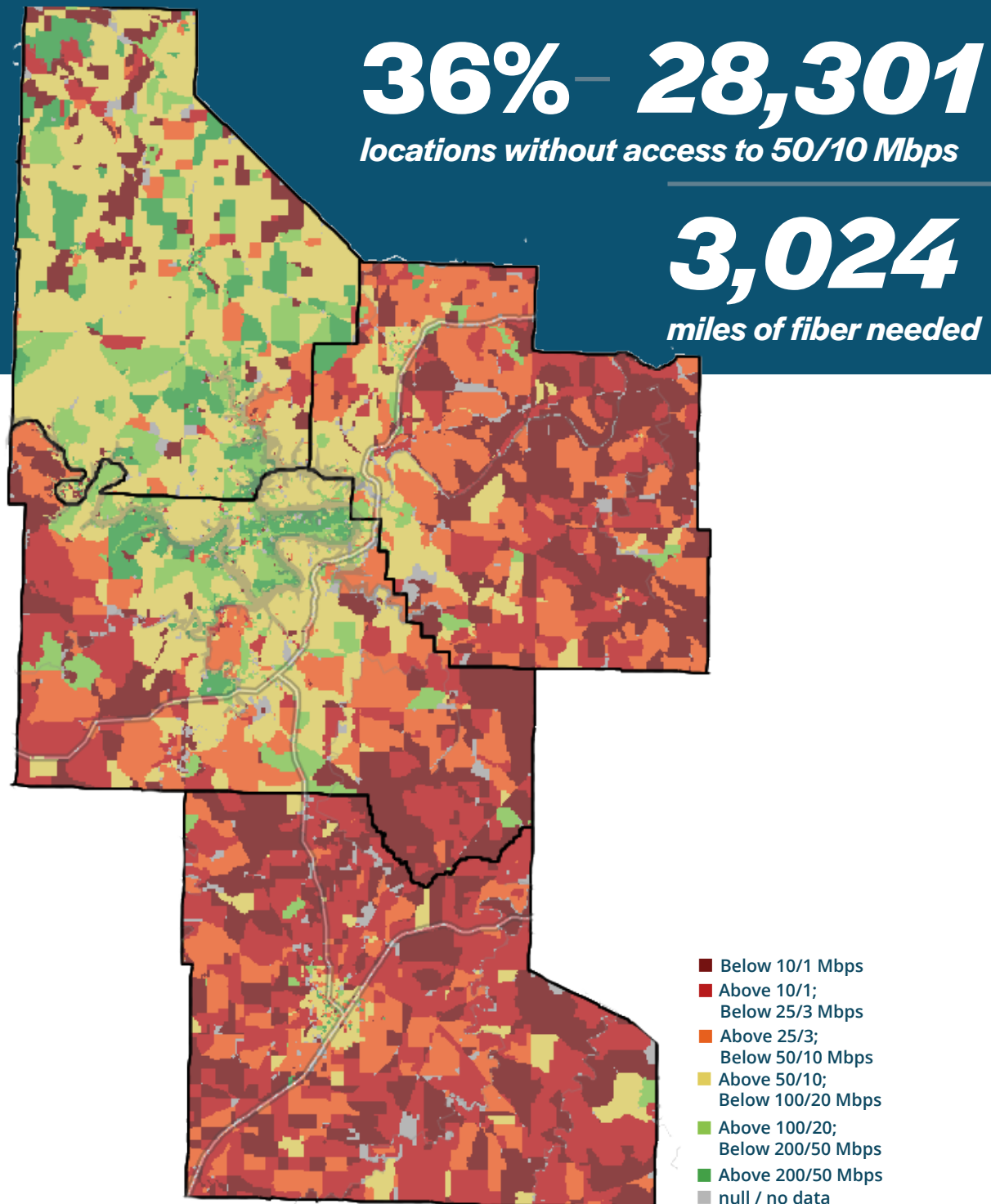
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• • • Business Locations *[the larger the dot the greater the broadband demand]*



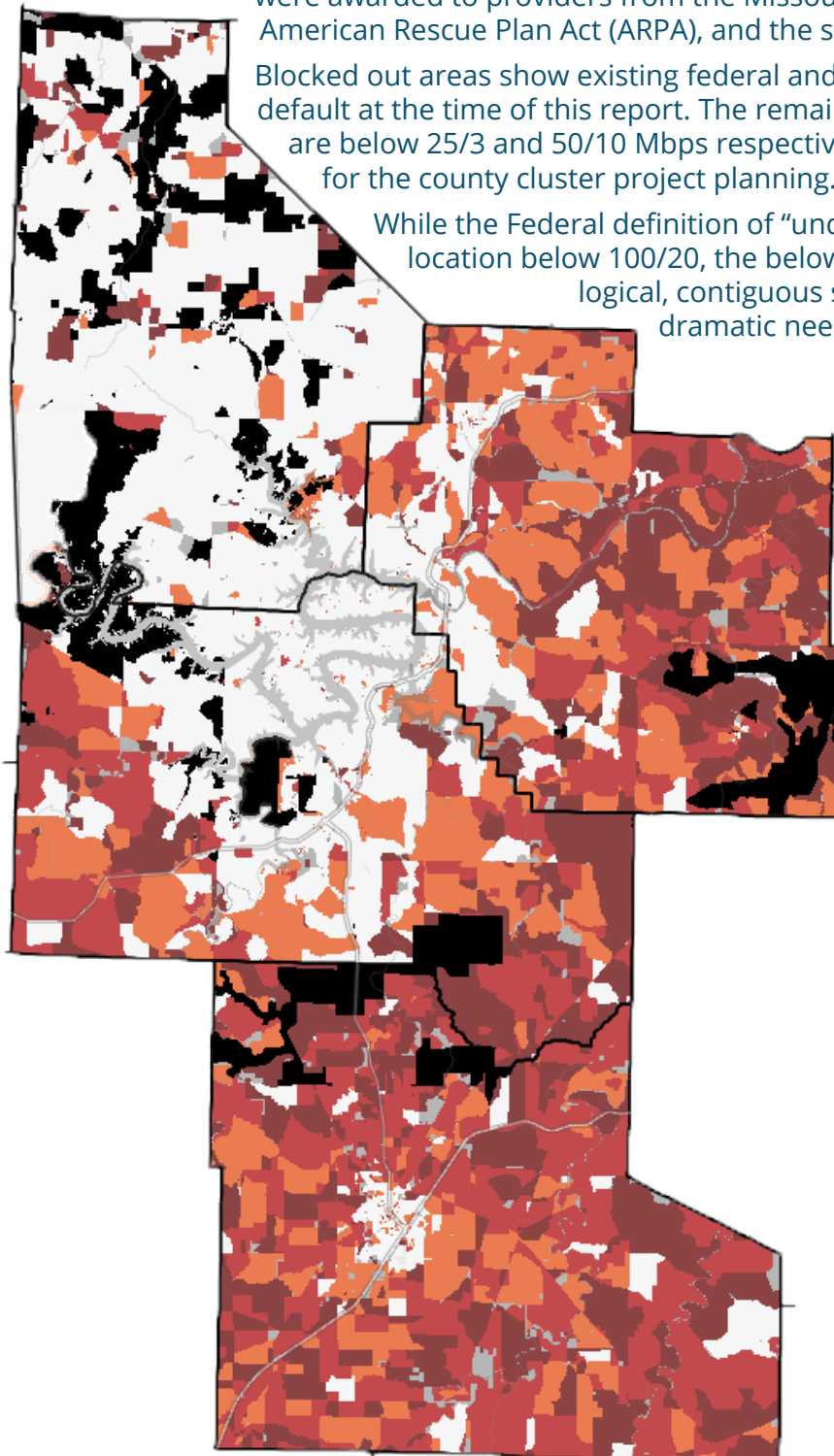
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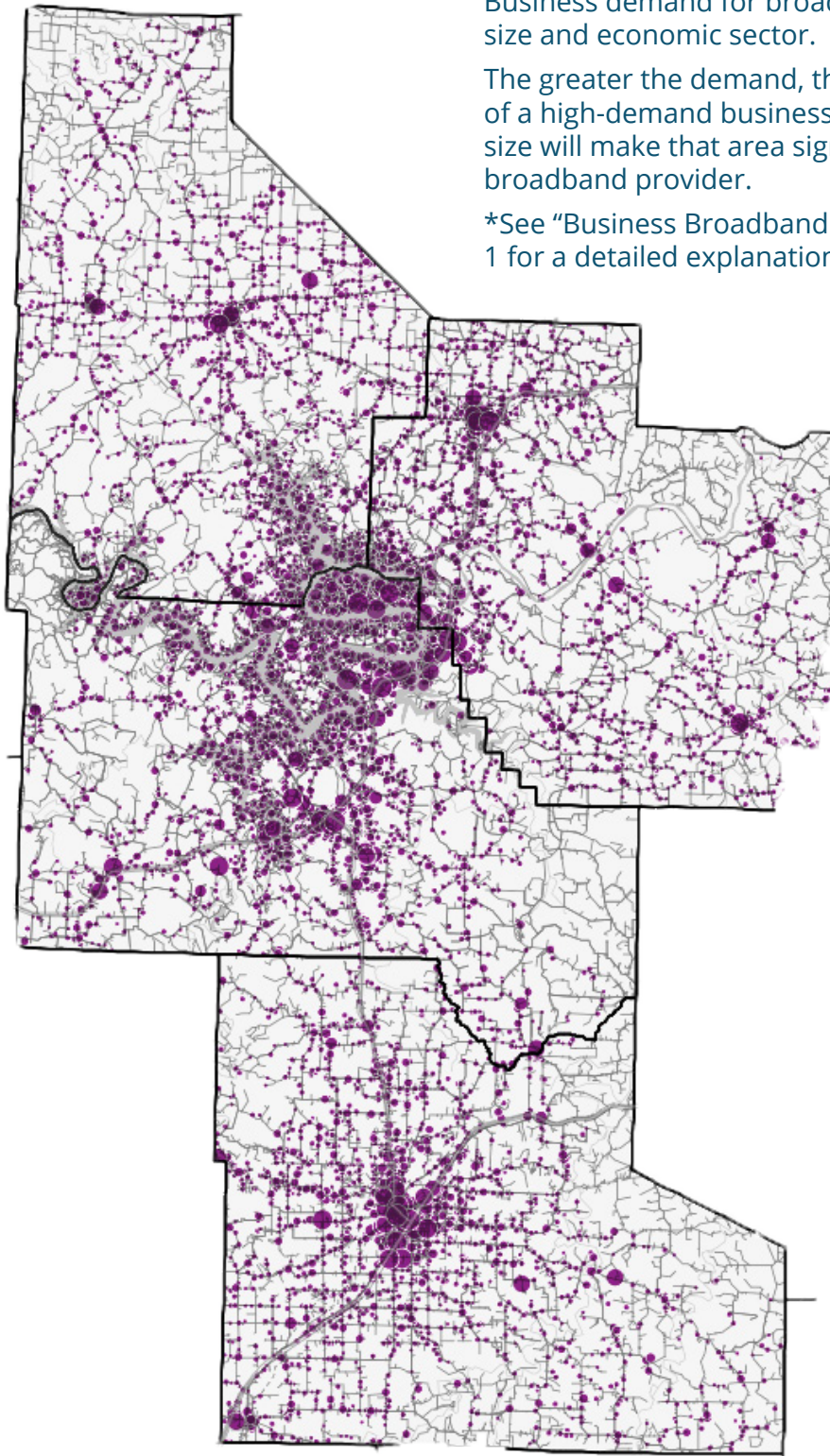
- Below 10/1 Mbps
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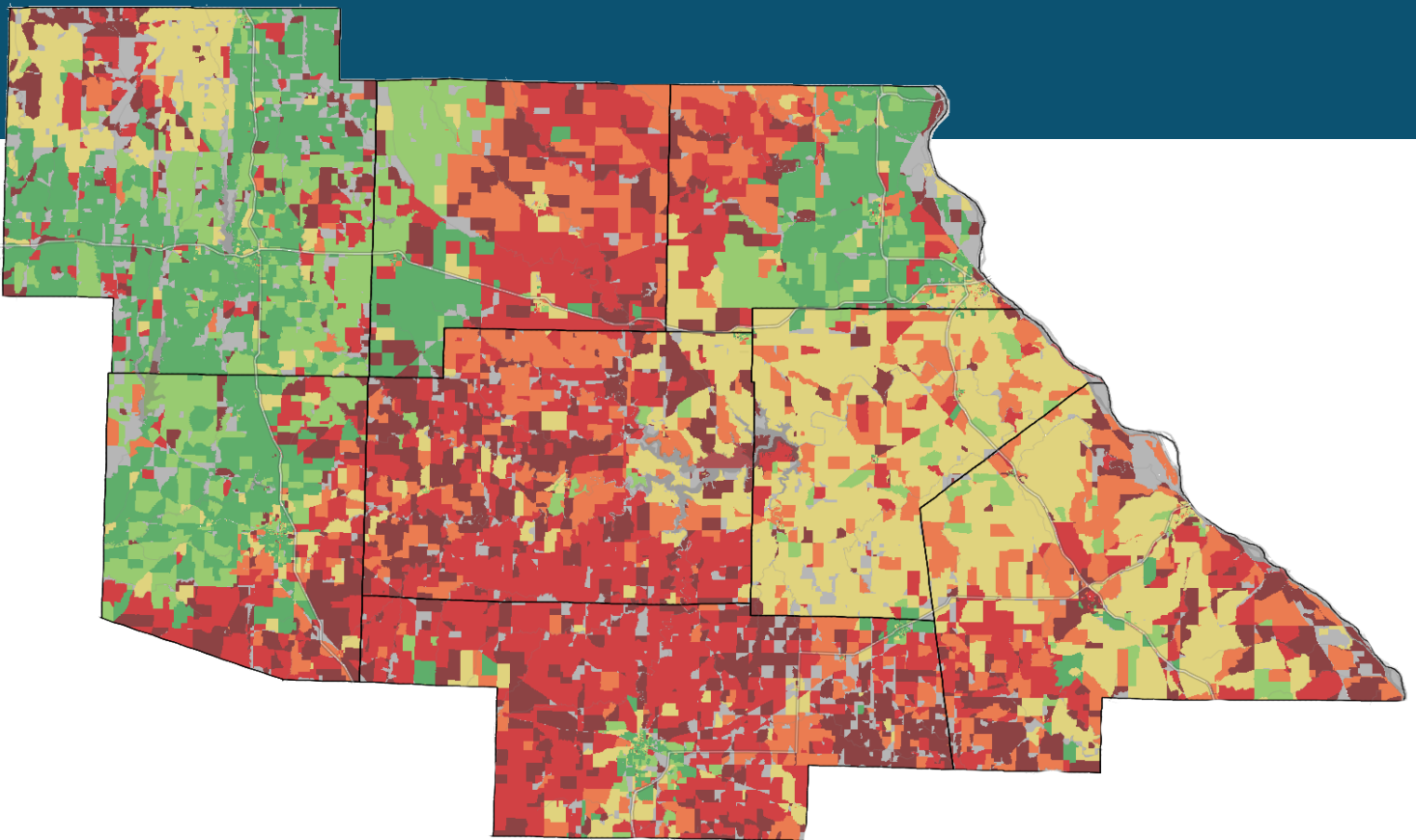
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34% — 28,839 | **4,596**
locations without access to 50/10 Mbps | *miles of fiber needed*



■ Below 10/1 Mbps ■ Above 10/1; ■ Above 25/3; ■ Above 50/10; ■ Above 100/20; ■ Above 200/50 Mbps
■ null / no data ■ Below 25/3 Mbps ■ Below 50/10 Mbps ■ Below 100/20 Mbps ■ Below 200/50 Mbps

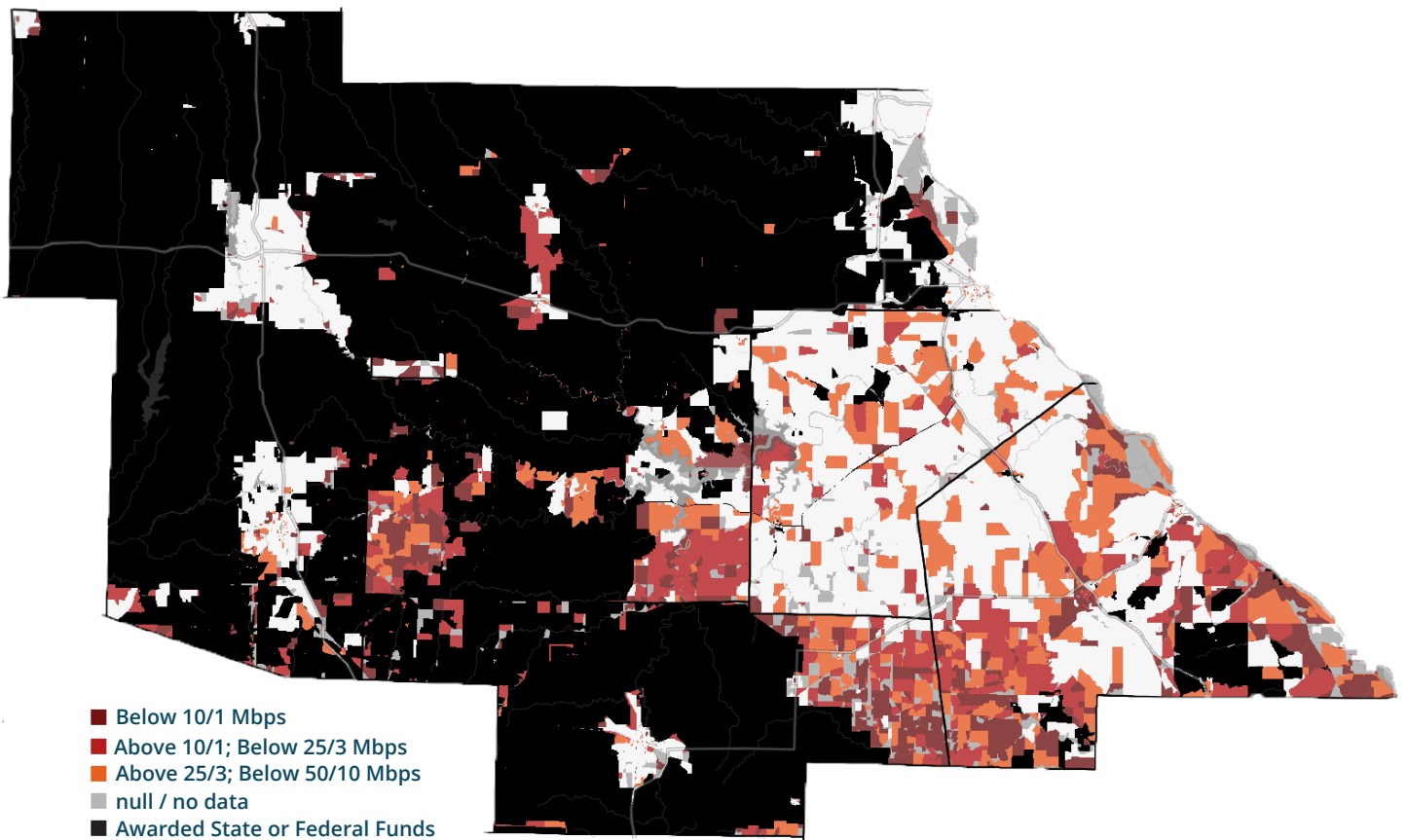
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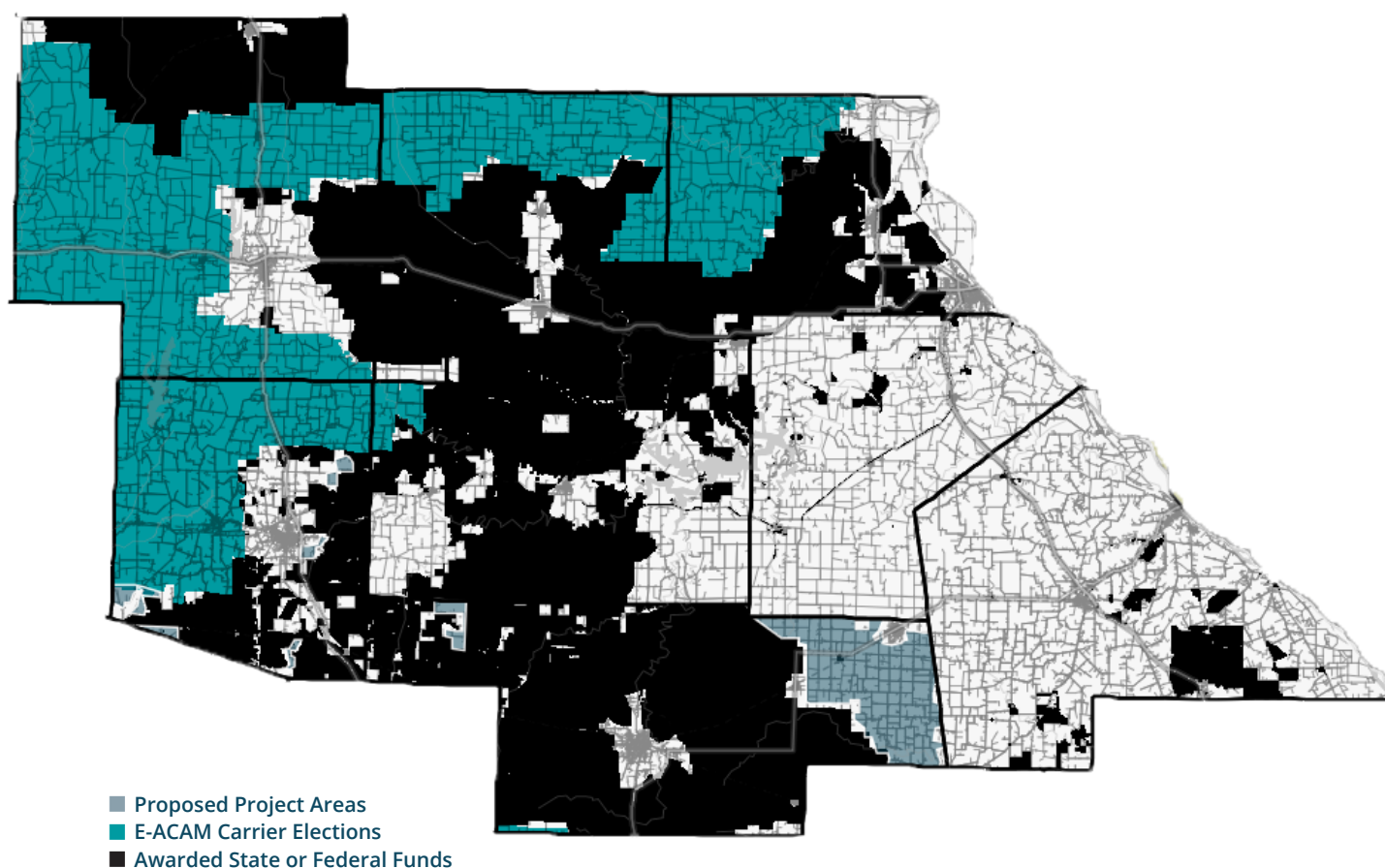
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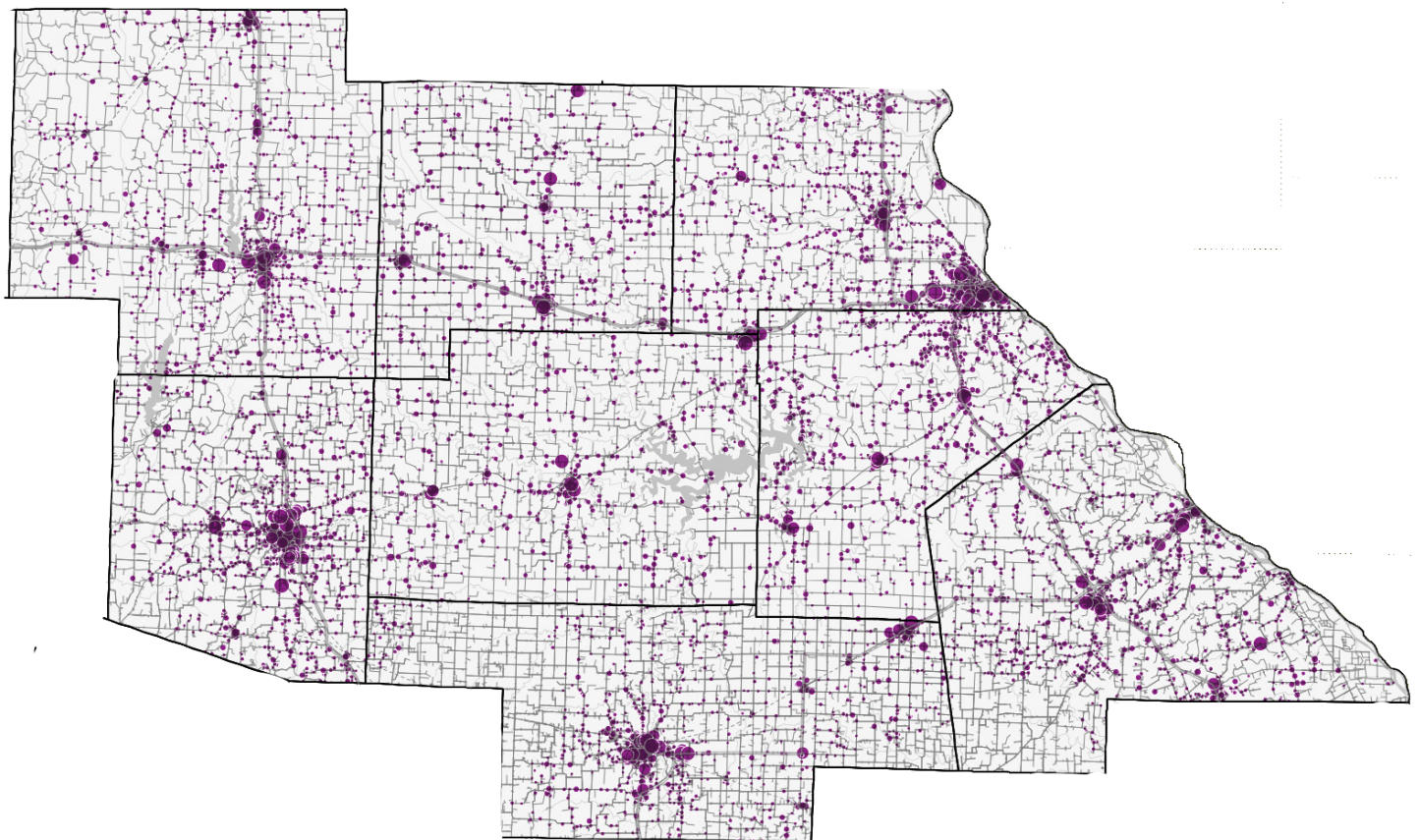
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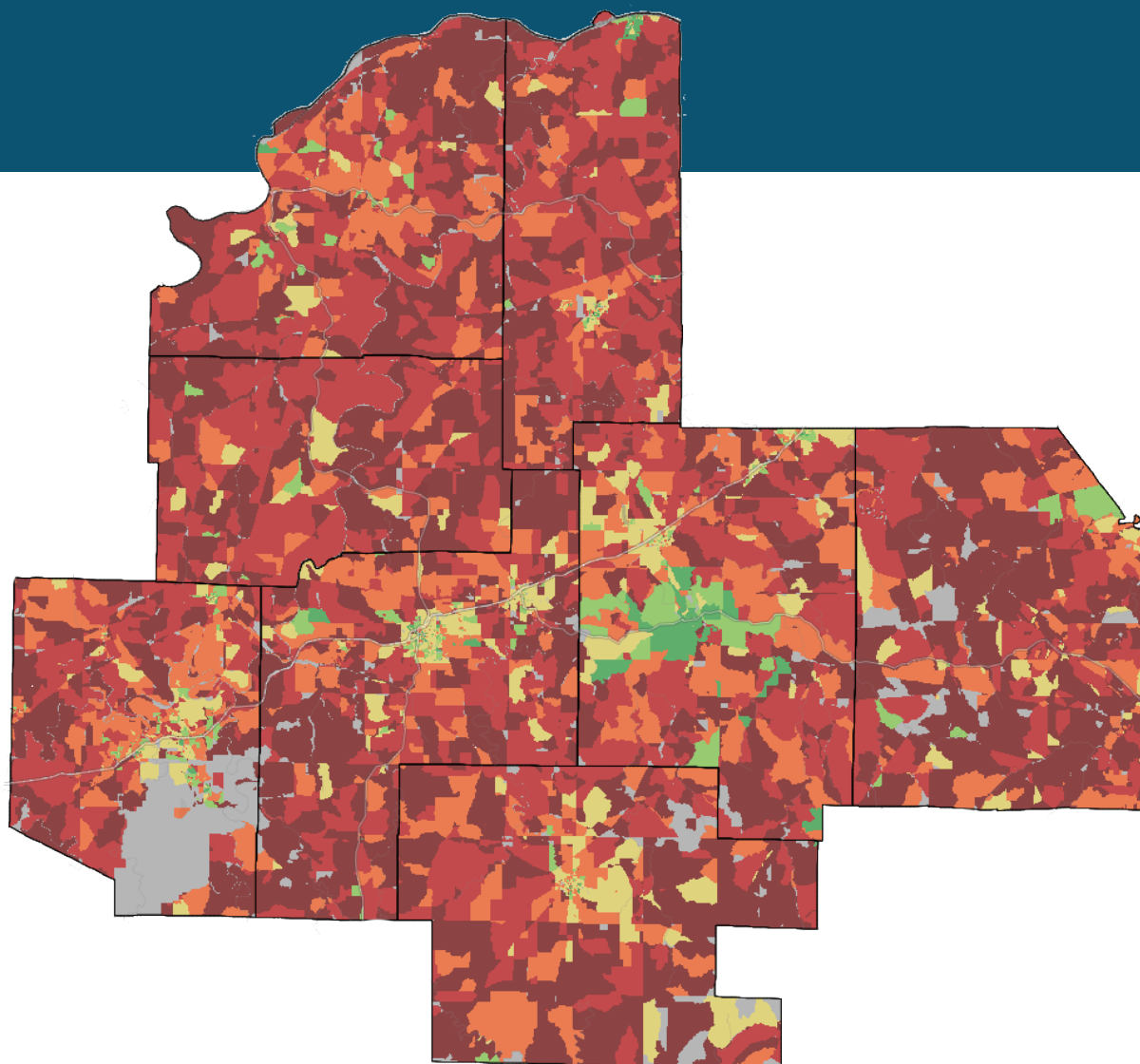
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• • • Business Locations *[the larger the dot the greater the broadband demand]*

70% – 60,102
locations without access to 50/10 Mbps

6,517
miles of fiber needed



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

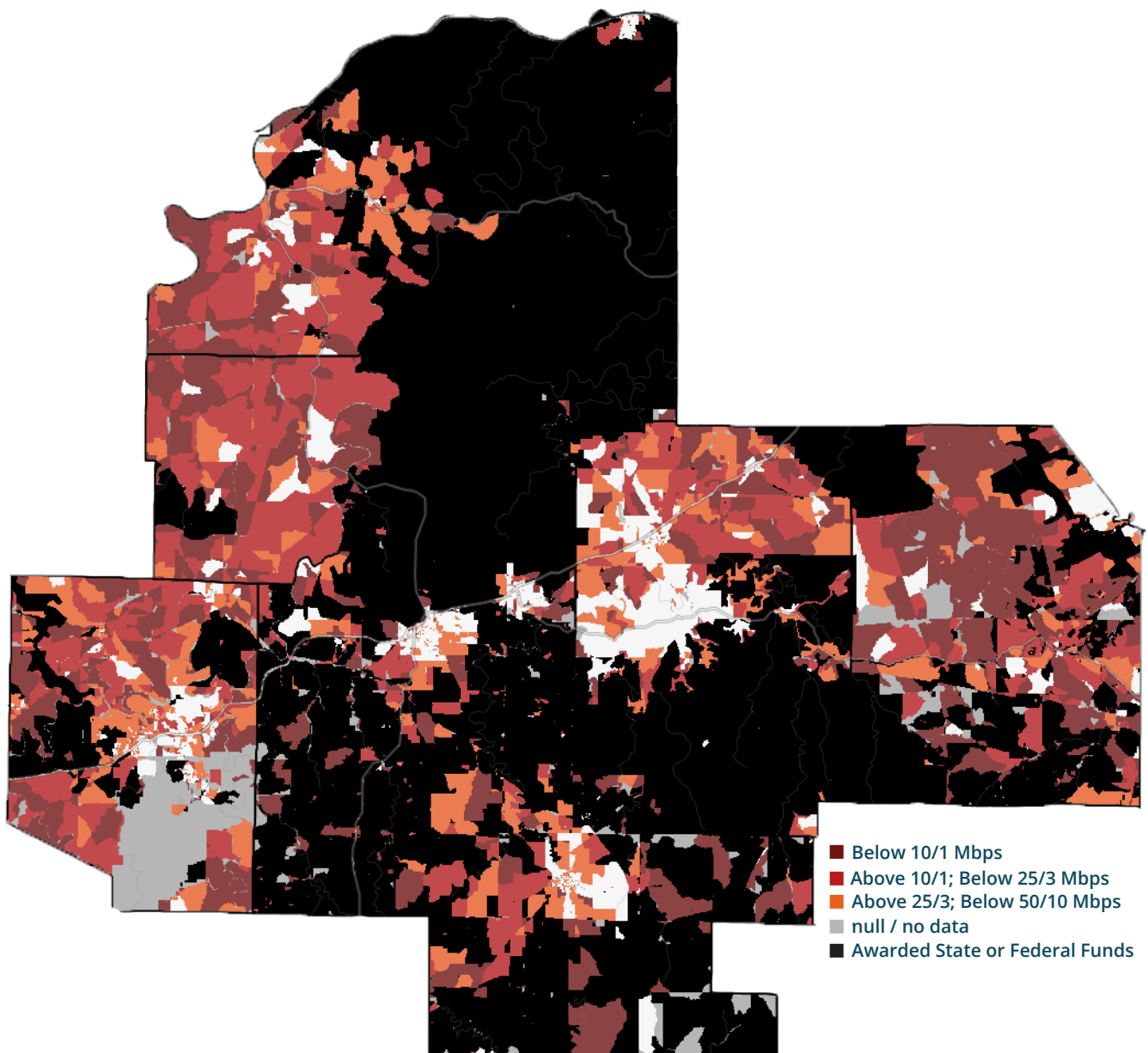
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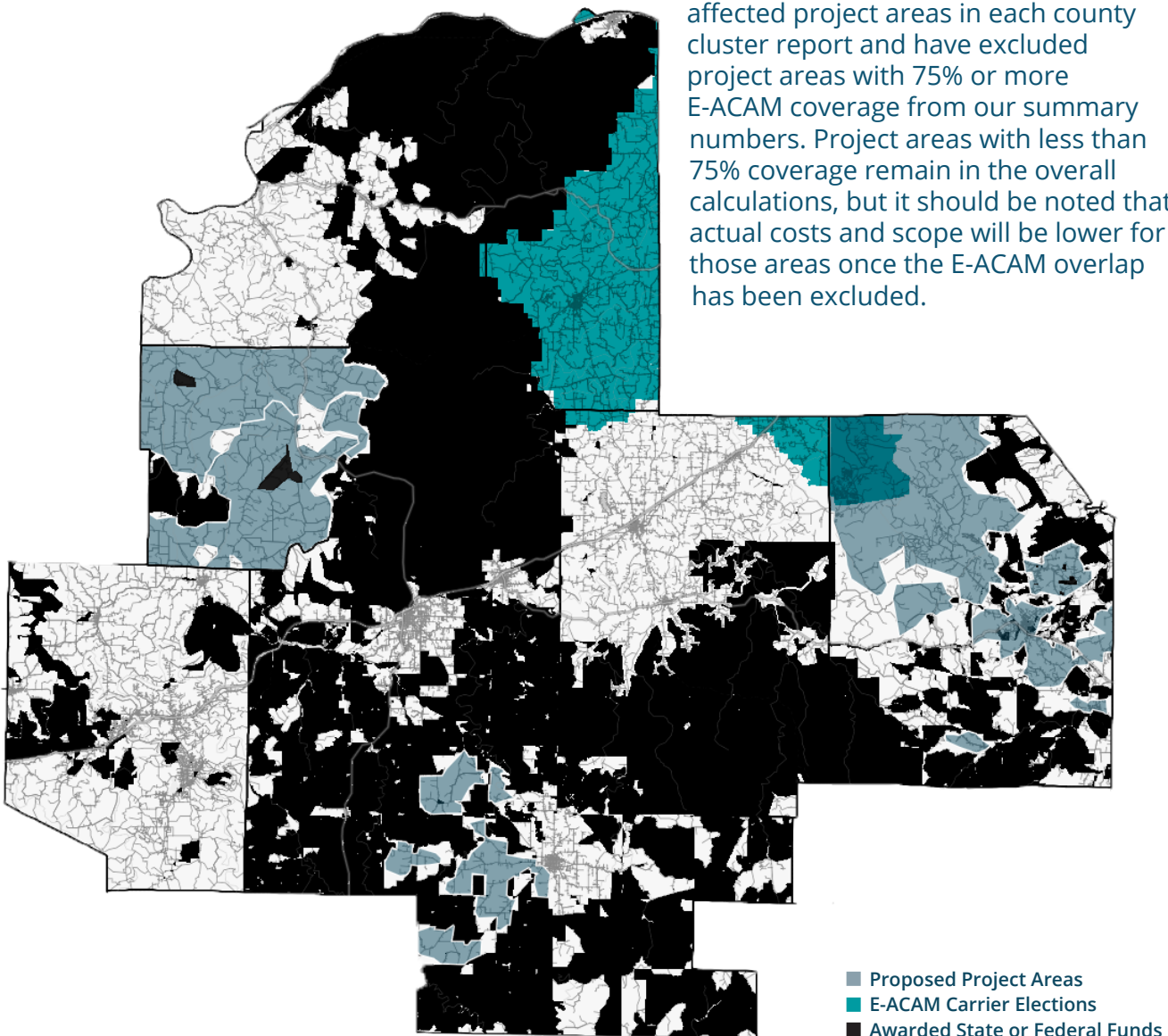
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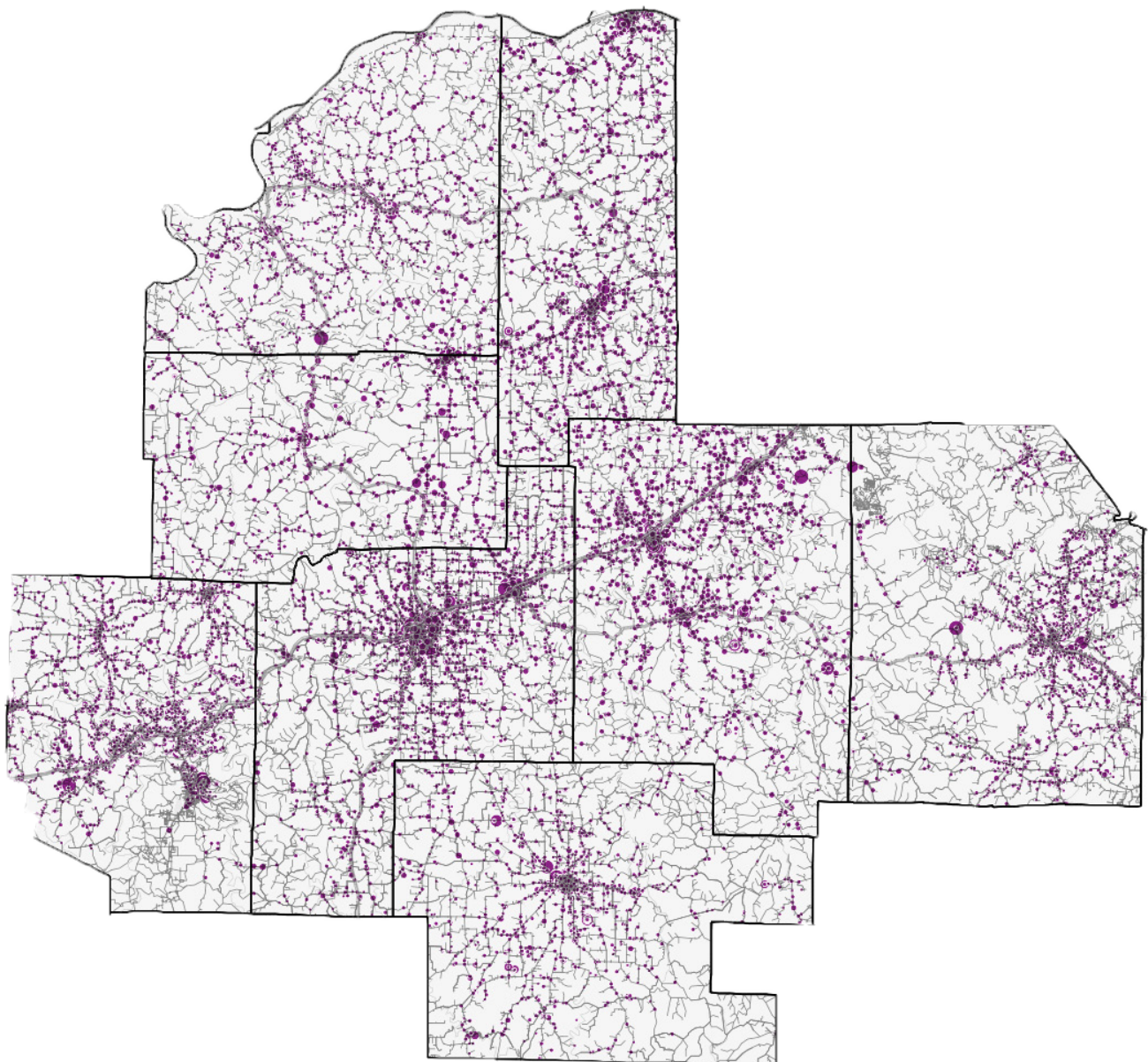


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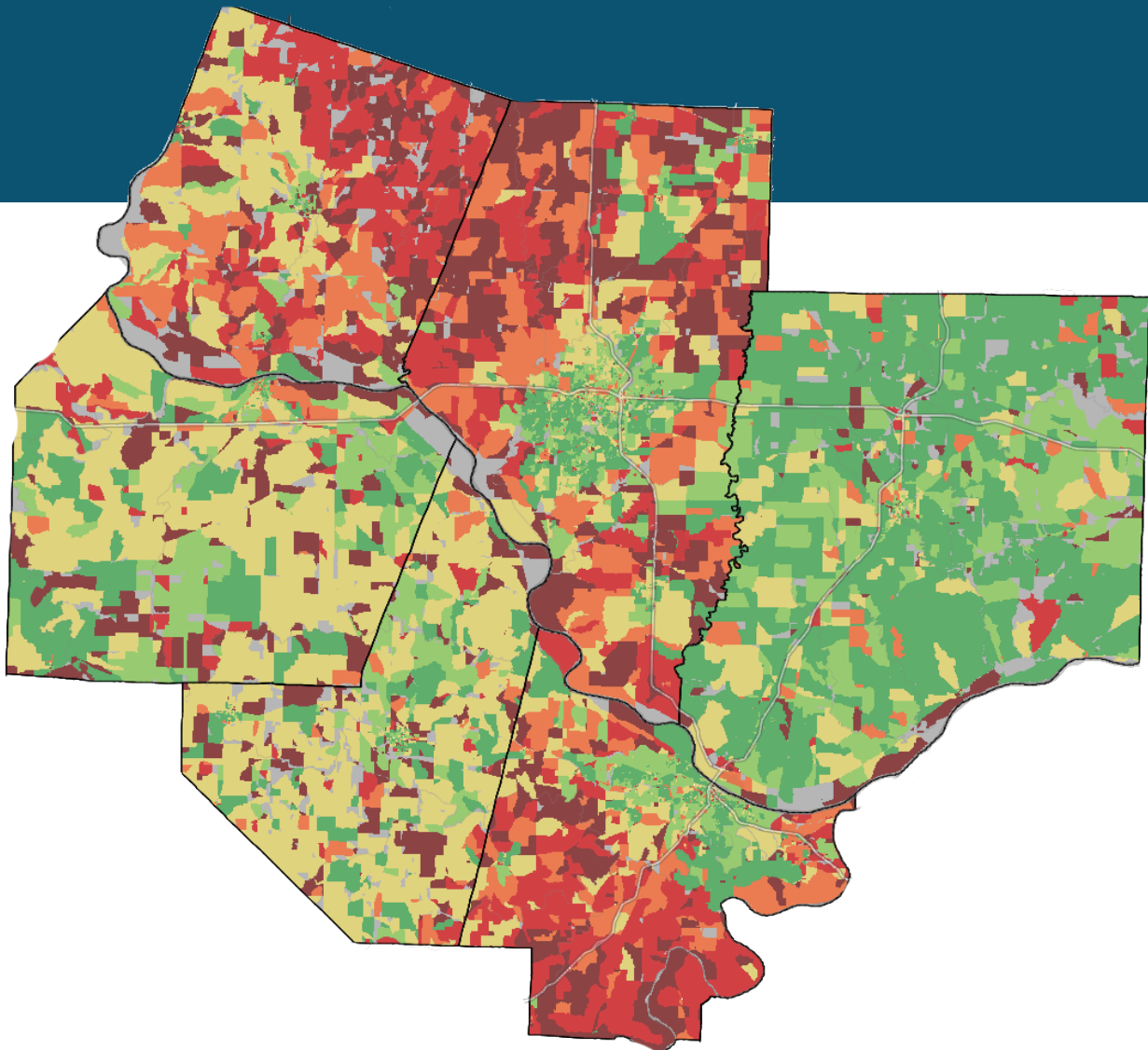
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• • • Business Locations *[the larger the dot the greater the broadband demand]*

20% – 24,714
locations without access to 50/10 Mbps

2,472
miles of fiber needed



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

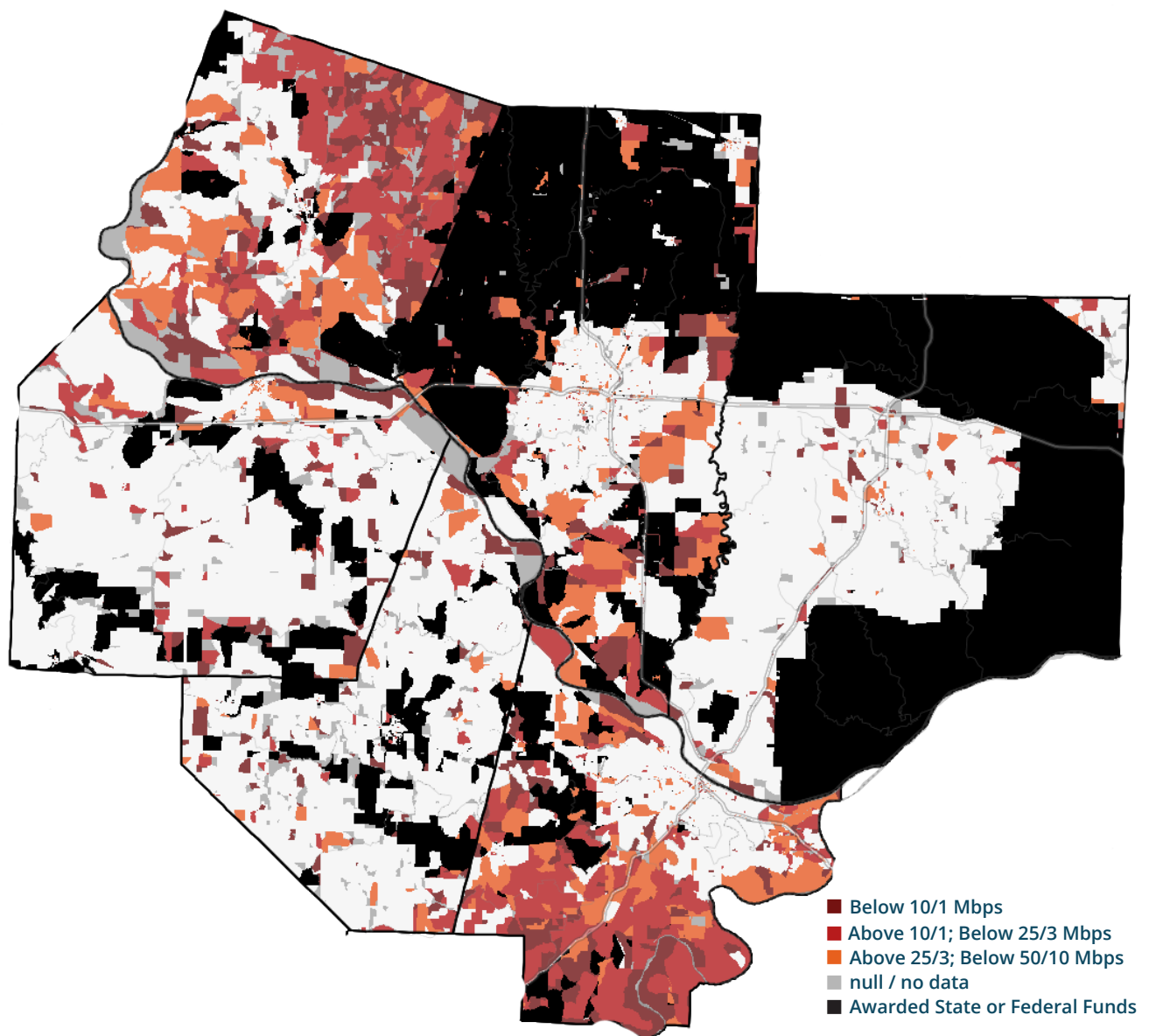
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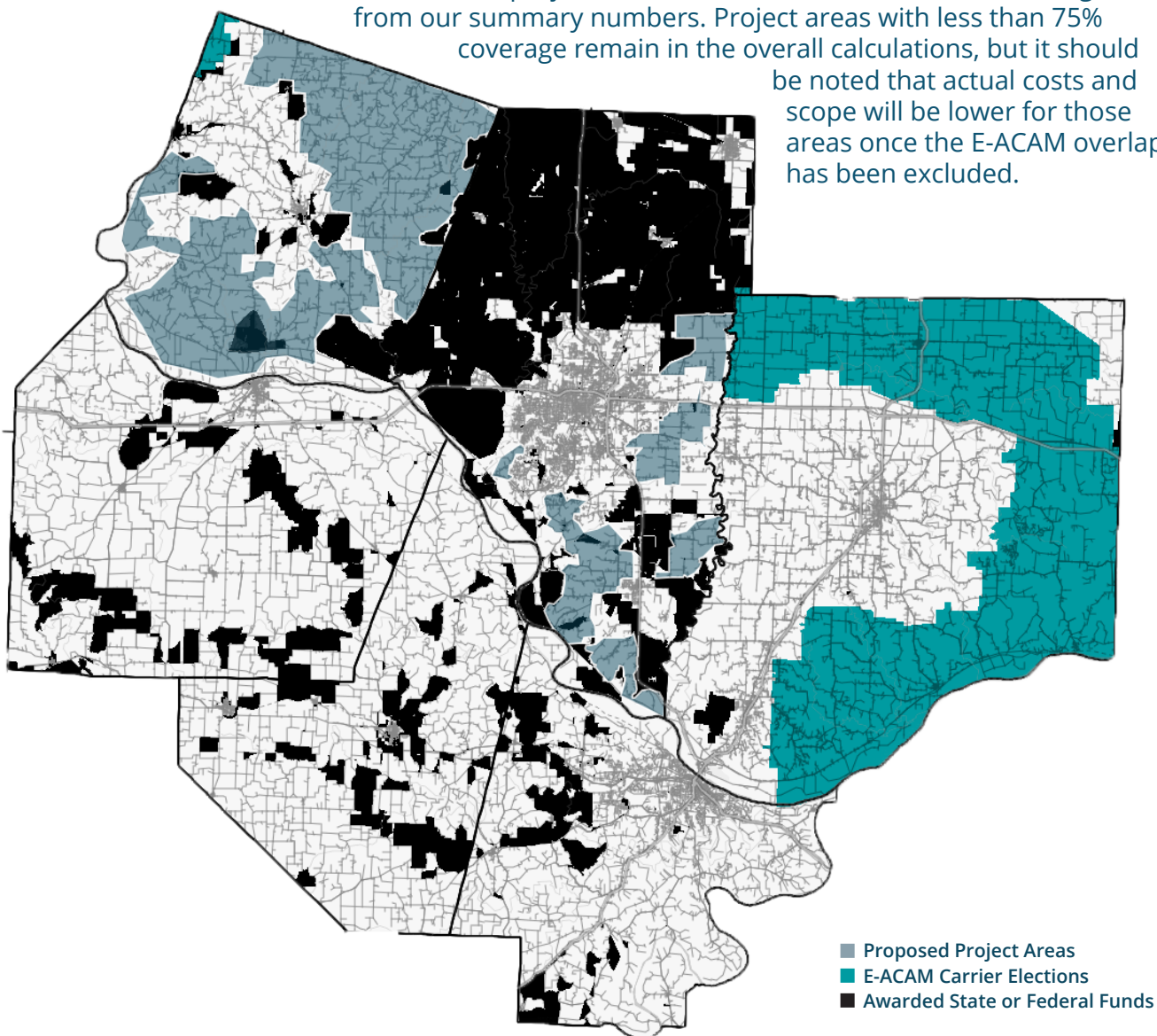
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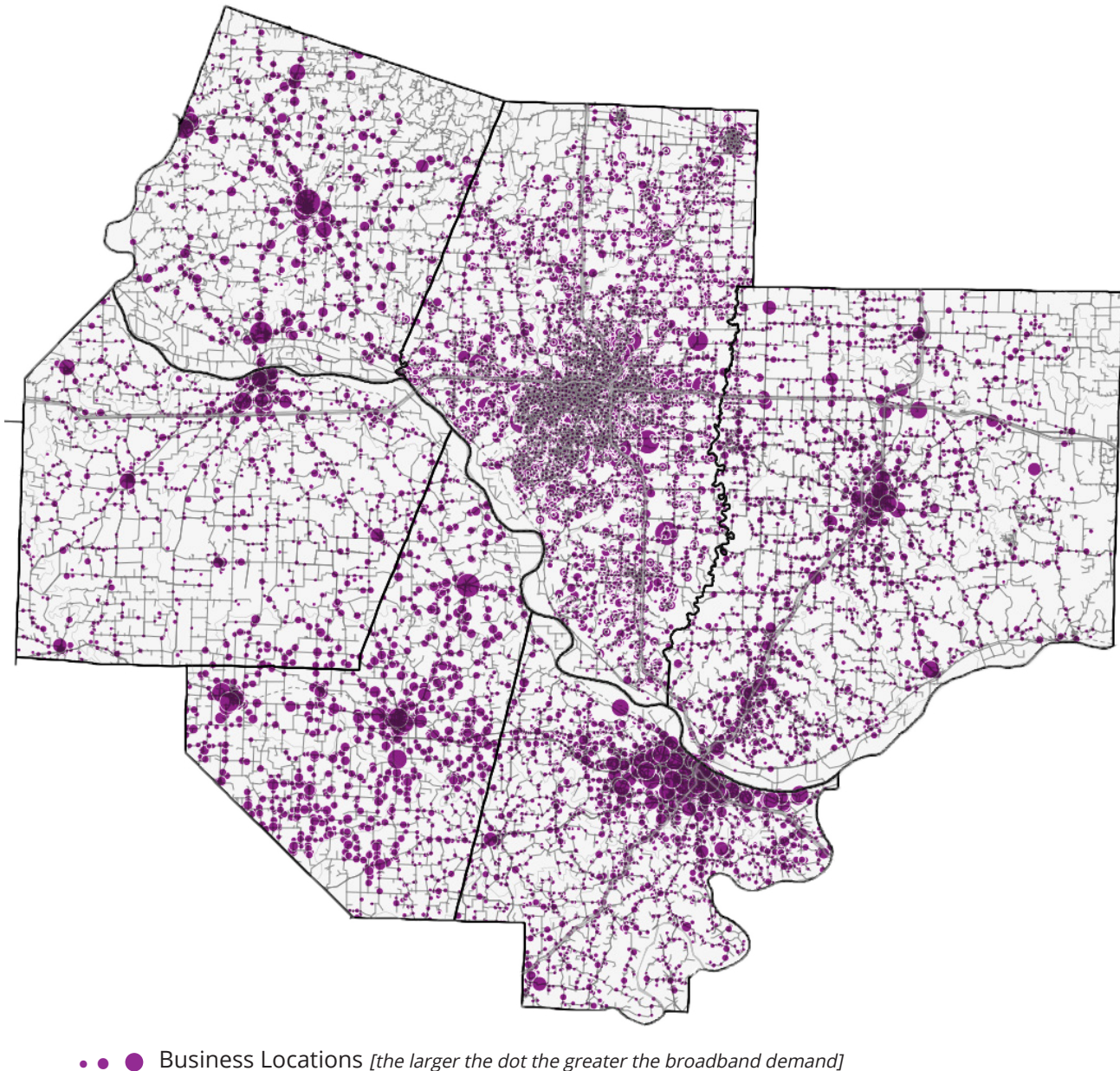
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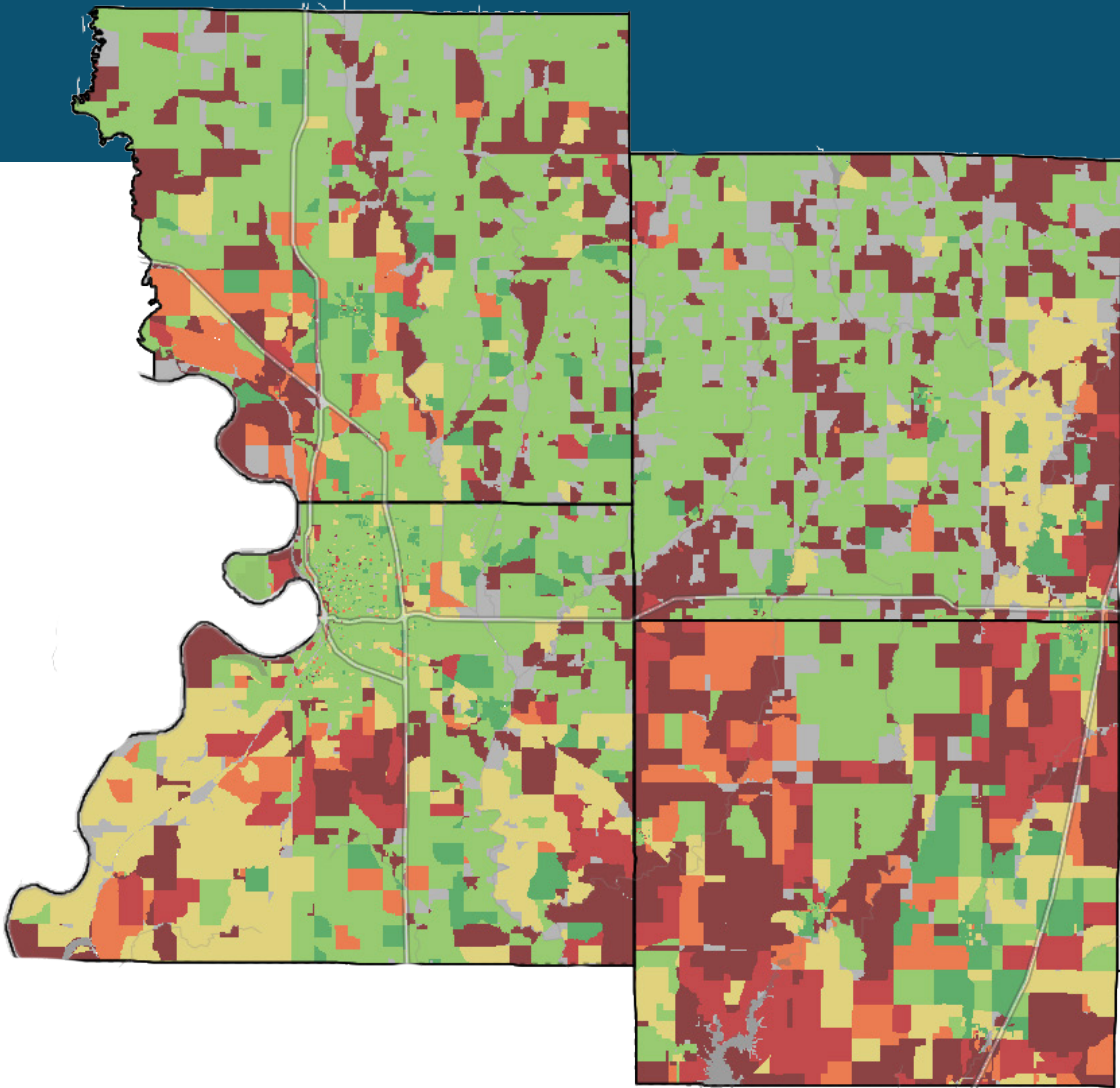
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19% – 10,588 | **1,313**
locations without access to 50/10 Mbps | *miles of fiber needed*



■ Below 10/1 Mbps ■ Above 10/1; ■ Above 25/3; ■ Above 50/10; ■ Above 100/20; ■ Above 200/50 Mbps
■ null / no data Below 25/3 Mbps Below 50/10 Mbps Below 100/20 Mbps Below 200/50 Mbps

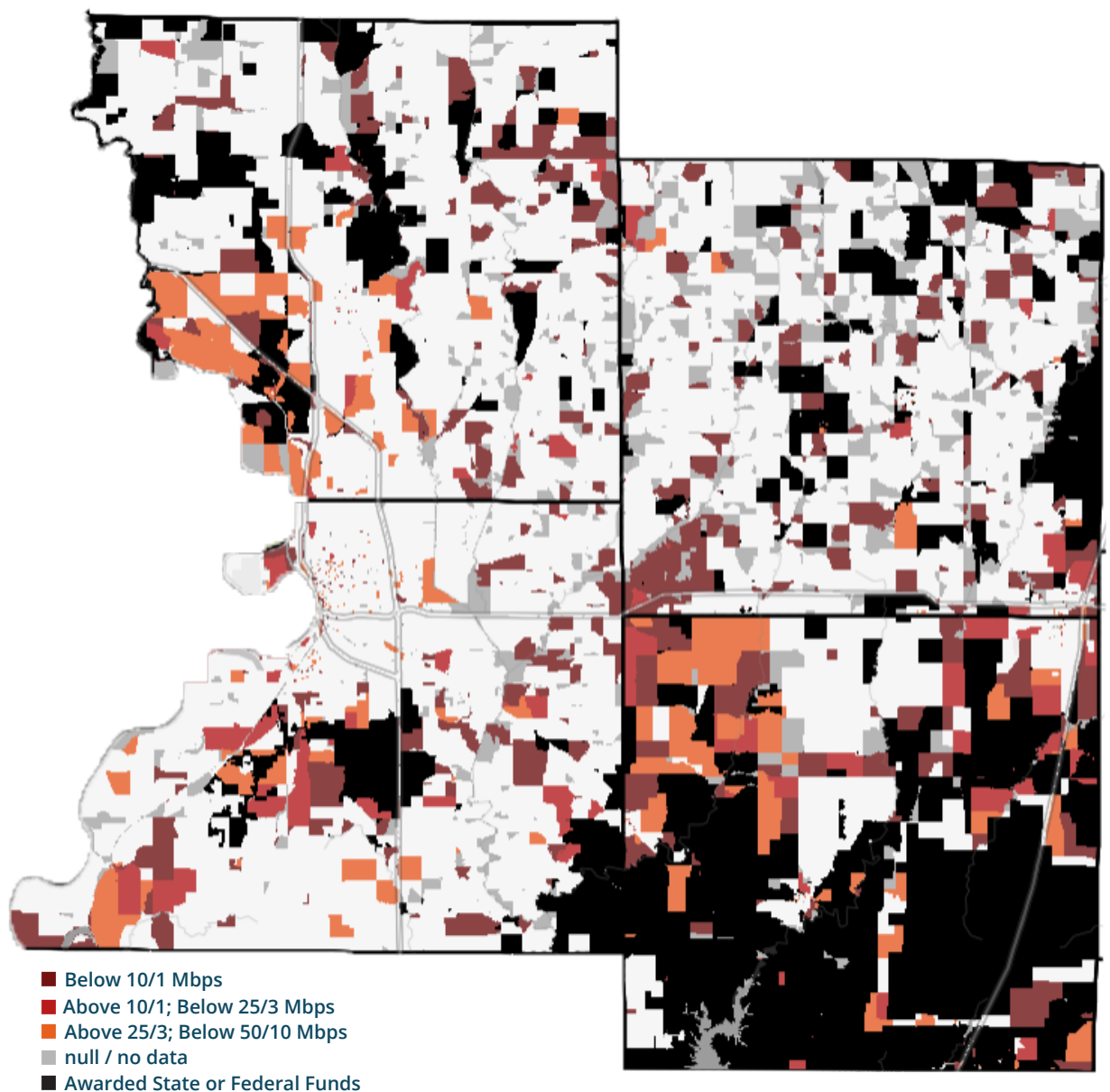
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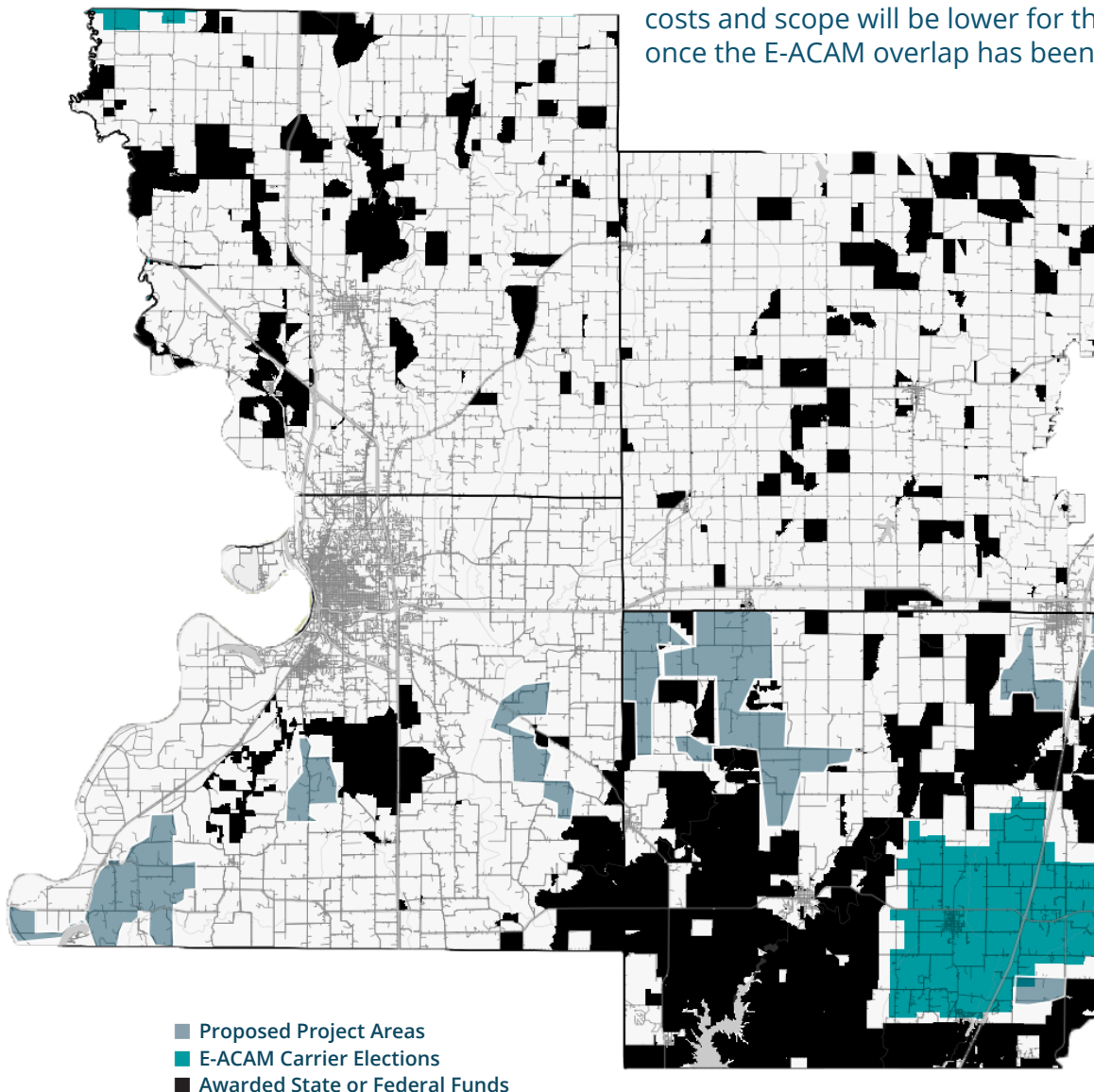
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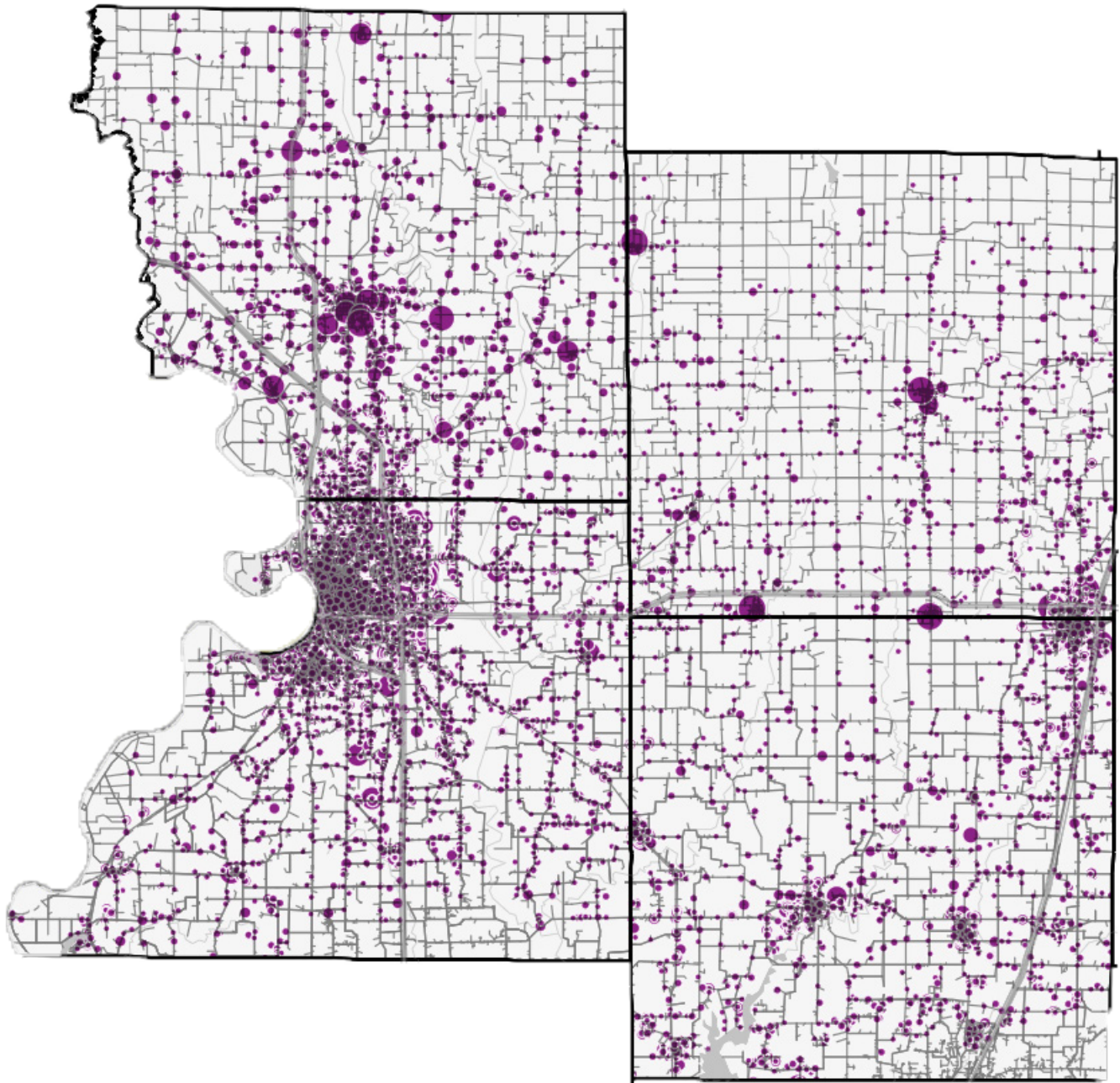


BUSINESS OPPORTUNITY AREAS

Business demand for broadband varies based on company size and economic sector.

The greater the demand, the bigger the dot. The presence of a high-demand business or multiple businesses of any size will make that area significantly more attractive to a broadband provider.

*See "Business Broadband Opportunity Index" in Appendix 1 for a detailed explanation of how dot size was determined



• • • Business Locations *[the larger the dot the greater the broadband demand]*

Northeast Missouri

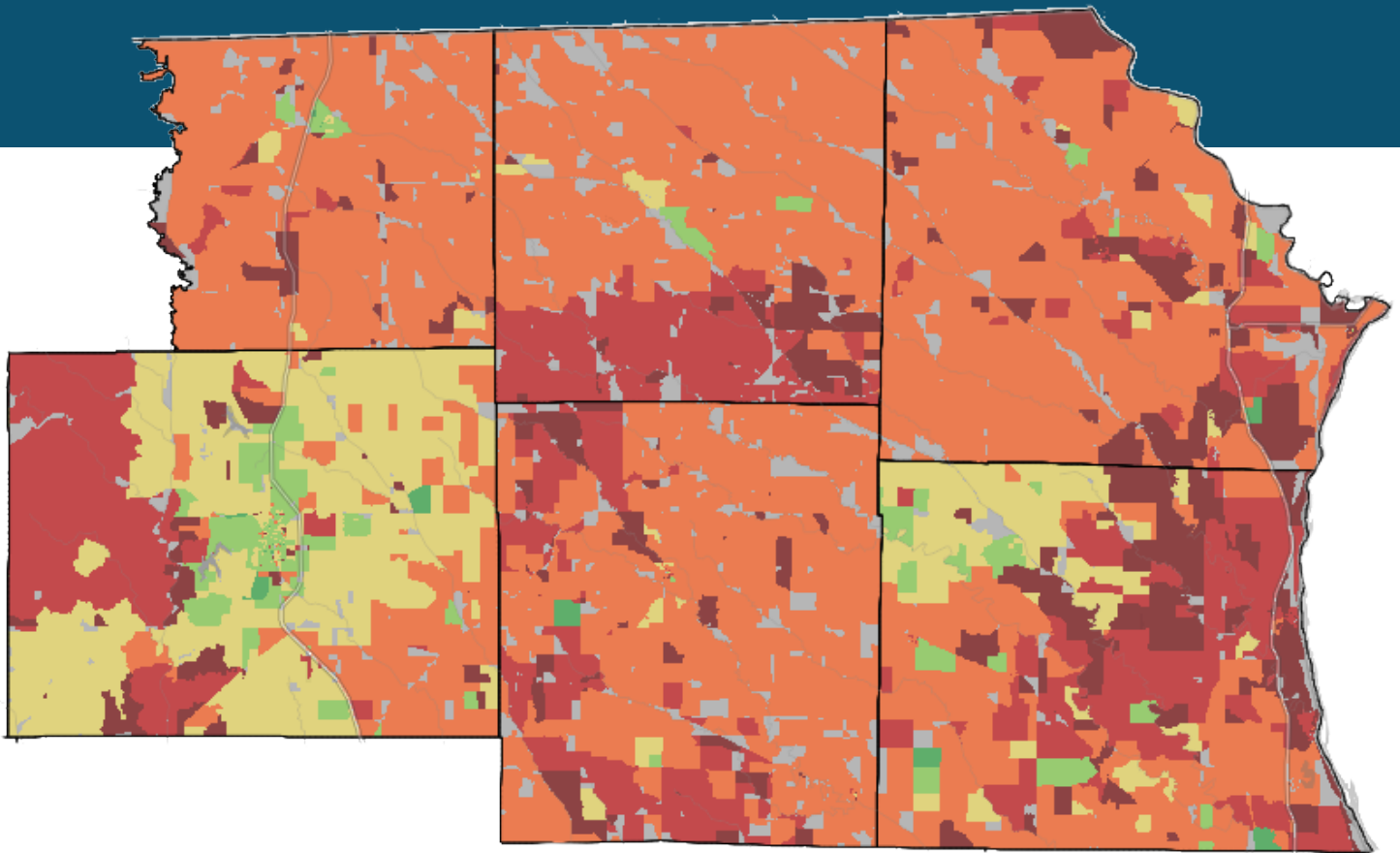
Regional Planning Commission

64% — 18,683

locations without access to 50/10 Mbps

3,631

miles of fiber needed



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

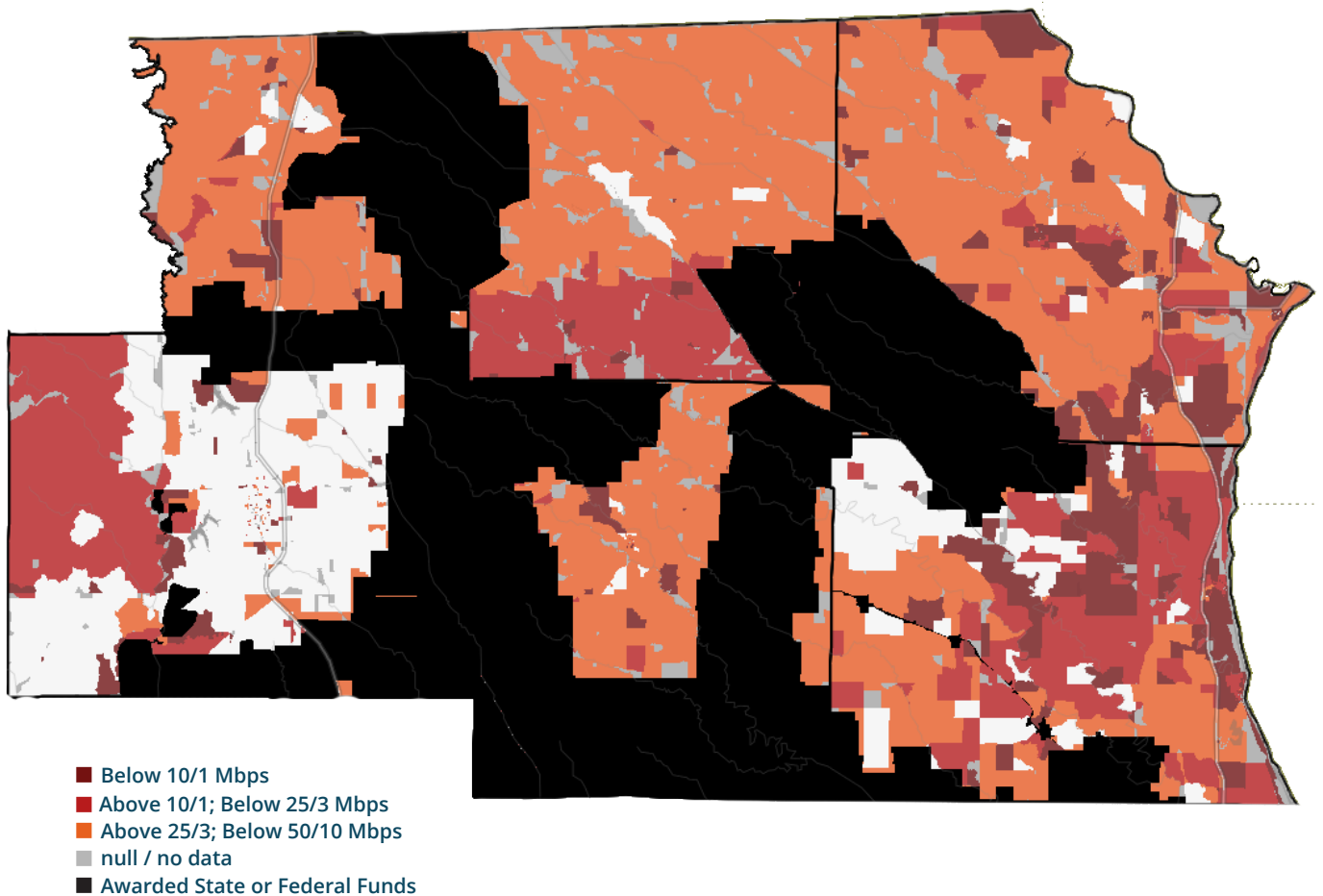
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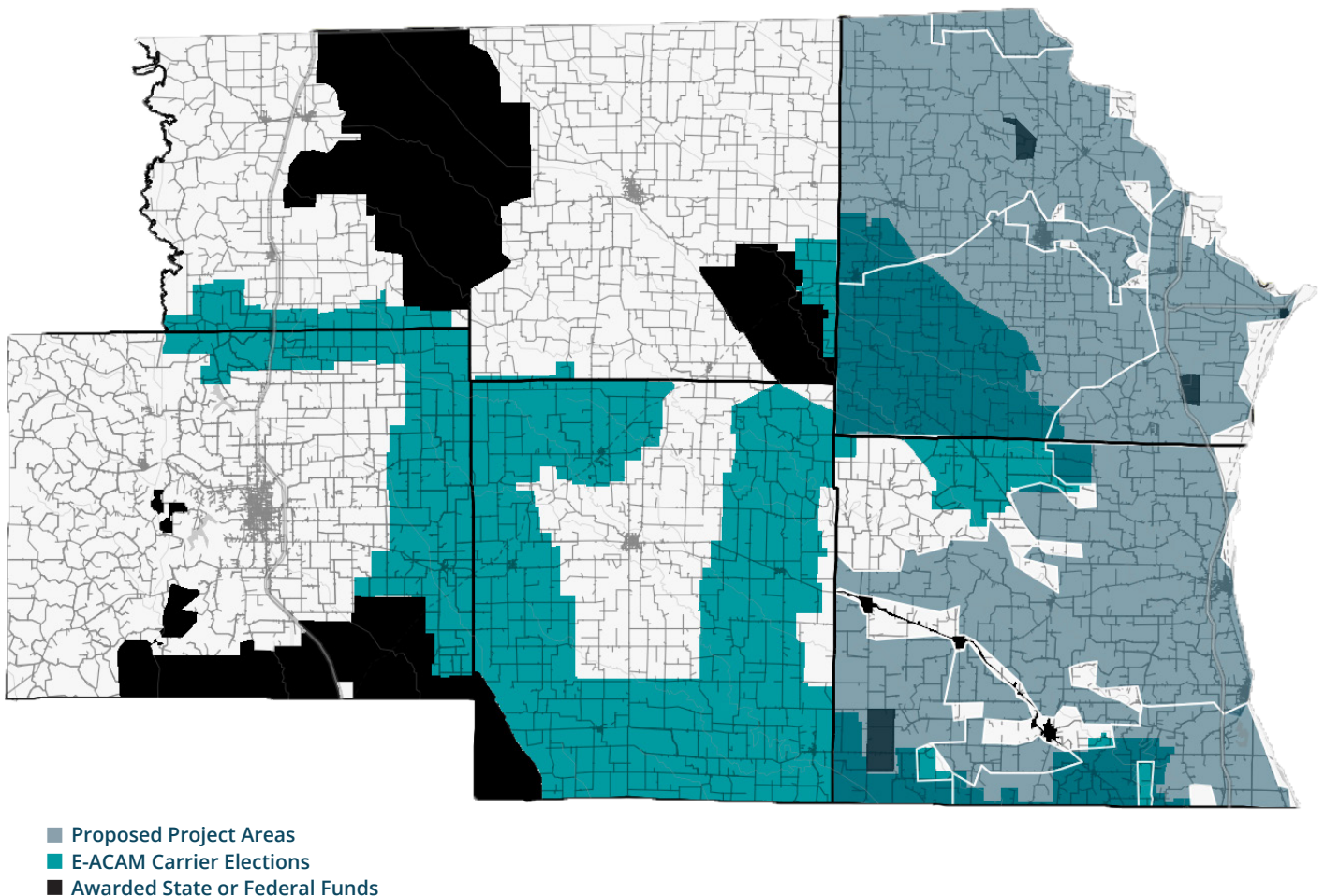
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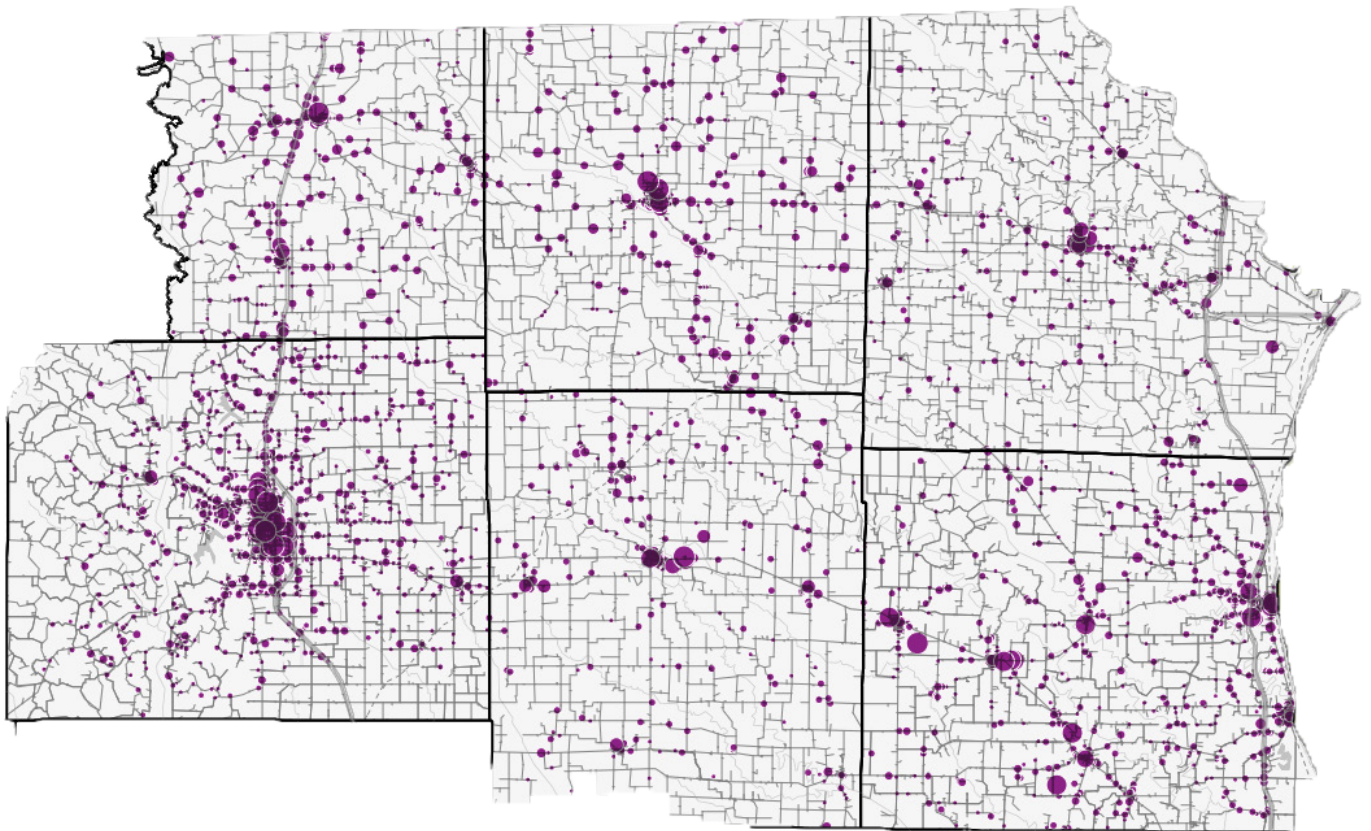


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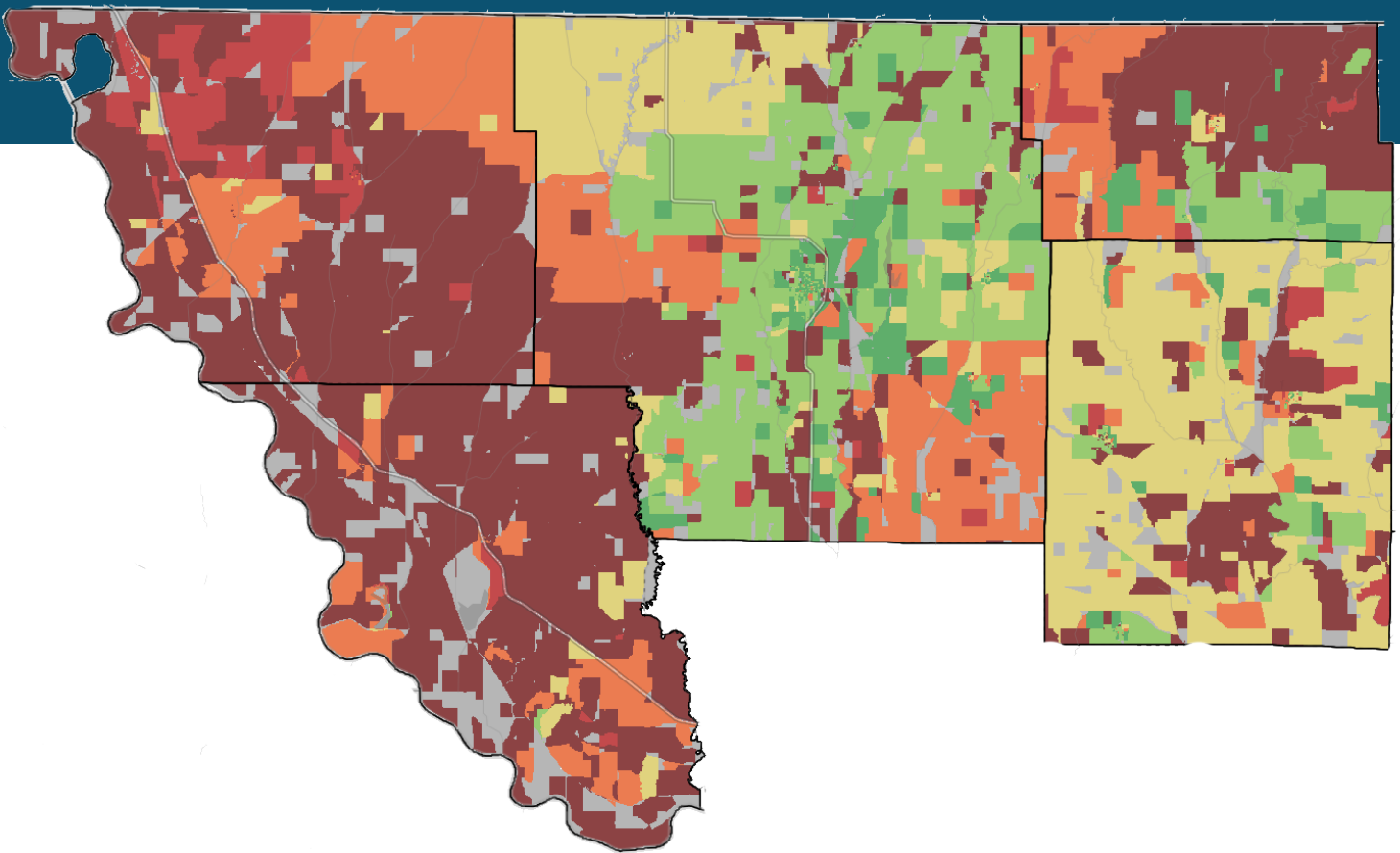
• • • Business Locations *[the larger the dot the greater the broadband demand]*

Northwest Missouri

Regional Council of Governments

51% – 12,228
locations without access to 50/10 Mbps

2,781
miles of fiber needed



■ Below 10/1 Mbps ■ Above 10/1; ■ Above 25/3; ■ Above 50/10; ■ Above 100/20; ■ Above 200/50 Mbps
■ null / no data ■ Below 25/3 Mbps ■ Below 50/10 Mbps ■ Below 100/20 Mbps ■ Below 200/50 Mbps

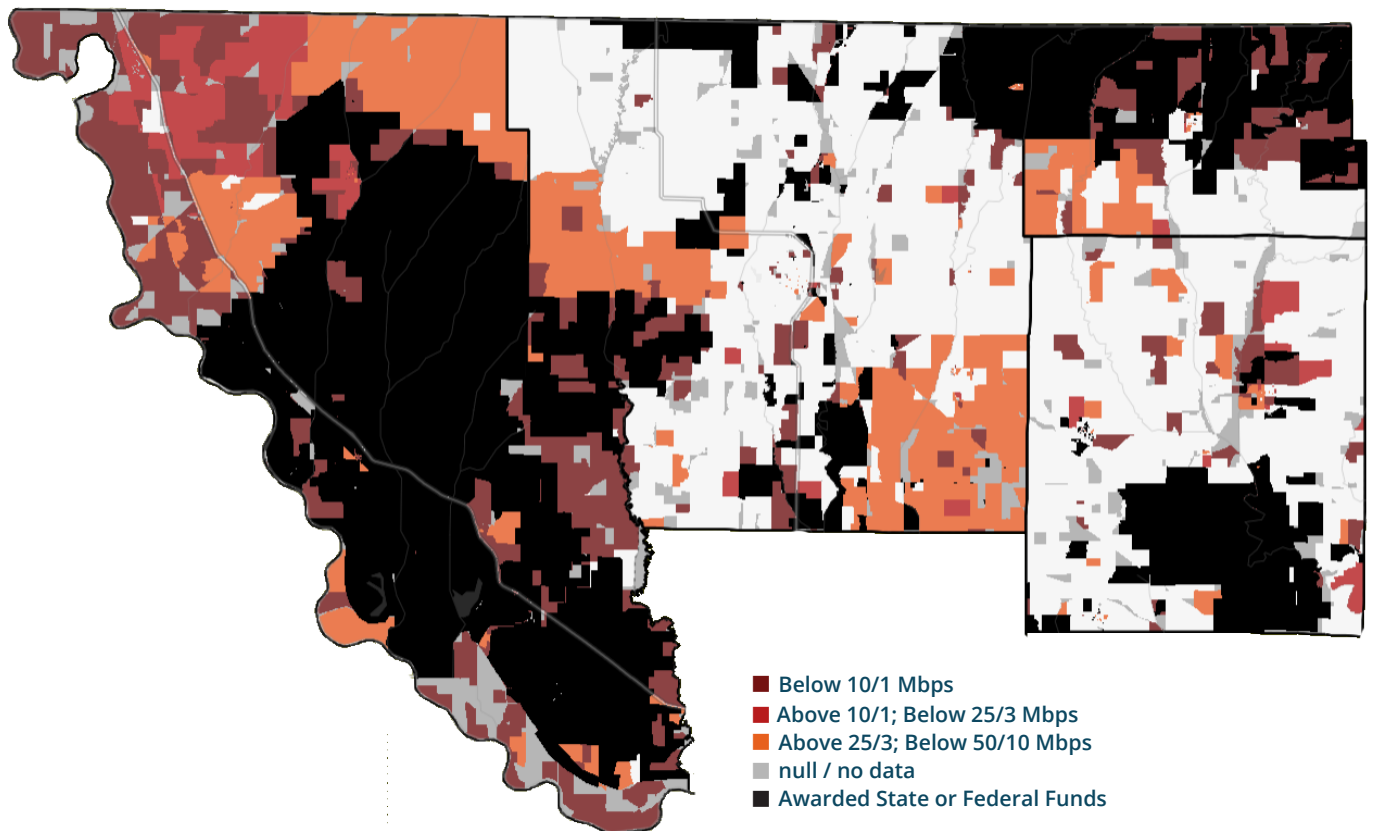
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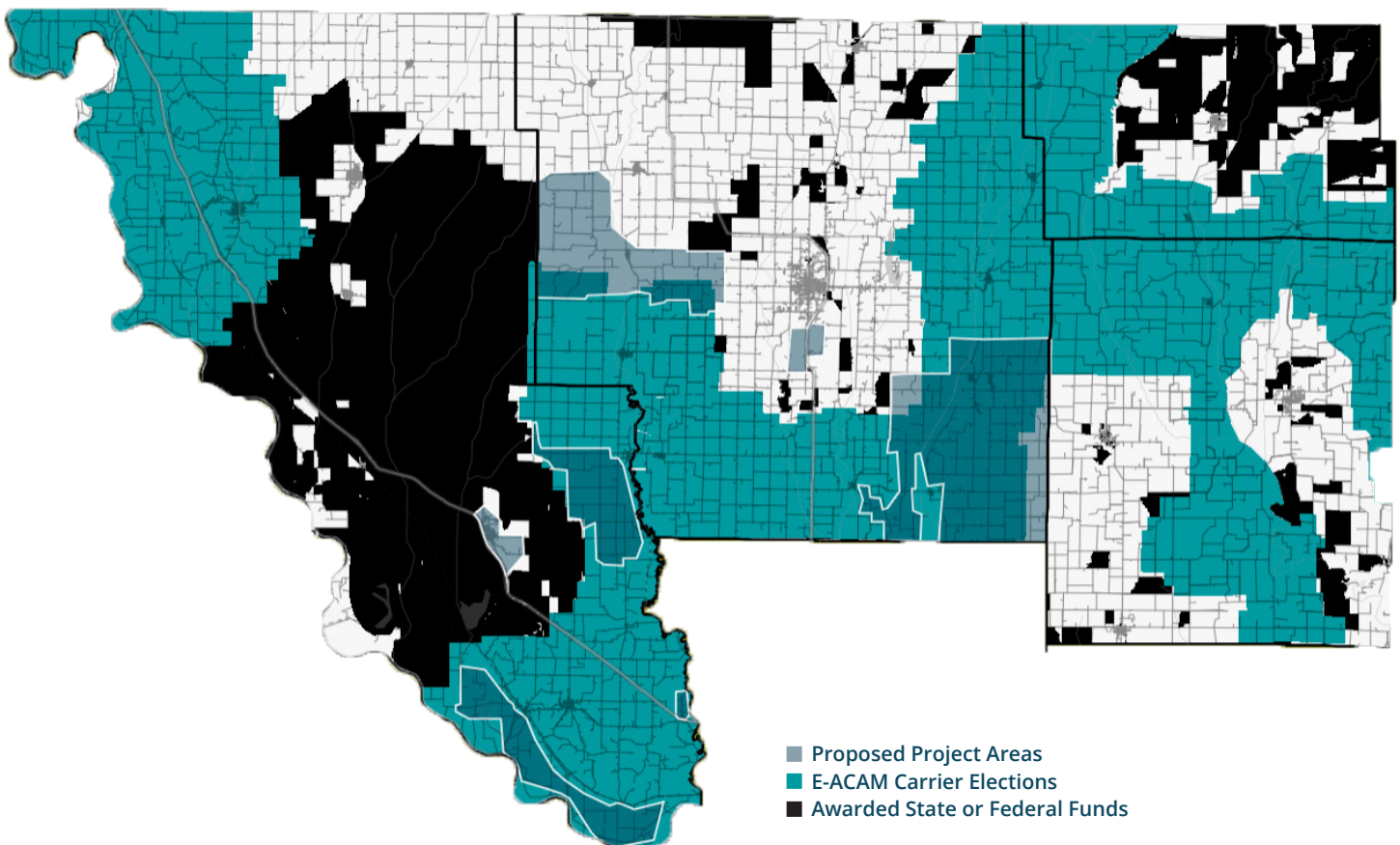
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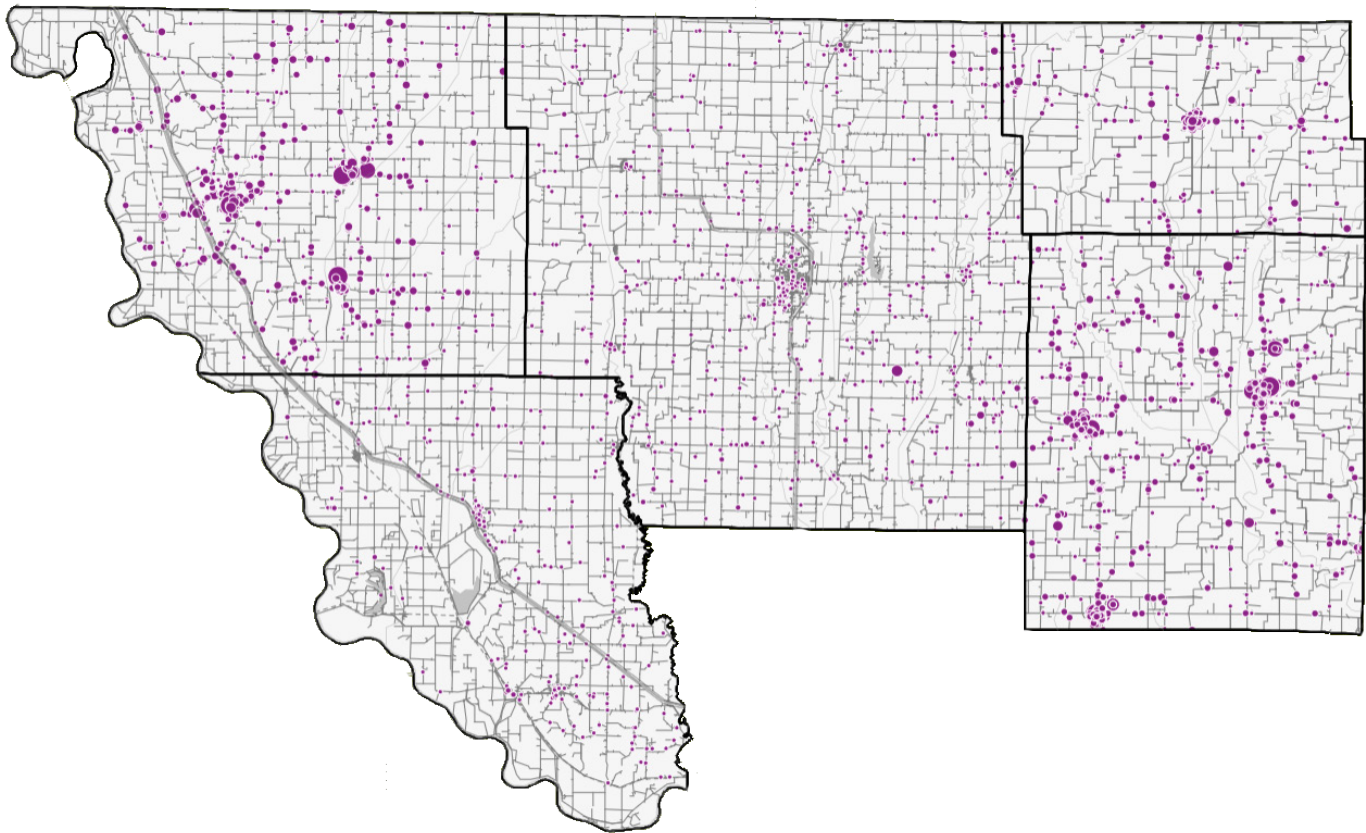


BUSINESS OPPORTUNITY AREAS

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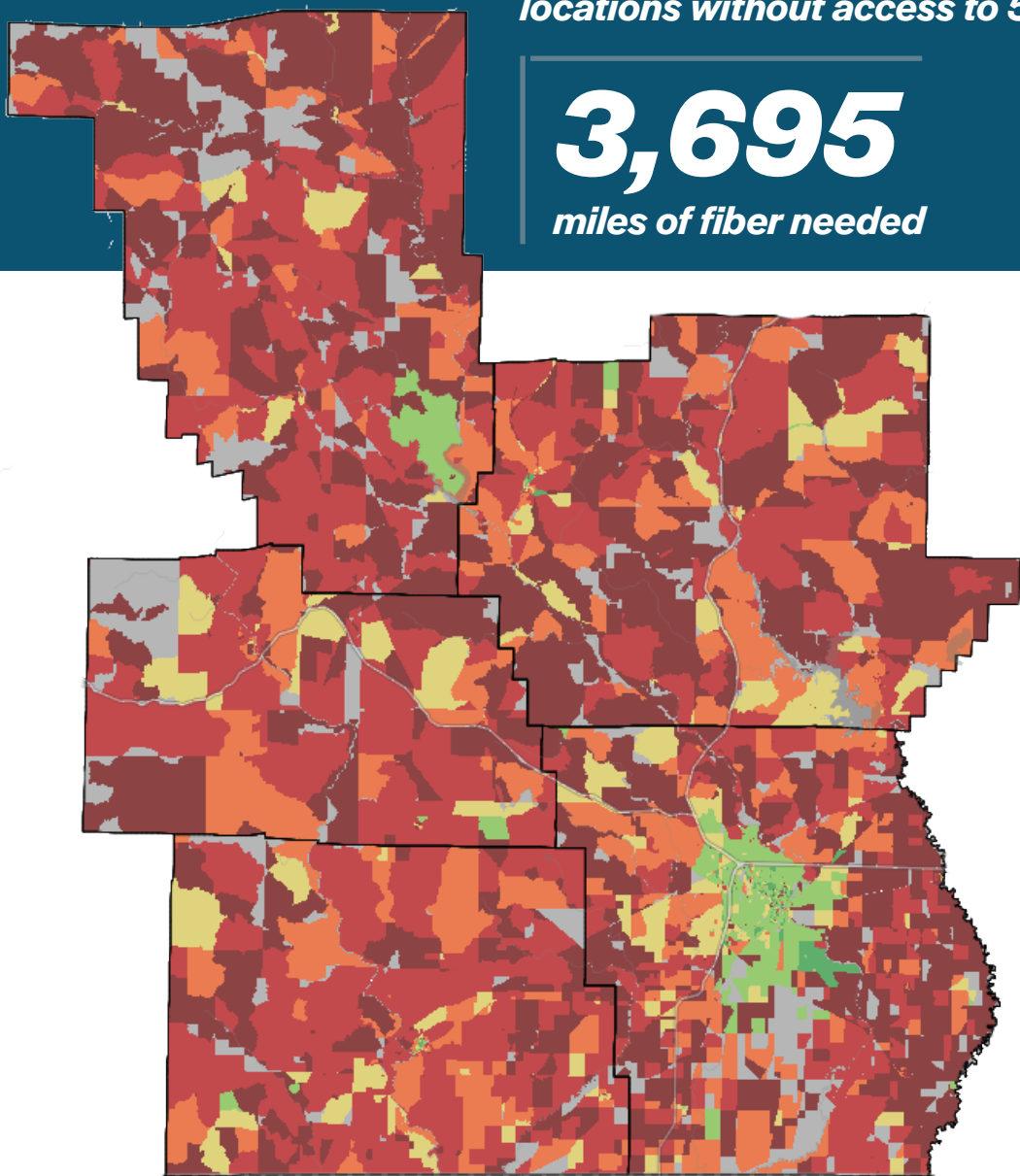
• • • Business Locations *[the larger the dot the greater the broadband demand]*

66% – 26,151

locations without access to 50/10 Mbps

3,695

miles of fiber needed



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

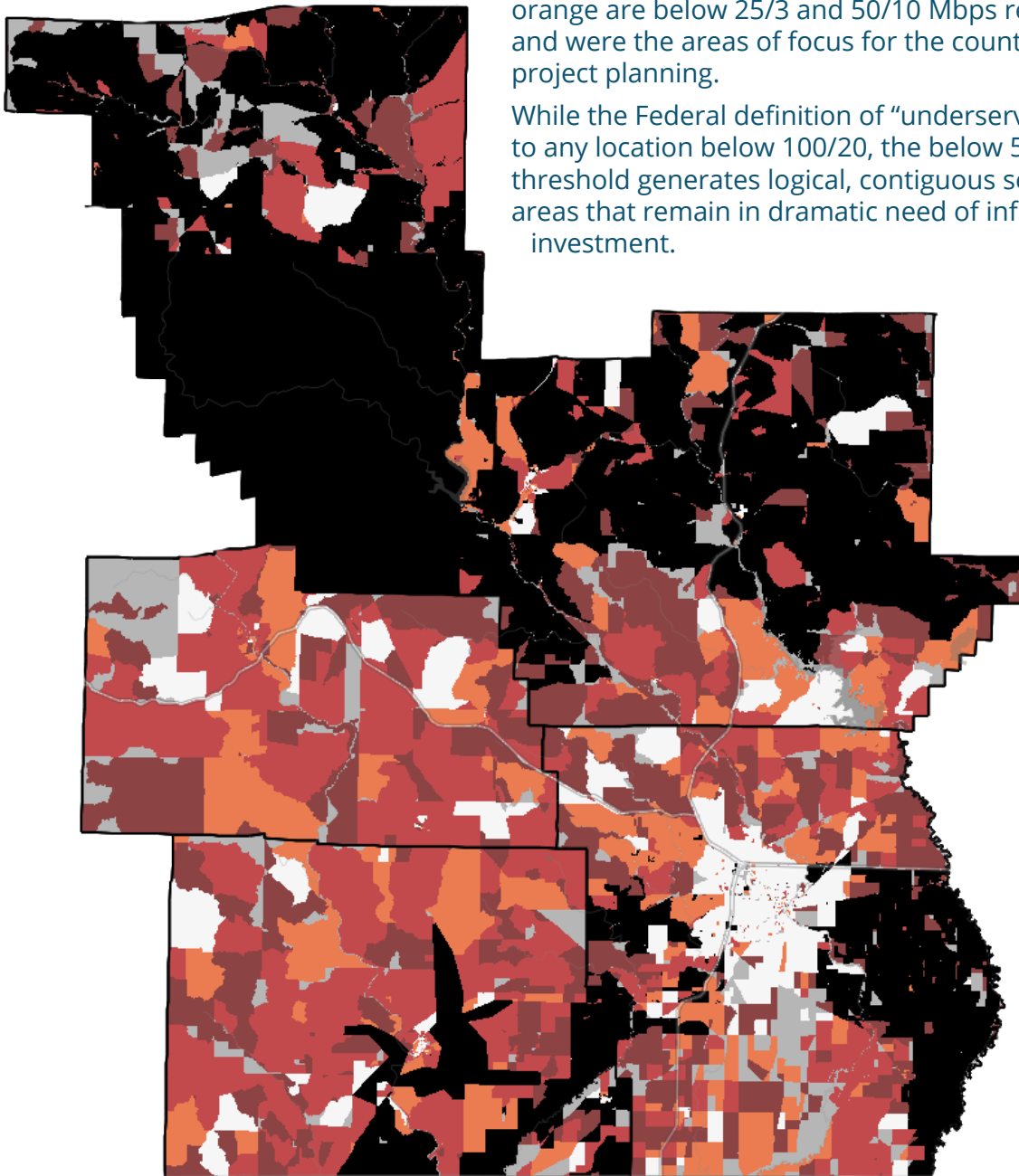
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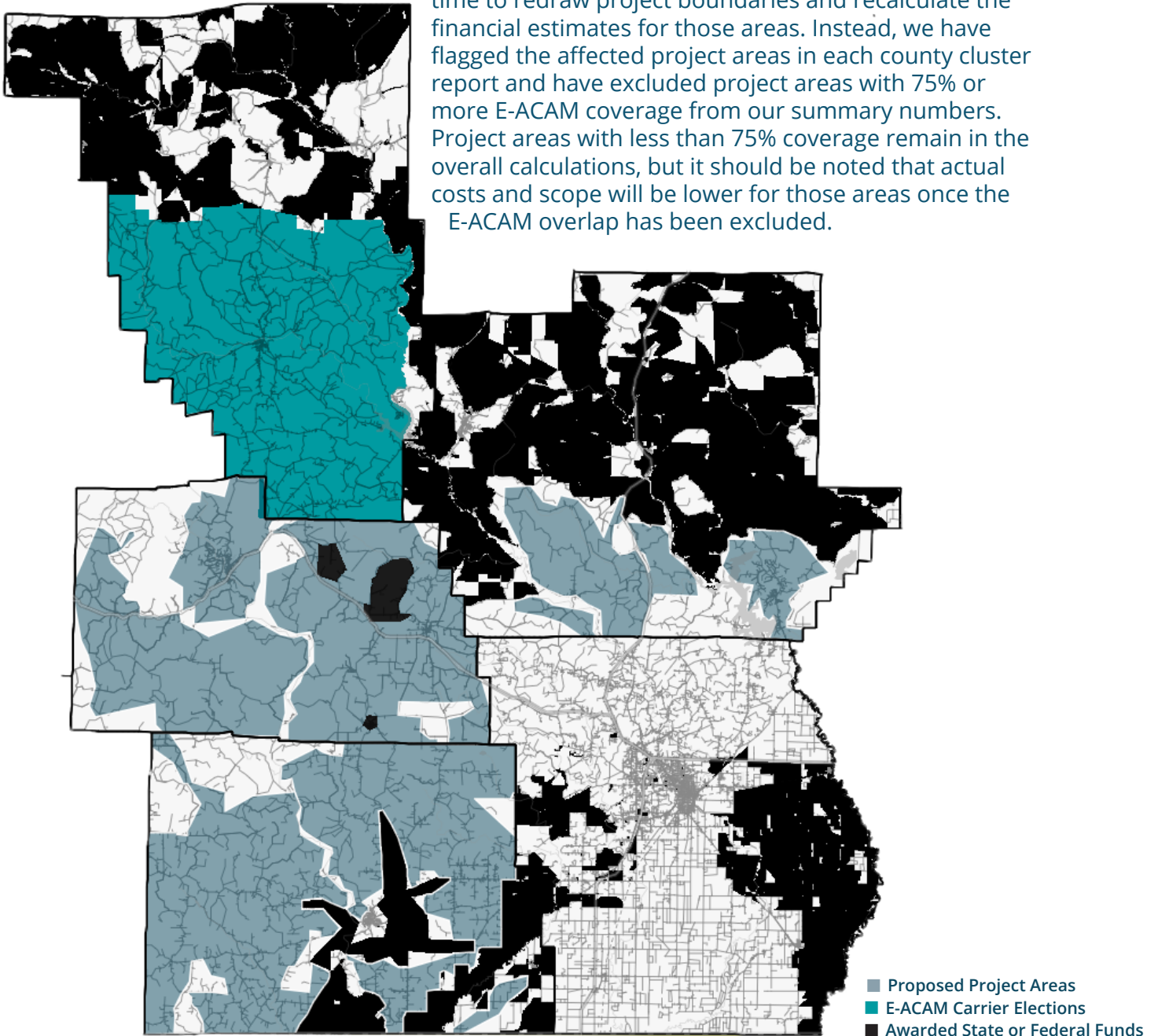


■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Awarded State or Federal Funds
■ null / no data

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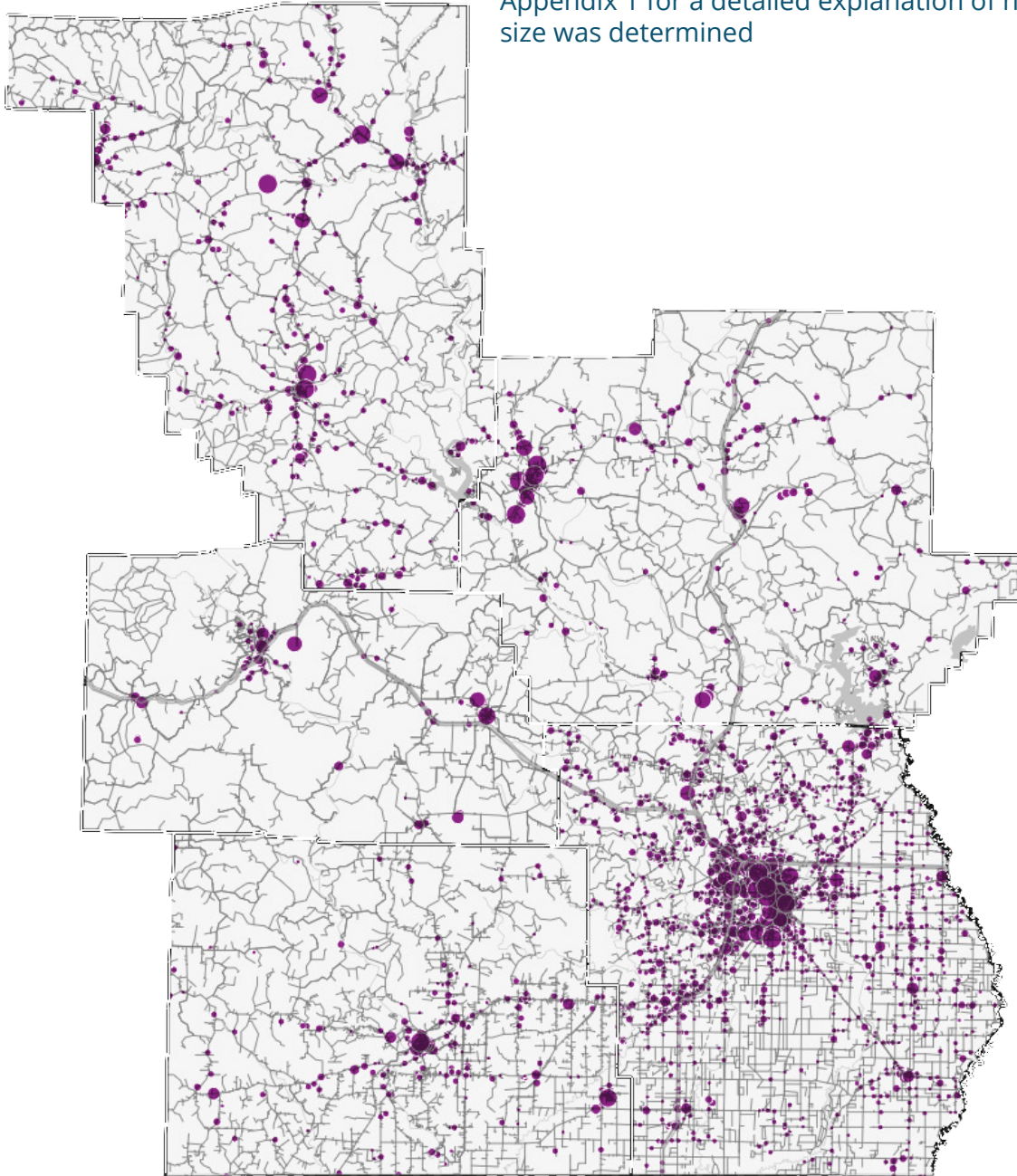
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BUSINESS OPPORTUNITY AREAS

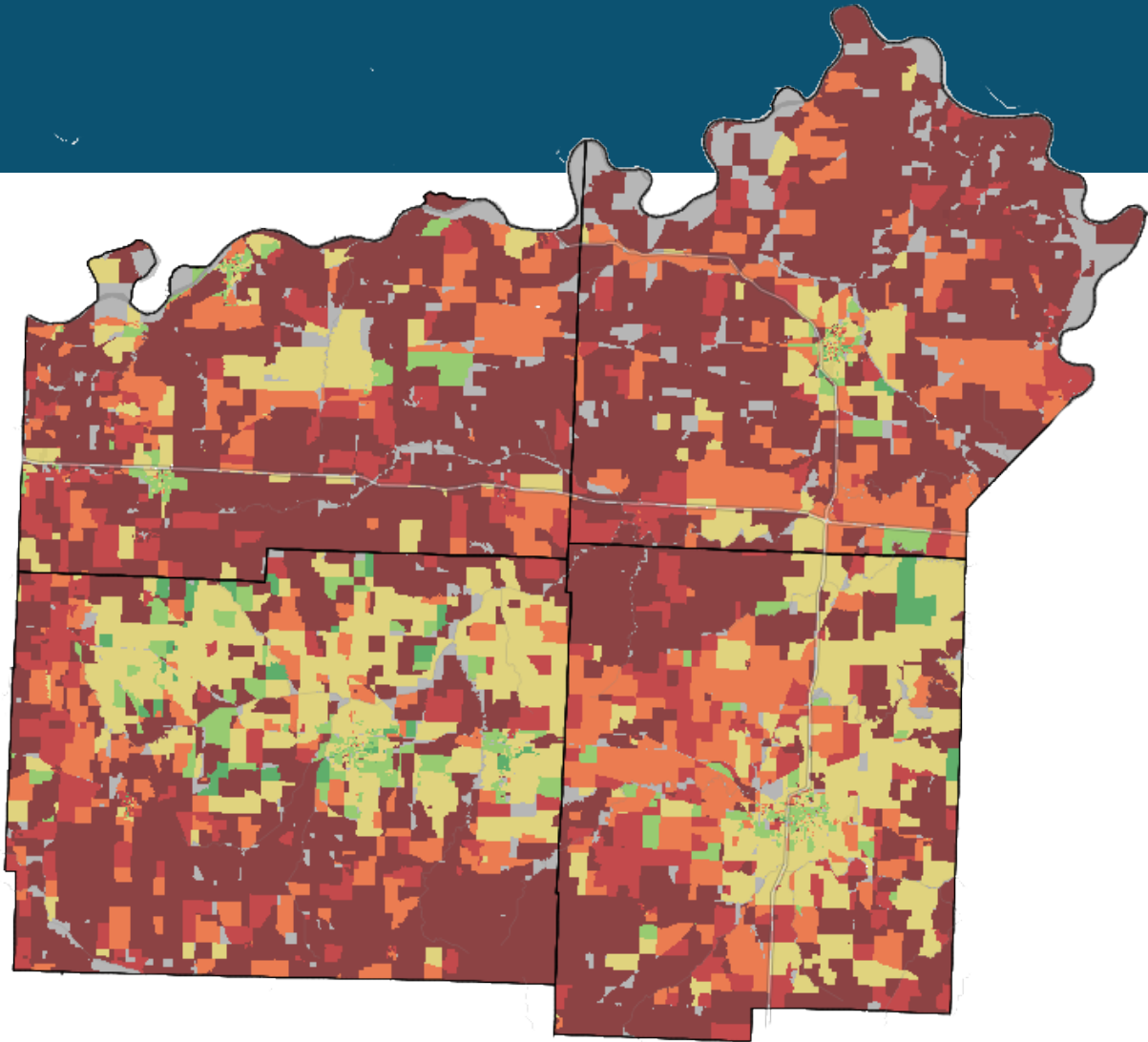
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• • • Business Locations *[the larger the dot the greater the broadband demand]*

66% — 42,252 | 4,438
locations without access to 50/10 Mbps | miles of fiber needed



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

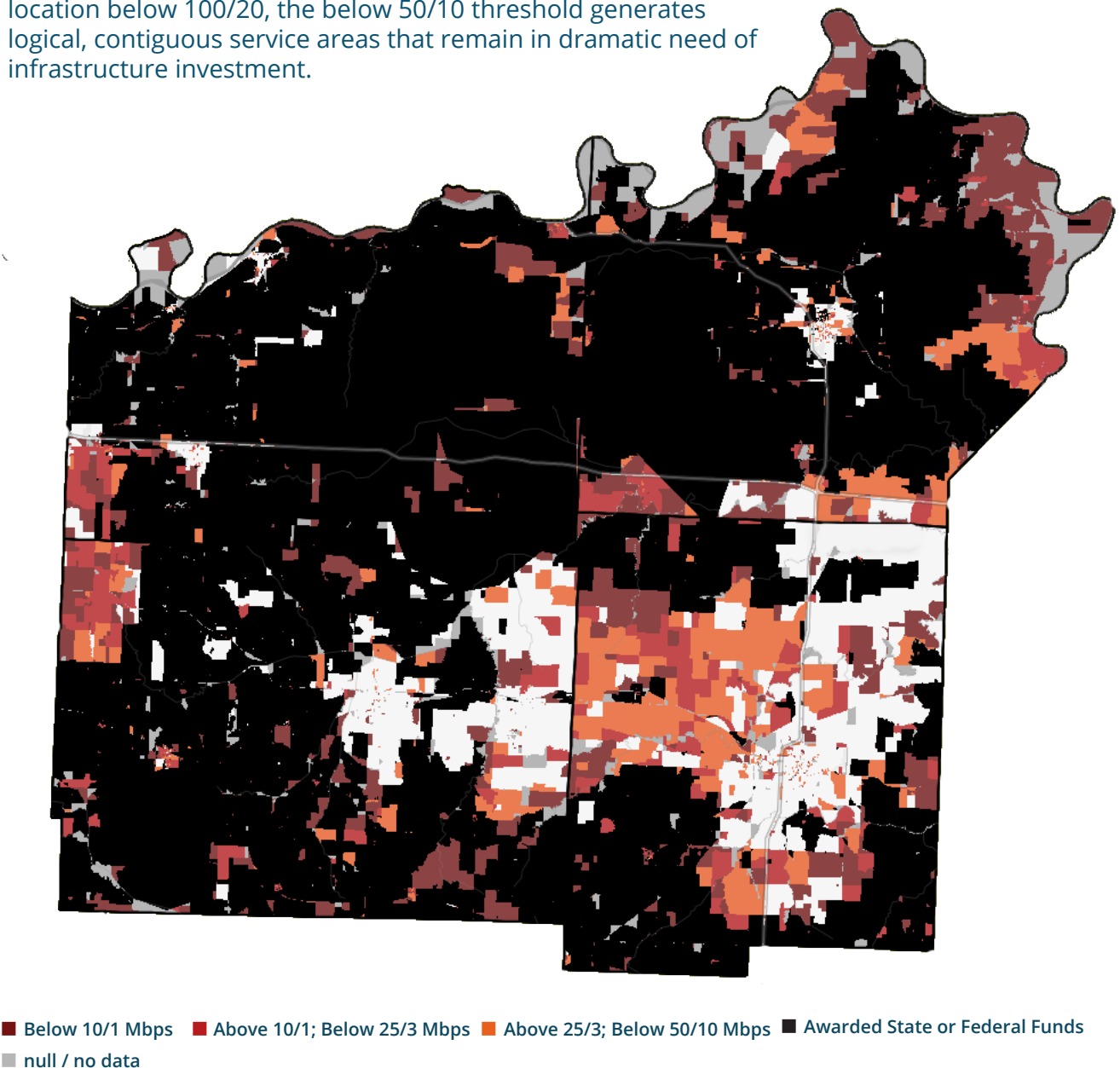
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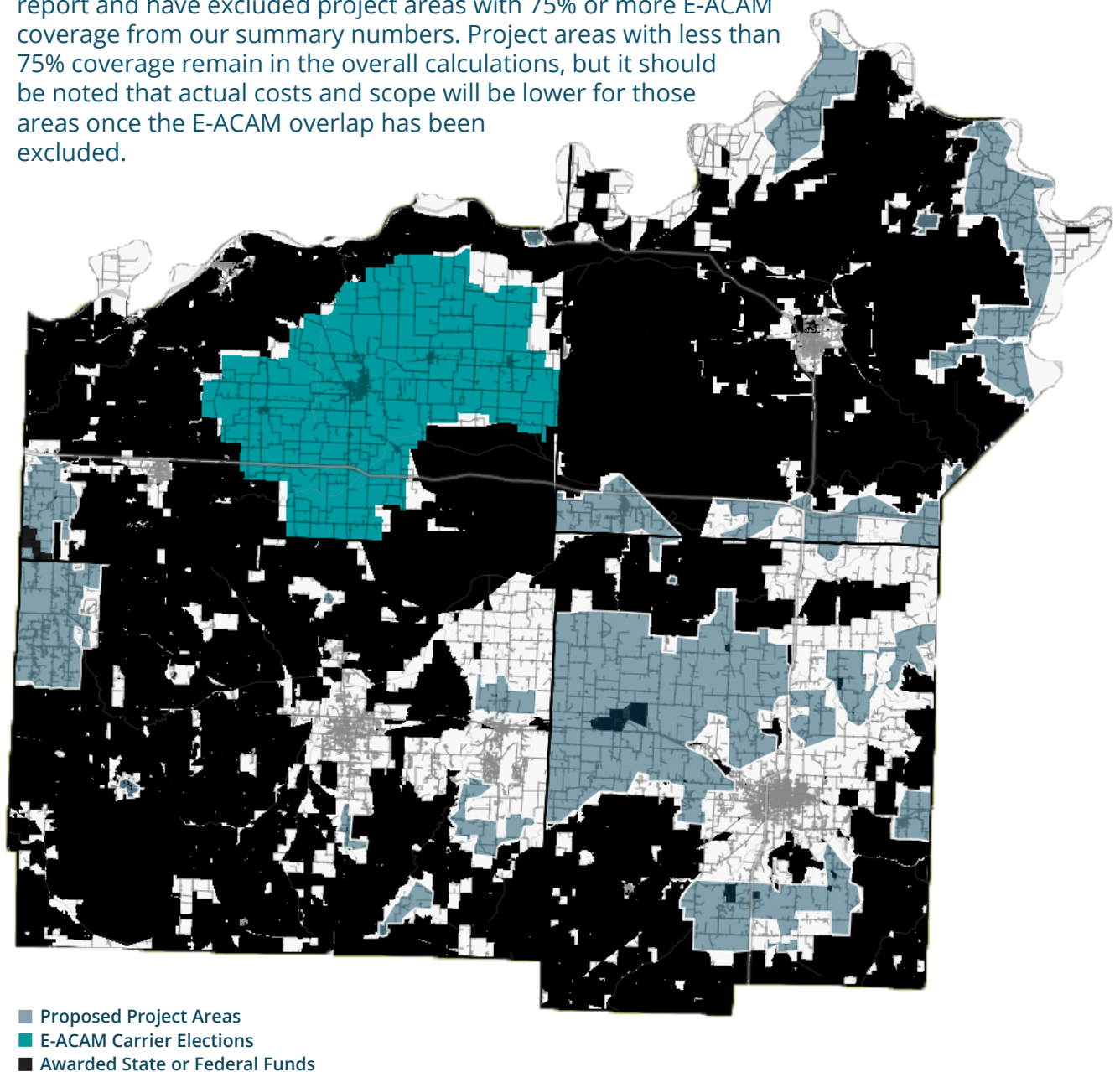
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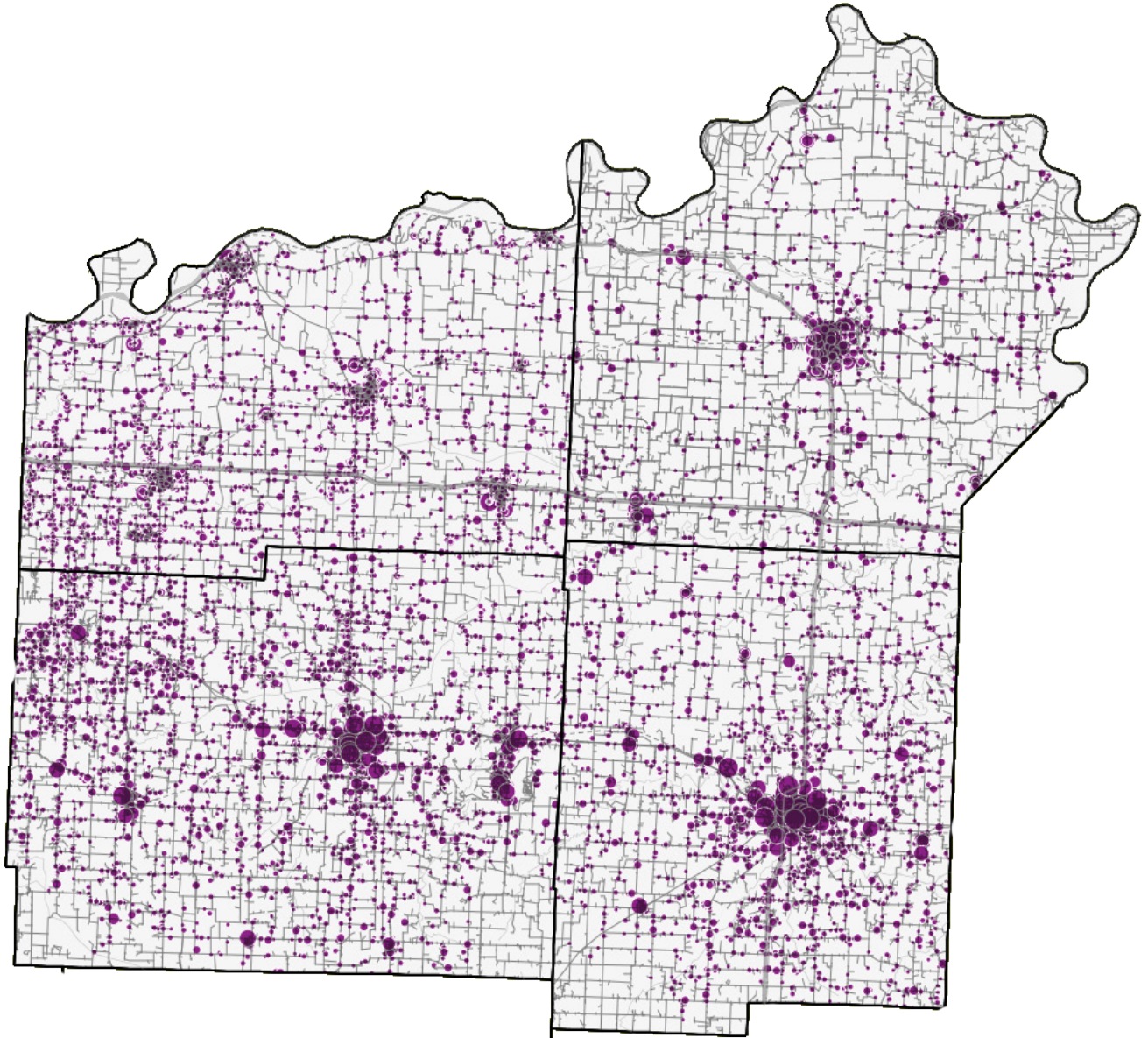
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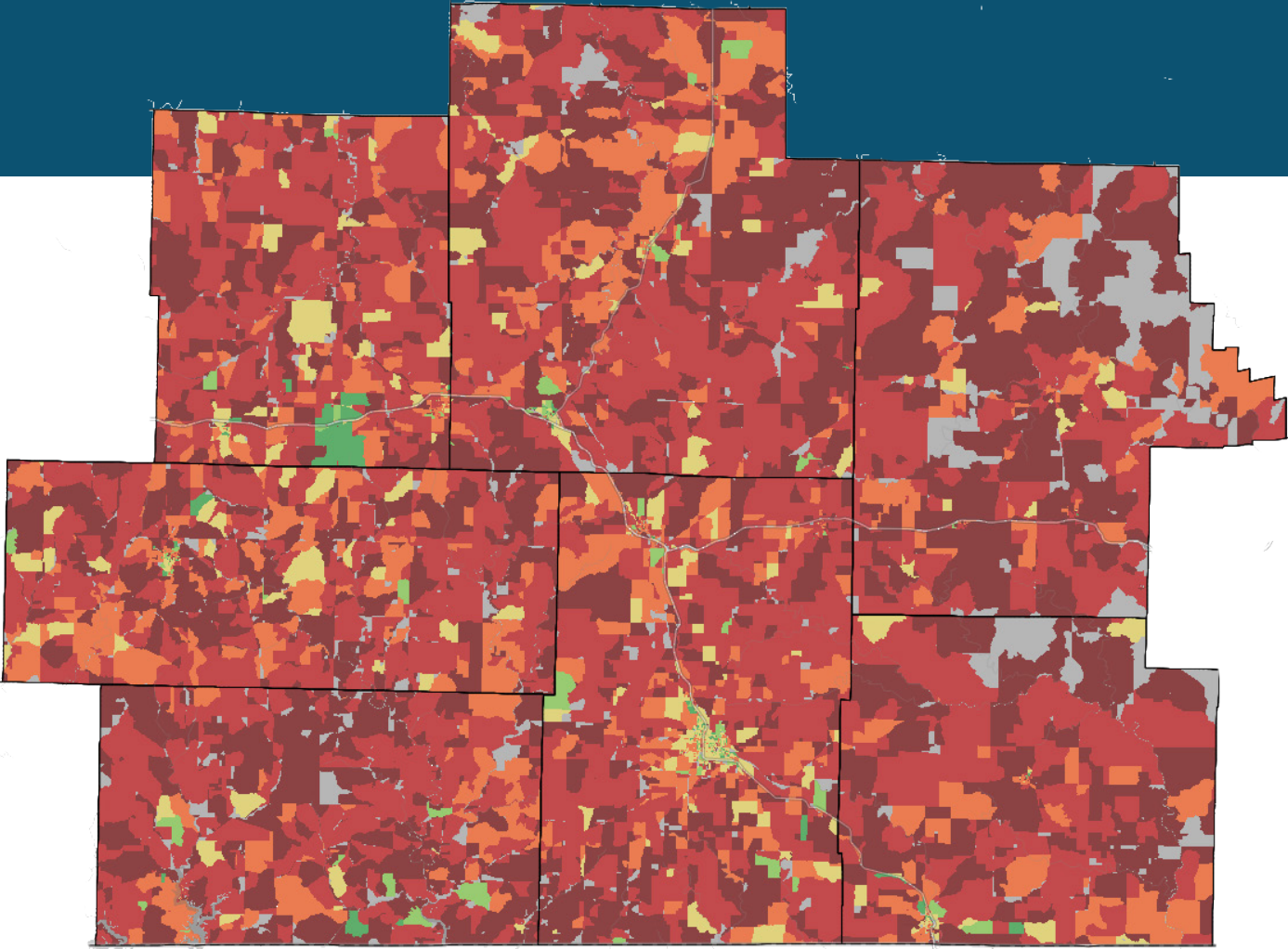
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• • • Business Locations *[the larger the dot the greater the broadband demand]*

84%– 52,742
locations without access to 50/10 Mbps

7,618
miles of fiber needed



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
■ null / no data

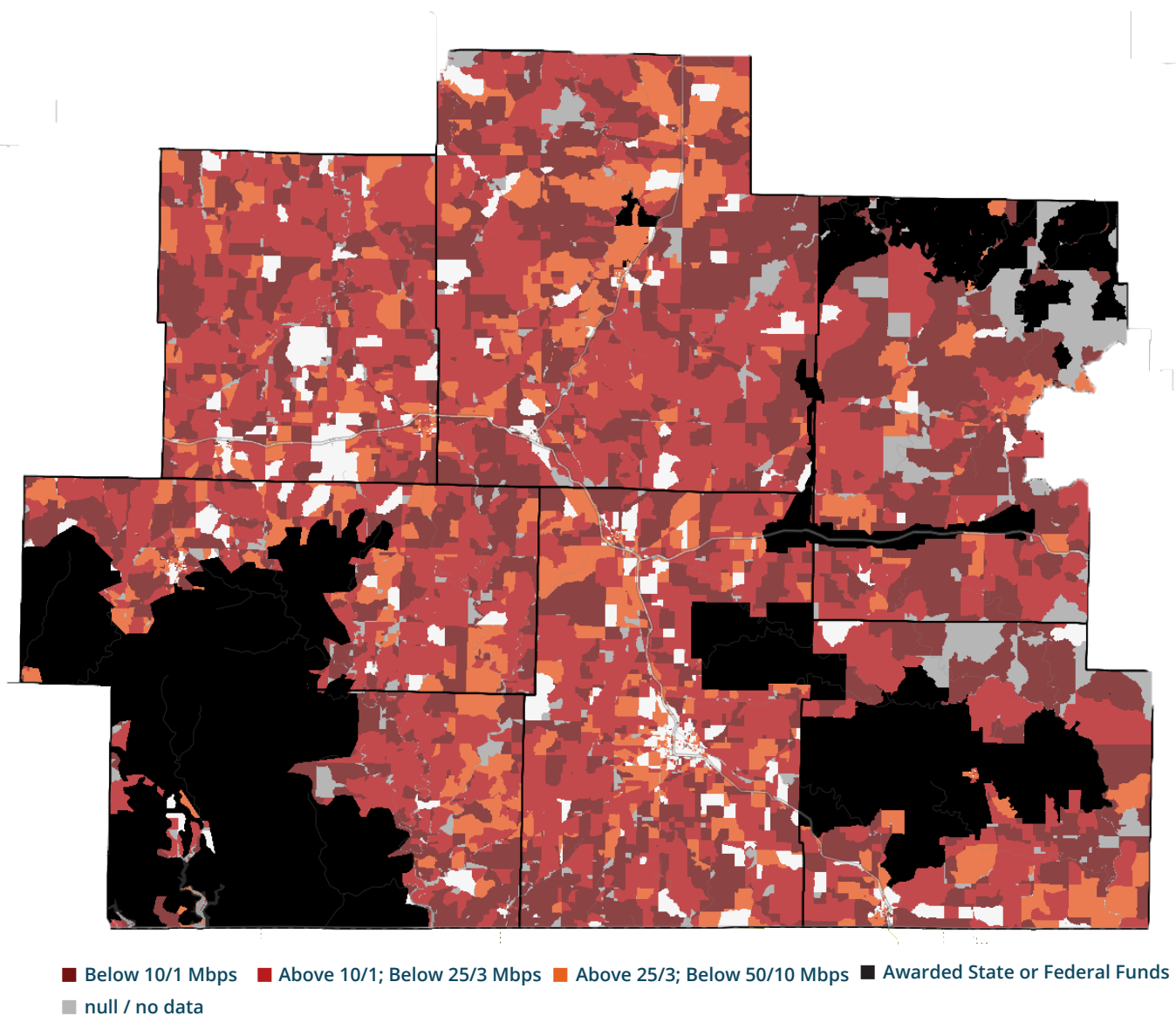
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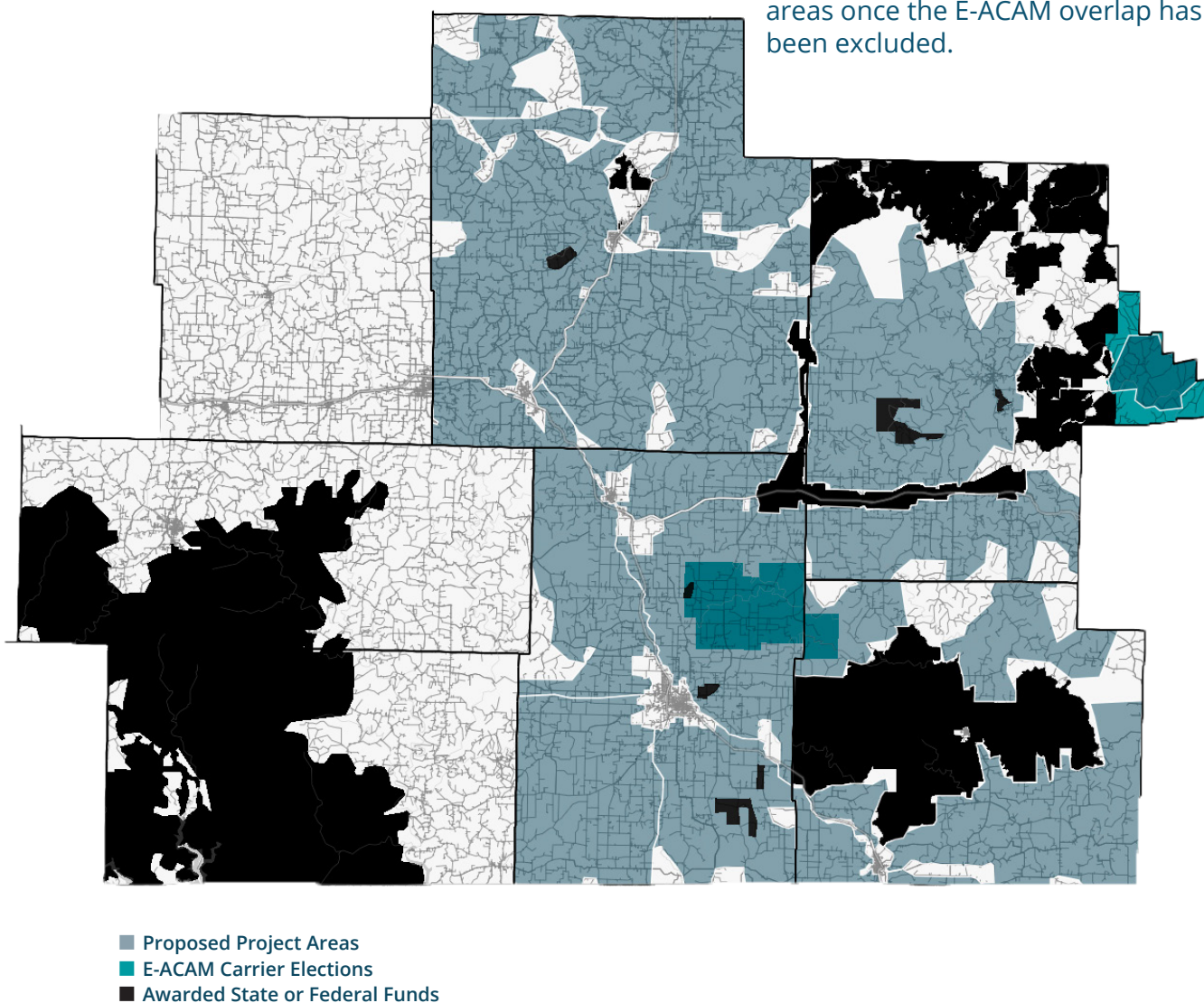
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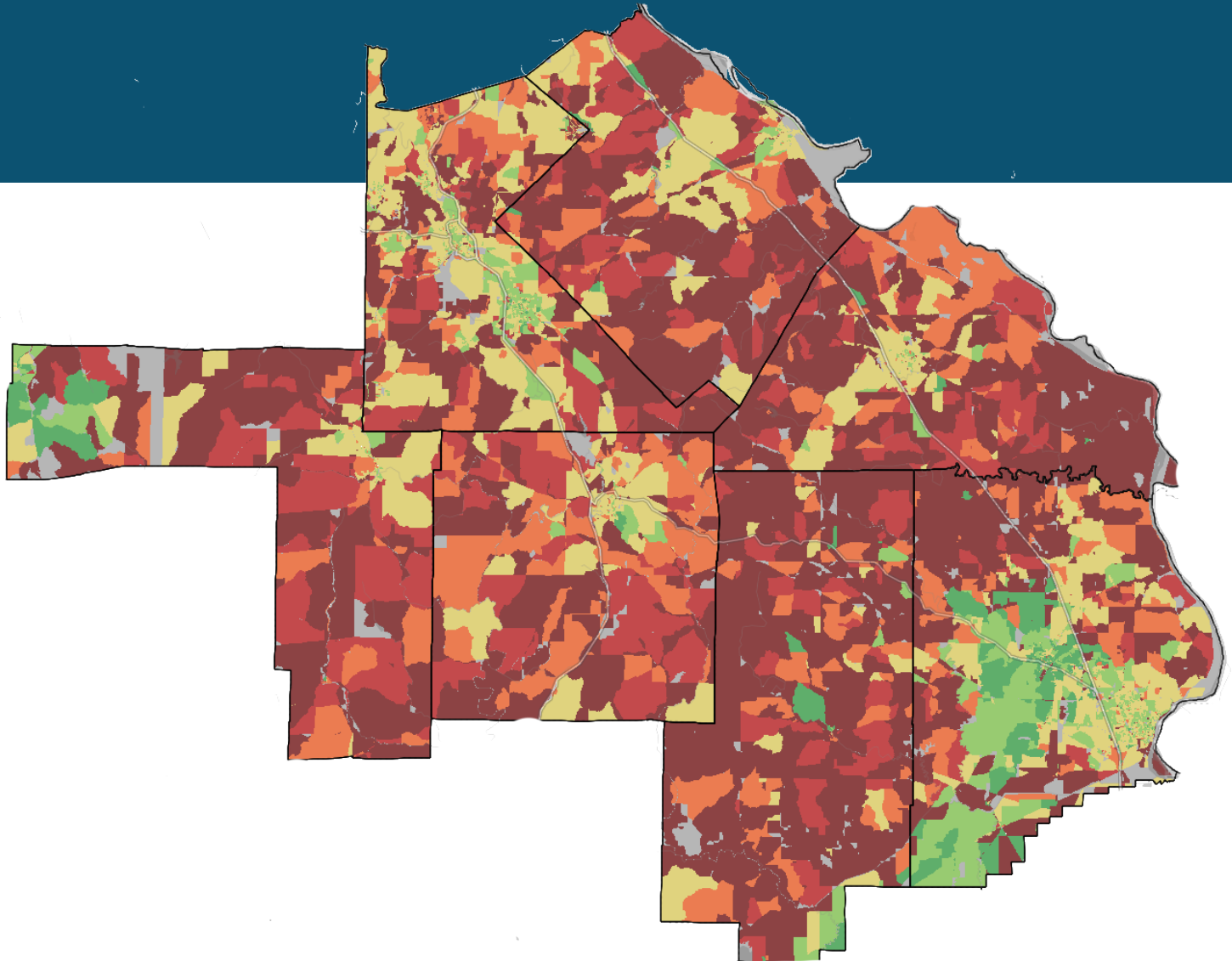
• • • Business Locations *[the larger the dot the greater the broadband demand]*

Southeast Missouri

Regional Planning and Economic Development Commission

40%— 39,877
locations without access to 50/10 Mbps

4,107
miles of fiber needed



■ Below 10/1 Mbps ■ Above 10/1; ■ Above 25/3; ■ Above 50/10; ■ Above 100/20; ■ Above 200/50 Mbps
■ null / no data ■ Below 25/3 Mbps ■ Below 50/10 Mbps ■ Below 100/20 Mbps ■ Below 200/50 Mbps

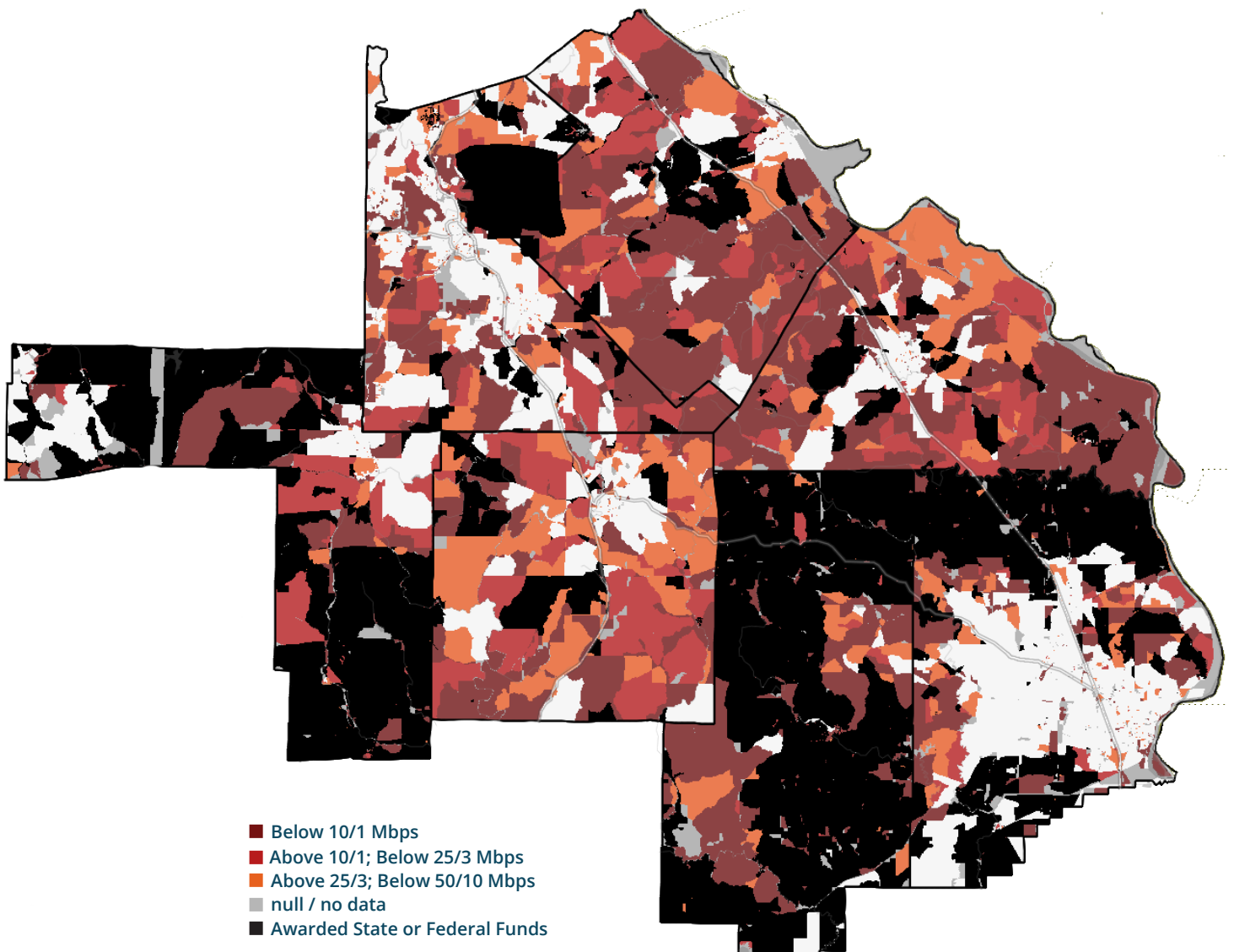
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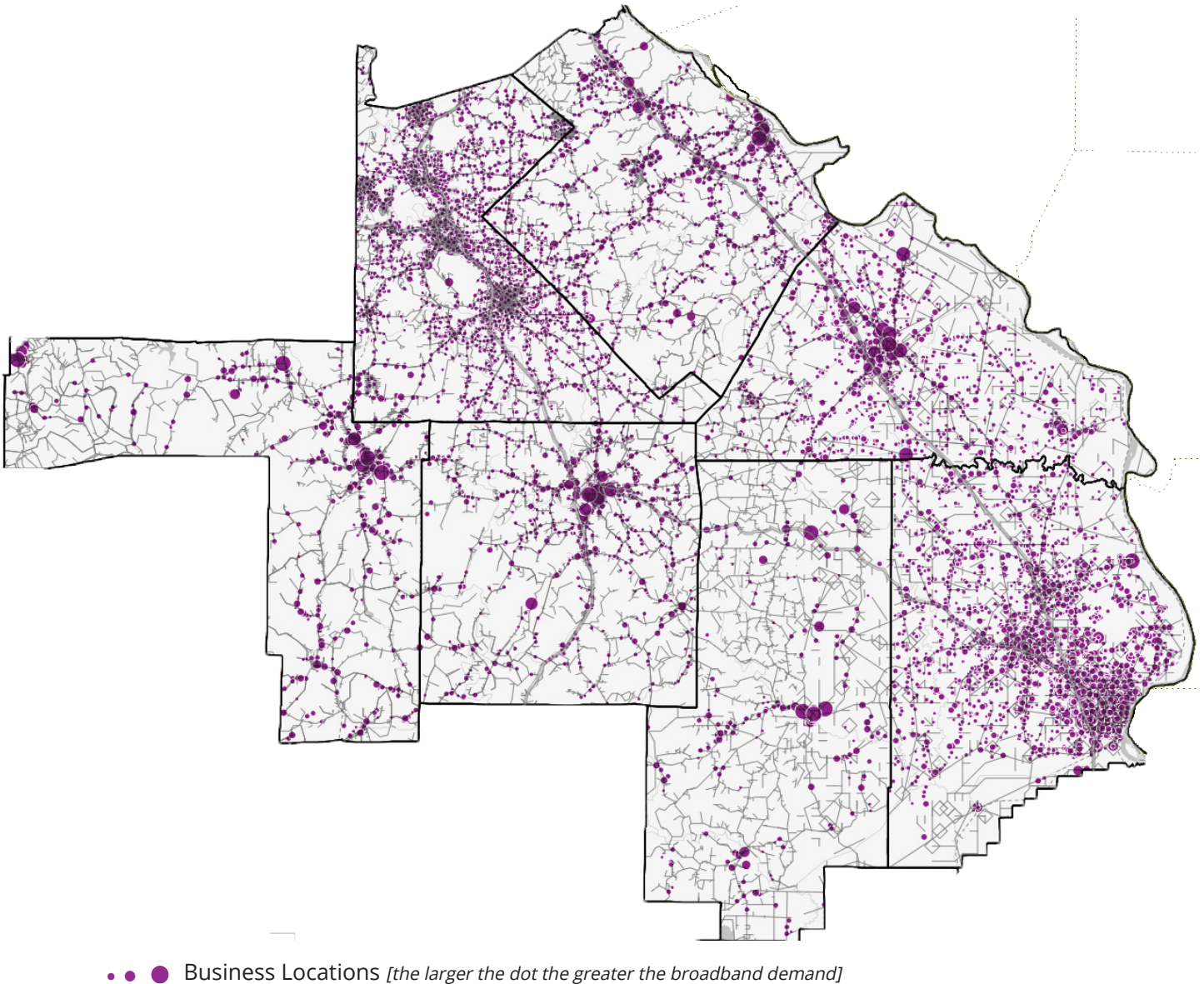


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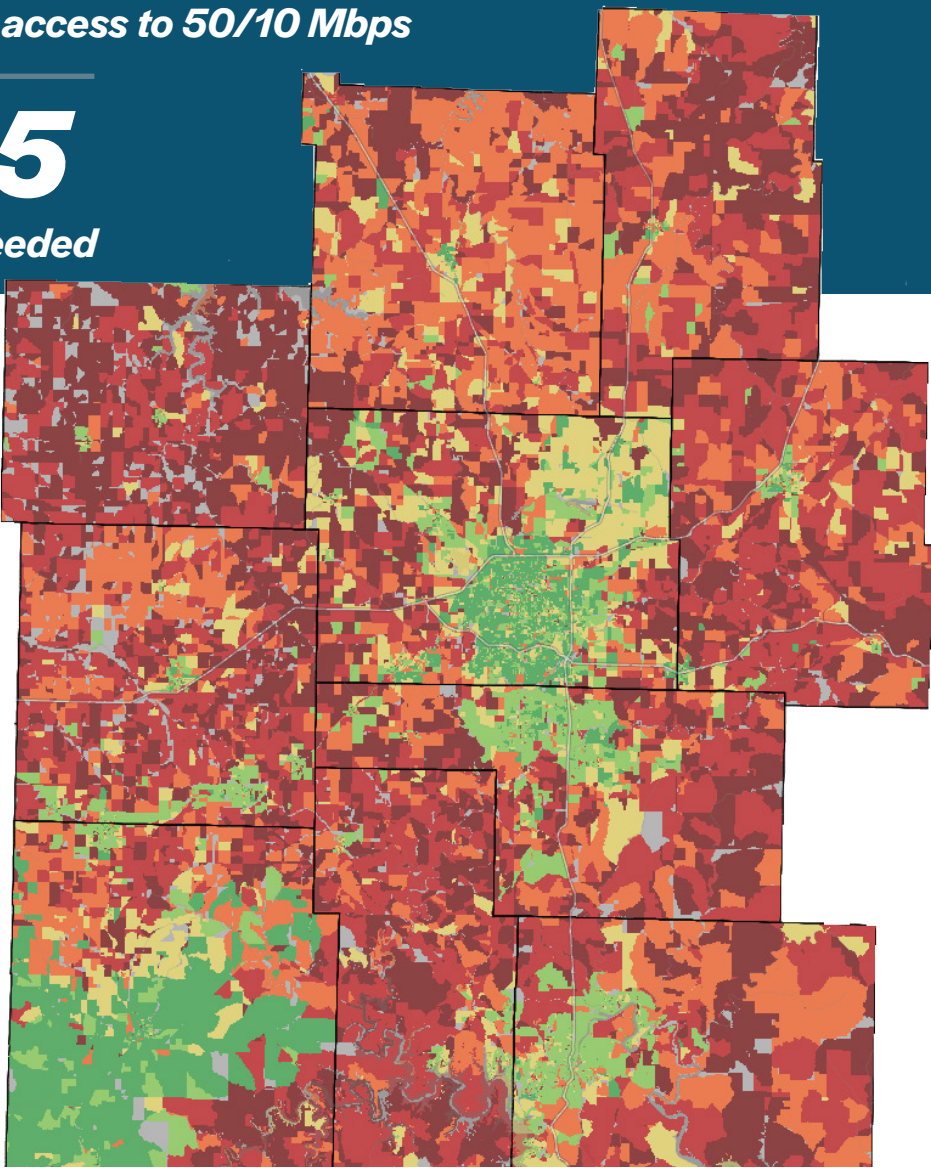


36% – 94,428

locations without access to 50/10 Mbps

9,335

miles of fiber needed



■ Below 10/1 Mbps ■ Above 10/1; Below 25/3 Mbps ■ Above 25/3; Below 50/10 Mbps ■ Above 50/10; Below 100/20 Mbps ■ Above 100/20; Below 200/50 Mbps ■ Above 200/50 Mbps
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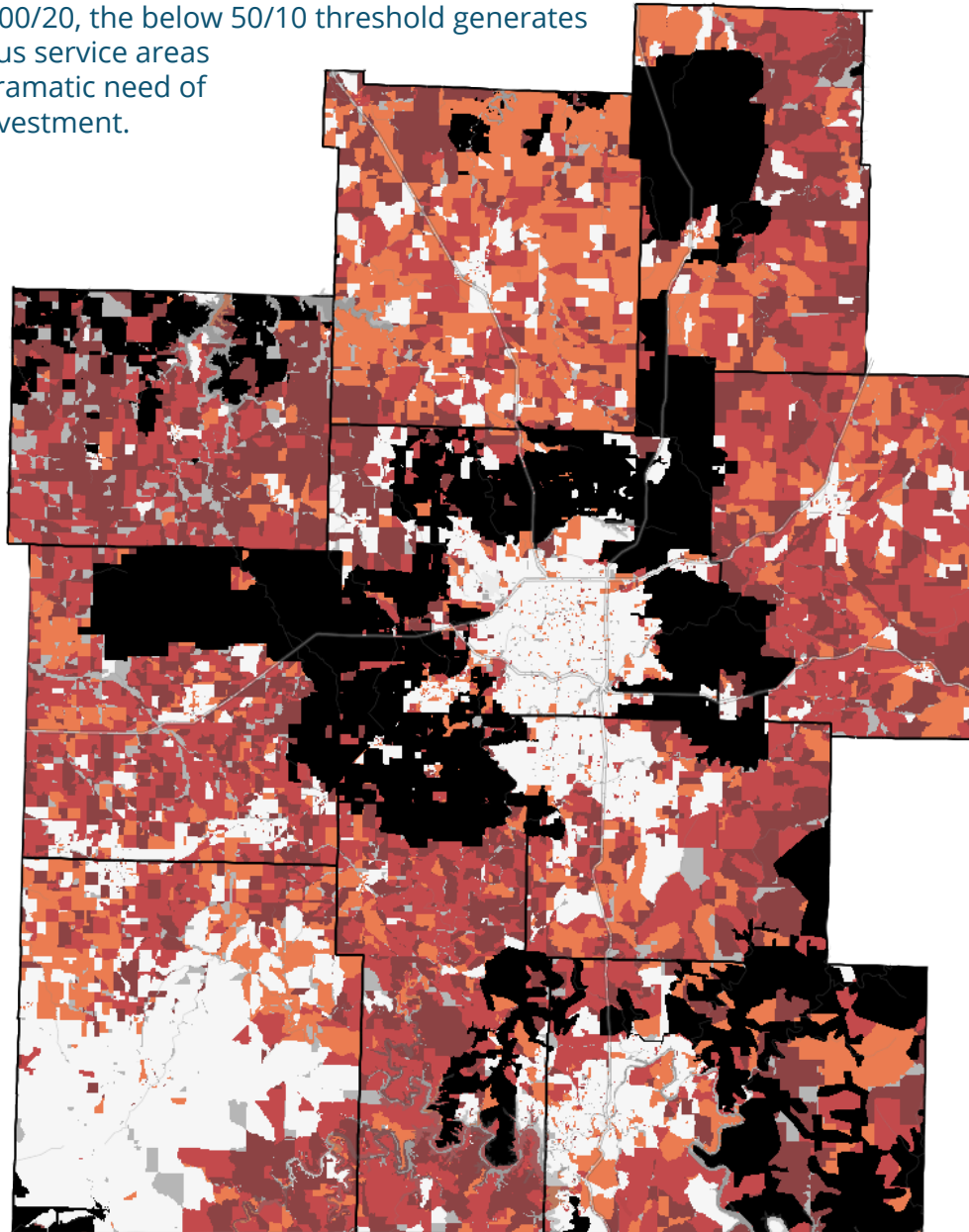
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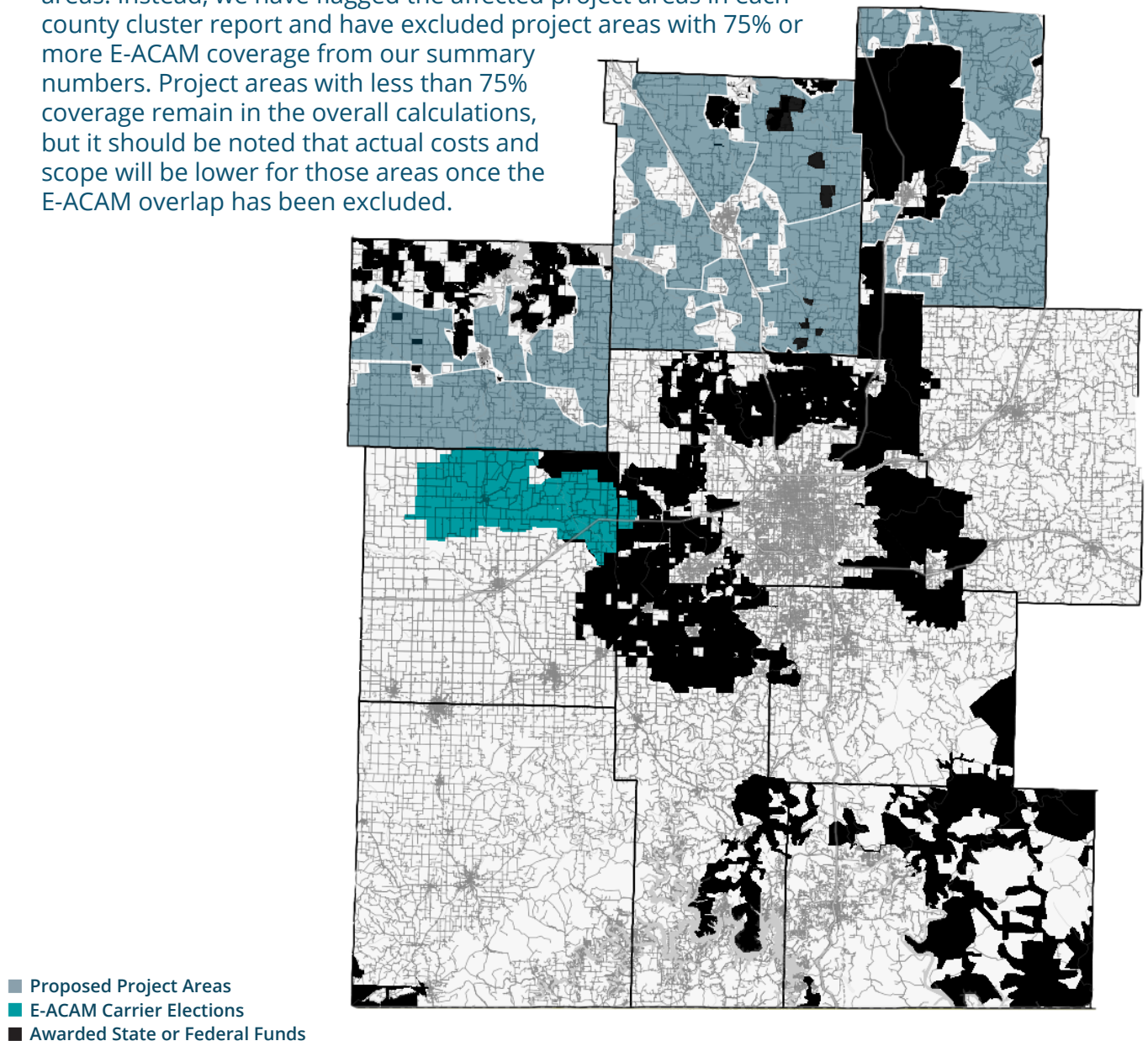
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■ null / no data

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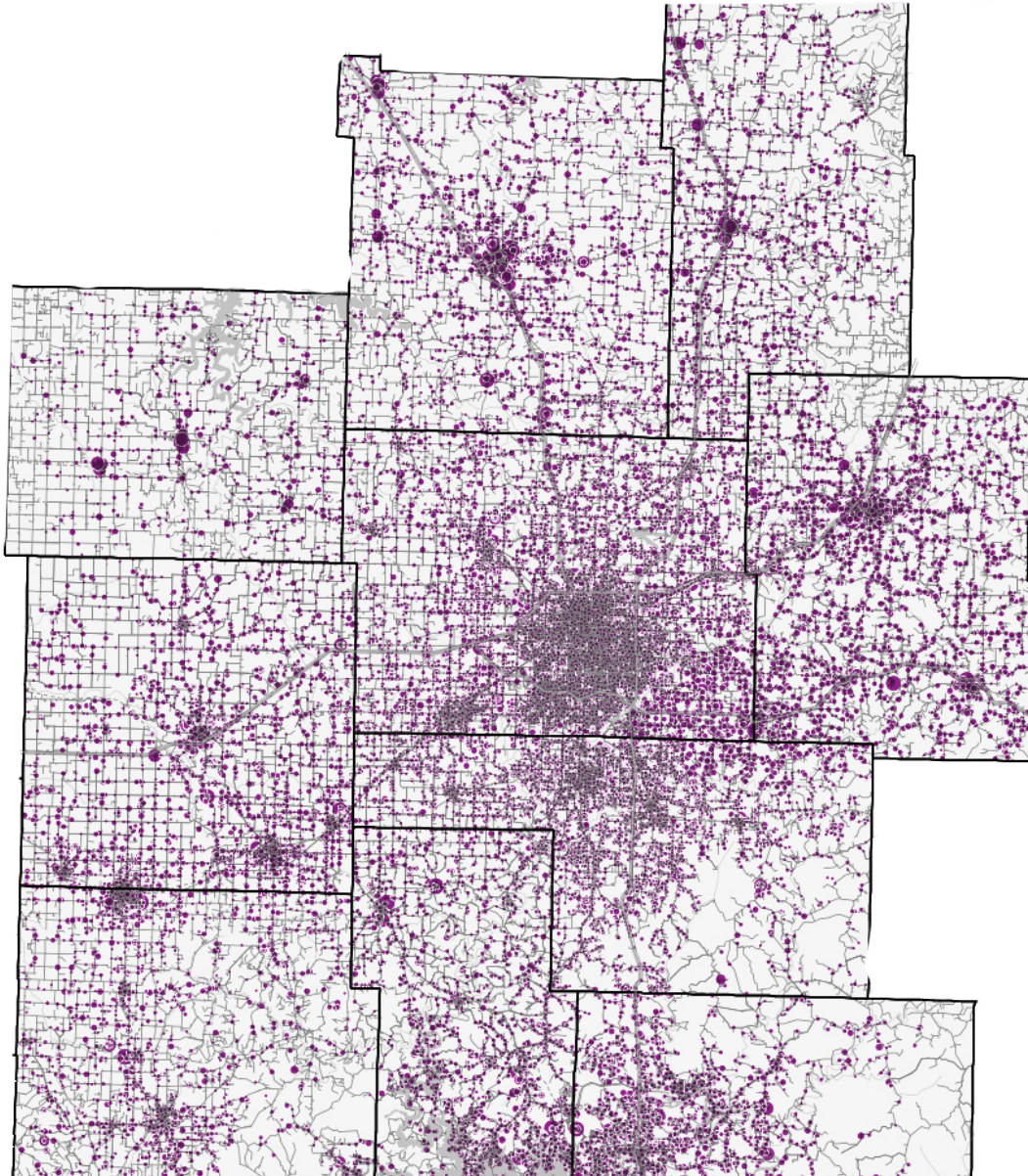
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• • • Business Locations *[the larger the dot the greater the broadband demand]*

APPENDIX 5

Missouri Providers

The following pages are an compiled list of providers who claimed coverage with the FCC as of June 2023.¹ The sheet is organized by county in alphabetical order. In cases, where a provider offers multiple technologies in a particular county, only the fastest technology is listed.² The speed ratings are based on what each provider provided to the FCC.³ The Claimed Ratings are color-coded to match the speed rating scale in the maps throughout this report.

	Below 10/1 Mbps
	Above 10/1; Below 25/3 Mbps
	Above 25/3; Below 50/10 Mbps
	Above 50/10; Below 100/20 Mbps
	Above 100/20; Below 200/50 Mbps
	Above 200/50 Mbps

¹This list includes providers who claimed coverage with the FCC as of June 2023.

²In cases where a provider offers multiple technologies in a particular county, only the fastest technology is listed.

³Speeds and ratings are based on what each provider reported to the FCC.

County	Provider Name ¹	Provider ID	Technology ²	Claimed Rating ³	Claimed Speed ³
<i>Adair County</i>					
Adair County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Adair County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Adair County	Brightspeed	470022	DSL	1	below 10/1
Adair County	Mark Twain Rural Telephone Company	130781	Fiber	6	above 200/50
Adair County	Northeast Missouri Rural Telecommunications	130940	Fiber	6	above 200/50
Adair County	Socket Telecom, LLC	150316	Fiber	6	above 200/50
Adair County	Sparklight	130183	Cable Modem	6	above 200/50
Adair County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Adair County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Adair County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
<i>Andrew County</i>					
Andrew County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Andrew County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Andrew County	Brightspeed	470022	Fiber	4	above 50/10 below 100/20
Andrew County	Grand River Mutual Telephone Corporation	130560	Fiber	6	above 200/50
Andrew County	Mercury Broadband	190236	Fixed Wireless	5	above 100/20 below 200/50
Andrew County	Optimum	130370	Cable Modem	5	above 100/20 below 200/50
Andrew County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Andrew County	United Fiber	150327	Fiber	6	above 200/50
Andrew County	Windstream Missouri, Inc.	131413	DSL	4	above 50/10 below 100/20
<i>Atchison County</i>					
Atchison County	Brightspeed	470022	DSL	3	above 25/3 below 50/10
Atchison County	IAMO Telephone Company	130631	Fiber	6	above 200/50
Atchison County	Midwest Data Center	131126	Fiber	6	above 200/50
Atchison County	Rock Port Telephone Company	131126	Fiber	6	above 200/50
Atchison County	T-Mobile US	130403	Fixed Wireless	3	above 25/3 below 50/10
<i>Audrain County</i>					
Audrain County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Audrain County	Air Link Rural Broadband, LLC	280004	Fiber	5	above 100/20 below 200/50
Audrain County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Audrain County	Brightspeed	470022	DSL	4	above 50/10 below 100/20
Audrain County	Callabyte	340012	Fiber	6	above 200/50
Audrain County	Charter Communications Inc	130235	Fiber	6	above 200/50
Audrain County	Kingdom Telephone Co	130697	Fiber	6	above 200/50
Audrain County	OREGON TELEPHONE CORPORATION	130986	Fiber	6	above 200/50
Audrain County	PHYNX	130697	Fiber	6	above 200/50
Audrain County	Ralls Technologies, L.L.C.	160146	Fiber	5	above 100/20 below 200/50
Audrain County	Socket Telecom, LLC	150316	Fiber	6	above 200/50
Audrain County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Audrain County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Audrain County	UPN	350042	Fiber	6	above 200/50
Audrain County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Audrain County	Windstream Missouri, Inc.	131413	Fiber	6	above 200/50
<i>Barry County</i>					
Barry County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Barry County	Aire Internet	370009	Fixed Wireless	4	above 50/10 below 100/20
Barry County	BarryElectricCooperative	360007	Fiber	6	above 200/50
Barry County	Brightspeed	470022	Fiber	4	above 50/10 below 100/20
Barry County	Cox Communications	130360	Cable Modem	5	above 100/20 below 200/50
Barry County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Barry County	MISSOURI TELECOM	240060	Fiber	6	above 200/50
Barry County	Optimum	130370	Cable Modem	5	above 100/20 below 200/50
Barry County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Barry County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Barry County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Barry County	Windstream Missouri, Inc.	131413	Fixed Wireless	4	above 50/10 below 100/20
Barry County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Barton County</i>					
Barton County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Barton County	Brightspeed	470022	DSL	3	above 25/3 below 50/10
Barton County	Craw Kan Telephone Cooperative Inc	130364	Fiber	6	above 200/50
Barton County	K-PowerNet LLC	460048	Fiber	6	above 200/50
Barton County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Barton County	Optimum	130370	Cable Modem	1	below 10/1
Barton County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Barton County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Barton County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Barton County	Windstream Missouri, Inc.	131413	Fixed Wireless	4	above 50/10 below 100/20
Barton County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Bates County</i>					
Bates County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Bates County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Bates County	Brightspeed	470022	DSL	4	above 50/10 below 100/20
Bates County	Conexon Connect LLC	430114	Fiber	6	above 200/50
Bates County	Consolidated Communications	130335	DSL	4	above 50/10 below 100/20
Bates County	Craw Kan Telephone Cooperative Inc	130364	Fiber	6	above 200/50
Bates County	Fastwyre Broadband	131226	DSL	3	above 25/3 below 50/10
Bates County	Fidelity	130183	Fiber	6	above 200/50
Bates County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Bates County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50

Bates County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Bates County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Benton County</i>				
Benton County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Benton County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Benton County	Co-Mo Connect	280017 Fiber	6	above 200/50
Benton County	Liberty Link	390159 Fixed Wireless	5	above 100/20 below 200/50
Benton County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Benton County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Benton County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Benton County	Windstream Missouri, Inc.	131413 DSL	6	above 200/50
Benton County	Wisper ISP, LLC	430176 Fixed Wireless	3	above 25/3 below 50/10
<i>Bollinger County</i>				
Bollinger County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Bollinger County	Charter Communications Inc	130235 Fiber	5	above 100/20 below 200/50
Bollinger County	GoSEMO, LLC	390101 Fiber	6	above 200/50
Bollinger County	King Street Wireless, L.P.	300079 Fixed Wireless	2	above 10/1 below 25/3
Bollinger County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Bollinger County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Bollinger County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Bollinger County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Boone County</i>				
Boone County	APX Net	320008 Fiber	2	above 10/1 below 25/3
Boone County	Air Link Rural Broadband, LLC	280004 Fiber	5	above 100/20 below 200/50
Boone County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Boone County	Brightspeed	470022 Fiber	6	above 200/50
Boone County	Callabyte	340012 Fiber	6	above 200/50
Boone County	Chariton Valley Communication Corporation	130234 Fiber	6	above 200/50
Boone County	Charter Communications Inc	130235 Fiber	6	above 200/50
Boone County	Consolidated Communications, Fidium	130335 DSL	6	above 200/50
Boone County	Juvilex Communications	440146 Fiber	6	above 200/50
Boone County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Boone County	PHYNX	130697 Fiber	6	above 200/50
Boone County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Boone County	Socket Telecom, LLC	150316 Fiber	6	above 200/50
Boone County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Boone County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Boone County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Boone County	iZones	460045 Fixed Wireless	5	above 100/20 below 200/50
<i>Buchanan County</i>				
Buchanan County	APX Net	320008 Fiber	2	above 10/1 below 25/3
Buchanan County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Buchanan County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Buchanan County	Brightspeed	470022 DSL	3	above 25/3 below 50/10
Buchanan County	Mercury Broadband	190236 Fixed Wireless	5	above 100/20 below 200/50
Buchanan County	Optimum	130370 Fiber	6	above 200/50
Buchanan County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Buchanan County	United Fiber	150327 Fiber	6	above 200/50
Buchanan County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Buchanan County	Voyant Communications	130026 Fiber	2	above 10/1 below 25/3
Buchanan County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Butler County</i>				
Butler County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Butler County	Arrowhead Broadband	450118 Fiber	6	above 200/50
Butler County	BOYCOM CABLEVISION INC.	190059 Fiber	6	above 200/50
Butler County	Big River Broadband	130124 Fiber	6	above 200/50
Butler County	Clay County Connect, Inc	430110 Fiber	6	above 200/50
Butler County	Sparklight	130183 Cable Modem	6	above 200/50
Butler County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Butler County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Butler County	Windstream Missouri, Inc.	131413 Fixed Wireless	4	above 50/10 below 100/20
Butler County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Caldwell County</i>				
Caldwell County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Caldwell County	Brightspeed	470022 Fiber	6	above 200/50
Caldwell County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Caldwell County	Green Hills Technologies	130263 Fiber	6	above 200/50
Caldwell County	Mercury Broadband	190236 Fixed Wireless	5	above 100/20 below 200/50
Caldwell County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Caldwell County	UPN	350042 Fiber	2	above 10/1 below 25/3
Caldwell County	United Fiber	150327 Fiber	6	above 200/50
Caldwell County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
<i>Callaway County</i>				
Callaway County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Callaway County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Callaway County	Brightspeed	470022 Fiber	6	above 200/50
Callaway County	Callabyte	340012 Fiber	6	above 200/50
Callaway County	Charter Communications Inc	130235 Fiber	6	above 200/50
Callaway County	Kingdom Telephone Co	130697 Fiber	6	above 200/50
Callaway County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Callaway County	PHYNX	130697 Fiber	6	above 200/50
Callaway County	Socket Telecom, LLC	150316 Fiber	6	above 200/50
Callaway County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50

Callaway County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Callaway County	UPN	350042	Fiber	6	above 200/50
Callaway County	VERIZON	131425	Fixed Wireless	4	above 50/10 below 100/20
Callaway County	Windstream Missouri, Inc.	131413	DSL	6	above 200/50
Callaway County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Callaway County	iZones	460045	Fixed Wireless	5	above 100/20 below 200/50
<i>Camden County</i>					
Camden County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Camden County	Brightspeed	470022	DSL	3	above 25/3 below 50/10
Camden County	Cable America	130183	Cable Modem	6	above 200/50
Camden County	Charter Communications Inc	130235	Fiber	6	above 200/50
Camden County	Co-Mo Connect	280017	Fiber	6	above 200/50
Camden County	Consolidated Communications, Fidium	130335	DSL	6	above 200/50
Camden County	OREGON TELEPHONE CORPORATION	130986	DSL	3	above 25/3 below 50/10
Camden County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Camden County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Camden County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Camden County	VERIZON	131425	Fixed Wireless	4	above 50/10 below 100/20
Camden County	Windstream Missouri, Inc.	131413	DSL	1	below 10/1
Camden County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Cape Girardeau County</i>					
Cape Girardeau County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Cape Girardeau County	Big River Broadband	130124	Fiber	6	above 200/50
Cape Girardeau County	Big River Communications	130124	Fiber	6	above 200/50
Cape Girardeau County	Charter Communications Inc	130235	Fiber	6	above 200/50
Cape Girardeau County	Consolidated Communications, Fidium	130335	DSL	6	above 200/50
Cape Girardeau County	GoSEMO, LLC	390101	Fiber	6	above 200/50
Cape Girardeau County	Ritter Communications	130427	Fiber	6	above 200/50
Cape Girardeau County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Cape Girardeau County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Cape Girardeau County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Cape Girardeau County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Carroll County</i>					
Carroll County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Carroll County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Carroll County	Brightspeed	470022	DSL	3	above 25/3 below 50/10
Carroll County	Chariton Valley Telephone Corporation	130234	Fiber	6	above 200/50
Carroll County	Green Hills Technologies	130263	Fiber	6	above 200/50
Carroll County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Carroll County	T-Mobile US	130403	Fixed Wireless	3	above 25/3 below 50/10
Carroll County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
<i>Carter County</i>					
Carter County	BOYCOM CABLEVISION INC.	190059	Cable Modem	5	above 100/20 below 200/50
Carter County	Brightspeed	470022	DSL	3	above 25/3 below 50/10
Carter County	McCormack Networks	130449	Fiber	6	above 200/50
Carter County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Carter County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Carter County	Windstream Missouri, Inc.	131413	DSL	6	above 200/50
<i>Cass County</i>					
Cass County	AT&T Inc	130077	Fiber	6	above 200/50
Cass County	Brightspeed	470022	Fiber	4	above 50/10 below 100/20
Cass County	Charter Communications Inc	130235	Fiber	6	above 200/50
Cass County	Conexon Connect LLC	430114	Fiber	6	above 200/50
Cass County	Consolidated Communications	130335	Fiber	6	above 200/50
Cass County	Fidelity	130183	Cable Modem	5	above 100/20 below 200/50
Cass County	Google Fiber	240041	Fiber	6	above 200/50
Cass County	KC Web	380064	Fiber	6	above 200/50
Cass County	Liberty Link	390159	Fixed Wireless	5	above 100/20 below 200/50
Cass County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Cass County	MoKan Dial, Inc.	131362	Fiber	6	above 200/50
Cass County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Cass County	UPN	350042	Fiber	6	above 200/50
Cass County	VERIZON	131425	Fixed Wireless	4	above 50/10 below 100/20
Cass County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Cass County	Xfinity	130317	Cable Modem	6	above 200/50
<i>Cedar County</i>					
Cedar County	Brightspeed	470022	DSL	3	above 25/3 below 50/10
Cedar County	Click Computers Inc.	360018	Fixed Wireless	5	above 100/20 below 200/50
Cedar County	Conexon Connect LLC	430114	Fiber	6	above 200/50
Cedar County	Fidelity	130183	Cable Modem	5	above 100/20 below 200/50
Cedar County	T-Mobile US	130403	Fixed Wireless	3	above 25/3 below 50/10
Cedar County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	2	above 10/1 below 25/3
Cedar County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Cedar County	Windstream Missouri, Inc.	131413	Fixed Wireless	4	above 50/10 below 100/20
Cedar County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Chariton County</i>					
Chariton County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Chariton County	Air Link Rural Broadband, LLC	280004	Fiber	5	above 100/20 below 200/50
Chariton County	Brightspeed	470022	DSL	4	above 50/10 below 100/20
Chariton County	Chariton Valley Communication Corporation	130234	Fiber	6	above 200/50
Chariton County	Chariton Valley Telephone Corporation	130234	Fiber	6	above 200/50
Chariton County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Chariton County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50

Chariton County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Chariton County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Chariton County	Windstream Missouri, Inc.	131413	Fixed Wireless	4	above 50/10 below 100/20
<i>Christian County</i>					
Christian County	AT&T Inc	130077	Fiber	6	above 200/50
Christian County	Brightspeed	470022	Fiber	6	above 200/50
Christian County	Cable America	130183	Cable Modem	6	above 200/50
Christian County	K-PowerNet LLC	460048	Fiber	6	above 200/50
Christian County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Christian County	Net Vision Communications	360128	Fiber	6	above 200/50
Christian County	Optimum	130370	Cable Modem	5	above 100/20 below 200/50
Christian County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Christian County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Christian County	Total HighSpeed Internet Solutions	260056	Fiber	6	above 200/50
Christian County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Christian County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Christian County	WON Communications LLC	400056	Fixed Wireless	6	above 200/50
Christian County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Clark County</i>					
Clark County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Clark County	Brightspeed	470022	DSL	4	above 50/10 below 100/20
Clark County	FullSpeed LLC	470034	Fixed Wireless	3	above 25/3 below 50/10
Clark County	Mark Twain Rural Telephone Company	130781	Fiber	6	above 200/50
Clark County	Northeast Missouri Rural Telecommunications	130940	Fiber	6	above 200/50
Clark County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Clark County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Clark County	Windstream Iowa Communications, Inc.	131413	DSL	1	below 10/1
Clark County	yondoo Broadband, LLC	390157	Fiber	6	above 200/50
<i>Clay County</i>					
Clay County	AT&T Inc	130077	Fiber	6	above 200/50
Clay County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Clay County	Brightspeed	470022	Fiber	6	above 200/50
Clay County	Charter Communications Inc	130235	Fiber	6	above 200/50
Clay County	Consolidated Communications	130335	Fiber	6	above 200/50
Clay County	Everfast Fiber	470028	Cable Modem	5	above 100/20 below 200/50
Clay County	Fusion Cloud Services, Inc.	360117	DSL	1	below 10/1
Clay County	Google Fiber	240041	Fiber	6	above 200/50
Clay County	Intercept Wireless; Intercept Fiber	340036	Fiber	6	above 200/50
Clay County	KC Fiber	150237	Fiber	6	above 200/50
Clay County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Clay County	NetFortris	300103	Fiber	5	above 100/20 below 200/50
Clay County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Clay County	UPN	350042	Fiber	6	above 200/50
Clay County	United Fiber	150327	Fiber	6	above 200/50
Clay County	VERIZON	131425	Fixed Wireless	6	above 200/50
Clay County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Clinton County</i>					
Clinton County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Clinton County	Brightspeed	470022	Fiber	4	above 50/10 below 100/20
Clinton County	Charter Communications Inc	130235	Fiber	6	above 200/50
Clinton County	Grand River Mutual Telephone Corporation	130560	Fiber	6	above 200/50
Clinton County	Intercept Wireless; Intercept Fiber	340036	Fixed Wireless	3	above 25/3 below 50/10
Clinton County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Clinton County	Mercury Broadband	190236	Fixed Wireless	5	above 100/20 below 200/50
Clinton County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Clinton County	UPN	350042	Fiber	6	above 200/50
Clinton County	United Fiber	150327	Fiber	6	above 200/50
Clinton County	VERIZON	131425	Fixed Wireless	4	above 50/10 below 100/20
Clinton County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Cole County</i>					
Cole County	AT&T Inc	130077	Fiber	6	above 200/50
Cole County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Cole County	Brightspeed	470022	Fiber	6	above 200/50
Cole County	Callabyte	340012	Fiber	6	above 200/50
Cole County	Co-Mo Connect	280017	Fiber	6	above 200/50
Cole County	Consolidated Communications, Fidium	130335	DSL	6	above 200/50
Cole County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Cole County	Optimum	130370	Cable Modem	5	above 100/20 below 200/50
Cole County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Cole County	Socket Telecom, LLC	150316	Fiber	6	above 200/50
Cole County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Cole County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Cole County	VERIZON	131425	Fixed Wireless	4	above 50/10 below 100/20
Cole County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Cooper County</i>					
Cooper County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Cooper County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Cooper County	Brightspeed	470022	DSL	3	above 25/3 below 50/10
Cooper County	Co-Mo Connect	280017	Fiber	6	above 200/50
Cooper County	Optimum	130370	Cable Modem	3	above 25/3 below 50/10
Cooper County	Otelco Mid-Missouri LLC	131378	Fiber	6	above 200/50
Cooper County	Socket Telecom, LLC	150316	Fiber	6	above 200/50
Cooper County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50

Cooper County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Cooper County	UPN	350042 Fiber	6	above 200/50
Cooper County	VERIZON	131425 Fixed Wireless	4	above 50/10 below 100/20
Cooper County	Wisper ISP, LLC	430176 Fixed Wireless	3	above 25/3 below 50/10
<i>Crawford County</i>				
Crawford County	BlueBit Networks	350017 Fixed Wireless	4	above 50/10 below 100/20
Crawford County	Brightspeed	470022 Fiber	6	above 200/50
Crawford County	Charter Communications Inc	130235 Fiber	6	above 200/50
Crawford County	Fidelity	130183 Cable Modem	5	above 100/20 below 200/50
Crawford County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Crawford County	Steelville Telephone Exchange, Inc.	131260 Fiber	6	above 200/50
Crawford County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Crawford County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Crawford County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Dade County</i>				
Dade County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Dade County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Dade County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Dade County	Miller Telephone Company	131303 Fiber	5	above 100/20 below 200/50
Dade County	SpringNet	190431 Fiber	6	above 200/50
Dade County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Dade County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Dade County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Dade County	Windstream Missouri, Inc.	131413 Fixed Wireless	4	above 50/10 below 100/20
Dade County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Dallas County</i>				
Dallas County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Dallas County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Dallas County	Fidelity	130183 Fiber	6	above 200/50
Dallas County	OREGON TELEPHONE CORPORATION	130986 DSL	1	below 10/1
Dallas County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Dallas County	Total HighSpeed Internet Solutions	260056 Fiber	6	above 200/50
Dallas County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Dallas County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Dallas County	Windstream Missouri, Inc.	131413 Fixed Wireless	3	above 25/3 below 50/10
Dallas County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Daviess County</i>				
Daviess County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Daviess County	Brightspeed	470022 DSL	2	above 10/1 below 25/3
Daviess County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Daviess County	Green Hills Technologies	130263 Fiber	6	above 200/50
Daviess County	Mercury Broadband	190236 Fixed Wireless	5	above 100/20 below 200/50
Daviess County	Mid-States Services, LLC	130829 Fiber	6	above 200/50
Daviess County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Daviess County	United Fiber	150327 Fiber	6	above 200/50
Daviess County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Daviess County	Windstream Missouri, Inc.	131413 Fixed Wireless	4	above 50/10 below 100/20
<i>DeKalb County</i>				
DeKalb County	Bluebird Network LLC	300002 Fiber	6	above 200/50
DeKalb County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
DeKalb County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
DeKalb County	Mercury Broadband	190236 Fixed Wireless	5	above 100/20 below 200/50
DeKalb County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
DeKalb County	United Fiber	150327 Fiber	6	above 200/50
DeKalb County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
DeKalb County	Windstream Missouri, Inc.	131413 Fixed Wireless	3	above 25/3 below 50/10
<i>Dent County</i>				
Dent County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Dent County	Fidelity	130183 Cable Modem	5	above 100/20 below 200/50
Dent County	Steelville Telephone Exchange, Inc.	131260 Fiber	6	above 200/50
Dent County	T-Mobile US	130403 Fixed Wireless	1	below 10/1
Dent County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Dent County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Douglas County</i>				
Douglas County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Douglas County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Douglas County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Douglas County	T-Mobile US	130403 Fixed Wireless	1	below 10/1
Douglas County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Douglas County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Douglas County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Dunklin County</i>				
Dunklin County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Dunklin County	FDF Communications	130492 Fiber	6	above 200/50
Dunklin County	Kennett City Light Gas and Water	430203 Fiber	6	above 200/50
Dunklin County	MCEC Fiber	430052 Fiber	6	above 200/50
Dunklin County	PD Fiber, LLC	390085 Fiber	6	above 200/50
Dunklin County	Ritter Communications	130427 Cable Modem	6	above 200/50
Dunklin County	Sparklight	130183 Cable Modem	6	above 200/50
Dunklin County	T-Mobile US	130403 Fixed Wireless	1	below 10/1
Dunklin County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Dunklin County	empower, delivered by CECC	410153 Fiber	6	above 200/50

Franklin County				
Franklin County	AT&T Inc	130077 DSL	5	above 100/20 below 200/50
Franklin County	BlueBit Networks	350017 Fixed Wireless	4	above 50/10 below 100/20
Franklin County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Franklin County	Brightspeed	470022 DSL	1	below 10/1
Franklin County	Charter Communications Inc	130235 Fiber	6	above 200/50
Franklin County	Fidelity	130183 Fiber	6	above 200/50
Franklin County	Fidelity Telephone LLC	130183 Fiber	6	above 200/50
Franklin County	Gateway Fiber	420048 Fiber	6	above 200/50
Franklin County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Franklin County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Franklin County	UPN	350042 Fiber	6	above 200/50
Franklin County	VERIZON	131425 Fixed Wireless	4	above 50/10 below 100/20
Franklin County	Wisper ISP, LLC	430176 DSL	2	above 10/1 below 25/3
Gasconade County				
Gasconade County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Gasconade County	Brightspeed	470022 Fiber	5	above 100/20 below 200/50
Gasconade County	Callabyte	340012 Fiber	6	above 200/50
Gasconade County	Fidelity	130183 Fiber	6	above 200/50
Gasconade County	Fidelity Telephone LLC	130183 Fiber	6	above 200/50
Gasconade County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Gasconade County	Socket Telecom, LLC	150316 Fiber	6	above 200/50
Gasconade County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Gasconade County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Gasconade County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Gentry County				
Gentry County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Gentry County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Gentry County	Brightspeed	470022 DSL	3	above 25/3 below 50/10
Gentry County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Gentry County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Gentry County	Mercury Broadband	190236 Fixed Wireless	5	above 100/20 below 200/50
Gentry County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Gentry County	United Fiber	150327 Fiber	6	above 200/50
Gentry County	Windstream Missouri, Inc.	131413 Fixed Wireless	4	above 50/10 below 100/20
Greene County				
Greene County	AT&T Inc	130077 Fiber	6	above 200/50
Greene County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Greene County	Cable America	130183 Cable Modem	6	above 200/50
Greene County	Choctaw Telephone Company	131362 DSL	4	above 50/10 below 100/20
Greene County	Consolidated Communications, Fidium	130335 DSL	6	above 200/50
Greene County	K-PowerNet LLC	460048 Fiber	6	above 200/50
Greene County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Greene County	MISSOURI TELECOM	240060 Fiber	6	above 200/50
Greene County	Net Vision Communications	360128 Fiber	6	above 200/50
Greene County	Optimum	130370 Cable Modem	5	above 100/20 below 200/50
Greene County	Rayfield Communications	280047 DSL	4	above 50/10 below 100/20
Greene County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Greene County	SpringNet	190431 Fiber	6	above 200/50
Greene County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Greene County	TPx Communications	131386 DSL	4	above 50/10 below 100/20
Greene County	Total HighSpeed Internet Solutions	260056 Fiber	6	above 200/50
Greene County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Greene County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Greene County	WON Communications LLC	400056 Fixed Wireless	6	above 200/50
Greene County	Windstream Missouri, Inc.	131413 DSL	4	above 50/10 below 100/20
Greene County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
Grundy County				
Grundy County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Grundy County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Grundy County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Grundy County	Mid-States Services, LLC	130829 Fiber	6	above 200/50
Grundy County	Optimum	130370 Cable Modem	3	above 25/3 below 50/10
Grundy County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Grundy County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Harrison County				
Harrison County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Harrison County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Harrison County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Harrison County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Harrison County	Windstream Missouri, Inc.	131413 Fixed Wireless	4	above 50/10 below 100/20
Henry County				
Henry County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Henry County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Henry County	Charter Communications Inc	130235 Fiber	6	above 200/50
Henry County	Consolidated Communications	130335 DSL	4	above 50/10 below 100/20
Henry County	K-PowerNet LLC	460048 Fiber	6	above 200/50
Henry County	Liberty Link	390159 Fixed Wireless	5	above 100/20 below 200/50
Henry County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Henry County	Socket Telecom, LLC	150316 Fiber	6	above 200/50
Henry County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Henry County	UPN	350042 Fiber	6	above 200/50
Henry County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Henry County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50

Hickory County			
Hickory County	Brightspeed	470022 DSL	4 above 50/10 below 100/20
Hickory County	Fastwyre Broadband	131226 Cable Modem	2 above 10/1 below 25/3
Hickory County	T-Mobile US	130403 Fixed Wireless	5 above 100/20 below 200/50
Hickory County	VERIZON	131425 Fixed Wireless	3 above 25/3 below 50/10
Hickory County	Wisper ISP, LLC	430176 Fixed Wireless	5 above 100/20 below 200/50
Holt County			
Holt County	Bluebird Network LLC	300002 Fiber	6 above 200/50
Holt County	Brightspeed	470022 Fiber	4 above 50/10 below 100/20
Holt County	Fastwyre Broadband	131226 DSL	3 above 25/3 below 50/10
Holt County	Mercury Broadband	190236 Fixed Wireless	5 above 100/20 below 200/50
Holt County	Midwest Data Center	131126 Fiber	6 above 200/50
Holt County	Oregon Farmers Mutual Telephone Company	131362 Fiber	5 above 100/20 below 200/50
Holt County	T-Mobile US	130403 Fixed Wireless	5 above 100/20 below 200/50
Holt County	United Fiber	150327 Fiber	6 above 200/50
Howard County			
Howard County	AT&T Inc	130077 DSL	2 above 10/1 below 25/3
Howard County	Air Link Rural Broadband, LLC	280004 Fiber	6 above 200/50
Howard County	Bluebird Network LLC	300002 Fiber	6 above 200/50
Howard County	Brightspeed	470022 DSL	4 above 50/10 below 100/20
Howard County	Chariton Valley Telephone Corporation	130234 Fiber	6 above 200/50
Howard County	Socket Telecom, LLC	150316 Fiber	6 above 200/50
Howard County	T-Mobile US	130403 Fixed Wireless	5 above 100/20 below 200/50
Howard County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3 above 25/3 below 50/10
Howard County	VERIZON	131425 Fixed Wireless	3 above 25/3 below 50/10
Howard County	iZones	460045 Fixed Wireless	4 above 50/10 below 100/20
Howell County			
Howell County	Bluebird Network LLC	300002 Fiber	6 above 200/50
Howell County	Brightspeed	470022 Fiber	4 above 50/10 below 100/20
Howell County	Current High Speed	420029 Fiber	6 above 200/50
Howell County	Fidelity	130183 Fiber	6 above 200/50
Howell County	LTD Broadband	240056 Fiber	6 above 200/50
Howell County	NEXT, Powered by NAEC, LLC	380089 Fiber	6 above 200/50
Howell County	Peace Valley Telephone	131019 Fixed Wireless	3 above 25/3 below 50/10
Howell County	Sho-Me Technologies, LLC	330067 Fiber	6 above 200/50
Howell County	T-Mobile US	130403 Fixed Wireless	5 above 100/20 below 200/50
Howell County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3 above 25/3 below 50/10
Howell County	VERIZON	131425 Fixed Wireless	3 above 25/3 below 50/10
Howell County	Wisper ISP, LLC	430176 Fixed Wireless	5 above 100/20 below 200/50
Iron County			
Iron County	AT&T Inc	130077 DSL	1 below 10/1
Iron County	Brightspeed	470022 Fiber	4 above 50/10 below 100/20
Iron County	Charter Communications Inc	130235 Fiber	5 above 100/20 below 200/50
Iron County	Steelville Telephone Exchange, Inc.	131260 Fiber	6 above 200/50
Iron County	T-Mobile US	130403 Fixed Wireless	5 above 100/20 below 200/50
Iron County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	2 above 10/1 below 25/3
Iron County	Windstream Missouri, Inc.	131413 DSL	2 above 10/1 below 25/3
Jackson County			
Jackson County	APX Net	320008 Fiber	4 above 50/10 below 100/20
Jackson County	AT&T Inc	130077 Fiber	6 above 200/50
Jackson County	Bluebird Network LLC	300002 Fiber	6 above 200/50
Jackson County	Brightspeed	470022 Fiber	6 above 200/50
Jackson County	Charter Communications Inc	130235 Fiber	6 above 200/50
Jackson County	Consolidated Communications, Fidium	130335 DSL	6 above 200/50
Jackson County	Everfast Fiber	470028 Fiber	6 above 200/50
Jackson County	Fusion Cloud Services, Inc.	360117 DSL	1 below 10/1
Jackson County	Google Fiber	240041 Fiber	6 above 200/50
Jackson County	NetFortris	300103 Fiber	6 above 200/50
Jackson County	T-Mobile US	130403 Fixed Wireless	5 above 100/20 below 200/50
Jackson County	TPx Communications	131386 DSL	4 above 50/10 below 100/20
Jackson County	UPN	350042 Fiber	6 above 200/50
Jackson County	VERIZON	131425 Fixed Wireless	6 above 200/50
Jackson County	Wisper ISP, LLC	430176 Fixed Wireless	5 above 100/20 below 200/50
Jackson County	Xfinity	130317 Cable Modem	6 above 200/50
Jackson County	Xiber, LLC	380177 Fiber	6 above 200/50
Jackson County	ZAYO GROUP, LLC	130982 Fiber	6 above 200/50
Jasper County			
Jasper County	AT&T Inc	130077 DSL	2 above 10/1 below 25/3
Jasper County	Aire Internet	370009 Fixed Wireless	4 above 50/10 below 100/20
Jasper County	Bluebird Network LLC	300002 Fiber	6 above 200/50
Jasper County	Brightspeed	470022 DSL	3 above 25/3 below 50/10
Jasper County	Carthage Water and Electric Plant	460100 Fiber	6 above 200/50
Jasper County	Craw Kan Telephone Cooperative Inc	130364 Fiber	6 above 200/50
Jasper County	GTC Broadband Inc	130558 Fiber	6 above 200/50
Jasper County	Granby Telephone Company	130558 Fiber	6 above 200/50
Jasper County	MCC Missouri LLC	130804 Cable Modem	6 above 200/50
Jasper County	Optimum	130370 Cable Modem	3 above 25/3 below 50/10
Jasper County	Rise Broadband	140048 Fixed Wireless	3 above 25/3 below 50/10
Jasper County	Sparklight	130183 Cable Modem	6 above 200/50
Jasper County	T-Mobile US	130403 Fixed Wireless	5 above 100/20 below 200/50
Jasper County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3 above 25/3 below 50/10
Jasper County	UPN	350042 Fiber	6 above 200/50
Jasper County	VERIZON	131425 Fixed Wireless	3 above 25/3 below 50/10

Jasper County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Jefferson County</i>				
Jefferson County	AT&T Inc	130077 Fiber	6	above 200/50
Jefferson County	Charter Communications Inc	130235 Fiber	6	above 200/50
Jefferson County	Lightwave Communications Ilc	390065 Fiber	6	above 200/50
Jefferson County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Jefferson County	VERIZON	131425 Fixed Wireless	4	above 50/10 below 100/20
Jefferson County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Johnson County</i>				
Johnson County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Johnson County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Johnson County	Brightspeed	470022 Fiber	6	above 200/50
Johnson County	Charter Communications Inc	130235 Fiber	6	above 200/50
Johnson County	Consolidated Communications	130335 DSL	4	above 50/10 below 100/20
Johnson County	GoNetSpeed : Otelco : I-Land Internet	131378 Fixed Wireless	3	above 25/3 below 50/10
Johnson County	Liberty Link	390159 Fiber	6	above 200/50
Johnson County	Socket Telecom, LLC	150316 Fiber	6	above 200/50
Johnson County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Johnson County	UPN	350042 Fiber	6	above 200/50
Johnson County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Johnson County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Knox County</i>				
Knox County	AT&T Inc	130077 DSL	1	below 10/1
Knox County	Brightspeed	470022 DSL	1	below 10/1
Knox County	Mark Twain Communications Company	130781 Fiber	6	above 200/50
Knox County	Mark Twain Rural Telephone Company	130781 Fiber	6	above 200/50
Knox County	Northeast Missouri Rural Telecommunications	130940 Fiber	6	above 200/50
Knox County	T-Mobile US	130403 Fixed Wireless	3	above 25/3 below 50/10
Knox County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
<i>Laclede County</i>				
Laclede County	Brightspeed	470022 Fiber	6	above 200/50
Laclede County	Cable America	130183 Cable Modem	6	above 200/50
Laclede County	OREGON TELEPHONE CORPORATION	130986 Fiber	6	above 200/50
Laclede County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Laclede County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Laclede County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Laclede County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Laclede County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Lafayette County</i>				
Lafayette County	Alma Telephone Company	130043 Fiber	4	above 50/10 below 100/20
Lafayette County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Lafayette County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Lafayette County	Charter Communications Inc	130235 Fiber	6	above 200/50
Lafayette County	Citizens Telephone Company of Higginsville Missouri	130263 Fiber	6	above 200/50
Lafayette County	Optimum	130370 Cable Modem	5	above 100/20 below 200/50
Lafayette County	Socket Telecom, LLC	150316 Fiber	6	above 200/50
Lafayette County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Lafayette County	TurboNet	410151 Fiber	5	above 100/20 below 200/50
Lafayette County	VERIZON	131425 Fixed Wireless	4	above 50/10 below 100/20
Lafayette County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
Lafayette County	Xfinity	130317 Cable Modem	5	above 100/20 below 200/50
<i>Lawrence County</i>				
Lawrence County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Lawrence County	Aire Internet	370009 Fixed Wireless	4	above 50/10 below 100/20
Lawrence County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Lawrence County	Choctaw Telephone Company	131362 Fiber	5	above 100/20 below 200/50
Lawrence County	Consolidated Communications, Fidium	130335 DSL	4	above 50/10 below 100/20
Lawrence County	K-PowerNet LLC	460048 Fiber	6	above 200/50
Lawrence County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Lawrence County	MISSOURI TELECOM	240060 Fiber	6	above 200/50
Lawrence County	Miller Telephone Company	131303 Fiber	5	above 100/20 below 200/50
Lawrence County	Optimum	130370 Cable Modem	5	above 100/20 below 200/50
Lawrence County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Lawrence County	Total HighSpeed Internet Solutions	260056 Fiber	6	above 200/50
Lawrence County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Lawrence County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Lawrence County	Windstream Missouri, Inc.	131413 DSL	6	above 200/50
Lawrence County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Lewis County</i>				
Lewis County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Lewis County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Lewis County	Mark Twain Communications Company	130781 Fiber	6	above 200/50
Lewis County	Mark Twain Rural Telephone Company	130781 Fiber	6	above 200/50
Lewis County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Lewis County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Lewis County	yondoo Broadband, LLC	390157 Fiber	6	above 200/50
<i>Lincoln County</i>				
Lincoln County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Lincoln County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Lincoln County	Brightspeed	470022 Fiber	6	above 200/50
Lincoln County	Charter Communications Inc	130235 Fiber	6	above 200/50
Lincoln County	Consolidated Communications, Fidium	130335 DSL	6	above 200/50
Lincoln County	Gateway Fiber	420048 Fiber	6	above 200/50

Lincoln County	Socket Telecom, LLC	150316 Fiber	6	above 200/50
Lincoln County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Lincoln County	VERIZON	131425 Fixed Wireless	4	above 50/10 below 100/20
Lincoln County	Windstream Missouri, Inc.	131413 Fixed Wireless	4	above 50/10 below 100/20
Lincoln County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
Lincoln County	yondoo Broadband, LLC	390157 Fiber	6	above 200/50
<i>Linn County</i>				
Linn County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Linn County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Linn County	Chariton Valley Communication Corporation	130234 Fiber	6	above 200/50
Linn County	Chariton Valley Telephone Corporation	130234 Fiber	6	above 200/50
Linn County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Linn County	Green Hills Technologies	130263 Fiber	6	above 200/50
Linn County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Linn County	Northeast Missouri Rural Telecommunications	130940 Fiber	6	above 200/50
Linn County	Optimum	130370 Cable Modem	5	above 100/20 below 200/50
Linn County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Linn County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Linn County	Windstream Missouri, Inc.	131413 Fixed Wireless	4	above 50/10 below 100/20
<i>Livingston County</i>				
Livingston County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Livingston County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Livingston County	Chariton Valley Telephone Corporation	130234 Fiber	6	above 200/50
Livingston County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Livingston County	Green Hills Technologies	130263 Fiber	6	above 200/50
Livingston County	Mid-States Services, LLC	130829 Fiber	6	above 200/50
Livingston County	Optimum	130370 Cable Modem	3	above 25/3 below 50/10
Livingston County	Socket Telecom, LLC	150316 Fiber	6	above 200/50
Livingston County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Livingston County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Livingston County	Zito Media	160157 Cable Modem	5	above 100/20 below 200/50
<i>Macon County</i>				
Macon County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Macon County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Macon County	Chariton Valley Communication Corporation	130234 Fiber	6	above 200/50
Macon County	Chariton Valley Telephone Corporation	130234 Fiber	6	above 200/50
Macon County	Mark Twain Rural Telephone Company	130781 Fiber	5	above 100/20 below 200/50
Macon County	Northeast Missouri Rural Telecommunications	130940 Fiber	6	above 200/50
Macon County	Sparklight	130183 Cable Modem	6	above 200/50
Macon County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Macon County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Macon County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
<i>Madison County</i>				
Madison County	AT&T Inc	130077 DSL	4	above 50/10 below 100/20
Madison County	Big River Communications	130124 DSL	1	below 10/1
Madison County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Madison County	Charter Communications Inc	130235 Fiber	5	above 100/20 below 200/50
Madison County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Madison County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Madison County	Windstream Missouri, Inc.	131413 DSL	4	above 50/10 below 100/20
Madison County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Maries County</i>				
Maries County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Maries County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Maries County	GTECH Fiber LLC	450051 Fiber	6	above 200/50
Maries County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Maries County	T-Mobile US	130403 Fixed Wireless	1	below 10/1
Maries County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Maries County	Windstream Missouri, Inc.	131413 Fixed Wireless	3	above 25/3 below 50/10
Maries County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Marion County</i>				
Marion County	AT&T Inc	130077 DSL	3	above 25/3 below 50/10
Marion County	Adams Telsystems Inc.	130012 Fiber	6	above 200/50
Marion County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Marion County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Marion County	Chariton Valley Communication Corporation	130234 Fiber	6	above 200/50
Marion County	Charter Communications Inc	130235 Fiber	6	above 200/50
Marion County	Mark Twain Communications Company	130781 Fiber	6	above 200/50
Marion County	Mark Twain Rural Telephone Company	130781 Fiber	6	above 200/50
Marion County	Ralls Technologies, L.L.C.	160146 Fiber	5	above 100/20 below 200/50
Marion County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Marion County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Marion County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
<i>McDonald County</i>				
McDonald County	BarryElectricCooperative	360007 Fiber	6	above 200/50
McDonald County	Brightspeed	470022 DSL	2	above 10/1 below 25/3
McDonald County	Cox Communications	130360 Cable Modem	5	above 100/20 below 200/50
McDonald County	K-PowerNet LLC	460048 Fiber	6	above 200/50
McDonald County	Le-Ru Telephone Company	130736 Fiber	6	above 200/50
McDonald County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
McDonald County	McDonald County Telephone and Internet	130798 Fiber	6	above 200/50
McDonald County	OREGON TELEPHONE COPORATION	130986 Fiber	6	above 200/50
McDonald County	OREGON TELEPHONE CORPORATION	130986 Fiber	6	above 200/50

McDonald County	Oregon Telephone Corporation	130986 Fiber	6	above 200/50
McDonald County	OzarksGo	360065 Fiber	6	above 200/50
McDonald County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
McDonald County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	2	above 10/1 below 25/3
McDonald County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
McDonald County	Windstream Missouri, Inc.	131413 DSL	6	above 200/50
McDonald County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Mercer County</i>				
Mercer County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Mercer County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Mercer County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
<i>Miller County</i>				
Miller County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Miller County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Miller County	Charter Communications Inc	130235 Fiber	6	above 200/50
Miller County	Co-Mo Connect	280017 Fiber	6	above 200/50
Miller County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Miller County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Miller County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Miller County	VERIZON	131425 Fixed Wireless	4	above 50/10 below 100/20
Miller County	Windstream Missouri, Inc.	131413 Fiber	6	above 200/50
Miller County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Mississippi County</i>				
Mississippi County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Mississippi County	Charter Communications Inc	130235 Fiber	5	above 100/20 below 200/50
Mississippi County	GoSEMO, LLC	390101 Fiber	6	above 200/50
Mississippi County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Mississippi County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Mississippi County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Moniteau County</i>				
Moniteau County	Brightspeed	470022 Fiber	5	above 100/20 below 200/50
Moniteau County	Co-Mo Connect	280017 Fiber	6	above 200/50
Moniteau County	Otelco Mid-Missouri LLC	131378 DSL	4	above 50/10 below 100/20
Moniteau County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Moniteau County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Moniteau County	VERIZON	131425 Fixed Wireless	4	above 50/10 below 100/20
Moniteau County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
Moniteau County	iZones	460045 Fixed Wireless	5	above 100/20 below 200/50
<i>Monroe County</i>				
Monroe County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Monroe County	Brightspeed	470022 DSL	3	above 25/3 below 50/10
Monroe County	Chariton Valley Communication Corporation	130234 Fiber	6	above 200/50
Monroe County	Chariton Valley Telephone Corporation	130234 Fiber	6	above 200/50
Monroe County	Charter Communications Inc	130235 Fiber	5	above 100/20 below 200/50
Monroe County	Mark Twain Communications Company	130781 Fixed Wireless	4	above 50/10 below 100/20
Monroe County	Ralls Technologies, L.L.C.	160146 Fiber	5	above 100/20 below 200/50
Monroe County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Monroe County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Monroe County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Monroe County	Windstream Missouri, Inc.	131413 Fixed Wireless	4	above 50/10 below 100/20
<i>Montgomery County</i>				
Montgomery County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Montgomery County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Montgomery County	Brightspeed	470022 Fiber	6	above 200/50
Montgomery County	Callabyte	340012 Fiber	6	above 200/50
Montgomery County	Charter Communications Inc	130235 Fiber	6	above 200/50
Montgomery County	Kingdom Telephone Co	130697 Fiber	6	above 200/50
Montgomery County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Montgomery County	OREGON TELEPHONE CORPORATION	130986 Fiber	6	above 200/50
Montgomery County	OREGON TELEPHONE CORPORATOIN	130986 Fiber	6	above 200/50
Montgomery County	PHYNX	130697 Fiber	6	above 200/50
Montgomery County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Montgomery County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	2	above 10/1 below 25/3
Montgomery County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Montgomery County	Windstream Missouri, Inc.	131413 Fiber	6	above 200/50
<i>Morgan County</i>				
Morgan County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Morgan County	Brightspeed	470022 DSL	3	above 25/3 below 50/10
Morgan County	Charter Communications Inc	130235 Fiber	5	above 100/20 below 200/50
Morgan County	Co-Mo Connect	280017 Fiber	6	above 200/50
Morgan County	Otelco Mid-Missouri LLC	131378 DSL	3	above 25/3 below 50/10
Morgan County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Morgan County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Morgan County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Morgan County	Windstream Missouri, Inc.	131413 DSL	6	above 200/50
Morgan County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>New Madrid County</i>				
New Madrid County	AT&T Inc	130077 DSL	5	above 100/20 below 200/50
New Madrid County	BPS Telephone Company	130492 Fiber	6	above 200/50
New Madrid County	Big River Communications	130124 DSL	1	below 10/1
New Madrid County	Charter Communications Inc	130235 Fiber	5	above 100/20 below 200/50
New Madrid County	GoSEMO, LLC	390101 Fiber	6	above 200/50
New Madrid County	King Street Wireless, L.P.	300079 Fixed Wireless	2	above 10/1 below 25/3

New Madrid County	PD Fiber, LLC	390085 Fiber	6	above 200/50
New Madrid County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
New Madrid County	Sparklight	130183 Cable Modem	6	above 200/50
New Madrid County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
New Madrid County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
<i>Newton County</i>				
Newton County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Newton County	Aire Internet	370009 Fixed Wireless	4	above 50/10 below 100/20
Newton County	BarryElectricCooperative	360007 Fiber	6	above 200/50
Newton County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Newton County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Newton County	Consolidated Communications, Fidium	130335 DSL	4	above 50/10 below 100/20
Newton County	FIBER COMMUNICATIONS of COLUMBUS	130314 Fiber	6	above 200/50
Newton County	GTC Broadband Inc	130558 Fiber	6	above 200/50
Newton County	Granby Telephone Company	130558 Fiber	6	above 200/50
Newton County	K-PowerNet LLC	460048 Fiber	6	above 200/50
Newton County	Le-Ru Telephone Company	130736 Fiber	6	above 200/50
Newton County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Newton County	OREGON TELEPHONE COPORATION	130986 Fiber	6	above 200/50
Newton County	Optimum	130370 Fiber	6	above 200/50
Newton County	Sparklight	130183 Cable Modem	6	above 200/50
Newton County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Newton County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Newton County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Newton County	Windstream Missouri, Inc.	131413 DSL	6	above 200/50
Newton County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Nodaway County</i>				
Nodaway County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Nodaway County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Nodaway County	Fastwyre Broadband	131226 DSL	3	above 25/3 below 50/10
Nodaway County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Nodaway County	IAMO Telephone Company	130631 Fiber	6	above 200/50
Nodaway County	King Street Wireless, L.P.	300079 Fixed Wireless	2	above 10/1 below 25/3
Nodaway County	Optimum	130370 Cable Modem	5	above 100/20 below 200/50
Nodaway County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Nodaway County	United Fiber	150327 Fiber	6	above 200/50
Nodaway County	Windstream Iowa Communications, Inc.	131413 DSL	5	above 100/20 below 200/50
<i>Oregon County</i>				
Oregon County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Oregon County	Current High Speed	420029 Fiber	6	above 200/50
Oregon County	Fidelity	130183 Cable Modem	5	above 100/20 below 200/50
Oregon County	LTD Broadband	240056 Fiber	6	above 200/50
Oregon County	NEXT, Powered by NAEC, LLC	380089 Fiber	6	above 200/50
Oregon County	Peace Valley Telephone	131019 DSL	2	above 10/1 below 25/3
Oregon County	T-Mobile US	130403 Fixed Wireless	3	above 25/3 below 50/10
Oregon County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Oregon County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Oregon County	Windstream Missouri, Inc.	131413 Fiber	6	above 200/50
<i>Osage County</i>				
Osage County	AT&T Inc	130077 DSL	5	above 100/20 below 200/50
Osage County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Osage County	Cable America	130183 Cable Modem	6	above 200/50
Osage County	Mid MO Micro Computers	350064 Fiber	5	above 100/20 below 200/50
Osage County	Optimum	130370 Cable Modem	5	above 100/20 below 200/50
Osage County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Osage County	T-Mobile US	130403 Fixed Wireless	1	below 10/1
Osage County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Osage County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Osage County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Ozark County</i>				
Ozark County	Brightspeed	470022 Fiber	1	below 10/1
Ozark County	NEXT, Powered by NAEC, LLC	380089 Fiber	6	above 200/50
Ozark County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Ozark County	T-Mobile US	130403 Fixed Wireless	3	above 25/3 below 50/10
Ozark County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Ozark County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Ozark County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Pemiscot County</i>				
Pemiscot County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Pemiscot County	BPS Telephone Company	130492 Fiber	6	above 200/50
Pemiscot County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Pemiscot County	MCEC Fiber	430052 Fiber	6	above 200/50
Pemiscot County	PD Fiber, LLC	390085 Fiber	6	above 200/50
Pemiscot County	Sparklight	130183 Cable Modem	6	above 200/50
Pemiscot County	T-Mobile US	130403 Fixed Wireless	3	above 25/3 below 50/10
Pemiscot County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
<i>Perry County</i>				
Perry County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Perry County	BLIP_Networks	200006 Fixed Wireless	5	above 100/20 below 200/50
Perry County	Big River Communications	130124 DSL	2	above 10/1 below 25/3
Perry County	Charter Communications Inc	130235 Fiber	6	above 200/50
Perry County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Perry County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50

Perry County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Perry County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Pettis County					
Pettis County	AT&T Inc	130077	DSL	5	above 100/20 below 200/50
Pettis County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Pettis County	Brightspeed	470022	DSL	4	above 50/10 below 100/20
Pettis County	Charter Communications Inc	130235	Fiber	6	above 200/50
Pettis County	Citizens Cablevision Inc	130263	Cable Modem	5	above 100/20 below 200/50
Pettis County	Co-Mo Connect	280017	Fiber	6	above 200/50
Pettis County	Liberty Link	390159	Fixed Wireless	5	above 100/20 below 200/50
Pettis County	Otelco Mid-Missouri LLC	131378	DSL	4	above 50/10 below 100/20
Pettis County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Pettis County	Socket Telecom, LLC	150316	Fiber	6	above 200/50
Pettis County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Pettis County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Pettis County	VERIZON	131425	Fixed Wireless	4	above 50/10 below 100/20
Pettis County	Windstream Missouri, Inc.	131413	DSL	2	above 10/1 below 25/3
Pettis County	Wisper ISP, LLC	430176	Fiber	6	above 200/50
Phelps County					
Phelps County	BlueBit Networks	350017	Fixed Wireless	4	above 50/10 below 100/20
Phelps County	Brightspeed	470022	Fiber	6	above 200/50
Phelps County	Charter Communications Inc	130235	Fiber	5	above 100/20 below 200/50
Phelps County	Fidelity	130183	Fiber	6	above 200/50
Phelps County	GTECH Fiber LLC	450051	Fiber	6	above 200/50
Phelps County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Phelps County	Socket Telecom, LLC	150316	Fiber	6	above 200/50
Phelps County	Steelville Telephone Exchange, Inc.	131260	Fiber	6	above 200/50
Phelps County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Phelps County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Phelps County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Phelps County	Wave Internet Technologies LLC	450172	Fiber	6	above 200/50
Phelps County	Windstream Missouri, Inc.	131413	DSL	6	above 200/50
Phelps County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Pike County					
Pike County	AT&T Inc	130077	DSL	3	above 25/3 below 50/10
Pike County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Pike County	Charter Communications Inc	130235	Fiber	6	above 200/50
Pike County	Ralls Technologies, L.L.C.	160146	Fiber	6	above 200/50
Pike County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Pike County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Pike County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Pike County	Windstream Missouri, Inc.	131413	Fixed Wireless	4	above 50/10 below 100/20
Pike County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Pike County	yondoo Broadband, LLC	390157	Fiber	6	above 200/50
Platte County					
Platte County	AT&T Inc	130077	Fiber	6	above 200/50
Platte County	Aureon Communications, L.L.C.	280005	Fiber	4	above 50/10 below 100/20
Platte County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Platte County	Brightspeed	470022	Fiber	6	above 200/50
Platte County	Charter Communications Inc	130235	Fiber	6	above 200/50
Platte County	Consolidated Communications	130335	Fiber	6	above 200/50
Platte County	Google Fiber	240041	Fiber	6	above 200/50
Platte County	Mercury Broadband	190236	Fixed Wireless	5	above 100/20 below 200/50
Platte County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Platte County	UPN	350042	Fiber	6	above 200/50
Platte County	United Fiber	150327	Fiber	6	above 200/50
Platte County	VERIZON	131425	Fixed Wireless	6	above 200/50
Platte County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Polk County					
Polk County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Polk County	Brightspeed	470022	DSL	4	above 50/10 below 100/20
Polk County	Fastwyre Broadband	131226	Cable Modem	2	above 10/1 below 25/3
Polk County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Polk County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Polk County	Total HighSpeed Internet Solutions	260056	Fiber	6	above 200/50
Polk County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Polk County	WON Communications LLC	400056	Fixed Wireless	6	above 200/50
Polk County	Windstream Missouri, Inc.	131413	Fiber	6	above 200/50
Polk County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Pulaski County					
Pulaski County	Brightspeed	470022	Fiber	6	above 200/50
Pulaski County	Cable America	130183	Cable Modem	6	above 200/50
Pulaski County	GTECH Fiber LLC	450051	Fiber	6	above 200/50
Pulaski County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Pulaski County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Pulaski County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Pulaski County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Pulaski County	Windstream Missouri, Inc.	131413	Fiber	6	above 200/50
Pulaski County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Putnam County					
Putnam County	Grand River Mutual Telephone Corporation	130560	Fiber	6	above 200/50
Putnam County	Northeast Missouri Rural Telecommunications	130940	Fiber	6	above 200/50
Putnam County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50

Putnam County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
<i>Ralls County</i>				
Ralls County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Ralls County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Ralls County	Brightspeed	470022 DSL	3	above 25/3 below 50/10
Ralls County	Chariton Valley Communication Corporation	130234 Fiber	6	above 200/50
Ralls County	Charter Communications Inc	130235 Fiber	6	above 200/50
Ralls County	Consolidated Communications, Fidium	130335 DSL	6	above 200/50
Ralls County	Mark Twain Communications Company	130781 Fixed Wireless	4	above 50/10 below 100/20
Ralls County	OREGON TELEPHONE CORPORATION	130986 Fiber	6	above 200/50
Ralls County	Ralls Technologies, L.L.C.	160146 Fiber	6	above 200/50
Ralls County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Ralls County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Ralls County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Ralls County	Windstream Missouri, Inc.	131413 Fiber	6	above 200/50
<i>Randolph County</i>				
Randolph County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Randolph County	Air Link Rural Broadband, LLC	280004 Fiber	5	above 100/20 below 200/50
Randolph County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Randolph County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Randolph County	Chariton Valley Communication Corporation	130234 Fiber	6	above 200/50
Randolph County	Chariton Valley Telephone Corporation	130234 Fiber	6	above 200/50
Randolph County	Charter Communications Inc	130235 Fiber	5	above 100/20 below 200/50
Randolph County	PHYNX	130697 Fiber	6	above 200/50
Randolph County	Socket Telecom, LLC	150316 Fiber	6	above 200/50
Randolph County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Randolph County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Randolph County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
<i>Ray County</i>				
Ray County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Ray County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Ray County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Ray County	Consolidated Communications	130335 DSL	4	above 50/10 below 100/20
Ray County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Ray County	Green Hills Technologies	130263 Fiber	6	above 200/50
Ray County	Intercept Wireless; Intercept Fiber	340036 Fixed Wireless	3	above 25/3 below 50/10
Ray County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Ray County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Ray County	TurboNet	410151 Fiber	5	above 100/20 below 200/50
Ray County	UPN	350042 Fiber	6	above 200/50
Ray County	United Fiber	150327 Fiber	6	above 200/50
Ray County	VERIZON	131425 Fixed Wireless	4	above 50/10 below 100/20
Ray County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Reynolds County</i>				
Reynolds County	BOYCOM CABLEVISION INC.	190059 Cable Modem	5	above 100/20 below 200/50
Reynolds County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Reynolds County	McCormack Networks	130449 Fiber	6	above 200/50
Reynolds County	T-Mobile US	130403 Fixed Wireless	3	above 25/3 below 50/10
Reynolds County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Reynolds County	Windstream Missouri, Inc.	131413 Fiber	6	above 200/50
<i>Ripley County</i>				
Ripley County	BOYCOM CABLEVISION INC.	190059 Cable Modem	6	above 200/50
Ripley County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Ripley County	T-Mobile US	130403 Fixed Wireless	1	below 10/1
Ripley County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Ripley County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Ripley County	Windstream Missouri, Inc.	131413 Fiber	6	above 200/50
<i>Saline County</i>				
Saline County	AT&T Inc	130077 DSL	5	above 100/20 below 200/50
Saline County	Air Link Rural Broadband, LLC	280004 Fiber	6	above 200/50
Saline County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Saline County	Brightspeed	470022 Fiber	4	above 50/10 below 100/20
Saline County	Citizens Cablevision Inc	130263 Cable Modem	5	above 100/20 below 200/50
Saline County	Co-Mo Connect	280017 Fiber	6	above 200/50
Saline County	Fusion Cloud Services, Inc.	360117 DSL	1	below 10/1
Saline County	Marshall Municipal Utilities	300087 Fiber	6	above 200/50
Saline County	Otelco Mid-Missouri LLC	131378 Fiber	6	above 200/50
Saline County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Saline County	TPx Communications	131386 DSL	4	above 50/10 below 100/20
Saline County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Saline County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
Saline County	Zito Media	160157 Cable Modem	5	above 100/20 below 200/50
<i>Schuyler County</i>				
Schuyler County	CITIZENS MUTUAL TELEPHONE	130259 Fiber	6	above 200/50
Schuyler County	Mark Twain Rural Telephone Company	130781 Fiber	6	above 200/50
Schuyler County	Northeast Missouri Rural Telecommunications	130940 Fiber	6	above 200/50
Schuyler County	T-Mobile US	130403 Fixed Wireless	3	above 25/3 below 50/10
Schuyler County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
<i>Scotland County</i>				
Scotland County	Brightspeed	470022 DSL	1	below 10/1
Scotland County	CITIZENS MUTUAL TELEPHONE	130259 Fiber	6	above 200/50
Scotland County	Mark Twain Rural Telephone Company	130781 Fiber	5	above 100/20 below 200/50
Scotland County	Northeast Missouri Rural Telecommunications	130940 Fiber	6	above 200/50

Scotland County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Scotland County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
<i>Scott County</i>					
Scott County	AT&T Inc	130077	DSL	4	above 50/10 below 100/20
Scott County	Big River Communications	130124	DSL	1	below 10/1
Scott County	Charter Communications Inc	130235	Fiber	6	above 200/50
Scott County	GoSEMO, LLC	390101	Fiber	6	above 200/50
Scott County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Scott County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
<i>Shannon County</i>					
Shannon County	Brightspeed	470022	DSL	4	above 50/10 below 100/20
Shannon County	McCormack Networks	130449	Fiber	5	above 100/20 below 200/50
Shannon County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Shannon County	T-Mobile US	130403	Fixed Wireless	3	above 25/3 below 50/10
Shannon County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Shannon County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Shannon County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>Shelby County</i>					
Shelby County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Shelby County	Brightspeed	470022	Fiber	4	above 50/10 below 100/20
Shelby County	Chariton Valley Communication Corporation	130234	Fiber	6	above 200/50
Shelby County	Chariton Valley Telephone Corporation	130234	Fiber	6	above 200/50
Shelby County	Charter Communications Inc	130235	Fiber	5	above 100/20 below 200/50
Shelby County	Mark Twain Communications Company	130781	Fiber	6	above 200/50
Shelby County	Mark Twain Rural Telephone Company	130781	Fiber	6	above 200/50
Shelby County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Shelby County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Shelby County	VERIZON	131425	Fixed Wireless	4	above 50/10 below 100/20
<i>St. Charles County</i>					
St. Charles County	AT&T Inc	130077	Fiber	6	above 200/50
St. Charles County	Bluebird Network LLC	300002	Fiber	6	above 200/50
St. Charles County	Brightspeed	470022	Fiber	6	above 200/50
St. Charles County	Cable America	130183	Cable Modem	6	above 200/50
St. Charles County	Charter Communications Inc	130235	Fiber	6	above 200/50
St. Charles County	Consolidated Communications, Fidium	130335	DSL	6	above 200/50
St. Charles County	Gateway Fiber	420048	Fiber	6	above 200/50
St. Charles County	OREGON TELEPHONE CORPORATION	130986	Fiber	6	above 200/50
St. Charles County	Optimum	130370	Cable Modem	5	above 100/20 below 200/50
St. Charles County	Socket Telecom, LLC	150316	Fiber	6	above 200/50
St. Charles County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
St. Charles County	VERIZON	131425	Fixed Wireless	6	above 200/50
St. Charles County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
St. Charles County	i3 Broadband	350085	Fiber	6	above 200/50
<i>St. Clair County</i>					
St. Clair County	Brightspeed	470022	Fiber	1	below 10/1
St. Clair County	Conexon Connect LLC	430114	Fiber	6	above 200/50
St. Clair County	K-PowerNet LLC	460048	Fiber	6	above 200/50
St. Clair County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
St. Clair County	T-Mobile US	130403	Fixed Wireless	1	below 10/1
St. Clair County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
St. Clair County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>St. Francois County</i>					
St. Francois County	AT&T Inc	130077	Fiber	6	above 200/50
St. Francois County	Aptitude Internet LLC	320007	Fiber	6	above 200/50
St. Francois County	Big River Communications	130124	DSL	1	below 10/1
St. Francois County	Brightspeed	470022	DSL	2	above 10/1 below 25/3
St. Francois County	Charter Communications Inc	130235	Fiber	6	above 200/50
St. Francois County	Consolidated Communications, Fidium	130335	DSL	6	above 200/50
St. Francois County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
St. Francois County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
St. Francois County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
St. Francois County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
<i>St. Louis County</i>					
St. Louis County	AT&T Inc	130077	Fiber	6	above 200/50
St. Louis County	Big River Communications	130124	DSL	2	above 10/1 below 25/3
St. Louis County	Bluebird Network LLC	300002	Fiber	6	above 200/50
St. Louis County	Cable America	130183	Cable Modem	6	above 200/50
St. Louis County	Charter Communications Inc	130235	Fiber	6	above 200/50
St. Louis County	Consolidated Communications, Fidium	130335	DSL	6	above 200/50
St. Louis County	Fusion Cloud Services, Inc.	360117	DSL	1	below 10/1
St. Louis County	Optimum	130370	Cable Modem	5	above 100/20 below 200/50
St. Louis County	Socket Telecom, LLC	150316	Fiber	6	above 200/50
St. Louis County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
St. Louis County	TPx Communications	131386	DSL	6	above 200/50
St. Louis County	UPN	350042	Fiber	6	above 200/50
St. Louis County	VERIZON	131425	Fixed Wireless	6	above 200/50
St. Louis County	Voyant Communications	310026	Fiber	2	above 10/1 below 25/3
St. Louis County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
St. Louis County	Xfinity	130317	Fiber	5	above 100/20 below 200/50
St. Louis County	ZAYO GROUP, LLC	130982	Fiber	5	above 100/20 below 200/50
St. Louis County	i3 Broadband	350085	Fiber	6	above 200/50
<i>St. Louis city</i>					
St. Louis city	AT&T Inc	130077	Fiber	6	above 200/50

St. Louis city	Bluebird Network LLC	300002 Fiber	6	above 200/50
St. Louis city	Charter Communications Inc	130235 Fiber	6	above 200/50
St. Louis city	Cogent Communication	200014 Fiber	6	above 200/50
St. Louis city	Consolidated Communications, Fidium	130335 DSL	6	above 200/50
St. Louis city	Crown Castle Fiber LLC	400092 Fiber	1	below 10/1
St. Louis city	Fusion Cloud Services, Inc.	360117 DSL	1	below 10/1
St. Louis city	S-Net Communications	230042 Fiber	6	above 200/50
St. Louis city	Stratus Networks, Inc.	300150 Fiber	6	above 200/50
St. Louis city	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
St. Louis city	TPx Communications	131386 DSL	6	above 200/50
St. Louis city	VERIZON	131425 Fixed Wireless	6	above 200/50
St. Louis city	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Ste. Genevieve County</i>				
Ste. Genevieve County	AT&T Inc	130077 Fiber	6	above 200/50
Ste. Genevieve County	Aptitude Internet LLC	320007 Fiber	6	above 200/50
Ste. Genevieve County	Big River Communications	130124 DSL	2	above 10/1 below 25/3
Ste. Genevieve County	Charter Communications Inc	130235 Fiber	6	above 200/50
Ste. Genevieve County	Lightwave Communications llc	390065 Fiber	6	above 200/50
Ste. Genevieve County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Ste. Genevieve County	VERIZON	131425 Fixed Wireless	4	above 50/10 below 100/20
Ste. Genevieve County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Stoddard County</i>				
Stoddard County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Stoddard County	BPS Telephone Company	130492 Fiber	6	above 200/50
Stoddard County	Charter Communications Inc	130235 Fiber	5	above 100/20 below 200/50
Stoddard County	FDF Communications	130492 Fiber	6	above 200/50
Stoddard County	GoSEMO, LLC	390101 Fiber	6	above 200/50
Stoddard County	Sparklight	130183 Cable Modem	6	above 200/50
Stoddard County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Stoddard County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
<i>Stone County</i>				
Stone County	AT&T Inc	130077 Fiber	6	above 200/50
Stone County	Brightspeed	470022 Fiber	6	above 200/50
Stone County	K-PowerNet LLC	460048 Fiber	6	above 200/50
Stone County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Stone County	Optimum	130370 Cable Modem	5	above 100/20 below 200/50
Stone County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Stone County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Stone County	Total HighSpeed Internet Solutions	260056 Fiber	6	above 200/50
Stone County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Stone County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Stone County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Sullivan County</i>				
Sullivan County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Sullivan County	Grand River Mutual Telephone Corporation	130560 Fiber	6	above 200/50
Sullivan County	Northeast Missouri Rural Telecommunications	130940 Fiber	6	above 200/50
Sullivan County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Sullivan County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Sullivan County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Sullivan County	Windstream Missouri, Inc.	131413 Fiber	6	above 200/50
<i>Taney County</i>				
Taney County	Brightspeed	470022 Fiber	6	above 200/50
Taney County	Consolidated Communications, Fidium	130335 DSL	6	above 200/50
Taney County	K-PowerNet LLC	460048 Fiber	6	above 200/50
Taney County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Taney County	Optimum	130370 Cable Modem	5	above 100/20 below 200/50
Taney County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Taney County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Taney County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Taney County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Taney County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Texas County</i>				
Texas County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Texas County	Cable America	130183 Cable Modem	6	above 200/50
Texas County	MCC Missouri LLC	130804 Cable Modem	6	above 200/50
Texas County	Sho-Me Technologies, LLC	330067 Fiber	6	above 200/50
Texas County	T-Mobile US	130403 Fixed Wireless	5	above 100/20 below 200/50
Texas County	UNITED STATES CELLULAR CORPORATION	131310 Fixed Wireless	3	above 25/3 below 50/10
Texas County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Texas County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Vernon County</i>				
Vernon County	AT&T Inc	130077 DSL	2	above 10/1 below 25/3
Vernon County	Bluebird Network LLC	300002 Fiber	6	above 200/50
Vernon County	Brightspeed	470022 DSL	4	above 50/10 below 100/20
Vernon County	Conexon Connect LLC	430114 Fiber	6	above 200/50
Vernon County	Craw Kan Telephone Cooperative Inc	130364 Fiber	6	above 200/50
Vernon County	Fastwyre Broadband	131226 DSL	3	above 25/3 below 50/10
Vernon County	Fidelity	130183 Cable Modem	5	above 100/20 below 200/50
Vernon County	MISSOURI TELECOM	240060 Fiber	6	above 200/50
Vernon County	T-Mobile US	130403 Fixed Wireless	3	above 25/3 below 50/10
Vernon County	VERIZON	131425 Fixed Wireless	3	above 25/3 below 50/10
Vernon County	Wisper ISP, LLC	430176 Fixed Wireless	5	above 100/20 below 200/50
<i>Warren County</i>				

Warren County	Bluebird Network LLC	300002	Fiber	6	above 200/50
Warren County	Brightspeed	470022	Fiber	6	above 200/50
Warren County	Cable America	130183	Cable Modem	6	above 200/50
Warren County	Callabyte	340012	Fiber	6	above 200/50
Warren County	Charter Communications Inc	130235	Fiber	6	above 200/50
Warren County	Consolidated Communications, Fidium	130335	DSL	6	above 200/50
Warren County	Gateway Fiber	420048	Fiber	6	above 200/50
Warren County	Kingdom Telephone Co	130697	Fiber	6	above 200/50
Warren County	Socket Telecom, LLC	150316	Fiber	6	above 200/50
Warren County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Warren County	UPN	350042	Fiber	6	above 200/50
Warren County	VERIZON	131425	Fixed Wireless	4	above 50/10 below 100/20
Warren County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Washington County					
Washington County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Washington County	BlueBit Networks	350017	Fixed Wireless	4	above 50/10 below 100/20
Washington County	Brightspeed	470022	Fiber	4	above 50/10 below 100/20
Washington County	Charter Communications Inc	130235	Cable Modem	5	above 100/20 below 200/50
Washington County	Fidelity Telephone LLC	130183	DSL	3	above 25/3 below 50/10
Washington County	Steelville Telephone Exchange, Inc.	131260	DSL	3	above 25/3 below 50/10
Washington County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Washington County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Washington County	yondoo Broadband, LLC	390157	Fiber	6	above 200/50
Wayne County					
Wayne County	AT&T Inc	130077	DSL	2	above 10/1 below 25/3
Wayne County	BOYCOM CABLEVISION INC.	190059	Cable Modem	6	above 200/50
Wayne County	McCormack Networks	130449	Fiber	5	above 100/20 below 200/50
Wayne County	T-Mobile US	130403	Fixed Wireless	1	below 10/1
Wayne County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Wayne County	Windstream Missouri, Inc.	131413	Fiber	6	above 200/50
Webster County					
Webster County	AT&T Inc	130077	Fiber	6	above 200/50
Webster County	Brightspeed	470022	Fiber	4	above 50/10 below 100/20
Webster County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Webster County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Webster County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Webster County	Total HighSpeed Internet Solutions	260056	Fiber	6	above 200/50
Webster County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Webster County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Webster County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50
Worth County					
Worth County	Grand River Mutual Telephone Corporation	130560	Fiber	6	above 200/50
Worth County	T-Mobile US	130403	Fixed Wireless	3	above 25/3 below 50/10
Worth County	United Fiber	150327	Fiber	6	above 200/50
Worth County	Windstream Missouri, Inc.	131413	DSL	6	above 200/50
Wright County					
Wright County	Brightspeed	470022	DSL	4	above 50/10 below 100/20
Wright County	Cable America	130183	Cable Modem	6	above 200/50
Wright County	MCC Missouri LLC	130804	Cable Modem	6	above 200/50
Wright County	Ridgetop Networks, LLC	250066	DSL	5	above 100/20 below 200/50
Wright County	Sho-Me Technologies, LLC	330067	Fiber	6	above 200/50
Wright County	Steelville Telephone Exchange, Inc.	131260	Fiber	6	above 200/50
Wright County	T-Mobile US	130403	Fixed Wireless	5	above 100/20 below 200/50
Wright County	UNITED STATES CELLULAR CORPORATION	131310	Fixed Wireless	3	above 25/3 below 50/10
Wright County	VERIZON	131425	Fixed Wireless	3	above 25/3 below 50/10
Wright County	Wisper ISP, LLC	430176	Fixed Wireless	5	above 100/20 below 200/50