VERNONBURG GROUP
DIGITAL OPPORTUNITY INDEX

THE DIGITAL OPPORTUNITY INDEX:

An Alternative to ESG Ratings for Internet Service Providers

Vernonburg Group LLC

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CONTENTS

ABOUT VERNONBURG GROUP

Vernonburg Group LLC is a specialized consulting firm advancing broadband availability and adoption through integrated expertise in broadband policy and regulation, market research and risk assessment, comprehensive project feasibilities, broadband network design, financial modeling, geospatial analysis, funding strategy, stakeholder engagement, and program design and implementation. We support governments, internet service providers (ISPs), technology companies, non-profits, and development organizations across the United States and internationally in designing and delivering high-impact connectivity initiatives—particularly in rural and underserved communities.

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.

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EXECUTIVE SUMMARY

Since the release of our inaugural Digital Opportunity Index report in July 2025, the dominant theme for the broadband sector has been change: change in network footprints, change in digital skills necessary to meet the demands of a changing workforce that is increasingly focused on artificial intelligence (AI), and change in broadband provider ownership.

The Digital Opportunity Index focuses on how publicly traded U.S. internet service provider (ISPs) are investing in extending high-speed infrastructure to underserved areas and helping communities overcome barriers to broadband adoption. As we explained in our first report, traditional Environmental, Social, and Governance (ESG) measurements often focus on a broad spectrum of climate and social indicators such as carbon emissions, labor practices, and corporate governance. While these are important areas for consideration, they do not get at the essentiality of internet access in today's world. Nor do they measure ISPs' core business activities.

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.

Deployment

In June 2025, the $42.5 billion Broadband Equity, Access, and Deployment (BEAD) federal infrastructure program, which funds network deployments to all locations lacking access to broadband service, was modified to reflect the Trump Administration's priorities. The National Telecommunications and Information Administration (NTIA) directed state and territorial broadband office grantees to undertake competitive BEAD subgrantee selections and submit their proposals to NTIA by September 4, 2025. NTIA has approved BEAD subgrantee selections in almost every state and territory and the companies represented in

this report will receive approximately $5 billion in federal BEAD support to expand broadband access. This infusion of funding is set to roll out this year, a time when the cost to deploy fiber-to-the-premises broadband continues to rise significantly.[1] Under the BEAD program, last-mile network deployments should be completed within four years of subgrant award.

The majority of the scores for coverage remained the same between the 2025 Digital Opportunity Index and this edition ("1H2026 edition"). Two ISPs saw decreases at last one specified coverage area (either low-income, rural, or Tribal). Three ISPs saw increases in one of these areas. As BEAD deployment commences, we would expect to see coverage increases across all areas.

Digital Skilling

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 job advancement in the workplace. The recent surge in AI has transformed digital literacy from a baseline requirement into a critical economic imperative. As AI-driven automation reshapes job functions, the workforce must pivot toward advanced digital fluency to leverage these technologies. To maintain a competitive edge, students and those already in the workforce require seamless access to continuous digital upskilling. Without a concerted effort to enhance these digital skills, the labor market faces a growing "skills gap" that could stifle innovation and leave significant portions of the population behind in a rapidly evolving global economy.

Foundational to the success of the AI transition is the availability of high-speed broadband at home, a core component of the Digital Opportunity Index. Developing digital skills, including those required to succeed in the AI transition, requires more than just occasional connectivity; it demands high bandwidth for data-intensive learning, real-time collaboration, and immersive practice. When broadband access is inconsistent or too slow, it creates a new "digital divide:" one that prevents individuals from achieving the mastery required to keep up with the AI boom and continue to advance. Broadband providers deliver more than simple connectivity: they provide the foundational infrastructure that enables lifelong learning and ensures the workforce is prepared to meet the demands of the AI era. To the extent ISPs are additionally investing in digital skilling, which according to our rating eight are doing, they may consider directing more of those

resources towards ensuring not only a foundation of digital skills but programs that focus on achieving digital fluency.

Ownership

When we undertook our first Digital Opportunity Index rating, we evaluated 15 publicly traded companies on their efforts to further digital opportunity. Since then, a number of the companies that we rated have merged, been taken private, or in the case of Charter (Spectrum), merged with a previously private company (Cox Communications). We include a chart below to outline those changes. Companies that are no longer publicly-traded have been removed from our ratings. For those companies that merged during this rating period, we will continue to review their digital opportunity investments separately, since the effects of their mergers are not fully apparent in the data we analyze. We plan to evaluate them as combined entities in our next report.

Table 1: ISP Ownership Shifts

Provider	Status Change	Details
Verizon	Acquirer of another index ISP (Frontier)	Completed its $20B acquisition of Frontier Communications in January 2026.[2]
Frontier Communications	Acquired by another index ISP (Verizon)	Now operating as "Frontier, a Verizon Company" following the January 2026 merger.[3]
AT&T	Acquirer of part of another index ISP (Lumen)	Completed its $5.75B deal to acquire Lumen Technologies' consumer fiber business in February 2026.[4]
Lumen Technologies	Divestiture of consumer fiber assets to another index ISP (AT&T)	Completed divestment of its consumer fiber assets to AT&T to pivot toward enterprise services and AI infrastructure.[5]
Charter (Spectrum)	Merging with a non-index (private) ISP (Cox)	Announced a $34.5B merger with Cox Communications in May 2025, approved by FCC in February 2026.
GFiber (formerly Google Fiber)	Merging with a non-index (private) ISP (Astound)	Announced plans to merge with Astound Broadband in March 2026.[6]
T-Mobile	Acquired four non-index ISPs: Metronet, Lumos, USCellular, U.S. Internet	Lumos deal closed April 2025 (joint venture with EQT).[7] Metronet deal closed July 2025 (joint venture with KKR).[8] USCellular deal closed August 2025.[9] U.S. Internet deal closed September 2025.[10]
Optimum (Altice)	Rebranded	Rebranded in November 2025 to Optimum Communications Inc.[11]

FIVE INDICATORS

In this publication, we evaluate the 14 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.

The 14 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)
- 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, three scored AA, one scored A, six scored between B and BBB, and one scored the lowest grade of CCC. The ISP "leaders," those ISPs scoring AAA or AA, remained the same between the 2025 and 1H2026 editions of the Index, with one exception. The score of one ISP increased to reach an AA grade, while the score of a previous

leader decreased from AA to A. In 2025, no ISPs received the CCC score, while one did in 1H2026.

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

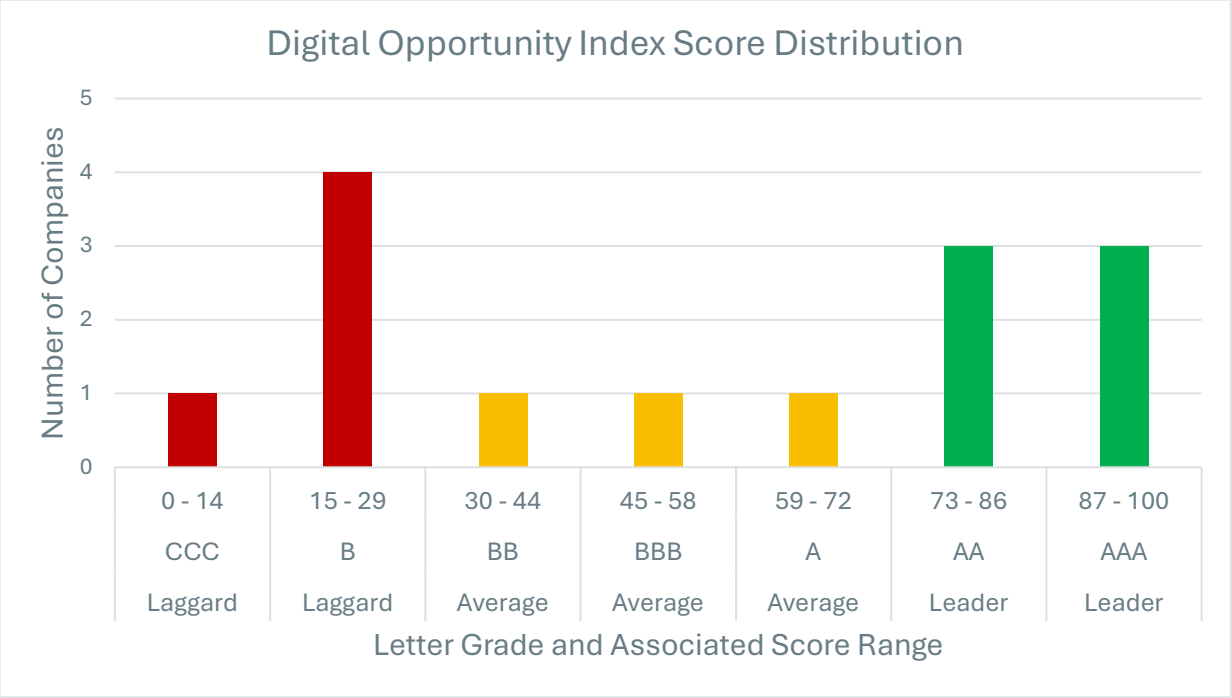

Figure 1: Digital Opportunity Index Score Distribution (Executive Summary)

The Digital Opportunity Index **leaders** are:

xfinity Spectrum verizon T-Mobile AT&T Sparklight

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. This index shows where companies have taken meaningful steps to closing the digital divide, for which they should be applauded, and where more remains to be done.

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 to market performance and resilience during downturns[13] as well as strong human capital management,[14] and is valued highly by employees.[15]

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. In fact, increased broadband availability and adoption correlates with higher test scores and reductions in socio-economic educational achievement gaps.[16] In addition to broadband availability and adoption, adequate digital skills are also necessary for success: 92% of jobs require them.[17] Further, beyond academic and professional settings, Internet connectivity is critical for community-wide progress, including public health outcomes and civic participation.[18] Worldwide, access to the Internet is a significant facilitator in receiving medical treatment and mitigating the harmful impact of income inequality in healthcare access.[19] In response, stakeholders across sectors have begun collaborating in new ways to increase availability and adoption of high-speed Internet connectivity services, alongside promoting digital skills and literacy.

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.[20] 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, for which they should be given credit in their valuations. By prioritizing investments that expand coverage and adoption in underserved areas and promoting digital opportunity initiatives, ISPs can reach more customers, which expands their potential customer base and improves customer retention. Through increasing meaningful broadband adoption, ISPs are not only improving their own economics, they are fueling a more connected, productive, and resilient overall economic growth by ensuring that people have access to the digital tools needed to advance in our digital economy.

- **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 of dollars 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 drives our research is: 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 to 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.[21] 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.[22] 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 communities with the greatest broadband availability gaps: rural, Tribal, and areas with higher poverty rates.[23] The indicator with the second highest value is broadband affordability at 25 points, followed by digital skilling at 15 points, outreach at 12 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.[24] 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.[25]

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: 12 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.

In a change from our last reporting cycle, we are now allocating two (2) points under this criterion for company donations of used equipment to local non-profit organizations or refurbishing organizations. Unlike the device affordability criteria, the points for this criterion are based on a one-time or more ad hoc donation approach as opposed to an offering that is direct to consumers and part of a company's more deliberate offering to consumers.

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 a program to connect eligible subscribers to partnered providers of donated or low-cost devices, and/or if the ISP is implementing its own program to provide customers with low-cost devices. The key is the program is generally available to low-income consumers.

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

Table 2. Index Letter Grading System

Index Point Score	Index Ratings	Meaning
87-102 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 January 20, 2026.

- **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 2023 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.[26] 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

OVERALL INSIGHTS

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, three scored AA, one scored A, six scored between B and BBB, and one scored 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.

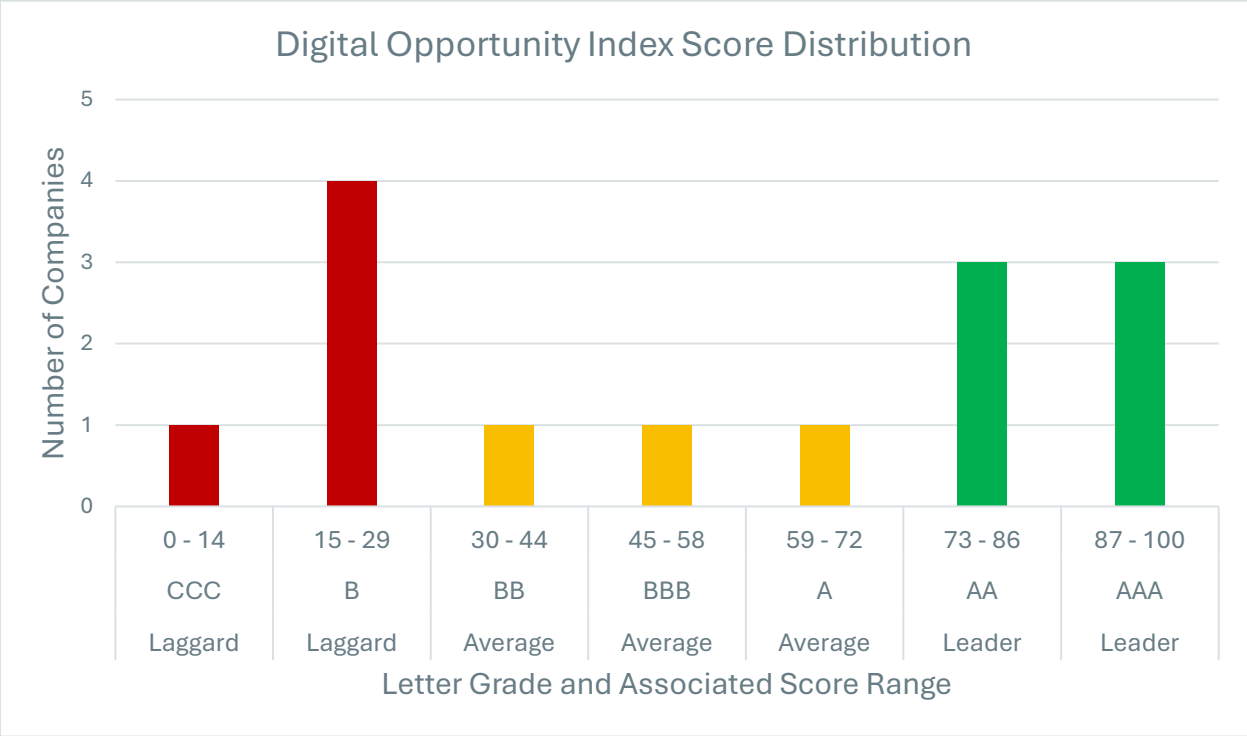

Figure 2: Digital Opportunity Index Score Distribution

The Digital Opportunity Index **leaders** are:

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

Figure 3 presents each company's total points (and their points from our 2025 report). The first column represents the companies' scores in 1H2026 and the second column, in a lighter shade, represents their 2025 score. Green shading represents those in the "leaders" category. Companies that are shaded yellow to represent the "average" category. Companies shaded red represent the "laggard" category.

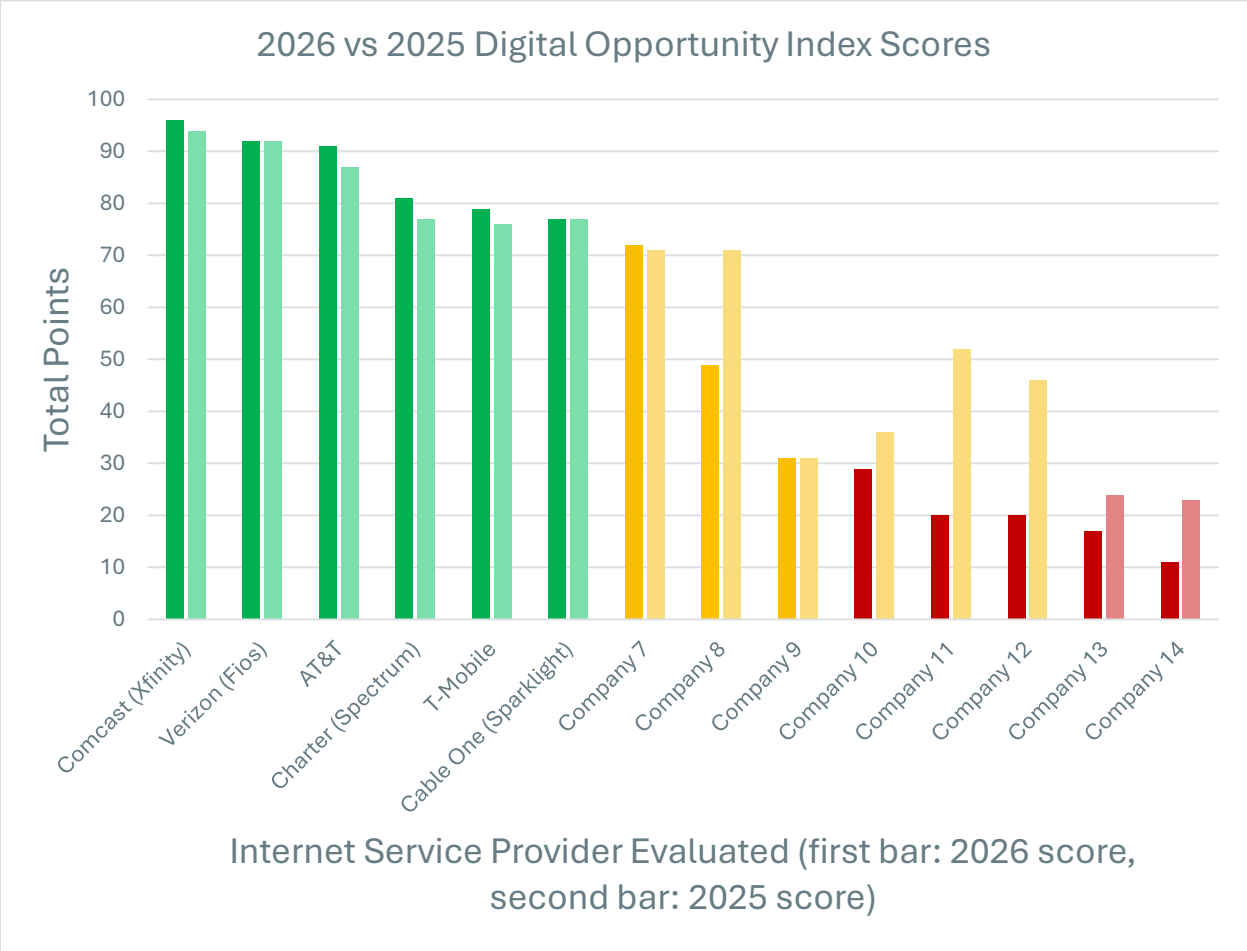

Figure 3: Digital Opportunity Index Numeric Scores

Companies 10-12 moved from the average category in 2025 to the laggard category in 1H2026. Some of these decreases in scores can be attributed to the changes in how scores are determined in the Device Affordability and Outreach indicator categories. In 2025, ISPs received a score of 5 if they donated to community organizations' funds for devices or did a one-time donation of devices to individuals or organizations. They could also obtain full points by having their own low-cost device program or partnering with an organization with a program. In 1H2026, companies received 0 points if they did not have their own program which offers low-cost devices to low-income customers or partnered with an organization

that does so. They received 2 points in the Outreach category if they had made a donation of funding or devices to organizations since the release of the last Digital Opportunity Index Report.

Only one ISP, Comcast (Xfinity), received full points in the Device Affordability category. The remaining ISPs lost 2-5 points in this edition of the Index, depending on whether they scored points related to devices in the Outreach category.

Given Vernonburg Group's extensive research on and tracking of broadband coverage in the U.S.,[27] 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 (BSLs) in each category. On average, the coverage scores of ISPs did not change significantly between the 2025 and 1H2026 Digital Opportunity Index reports.

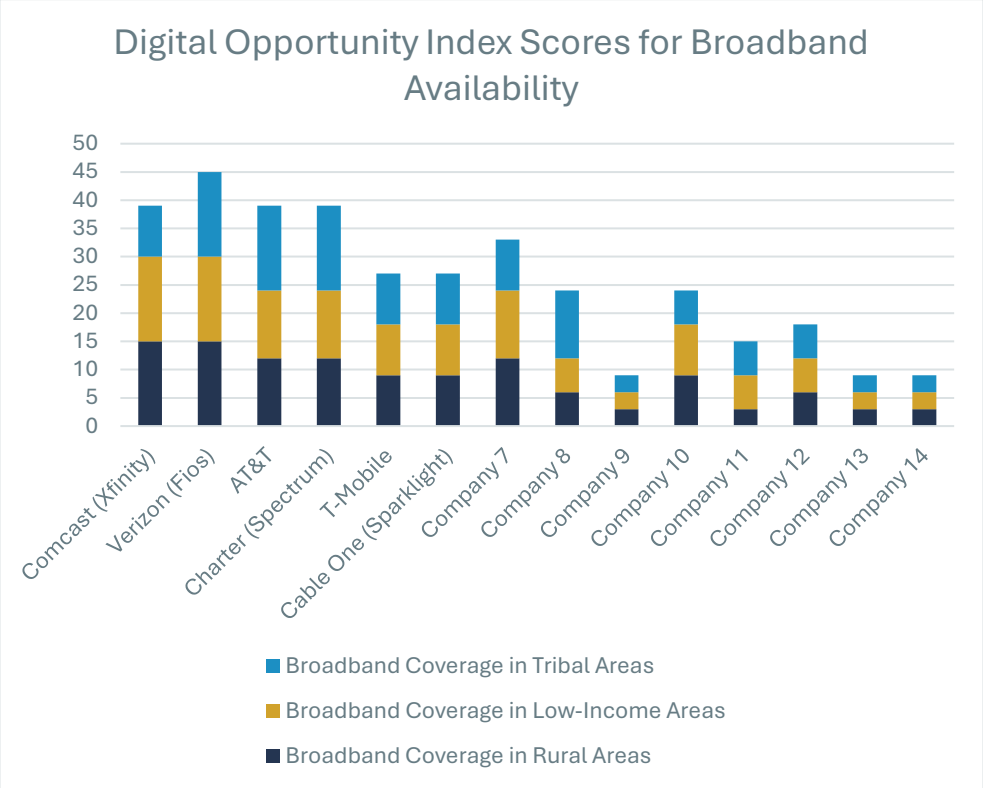

Figure 4: Digital Opportunity Index Scores for Broadband Availability

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 plan options, 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 challenging 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 substantial 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. continued their billion-dollar commitments to nonprofits and communities nationwide. Charter Communications, Inc. has also re-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.

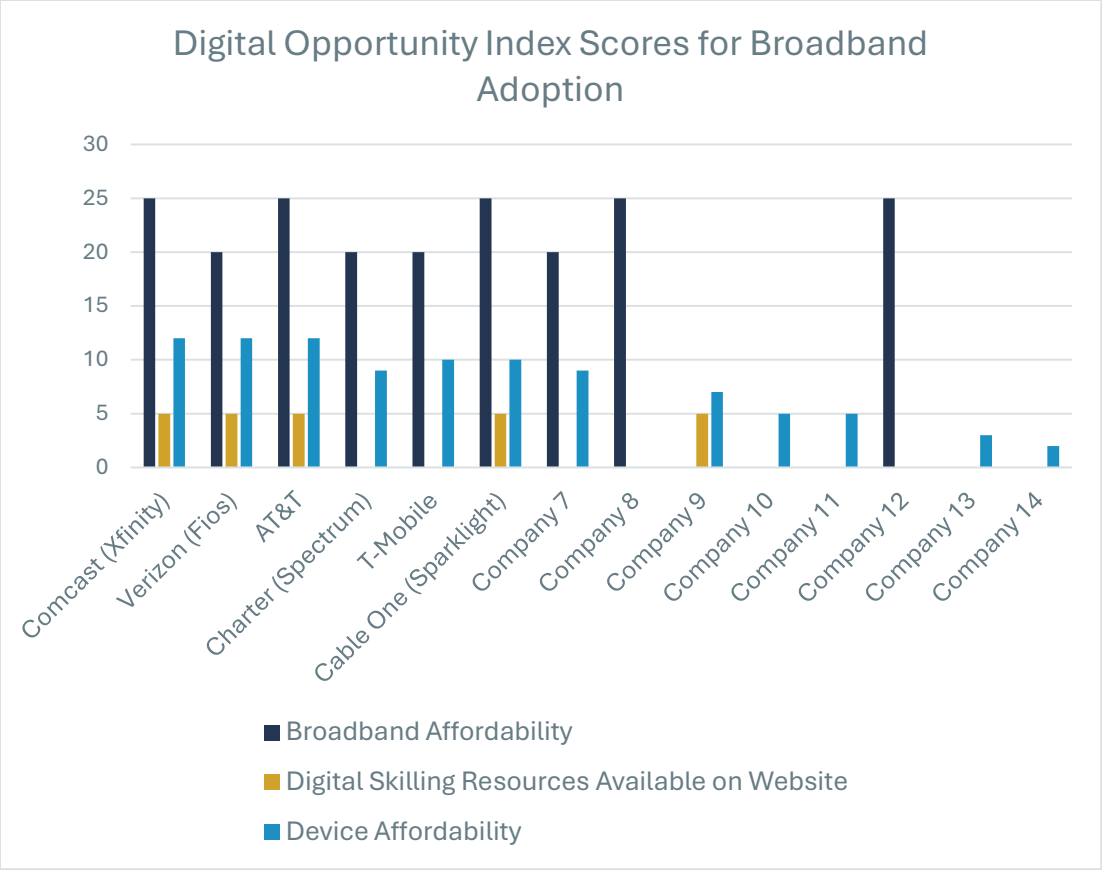

Figure 5: Digital Opportunity Index Scores for Broadband Adoption

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, national nonprofits like EveryoneOn's Offer Locator and the National Digital Inclusion Alliance.[28]
- 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.

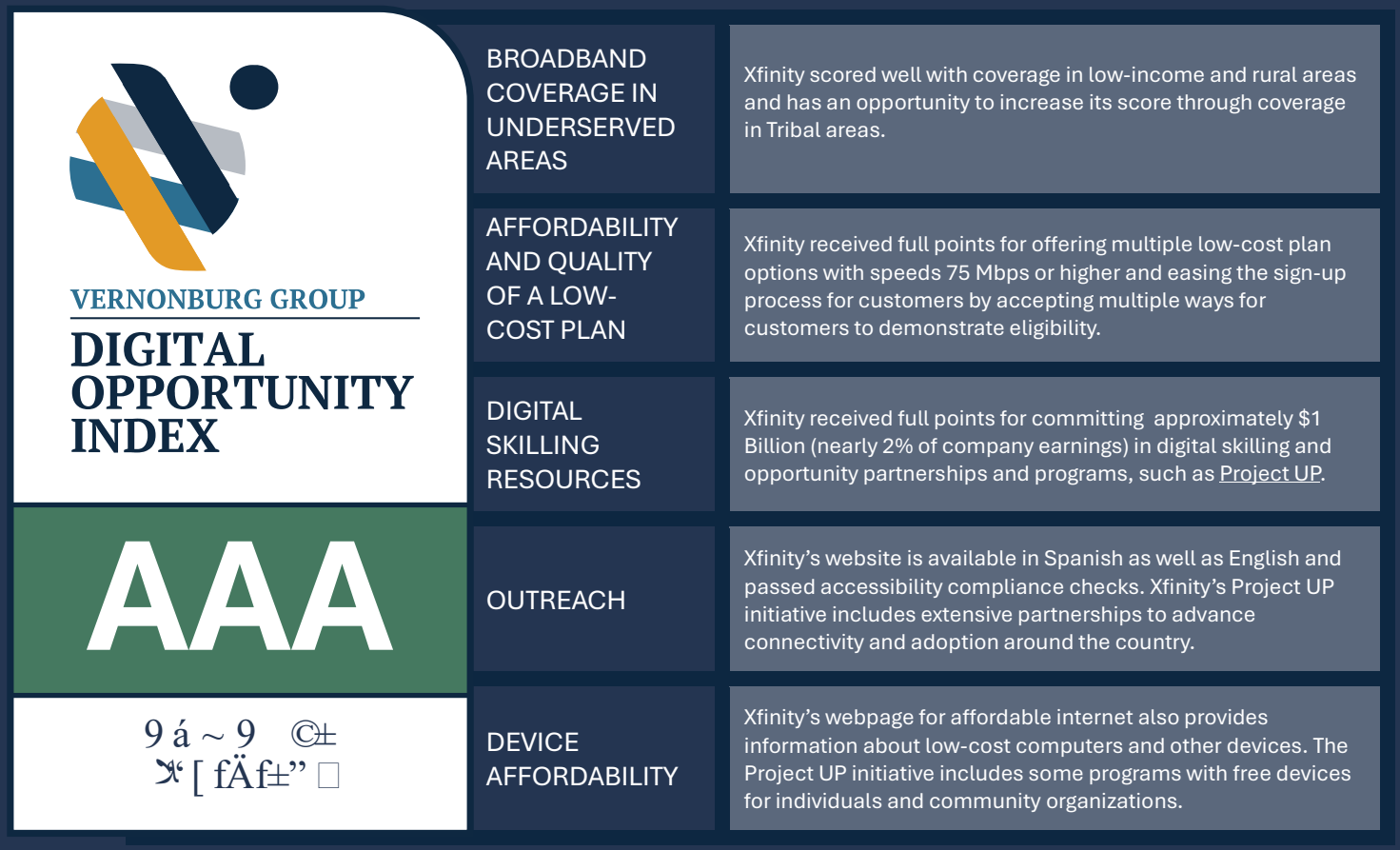

Figure 6: Comcast (Xfinity) Digital Opportunity Index 1H2026 Scorecard

Figure 7: Verizon (Fios) Digital Opportunity Index 1H2026 Scorecard

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DIGITAL OPPORTUNITY INDEX

BROADBAND COVERAGE IN UNDERSERVED AREAS	AT&T's more significant areas for improvement are in rural and low-income areas.
AFFORDABILITY AND QUALITY OF A LOW-COST PLAN	Speeds and prices of Access from AT&T, AT&T's affordable service option, vary by location, but can be as low as $15/month.
DIGITAL SKILLING RESOURCES	AT&T has committed $5 billion by 2030 to help 25 million people get and stay connected and works with nonprofits to establish learning centers within communities. AT&T's ScreenReady initiative offers families free digital skilling to use the Internet safely and effectively. AT&T has also partnered with the Public Library Association and the National Parent Teacher Association to deliver free digital literacy workshops.
OUTREACH	AT&T has established Connected Learning Centers in local non-profits across the country. These centers provide free tutoring, mentoring, Internet, and computers. AT&T plans to open 100 centers by the end of 2027. Its website is available in English and Spanish, and it has a low accessibility compliance fail rate. AT&T has also donated computers and hot-spots to families and students.
DEVICE AFFORDABILITY	AT&T's digital opportunity efforts include distributing more than 82,000 donated computers and WIFI hotspots nationwide.

Figure 8: AT&T Digital Opportunity Index 1H2026 Scorecard

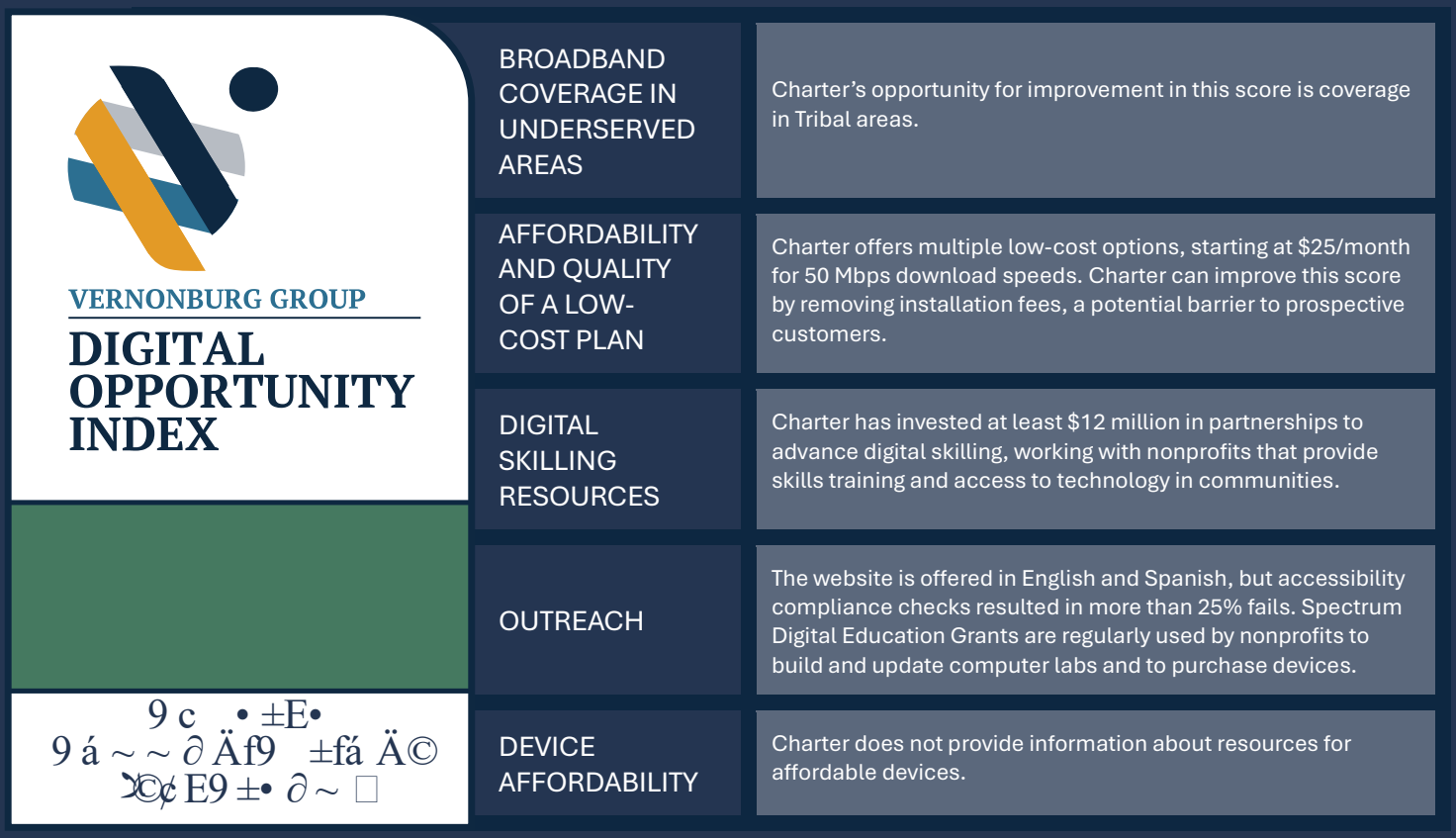

Figure 9: Charter Communications (Spectrum) Digital Opportunity Index 1H2026 Scorecard

Figure 10: T-Mobile Digital Opportunity Index 1H2026 Scorecard

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DIGITAL OPPORTUNITY INDEX

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BROADBAND COVERAGE IN UNDERSERVED AREAS	Sparklight has improved its coverage of rural areas. Sparklight could improve its overall score by increasing coverage across all areas.
AFFORDABILITY AND QUALITY OF A LOW-COST PLAN	Lift Internet is Sparklight's $29.95/month low-cost plan. The plan offers 200 Mbps speeds and there are multiple government programs that customers can qualify through. There are no installation fees or credit checks involved in signing up for the plan.
DIGITAL SKILLING RESOURCES	Sparklight provides digital skills resources on its website and administers $250,000 in grants to non-profits annually. One of the priority areas for these grants is Education and Digital Literacy.
OUTREACH	Sparklight helps fund community organizations that provide digital skilling. Sparklight's website has a low accessibility check fail rate, but it is only available in English.
DEVICE AFFORDABILITY	Sparklight donates Chromebooks to Title 1 elementary schools each year.

Figure 11: Cable One (Sparklight) Digital Opportunity Index 1H2026 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 communities. The Digital Opportunity Index was developed to fill a critical gap: to assess, encourage, and recognize further intentional and transparent efforts by ISPs to close the digital divide.

By translating complex data into actionable insight, the Index offers an industry-specific perspective through which ISPs, investors, regulators, and ratings agencies can understand and influence performance on broadband availability and adoption. The Index is one of many tools for injecting accountability and promoting dialogue—one that will evolve as more data becomes available, as needs change, 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

AI: Artificial Intelligence

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

NTIA: National Telecommunications and Information Administration

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