St. Louis Digital Divide

Summary of Study and Findings

Nearly half of households in St. Louis City and County are impacted by at least one aspect of the digital divide.

Introduction

The COVID-19 pandemic brought to the forefront just how important digital access is in order to fully participate in many aspects of modern life. From virtual learning, working from home, communicating with healthcare professionals via telemedicine, and beyond, digital connectivity has become central to our way of life. This heightened awareness also uncovered just how many people were lacking this necessary access.

Nearly half of households in St. Louis City and County are affected by some aspect of the digital divide and will require investment to ensure adequate long-term connectivity. What was once considered primarily an issue of urban and rural divide has significant impact on urban and suburban families in our region.

In order to fully participate in our economic, educational, and healthcare systems, residents need:

- Consistent, reliable, and affordable access to high-speed broadband (HSBB)
- Affordable devices capable of maintaining HSBB connection
- Training and support to participate in this new virtual landscape

Defining the Digital Divide
Five Key Components

The digital divide is best understood by examining and addressing five key components, **any of which can prevent an individual or family from adequate connectivity.**

1 Coverage

Does infrastructure exist to provide high-speed broadband technology?

2 Quality

Is the connection fast and reliable enough for users to engage in activities such as virtual learning or telemedicine visits?

3 Service Affordability

Can households afford quality high-speed broadband service?

4 Device Affordability

Can households afford the devices they need?

5 Digital Literacy and Mentoring

Do residents have the skills and/or support necessary to utilize the technology?

Impact of the Digital Divide on St. Louis City and County

The vast majority of St. Louis City and County residents experience at least one of these five components, but **low-income[1] areas often face three or more barriers.**

Almost **55 percent** of the population live in areas meaningfully impacted by two or more digital divide pillars. Digital literacy needs permeate the region as older cohorts in all areas drive mentorship needs.

Service affordability affects **70–75 percent** of the region, most prominently in the City and north County.

Divide Dimensions Count

One
Two
Three
Four
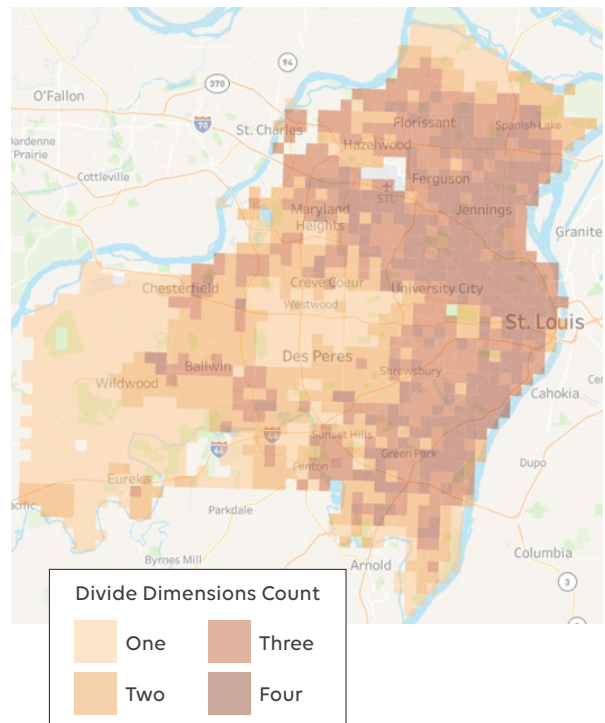
[1]Low-income households are defined as households with an average income of $35,000 and below
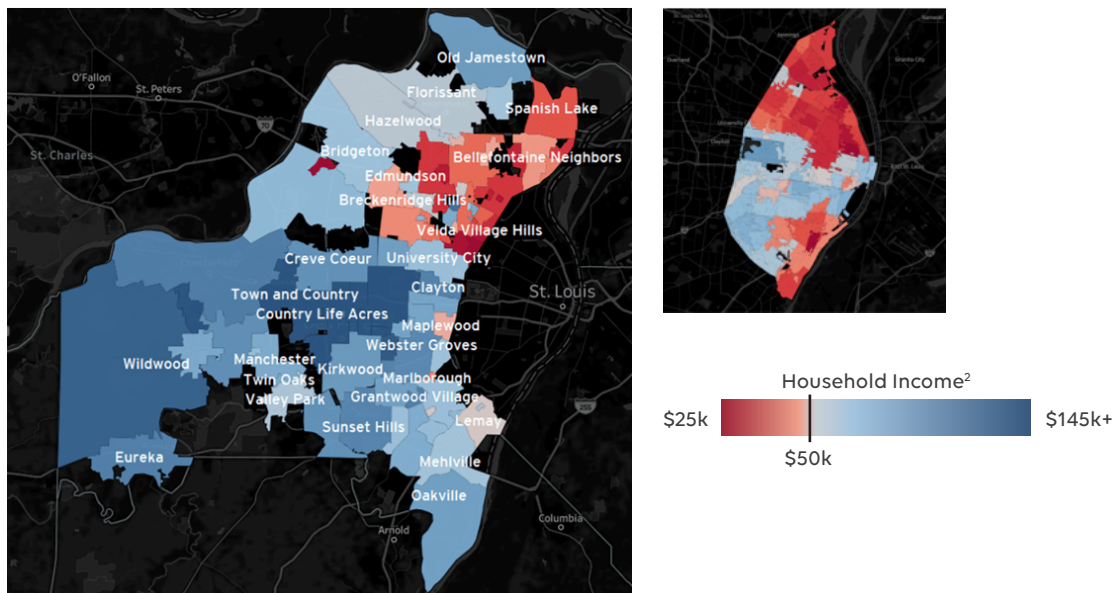
The St. Louis Landscape
and the Five Key Components

Based on the five key components of the digital divide, it is apparent that **income-related issues** such as service and device affordability are key drivers of the digital divide for most residents in St. Louis.

Poverty is particularly pervasive in north St. Louis City and areas of north County.

- **160,000 people in St. Louis City and County live below the poverty line**
- **22 percent** of St. Louis City residents live below the poverty line, with some neighborhoods in north City near or above **50 percent** and some portions of north County as high as **44 percent**
- These neighborhoods are disproportionately Black and have suffered historically from disinvestment

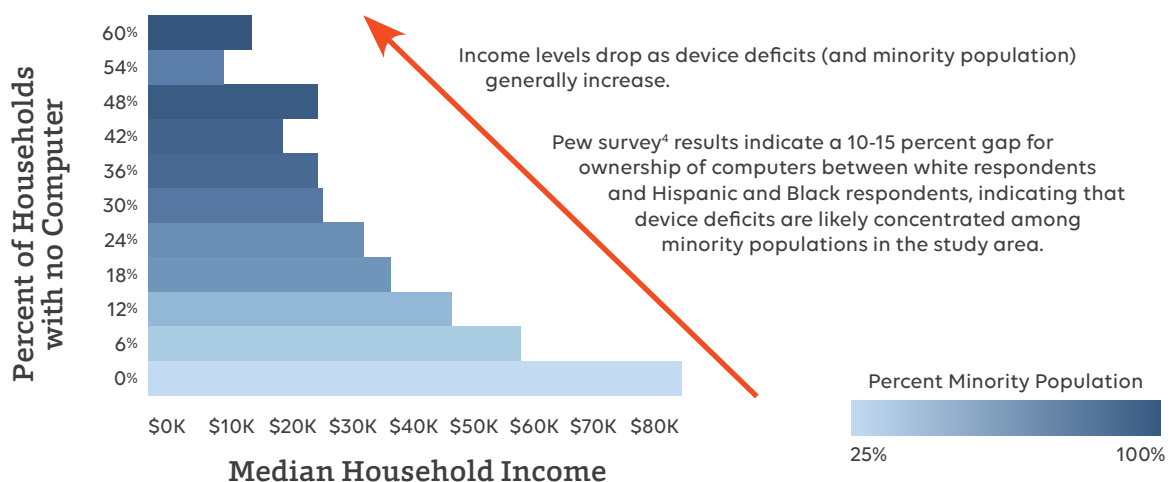## Pervasive Poverty Areas of St. Louis City and County

Household Income[2]

$25k $50k $145k+

Low income areas often face three or more of the five key components as barriers.

[2]Median household income of census places in St. Louis County

Analysis of the St. Louis Landscape

1   **Coverage:** Fiber internet is currently the best available way to ensure a "future-proof" connection, but approximately 250,000 to 300,000 households in St. Louis City and County lack access to fiber internet and will require upgrades to ensure long-term connectivity. Fiber internet availability is limited in the most economically disadvantaged areas of the region.

2   **Quality:** Coverage and HSBB quality generally exists in St. Louis. However, large portions of the study area exhibit low levels of competitive intensity, which often negatively impacts consumers. Speed test results imply widespread broadband service deficiencies on a more local basis.

3   **Service Affordability:** Approximately 150,000 households in St. Louis City and County struggle to afford HSBB. The challenge is particularly acute in St. Louis City and North County given the high proportion of low-income households.

4   **Device Affordability:** One quarter of households in the City do not have a computer, or only have a smartphone. In some north City neighborhoods, such as Walnut Park, this rate exceeds 30 percent. Approximately 90,000 households across the City and County are unable to afford adequate devices. These households are also the most likely to need broadband service subsidies

5   **Digital Literacy and Mentoring:** Students, their families, and an estimated 100,000 adults need some form of digital literacy or mentorship engagement. Challenges in digital literacy are more common among older individuals. A recent Pew survey[3] indicates that around 60 percent of individuals aged 75 or older have low tech readiness, and 20 percent have little or no confidence in their ability to use the internet to complete online tasks.
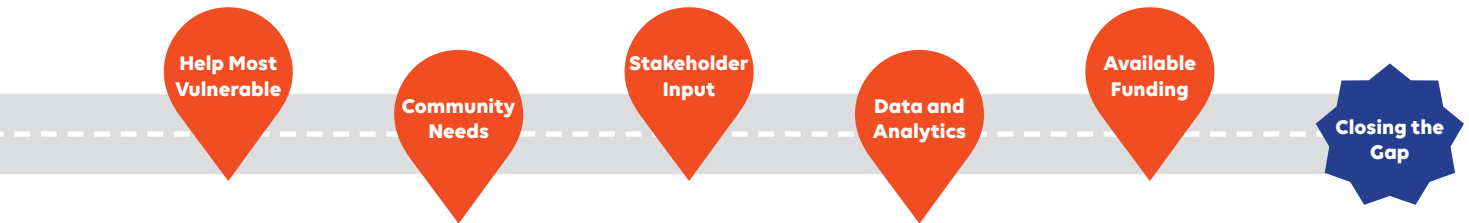
Household Income vs. Device Deficit and Race

Income levels drop as device deficits (and minority population) generally increase.

Pew survey[4] results indicate a 10-15 percent gap for ownership of computers between white respondents and Hispanic and Black respondents, indicating that device deficits are likely concentrated among minority populations in the study area.

Percent of Households with no Computer

Median Household Income

Percent Minority Population

25% — 100%

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[3] "The Internet and the Pandemic." Pew Research Center, September 1, 2021.
[4] "Home Broadband Adoption, Computer Ownership Vary by Race, Ethnicity in the U.S." Pew Research Center, September 10, 2021.

Addressing the Challenge

Finding a solution to the digital divide challenge starts with a true understanding of our region's needs, as well as sourcing the tools and services necessary to meet those needs.

Help Most Vulnerable — **Community Needs** — **Stakeholder Input** — **Data and Analytics** — **Available Funding** — **Closing the Gap**

This report serves as an inventory of those needs and reflects a snapshot in time to help our civic, business, and philanthropic leaders prepare a framework to address these issues.

- **Invest in infrastructure**: Improve quality and affordability of HSBB by investing in low-cost internet service. It is estimated that 150,000 households will need subsidies and other support to spur home broadband adoption.
- **Provide affordable devices**: Approximately 90,000 households cannot afford adequate devices.
- **Facilitate technical support and training**: An estimated 100,000 adults will benefit from technical support and training. In addition, many are likely to need help understanding the process and products needed to use internet services and make purchases. Public libraries or local community organizations are likely best suited to coordinate device and literacy initiatives including local outreach, distribution, and tutoring.
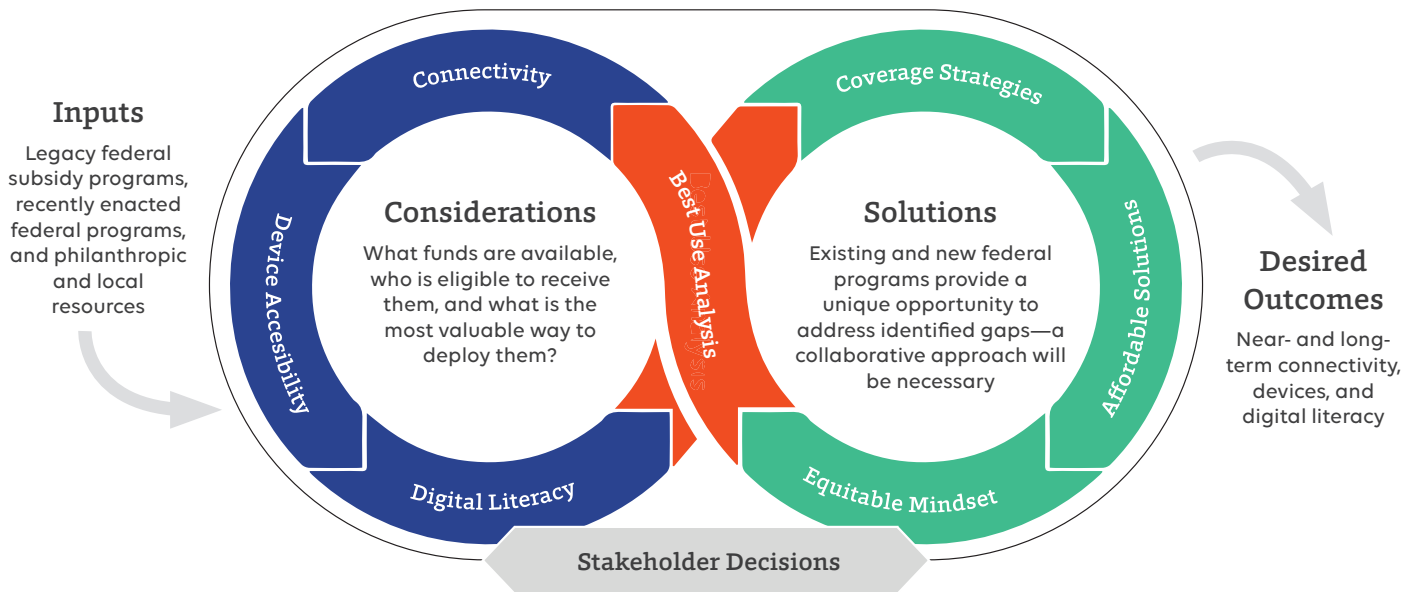
This report is intended to serve as a resource while a framework of action is prepared that will equip our neighbors with the tools and knowledge they need to thrive in a wired world.

Preliminary estimates have been made to help assess the scope of the challenge. These estimates indicate the following investments will be needed:

- One-time infrastructure investment: $200 to $300 million
- Annual cost of affordable household broadband service subsidies: $45 to $50 million
- Initial cost of devices: $20 to $30 million

Funding Opportunities

Matching available tools, like federal programs and local resources, to the needs assessment will allow St. Louis to implement solutions to pursue desired connectivity outcomes.

Inputs

Legacy federal subsidy programs, recently enacted federal programs, and philanthropic and local resources

Connectivity

Device Accesibility

Digital Literacy

Considerations

What funds are available, who is eligible to receive them, and what is the most valuable way to deploy them?

Best Use Analysis

Coverage Strategies

Affordable Solutions

Equitable Mindset

Solutions

Existing and new federal programs provide a unique opportunity to address identified gaps—a collaborative approach will be necessary

Desired Outcomes

Near- and long-term connectivity, devices, and digital literacy

Stakeholder Decisions

The Infrastructure Investment and Jobs Act (IIJA) provides funding to address connectivity, affordability, and literacy challenges. There are significant opportunities for new infrastructure investment and establishing long-term solutions to affordability and literacy constraints.

- Missouri will receive approximately **$681 million** to invest in broadband for underserved communities.[5]

- Under the IIJA Digital Equity Initiative, approximately $51 million is available to help fund digital literacy mentoring. Strategic deployment of this funding will create opportunities for the City and County to address underserved populations and bridge affordability and literacy gaps.

- The Coronavirus Aid Relief and Economic Security Act (CARES Act) of 2020 and American Rescue Plan Act (ARPA) established a variety of initiatives to enhance connectivity, relieve affordability concerns through additional funding for legacy programs, and support certain telehealth and internet security challenges. The state of Missouri has committed to deploying $400 million in ARPA funds for broadband initiatives.

- Longstanding federally funded programs such as Lifeline, E-Rate, and the Emergency Broadband Benefit Program can lessen the affordability issue.

[5]An additional $281 million may be available to help households with service affordability and/or free devices

> **Coordination of civic, business, and philanthropic leaders in St. Louis will be key to maximizing the opportunity for funding.**

Conclusion

Key Takeaways

This report provides a **detailed and actionable assessment** of the digital landscape in St. Louis City and County.

We understand the impact of the digital divide on broad swaths of the St. Louis population, and recognize that it is most acutely felt by low-income and minority communities.

This assessment positions St. Louis to act efficiently and effectively. It allows us to understand the breadth and depth of the digital divide, and establishes the necessary framework to catapult St. Louis as a **national leader in digital equity.**

Coordination and investment from local leaders and **unprecedented federal funding** uniquely positions St. Louis to address the digital divide and ensure that all St. Louisans have the opportunity to thrive in an increasingly digital society.

For More Information:

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