



VERNONBURG GROUP

**DIGITAL
OPPORTUNITY
INDEX**

THE DIGITAL OPPORTUNITY INDEX:

An Alternative to ESG Ratings for Internet Service Providers

Vernonburg Group LLC

July 2025

CONTENTS

- ABOUT VERNONBURG GROUP3**
- EXECUTIVE SUMMARY4**
- INTRODUCTION7**
- IMPLICATIONS FOR STAKEHOLDERS9**
- METHODOLOGY11**
 - METRICS AND WEIGHTING13*
 - DATA SOURCES AND COLLECTION.....15*
 - CHALLENGES AND LIMITATIONS18*
- KEY FINDINGS.....19**
 - COMPANY SCORECARDS.....25*
- CONCLUSION29**
- ACRONYMS.....30**
- ENDNOTES31**



ABOUT VERNONBURG GROUP

Vernonburg Group LLC envisions a world with meaningful internet connectivity for every person and community worldwide. We help governments, companies, and other organizations bring meaningful internet connectivity to communities around the world by developing strategies and supportive policy frameworks, forging partnerships, mobilizing capital, and providing actionable data-driven insights.

As the developer of the Digital Opportunity Index, Vernonburg Group brings a data-driven approach to evaluating broadband providers' contributions to closing the digital divide. Our work is grounded in the belief that both infrastructure availability and service adoption matter—and that aligning technical planning with social and economic impact is essential to achieving meaningful, universal connectivity.



CONTACT US

Paul Garnett

Chief Executive Officer and Founder,
Vernonburg Group

paul@vernonburggroup.com

Greg Guice

Chief Policy Officer, Vernonburg Group

greg@vernonburggroup.com

Breese McIlvaine

*Director of Global Programs and Digital
Opportunity, Vernonburg Group*

breese@vernonburggroup.com

EXECUTIVE SUMMARY

Access to affordable, high-quality Internet connectivity is essential for participation in modern life. Internet service providers (ISPs) have made significant investments to extend high-speed infrastructure to underserved areas and help households and communities overcome barriers to broadband adoption. Despite decades of investment and innovation, tens of millions of U.S. households remain unconnected—especially in rural, low-income, and Tribal areas. Vernonburg Group developed the Digital Opportunity Index to fill a critical gap: the absence of objective tools that assess, encourage, and reward intentional and transparent efforts by ISPs to close the digital divide.

Mainstream standards such as Environmental, Social, and Governance (ESG) indices purport to align ethical and social outcomes with financial performance. These frameworks have helped investors evaluate corporate risk and long-term value, and are often used in due diligence processes. However, ESG indices attempt to hold ISPs accountable for activities that are misaligned with ISPs' core business activities of providing Internet connectivity services to consumers and businesses. ESG indices overlook the distinct, measurable ways ISPs can—and do—expand broadband availability and adoption. This gap risks undervaluing ISPs actively addressing the digital divide. The Digital Opportunity Index addresses that blind spot.



The Digital Opportunity Index provides an objective, data-driven, and credible framework that recognizes and incentivizes ISP efforts to expand infrastructure and promote broadband adoption and use of digital services. It is the first benchmark of its kind focused exclusively on closing the digital divide.

FIVE INDICATORS

In this inaugural publication, we evaluate the 15 publicly traded ISPs in the United States against five indicators:

1. Broadband availability in rural, Tribal, and low-income areas
2. Affordability and quality of the low-cost plans offered
3. Digital skilling resources provided
4. Outreach (including accessibility and partnerships)
5. Resources for affordable devices

The 15 publicly traded US ISPs rated for this report are:

- Altice USA, Inc. (brand: Optimum)
- AT&T Inc.
- Cable One, Inc. (brand: Sparklight)
- Charter Communications (brand: Spectrum)
- Comcast Corporation (brand: Xfinity)
- Consolidated Communications Holdings, Inc.
- Frontier Communications Parent, Inc.
- Google Fiber
- Hughes Network Systems, LLC
- Lumen Technologies, Inc.
- Mediacom Communications Corporation
- Telephone and Data Systems, Inc. (brand: TDS Telecom)
- T-Mobile US, Inc.
- Verizon
- Viasat, Inc.



Of the ISPs evaluated, three received the highest AAA score, four scored AA, one scored A, and the remaining scored between B and BBB. None received 100% of possible points and none scored the lowest grade of CCC.

Figure 1 summarizes the full scoring distribution of all companies. No ISP received a perfect score—even those ISPs categorized as AAA have room for improvement, as detailed below.

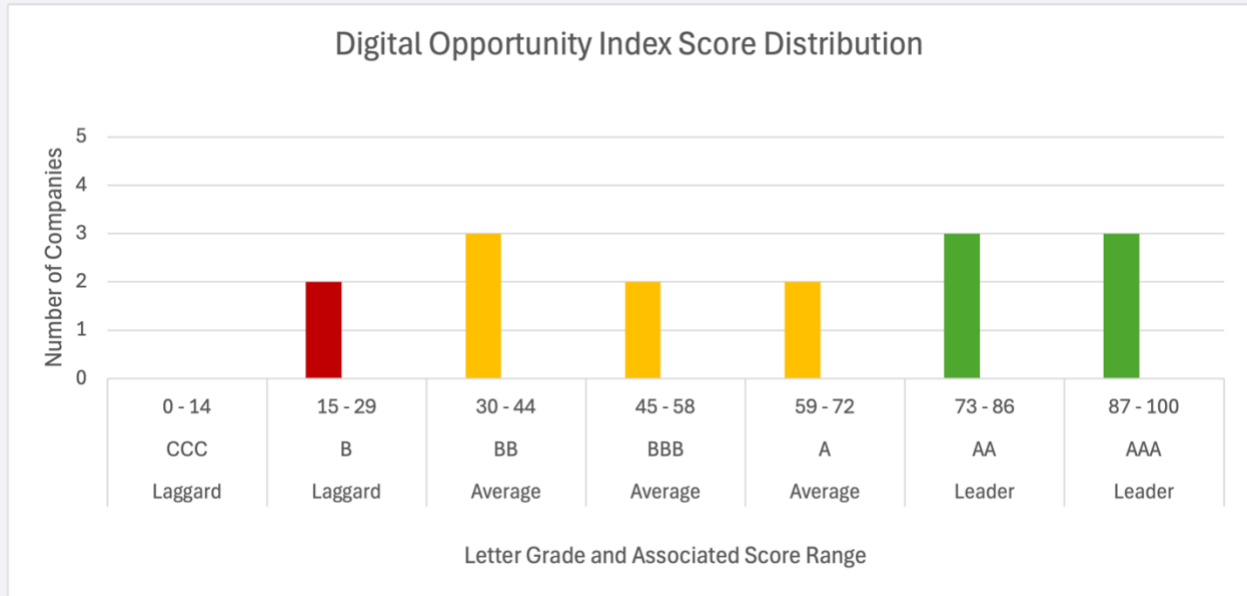


Figure 1: Digital Opportunity Index Score Distribution (Executive Summary)

The Digital Opportunity Index **leaders** are:

The following paper describes our methodology, insights, and is a call to action for stakeholders to advance digital opportunity with direct investments in areas of need. Join us in celebrating achievements and closing the digital divide.

INTRODUCTION

Environmental, Social, and Governance (ESG) investing, originally rooted in socially responsible investment strategies of the 1960s, has evolved into a major force shaping global capital markets. ESG assets were projected to reach nearly \$30 trillion globally in 2024, with forecasts suggesting growth to over **\$167 trillion by 2034**. ESG ratings agencies such as MSCI and S&P Global evaluate companies on a broad spectrum of climate and social indicators. These frameworks are not only influencing corporate behavior, but also reshaping how markets assess risk, value, and impact. While debates around the scope and application of ESG have intensified recently—particularly in the U.S.—there remains broad and growing investor interest in tools that appropriately measure long-term risk, corporate responsibility, and social and economic impact.

ESG indices have become central tools for aligning corporate practices with long-term sustainability and social outcomes. By incentivizing improvements in areas such as carbon emissions, labor practices, and corporate governance, ESG indices aim to help companies enhance public perception, build investor trust, and reduce operational risks. Studies show that strong ESG performance is correlated market performance and resilience during downturns¹ as well as strong human capital management,² and is valued highly by employees.³

High-speed broadband connectivity is one of the most powerful enablers of opportunity in the 21st century. Internet access, and the skills that are necessary to effectively use it, are widely recognized as crucial for economic development, especially as it relates to educational achievement, employment attainment, and advancing in the workplace. Increased broadband availability and adoption correlates with higher test scores and reductions in socio-economic educational achievement gaps.⁴ In addition to broadband availability and adoption, adequate digital skills are also necessary for success: 92% of jobs require them.⁵ Beyond academic and professional settings, Internet connectivity is critical for community-wide progress, including public health outcomes and civic participation.⁶ Worldwide, access to the Internet is a significant facilitator in receiving medical treatment and mitigating the harmful impact of income inequality in healthcare access.⁷ National strategies for economic growth prioritize Internet connectivity and digital skills.

While ESG frameworks have expanded to include many social metrics, broadband availability and adoption are not rigorously measured. ESG and related corporate accountability ratings and benchmarks strive to apply a single measurement framework to highly diverse companies and, in the process, lose focus on the socially and economically beneficial activities that are core to specific sectors or companies. Despite widespread reliance on broadband across nearly every sector of the economy, Internet connectivity is not prioritized or even measured.⁸ The publicly traded U.S. ISPs are being penalized for failure to pursue activities that are not core to their businesses and are not being held accountable and rewarded for socially and economically beneficial activities that are core to their day-to-day businesses. In addition to slowing progress on important economic development goals, this type of misalignment risks undermining financial returns and shareholder value.

Vernonburg Group's Digital Opportunity Index represents a pragmatic evolution of ESG—one that responds directly to growing skepticism around ESG frameworks. While traditional ESG models often emphasize environmental and governance metrics, the Digital Opportunity Index focuses squarely on broadband infrastructure availability and adoption metrics.

Against this backdrop, the Digital Opportunity Index introduces a forward-looking model for investors, regulators, consumers, and other stakeholders to evaluate ISPs' progress on economically and socially beneficial activities furthering broadband availability and adoption and that are core to their businesses. The paper shares the detailed insights for the top scoring companies but intentionally omits names and other details of those that scored average or laggard.

IMPLICATIONS FOR STAKEHOLDERS

The Digital Opportunity Index is designed not only as an evaluative tool, but as a catalyst for action. By shedding light on how ISPs are advancing (or failing to advance) digital opportunity, the index provides stakeholders across sectors with a clear benchmark for accountability, investment, and policy alignment. Whether allocating capital, shaping regulatory priorities, or expanding service coverage, stakeholders have an opportunity and a responsibility to act on these insights. The following section outlines how different audiences can use the index to accelerate progress toward universal connectivity.

- **For Internet Service Providers:**

We encourage ISPs to request a full report of their scores and to engage with Vernonburg Group to leverage the findings of the Digital Opportunity Index to enhance their contributions to closing the digital divide. In addition to better understanding their areas of improvement, ISPs can also provide feedback and additional information to improve the accuracy of the assessment. High-scoring companies demonstrate a commitment not only to universal access, but also to long-term market growth, which should be celebrated. By prioritizing investments that expand coverage in underserved areas and digital opportunity initiatives, ISPs can reach more customers and improve customer retention. Through increasing meaningful broadband adoption, ISPs are contributing to building more connected, productive, and resilient societies.

- **For Investors:**

Investors play a critical role in shaping industry behavior through capital allocation and shareholder influence. The Digital Opportunity Index offers a practical tool for due diligence and portfolio screening. By investing in companies that score well—or engaging with lower-scoring firms to improve their programming—investors can mitigate long-term risk, support inclusive growth, and align their capital with broader social goals. Closing the broadband gap is not only a public good, but also a strategic business opportunity. As such, investors can help drive meaningful progress.

- **For ESG Ratings Agencies and Benchmarking Organizations:**

The telecommunications sector has historically received limited attention in ESG frameworks, which have overlooked the digital divide. The Digital Opportunity Index offers a sector-specific, evidence-based supplement that benchmarking organizations can incorporate into broader ESG evaluations. By integrating this index into their assessment criteria, rating agencies can strengthen how they evaluate corporate performance on social and economic impact, particularly for a sector so essential for economic growth and civic participation.

- **For Regulators and Policymakers:**

Federal, state, and local policymakers can use the Digital Opportunity Index to better understand and acknowledge ISPs' voluntary efforts to increase digital opportunity, form more effective public-private partnerships, and design targeted programmatic interventions. The index supports efforts to hold ISPs accountable for delivering ubiquitous infrastructure and ensures that public funding, licensing, and partnerships are informed, tailored, and targeted using clear, transparent performance metrics. As governments allocate billions to close the digital divide, the index offers a timely and practical lens for guiding these pivotal decisions.

Closing the digital divide requires more than ambition—it demands measurable action, transparent accountability, and aligned incentives. The Digital Opportunity Index offers a starting point: a tool grounded in publicly available data, designed to guide better decisions across investment, regulation, and operations. Vernonburg Group welcomes dialogue and collaboration with all stakeholders to interpret the findings, define priorities, and chart a course for progress. We are available to support ISPs in developing strategies to improve their scores, assist investors in integrating digital opportunity into ESG evaluations, and advise policymakers on performance-based approaches to broadband accountability. By working together to recognize and reward companies that prioritize digital opportunity, we can shift the broadband market toward a more impactful, sustainable, and resilient future.

JOIN US

- Discuss the methodology and ways to improve it.
- Request a report on your company's score and recommendations for improvements.
- Use the Index as part of your due diligence for investing in internet service providers.
- Join our coalition to advocate for using state and federal funds for broadband adoption.
- Partner with us to scale the Index to a global benchmark.

METHODOLOGY

With the goal of advancing broadband availability, adoption, and digital opportunity, we set out to create an index that could meaningfully measure ISPs' efforts. Our methodology follows best practices of global indices and benchmarks to be objective and quantitatively rigorous, while complementing existing frameworks to add value to the industry. The central question that drove our research was: to what extent does the ISP demonstrate commitment to closing the digital divide? While developing our indicators and measurements to ensure that our findings were fair, transparent, and informative, we followed these guiding principles:

- **Be complementary:**
Avoid duplicating other existing indices. The Digital Opportunity Index is distinguished primarily by its clear focus on connectivity, comparing companies within a single industry (ISPs), and inclusive of all publicly traded companies (not just the largest ones).

- **Be as objective as possible:**
Define quantifiable indicators to avoid subjectivity in analysis, while still meaningfully evaluating ISPs on their efforts towards digital opportunity.

- **Be reasonable:**
Focus on what is within an ISP's control to impact. Avoid placing weight on exogenous factors that are outside of the scope for an ISP's business.

- **Be consistent and replicable:**
Select data sources for indicators that are consistent and replicable for all evaluated ISPs and over time to allow for regular data refreshes.

- **Be impartial:**
Throughout the process, we were intentional in preserving independence and impartiality. We did not engage with the ISPs evaluated until after we had completed our first evaluation to ensure impartiality.

The indicators and measurements encompass where and how ISPs provide connectivity services, while also evaluating intentionality in addressing barriers to broadband adoption. The lack of widespread availability of adequate broadband connections is not the only obstacle to closing the digital divide. American households often face more than one barrier to broadband adoption. U.S. Census surveys indicate that perceived relevance and value of a home broadband subscription is the most common reason for not subscribing, followed by being unable to afford it.⁹ To motivate households to get and stay connected, multifaceted approaches are important to equip them with information and resources to overcome the barriers they face.¹⁰ The Digital Opportunity Index reflects this dimensionality within the indicators and weighting.

The indicators making up the Digital Opportunity Index are directly related to the core business and services of ISPs, and therefore their score is within their control to improve. Each indicator is worth a different allocation of points to reflect centrality to business operations and degree of impact on advancing digital opportunity. Availability is worth the most with 45 points: providing broadband access is the first and fundamental step to broadband adoption. Without it, none of the other components of digital opportunity are possible. Based on Vernonburg Group's extensive data analysis of broadband availability across the U.S., the availability indicator focuses on ISPs' coverage to areas with the greatest broadband availability gaps: rural, Tribal, and areas with high poverty rates.¹¹ The indicator with the second highest value is broadband affordability at 25 points, followed by digital skilling at 15 points, outreach at 10 points, and device affordability at 5 points. The following section describes each indicator in detail.



The process of developing the index has been entirely independent of the operators evaluated.

We have intentionally obscured the details of the companies outside the top scoring cohort. We did review our approach and scoring with these “leaders” and received constructive feedback on the methodology, but we did not change any scores based on those conversations.

METRICS AND WEIGHTING

Below is a summary of each index indicator, including a definition, the total possible points, and rationale to our scoring approach. The Index allows for partial scores to provide a greater level of precision in the analysis.

INDICATOR: BROADBAND AVAILABILITY

Total Possible Points: 45 points

Definition: This indicator scores an ISP on its broadband coverage in rural, low-income, and Tribal areas, which are three key geographic defining factors that correlate with lower rates of broadband availability and adoption.¹² Our definition of broadband aligns with the Federal Communications Commission's (FCC) defined benchmark for high-speed fixed broadband at download speeds of 100 megabits per second (Mbps) and upload speeds of 20 Mbps.¹³

Vernonburg Group organized each ISP's scores in each category into quintiles and allocated points based on in which quintile the ISP fell. Broadband availability is the indicator with the most possible points because it focuses on the core business of ISPs: providing connectivity services.

INDICATOR: BROADBAND AFFORDABILITY

Total Possible Points: 25 points

Definition: This indicator scores an ISP on whether it has a designated low-cost Internet plan(s), the advertised speed and price of the low-cost plan(s), the eligibility requirements, and the ease of enrollment. Highest points are awarded to ISPs with internet plans that are high speed (at least 100/20 Mbps), low cost (less than or equal to \$30/month), with relatively easy burden of proof to demonstrate eligibility, and no additional barriers to affordability (such as credit checks, installation fees, equipment rental fees, and limitations on data usage).

INDICATOR: DIGITAL SKILLING

Total Possible Points: 15 points

Definition: This indicator scores an ISP on whether it provides online digital skilling resources and/or in-person digital skilling resources. It also looks at the ISP's transparency regarding their financial support towards digital skilling programs.

INDICATOR: OUTREACH

Total Possible Points: 10 points

Definition: This indicator scores an ISP on the extent to which it is promoting broadband availability and adoption resources, particularly through community partnerships, and ensuring information is publicly available as well as accessible to people with disabilities and/or language barriers.

INDICATOR: DEVICE AFFORDABILITY

Total Possible Points: 5 points

Definition: This indicator scores an ISP on whether it offers resources to customers for low-cost devices (laptops and/or desktops). This may include posting information about sources of donated or low-cost devices on the company website, and/or if the ISP is implementing its own program to provide customers with low-cost devices.

Compiled together, the total score is categorized under different letter grades, consistent with other ESG rating systems (Table 1). Scoring AA and higher makes one a leader; BB to A is average, and B or below is laggard.

Table 1. Index Letter Grading System

Index Point Score	Index Ratings	Meaning
87-100 points	AAA	ISP is a leader in efforts to advance digital opportunity
73-86 points	AA	ISP is a leader in efforts to advance digital opportunity
59-72 points	A	ISP is average in efforts to advance digital opportunity
30-44 points	BB	ISP is average in efforts to advance digital opportunity
15-29 points	B	ISP is average in efforts to advance digital opportunity
0-14 points	CCC	ISP is a laggard in efforts to advance digital opportunity

DATA SOURCES AND COLLECTION

The integrity and credibility of the Digital Opportunity Index rely on the use of transparent, verifiable, and publicly available data. To ensure objectivity and replicability, the index draws exclusively from information that is accessible to investors, regulators, and the public—including corporate sustainability reports, federal funding databases, and government accountability tools. The indicators included in the index were selected not only for their relevance to digital opportunity, but also for their measurability and consistency across firms. This approach is intentional: it ensures that all companies are evaluated against the same standard, using data that reflects actions within their direct control. Where possible, data was cross-referenced and triangulated to improve accuracy and reduce the influence of incomplete or selectively reported information.



TYPES OF DATA UTILIZED

All data used in this analysis are publicly available. Much of the information was gathered through direct web searches and systematic review of ISP corporate websites. A key consideration in our evaluation was the accessibility and visibility of information—companies that prominently feature low-cost offerings, digital opportunity programs, or affordability resources were scored higher, as these efforts reflect a deliberate and transparent commitment to digital opportunity.

To assess broadband availability, Vernonburg Group relied on multiple public datasets. To estimate the number of rural locations within each ISP’s network footprint, we used two primary sources: the 2020 U.S. Census Bureau census block data and the FCC Broadband Data Collection (BDC) from May 30, 2025.

- **Rural Areas:**

To replicate how population density impacts average deployment costs, census blocks with a population density below 250 people per square mile were classified as rural. Using the FCC’s BDC, which includes detailed coverage data at the location level (including speeds and technology types), we identified the number of ISP-covered locations within rural-designated census blocks that receive download speeds of at least 100 Mbps. For example, if an ISP served 1,000 total locations with qualifying speeds and 300 of those fell within rural census blocks, the ISP was credited with 300 rural-served locations.

- **Lower-Income Areas:**

Using the 2022 American Community Survey (ACS), we identified census block groups where at least 25% of households live below the federal poverty level. We then calculated the number of ISP-covered locations within these lower-income-designated block groups, again using FCC BDC data filtered for service speeds of 100 Mbps or higher.

- **Tribal Areas:**

To evaluate service in Tribal lands, we referenced 2020 Tribal area delineations from the U.S. Census Bureau, including American Indian, Alaska Native, and Hawaiian Homelands. We then overlapped these areas with FCC-reported ISP footprints (defined as census blocks where ISPs provide service at 100 Mbps+). This allowed us to estimate the geographic extent of Tribal land intersecting with each ISP’s service footprint.

For additional indicators—such as affordability resources, community investment, and digital skills offerings—we conducted qualitative reviews of ISP websites and public disclosures. We examined how prospective customers might navigate websites to find pricing, affordability programs, and device or digital literacy support. Announcements, press releases, and sustainability reports were used to verify and document community investments or public-private partnerships. The visibility and prominence of such initiatives were used as a proxy for organizational prioritization of digital opportunity.

Finally, to assess website accessibility, we used the automated [Accessibility Insights](#) tool.¹⁴ This screen provided an objective and replicable baseline across ISPs, though we acknowledge that full Americans with Disabilities Act (ADA) compliance assessment would require manual review. We encourage all ISPs to conduct professional audits of their web presence to ensure inclusivity and compliance with accessibility standards.



CHALLENGES AND LIMITATIONS

The Digital Opportunity Index relies heavily on publicly available, self-reported data. This is a deliberate design choice—transparency itself is a signal of institutional commitment to digital opportunity. ISPs that disclose their programs, policies, and performance on digital opportunity are better positioned to be evaluated, and we believe public-facing communication is a vital accountability mechanism.

Reliance on self-reporting introduces potential biases or limitations. In particular:

- **FCC Broadband Availability Data:**
ISP coverage data reported to the FCC may not always align with on-the-ground service realities. However, given the extensive data validation efforts underway through state-led Broadband Equity, Access, and Deployment (BEAD) Challenge Processes, this data now serves as the authoritative baseline for federal broadband funding programs and was used accordingly in our analysis.
- **Lower-Income Area Classification:**
Our use of ACS data at the census block group level introduces a geographic mismatch with ISP footprints reported at the finer census block level. Because the ACS does not provide household-level poverty data within block groups, we cannot guarantee that served locations fall within low-income households—only that they are located within block groups with high poverty rates.
- **Tribal Area Mapping:**
FCC BDC data includes service at the census block level but does not disclose precise coordinates of served locations. As a result, we count any Tribal area that overlaps a census block where an ISP serves at least one qualifying location, but we cannot confirm whether that location specifically lies within Tribal land boundaries.

- **Website Accessibility Scans:**

To check website accessibility, we used a web-based, automated accessibility tool. Automated accessibility tools are limited in scope. While helpful for flagging high-level compliance issues, they do not replace the need for comprehensive manual audits. As such, accessibility findings in this index should be considered preliminary and indicative—not definitive. Verifying results with manual testing and feedback on user experience is essential to ensuring accessibility.

Despite these limitations, the data sources that we used represent the best available public information to enable consistent, replicable comparisons across providers. Vernonburg Group encourages ISPs to enhance transparency and accountability by expanding their public disclosures and investing in data accuracy and accessibility.

KEY FINDINGS



This benchmarking highlights not only individual company performance, but also industry-wide trends and opportunities for collective improvement. Of the ISPs evaluated, three received the highest AAA score, four scored AA, one scored A, and the remaining scored between B and BBB. None scored the lowest grade of CCC.

Figure 2 summarizes the full scoring distribution of all companies. No ISP received a perfect score—even those ISPs categorized as AAA have room for improvement, as detailed below.

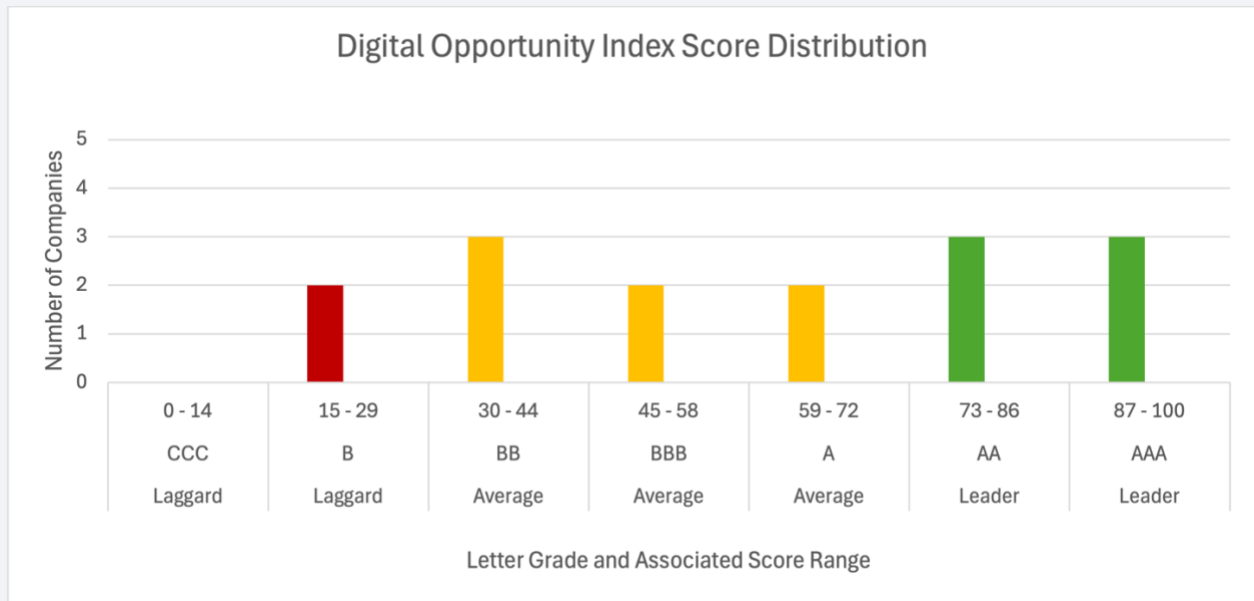


Figure 2: Digital Opportunity Index Score Distribution

The Digital Opportunity Index **leaders** are:

- Comcast Corporation (brand: Xfinity)
- Verizon Communications Inc. (brand: Fios)
- AT&T Inc. (brand: AT&T Fiber)
- Altice USA, Inc. (brand: Optimum)
- Cable One, Inc. (brand: Sparklight)
- Charter Communications, Inc. (brand: Spectrum)

Figure 3 presents each company’s total numeric score. Green shading represents those in the “leaders” category. Companies 7 through 13 are shaded yellow to represent the “average” category. Companies 14 and 15 are shaded red to represent the “laggard” category. The chart highlights a wide variation in performance among ISPs, with a handful demonstrating strong, intentional efforts to promote digital opportunity, while others show limited public evidence of such efforts.

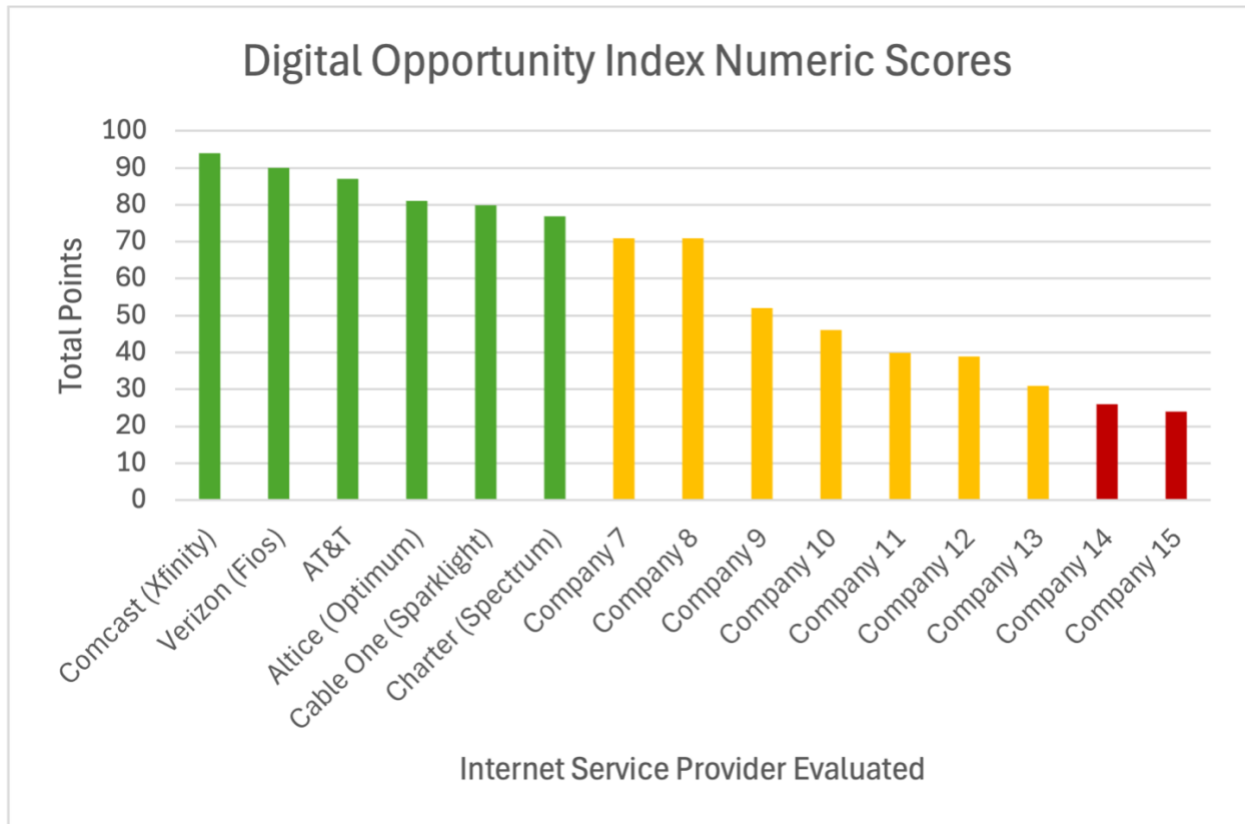


Figure 3: Digital Opportunity Index Numeric Scores

GIVEN VERNONBURG GROUP'S EXTENSIVE RESEARCH ON AND TRACKING OF BROADBAND COVERAGE IN THE U.S.,¹⁵ WE WERE NOT SURPRISED TO SEE A COMMON OPPORTUNITY AREA FOR ISPS IS TO EXPAND INFRASTRUCTURE AND COVERAGE INTO RURAL AND TRIBAL AREAS.

Figure 4 exhibits the distribution of scores under the broadband coverage indicator. Providers score highest that serve the most broadband serviceable locations in each category.

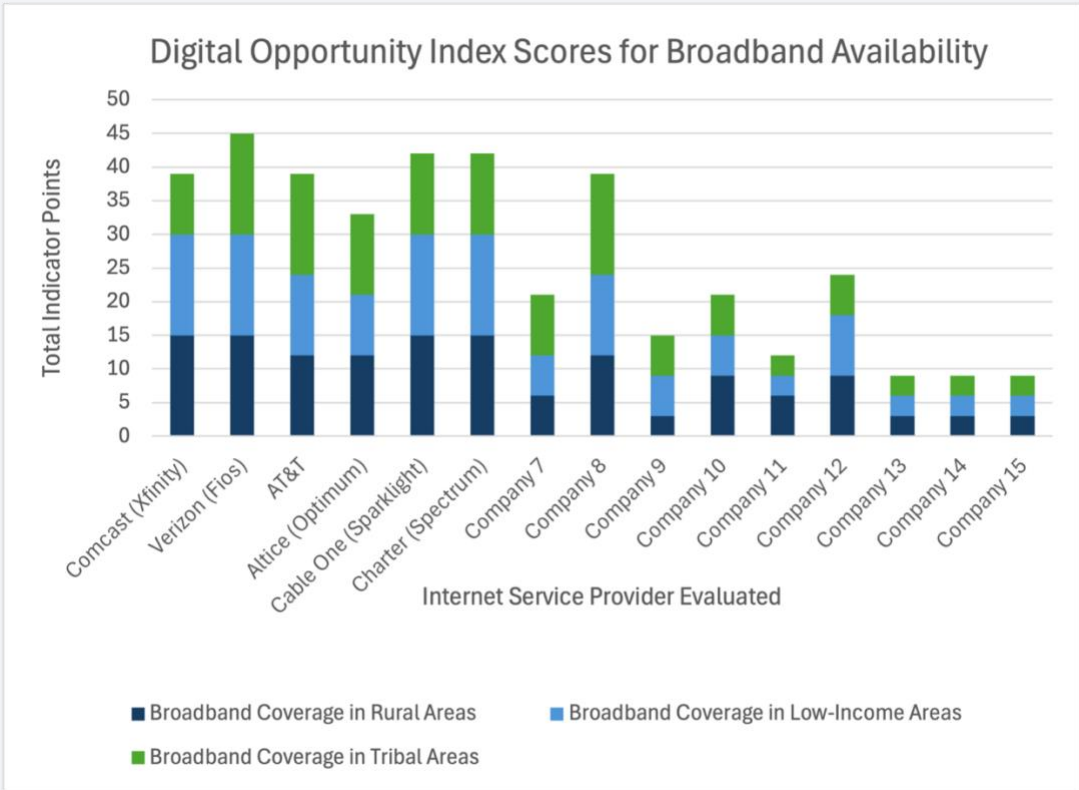


Figure 4: Digital Opportunity Index Scores for Broadband Availability

MAKING BROADBAND SERVICE AVAILABLE IS NOT ENOUGH TO GUARANTEE SUBSCRIPTION, THOUGH

Providing affordable service options is an important step to ensure that households can subscribe to home broadband service. ISPs have taken great strides to provide low-cost plans, in some cases offering multiple options, empowering customers to choose what best fits their needs. Many households (that meet provider eligibility restrictions) can sign up for Internet service for less than \$10/month. ISPs should be commended for offering high-speed services at such affordable price points.

Challenges remain for customers if ISPs set cumbersome processes for proving eligibility for the low-cost options, limitations on data usage, and additional fees for customer premise equipment rentals. Vernonburg Group applauds the industry’s efforts to offer affordable options and encourages ISPs to continue exploring ways to make the plans simpler for households to subscribe to and maintain service because continuous connectivity is critical to experiencing the benefits that are derived from Internet access.

ISPs have made remarkable investments, both financial and in-kind resources, to communities around the country to encourage broadband adoption and increase digital skills. Nearly every company assessed has partnered with nonprofits or promoted online digital skilling resources. Comcast Corporation (Xfinity) and Verizon Communications Inc. stood out with billion-dollar commitments to nonprofits and communities nationwide. Charter Communications, Inc. has also committed millions of dollars to partnerships that support communities with digital navigators, training, and more. While larger ISPs often had greater resources to invest across all indicators, some smaller and mid-sized providers demonstrated leadership in specific areas—particularly in affordability and community-based partnerships. Devoting resources to philanthropy and social impact initiatives can be difficult for smaller providers. This reality underscores the importance of the public sector investing in broadband adoption resources for communities high in need and not already supported with private investment. Figure 5 displays how all companies evaluated scored on broadband adoption indicators.

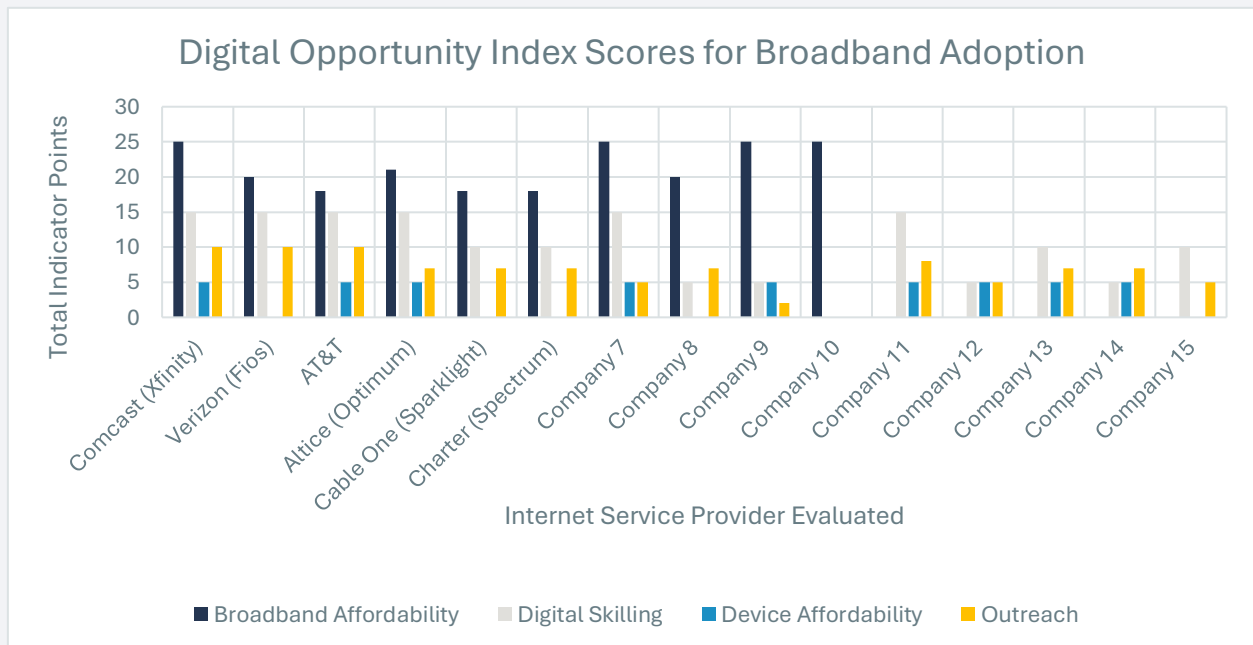


Figure 5: Digital Opportunity Index Scores for Broadband Adoption.

Many companies have an opportunity for some relatively

QUICK WINS OF ADDITIONAL POINTS BY:

- Adding links to free digital skilling and low-cost device resources, compilations of digital opportunity support at libraries, state digital opportunity asset inventories, and national nonprofits like that offer databases of resources.
- Enabling website translation so that people for whom English is not their primary language are able to navigate and find the information they need.
- Conducting a thorough accessibility assessment of their website and materials to ensure compliance and positive user experience for people with disabilities.

The Digital Opportunity Index reveals that meaningful progress is underway—but there is more work to do. Several ISPs are stepping up with investments in affordability, digital skills, and outreach, demonstrating that intentional, focused strategies are both possible and impactful. Yet persistent gaps remain—particularly in Tribal coverage, accessibility, and device access—indicating that even industry leaders have room to grow. These findings are intended not only to inform, but to inspire: each company profiled here has opportunities to lead, learn, and do more to close the digital divide. The following pages offer a closer look at individual company performances, highlighting what’s working, what’s missing, and where the next gains could be made.

COMPANY SCORECARDS

The following section provides a scorecard for each company evaluated that scored as a **leader**, detailing the company's score for each indicator with a summary of the insights informing that score and opportunities for improvement.


 <p>VERNONBURG GROUP</p> <p>DIGITAL OPPORTUNITY INDEX</p> <p>AAA</p> <p>COMCAST (XFINITY)</p>	BROADBAND COVERAGE IN UNDERSERVED AREAS	Xfinity scored well with coverage in low-income and rural areas and has an opportunity to increase its score through coverage in Tribal areas.
	AFFORDABILITY AND QUALITY OF A LOW-COST PLAN	Xfinity received full points for offering multiple low-cost plan options with speeds 75 Mbps or higher and easing the sign-up process for customers by accepting multiple ways for customers to demonstrate eligibility.
	DIGITAL SKILLING RESOURCES	Xfinity received full points for committing approximately \$1 Billion (nearly 2% of company earnings) in digital skilling and opportunity partnerships and programs, such as Project UP .
	OUTREACH	Xfinity's website is available in Spanish as well as English and passed accessibility compliance checks. Xfinity's Project UP initiative includes extensive partnerships to advance connectivity and adoption around the country.
	DEVICE AFFORDABILITY	Xfinity's webpage for affordable internet also provides information about low-cost computers and other devices. The Project UP initiative includes some programs with free devices for individuals and community organizations.

Figure 6: Comcast Corporation (Xfinity) Digital Opportunity Index Scorecard



Figure 7: Verizon Communications Inc. (Fios) Digital Opportunity Index Scorecard

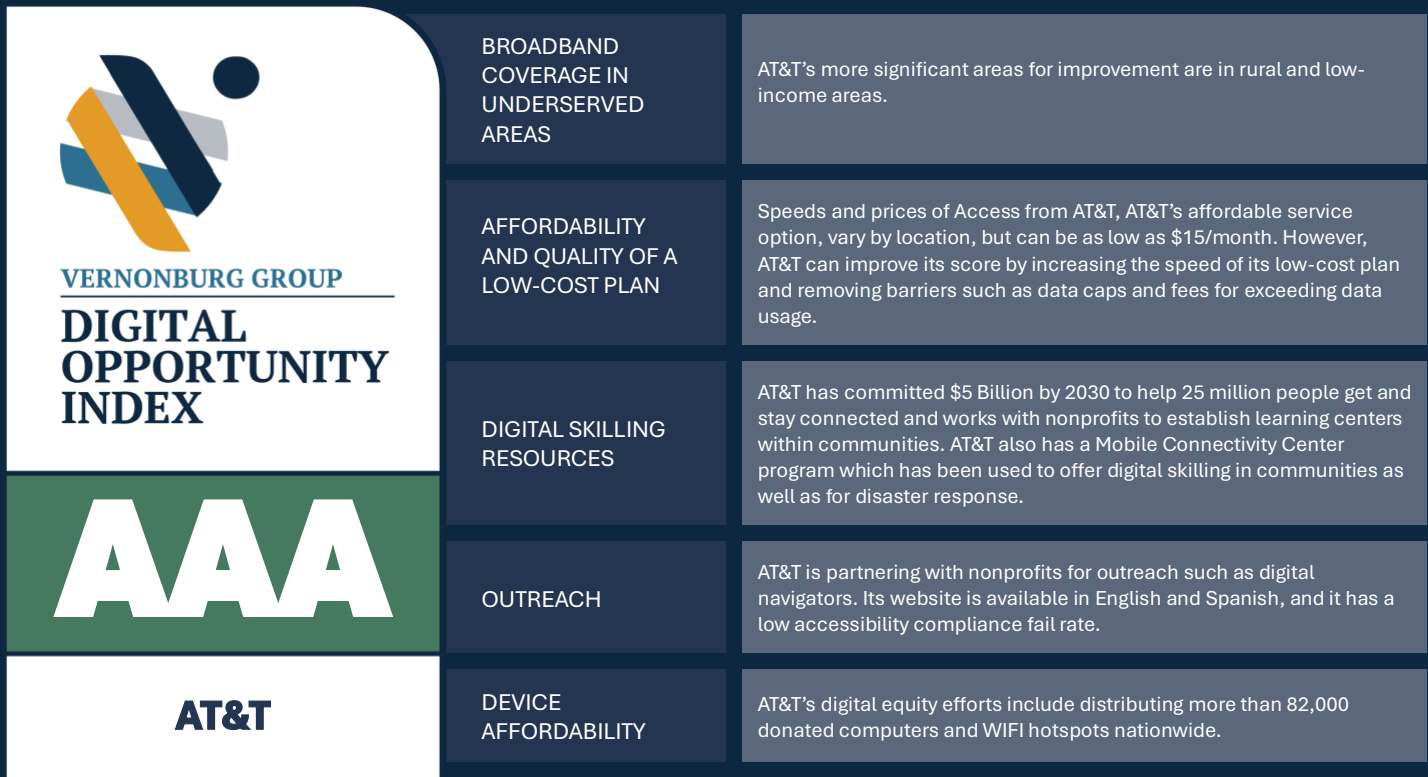


Figure 8: AT&T Inc. Digital Opportunity Index Scorecard

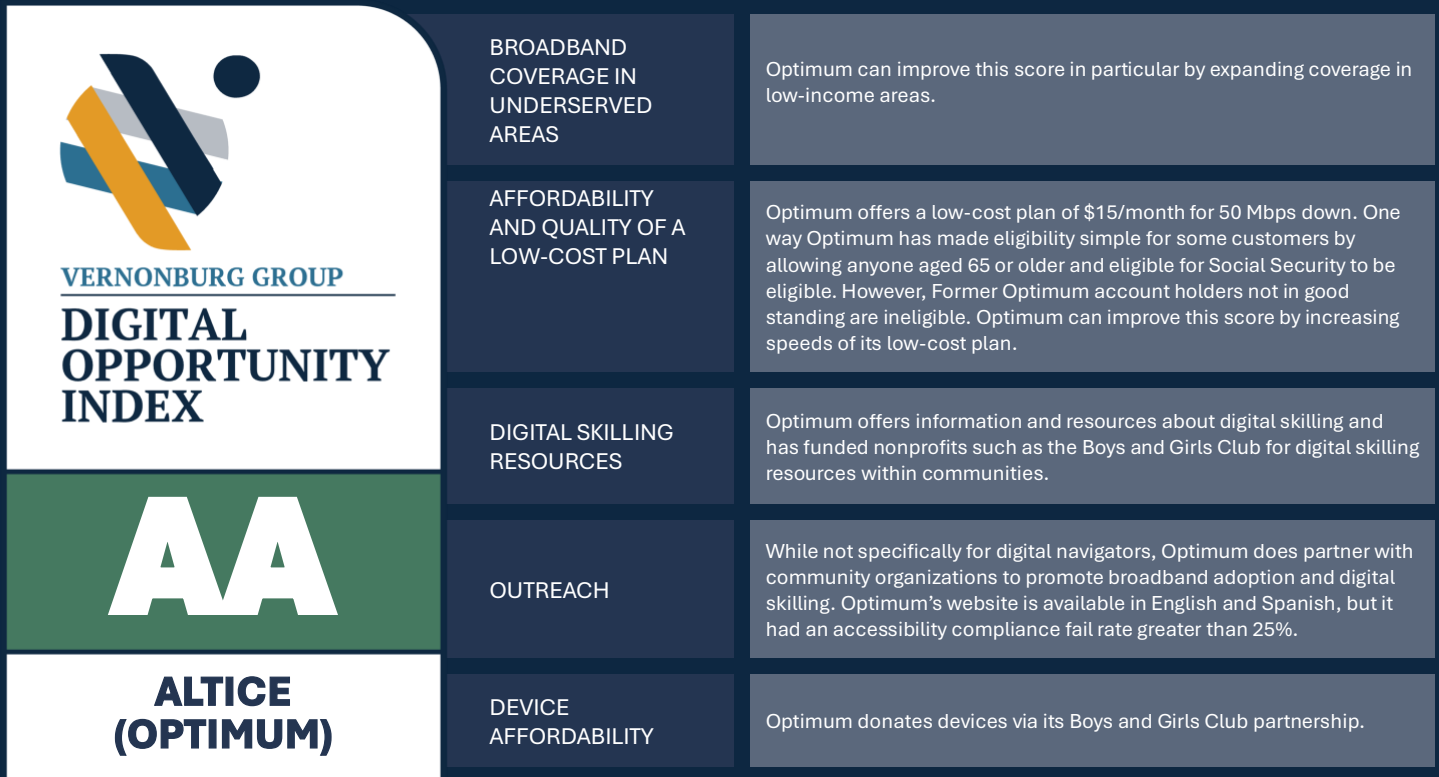


Figure 9: Altice USA, Inc. (Optimum) Digital Opportunity Index Scorecard

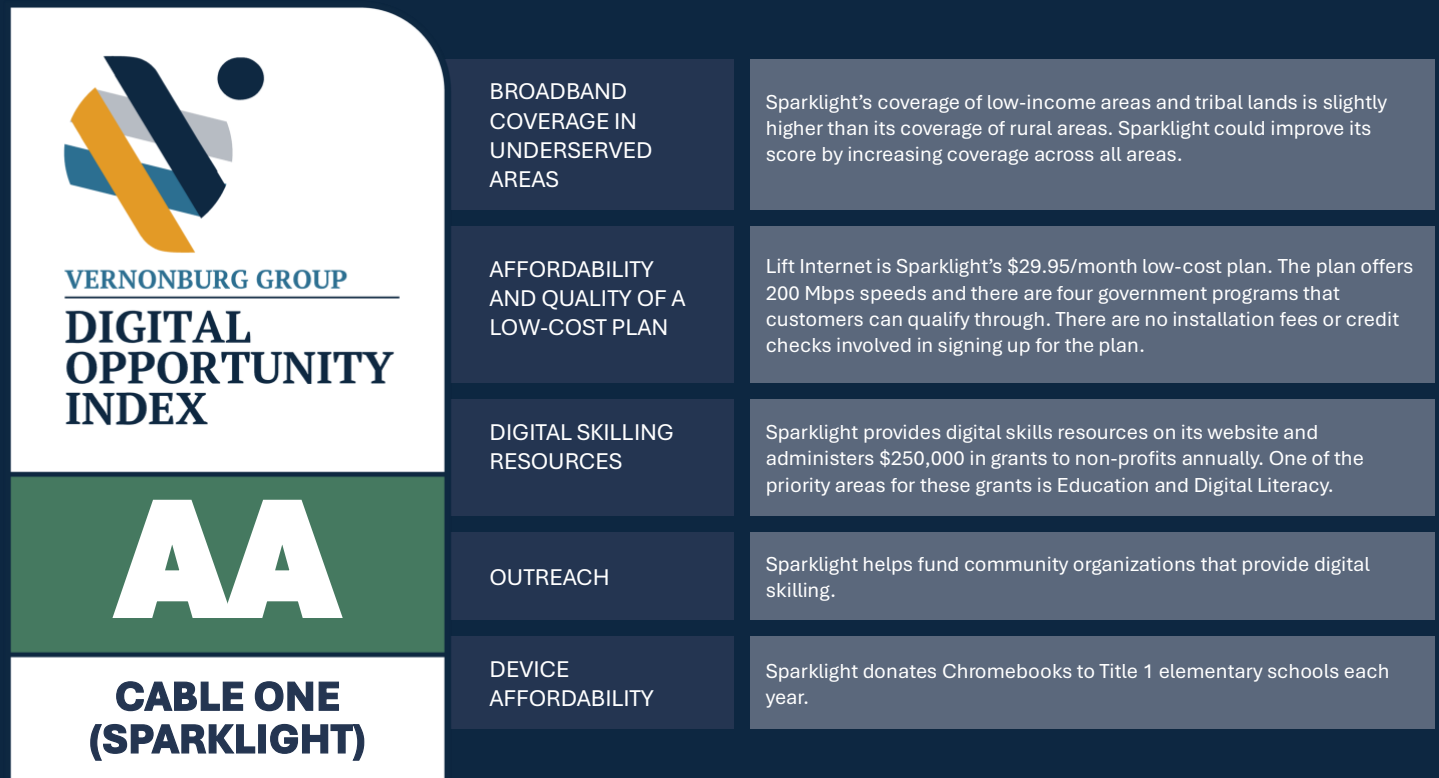


Figure 10: Cable One Inc. (Sparklight) Digital Opportunity Index Scorecard

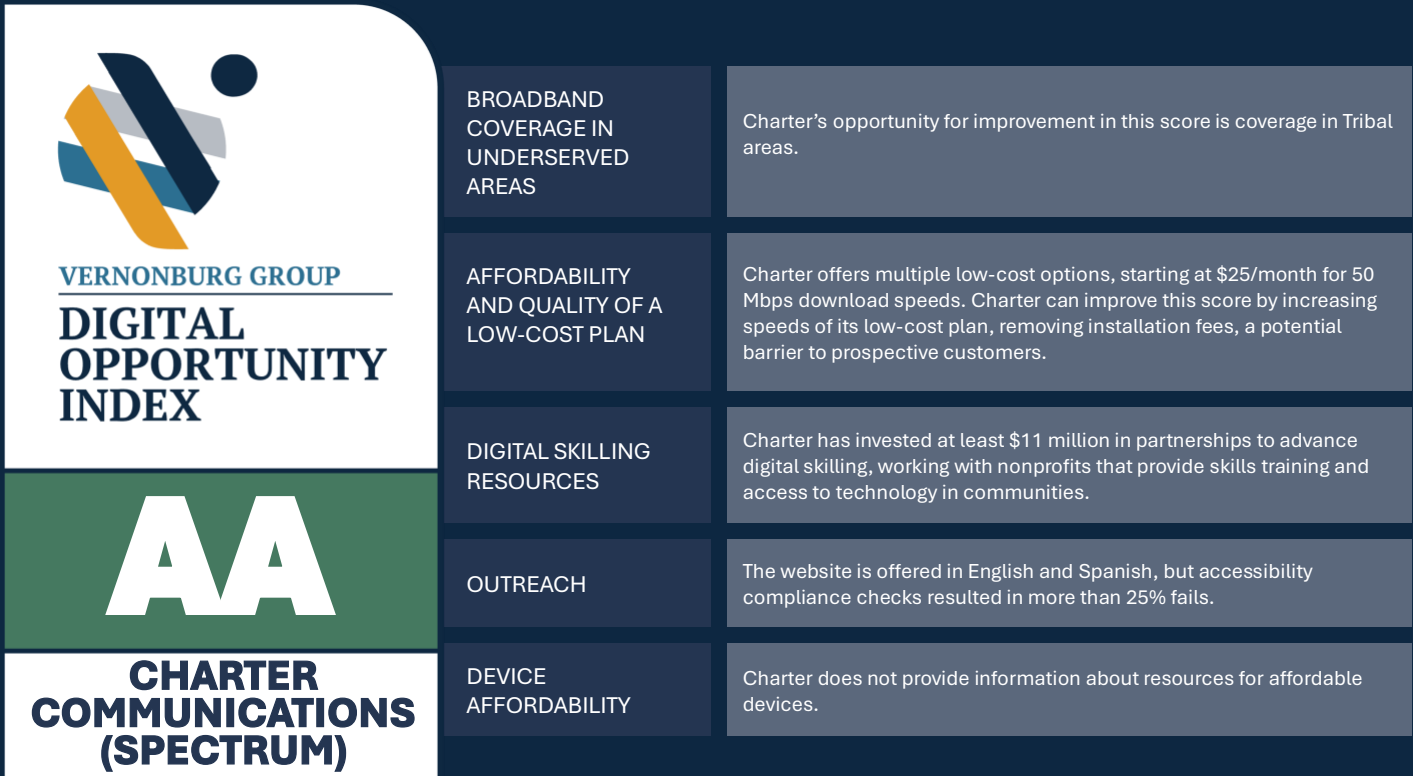


Figure 11: Charter Communications Inc. (Spectrum) Digital Opportunity Index Scorecard



We encourage all ISPs to [contact us](#) and request a full report of their scores and to engage with Vernonburg Group to leverage the findings of the Digital Opportunity Index to enhance their contributions to closing the digital divide.

CONCLUSION

Access to affordable, high-quality Internet is no longer a luxury. It is a prerequisite for participation in modern life. ISPs have made significant investments in providing intentionally designed offerings and diverse resources to households and communities to overcome barriers to broadband adoption. Despite decades of investment and innovation, tens of millions remain unconnected—especially in rural, low-income, and Tribal areas. The Digital Opportunity Index was developed to fill a critical gap: to assess and encourage further intentional and transparent efforts by ISPs to close the digital divide.

By translating complex data into actionable insight, this index offers a new lens through which ISPs, investors, regulators, and ratings agencies can understand and influence performance on broadband availability and adoption. It does not claim to be exhaustive or final. Rather, it is a starting point for accountability and dialogue—one that we hope will evolve as more data becomes available, and as companies further invest in efforts to advance full participation in our digital world.

Vernonburg group is committed to improving and refining this tool in partnership with the broader ecosystem.

We invite feedback, collaboration, and continued exchange from stakeholders who are serious about aligning capital, policy, and business practices with the goal of universal digital opportunity. Together, we can help shift the market toward truly ubiquitous infrastructure—and ensure that connectivity serves as a bridge, not a barrier.

ACRONYMS

ACS: American Community Survey

ADA: Americans with Disabilities Act

BDC: Broadband Data Collection

BEAD: Broadband Equity, Access, and Deployment

ESG: Environmental, Social, and Governance

FCC: Federal Communications Commission

ISP: Internet Service Provider

Mbps: Megabits per second

ENDNOTES

- ¹ Whelan, Tensie, Ulrich Atz, Tracy Van Holt, and Casey Clark. 2021. “ESG AND FINANCIAL PERFORMANCE.” NYU Stern Center for Sustainable Business. <https://www.stern.nyu.edu/sites/default/files/assets/documents/ESG%20Paper%20Aug%202021.pdf>.
- ² Cai, Xinyu, Hua Xiang, Inna Neskorođieva, and Akmal Durmanov. 2024. “Interrelation between Human Capital Management and ESG Engagement: Evidence from S&P 500 Firms.” *Humanities and Social Sciences Communications* 11 (1): 1654. <https://doi.org/10.1057/s41599-024-04189-6>.
- ³ “ESG Worker Preferences Study.” 2024. PricewaterhouseCoopers. April 22, 2024. <https://www.pwc.com/gx/en/issues/workforce/pwcs-global-workforce-sustainability-study.html>.
- ⁴ Caldarulo, Mattia, Karen Mossberger, and Anthony Howell. 2023. “Community-Wide Broadband Adoption and Student Academic Achievement.” *Telecommunications Policy* 47 (1): 102445. <https://doi.org/10.1016/j.telpol.2022.102445>.
- ⁵ “92% of Jobs Require Digital Skills, One-Third of Workers Have Low or No Digital Skills Due to Historic Underinvestment, Structural Inequities.” 2023. National Skills Coalition. February 6, 2023. <https://nationalskillscoalition.org/news/press-releases/new-report-92-of-jobs-require-digital-skills-one-third-of-workers-have-low-or-no-digital-skills-due-to-historic-underinvestment-structural-inequities/>.
- ⁶ Frey, Vincenz, Delia Baldassarri, and Francesco Billari. 2024. “Bridging the Digital Divide Narrows the Participation Gap: Evidence from a Quasi-Natural Experiment.” *Sociological Science* 11 (March):214–32. <https://doi.org/10.15195/v11.a9>.
- ⁷ Yu, Jiajie, and Shuang Meng. 2022. “Impacts of the Internet on Health Inequality and Healthcare Access: A Cross-Country Study.” *Frontiers in Public Health* 10 (June):935608. <https://doi.org/10.3389/fpubh.2022.935608>.
- ⁸ Garnett, Paul. 2021. “It’s Time for Wall Street to Get Serious About Closing the Global Broadband Gap.” Vernonburg Group. 2021. <https://www.vernonburggroup.com/blog/its-time-for-wall-street-to-get-serious-about-closing-the-global-broadband-gap>.

-
- ⁹ US Census Bureau Current Population Survey. “Computer and Internet Use.” 2023. Available at: https://www.census.gov/data/datasets/time-series/demo/cps/cps-supp_cps-repwgt/cps-computer.html. Accessed April 8, 2025.
- ¹⁰ Garnett, Paul, Breese McIlvaine, and Alexander Jeffrey. 2025. “Avoiding the Overbuild Trap: Adoption, Not Overbuilding, Drives Connectivity and Digital Opportunity.” <https://www.vernonburggroup.com/publications/subsidizedoverbuilds>.
- ¹¹ Garnett, Paul, Alexander Jeffrey, and David Johnson. 2024. “Achieving Internet for All: Socioeconomics and Fixed Broadband Availability in the U.S.” Vernonburg Group. April 2024. <https://www.vernonburggroup.com/publications/achievinginternetforall>.
- ¹² Garnett, Paul, Alexander Jeffrey, and David Johnson. 2024. “Achieving Internet for All: Socioeconomics and Fixed Broadband Availability in the U.S.” Vernonburg Group. April 2024. <https://www.vernonburggroup.com/publications/achievinginternetforall>.
- ¹³ “FCC Increases Broadband Speed Benchmark | Federal Communications Commission.” 2024. Federal Communications Commission. March 14, 2024. <https://www.fcc.gov/document/fcc-increases-broadband-speed-benchmark>.
- ¹⁴ “Accessibility Insights.” n.d. Microsoft Accessibility Insights. <https://accessibilityinsights.io>.
- ¹⁵ Garnett, Paul, Alexander Jeffrey, and David Johnson. 2024. “Achieving Internet for All: Socioeconomics and Fixed Broadband Availability in the U.S.” Vernonburg Group. April 2024. <https://www.vernonburggroup.com/publications/achievinginternetforall>.