

Application to DHCD Submitted through CAMS

Stafford County Government

Stafford County-Comcast VATI 2023

Application ID: 95708182022162809
Application Status: Pending
Program Name: Virginia Telecommunication Initiative 2023 - Application
Organization Name: Stafford County Government
Organization Address:

Profile Manager Name: Tina Owens
Profile Manager Phone: (540) 658-4573
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Project Name: Stafford County-Comcast VATI 2023
Project Contact Name: Michael Cannon
Project Contact Phone: (540) 658-8687
Project Contact Email: mcannon@staffordcountyva.gov
Project Location: 13000 Courthouse Road
Stafford, VA 22555-0339
Project Service Area: Stafford County

Total Requested Amount: \$5,377,944.00
Required Annual Audit Status: Accepted

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	\$5,377,944.00	\$5,751,962.00	\$11,129,906.00
Other: Comcast Match	\$0.00	\$4,451,962.00	\$4,451,962.00
Other: Stafford County Match	\$0.00	\$1,300,000.00	\$1,300,000.00
Other: DHCD Request	\$5,377,944.00	\$0.00	\$5,377,944.00
Total:	\$5,377,944.00	\$5,751,962.00	\$11,129,906.00

Budget Narrative:

Questions and Responses:

1. Project Description and Need

Describe why and how the project area(s) was selected. Describe the proposed geographic area including specific boundaries of the project area (e.g. street names, local and regional boundaries, etc.). Attach a copy of the map of your project area(s). Label map: Attachment 1 – Project Area Map.

Answer:

Stafford County (“Partner” or “County”) and Comcast Cable Communications, LLC (“Comcast”^[1]) appreciate the opportunity to respond to the Commonwealth of Virginia’s Department of Housing and Community Development’s (“DHCD”) Virginia Telecommunication Initiative (“VATI”) with respect to deploying broadband infrastructure to eligible service areas in the County. As detailed further below, we propose to deploy qualifying broadband service to 1,297 households.

The geographic area for this proposed project includes approximately 133.7 miles of infrastructure generally dispersed throughout areas county-wide which do not already have access to broadband service, as noted on the attached Project Area map and further detailed below.

The project area was selected based on the County's formal RFI process that provided initial unserved areas based on a study. After consultation between the County and Comcast, the project meets the eligibility criteria established by the Virginia General Assembly and the Department of Housing and Community Development for a Virginia Telecommunication Initiative award. VATI eligibility criteria being more restrictive than that of some federal programs, the project area thus also meets eligibility criteria for the Coronavirus State and Local Fiscal Recovery Fund and the Capital Projects Fund established under the American Rescue Plan Act.

Comcast proposes to extend its network so that homes and businesses in the project area are serviceable with broadband speeds that reliably meet or exceed 100 Mbps download and at least 20 Mbps upload speeds and **[Redacted]**.

The County has researched internet service availability through a formal study based on federal and

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state availability maps, stakeholder inputs, desk and field studies, and speed tests. This information led to the development of a preliminary broadband plan that identifies unserved areas of the County that should be targeted for internet service. The County went through a formal, competitive RFI process through which Comcast was selected as a partner for the County to co-apply for this grant opportunity.

The geographic area for this proposed project targets a significant portion of remaining areas that are currently unserved throughout the County.

Comcast currently offers service to **[Redacted]** premises in the county. It is in the process of completing an extension of its network to 634 locations under VATI FY22. The project identified herein should result in near ubiquitous coverage in the county.

[1] Note Regarding Comcast: Comcast Cable Communications, LLC is a wholly owned indirect subsidiary of Comcast Corporation. Comcast Corporation is a publicly traded company that through its cable division subsidiaries, including, but not limited to Comcast Cable Communications, LLC, provides cable television, voice and internet services. For the purposes of this response, the term "Comcast" throughout this response may refer to Comcast Corporation, Comcast Cable Communications, LLC, or the Comcast Corporation cable division operating subsidiaries or affiliates holding cable television franchises in the relevant jurisdictions. In the event of a grant award, for the avoidance of any doubt, the contracting entity for Comcast will be Comcast Cable Communications, LLC and any and all grant obligations binding upon Comcast Cable Communications, LLC must be agreed to in a separate writing between the parties.

2. List existing providers in the proposed project area and the speeds offered. Describe your outreach efforts to identify existing providers and how this information was compiled with source(s).

Answer:

To the best of our collective knowledge, there are no existing providers in the proposed project area which meet the qualifications to render the area ineligible for a VATI award. Comcast provides service to areas adjacent to the proposed project.

3. Describe if any areas near the project have received funding from federal grant programs, including but not limited to Connect America Funds II (CAF II), ACAM, ReConnect, Community Connect, and Rural Digital Opportunity Funds (RDOF). If there have been federal funds awarded near the project area(s), provide a map showing these areas, verifying the proposed project area does not conflict with these areas. Label Map: Attachment 2 – Documentation on Federal Funding Area.

Answer:

No areas within or immediately adjacent to the Stafford County Project have received funding from federal grant programs such as the Connect America Fund, ACAM, RDOF, ReConnect, and Community Connect as noted on the attached map.

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4. Overlap: To be eligible for VATI, applicants must demonstrate that the proposed project area(s) is unserved. An unserved area is defined as an area with speeds below 100/20 Mbps and with less than 25% service overlap within the project area for wireless projects and 20% for wireline projects. Describe any anticipated service overlap with current providers within the project area. Provide a detailed explanation as to how you determined the percentage overlap. Label Attachment: Attachment 3 – Documentation Unserved Area VATI Criteria.

Answer:

Stafford County and Comcast anticipate less than 10% service overlap within the project area with any existing fixed wireless providers and less than 5% with wireline providers. The project area is almost entirely unserved with wireline service based on data available through the FCC's publicly available Form 477 website and from broadband providers. A few census blocks indicate service provided by KGI. Within those areas, the County believes that less than 10% of the project area, which is provided by KGI is reporting speeds at or above 100/20. The estimated overlap between KGI locations and the service area as a whole is less than 10% for estimated serviceable locations capable of reaching the 100/20 threshold. The broadband study indicated that the KGI locations in this area should be considered potentially underserved due to the line-of-sight limitations on fixed wireless, limits on simultaneous, total subscriber capacity, and drop-off in signal strengths towards the more outlying areas of the indicated census blocks.

T-Mobile has recently reported limited service in a few census blocks as well, but they are reported as achieving a maximal speed of 25/3 and are therefore not relevant to any overlap calculations as they are unlikely to consistently deliver 25/3, let alone 100/20.

5. Total Passings: Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 25 Megabits per second download and 3 Megabits per second upload speeds, as they will receive priority in application scoring. For projects with more than one service area, each service area must have delineated passing information. Label Attachment: Attachment 4 – Passings Form.
- a. Of the total number of VATI passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.
 - b. If applicable, of the total number of RDOF passings, provide the number of residential, business, non-residential, and community anchors in the proposed project area.
 - c. If applicable, provide the number of passings that will require special construction costs, defined as a one-time fee above normal service connection fees required to provide broadband access to a premise. Describe the methodology used for these projections.
 - d. If applicable, provide the number of passings included in the application that will receive broadband access because special construction costs have been budgeted in the VATI application. Describe the methodology used for determining which passings with special construction costs were budgeted in the application.
 - e. Provide the number of passings in the project area that have 25/3 Mbps or less. Describe the methodology used for these projections. (up to 15 points)

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a. Comcast will extend service to 1,297 premises which currently do not have wireline access to broadband at 100Mbps/20Mbps. As noted in Attachment 3 - Documentation Unserved Area VATI Criteria, KGI Wireless offers service to some census blocks in the county, however these census blocks are largely unserved and less than 10% of are actually serviceable with speeds at above 100/20, well below the 25% allowable threshold for project area eligibility.

b. Not Applicable.

c. The Stafford County project is designed to achieve functionally universal coverage in the county. The cost estimate includes **[Redacted]**. As such, there will be no additional construction charges to customers that are included in the project that are connected to the network during the project construction period. If a premise requires service line installation and Comcast is not granted access during the construction period, Comcast reserves the right to charge the customer for such work should the property owner seek to be connected after the construction period is complete and the project is closed.

d. Private, at-risk capital is not likely to be invested by a private provider in this area due to low population density. If undertaken alone, the extension of Comcast's plant proposed herein would not meet the criteria of Comcast's standard investment model. Comcast therefore anticipates all passings included in the application will receive access because special construction costs have been budgeted into the VATI application.

Of the 1,297 proposed passings, Comcast estimates **[Redacted]** will receive access without special construction costs. **[Redacted]** will receive broadband access because special construction costs have been budgeted in the VATI application.

e. Because Comcast is the incumbent provider for the area (in terms of polygon of service), the actual service area is defined as currently non-passed locations. Comcast and the Stafford County analyzed areas that do not have access to Internet speeds of 25/3 Mbps or less in census blocks using data from the FCC Form 477 website, and the County further conducted desktop and selective field inspections. No other wireline provider capable of delivering 25/3 service was identified. As indicated above, there are some expected estimated "passings" by KGI that would overlap with the proposed funding service area. Comcast therefore estimates less than 25 percent of the passings in the Project Area have access to Internet speeds of only 25/3 Mbps or less.

6. Describe if any blocks awarded in Rural Digital Opportunity Fund (RDOF) are included in the VATI application area. If RDOF areas are included in the VATI application, provide a map of these areas and include information on number of passings in RDOF awarded areas within the VATI application area, and Census Block Group ID number for each block group in the project area. Label Attachment: Attachment 5 – RDOF Awarded Areas Form in VATI Area

Answer:

There are no RDOF award areas in Stafford County.

7. **For wireless projects only:** Please explain the ownership of the proposed wireless infrastructure. Please describe if the private co-applicant will own or lease the radio mast, tower, or other vertical structure onto which the wireless infrastructure will be installed.

Answer:

Not applicable.

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8. Network Design: Provide a description of the network system design used to deliver broadband service from the network's primary internet point(s) of presence to end users, including the network components that already exist and the ones that would be added by the proposed project. Provide a detailed explanation of how this information was determined with sources. Provide information on how capacity for scalability, or expansion, of how the network can adapt to future needs. If using a technology with shared bandwidth, describe how the equipment will handle capacity during peak intervals. For wireless projects, provide a propagation map for the proposed project area with a clearly defined legend for scale of map. Label Map: Attachment 6 – Propagation Map Wireless Project.

Answer:

Comcast has built a fiber backbone at the core of its network that stretches across the country with almost 260,000 sheath miles of fiber - using the industry's advanced optics/lasers and Internet Protocol ("IP") routing technologies. Dozens of converged regional area networks interconnect to create this fiber backbone that delivers high-speed Internet, video, and voice services to tens of millions of customers throughout the country. IP technology ties all of this together, creating a highly scalable connectivity platform or "IP core." Nearly all of the 60 million homes and businesses in its service areas can access ultra-fast Xfinity Gigabit Internet and Comcast Business Gigabit services, including customers in Virginia.

Comcast currently serves the more densely populated areas of the county. Comcast will leverage the existing network to extend to the unserved areas of the county. In general, Comcast can expand utilizing [Redacted] .

[Redacted] .

[Redacted].

Recently, Comcast took another groundbreaking step forward in the road to 10G in what is believed to be the first-ever, end-to-end deployment by an Internet provider of advanced "hollowcore" fiber optics. Hollowcore fibers deliver significantly lower latency than traditional fibers and over time will provide critical performance attributes. These fibers will help power Comcast's network and support the delivery of multigigabit speeds through 10G. For more information on Comcast's hollowcore deployment, see the press release at <https://corporate.comcast.com/press/releases/comcast-first-isp-hollow-core-fiber-faster-speed-lower-latency>.

Additional information about these exciting developments is available at <https://www.cablelabs.com/path-10g-2020-update>.

For information on Comcast's Network Performance, please see Comcast's Network Performance Report at https://update.comcast.com/wp-content/uploads/sites/33/dlm_uploads/2022/02/0222_2021NetworkReport_V19.pdf

9. Speeds: Describe the internet service offerings, including download and upload speeds, to be provided after completion of the proposed project. Detail whether that speed is based on dedicated or shared bandwidth, and detail the technology that will be used. This description can be illustrated by a map or schematic diagram, as appropriate. List the private co-applicant's tiered price structure for all speed offerings in the proposed project area, including the lowest tiered speed offering at or above 100/20 Mbps. (up to 10 points)

Answer:

Comcast will offer customers multiple choices of residential and commercial broadband services,

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from which customers may choose depending on the customers' specific needs.

For your reference, the following services and prices are generally available throughout Virginia. Currently, the service tiers are offered at these prices noted in the table below.

Xfinity Residential Services

Tier

Speeds (Mbps)

Promotional Pricing (First 24 Months)

Regular Pricing (monthly)

Performance Starter

50 / 10

\$65.00

Performance

100 / 10

\$83.95

Performance Pro

300 / 10

\$49.99

\$98.95

Blast!

600 / 20

\$69.99

\$103.95

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Extreme Pro

900 / 20

\$79.99

\$108.95

Gigabit

1,200 / 35

\$89.99

\$113.95

Comcast Business Tier

Tier

Speeds (Mbps)

Business Internet 100

100 / 15

Business Internet 200

200 / 20

Business Internet 300 Plus

300 / 30

Business Internet 600

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600 / 35

Business Internet 1G

1,200 / 35

Note:

Prices above do not include equipment or applicable taxes, fees, and surcharges. Rates stated are the monthly rates for standalone Internet service as of the date of this submission. Pricing and services are subject to change. Discounted pricing may be available to customers who accept promotional offers or term agreements for Internet service or buy one or more additional services. Promotional pricing is a limited time offer, restrictions apply.

Additional Services

In addition to its high-speed residential and business internet offerings, Comcast provides a variety of other services including video, mobile, and home services.

Comcast Business Services. Comcast offers a variety of products and services to businesses. High-speed Internet services provide downstream speeds that range up to 1 Gbps and fiber-based speeds that range up to 100 Gbps. Our service offerings for small business locations primarily include high-speed Internet services, as well as voice and video services, that are similar to those provided to residential customers, cloud-based cybersecurity services, wireless backup connectivity, advanced Wi-Fi solutions, video monitoring services and cloud-based services that provide file sharing, online back up and web conferencing, among other features. Comcast also offers Ethernet network services that connect multiple locations and provide higher downstream and upstream speed options to medium-sized customers and larger enterprises, as well as advanced voice services, along with video solutions that serve hotels and other large venues. In addition, Comcast provides cellular backhaul services to mobile network operators to help them manage their network bandwidth. Comcast has expanded its service offerings to include a software-defined networking product for medium-sized and enterprise customers. Larger enterprises may also receive support services related to Wi-Fi networks, router management, network security, business continuity risks

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and other services. These service offerings are primarily provided to Fortune 1000 companies and other large enterprises with multiple locations both within and outside of Comcast's cable distribution footprint, where we have agreements with other companies to use their networks to provide coverage outside of our service areas.

Video Services. Comcast also offers a broad variety of video services, primarily through the X1 platform, an IP and cloud-enabled video platform that delivers the simplest, fastest, and most complete way for customers to access all their entertainment on all their screens. Video customers have access to hundreds of channels including programming provided by national broadcast networks, local broadcast stations, and national and regional cable networks, as well as government and public access programming. Comcast's video services also include access to video on demand services and an interactive, on-screen program guide.

VoIP Services. Comcast offers voice services using interconnected Voice over Internet Protocol technology. Service options provided include either unlimited or usage-based local and domestic long-distance calling, as well as options for international calling plans, voicemail, readable voicemail, nuisance call blocking tools and various call features such as caller ID and call waiting. Voice services also include the ability to access and manage voicemail and other account features through an online portal or mobile app.

Xfinity Mobile. Comcast offers wireless services for handsets, tablets and smart watches using mobile virtual network operator rights to provide the services over Verizon's wireless network, including its 5G technology and Comcast's existing network of more than 22.5 million in-home and outdoor Wi-Fi hotspots. Customers may choose to pay for services on an unlimited data plan, shared data plans, or per gigabyte of data used. Customers have the ability to bring their own device or purchase them from us with the option to pay upfront or finance the purchase interest-free over 24 months.

Xfinity Home. Xfinity Home, powered by Xfinity Internet, is one of the fastest growing home security providers in America. Not only does it offer peace of mind with 24/7 professional monitoring with battery and cellular backup, but it also includes smarter home security features like video monitoring and the ability to manage and control an increasing number of third-party smart home devices from a phone, tablet, the Xfinity Home touchscreen, or via the X1 Voice Remote.

10. Explain how the proposed project achieves universal broadband coverage for the locality or fits into a larger plan to achieve universal broadband coverage for the locality. If applicable, explain the remaining areas of need in the locality and a brief description of the plan to achieve universal broadband coverage. (up to 50 points)

Answer:

The preliminary broadband study identified several potential areas of unserved locations, and the current proposed project captures the largest area of unserved locations. This project is planned to achieve functionally universal broadband coverage in Stafford County. It would expand Comcast's existing service area to include locations which do not currently have access to service. The County expects updated federal maps as well as further discussions with incumbent ISPs to facilitate identifying any remaining unserved locations dispersed around the County as well as locations with long setbacks or lack of line-of-sight that - although passed - render them functionally unserved and therefore targets for future grant opportunities.

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11. Project Readiness

Describe the current state of project development, including but not limited to: planning, preliminary engineering, identifying easements/permits, status of MOU or MOA, and final design. Prepare a detailed project timeline or construction schedule, identifying specific tasks, staff, contractor(s) responsible, collection of data, etc., and estimated start and completion dates. Applicants are encouraged to extensively discuss, where applicable, easements relating to railroad crossings, federally-owned lands and parks, partnerships with the Virginia Department of Transportation, and mobile home parks. Applicants must include Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) between applicants (drafts are allowable). Label Attachments: Attachment 7 – Timeline/Project Management Plan; Attachment 8 – MOU/MOA between Applicant/Co-Applicant; (up to 10 points)

Answer:

Comcast has completed the planning and preliminary engineering phase for the proposed project. Final engineering, design and construction will commence upon the award of the grant. The initial tasks include project engineering and right of way preparation. These projects include a combination of underground and aerial construction. Given that Comcast already has facilities near the project area, which it can leverage in this project, Comcast will be able to implement the project quickly, upon receiving the final permits.

Throughout the duration of the project a dedicated Comcast team member will be in contact providing status and answering any questions the community may have, and the County will provide a dedicated Web page on its website to track and communicate progress and issue press releases and other forms of community outreach including social media.

Comcast anticipates completing the project within 18 months after contract execution between the County and DHCD. As contemplated by the 2023 VATI guidelines, Comcast may request an extension if it encounters permitting, pole attachment, or other circumstances beyond its control which may delay the project timeline. Comcast will activate service as areas are completed so many residents will be able to access service earlier than the end of the project.

Comcast will leverage existing pole attachment agreements with all the pole owning utilities in the project area. Having deployed thousands of miles of plant in Virginia, Comcast, has extensive experience working with pole owners and their processes in order to obtain the required permits to attach to poles. [Redacted].

The Stafford County Board of Supervisors approved a resolution on August 16 authorizing the grant application with Comcast. Comcast and the County will complete a formal agreement to make review of work and processing of payments as efficient as possible. Comcast has attached a sample MOU in draft form only.

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12. Has the applicant or co-applicant received any VATI grants? If so, provide a list of these grants, with a detailed summary of the status of each.

Answer:

Stafford County received a VATI 2020 grant with KGI as the co-applicant. The project closeout for this grant was submitted on August 2, 2022.

Stafford County received a VATI 2022 grant with Comcast as the co-applicant. The construction for this project is scheduled to commence in September 2022.

Between 2017 and 2021, DHCD awarded Comcast five Virginia Telecommunication Initiative ("VATI") grants. Comcast has successfully met or exceed the requirements of each of those awards, having constructed the projects on time and within the proposed budget. Comcast has deployed broadband, with speeds up to 1.2 Gbps and with services options designed for low-income households, to almost 3,000 locations throughout the project footprints. The FY22 Stafford County project is on track, with a timely completion expected.

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13. Matching funds: Complete the funding sources table indicating the cash match and in-kind resources from the applicant, co-applicant, and any other partners investing in the proposed project (VATI funding cannot exceed 80 percent of total project cost). In-kind resources include, but are not limited to: grant management, acquisition of rights of way or easements, waiving permit fees, force account labor, etc. Please note that a minimum 20% match is required to be eligible for VATI, the private sector provider must provide 10% of the required match. If the private co-applicant cash match is below 10% of total project cost, applicants must provide financial details demonstrating appropriate private investment. If applicants and co-applicants are seeking to include prior expended funds as matching funds, Attachment 11 must be completed. Label Attachments: Attachment 9 - Funding Sources Table; Attachment 10 – Documentation of Match Funding; Attachment 11 - Prior Expended Match Form

Answer:

The proposed project represents a partnership between Comcast and Stafford County. Comcast, the co-applicant, upon award of the VATI grant, will be responsible for any matching funds and will provide the labor and materials to complete the provision of services to the area delineated in the attached map. Comcast will provide approximately 40% of the projected construction costs of \$11,129,904, totaling approximately \$4,451,962. Stafford County will assist in providing approximately 12 % of the projected construction costs, totaling \$1,300,000, and in-kind contributions including application analysis and preparation, coordination with the Department of Housing and Community Development, assistance with right of way permitting, and participating in further concert with Comcast as the project is approved and construction begins. The value of these services will depend on the level of activity occurring as the project commences.

A breakdown of costs is below.

Name: Stafford County Project

Locations: 1,297

Mileage: 133.7

HP/Mile: 9.7

Total Cost: \$11,291,906

Comcast Cost: \$4,451,962

County Cost: \$1,300,000

VATI Gap Funding: \$5,377,944

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14. Leverage: Describe any leverage being provided by the applicant, co-applicant, and partner(s) in support of the proposed project. (up to 10 points)

Answer:

Stafford County will provide approximately 12% as a grant match, or \$1,300,000, which was approved by the Stafford County Board of Supervisors on August 16, 2022. This commitment is funded from the county's American Recovery Program funds.

15. Communications Plan: Describe efforts to keep the public informed of project progress and the broadband adoption plan.

a. Explain how you plan on communicating the project status to stakeholders, including but not limited to County leadership, project areas residents, etc. (Up to 10 points)

b. Explain how you plan to promote customer take rate, including marketing activities, outreach plan, and other actions to reach the identified serviceable units within the project area. Provide the anticipated take rate and describe the basis for the estimate. (up to 10 points)

c. Describe any digital literacy efforts to ensure residents and businesses in the proposed project area sufficiently utilize broadband. Please list any partnering organizations for digital literacy, such as the local library or cooperative extension office.

Answer:

a. Comcast will drive broadband adoption through a variety of means including mailing information to residents, local media, and outreach to the community. Also, Comcast will drive adoption of the affordable subscriber options, Internet Essentials and Internet Essentials Plus, to all eligible residents. Interested residents will be able to sign up for service by calling Comcast's toll-free telephone number, using Comcast's website or in person at the nearest Xfinity store. Comcast employs a sales and marketing team of professionals to support these efforts and call center team members are skilled in addressing questions regarding Comcast's products and services. If conditions allow, a public meeting or event can be held in conjunction with Stafford County in or near the proposed project area to inform the residents about the upcoming work and answer questions.

b. Forecasting a take rate with a high degree of accuracy is most challenging as the actual number of customers who choose to subscribe is beyond the parties' control. Comcast's take rate estimate for the project areas is based upon several unique factors. The County's support for the project and involvement with the community is expected to add heightened awareness earlier than might otherwise occur. The public nature of the VATI program is also expected to add to the early awareness of residents of broadband availability and positively enhance the take rate.

In Comcast's experience, [Redacted]. Comcast anticipates no different outcome with this project. Nonetheless, as Comcast [Redacted] once the project construction is complete and the proposed project area [Redacted].

Comparisons between applicants may not provide a useful measure of broadband access as each applicant will have different service offerings, marketing campaigns, and other intangibles that could drive take rates. [Redacted].

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c. Comcast is committed to serving all residences and businesses within the project area on a non-discriminatory basis with a variety of service options for low-income individuals and families. Under Comcast's Internet Essentials offering – the most comprehensive and successful low-income broadband adoption program in the nation – qualifying residential customers can obtain broadband service at speeds of up to 50 Mbps/10 Mbps for \$9.95/month, or speeds of up to 100 Mbps/10 Mbps for \$29.95/month with Internet Essentials Plus (plus applicable taxes, fees and surcharges), as well as free digital skills training in person and online. Comcast invests in programs that serve diverse individuals seeking equitable access to the advantages of technology and digital skills. To help reach as many people as possible, Comcast offers 240 languages through its call center and 7 languages through the online Internet Essentials application portal. Customers also have the option to purchase a low-cost Internet-ready computer. Internet Essentials is open to virtually all low-income households within Comcast's footprint, including families that qualify for federal assistance (e.g., National School Lunch Program, Medicaid, housing assistance) and low-income veterans, senior citizens, and persons with disabilities.

Since launching in 2011, Comcast has made dozens of improvements to the program, including expanding eligibility 14 times—bringing Internet Essentials to new audiences such as public housing residents, low-income veterans, seniors, community college students, and most recently, to all qualified low-income households living in Comcast's service area. Comcast has also increased the speeds for Internet Essentials, with the most recent speed increase to 50 Mbps/10Mbps occurring earlier this year. Since 2011, Internet Essentials has connected a cumulative total of more than ten million Americans to the Internet.

Illustrating this impact, in a 2021 Comcast survey, 76% of participants in Comcast's Internet Essentials broadband adoption program said their service has helped someone in their household find a job, and 78% of households with lost wages due to COVID-19 believe Internet Essentials has helped reduce that loss. 79% said the service has helped them find health and/or medical information. Significantly, 90% reported a positive impact on their child's grades.

In September of 2020, Comcast announced a multiyear program to launch WIFI connected “Lift Zones” in community centers nationwide for anyone to use, including students, adults, seniors, and veterans. Lift Zones are facilities primarily designed to help provide low-income students with a safe, clean space to participate in distance learning or do homework, however, are also available for adults for remote work, apply for a job, or learn digital skills.

Comcast has a long history of partnering with and supporting the communities we serve. Recently, Comcast has been focused on creating a world of unlimited possibilities through Project UP, championing Diversity, Equity & Inclusion, and protecting the environment. A few key accomplishments include:

- Installing 1,000+ Lift Zones nationwide in 2021 and committing to 250 more in 2022, to provide communities with free Internet access.
- Reaching our most inclusive employee representation in the ten years since we have been tracking diversity data:
 - Our overall workforce is 36% women and 45% people of color as of the end of 2021.
 - 47% of our new hires last year were women and 57% were people of color.
- Reducing our Scope 1 and 2 greenhouse gas emissions by 19% from 2020 to 2021, marking progress

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toward our carbon neutral goal.

For more information, please see the 2022 Impact Report (<https://corporate.comcast.com/impact/report/2022>) and the 2022 Internet Essentials Progress Report (<https://corporate.comcast.com/stories/2022-internet-essentials-progress-report>)

16. Project Management: Identify key individuals who will be responsible for the management of the project and provide a brief description of their role and responsibilities for the project. Present this information in table format. Provide a brief description of the applicant and co applicant's history and experience with managing grants and constructing broadband communication facilities.

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The following lists the individual members of the Project Management Team and outlines their roles and responsibilities for the pre-contract and implementation phases of the Project from Stafford County. Stafford County has managed numerous grants with DHCD, including two VATI Grants (VATI FY 2020 and VATI FY 2022), CARES ACT Broadband Program 2020-2022, COVID-19 CV1, CV2 and CV3.

Chief Administrative Official - the County Administrator, Randy Vosburg will serve as the Chief Administrative Officer and will provide communications to the Board and serve as the signatory authority for official requests/modifications to the grant as needed.

Grant Manager - Tina Owens will serve as the primary point of contact for the County and oversee the Project for the County, including the completion of draft remittance requests for submission to the Financial Manager for review.

Project Manager - Will lead Project Management Team meetings and track the status of the project, review and submit monthly reports, and coordinate Project activities for the County. The Chief Technology Officer of the County, Michael Cannon or his designee will lead this effort. In addition, the County may hire a consultant to assist with project management and other activities.

Grant Coordinator - Anthony Toigo the County's Grants Administrator, will track the progress of the grant project for the Board and County Administration

Financial Manager - Tracy Edwards, Grants Accountant, will review all Comcast invoices and remittance requests. Will also review and submit remittance requests to DHCD.

Attorney - Jeannise Galloway Ewing, Assistant County Attorney, will review contracts, official communications, and other legal matters as needed.

BIOs of Key Individuals

Randal Vosburg, is the County Administrator of Stafford County and has over twenty years of local government experience. He also served as County Administrator of Highlands County, Florida and as Assistant County Administrator. He was the director of Strategic Planning and Director of professional compliance for Sheriff's Department at Polk County, Florida.

Michael Cannon has over 35 years of experience managing and leading IT and telecommunications initiatives with over twenty in local governments. For the past six years he has served as the CTO for Stafford County and managed two VATI grants FY 2020 and FY2022. He is also on the Executive Committee of the the first of its kind smart community testbed for the Commonwealth located in Stafford, which launched in May, 2021. The testbed utilizes smart city technology and a variety of IoT devices to demonstrate and validate a variety of use cases focused on public safety, the environment, and the community with the goal of improving the quality of life for residents and visitors.

Tracy Edwards has over 10 years of grant management experience in a professional environment. She was with a local Sheriff's Office for 7.5 years helping with over 40 active law enforcement grants. She also worked within a local healthcare system for 3 years managing both Ryan White and Domestic Violence grants. In her current position as the Grants Accountant, she's supporting Stafford County grants, helping account for our ARPA funding, and working to ensure financial compliance.

Information about Comcast's management team is included in Attachment 20 - Network Expansion Management Team

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17. Project Budget and Cost Appropriateness

Budget: Applicants must provide a detailed budget that outlines how the grant funds will be utilized, including an itemization of equipment, construction costs, and a justification of proposed expenses. If designating more than one service area in a single application, each service area must have delineated budget information. For wireless projects, please include delineated budget information by each tower. Expenses should be substantiated by clear cost estimates. Include copies of vendor quotes or documented cost estimates supporting the proposed budget. Label Attachments: Attachment 12 – Derivation of Costs; Attachment 13 - Documentation of Supporting Cost Estimates. (up to 10 points)

Answer:

Comcast's Construction and Design team managed projects that added thousands of miles to Comcast's regional network in 2021-2022. Comcast's construction estimates are determined through a detailed project analysis that includes a desktop survey, an analysis of permitting costs (internal or external), a network impact study to determine necessary hub site preparation and possible infrastructure requirements, and a financial evaluation for overall build costs and likely return-on-investment. When contract labor is utilized, costs are accrued according to the fee schedule in the contract. The design and construction process is standard within the telecommunications industry.

As specifically noted in the attached project budget, examples of items that are included in the Material category are: power supplies, fiber conduit, splice enclosures, pedestals, and taps. Examples of items in the Labor category are in-house and contract labor to trench and backfill, lay conduit and fiber, perform administration of VDOT permits, and provide crew supervision.

Comcast estimates that this project will cost \$11,129,906.

As noted, the cost estimate includes [Redacted]. As such, there will be no additional construction charges to customers that are included in the project that are connected to the network during the project construction period. If a premise requires service line installation and Comcast is not granted access during the construction period, Comcast reserves the right to charge the customer for such work should the property owner seek to be connected after the construction period is complete and the project is closed.

18. The cost benefit index is comprised of state cost per unit passed. Individual cost benefit scores are calculated and averaged together to create a point scale for a composite score. Provide the following:
- Total VATI funding request
 - Number of serviceable units
(up to 125 points)

Answer:

a. Total VATI funding request - \$5,377,944

b. Number of serviceable units – 1,297

19.

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Commonwealth Priorities (Up to 50 points)

Additional points will be awarded to proposed projects that reflect Commonwealth priorities. If applicable, describe the following:

- a. Businesses, community anchors, or other passings in the proposed project area that will have a significant impact on the locality or region because of access to broadband.
- b. Unique partnerships involved in the proposed project. Examples include electric utilities, universities, and federal/state agencies.
- c. Digital equity efforts to ensure low to moderate income households in the proposed project area will have affordable access to speeds at or above 100/20 mbps, include information regarding the internet service provider's participation in the Affordable Connectivity Program
- d. The co-applicant's efforts to mitigate supply chain constraints, including labor shortages and order-to-delivery delays on telecommunications materials required to construct broadband networks.
- e. The applicant's and co-applicant's efforts to promote broadband adoption, including, but not limited to: telehealth, smart farming, e-entrepreneurship, and distance learning.

Answer:

- a. The project will provide a broadband network capable of delivering speeds that reliably meet or exceed 100 Mbps download and at least 20 Mbps upload speeds [Redacted].
- b. Comcast has a unique array of partnerships as noted in attachment 19 that relate to digital literacy, digital equity and broadband access and adoption. Stafford County formed a public-private partnership with the Virginia Innovation Partnership Corporation and OST to form the Virginia Smart Community Testbed (<https://vatestbed.com/>). The mission of the testbed is to serve as the hub for the Commonwealth of Virginia's network of living laboratories to test new smart technology, and generate practical, proven knowledge that can be used as the "model smart community" by cities and counties across the country.
- c. Comcast is proud to be an approved provider supporting the federal government's Affordable Connectivity Program (ACP) program. To date, ACP has connected over 11.5 million households. At a May 2022 White House event, Comcast was recognized for stepping up with innovative offerings like Internet Essentials Plus to help eligible families take full advantage of the ACP benefit. ([White House Lines up Broadband Providers, Websites for ACP – MeriTalk](https://www.meritalk.com/articles/white-house-lines-up-broadband-providers-websites-for-acp/); <https://www.meritalk.com/articles/white-house-lines-up-broadband-providers-websites-for-acp/>). Under the ACP program, qualifying customers may apply a credit of up to \$30 per month (\$75 per month in Tribal lands) to any Xfinity Internet service tier, including Blast!, Extreme, and Gigabit product tiers. As such, Comcast offers several lower cost options offering speeds in excess of 100Mbps/20Mbps. Importantly, qualifying customers may also apply the ACP credit to Internet Essentials, and one line of Unlimited on Xfinity Mobile. For example, an Internet Essentials customer (paying \$9.95/month) can add one line of Unlimited on Xfinity Mobile (\$45/month) for \$24.95/month after applying the ACP discount. Customers who subscribe to Internet Essentials or Internet Essentials Plus and enroll in ACP will effectively get broadband for free after the \$30/month government discount is applied. For more information, see <https://corporate.comcast.com/press/releases/comcast-affordable-connectivity-program-internet-essentials-service-xfinity-mobile>.
- d. In a time characterized by logistical constraints and supply chain delays, Comcast's extensive network of engineers, technicians, vendors, and partners provides an edge in ensuring a timely delivery of projects. The

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scale of Comcast's business also allows it to lock in competitive pricing on materials and equipment and effectively manage large projects.

e. Providing broadband service to this unserved area will greatly improve the community's quality of life by enabling residents to bridge the local skills gap, expand their career pathways, access and engage in telehealth opportunities, pursue education, and more. Upon completion of this project, the homeowners will have access to some of the fastest and most reliable broadband speeds available nationwide.

Furthermore, with access to broadband, community residents will be able to pursue education from their own homes and on their own time, which could provide significant savings compared to an on-campus traditional education experience. Online courses can be taken by anyone: homeschooled children, college students, entrepreneurs, freelancers, officegoers, and retirees. Education resources such as those offered by universities allows students to obtain a degree at their own pace and schedule without the added costs of on-campus life. Without high-speed Internet and increased broadband capacity, residents lack the connectivity they need to pursue a modern education and compete in today's world.

Comcast is a long-time community leader and is actively engaged in an array of community programs targeted at bridging the digital divide, supporting diversity and inclusion, and promoting volunteerism. Comcast's contributions are a significant driver of economic development and competitiveness in the city, and Comcast hopes to maintain this important role throughout the coming years.

Broadband Adoption

If selected, Comcast will drive broadband adoption for all consumers through a variety of means including mailing information to residents, local media, and outreach to the community. Comcast will also drive adoption of its affordable subscriber options, Internet Essentials and Internet Essentials Plus, to all eligible residents. Interested residents will be able to sign up for service by calling Comcast's toll-free telephone number, using Comcast's website, or in person at the nearest Xfinity store. Comcast employs a sales and marketing team of professionals to support these efforts and call center team members are skilled in addressing questions regarding Comcast's products and services. If conditions allow, a public meeting or event can be held in conjunction with county in or near the proposed project area to inform the residents about the upcoming work and answer questions. Comcast will partner with local leaders, community organizations, and non-profit groups to further maximize the broadband adoption rate in the Project Area.

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20. Additional Information

Please attach any letters of support from stakeholders. If the applicant is not a locality(s) in which the project will occur, please provide a letter of support from that locality.

Attachment 14 – Letters of Support.

Provide the two most recent Form 477 submitted to the FCC, or equivalent, as well as point, polygon, and, for wireless providers, RSSI shapefiles for the project area **in .zip file form**. With attachments 17 through 20, attach any other information that the applicant desires to include. Applicants are limited to four additional attachments.

Label Additional Attachments as:

- a. Attachment 15 –Two most recent Form 477 submitted to the FCC or equivalent
- b. Attachment 16 - Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area
- c. Attachment 17 - For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area
- d. Attachment 18 – XXXXXXXX
- e. Attachment 19 – XXXXXXXX
- f. Attachment 20 – XXXXXXXX

Answer:

N/A

Attachments:

Map(s) of project area, including proposed infrastructure

Attachment1ProjectAreaMap823202242303.pdf

Documentation of Federal Funding (CAF/ACAM/USDA/RDOF, etc...) in and/or near proposed project area.

Attachment2DocumentationforFederalFunding825202291257.pdf

Documentation that proposed project area is unserved based on VATI criteria

Attachment1ProjectAreaMap825202291223.pdf

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Passings Form (Use template provided)

Attachment4PassingsFormStafford829202224634.pdf

Documentation of RDOF awarded area in VATI project Area (Use template provided)

Attachment5RDOFAwardedAreasincludedinVATI825202290946.pdf

Propagation Map if Wireless Project

Attachment6PropagationMap825202272752.pdf

Timeline/Project Management Plan

Attachment7TimelineProjectManagementPlan829202224714.pdf

MOU/MOA between applicant/co-applicant (can be in draft form)

Attachment8MOUMOAbetweenApplicantCoApplicantStafford829202224800.pdf

Funding Sources Table (Use template provided)

Attachment9FundingSourcesTable829202224910.pdf

Documentation of Match Funding

Attachment10DocumentationofMatchFundingStafford829202230157.pdf

Prior Expended Match Form (use template provided)

Attachment11PriorExpendedMatchForm825202233349.pdf

Derivation of Cost/Project Budget (Use template provided)

Attachment12DerivationofCostsStaffordCounty829202225444.pdf

Documentation of Supporting Cost Estimates

Attachment13DocumentationofSupportingCostEstimates829202225523.pdf

Letters of Support

Attachment14LettersofSupport823202241630.pdf

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Two most recent Form 477 submitted to the FCC or equivalent

Attachment15TwomostrecentForm477submittedtotheFCCorequivalent825202233313.pdf

Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area

Attachment16PointandPolygonShapefiles825202255616.zip

For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area

Attachment17RSSIProjectionShapefiles825202233209.pdf

Optional

Attachment18NetworkPerformanceandDevelopments829202225654.pdf

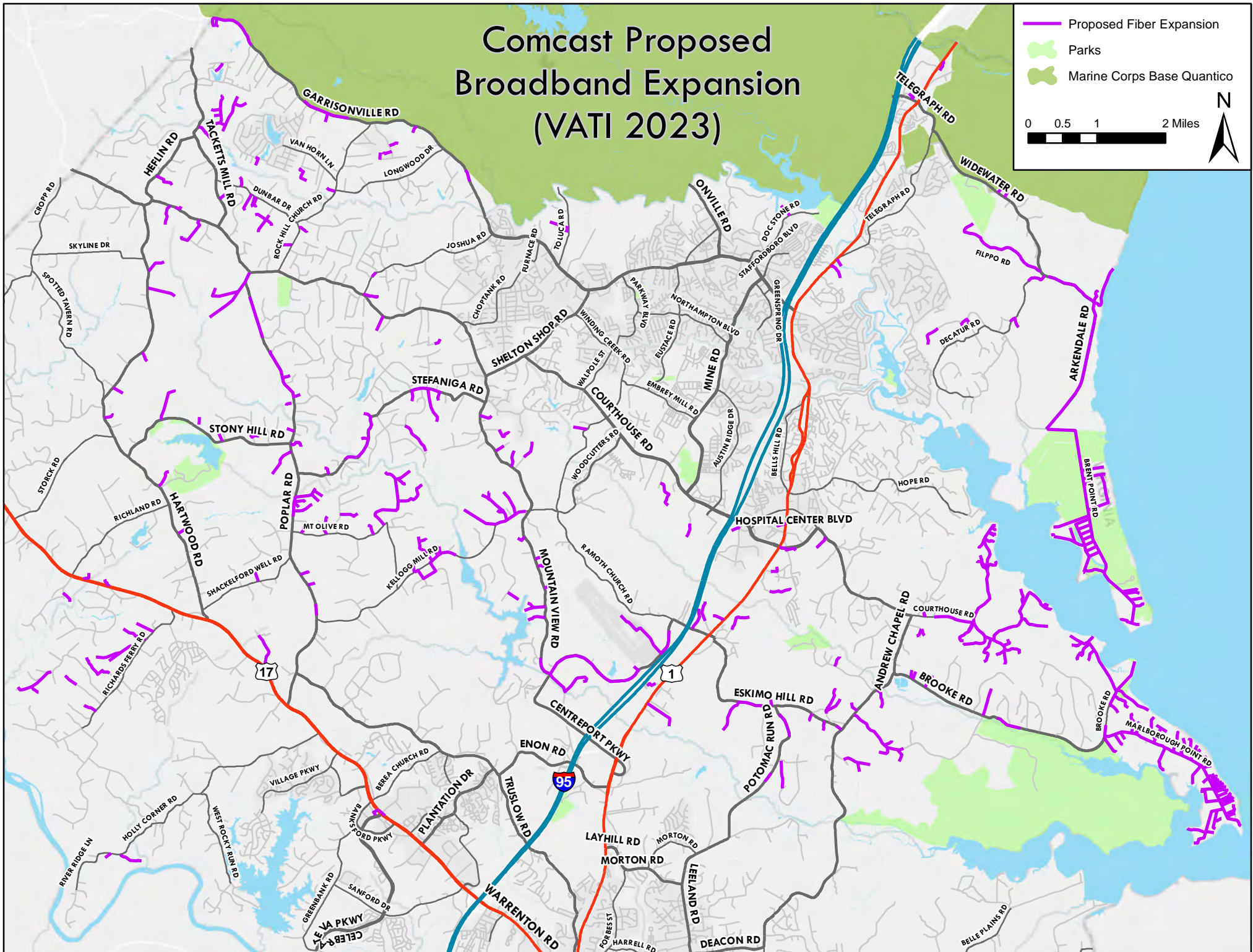
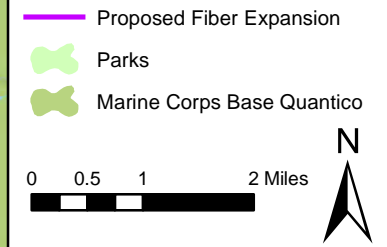
Optional

Attachment20NetworkExpansionManagementTeam829202225823.pdf

Optional

Attachment19CommunityImpactandInternetEssentialsReports825202291507.pdf

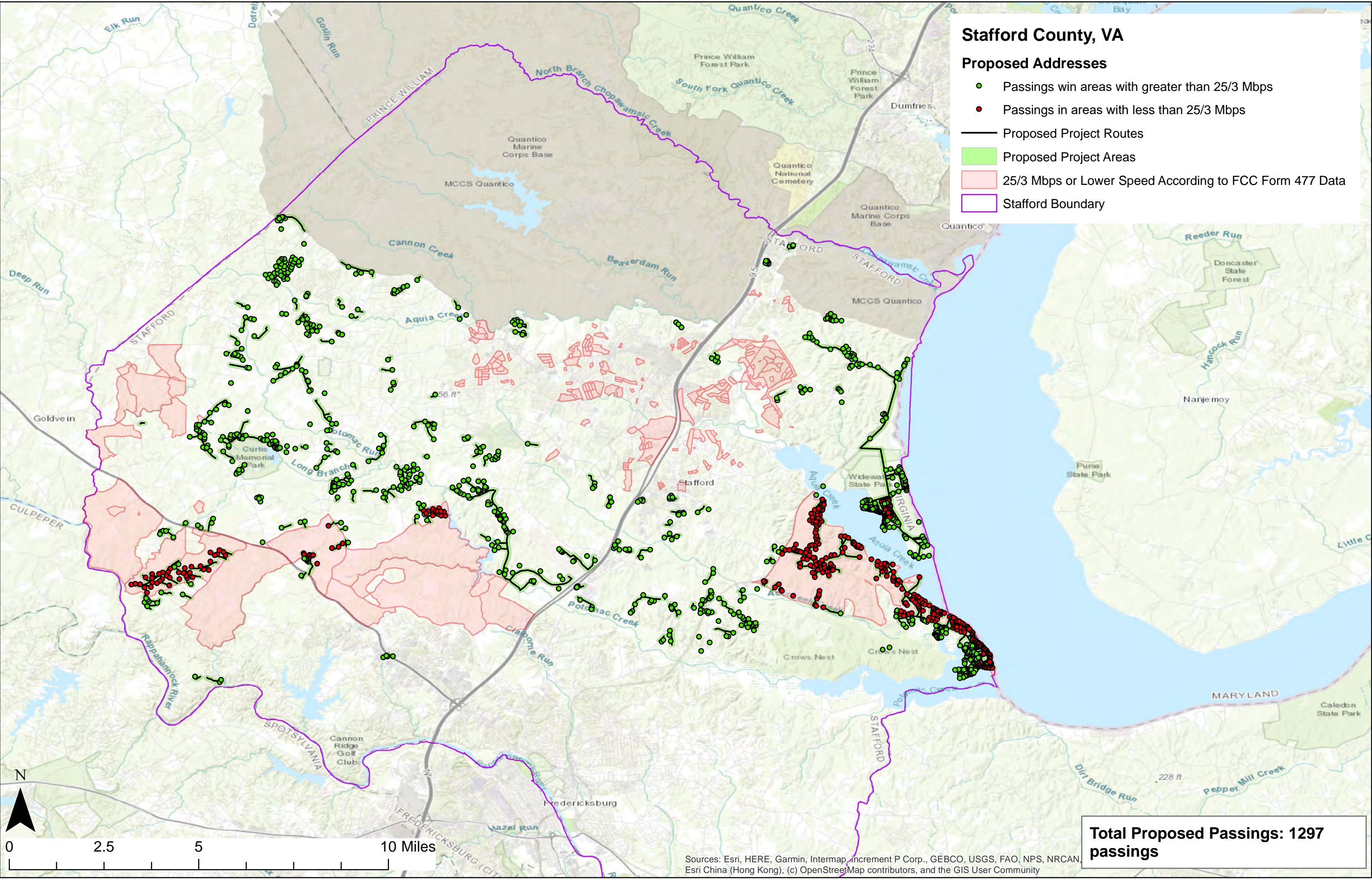
Comcast Proposed Broadband Expansion (VATI 2023)



Stafford County, VA

Proposed Addresses

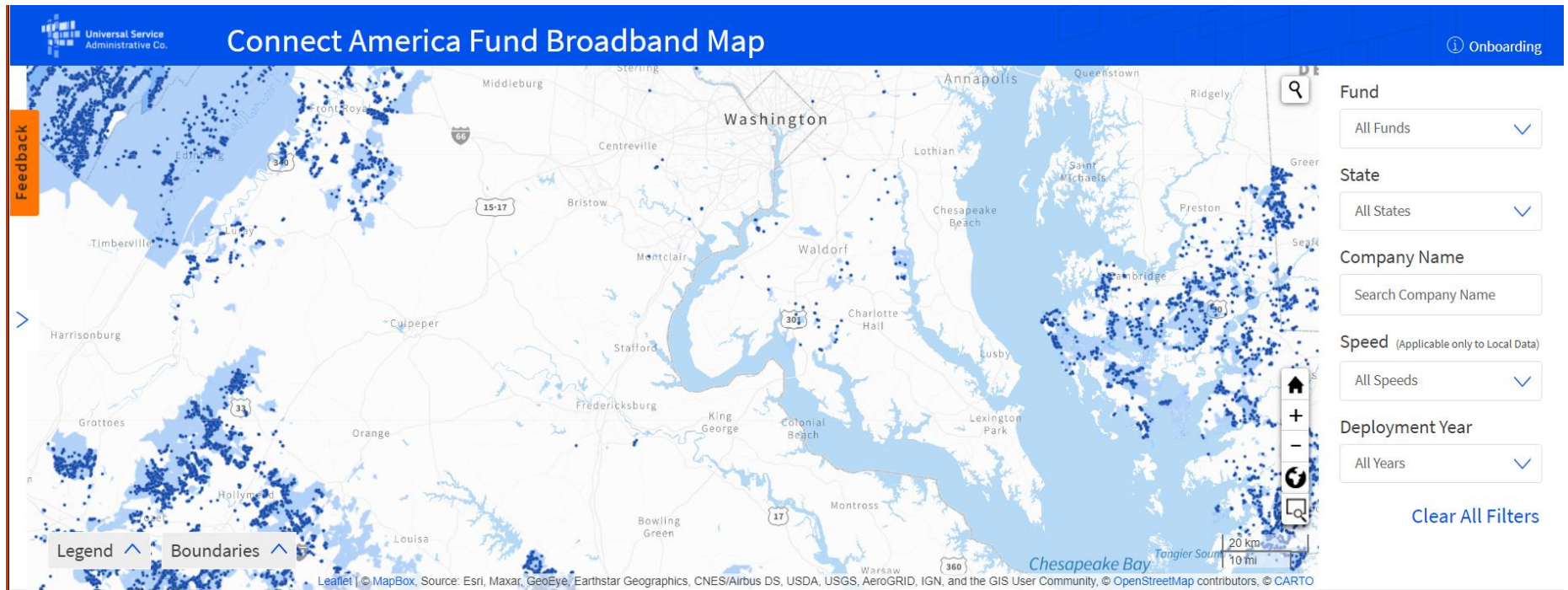
- Passings win areas with greater than 25/3 Mbps
- Passings in areas with less than 25/3 Mbps
- Proposed Project Routes
- Proposed Project Areas
- 25/3 Mbps or Lower Speed According to FCC Form 477 Data
- Stafford Boundary



Total Proposed Passings: 1297
passings

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

FY23 Virginia Telecommunication Initiative
Attachment 2 – Documentation of Federal Funding



The map above notes no federal Connect America Funds II (CAF II), Alternative Connect America Cost Model (ACAM), and Rural Digital Opportunity Funds (RDOF) have been awarded in Stafford County.

Source: <https://data.usac.org/publicreports/caf-map/>; accessed August 24, 2022

Type of Passings	Total Number of Passings in the Project Area ¹	Passings in the Project Area, without Special Construction Costs Required ²	Passings with Special Construction Costs budgeted in the Application ³	Number of Passings with Speeds at 25/3or below in Project Area ⁴
Residential	1278		0	307
Businesses (non-home based)	15	0	0	0
Businesses (home-based)	65	0	0	0
Community Anchors	2	0	0	0
Non-residential	2	0	0	0
Total	1297	0	0	0

Note : The Total Number of Passings **MUST** be equal to the Residential, Business (non-home based), Non-residential and Community Anchors sum.

Note : Do not include passings in RDOF awarded areas that were awarded to the co-applicant; these passings should be included in the RDOF Passings Form. Passings included in this application in RDOF awarded areas that were not awarded to the co-applicant, unless successfully challenged, are considered unserved and should be counted as passings in this form.

¹ The total number of structures in the project area that can receive service. See definition of passing below for more detail.

² The number of structures in the project area that will not require special construction costs to provide service to. These passings fall within the broadband provider’s standard service connection drop length and do not require nonstandard equipment or any additional fees above normal service connection fees required to provide broadband access to a premise.

³ The number of structures in the project area with all construction costs budgeted in the application. These passings will not require any additional special construction costs beyond those budgeted for in the VATI application.

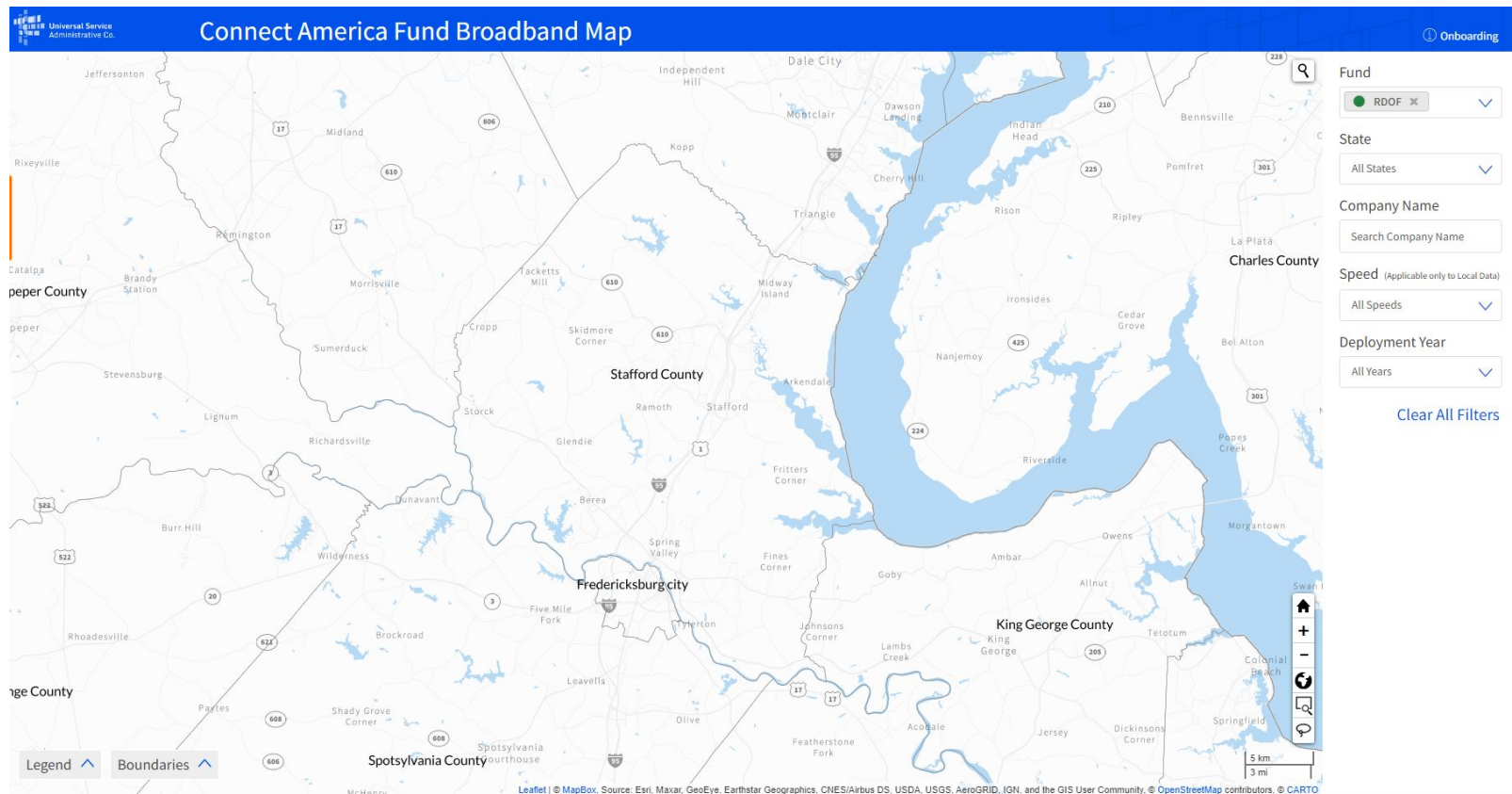
⁴ The number of structures in the project area that do not have access to internet at speeds of at least 10 mbps download and 1mbps upload.

Business – An organization or entity that provides goods or services in order to generate profit. Businesses based in residential homes can count if they are a registered business (BPOL, LLC, etc.).

Community Anchor - schools, libraries, medical and health care providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and agencies that provide outreach, access, equipment, and support services to facilitate greater use of broadband service by vulnerable populations, including low-income, unemployed, and the aged.

Non-Residential Passing – places of worship, federal, state, or local facilities or other potential customers that are neither a residence, business or a community anchor as defined above.

FY23 Virginia Telecommunication Initiative
Attachment 5 – RDOF Awarded Areas included in VATI Application



The map above notes no federal Rural Digital Opportunity Funds (RDOF) have been awarded in Stafford County.

Source: <https://data.usac.org/publicreports/caf-map/>; accessed August 25, 2022



August 25, 2022

ATTACHMENT 6. Propagation Map if Wireless Project

Attachment 6 is not applicable to this grant application.

Comcast - FY23 VATI Network Expansion Project Proposal Timeline



START DATE

January 01, 2023

*Project timeline includes 3-month period following award announcement to execute VATI agreement and 18-month period to complete project.

				YEAR 1												YEAR 2								
Task	START DATE	END DATE	# of Business Days	01/23	02/23	03/23	04/23	05/23	06/23	07/23	08/23	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24	06/24	07/24	08/24	09/24
Award announcement and finalize grant agreement(s)	01/01/23	03/30/23	64																					
Project Engineering (with DHCD pre-authorization)	02/01/23	08/31/23	152																					
Walk-out (with DHCD pre-authorization)	01/01/23	05/01/23	86																					
Permitting (with DHCD pre-authorization)	02/01/23	08/31/23	152																					
Design (with DHCD pre-authorization)	02/01/23	08/31/23	152																					
Materials (with DHCD pre-authorization)	12/01/22	04/15/23	97																					
Make Ready (with DHCD pre-authorization)	12/15/22	02/01/24	296																					
Construction	04/01/23	08/31/24	370																					
Total Project	04/01/23	09/30/24	391																					

**AGREEMENT BETWEEN STAFFORD COUNTY AND COMCAST
CABLE COMMUNICATIONS, LLC
FOR BROADBAND EXPANSION PROJECT**

This Agreement is dated [DATE] between Stafford County, Virginia, hereinafter referred to as the “[County]” and Comcast Cable Communications, LLC, hereinafter referred to as “Comcast,” each a “Party” and together, the “Parties.”

WHEREAS, the County is authorized to expend American Rescue Plan Act (“ARPA”) funds to ensure that unserved residents and businesses in the County have access to broadband in order to promote economic development within the County, and

WHEREAS, Comcast provided an estimate of costs to support a “Project,” whereby Comcast will design, build, own, operate, manage and maintain a hybrid fiber coaxial cable or fiber EPON network extension that will provide access to broadband internet service to certain unserved residents in the County,

WHEREAS the County determined that the public interest is served by contracting with Comcast to bring broadband to certain residents in the County, and

WHEREAS, the County and Comcast intend to fund the Project as set forth in this Agreement;

Now THEREFORE, the parties hereto do mutually agree as follows:

1. Definitions.
 - a) “Qualifying Broadband Service” means high speed internet service capable of 100Mbps download and 20 Mbps upload speeds and be scalable to a minimum of 100Mbps symmetrical for download and upload speeds based on future technology advances.
 - b) “Cable Franchise Agreement” means the grant of authority issued to Comcast by the [Township] to own and operate its network in the public rights of way dated [DATE].
 - c) “Excusable Delay Event” means a delay that results from: (1) an event described in Section 13 of this Agreement that impacts Comcast’s ability to achieve Final Completion of the Project- including, but not limited to a make-ready work that is not completed within six (6) months of Comcast's submission of a proper application for utility pole attachments.
 - d) “Final Completion” means the date certified in writing by Comcast that construction of the Network has been completed by the Comcast and the locations in the Project Area are Serviceable.
 - e) “Network” means the hybrid fiber coaxial cable or fiber communications network extension that Comcast builds in the County.
 - f) “Project Area” means the residential or business addresses intended to be served by

the Network funded by the Project as set forth in Exhibit A.

- g) “Serviceable” means a location in the Project Area which has access to the Qualifying Broadband Service.

2. Term and Termination.

- a) This Agreement shall commence on [DATE] (the “Effective Date”) and shall expire upon the date of Final Completion, unless terminated sooner in accordance with the provisions of this Agreement. Notwithstanding the forgoing, Comcast may terminate this Agreement at any time, with or without reason, at its convenience by giving the County thirty (30) days prior written notice of such termination.
- b) This Agreement may be terminated for default for a breach of any one or more material terms of this Agreement that the breaching party fails to remedy in accordance with this section. In the event of a breach of one or more material terms of this Agreement, the non-breaching party must provide written notice of the breach(es) to the breaching party. In the event that the breaching party does not cure the breach(es) within thirty (30) calendar days from receipt of the non-breaching party’s written notice (or such longer time to which the Parties may agree), the non-breaching party may terminate this Agreement, in whole or in part.
- c) Termination of this Agreement by either Party as permitted herein shall not limit the legal rights and remedies otherwise available either Party.

2. Project Description

Comcast shall construct a Network capable of delivering Qualifying Broadband Service to certain unserved premises in the County (“Project Area”). The Project Area includes [NUMBER] ([]) residential/business premises that currently lack access to broadband service.

3. Performance of the Work.

- a) Comcast will design, build, own, operate, manage and maintain the Network that will provide access to Qualifying Broadband Service in the Project Area. Upon Final Completion, Comcast will operate the Network consistent with the terms of its Cable Franchise Agreement.
- b) Final Completion of the Project shall be within eighteen (18) months of the Effective Date of this Agreement; provided, however, that the date for Final Completion will be extended for each day of delay caused by the occurrence of an Excusable Delay Event. The Parties agree that they have a shared interest in pursuing options that would expedite the construction and completion of the Project in order to accelerate access to Qualifying Broadband Service in the Project Area. In furtherance of this shared interest, the Parties shall cooperate to identify appropriate mechanisms to accelerate Project performance, including, but not limited to assisting in expediting the issuance of necessary permits.

- c) Comcast acknowledges that it is solely responsible for all Project decisions, the preparation of all plans and specifications, and for developing, performing, and completing the Project.
- 4. Project Personnel.
Each Party shall provide written notice to the other Party within five (5) business days of the Effective Date identifying the person serving as each Party's point of contact to support effective communication and to report on the Project's progress. Each Party's notice shall also include the address, phone numbers, and email address for the point of contact. In the event there is a change in a Party's point of contact, the affected Party shall provide (a) prompt written notice to the other Party of the change and (b) the new point of contact's contact information.
- 5. Ownership of Project and Service Requirements.
 - a) Comcast shall retain ownership in and have exclusive use of the Network and all equipment used or deployed in connection with the Project.
 - b) Comcast shall operate and maintain the Network consistent with applicable industry standards and offer the Qualifying Broadband Service to each Serviceable location in the Project Area under terms, conditions and prices reasonably consistent with what Comcast offers to its customers in the County.
- 6. Payment.
 - a) In consideration of Comcast's agreement to complete the Project, County shall pay to Comcast an amount of [AMOUNT] DOLLARS (\$[]) payable as set forth in Section 7. The County represents and warrants that they are authorized to expend such funds and that they shall comply with any and all applicable laws related to the expenditure of such funds.
 - b) Comcast contribute [AMOUNT] DOLLARS (\$[]) for the Project.
- 7. Invoicing and Payment.
 - a) Reporting/Payment Schedule
 - i. Comcast shall submit invoices for payment and Project status reports to the County point of contact.
 - ii. Comcast shall submit invoices, accompanied by a Project status report, with appropriate supporting documentation, to County, no more frequently than quarterly.
 - iii. The County shall pay Comcast within thirty (30) days of receipt of an invoice and Project status report.
- 8. Confidentiality.

- a) “Confidential Information” includes, but is not limited to, information, drawings, data, specifications, technical information, and other information or materials furnished or made available by the disclosing Party to the receiving Party that reasonably should be considered proprietary and/or confidential and/or that the disclosing Party has indicated is proprietary and/or confidential.
- b) The Parties agree that during and after the expiration or termination of this Agreement, neither Party, nor any person, firm, corporation or other entity affiliated with, owned in whole or in part by, employed by or otherwise connected with the receiving Party, shall directly or indirectly, without the express written consent of the disclosing Party, divulge, use, sell, exchange, furnish, give away, or transfer in any way the Confidential Information of the disclosing Party.
- c) The Parties agree that, during the term of this Agreement and for a period of three (3) years from the expiration or termination thereof, any Confidential Information received from the other Party:
 - i. will only be used for the purpose of performing obligations and exercising rights under the Agreement;
 - ii. will not be disclosed to any third party without prior written approval of the disclosing Party, except for disclosures to third parties that are expressly contemplated hereunder;
 - iii. may only be disclosed within the receiving Party’s organization to employees that have a “need-to-know” such information in connection with the performance of the receiving Party’s obligations under the Agreement and who have been advised of the obligations regarding Confidential Information under the Agreement;
 - iv. will be treated with at least the same degree of care as the receiving Party treats its own Confidential Information, but in no event less than a reasonable degree of care;
 - v. will be copied only to the extent necessary for the purposes of this Agreement; and
 - vi. will remain the property of the disclosing Party.
- d) In the event that the receiving Party is served with a subpoena or other validly issued administrative or judicial process demanding the Confidential Information of the disclosing Party, the receiving Party shall promptly notify the disclosing Party so that the disclosing Party may seek a protective order or other remedy. The Parties shall reasonably cooperate with each other to quash such process or otherwise to limit the scope of any required disclosure. Unless the demand shall have been timely limited, quashed, or extended, the receiving Party shall be entitled to comply with such demand to the extent permitted by law. In the event that disclosure of any Confidential

Information is compelled, either Party shall seek an appropriate protective order from the court or administrative body to limit access to the Confidential Information.

- e) Upon the expiration or termination of this Agreement or upon the disclosing Party's request, the Contractor shall return all Confidential Information to the disclosing Party or at the disclosing Party's option, destroy all Confidential Information and provide, within ten (10) days of the disclosing Party's request, a written certification that all Confidential Information in all formats, including without limitation, paper, electronic and disk form, have been returned or destroyed, as the case may be.
- f) Each Party acknowledges that unauthorized disclosure or use of the other Party's Confidential Information could cause irreparable harm and significant injury to the disclosing Party that may be difficult to ascertain. Accordingly, each Party agrees that the disclosing party shall have the right to seek immediate injunctive relief from breach or threatened breach of this Agreement prohibiting any unauthorized disclosure or use of the Confidential Information, in addition to any other rights and remedies the disclosing Party may have.
- g) The confidentiality provisions of this section shall survive the termination or expiration of this Agreement.

9. Limitation of Liability.

- a) NOTWITHSTANDING ANY PROVISION IN THIS AGREEMENT TO THE CONTRARY, UNDER NO CIRCUMSTANCE OR LEGAL THEORY (TORT, CONTRACT OR OTHERWISE), SHALL COMCAST BE LIABLE TO THE COUNTY FOR INDIRECT, EXEMPLARY, SPECIAL, OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF REVENUE, PROFIT OR USE OR COST OF CAPITAL OR OF SUBSTITUTE USE OR PERFORMANCE (COLLECTIVELY "CONSEQUENTIAL DAMAGES"), ARISING UNDER THIS AGREEMENT, IRRESPECTIVE OF WHETHER OR NOT THE [TOWNSHIP] HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.
- b) THE MAXIMUM LIABILITY OF COMCAST UNDER THIS AGREEMENT SHALL NOT EXCEED THE AMOUNT THE COUNTY WILL PAY TO COMCAST AS SET FORTH IN SECTION 6.a OF THIS AGREEMENT.

10. Changes.

In the event the County requests any change to the Project that causes an increase in the cost or time required for performance of the Project, Comcast shall notify the County of such within thirty (30) calendar days from the date of receipt of the County's written request. If the Parties agree to such changes in writing, the funding for the Project and the Final Completion date shall be equitably adjusted to incorporate such changes. Any request for work to be performed by Comcast outside the scope of this Agreement must be addressed under a separate agreement be executed by the Parties prior to performance.

11. Assignment; Transfer.

Neither Party may assign this Agreement in whole or in part, or delegate any of its duties or obligations thereunder, without the prior written consent of the other Party, except that without such consent Comcast (i) may assign this Agreement to a successor (by purchase, merger, operation of law, or otherwise) to all or substantially all of its business; and (ii) may assign this Agreement to an affiliate or subsidiary, provided such entity agrees in writing to be bound by the terms hereof. Any purported assignment in contravention of this section shall be null and void. Subject to the foregoing, this Agreement will bind and inure to the benefit of any permitted successors or assigns. Nothing herein is intended to limit Comcast's use of third-party consultants and contractors to perform the Project.

12. Nondiscrimination.

Comcast agrees to comply with all applicable federal, state, and local statutes, rules and regulations promoting fair employment practices or prohibiting employment discrimination and unfair labor practices. Comcast shall not discriminate in the hiring of any applicant for employment nor shall any qualified Comcast employee be demoted, discharged or otherwise subject to discrimination in the tenure, position, promotional opportunities, wages benefits or terms and conditions of their employment because of race, color, national origin, ancestry, age, sex, religion, disability, handicap, sexual orientation, gender identification, or for exercising any rights afforded by law.

13. Excusable Delay Event.

Neither party shall be liable to the other or be deemed to be in breach of this Agreement for any failure or delay in rendering performance arising out of causes beyond its reasonable control and without its fault or negligence. Such causes may include, but are not limited to, acts of God or of a public enemy, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or unusually severe weather.

14. Governing Law and Venue.

This Agreement shall be interpreted and enforced in accordance with the laws of the VIRGINIA without regard to its conflict of laws principles. Any dispute arising under this Agreement that is not settled between the Parties shall take place in any court of competent jurisdiction in VIRGINIA. Each Party shall bear its respective legal costs. **TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, EACH PARTY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN CONNECTION WITH ANY LITIGATION ARISING OUT OF THIS AGREEMENT.**

15. Compliance With Laws.

The Parties agree to comply with all applicable local, state and federal laws, regulations, and ordinances in the performance of this Agreement.

16. Modification; Amendment.

This Agreement shall not be modified or amended, in whole or in part, except by written agreement signed by the Parties.

17. Survival.

The provisions of this Agreement that, by their sense and context, are intended to survive performance by either Party or the Parties shall also survive the completion, expiration, termination, or cancellation of this Agreement.

18. Headings; Exhibits.

The headings of paragraphs in this Agreement are for convenience only; they form no part of this Agreement and shall not affect its interpretation. All schedules, exhibits or attachments referred to in this Agreement shall be incorporated in and constitute a part of this Agreement.

19. Construction.

In the event that any portion of this Agreement is held to be invalid or unenforceable, the Parties shall replace the invalid or unenforceable portion with another provision that, as nearly as possible, reflects the original intention of the Parties, and the remainder of this Agreement shall remain in full force and effect.

20. Counterparts.

This Agreement may be executed and delivered in counterparts, all of which taken together shall constitute a single instrument.

21. Entire Understanding.

This Agreement constitutes the entire understanding of the parties related to the subject matter hereof, and supersedes all prior agreements, proposals, representations, statements, or understandings, whether written or oral, concerning the Project or the Parties' rights or obligations relating to the Project.

22. Waivers.

Conditions, covenants, duties and obligations contained in this Agreement may be waived only by written agreement executed by the Parties. Forbearance or indulgence in any form or manner by a Party shall not be construed as a waiver, nor in any way limit the remedies available to that Party.

23. Notice.

Any notice provided in accordance with this Agreement shall be in writing and shall be sent by electronic mail to the Project Manager with a copy to the individuals listed below.

County:

Comcast:

Any notice shall be deemed delivered and received when submitted in writing in person or when delivered by any other appropriate method evidencing actual receipt by the receiving party.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by a duly authorized representative by their hands and seals, intending to be so bound, as of the day and year firstabove written.

ATTEST: _____

COMCAST CABLE COMMUNICATIONS, LLC

By: _____

Name: _____

Title: _____

ATTEST: _____

STAFFORD COUNTY

By: _____

Name: _____

Title: _____

EXHIBIT A

[illegible]

VATI FUNDING SOURCES TABLE

Please fill in the chart below with a description of the project funding source (local, federal, state, private, other), the amount from that source, the percentage of total project funding that source represents, and a description of the current status of the funds (pending, secured, etc.).

Source	Amount	%	Status
REQUESTED VATI	\$ 5,377,944	48	Pending
PRIVATE	\$ 4,451,962	40	CONFIRMED
LOCAL	\$ 1,300,000	12	CONFIRMED
	\$		
	\$		
	\$		
	\$		
TOTAL	\$ 11,129,906	100 %	



August 25, 2022

Tammy Breski
Program Manager, Virginia Telecommunication Initiative
Virginia Department of Housing and Community Development
600 E Main Street, #300
Richmond, VA 23219

Dear Ms. Breski:

The purpose of this letter is to provide documentation regarding the in-kind contributions for the project proposed to the Virginia Telecommunication Initiative ("VATI") program.

The proposed project represents a partnership between Comcast and Stafford County. As indicated in the application, Comcast will provide approximately 40% of the projected construction costs of \$11,129,906 totaling approximately \$4,451,962. Stafford County will provide approximately 12% of the projected construction costs, totaling \$1,300,000, will assist in providing in-kind contributions including application analysis and preparation, coordination with the Department of Housing and Community Development, assistance with right of way permitting, and participating in further concert with Comcast as the project is approved and construction begins. The value of these services will depend on the level of activity occurring as the project commences.

Should you have any questions regarding the information listed above, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "Misty Allen".

Misty Allen
Regional Vice President, Government & Regulatory Affairs

BOARD OF SUPERVISORS
COUNTY OF STAFFORD
STAFFORD, VIRGINIA

RESOLUTION

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, George L. Gordon, Jr., Government Center, Stafford, Virginia, on the 16th day of August, 2022:

<u>MEMBERS:</u>	<u>VOTE:</u>
Crystal L. Vanuch, Chairman	Yes
R. Pamela Yeung, Vice Chairman	Yes
Tinesha O. Allen	Yes
Meg Bohmke	Yes
Thomas C. Coen	Yes
Darrell E. English	Absent
Monica L. Gary	Yes

On motion of Ms. Yeung, seconded by Ms. Allen, which carried by a vote of 6 to 0, the following was adopted:

A RESOLUTION TO AUTHORIZE APPLICATION FOR THE FY2023 VIRGINIA TELECOMMUNICATIONS INITIATIVE (VATI) GRANT WITH COMCAST CORPORATION AS CO-APPLICANT TO BRING BROADBAND SERVICE TO VARIOUS UNSERVED AND UNDERSERVED AREAS OF THE COUNTY

WHEREAS, the County seeks to provide service to approximately 1,251 homes and businesses unserved and underserved by telecommunication broadband services in various parts of the County; and

WHEREAS, the Virginia Department of Housing and Community Development (DHCD) has implemented the Virginia Telecommunications Initiative (VATI), which provides grants to supplement construction costs by private sector broadband service providers in partnership with local units of government; and

WHEREAS, the County seeks to apply for the fiscal year (FY) 2023 VATI grant, which will award projects in an amount not to exceed 10% of DHCD's total available funds in FY2023; and

WHEREAS, the County identified Comcast Corporation (Comcast) as an eligible co-applicant for the VATI grant through Request for Information #22-01-1245-RFI; and

WHEREAS, Comcast has proposed to construct and bring landline service to 1,251 unserved and underserved homes and businesses in various parts of the County with an anticipated total project cost of \$10,230,000; and

WHEREAS, based on the proposed project costs, the request for VATI grant funds would include a match of 40% of the total project cost or \$4,092,000 would be provided by Comcast and 12.7% or \$1,300,000 would be provided by the County; and

WHEREAS, American Rescue Plan Act (ARPA) funds are available and can be used for the County's portion of the local match; and


WHEREAS, if the FY2023 VATI grant is awarded, staff desires to reallocate portions of prior ARPA fund appropriations to cover the County's portion of the local match associated with the FY2023 VATI grant; and

WHEREAS, the VATI grant application deadline is on or before August 25, 2022;

NOW, THEREFORE, BE IT RESOLVED by the Stafford County Board of Supervisors on this the 16th day of August, 2022, that the County Administrator be and he hereby is authorized to submit a FY2023 Virginia Telecommunications Initiative (VATI) grant application with co-applicant Comcast Corporation to extend broadband service to 1,251 or more unserved and underserved homes and businesses in various parts of Stafford County; and

BE IT FURTHER RESOLVED that if awarded, Comcast Corporation will provide 40% or \$4,092,000 in matching funds, and Stafford County would provide 12.7% or \$1,300,000 in American Rescue Plan Act (ARPA) funds as a local match.

A Copy, teste:


Randy E. Vosburg
County Administrator

REV:MQC



August 25, 2022

ATTACHMENT 11. Prior Expended Match Form

Attachment 11 is not applicable to this grant application.

STAFFORD COUNTY

ATTACHMENT 12

Derivation of Costs



1215 E. Fort Avenue
Suite 103
Baltimore, MD 21230

Product	Total	VATI	Non-VATI	Source of Estimate	Date
EXAMPLE					
<u>Construction</u>					
Broadband Construction – 133.7 miles	\$11,129,906	\$5,377,944	\$5,751,962	Comcast	8/25/2022

Documentation of Supporting Cost Estimates

* to be used for ineligible items necessary for the project

*Comcast will invoice for any Virginia Telecommunication Initiative projects on a reimbursement basis. A reimbursement voucher(s) would include a detailed materials list, copies of vendor invoices, and documentation of payment of Comcast expenses. Reimbursement vouchers may include confidential and proprietary information which Comcast would submit following applicable program guidelines and law.



VATI, rr <vati@dhcd.virginia.gov>

VATI DHCD for Stafford County

U.S. Senator Kaine <senator@kaine.senate.gov>
To: director@dhcd.virginia.gov

Mon, Aug 29, 2022 at 5:43 PM

TIM KAINE
VIRGINIA

COMMITTEE ON
ARMED SERVICES

COMMITTEE ON
FOREIGN RELATIONS

COMMITTEE ON
THE BUDGET

COMMITTEE ON
HEALTH, EDUCATION, LABOR,
AND PENSIONS

United States Senate
WASHINGTON, DC 20510-4607

WASHINGTON OFFICE:
WASHINGTON, DC 20510-4607
(202) 224-4024

August 29, 2022

The Honorable Bryan Horn
Director
Virginia Department of Housing and Community Development
600 E Main St Ste 300
Richmond, VA 23219-2430

Dear Director Horn:

I write to express support for Stafford County, an applicant for grant funding under the Virginia Department of Housing and Community Development's (DHCD) Virginia Telecommunication Initiative, for funding to deploy high-speed broadband internet access throughout the county.

Stafford County is partnering with a national cable company to provide broadband access to 1,251 homes in unserved and underserved areas throughout the County. The project will total 156 line extensions and 120 miles of fiber in order to help Stafford progress towards universal broadband coverage. Access to high-speed internet is the key to equity in education for today's schoolchildren and to the sustainability of today's workforce, as recently evidenced by the COVID-19 pandemic. Broadband is part of the essential infrastructure for a modern community, particularly in Stafford County, a bedroom community of Washington, D.C., and home to many federal employees, as well as multiple defense contractors and their employees.

Please give full and fair evaluation to this project, which will benefit Stafford County and its residents seeking better connectivity for their children's schooling, their work, and the general communications of our modern, interconnected world. Should you have any questions regarding this project, contact my Office's Grants Coordinator, Eida_Stanco@kaine.senate.gov. Thank you.

Sincerely,

Tim Kaine



Candi Mundon King

P.O. Box 524
Dumfries, VA 22026

2nd HOUSE DISTRICT

COMMONWEALTH OF VIRGINIA

HOUSE OF DELEGATES

RICHMOND

COMMITTEE ASSIGNMENTS:
PRIVILEGES AND ELECTIONS
PUBLIC SAFETY
FINANCE

August 19, 2022

Mr. Randal E. Vosburg
County Administrator
Stafford County Government
1300 Courthouse Road
Stafford, VA 22554

Dear Mr. Vosburg:

I am writing to you in support of the Virginia Telecommunications Initiative (VATI) grant which provides financial assistance to supplement construction costs by private sector broadband service providers extending service to areas currently unserved by any broadband provider and the underserved. I support the efforts of Stafford County and Comcast in bringing high-speed broadband internet access particularly to the unserved and underserved residents in areas throughout the county.

Stafford County is partnering with Comcast Cable to apply for a 2023 VATI Award. If successful, the project will provide broadband access to 1,251 homes in unserved and underserved areas throughout Stafford County. The project will total 156 line extensions, 120 miles of fiber, and help Stafford to progress towards universal broadband coverage.

Additionally, as proven during the Coronavirus epidemic, access to high-speed internet is the key to equity in education for today's schoolchildren and to the sustainability of today's workforce. It is part of the essential infrastructure for a modern community, particularly in Stafford County, a bedroom community of Washington, D.C., and home to many defense contractors as well as their employees and federal employees.

Thank you so much for working on this effort on behalf my constituents. Again, I confirm support of your request of the VATI grant.

Best regards,

A handwritten signature in blue ink, appearing to read "C. Mundon King".

Candi Mundon King
Member, Virginia House of Delegates

COMMONWEALTH OF VIRGINIA

SENATE OF VIRGINIA

RICHARD H. STUART

TWENTY-EIGHTH SENATORIAL DISTRICT

PART OF KING GEORGE, PRINCE WILLIAM,
SPOTSYLVANIA, STAFFORD, AND
WESTMORELAND COUNTIES



COMMITTEE ASSIGNMENTS:
AGRICULTURE, CONSERVATION, AND
NATURAL RESOURCES
GENERAL LAWS AND TECHNOLOGY
JUDICIARY

August 16, 2022

Mr. Randal E. Vosburg
County Administrator
Stafford County Government
1300 Courthouse Road
Stafford, Virginia 22554

Dear Mr. Vosburg:

I am writing to you in support of the Virginia Telecommunications Initiative (VATI) grant which provides financial assistance to supplement construction costs by private sector broadband service providers extending service to areas currently unserved by any broadband provider and the underserved. I support the efforts of Stafford County and Comcast in bringing high-speed broadband internet access particularly to the unserved and underserved residents in areas throughout the county.

Stafford County is partnering with Comcast Cable to apply for a 2023 VATI Award. If successful, the project will provide broadband access to 1,251 homes in unserved and underserved areas throughout Stafford County. The project will total 156 line extensions, 120 miles of fiber, and help Stafford to progress towards universal broadband coverage.

Additionally, as proven during the Coronavirus epidemic, access to high-speed internet is the key to equity in education for today's schoolchildren and to the sustainability of today's workforce. It is part of the essential infrastructure for a modern community, particularly in Stafford County, a bedroom community of Washington, D.C., and home to many defense contractors as well as their employees and federal employees.

Thank you so much for working on this effort on behalf my constituents. Again, I confirm support of your request of the VATI grant.

Sincerely,

A handwritten signature in dark ink, appearing to be "R. Stuart", with a long horizontal flourish extending to the right.

Richard H. Stuart
Member, Senate of Virginia
Twenty-Eighth District

ROBERT J. WITTMAN

1ST DISTRICT, VIRGINIA

HOUSE ARMED SERVICES COMMITTEE
RANKING MEMBER, SEAPOWER AND PROJECTION FORCES
TACTICAL AIR AND LAND FORCES

NATURAL RESOURCES COMMITTEE
WATER, OCEANS, AND WILDLIFE

CO-CHAIR, CONGRESSIONAL
SHIPBUILDING CAUCUS

CO-CHAIR, CONGRESSIONAL
CHESAPEAKE BAY WATERSHED TASK FORCE

CO-CHAIR, CONGRESSIONAL
PUBLIC HEALTH CAUCUS

CO-CHAIR, CONGRESSIONAL
RURAL BROADBAND CAUCUS



Congress of the United States
House of Representatives
Washington, DC 20515

WASHINGTON OFFICE:
2055 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-4261

DISTRICT OFFICES:

STAFFORD OFFICE
95 DUNN DRIVE SUITE 201
STAFFORD, VA 22556
(540) 659-2734

MECHANICSVILLE OFFICE
6501 MECHANICSVILLE TURNPIKE SUITE 102
MECHANICSVILLE, VA 23111
(804) 730-6595

MIDDLE PENINSULA OFFICE
508 CHURCH LANE
P.O. Box 3106
TAPPAHANNOCK, VA 22560
(804) 443-0668

WWW.WITTMAN.HOUSE.GOV

August 22, 2022

Mr. Randal E. Vosburg
County Administrator
Stafford County Government
1300 Courthouse Road
Stafford, VA 22554

Dear Mr. Vosburg:

I am writing in support of the Stafford County FY2023 Virginia Department of Housing and Community Development Virginia Telecommunications Initiative (VATI) grant application to expand high-speed broadband availability in the First Congressional District through a partnership with Comcast. Approval of this application would help meet the critical need to buildout high-speed broadband service to residents of Stafford County.

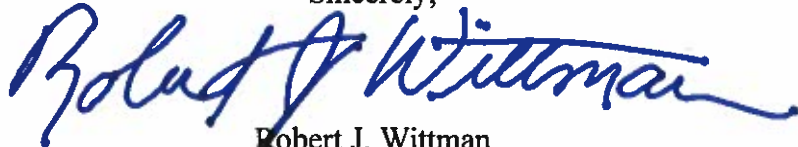
Rural residents in Virginia's First Congressional District appreciate the value of high-speed broadband access. Providing reliable broadband access is vital for commercial stability, job creation, distance learning, and telehealth service expansion. Throughout the First Congressional District of Virginia, as in other largely rural areas, economic incentives are needed to expand broadband access, and the VATI program has been a successful vehicle of meeting that need. VATI encourages private telecommunications providers to enlarge their coverage and gives localities the ability to design the expansion that is right for their communities. This eases the financial burden associated with construction costs, broadens service, and creates a successful public-private partnership (P3) for the awardees and for the Commonwealth.

Stafford County is partnering with Comcast Cable to apply for a 2023 VATI Award. If successful, the project will provide broadband access to 1,251 homes in unserved and underserved areas throughout Stafford County. The project will total 156-line extensions, 120 miles of fiber, and help Stafford to progress towards universal broadband coverage.

Additionally, as proven during the COVID-19 pandemic, access to high-speed internet is the key to fairness in education for today's students and to the sustainability of the modern workforce. It is part of the essential infrastructure for a modern community, particularly in Stafford County, a bedroom community of Washington, D.C.

Thank you for your consideration of the Stafford County application. Moreover, if you have any concerns or questions, please do not hesitate to contact my office.

Sincerely,

A handwritten signature in blue ink, reading "Robert J. Wittman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Robert J. Wittman
Member of Congress

United States Senate

WASHINGTON, DC 20510-4606

August 17, 2022

COMMITTEES:
FINANCE

BANKING, HOUSING, AND
URBAN AFFAIRS

BUDGET

INTELLIGENCE

RULES AND ADMINISTRATION

The Honorable Bryan Horn
Director
Virginia Department of Housing and Community Development
600 East Main Street, Suite 300
Richmond, VA 23219-2430

Dear Director Horn,

I write today in support of Stafford County's grant proposal to the Virginia Department of Housing and Community Development's (DHCD) Virginia Telecommunication Initiative to assist with bringing broadband service to unserved and underserved areas of the community.

Broadband is a necessity in our world today. For too many Americans, lack of access to affordable, high-speed internet is the barrier to being able to connect with health care providers online, participate in distance learning, or work from home. I understand that this proposed project will provide broadband access to 1,251 homes in unserved and underserved areas throughout Stafford County. The project will total 156 line extensions, 120 miles of fiber, and help Stafford to progress towards universal broadband coverage. Affordable, high-speed internet is part of the essential infrastructure for a modern community and is important for residents of Stafford County, which is home to many defense contractors and federal employees.

I ask that you give this proposal every appropriate consideration. To the extent possible, please continue to update my office on the status of this grant by emailing GrantSupport_Warner@warner.senate.gov.

Thank you for your service on behalf of my constituents.

Sincerely,



MARK R. WARNER
United States Senator

MRW/aw

☐ 180 WEST MAIN STREET
ABINGDON, VA 24210
PHONE: (276) 628-8158

☐ 101 WEST MAIN STREET
SUITE 7771
NORFOLK, VA 23510
PHONE: (757) 441-3079

☐ 919 EAST MAIN STREET
SUITE 630
RICHMOND, VA 23219
PHONE: (804) 775-2314

☒ 120 LUCK AVENUE, SW
SUITE 108
ROANOKE, VA 24011
PHONE: (540) 857-2676

☐ 8000 TOWERS CRESCENT DRIVE
SUITE 200
VIENNA, VA 22182
PHONE: (703) 442-0670

Stafford County Economic Development Authority

Dr. Tamara Holmes
Associate Director of Policy and Strategic Development
Department of Housing and Community Development
600 E. Main Street, Suite 1100
Richmond, VA 23219

Dr. Holmes:

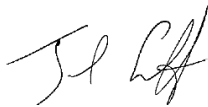
Please accept this letter of support for the Stafford County Virginia Telecommunications Initiative (VATI) grant on behalf of the member of the Stafford County Economic Development Authority (EDA).

The EDA is very proud of the work being done and honored to have supported prior VATI applications. The truth is, however, that more must be done in Stafford County to meet the demands of the new workforce and to promote future economic resiliency. In our opinion, access to broadband internet is paramount to the economic vitality of Stafford County and the Commonwealth of Virginia. Just as importantly, the areas and citizens who would be served by this critical infrastructure are among the most in need of broadband service for their future economic vitality.

Finally, we believe this is an aggressive and highly leveraged project that will meet the goals of the VATI program and deliver superior results for our citizens.

Do not hesitate to reach out to the EDA directly regarding any facet of this letter or our support for this application in general.

Sincerely,



Joel Griffin, Chairman

From: Michael Q. Cannon
Sent: Monday, August 15, 2022 2:03 PM
To: Shannon G. Eubanks <seubanks@staffordcountyva.gov>
Subject: RE: Comcast

Thank you Shannon. This is very helpful for the grant application.

From: Shannon G. Eubanks <seubanks@staffordcountyva.gov>
Sent: Monday, August 15, 2022 9:43 AM
To: Brandon <brandonestep1@gmail.com>; Brian Roinestad (broinestad@AtlanticBuilders.com) <broinestad@AtlanticBuilders.com>; Glenna Meade - TCC (glenna099@outlook.com) <glenna099@outlook.com>; Kelly Carder <tripsforme@cox.net>; Michael Campesi <michael@campesi.com>; Nicholas Iroaka-Ohia (nicholas.staffordteleboard@gmail.com) <nicholas.staffordteleboard@gmail.com>; Wanda Blackwell <wanda_blackwell@hotmail.com>
Cc: Michael Q. Cannon <MCannon@staffordcountyva.gov>
Subject: FW: Comcast

FYI

Shannon Eubanks
Community Engagement Manager

Department of Community Engagement
Office: 540.658.4893 | Mobile: 540.498.8176
Email: seubanks@staffordcountyva.gov
1300 Courthouse Road, Stafford, VA 22554
www.staffordcountyva.gov



From: Daniel Byler <daniel.m.byler@gmail.com>
Sent: Sunday, August 14, 2022 7:03 AM
To: Shannon G. Eubanks <seubanks@staffordcountyva.gov>
Subject: Comcast

Hi--

I understand that Stafford County is applying for a grant to get Comcast service out to Marlborough Point. I want to write in support of this for a few major reasons:

1. My wife and I work from home and our current internet provider (KGI) is unreliable. We frequently have outages and it makes working from home painful and at many times impossible.
2. My children homeschool due to congenital health defects. Having reliable internet helps their school be effective.

Internet has become a foundational utility for my family and I would really appreciate having it be reliable and high speed.

Thanks so much for your time.

Daniel



August 25, 2022

Tammy Breski
Program Manager, Virginia Telecommunication Initiative
Virginia Department of Housing and Community Development
Main Street Centre
600 East Main Street, Suite 300
Richmond, Virginia 23219

Re: Attachment 15 – Two most recent Form 477 submitted to the FCC or equivalent

Dear Ms. Breski,

The purpose of this letter is to provide information regarding the recent Form 477 submissions or equivalent by Comcast to the Federal Communications Commission. Data from Comcast's submissions can be located at <https://www.fcc.gov/general/broadband-deployment-data-fcc-form-477>.

Should you have any questions regarding the information listed above, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read "K. Broadhurst".

Kevin Broadhurst
Vice President of Government and Regulatory Affairs



August 25, 2022

ATTACHMENT 17. RSSI Projection Shapefiles

Attachment 17 is not applicable to this grant application.

Appendix 18: Network Performance and Developments

Recently, Comcast took another groundbreaking step forward in the road to 10G in what is believed to be the first-ever, end-to-end deployment by an Internet provider of advanced “hollowcore” fiber optics. Hollowcore fibers deliver significantly lower latency than traditional fibers and over time will provide critical performance attributes. These fibers will help power Comcast’s network and support the delivery of multigigabit speeds through 10G. For more information on Comcast’s hollowcore deployment, see the press release below.

Additional information about these exciting developments is also available below In CableLabs' Path to 10G update and Comcast's Network Performance report, as seen below.

Comcast Becomes First ISP in the United States to Deploy Advanced Hollowcore Fiber with Faster Speed, Lower Latency

Apr 20, 2022



PHILADELPHIA, PA

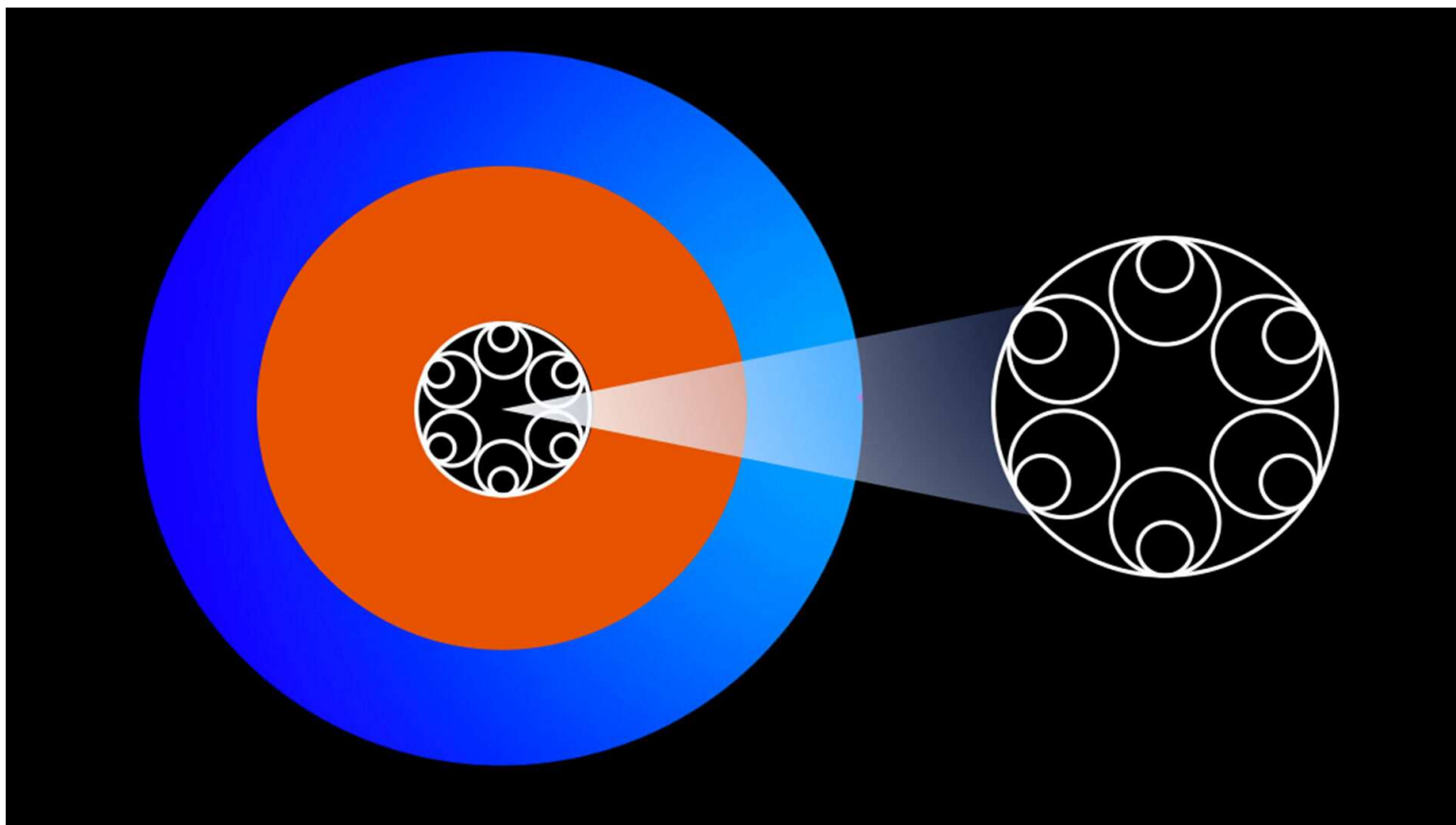
Comcast, the nation's largest gig-speed Internet provider, today announced what is believed to be the first-ever end-to-end deployment of advanced "hollowcore" fiber optics in the world by an Internet provider.

Hollowcore fibers deliver significantly lower latency than traditional fibers and over time will provide critical performance attributes. These fibers will help power Comcast's network <https://corporate.comcast.com/our-network> and support the delivery of multigigabit speeds through 10G.

How does Hollowcore work?

Since light travels nearly 50% faster through air than glass, data travels much faster through hollowcore than through traditional fiber. The faster speed can be used to double the reach for latency critical applications and speed up the transaction rates by around 47%.

<https://update.comcast.com/download/16764>
Download the Fact Sheet



Unlike traditional fibers, in which laser light travels over a solid glass core, hollowcore fibers are empty inside with air-filled channels. Since light travels nearly 50 percent faster through air than glass, data travels about 150 percent faster with up to 33 percent lower latency through hollowcore fiber compared to traditional fiber. The faster speed of light can be used to double the reach for latency critical applications or can speed up the transaction rates by around 47 percent. For the deployment announced today, Comcast worked with hollowcore fiber cable solutions provider, [Lumenicity](https://lumenicity.com/) <https://lumenicity.com/>.

“Hollowcore fiber is a leap forward in how we deliver ultra-fast, ultra-low latency and ultra-reliable services to customers,” said Elad Nafshi, EVP & Chief Network Officer at Comcast Cable.

As we continue to develop and deploy technology to

deliver 10G, multigigabit performance to tens of millions of homes, hollowcore fiber will help to ensure that the network powering those experiences is among the most advanced and highest performing in the world.

ELAD NAFSHI

EVP & Chief Network Officer at Comcast Cable

Comcast connected two locations in Philadelphia, which enables network engineers to continue to test and observe the performance and physical compatibility of hollowcore fiber in a real-world deployment. This 40-kilometer hybrid deployment of hollowcore and traditional fiber is believed to be the longest in the world by an Internet provider. Comcast successfully tested bidirectional transmission (upstream and downstream traffic traveling on a single fiber), used coherent and direct-detect systems (allowing for forward and backward technology compatibility), and produced traffic rates ranging from 10 gigabits per second (Gbps) to 400 Gbps all simultaneously on a single strand of hollowcore fiber.

“We are proud to be working with Comcast on the next generation hollowcore fiber, which we believe unlocks exciting new potential for connectivity around the world,” said David Parker, Executive Chairman of Lumenisity.

Hollowcore fiber will help to power the next generation of ultra-low latency technologies to support network virtualization, telemedicine, augmented and virtual reality, and other emerging services. Moving forward, Comcast is exploring opportunities to strategically deploy hollowcore fiber in select core- and access-network deployments. From 2017 to 2021, Comcast added more than 50,000 new

route miles of fiber to its network and is actively building more fiber into cities and towns across the United States.

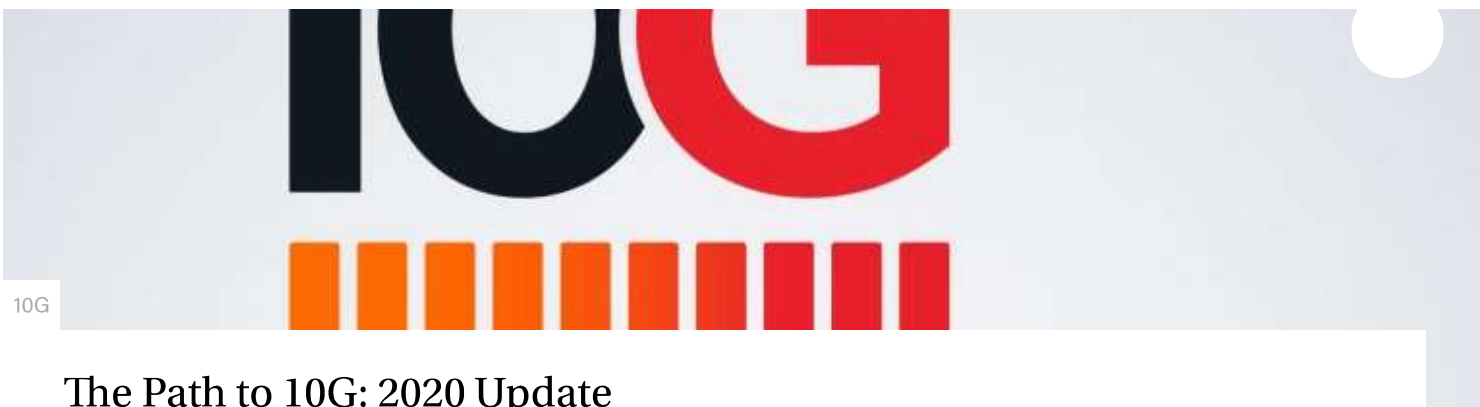
50K+

**New route miles of fiber added
to Comcast's network from 2017
to 2021.**

Comcast's ongoing work to expand and evolve its fiber deployments – including this groundbreaking step forward with hollowcore fiber – helps to power Comcast's [ongoing 10G evolution https://corporate.comcast.com/press/releases/world-first-test-10g-modem-technology-multigigabit-speeds-to-homes](https://corporate.comcast.com/press/releases/world-first-test-10g-modem-technology-multigigabit-speeds-to-homes), which will deliver reliable multigigabit upload and download speeds over the connections already installed in tens of millions of homes and businesses.

What is 10G?

10G technology builds on the work Comcast has done over the past several years to build a smarter, more virtualized network. In addition to providing a path to multigigabit upload and download speeds at scale, 10G updates will deliver near-term benefits to customers in the form of increased reliability, performance, and lower latency.



The Path to 10G: 2020 Update

Mariam Sorond Chief Research and Development Officer and Senior Vice President

Jan 3, 2020



The future of connectivity holds technical enhancements that are meant to change the way we live, work, learn and play. A fully realized connected network that enables all the different use cases and provides ubiquitous coverage through a seamless experience will need to rely on multiple access technologies and choices. Seeing this paradigm shift in the future of connectivity, the broadband industry came together to **announce the 10G Platform** in January 2019, led by CableLabs, SCTE-ISBE, **NCTA** and **GIGAEurope**. 10G will enable broadband connectivity with higher connection speeds, lower latency, higher reliability and increased security, and it also will enable and complement other access technologies.

Today, **DOCSIS 3.1** technology enables the cable industry to **offer 1 Gbps service** to 80% of U.S. households. Just one year after the announcement of 10G, we have made some exciting progress towards this milestone in just 12 months.

Speed

Feedback

As we march towards the frontier of 10G, new cable modems already being certified are capable of 5 Gbps capacity, with integrated standard 2.5 Gbps Ethernet ports that make it easier to distribute that capacity throughout the home. With full duplex and extended spectrum capabilities integrated into next-generation **DOCSIS 4.0** technology, the industry will be able to deliver on that 10 Gbps promise over hybrid fiber coax networks.

The 10G optical network (Figure 1), is the backbone of the distributed access architecture and will provide the industry with opportunities for true service convergence that leverages the flexibility and tremendous capacity provided by fiber optics.

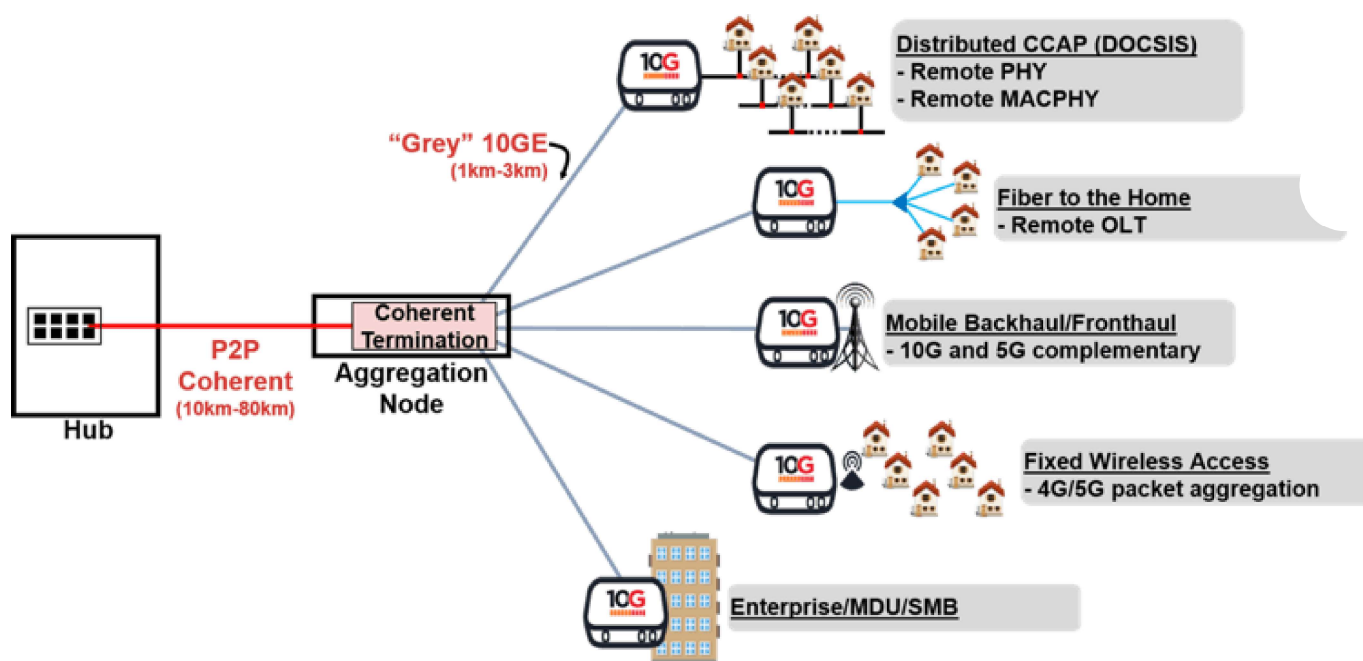


Figure 1: The 10G converged optical network

This year, CableLabs released an update to the 100 Gbps **point-to-point coherent optics** specification and released a new 200 Gbps specification – both intended to support the aggregation requirements of the distributed access architecture. While operators currently deploy **10G passive optical network technology (PON)** where fiber to the premise is preferred, the IEEE standard for next-generation 25G-PON and 50G-PON technology remains on track for mid-2020 completion.

Latency

Lower latency is an important network characteristic that is quickly becoming a key service differentiator for connectivity, especially when considering delivering top cloud gaming or telemedicine experiences. This year, CableLabs and industry partners completed the DOCSIS specification updates to include **Low Latency DOCSIS (LLD)**, a technique allowing traffic that requires low latency to transit the HFC network in just 1-2ms. Implementation of this technology quickly ramped up with seven vendors attending the LLD interoperability events.

Additionally, as part of the convergence of HFC networks with 5G networks, latency becomes critical when looking to use HFC as the transport layer. In 2019, we trialed two new technologies that enable mobile deployments over DOCSIS networks:

- **Low Latency Xhaul** pipelines DOCSIS bandwidth requests from mobile base stations, and was trialed and showed average DOCSIS network latency below 2ms.
- We also lead a trial of the **TIP vRAN Fronthaul project**, which is vRAN fronthaul designed to handle DOCSIS network latencies up to 30ms.

Security

Another key pillar of the 10G Platform is security, to which we have dedicated significant efforts over the last year, advancing four leading technologies:

- **Transparent Security** uses the programmable data plane inside the access network to perform in-band telemetry and traffic processing. This increases protection against distributed denial of service attacks and provides flexibility to the network operator in active defense techniques.
- **Device Onboarding** makes good on the 10G promise by requiring easy and secure onboarding and provisioning of devices connecting to the platform made possible through strong device identity credentials and lifecycle management.
- **Endpoint Identity** provides unique, immutable, and attestable identities for networked devices. Strong device identity provides the trust framework to enable all other security controls, making it fundamental for securing the 10G Platform.
- **Network Independent Credentialing**, an essential part of 10G security, allows for authentication and risk management across access networks. Supporting this vision, Release 2 of the CBRS-A specifications included CableLabs' work on Extended Credentials Authentication Framework (TS-1003) which extends the possibility to authenticate to CBRS-A Networks with different types of credentials – e.g., X.509 Digital Certificates. Building on that, the work is now focused on providing a common credentials management framework that can be integrated across the 10G platform (EAP-CREDS).

Reliability

Proactive network maintenance (PNM) has long been a key element to increasing the reliability of the HFC network and providing an excellent quality of experience for cable service subscribers, and it is no different with 10G. This year CableLabs has a more **robust portfolio of PNM activities** than ever before. By measuring key **“health” parameters** from millions of cable modems, operators are able to create solutions on the **Pro Ops platform** to solve problems before customers experience any degradation in service.

Our PNM accomplishments extend to Wi-Fi where CableLabs led the pursuit of establishing a standard set of health metrics and their reporting format for Wi-Fi networks – now officially called **Wi-Fi CERTIFIED Data Elements**– to optimize residential Wi-Fi networks. Soon, PNM for cable industry optical networks will integrate seamlessly with traditional industry network solutions.

In addition to PNM, we have delivered **Dual Channel Wi-Fi™**, which enables a 10G reliable Wi-Fi connection by ensuring optimized delivery of data services used in video, gaming, large file downloads, and time-sensitive services like video conferencing. A Dual Channel Wi-Fi reference implementation is currently available to the operators and vendors.

Looking into 2020

The connectivity catalyst of the future needs to occur across many spaces, including cyberspace, geospace, and electromagnetic space and it will all be coming to you in a virtualized cloud-native form. Technologies need to evolve to meet the vision through cost-effective solutions; wired, wireless, fixed, mobile, terrestrial, satellite, HAPS, unlicensed, licensed, low-band, high band, low-speed, high-speed, will all play a role to meet the demand of humans and things.

Over the past year, the industry has worked to create and introduce technologies that bring us one step closer to the promise of a 10G network, and are excited by the progress we have made. At CableLabs, we are excited about 10G and are actively involved with 5G, IEEE, and many other industry forums which are also working on advancing the future of connectivity.

Feedback

[Learn More About 10G](#)

 [COMMENTS](#)





NETWORK

REPORT

2021

OVERVIEW

In a year marked by shifts in Internet usage patterns as the COVID-19 pandemic ebbed and surged, Comcast's network continued to thrive as overall demand rose over historic 2020 levels. Data suggested a shift to pre-pandemic usage patterns, as peak download (downstream) traffic grew faster than peak upload (upstream) traffic.

In this second annual **Comcast Network Report**, we're sharing the major trends we observed on our network over the past year, and detailing how billions in strategic investment, combined with continuous innovation, allowed our network to thrive during a record-setting period of Internet demand.



INVESTMENT

In 2021 alone, Comcast invested more than **\$4.2 billion** to strengthen, expand and evolve the network – more than any previous year.

+50k

From 2017 to 2021, we built 50k new route miles of fiber into our network.

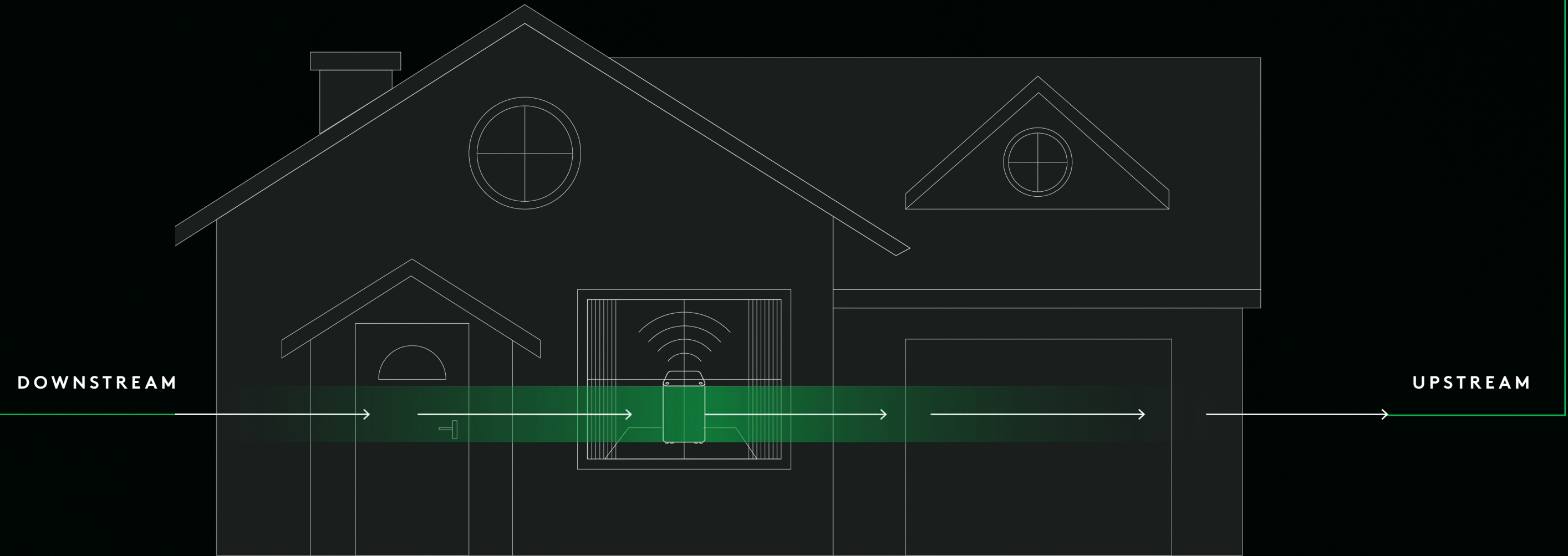
\$20B

In the past five years (2017-2021), we've invested nearly \$20 billion to evolve and grow our network.



TRAFFIC

Peak traffic growth continued to climb, even from record highs set in 2020. Peak downstream traffic grew **2x faster** than upstream traffic, more closely mirroring pre-pandemic trends.



+11%

Peak **downstream** traffic increased approximately 11 percent over 2020 levels.

+5%

Peak **upstream** traffic increased approximately 5 percent over 2020 levels.

Asymmetrical speeds: Network asymmetry increased throughout the year, with **total downstream traffic volumes 12.4x higher** than upstream for the first 6 months of the year, and **14.5x higher** for the last six months

Daily peak times shifted toward pre-pandemic norms throughout the year – peak upstream traffic times were 10am in January, 3pm in June, and 10pm in December.

10:00 AM

JAN

3:00 PM

JUN

10:00 PM

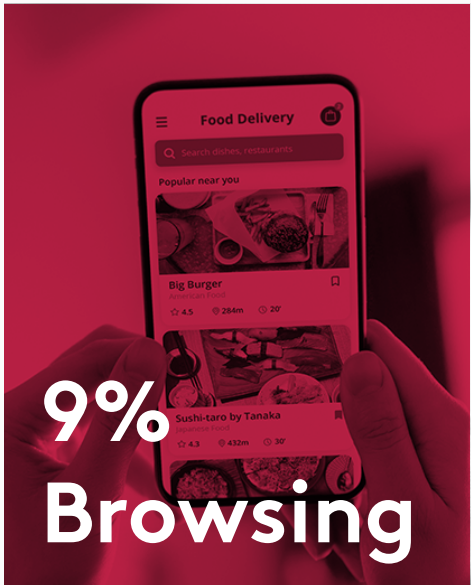
DEC

CONTENT

Similar to last year, entertainment activities dominated peak network traffic, with **video streaming** accounting for 71 percent of downstream traffic (same as 2020).

⬆ 10-20% increase in video streaming, gaming, and web browsing

Videoconferencing fell slightly as a percentage of peak network traffic, remaining less than 5 percent in 2021.



2021 NETWORK TRAFFIC



NETWORK INNOVATION & THE ROAD TO 10G

Investing billions to strengthen and grow our network is important...but it's only the beginning of building a smart network that's ready for anything.

Our network architects and software engineers continuously innovate and evolve our network technology to increase speeds, strengthen reliability and improve overall performance.

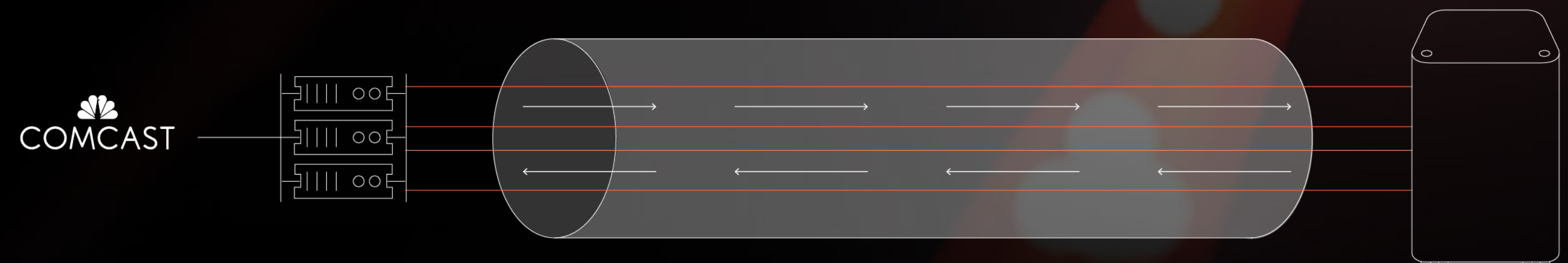
Innovating for Reliability

XMF, a new network technology, reduces the amount of time it takes for a technician to find and isolate a fiber cut from 2 hours down to one-and-a-half minutes. The XMF platform monitors hundreds of thousands of local broadband optical links every minute across the Comcast network, measuring both the optical spectrum and testing the length and quality of the fiber links. In practical terms, that means that with XMF installed, network engineers can pinpoint the exact point at which a local fiber network is experiencing an issue and share the precise geolocation with local technicians.

Leading the Way on 10G

We are evolving our network to 10G, a technology which will allow Comcast to deliver multigigabit upload and download speeds to tens of millions Americans over the cable connections already installed in their homes and businesses. In 2021, our work on 10G technologies kicked into high gear.

- In April, we conducted a lab test of DOCSIS 4.0 technology and showed ability to deliver 4-gig upload and download speeds.
- In October, we conducted the world's first test of a 10G connection all the way from our network to a modem. The team activated a virtualized cable modem termination system (vCMTS) powered by Full Duplex DOCSIS 4.0 Technology, another world's first.



DOCSIS 4.0

1. Dramatically increases the amount of data we can deliver both upstream and downstream, enabling multigigabit symmetrical speeds over traditional "cable" connections in homes and businesses.
2. Transforms **how** data is delivered over cable connections to be more efficient and support anything our customers choose to do online.

WiFi

The fastest network is only as good as its WiFi.

That’s why we’ve paired our network advancements with smart, supersonic WiFi that ensures customers have the best connected experiences however and wherever they connect.

Billions

Unique devices: Nearly **a billion** unique devices connected to WiFi in Xfinity households, a 12x increase from 2018.

xFi Advanced Security: Proactively blocks **billions** of cybersecurity threats before they reach our customers’ devices, and is included with our xFi gateway.

Millions

Smartphones: Continuing to be the main device connected in our customers’ homes, smartphones make up **1/3** of all devices connected to Xfinity WiFi.

xFi Pods: Help to cover the home with strong and reliable WiFi. **90-100 million** devices are connecting through our xFi Pods in the U.S. and Europe each day.

Pause/unpause: Xfinity customers used the pause/unpause WiFi feature nearly **100 million times**.

Parental Controls: More than **1 million** Xfinity customers are using xFi parental controls to help manage WiFi in their home.

Gigabits

Gig speeds: Even as demand on the network continued to grow, Comcast increased speeds for the most popular Xfinity speed tiers, including increasing gig speeds to **1.2 Gbps**.

xFi Advanced Gateway
Comcast’s most powerful device to date, the next generation xFi Advanced Gateway incorporates WiFi 6E, offering customers an unbeatable broadband experience with a faster, more reliable wireless connection. The gateway will boost capacity in the home with three WiFi bands – 2.4 GHz, 5 GHz, and a new, 6 GHz band.



PROJECT UP

As the world becomes more digital, it's our responsibility to use media and technology to ensure that everyone has the resources and opportunities they need to participate and excel in today's society. Project UP is our comprehensive initiative to advance digital equity and help **build a future of unlimited possibilities.**

PROJECT
UP

Backed by a \$1 billion commitment, Project UP encompasses the programs and community partnerships across Comcast, NBCUniversal, and Sky that connect people to the Internet, advance economic mobility, and open doors for the next generation of innovators, entrepreneurs, storytellers, and creators. Three of these programs are featured below:

internet»
essentials
FROM COMCAST

We have been committed to creating and supporting digital equity within the communities we serve for more than a decade. We launched Internet Essentials in 2011 to bring affordable, high-speed Internet to low-income families connecting a cumulative total of more than 10 million people from low-income families to the Internet at home in 10 years.



Comcast launched 1,000 Lift Zones nationwide to provide safe spaces for students to access free, high-capacity WiFi in 2021. Together with nonprofit partners and city leaders, we are building safe spaces for students and families to connect to free WiFi for distance learning at more than 1,000 Lift Zones in community centers across the country.



The Comcast RISE Investment Fund has granted \$11 million to 1,100 small businesses owned by people of color and the program will support 13,000 small businesses by the end of 2022. A program offering grants, marketing services, and technology upgrades – Comcast RISE stands for “Representation, Investment, Strength, and Empowerment,” and was created to strengthen and empower small businesses hard hit by COVID-19.

2022 AND BEYOND

In 2022, we're looking forward to accelerating our 10G roadmap, even as we expand our network to serve more people in more places, and deploy new technology innovations that deliver more speed, security and reliability to our customers. Whatever the future holds, our network will be ready to support whatever our customers can imagine.



[COMCASTCORPORATION.COM](https://comcastcorporation.com)



Appendix 19: Community Impact and Internet Essentials Reports

For more information on Comcast's Community Impact and Internet Essentials program, please see the 2022 Impact Report and the 2022 Internet Essentials Progress Report below.

Comcast is proud to be an approved provider supporting the federal government's Affordable Connectivity Program (ACP) program. At a May 2022 White House event, Comcast was recognized for stepping up with innovative offerings like Internet Essentials Plus to help eligible families take full advantage of the ACP benefits. For details, see the article attached below.

Under the ACP program, qualifying customers may apply a credit of up to \$30 per month (\$75 per month in Tribal lands) to any Xfinity Internet service tier, including Blast!, Extreme, and Gigabit product tiers. As such, Comcast offers several lower cost options offering speeds in excess of 100Mbps/20Mbps. Importantly, qualifying customers may also apply the ACP credit to Internet Essentials, and one line of Unlimited on Xfinity Mobile. For example, an Internet Essentials customer (paying \$9.95/month) can add one line of Unlimited on Xfinity Mobile (\$45/month) for \$24.95/month after applying the ACP discount. Customers who subscribe to Internet Essentials or Internet Essentials Plus and enroll in ACP will effectively get broadband for free after the \$30/month government discount is applied. For more information, see the press release below.



COMCAST
NBCUNIVERSAL

IMPACT

REPORT 2022

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NOTE ABOUT FORWARD-LOOKING STATEMENTS

This Impact Report includes estimates, projections and statements regarding environmental, social and governance-related plans, objectives and goals that are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934 (the “Exchange Act”). Forward-looking statements may appear throughout this report. These forward-looking statements generally are identified by the words “believe,” “project,” “expect,” “anticipate,” “estimate,” “intend,” “potential,” “strategy,” “future,” “opportunity,” “commit,” “plan,” “goal,” “may,” “should,” “could,” “would,” “will,” “continue,” “will likely result” and similar expressions. Forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties that may cause actual results to differ materially. In evaluating these statements, you should consider various factors, including the risks and uncertainties we describe in the “Risk Factors” sections of our Forms 10-K and 10-Q and other reports we file with the Securities and Exchange Commission (“SEC”). The inclusion of forward-looking and other statements in this Impact Report is not an indication that they are necessarily material to investors or required to be disclosed in our filings with the SEC. Such statements may contain estimates, make assumptions based on developing standards that may change and provide aspirations and commitments that are not intended to be promises or guarantees. Readers are cautioned not to place undue reliance on forward-looking statements and such other statements, which speak only as of the date they are made. We undertake no obligation to update or revise publicly any forward-looking or such other statements, whether because of new information, future events or otherwise.

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A Message from Our Leaders



Brian L. Roberts

Chairman & Chief Executive Officer,
Comcast Corporation

In a year marked by both ongoing challenges and encouraging signs of progress, we accelerated and deepened our efforts to support our local communities, our teammates, and our planet.

After connecting 10 million people to the Internet over the past 10 years, our work to address digital inequities continues to build momentum. In 2021, we launched Project UP, our comprehensive initiative to help ensure that everyone has the resources and opportunities they need to build a future of unlimited possibilities. Backed by a \$1 billion investment over the next decade, Project UP will provide tens of millions of Americans with access to the technology, tools, and resources that will enable them to build skills, careers, and pathways to economic mobility in an increasingly digital society.

We're leveraging our unique expertise as a media and technology company to support underserved communities and underrepresented small businesses, including opening over 1,000 Lift Zones in community centers nationwide to provide students, seniors, and veterans with free Internet. And we awarded millions in Comcast RISE monetary, marketing, and technology grants to help thousands of entrepreneurs of color keep their businesses open amidst a pandemic and, ultimately, thrive.

Finally, we took additional steps to reduce our environmental footprint in 2021 by setting an ambitious goal to be carbon neutral for Scope 1 and 2 emissions across our global operations by 2035.

While we are incredibly proud of these achievements, which you can read about in the pages that follow, we're even more excited about the road ahead. We remain resolutely focused on making the future we envision – one where everyone, in every community, has the chance to realize their dreams – a reality by deepening our commitments in new, innovative, and impactful ways.

None of this would be possible without our wonderful people and partners, who are the heart and soul of this important work. We are grateful for their ongoing support and passion.



Dalila Wilson-Scott

Executive Vice President &
Chief Diversity Officer,
Comcast Corporation;
President, Comcast
NBCUniversal Foundation

PROJECT UP

Project UP is our initiative to help advance digital equity and build a world of unlimited possibilities. From connecting people to the Internet; to opening doors for the next generation of innovators, entrepreneurs, and storytellers; to creating new career pathways in media and technology, we can deepen our impact and help create a future that benefits generations to come. This work is backed by a \$1 billion commitment over the next 10 years, which will enable us to reach tens of millions of people with the opportunities and resources they need to create a brighter future.



CONNECTIVITY:

Expanding Digital Access



A key component of Project UP is increasing access to the Internet — and the tools and information necessary — to close the opportunity gap. Over the past 10 years, Comcast has connected 10 million people to the Internet at home through **Internet Essentials**, the nation's largest and most comprehensive broadband adoption program.

And when the COVID-19 crisis began, our company was already well-positioned to spring into action with two other connectivity solutions: **Lift Zones**, which are community centers that provide free Wi-Fi, and the **Internet Essentials Partnership Program**, which enables schools, school districts, and community partners to quickly connect large numbers of people to the Internet at home. At the same time, we continue to focus on driving adoption for discrete populations, like Federal Pell Grant recipients, seniors, and veterans, to help get even more people connected.

Collaborating to Close the Gap

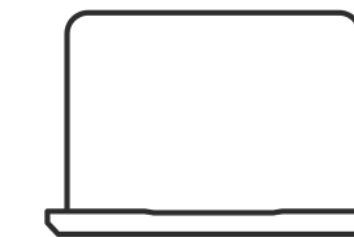
While Comcast is committed to digital equity within our own programs, we know that closing the broadband adoption gap requires collective action. In November 2021, the federal government signed into law the Infrastructure and Investment Jobs Act, which includes the \$14.2 billion Affordable Connectivity Program (ACP). This is a successor to the temporary \$3.2 billion Emergency Broadband Benefit (EBB) program, which helped Americans connect to the Internet during the COVID-19 crisis. Through these programs, which enable qualifying low-income customers to apply a financial subsidy to our broadband services, customers can receive our Internet Essentials service or our new enhanced Internet Essentials Plus service with twice the download speed — up to 100 Mbps — effectively for free. Comcast is proud to continue supporting these efforts to help close the digital divide for low-income consumers and connect even more people to the endless opportunity, education, growth, and discovery that the Internet provides.

A DIGITAL EQUITY SNAPSHOT



1 Billion

committed in cash and in kind
over the next 10 years to further
close the digital divide

Tens of
Millions

of people reached with connectivity,
skills, training, and resources



1,000+

community partnerships

Bridging the Digital Divide: Internet Essentials

Internet Essentials provides wraparound solutions for low-income families, including: a low-cost, high-speed Internet connection at home, access to free online digital skills training through a network of thousands of local partner organizations, and the option to purchase a low-cost computer.

“

A lack of digital skills is clearly a significant barrier to broadband adoption. While these skills will take time to learn, the benefits will last a lifetime and close not just the digital divide, but the economic divide as well.

Broderick Johnson

EVP, Public Policy & EVP, Digital Equity

Comcast Corporation



Digital Harbor High School

Baltimore, MD

Internet Essentials Customer Snapshots

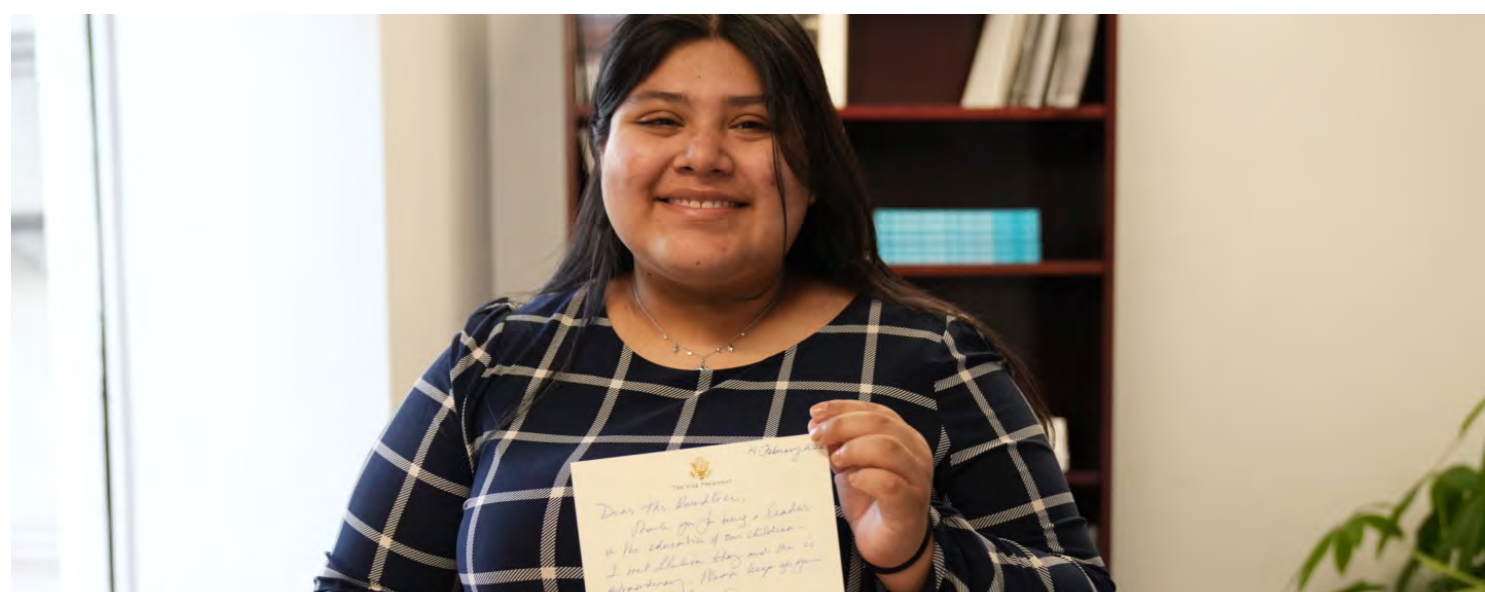


Josh

Goes Back to School

Several years ago, Josh Delano left active military service to spend more time with his family. Once home, he decided to pursue his dream of becoming an electrical engineer and went back to school to continue his education.

Through a Department of Veterans Affairs federal work study program, Delano first heard about Internet Essentials, which had just expanded its eligibility to include low-income veterans. The home Internet service enabled him to do his schoolwork at home, and save money by eating at home. In 2018, Delano graduated with a bachelor's degree in electrical and electronics engineering, and he has since found fulfilling work doing electrical construction.



Llulisa

Sets Her Sights on the Future

Mayra and her daughter Llulisa are Internet Essentials customers and now benefit from the Affordable Connectivity Program (ACP), an early success of the historic bipartisan infrastructure law passed late last year. They are among the 10 million families who began using the program within just a few short months.

Llulisa says that during the pandemic, the Internet connected her to resources that helped her complete her homework and apply to colleges online. She just got accepted to her first choice for college, and she plans to be an immigration lawyer one day. "I'll be the first person in my family to attend college, but not the last," she says.



Albert

Gains Digital Skills

Albert Pennell has 12 children and 24 grandchildren. Yet without Internet service or a digital device, it hasn't always been easy for him to stay in touch. But all of that changed through Internet Essentials, whose eligibility includes low-income seniors.

With Internet Essentials, Pennell received access to digital skills training, a connected device, and Internet service at home. Learning how to use a computer and operate a cellphone has been life-changing for Pennell. Not only does he now stay more connected with his family; he uses his tablet at church to help others, listen to music, and search Bible verses.

Celebrating a Major Milestone: Lift Zones

In 2021, Comcast reached an auspicious milestone ahead of schedule: our 1,000th Lift Zone. Now that the goal has been reached, we are building on this progress with more ambitious goals — installing 250 additional Lift Zones before the end of 2022 and providing free Wi-Fi to 100 veteran-serving locations nationwide. And as the number of Lift Zones continues to climb around the country, we are boosting our programming in response to the needs of the communities they serve.

“

Today, we are rededicating ourselves to this mission to ensure that the next generation of leaders in America has the tools, resources, and abilities they need to succeed in an increasingly digital world.

Dave Watson**Chief Executive Officer**

Comcast Cable



The Ralph J. Roberts Germantown Boys & Girls Club



The Sanneh Foundation

Lift Zone Partner Snapshot

The Sanneh Foundation, home of Comcast's very first Lift Zone, is an organization fiercely dedicated to supporting underserved youth and families in the Twin Cities.

The Foundation runs an afterschool program at the Conway Center, where kids gather for tutoring, a warm meal, or a safe space. As the needs of the community changed during the pandemic, so did what the Sanneh Foundation offered.

The afterschool program quickly shifted course, opening its doors during the school day, installing glass booths, and hiring parents and other community members. In September 2020, Comcast installed its first Lift Zone, which increased Internet access and helped repurpose the gym as a distance-learning hub.

The Lift Zone became a lifeline. "It helped families survive, because they couldn't afford to stay home," says the founder and CEO, Tony Sanneh. It also supported a community dealing with prolonged uncertainty, for example, by connecting families in need to the Foundation's food distribution program. "During a challenging time, it let everyone have some ease."

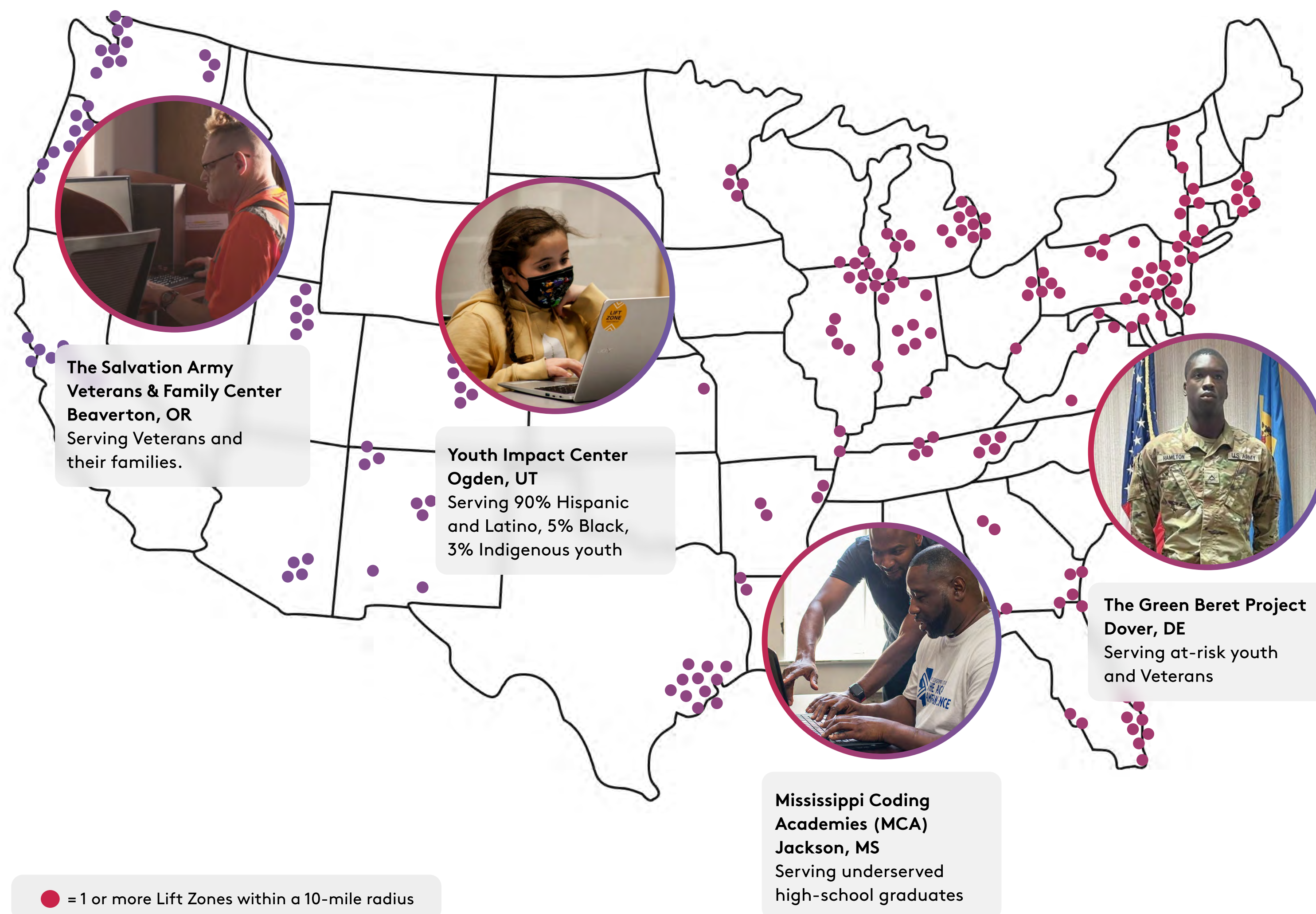


The Sanneh Foundation
St. Paul, MN

Now both organizations are celebrating another milestone with the opening of Comcast's 1,000th Lift Zone, and Sanneh's second, in December 2021. After a fire forced the Conway Center to close for four weeks, the Sanneh Foundation quickly shifted its operations to another location to host its free youth sports camps and food distribution. Comcast swiftly moved in to bring service to the new location, making it fully operational as a Lift Zone for older youth, with a focus on career readiness and workforce development. Comcast marked the anniversary with a \$50,000 grant to help support the organization as it rebuilds.

LIFT ZONE MILESTONE

1,000th



SKILLS & CREATIVITY:

Creating Career Pathways and Amplifying **New Voices**



Project UP focuses on creating equitable access to skills and development opportunities to build and support the future workforce. We are connecting underrepresented people with career on-ramps by helping them develop marketable skills in IT, journalism, filmmaking, computer science, and other tech-enabled industries.

In doing so, we are supporting and empowering the next generation of innovators, entrepreneurs, storytellers, and creators.

Shining the Light on Barriers — and Solutions

Many workers are underrepresented in technology careers. How do we level this uneven playing field? The first step is understanding the scope and scale of the problem through data and research.

That's why we are partnering with **Jobs for the Future** (JFF), a national nonprofit that works toward economic equity through changes in the workforce and educational system. A partnership with Comcast NBCUniversal supported a new report identifying promising evidence, practices, and policies that create conditions for Black learners and workers to advance in the tech industry.

Building Digital Skills at Every Stage

We are on a mission to create a world where the next generation has the skills they need to succeed and thrive in our increasingly digital world. In order to have the most lasting impact, we partner with nonprofits who work every day to create equitable career pathways, for everyone from youth to adult learners.

Per Scholas has a mission to advance economic equity through rigorous training for tech careers and connecting skilled talent to leading businesses; currently, Comcast is partnering with the organization to scale its remote operations and train 1,500 learners for in-demand technology jobs. We support **Genesys Works**, which provides pathways to career success for high school students in underrepresented communities through skills training, work experiences, and relationships. NBCUniversal is partnering with **Year Up** to close the opportunity divide, by training young people for early-career positions in ad sales, ops, and tech. Through Comcast NBCUniversal funding, **Easterseals** affiliates received grants to enable them to continue delivering critical



services for people with disabilities and their families, with the help of technology and digital solutions. With a mission to empower and advance the Hispanic community and strengthen Latino institutions, **Hispanic Federation** focuses on education, health, immigration, and the environment. **Build.org**, an entrepreneurship program that helps under-resourced high school students discover their untapped talents and potential, offers mentoring and experiential learning programs to prepare young people for the future. They offer the Design Challenge, a free, online curriculum created to inspire these students to use design thinking to solve real-world problems, tapping into their innate energy and imagination.



Per Scholas



Build.org

Volunteering with our Partners

In 2021, Comcast teamed up with CoLabL, a startup that supports underrepresented talent through networking and mentoring with potential employers. CoLabL connected Comcast employees with students participating in programs at Per Scholas and NPower, two of Comcast's partners. More than 100 Comcast employees volunteered to host mock interviews and provide career insights during a series of six virtual career workshops that attracted approximately 180 participants pursuing career pathways in technology.

Our Regional Partners

Comcast's partners in driving economic mobility run the gamut from national organizations with many chapters, to small — yet mighty — local organizations. Here are some of our regional partnerships that share our goals of advancing tech skills, increasing educational opportunities, and supporting entrepreneurs:



Suazo Business Center helps existing and future Latino and other underserved entrepreneurs in Utah's Wasatch Front, which includes Salt Lake City, West Valley City, West Jordan, Layton, and Ogden. Comcast supports Suazo's Business Startup and Growth program, which provides tools, resources, and training to first-generation entrepreneurs.



Byte Back in Washington, D.C., provides a pathway of inclusive tech training that leads to living-wage careers for low-income adults. Our partnership supports digital access through loaner laptops, provides training for digital skills and IT certifications, and offers workforce development for learners to build soft skills and career readiness.

The **Arab Community Center for Economic and Social Services (ACCESS)** in Dearborn, Michigan, provides technology-based educational and developmental opportunities to empower communities. Comcast supports the organization's Digital Inclusion program, whose goal is to increase the number of high school students with advanced technology skills. Training sessions include computer technology education, college preparedness, and life skills.

Partner Impact in Action



Ebuka Egbunam

CodePath

It can be daunting for college students to ponder their career path after graduation. Fortunately, Ebuka Egbunam, a young Nigerian community college student in Illinois, found his footing in the tech field through CodePath, a nonprofit organization committed to providing opportunity for students while increasing diversity in the tech world at large. It offers cost-free coding courses as well as mentorship and career support to all who enlist.

He says that the program equipped him with both technical and soft skills, and led him to realize he wants to be a software engineer for Google.



Airat Azeez

NPower

Finding a job during a pandemic isn't easy, and Airat Azeez, 22, struggled to find a place. After she heard about NPower through a friend, she wholeheartedly committed to the rigorous 16-week IT Fundamentals course.

NPower is a nonprofit that offers tuition-free programs to help launch tech careers for military veterans and young adults. During the training, she learned CompTIA A+, Google IT support, and got exposure to many other technologies. The program widened her network and helped her narrow down what kind of job she was looking for. She now holds a position as a technical recruiter.

Grows to Code

Comcast Grows to Code prepares frontline employees for entry-level software engineering roles through a partnership with the nonprofit LaunchCode. The six-month career development program includes an intensive coding bootcamp, onboarding program, and apprenticeship. All graduates of the first Comcast Grows to Code class are now full-time Comcast engineers. Based on the program's success, it has expanded to additional cities around the country and added new engineering and design career paths.



Creating Space for Tomorrow's Storytellers

Comcast NBCUniversal helps emerging talent explore careers in arts, news, sports, and entertainment. In doing so, we not only contribute to a more inclusive media landscape, we support skill-building that leads to economic mobility.

NBCU Academy is committed to shifting the historic underrepresentation of diverse and marginalized communities in media. This innovative journalism training

and development program prepares college students and recent graduates for careers in the news and media technology industry through access to on-site curriculum and digital content, hands-on training in newsrooms, and funding for accredited journalism programs and scholarships. A flagship initiative is the NBCU Academy Embed program, where six students from partner educational institutions, or entry-level journalists affiliated with journalism diversity organizations, spend two years working and training with our news teams that sit within the NBC News Digital diversity verticals and CNBC. These

placements include NBC Asian America, NBCBLK, NBC Latino, NBC Out, CNBC Make It, and CNBC en Español.

NBCU Academy has partnered with academic universities, community colleges and institutions, including Historically Black Colleges and Universities, Hispanic-Serving Institutions, and colleges with significant Latino, Asian American and Pacific Islander, Black, Indigenous, and tribal populations. This reaches students from diverse racial, ethnic, sexual orientation, gender identity, ability, economic, and geographic backgrounds.



To celebrate NBCU Academy's one-year anniversary in January 2022, the program announced the addition of 13 new partners, bringing the total number of partnerships across the country to 30. The addition of these schools expands the program's reach by introducing STEM programs, growing NBCU Academy's geographic footprint, and broadening the program beyond journalism to include business, engineering, technology, and sports programs.

“

Through NBCU Academy, we're nurturing a generation of diverse journalists that are ahead of the curve on media technologies and have a deep understanding of a range of industries.

Yvette Miley**SVP of Diversity, Equity, and Inclusion**

NBCU News Group



Elevating Young People's Voices

Through our partnerships, Comcast is dedicated to increasing pathways for previously untold stories and unheard voices. Here are just a few examples of the organizations we support to advance this goal:

Urban Arts Partnership

Vision: Bringing greater equity and stronger outcomes to public education through digital storytelling.

Young Storytellers

Vision: Using storytelling to spark creativity among elementary and middle school students in underfunded schools.

Girls Write Now

Vision: Breaking down the barriers of gender, race, age, and poverty to support the next generation of writers and leaders, using storytelling to find and celebrate each person's unique voice.

“

We are doubling down on empowering the next generation of creatives from diverse and underrepresented backgrounds.

Hilary Smith

Executive Vice President

NBCUniversal Corporate Social Responsibility





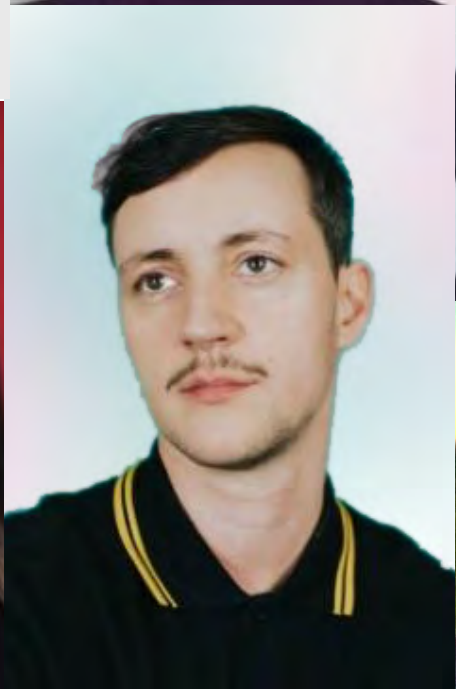
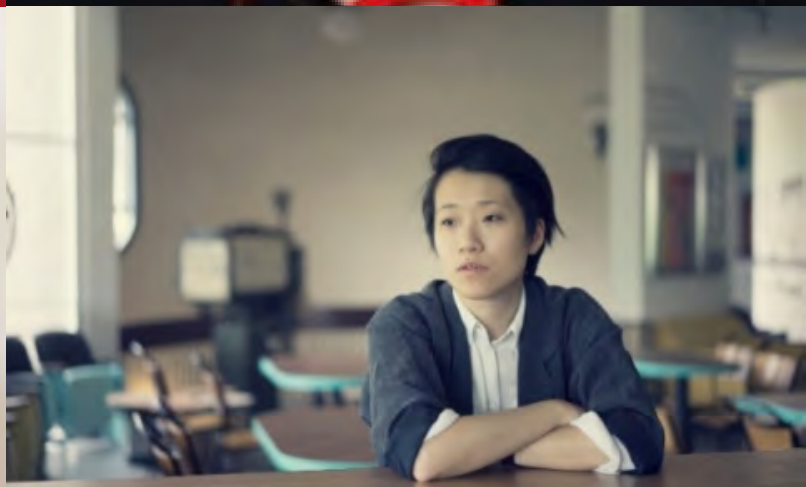
Advancing Inclusion for Creators

We embrace opportunities to address longstanding, systemic issues we see in the media industry, such as the underrepresentation of female directors. NBC's **Female Forward** forges a pipeline into scripted television for female directors. Through the program, nascent directors are given the opportunity to shadow current directors of an NBC series and then direct an in-season episode.

To further foster a more inclusive industry, we partner with the Geena Davis Institute on Gender in Media's **Spellcheck for Bias**, a program aimed at increasing authentic onscreen representation and casting opportunities for underrepresented talent.

On the film side, the Global Talent Development & Inclusion department and the American Film Institute's (AFI's) Directing Workshop for Women collaborate closely on the **Universal Directors Initiative**, which exposes directors to the studio production process as well as creative and production executives across the company.

Original Voices Fellowship Program, which is a joint program from NBCU Academy and NBC News Studios, awards a \$60,000 grant, access to NBCU News Group resources, and a one-year fellowship to documentarians. Now entering its second year, the program supports feature-length nonfiction films that showcase stories highlighting social issues affecting women, LGBTQ, people of color, and people with disabilities.



ENTREPRENEURIALISM:

Driving Economic Growth



Small businesses not only benefit individuals and their communities, but also help the broader economy prosper. Through our programs and partners, Project UP is helping to equip underrepresented entrepreneurs with the skills, digital resources, and opportunities to establish, maintain, and grow their businesses.

Comcast RISE recipient Seungmin Lee (shown on right), owner of Hello Chicken
Atlanta, GA

Seeding Small Business Success

Running a small business is hard work, period. But for small businesses owned by people of color, existing systemic barriers can make it even harder. **Comcast RISE** — which stands for Representation, Investment, Strength, and Empowerment — is a program we created to help remove these barriers.

To mark the program's first anniversary in November 2021, Comcast RISE expanded eligibility to all women-owned businesses.

“

The COVID-19 pandemic shone a light on a lot of inequities in society. Comcast RISE came about to help communities recover, and has had an incredible impact already on underrepresented entrepreneurs.

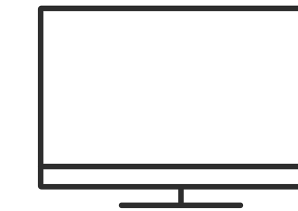
Pooja Midha
Chief Growth Officer
 Comcast Advertising



Comcast RISE recipient Joanis Duran,
 owner of Kalani + Wolf
 Miami, FL

COMCAST RISE BY THE NUMBERS

In its first year, the program provided:



\$50 Million

in marketing services and
 technology makeovers



\$11 Million

in cash grants from the RISE
 Investment Fund



6,700

small businesses owned by people
 of color support in 422 cities
 nationwide. Comcast RISE is on
 track to support 13,000
 entrepreneurs by the end of 2022

RISING STARS

Comcast RISE provides grants for technology and marketing makeovers, including media campaigns and equipment upgrades. In addition, the RISE Investment Fund awards small business owners a \$10,000 grant to propel their business to the next level. Here are a few recipients:



ES Beverage, a hot and cold beverage wholesaler and retailer in Atlanta, Georgia.

Owner: **Sabrina Scott-Pappas**

“COVID made the commerce business so tenuous. But Comcast RISE changed my life. It helped me to lower operational costs so I could regroup. They put me in a unique space where I could scale on my own.”

— Sabrina Scott-Pappas



Ravlin Martial Arts, a community-based martial arts school in Houston, Texas.

Owner: **Angelus McFarlane**

“RISE was the best thing that happened in 2020. The grant from Comcast and the technology they provided will help bring more people back to us now, and will take us through many years in the future.”

— Angelus McFarlane



Project Body, a fitness center for women located in Atlanta, Georgia.

Owner: **Claudia Fitzwater**

“The technology makeover I got through RISE helped us enhance our livestream model; we got a bump in our bandwidth, which helped with our quality and services.”

— Claudia Fitzwater



Create Cooking School, an Aurora, Colorado, school that brings people together to experience the flavors and ingredients of Latin American food.

Owners: **Erasmus Casiano and Diego Coconati**

“During the trying times of the pandemic when we had to change our business model, access to faster Internet and higher-tech phone lines helped us get over the edge.”

— Erasmo Casiano

Investing in Leaders Who Innovate

At Comcast NBCUniversal, we partner with forward-thinking organizations who are working with speed and intention to elevate the next generation of leaders. These leaders focus on bringing innovative ideas to life to create a more equitable society, which aligns with our company's goals of disrupting systemic racism. Here are a few of our trusted partners:



Surge Institute

What it does: Brings innovation and training to leaders of color in the field of education. Surge alumni have launched their own businesses and moved into leadership roles within their own organizations.

National Urban Fellows

What it does: A leadership development program that attracts, prepares, and positions people of color and women into social impact leadership positions and careers. Alumni from the program serve in elected office and as heads of foundations and nonprofits across the country.



Native Women Lead

What it does: Works to revolutionize systems and inspire innovation by investing in Native Women in business. The Albuquerque-based nonprofit organization does this by convening communities and building coalitions in ways that honor Native American culture and creativity.

DIVERSITY, EQUITY & INCLUSION

We passionately believe that infusing more diversity, equity, and inclusion (DE&I) in all areas of our society will create a more just world. It is also vital to our company's success — and to sparking innovation and growth that ultimately benefits *all* people.



Developing Diverse Talent

We are putting the full weight of our resources into accelerating our longstanding DE&I work, with the goal of driving lasting change and, ultimately, ensuring a more connected and equitable world. We know this must start inside the walls of our company, where we continue to invest in hiring, development, and advancement strategies, and building a workforce culture that reflects the communities we proudly serve. By doing so, we foster an inclusive and collaborative environment that empowers our greatest asset: our people.

“

Across our businesses, we have created pipeline and development programs for people from all backgrounds, as well as encouraged mobility, to ensure that we grow and retain the leaders of tomorrow.

Jeff Shell

Chief Executive Officer

NBCUniversal



NBC Page Program

New York, NY

Creating Inclusive Pathways

Creating more equity and equality in our organization requires careful thought about the kind of culture we want to grow, nurture, and support. That's why we apply a DE&I lens to our recruiting, retention, and pipeline efforts, which enables us to tap into the widest and deepest pool of talent available.

“

We strive to be a company where every employee feels welcomed and embraced as their true authentic selves, and one where the many vibrant experiences, backgrounds, and perspectives that make up our special organization are celebrated and valued.

Dalila Wilson-Scott

EVP & Chief Diversity Officer, Comcast Corporation
President, Comcast NBCUniversal Foundation

In 2021, we continued to take intentional and deliberate steps to attract diverse talent and evolve our strategies in support of our aspiration to have 50% women and 33% people of color at every level of our organization.

We want potential employees to know that we are a diverse and inclusive workplace, where everyone belongs, and everyone's voice is heard. Our employer brand campaign, **Create the Future with Us**, highlights the unique

backgrounds, experiences, and perspectives of our employees. Comcast's inclusive culture, captured in the brand pillar Bring Your Amazing Self, is represented in content throughout our internal and external websites, Career Center platform, social media channels, and digital media campaigns.

As of 2021, our company reached the most inclusive employee representation in the 10 years since we have been tracking diversity data.



We are also focused on forging new strategic partnerships with universities, community impact organizations, civil rights groups, and nonprofits to diversify our candidate pipeline. Our partnerships with Historically Black Colleges and Universities (HBCUs) are a key element of our recruitment strategy. Our activities range from HBCU-specific hiring and networking events, meetings with student organizations, and the on-campus Xfinity HBCU Experience, where students learned about career opportunities.

“

In line with our efforts to provide more gateways into the industry, we could not be more excited to bring the Below-the-Line Traineeship to a new generation of talent.

Donna Langley
Group Chairman

Universal Filmed Entertainment Group

Providing On-Set Training and Mentorship for Diversity Behind the Camera

Universal Filmed Entertainment Group (UFEG) recently launched its **Below-the-Line Traineeship** for underrepresented talent pursuing careers behind the camera. As part of NBCUniversal's commitment to promote DE&I across all areas of film and TV production, the paid traineeship kicked off with the director Jordan Peele's film "Nope." In collaboration with the Anti-Recidivism Coalition (ARC) and Hollywood Cinema Production Resources (Hollywood CPR), the program welcomed six trainees to the set, who were assigned to departments based on their area of study or interest.



Jordan Peele
Director of "Nope"

Focusing on Training & Growth

At Comcast NBCUniversal, we aspire to create a place where diverse employee populations can grow both personally and professionally. This centers on building a workplace where all people have the chance to develop their skills and embrace new experiences. We offer training, networking, and development resources across all levels of the organization, with many programs tailored for employees of color, women, and other underrepresented communities. Our goal is to build a workplace where all people have the chance to develop their skills, broaden their perspectives, expand their networks, and embrace new experiences.

To date, 200 director-level talents have completed NBCUniversal's **Elevate Talent Lab** experiences, designed to identify, engage and empower underrepresented talent, including Black, Asian/Pacific Islander, and Hispanic/Latino talent, across the NBCUniversal portfolio. To further develop emerging and senior leaders of color at Comcast, we partner with **DiverseForce on Boards**, a training program that matches leaders with local nonprofit boards to strengthen our Philadelphia-area communities.



Empowering Executives to Make Bold Career Moves

The **Talent Catalyst** program provides employees with services and resources to pursue cross-functional career opportunities. The two-year program prepares potential successors for VP-level roles, pairing participants with executive sponsors and assignments focused on areas of the business outside their current roles. Nearly half of the first two cohort's 87 participants are women, and more than one-third are people of color.

“

We're creating a workplace where everyone can bring their whole self to work and have the opportunity to succeed.

Craig Robinson
EVP & Chief Diversity Officer
NBCUniversal



Toni Murphy
Past Talent Catalyst participant

Comcast Cable is launching a host of DE&I-centered coaching programs, many of which focus on women, to help leaders build both their careers and inclusive teams. Here are a few examples:

Tone Networks is an online learning and coaching platform designed for women, with tools focused on leadership, professional growth, allyship, and more.

The Cru uses technology to help women meet their personal and professional goals by developing meaningful relationships with like-minded peers and diversifying their networks.

CoachDiversity helps senior executives sharpen their emotional intelligence and gain a clear understanding of how to overcome unconscious bias for greater empathy, self-awareness, and more equitable decision-making.



Cultivating a Culture
of Inclusion

Cultivating a Culture of Inclusion

Through every aspect of our company, we embrace diversity of background, perspective, and experience. In 2021, we expanded our efforts to champion a culture of inclusion and advance a society where everyone has the opportunity to realize a future of limitless possibilities. To truly understand how we can drive inclusivity throughout the company, we hosted employee listening sessions and conducted interviews with leaders across every level of the company.

Living Our Commitment

Our rotating DE&I Employee Advisory Council, which consists of 24 employees across Divisions, Regions, and Business Units, works alongside the National DE&I Cable Leadership Council and provides advice, recommendations, and feedback, and also pilots and previews new products or policies that are the outcomes of our DE&I efforts across the company. Similar councils have formed at different levels of the company to inform and support our efforts as well, giving even more teammates a voice in shaping our plans to champion equity.



ERG Advocate Kevin Hayes

In 2021, we continued to invest in opportunities for employees to help steward our workplace inclusion strategy. Our external Corporate DE&I Advisory Council is comprised of national civil rights, academic, political, and business leaders from the Black and African American, Asian American and Pacific Islander, Latino, Indigenous People and Native American, LGBTQ communities, women, and people with disabilities. The council helps us ensure accountability and drive progress in critical DE&I focus areas.

Supporting One Another through Affinity Groups

Another way we provide our employees with visibility and support is through our company-wide Employee Resource Groups (ERGs). These are voluntary, employee-led networks dedicated to developing the careers of our employees, providing community volunteer opportunities, and building an inclusive and collaborative workplace.

Our nine ERGs include more than 35,000 members in over 225 chapters across Comcast NBCUniversal, engaging people at all levels of the organization, empowering employees to drive business results while supporting an inclusive, collaborative company culture.

To support the development of our ERG projects, programs, and events, we recently established ERG Elevate, an annual fund. Each ERG will receive \$62,500 to elevate their work. Additionally, a new ERG governance structure includes two National Champions for each ERG to serve on a national advisory council responsible for driving our ERG strategic priorities. The new fund and structure will support cross-enterprise collaboration and the development of a shared vision for our ERGs.

“

Comcast NBCUniversal is a far more diverse company than it was 10 years ago. And I'm very proud of the role UnidosUS and the Corporate DE&I Advisory Council have played in that regard.

Janet Murguía
President & CEO
UnidosUS

Cultivating a Culture
of Inclusion

ERGS BY THE NUMBERS

9

ERGs

35,000

members

225

chapters

“

We have built a thriving community with the Comcast APA ERG, and I love being a part of it.

Noopur Davis

**National Champion, APA ERG;
EVP, Chief Product & Information Security Officer**
Comcast Cable

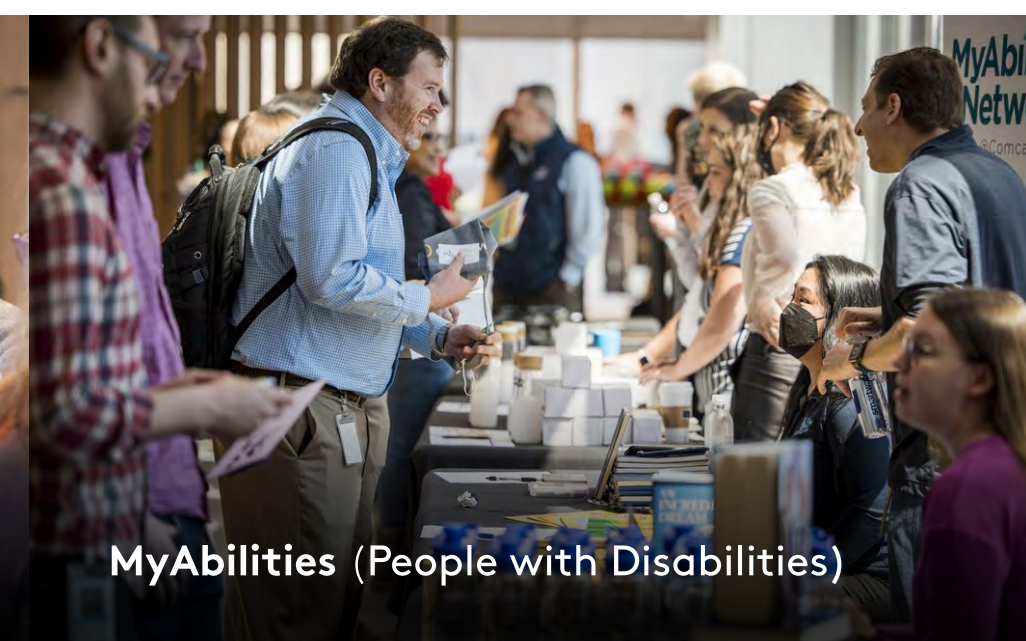
Our ERGs



APA (Asian Pacific Americans)



BEN (Black Employee Network)



MyAbilities (People with Disabilities)



OUT (LGBTQ and Straight Allies)



Unidos (Hispanic/Latino)



VetNet (Veterans)



YPN (Young Professionals)



Women's Network



Indigenous

ERGs in Action

Indigenous ERG was launched on October 11, 2021, in honor of Indigenous Peoples' Day. The ERG aims to elevate Indigenous voices inside our company while celebrating and promoting awareness of the vast experiences and accomplishments of Indigenous people from the more than 550 federally recognized tribes across the country and countless cultures worldwide.

Unidos ERG honored the cultures and contributions of Hispanic and Latino Americans through a series of Hispanic Heritage Month events and initiatives, including remarks from the acclaimed novelist, feminist, and philanthropist Isabel Allende.

MyAbilities ERG continued to empower and engage employees with disabilities, and to build cultural sensitivity and awareness.

OUT ERG created a virtual "Pride World" in lieu of in-person Pride Parades during Pride Month (June 2021), featuring online events, flats, flags, and street signs honoring famous LGBTQ figures throughout history, and an LGBTQ streaming cinema.

“

Terms like *inclusion* are so important because it means trying to understand. Because you don't have to 'be' to belong ... allyship and cross-community collaboration is the key to inclusion.

Kyle McSlarrow

**National Champion, Indigenous ERG;
SVP, Business Development and Planning**
Comcast Cable



Cultivating a Culture
of Inclusion



Beyond ERGs, employees come together in other ways.

BENengineers provides Black engineers at Comcast with a forum to share ideas, learnings, opportunities, and career guidance.

“

My purpose is to be on the forefront as a woman of color in this space, representing people who look like me and letting them know they can thrive here.

Shirlette Chambers
BENengineers, Co-Lead;
Cloud Software Engineer
Comcast

Continuing Education

Across our organization, we are creating moments to come together and participate in collective learning through programs such as these:

Our expanded **DE&I Speaker Series**, which on International Transgender Day of Visibility featured Michaela Jaé Rodriguez, the first transgender woman to win a Golden Globe and be nominated for an Emmy.

Tens of thousands of employees have participated in **DE&I Day** to build understanding about unconscious bias and about the actions everyone can take to build a positive and more inclusive culture for all.

Meet the Moment is a voluntary, yearlong educational program developed specifically for our employees that features education, as well as action steps, toward holding all employees accountable for sustained focus and progress on DE&I issues.



Cultivating a Culture
of Inclusion

In conjunction with ULearn, Comcast’s internal Learning and Development organization, and our Employee Relations team, the OUT ERG helped drive the creation of a Pronoun Guide for Comcasters.

In addition, we recently launched Guidelines to Support Transgender Employees to help raise awareness and build deeper understanding within our teams and company about transgender and gender non-binary experiences.

We remain committed to using our collective voice to drive awareness and empower Asian American employees and communities. For example, our Asian Pacific American (APA)

ERG partnered with **The Steve Fund** to host a series of mental health workshops to help employees navigate the trauma of racism and discrimination.

The sharp rise in incidents of anti-Asian bias, harassment, violence, and hate since the start of the pandemic has sparked a national conversation on Asian identity and discrimination. To commemorate **Asian American and Pacific Islander (AAPI) Heritage Month**, we announced a \$2 million contribution to 14 social justice nonprofits working to combat anti-Asian hate, and launched a long-term partnership with **Asian Americans Advancing Justice (AAJC)** to correct misinformation and disinformation.

“

Comcast NBCUniversal’s support will enable us to continue to speak out against the wave of senseless crimes and hate being perpetrated against members of the AAPI community, and call for social justice and civility.

John C. Yang

President & Executive Director

Asian Americans Advancing Justice | AAJC

Recognition for Disability Inclusion

In 2021, we were named **Disability:IN** 2021 Marketplace Innovator of the Year for our efforts to create an inclusive workplace where employees of all abilities can thrive in support of business innovation, and to create content that tells the remarkable stories of people impacted by our commitment to accessibility and empowered by our inclusive technologies to live more independent lives.



Celebrating Culture and Community through Art

To commemorate the Martin Luther King, Jr. holiday and Black History Month in 2021 and 2022, hundreds of Comcast employees and their families participated in a unique project with **Mural Arts Philadelphia** and local artists Serena Saunders and Alloyius Mcilwaine. Employees received a canvas to paint and mail back to the artists, who combined the artwork into murals to display at local nonprofit partner locations.



What Do You Need to Grow?

The Ralph J. Roberts Germantown Boys & Girls Club, Philadelphia, PA

© 2021 Serena Saunders, the City of Philadelphia Mural Arts Program, and Mural Arts Advocates. All rights reserved

Using Our Platforms to Promote Inclusivity

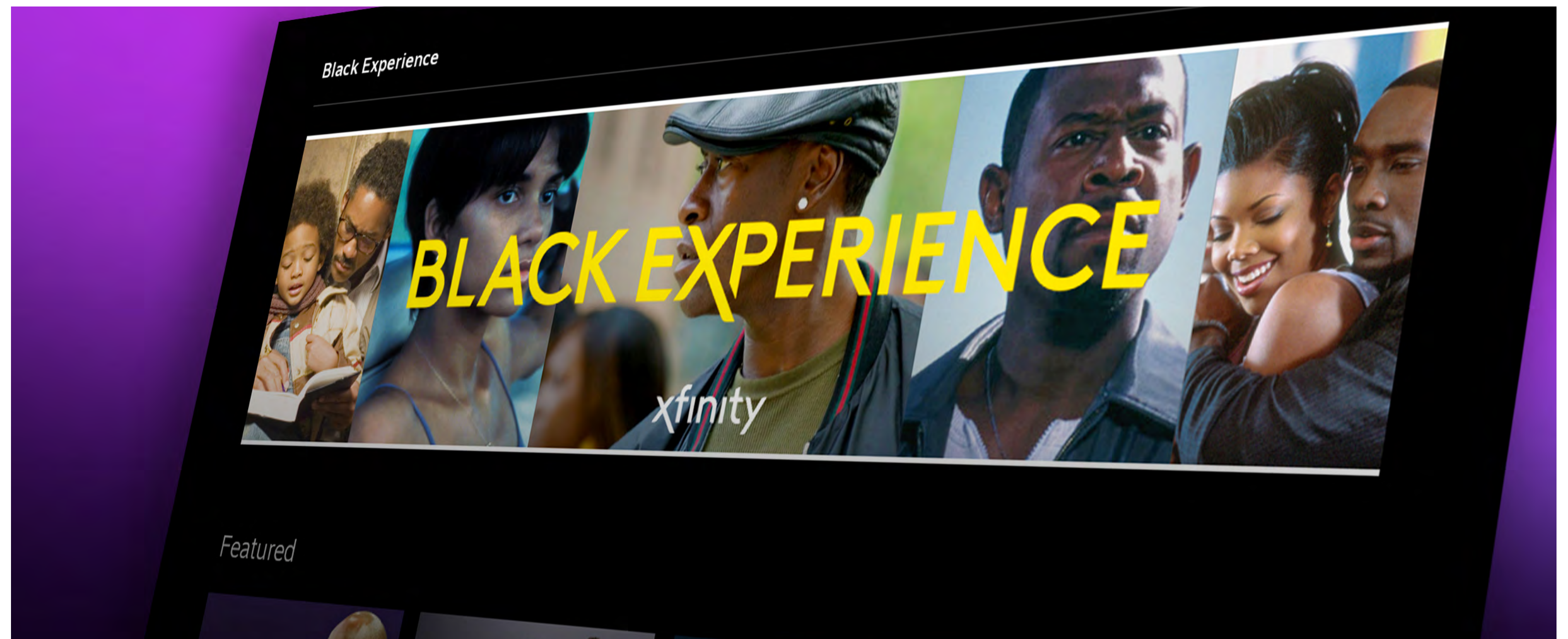
The More You Know, NBCUniversal’s award-winning initiative, which brings the nation’s most pressing issues to the forefront of public consciousness, is extending beyond its traditional public service announcement (PSA) format in 2022, with timely, relevant and inclusive video segments streaming on Peacock and promoted across digital and social media.



To champion Asian American voices, Xfinity again teamed up with **Gold House** to curate a collection of movies, music, shows, and podcasts that authentically celebrate and elevate AAPI stories; a Comcast Newsmakers panel discussion explored the deeply rooted history of Asian American discrimination and its ties to the current climate; and the “We Belong” campaign promoted a video tribute to AAPI contributions to our country’s history across national, local, and digital NBC platforms.

Celebrating Diverse Storytellers

For Black History Month 2022, we marked the first anniversary of the **Black Experience on Xfinity** by unveiling an expansive, on-demand collection of movies, TV shows, and documentaries championing the cinematic achievements of independent Black filmmakers and the legacy of civil rights pioneers. Yet another example of our vast ecosystem of diverse content on Xfinity is the “**¡Mi gente, presente!**” collection of bilingual and bicultural content to celebrate Hispanic Heritage month.



Embedding DE&I across Our Business

Advancing our diversity and equity priorities requires strategic alignment, impassioned leadership, and seamless collaboration. We are deepening our efforts in each of these areas by embedding executives with oversight of DE&I strategy and execution. These leaders take on key DE&I issues related to governance, public policy, education, and training. They also share open positions with their networks to ensure qualified candidates from underrepresented backgrounds — both within and outside the organization — are considered.

“

I’ve never been prouder to work for this company. We’ll continue to prioritize fostering a culture that includes collaboration, communication, and diversity and inclusion.

Rashida Jones
President
MSNBC



Rashida Jones

Blazing a Trail at Comcast Cable



*In 2021, Loren Hudson was named the first-ever **Chief Diversity Officer for Comcast Cable**. The 21-year Comcast veteran serves as a key partner to senior leaders and Human Resources, with a focus on establishing frameworks for DE&I accountability and driving employee training, career development, and education.*

Q: How do you see DE&I at Comcast, and your role in moving it forward?

A: One reason I joined the company 21 years ago was seeing senior leaders during the interview process who looked like me. And, like many others here, I've benefited from the continuous investment Comcast has made in my career. Now, I have the opportunity to be innovative in ways that reflect our current and future workforce needs.

Q: What attracted you to this role?

A: I have the opportunity to combine my passions: I get to focus on hiring and developing diverse talent and, operationally, I get to apply a DE&I lens to our business — from community partnerships to empowering small businesses. It's an amazing role, and I couldn't be prouder or more excited about the work ahead.

Q: What challenges has the pandemic presented for DE&I, and how has the company continued to build an inclusive culture?

A: We have stepped in through our benefits programs, coaching initiatives, Employee Resource Groups (ERGs),

external speakers, and mental well-being resources. We have tried to make the world smaller through the use of virtual tools, enabling teams to reimagine collaboration, and come together and build inclusive connections.

Q: Looking to 2022 and beyond, what are the company's core DE&I priorities?

A: We continue to ensure DE&I is baked into everything we do from a talent and operational perspective. Our aspirations are to have 50% women, and 33% people of color at all levels of our organization. We also apply a DE&I lens to our customer experience, which includes marketing, developmental opportunities, products, and community outreach.

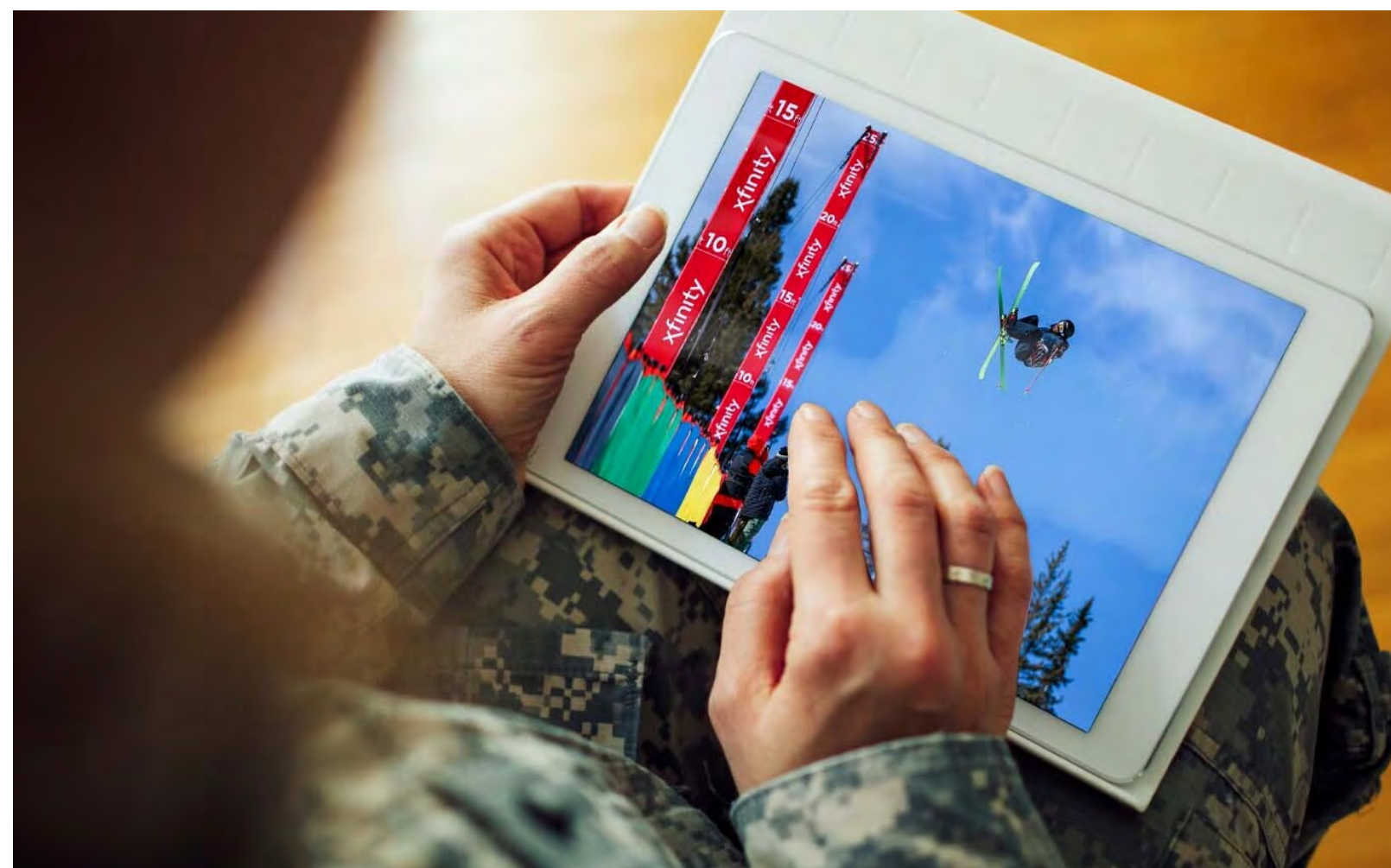
Q: What advice would you give to your 18-year-old self?

A: My advice would be to start networking early on. It would have been helpful as I was entering the workforce to reach beyond what was right in front of me ... to make deeper connections in the community and intentionally build my network. Making connections is very, very helpful for your personal and professional growth.

Leveraging Our Programming,
Platforms, & Products

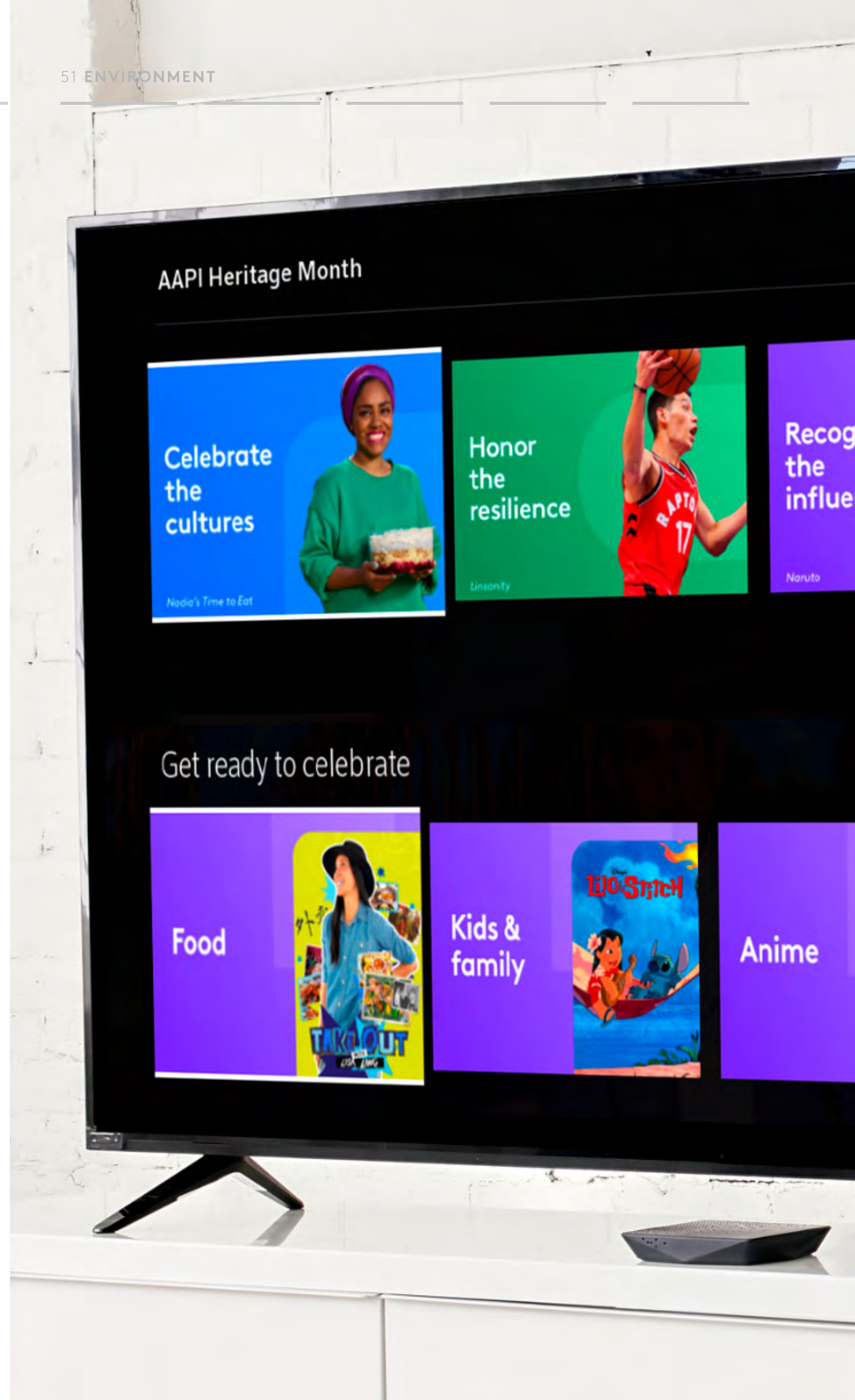
Leveraging Our Programming, Platforms and Products

Now more than ever, media has the power to bring people together for moments of connection and inspiration. We use our storytelling platforms to deliver programming that is representative of the diverse audiences and communities we serve, while working to ensure more people can access and experience our content through a commitment to inclusive innovation.



Serving Those Who Serve

In 2021 and 2022, we partnered with the Army & Air Force Exchange Service to provide U.S. service members, honorably discharged Veterans and their families with free streaming access to NBCUniversal's coverage of the Olympic and Paralympic Games on their personal devices and computers.



Game On

Few events unify the world like the Olympic and Paralympic Games. For the **2020 and 2022 Games** in Tokyo and Beijing, respectively, we delivered the most inclusive and accessible viewing experiences ever, giving fans of all abilities the opportunity to enjoy the action.

For the 2020 Games in Tokyo, we introduced closed captioning – which provides text of the audio coverage for viewers who are deaf or hard of hearing — on all coverage aired across NBCUniversal’s broadcast and cable networks, and for all digital livestreams.

We also offered live audio description services for both the Summer and Winter Games. These services intersperse broadcast audio with voiceovers describing the live action with context, for blind or visually impaired customers. Live audio description was included for all primetime Olympic Games competitions, along with Opening and Closing Ceremonies, and for all programming during the Paralympic Games, including those aired outside primetime hours.



NBCUNIVERSAL BREAKS RECORDS WITH PARALYMPIC COVERAGE

230+ Hours

of programming, including 120 hours of TV coverage from Beijing across our platforms

Most Watched

Our coverage generated numerous viewership milestones, including the two most-watched Paralympic Games telecasts on record in the U.S.

14.1 M

new viewers, setting a new Paralympic Games record

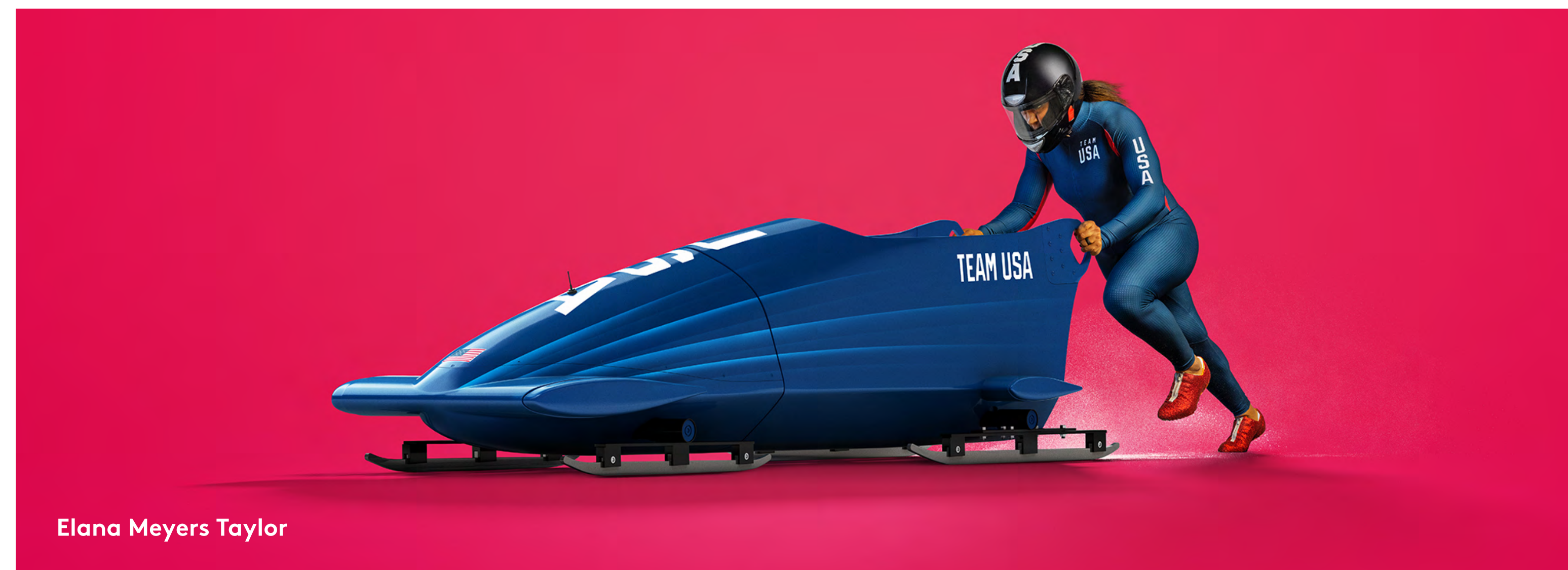
Inspiring the Next Generation

We also celebrated athletes who are inspiring the next generation: the Team of Tomorrow. In our Summer Games ad titled “Lines,” U.S. Olympic gold medalist Simone Manuel shared a powerful message about breaking barriers both in and out of the pool, and how she is working toward a day where the only lines that need to be crossed are finish lines. A Winter Games spot featured Elana Meyers Taylor, a four-

time U.S. Olympian and five-time U.S. Olympic medalist as a bobsled pilot, who said watching Vonetta Flowers become the first Black athlete to win a gold medal at the Winter Games changed her life two decades ago. “When I take to the starting block, I do it for so many ... it’s for all the young Black girls watching someone who looks like them, and it’s for everyone who is building a future I can’t wait to see,” says Meyers Taylor.

Delivering Inclusive TV Experiences

We were proud to play a role in delivering a history-making accessibility experience during the Super Bowl LVI telecast. For the first time ever, the National Football League (NFL) and National Association of the Deaf (NAD) spotlighted talented American Sign Language artists during the Pepsi Super Bowl Halftime Show.



Elana Meyers Taylor

“

We are committed to creating content that authentically reflects the world we live in, and increasing opportunities for those with disabilities is an integral part of that.

Janine Jones-Clark

EVP, Inclusion – Talent & Content

Universal Filmed Entertainment Group

Access for All

We believe in actively finding solutions to the challenges many people face, and this includes people living with disabilities. In 2021, we focused on breaking new ground with innovative products such as a large button remote and eye control. Our services continue to evolve as well. For example, Comcast's Accessibility Support Center agents are trained to assist customers with vision, hearing, and cognitive impairments, as well as mobility challenges. In addition, customers who are deaf or having hearing impairments can receive support from agents in American Sign Language (ASL).

Products that Matter

Accessibility is integrated into the Xfinity X1 experience, from the award-winning Voice Remote to the first talking guide, audio description, and enhanced closed captions. We offer X1 EYE Control, a web-based version of the Voice Remote that allows customers with disabilities to control their X1 experience from their web browser. And Xfinity Assistant now includes several accessibility features, including audio description or voice guidance.

The latest evolution of our award-winning Xfinity Adaptive Remote for Xfinity X1 and Flex TV offers unprecedented control of Live and On Demand TV, streaming music, and smart home technology. Launched in 2019, the Web-based remote works on any computer, smartphone, or tablet and seamlessly connects with assistive devices used and trusted by people with disabilities. New features include custom push-button commands instead of voice commands, an industry first.

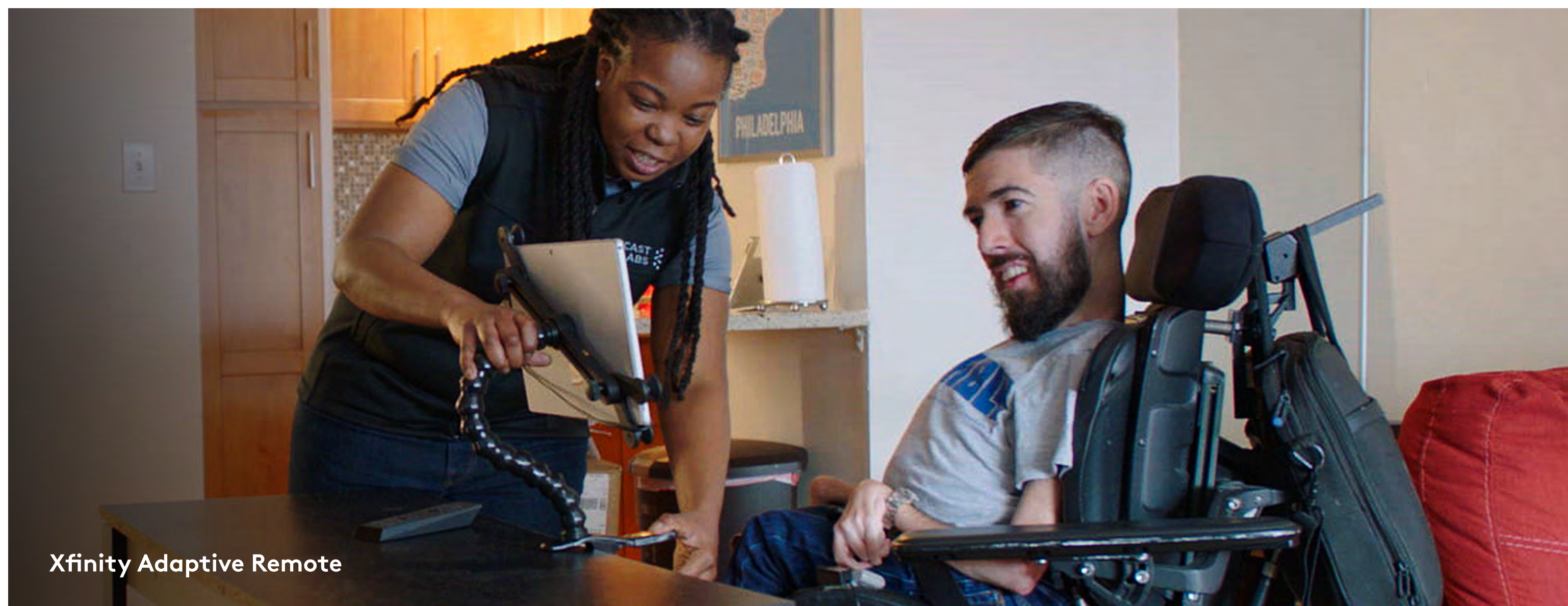
“

When you make a product more inclusive, you create a better experience for everyone.

Tom Wlodkowski

VP of Accessibility

Comcast Cable



Xfinity Adaptive Remote

Leveraging Our Programming,
Platforms, & Products

Partnering to Drive Inclusive Innovation

To drive awareness and adoption of the newly enhanced Xfinity Adaptive Remote, Comcast partnered with **Team Gleason**, a nonprofit committed to delivering innovative technology, equipment, resources, and opportunities to help people with Amyotrophic Lateral Sclerosis (ALS) live productive, purposeful, and meaningful lives. The partnership will engage people with physical and speech disabilities, as well as caregivers, clinicians, technologists, and assistive technology partners, to accelerate innovation to create better experiences for everyone in the home, and bring disability perspectives to the forefront.

“

Our partnership with Comcast allows us to continue innovating on technology that provides people with ALS and other physical disabilities the latest in accessibility functions.

Blair Casey
Chief Impact Officer
Team Gleason



Xfinity Adaptive Remote

Ruderman Foundation Pledge

Discrimination and bias exist for disabled people working in films and television. According to a Ruderman Foundation report, only 22% of characters with disabilities on network and streaming shows in 2018 were “authentically portrayed by actors with disabilities.” NBCUniversal, with support from the Ruderman Family Foundation, has pledged to include actors with disabilities in auditions for all new film and television productions.

The Valuable 500

Comcast NBCUniversal is proud to be a part of The Valuable 500, a global collective of CEOs and companies innovating together for disability inclusion. As part of our commitment to The Valuable 500, Sky pledged to mark International Day of Persons with Disabilities by launching its first-ever content collection highlighting inspiring documentaries that feature people with disabilities.

Driving Inclusive Growth

As communities of color and women continue to bear the brunt of the COVID-19 pandemic, we are accelerating our efforts to advance pathways to economic inclusion. By supporting more equitable access to capital, championing community-based financial institutions, and expanding our engagement with diverse suppliers, we are living out our commitment to narrowing the wealth gap.

Investing for Impact

In 2021, we deepened our efforts to advance racial equity by investing in institutions owned by members of marginalized communities that promote equitable access to capital.

In 2021, we announced three significant investments:

First Women's Bank: The first-of-its-kind, purpose-driven bank is the country's only women-founded, women-owned, and women-led commercial bank with a strategic focus on serving the financial needs of women. As a Mission Partner, we will help bridge the gender gap in access to capital.

Inclusiv's Racial Equity and Resilience Investment Fund: We are the fund's first corporate investor, and our \$10 million contribution will help credit unions led by and/or serving people of color deploy capital to business owners, homeowners, and consumers from underrepresented communities.

Clear Vision Impact Fund: We invested \$25 million in the Seibert Williams Shank & Co.-sponsored fund committed to providing employment, job training, and educational opportunities in underserved communities. As an anchor investor, we will help Clear Vision provide loans to minority-owned or operated businesses that have traditionally lacked access to capital.



Leveraging Our Purchasing Power

We are deeply committed to advancing the economic inclusion of underrepresented businesses. As part of this, we promote, increase, and improve the participation of within our supply chain that are owned by women, people of color, veterans, individuals with disabilities, and LGBTQ individuals. When we do business with companies that strive to promote diversity, they help create jobs for people within their communities, distributing more opportunity and wealth.

We are proud to be the first media and technology company inducted into the Billion Dollar Roundtable, a prestigious corporate advocacy group that celebrates companies that spend at least \$1 billion with diverse-owned businesses. The **Billion Dollar Roundtable** promotes and shares best practices in supply chain diversity excellence, and encourages corporate entities to continue growing their supplier diversity programs by increasing commitment and spending levels each year. Over the past five years, we have spent at least \$3 billion each year with diverse suppliers.

DIVERSE SUPPLIERS BY THE NUMBERS

\$30 Billion

spent with diverse suppliers since 2011

\$4.3 Billion

spent with diverse Tier 1 vendors (and over \$390 million with diverse Tier 2 subcontractors in 2021)

3,250

of diverse suppliers with direct purchases in 2021



Meet Our Suppliers

MasTec

We rely on MasTec, an infrastructure construction and maintenance company specializing in wireless and wireline/fiber communications, to deploy 5G fiber for the delivery of high-speed broadband Internet service to our customers. MasTec, which was founded in the 1960s by a Cuban immigrant who arrived in Miami without money or the ability to speak English, is now a Fortune 500 company certified as a Minority-Controlled organization by the National Minority Supplier Development Council (NMSDC). “We are honored to be a part of Comcast’s push to deliver an ever-growing suite of innovative high-speed video content and communications products to their customers,” says José Mas, CEO, MasTec. “We’re also proud of our shared commitment to promoting diversity and inclusion.”



MasTec employee

“

Our enterprise-wide supplier diversity commitment allows us to contribute to the overall economic growth and well-being of the communities in which we live and work.

Ajamu Johnson

Vice President of Enterprise Procurement

Comcast Cable

KST Data

KST Data is an AAPI-owned computer equipment reseller and managed service provider based in Los Angeles. The company has served as an extension of our IT organization, handling computer hardware procurement, setup, asset management, and on-site tech support. “Comcast’s commitment to supporting those that are underrepresented has proven that diversity, inclusion, and mentoring strengthens its business and the businesses of its key partners,” says Torres Tan, President and CEO, KST Data.

Giving Underserved Entrepreneurs an EDGE in the Media Industry

NBCUniversal’s EDGE (Entrepreneurs Driving Growth and Excellence) Accelerator Program is an industry first — the first capacity-building initiative geared toward developing and investing in diverse-owned businesses specializing in media, marketing, and digital technology. The program provides entrepreneurs an opportunity to take instructor-led MBA level coursework, paired with workshops led by NBCUniversal executives.



2021 Diversity Data

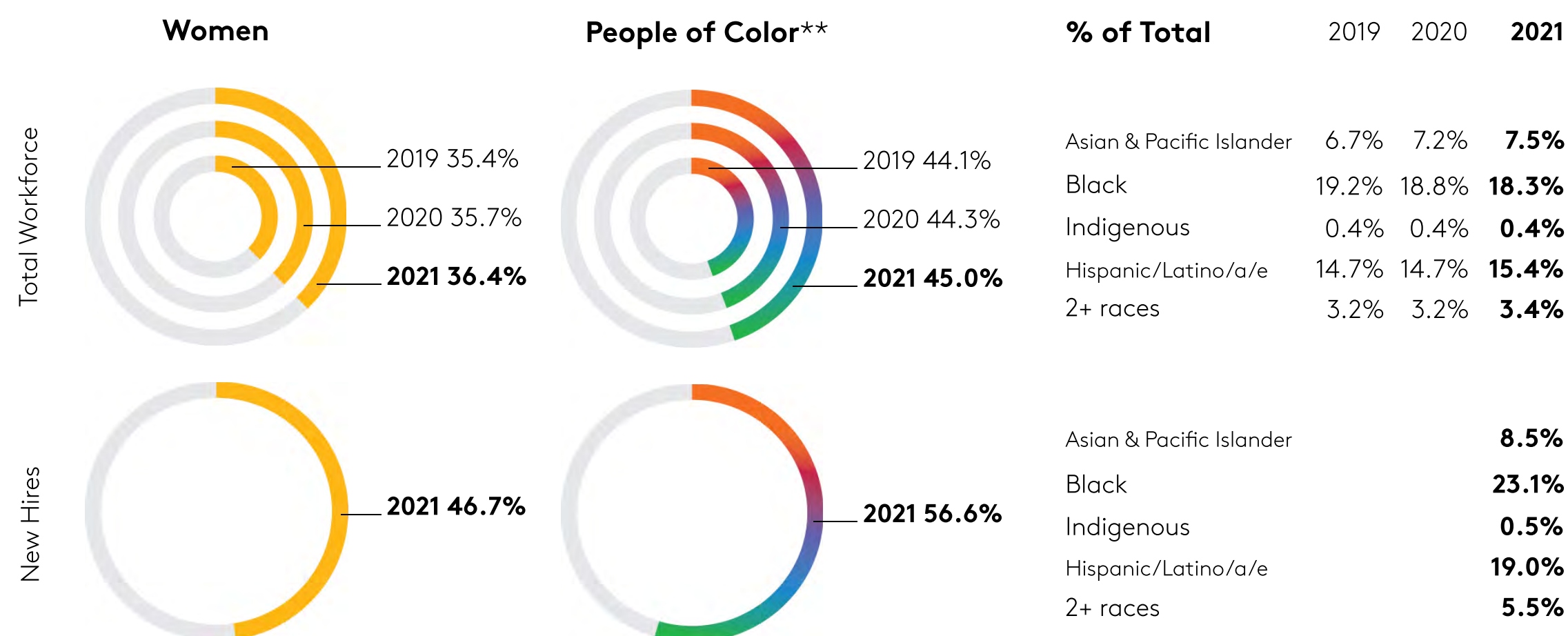


2021 Diversity Data

Workforce Diversity^{*}

Diversity, equity, and inclusion are essential to our business. Our aspiration is to have 50% women and 33% people of color at every level of our workforce.

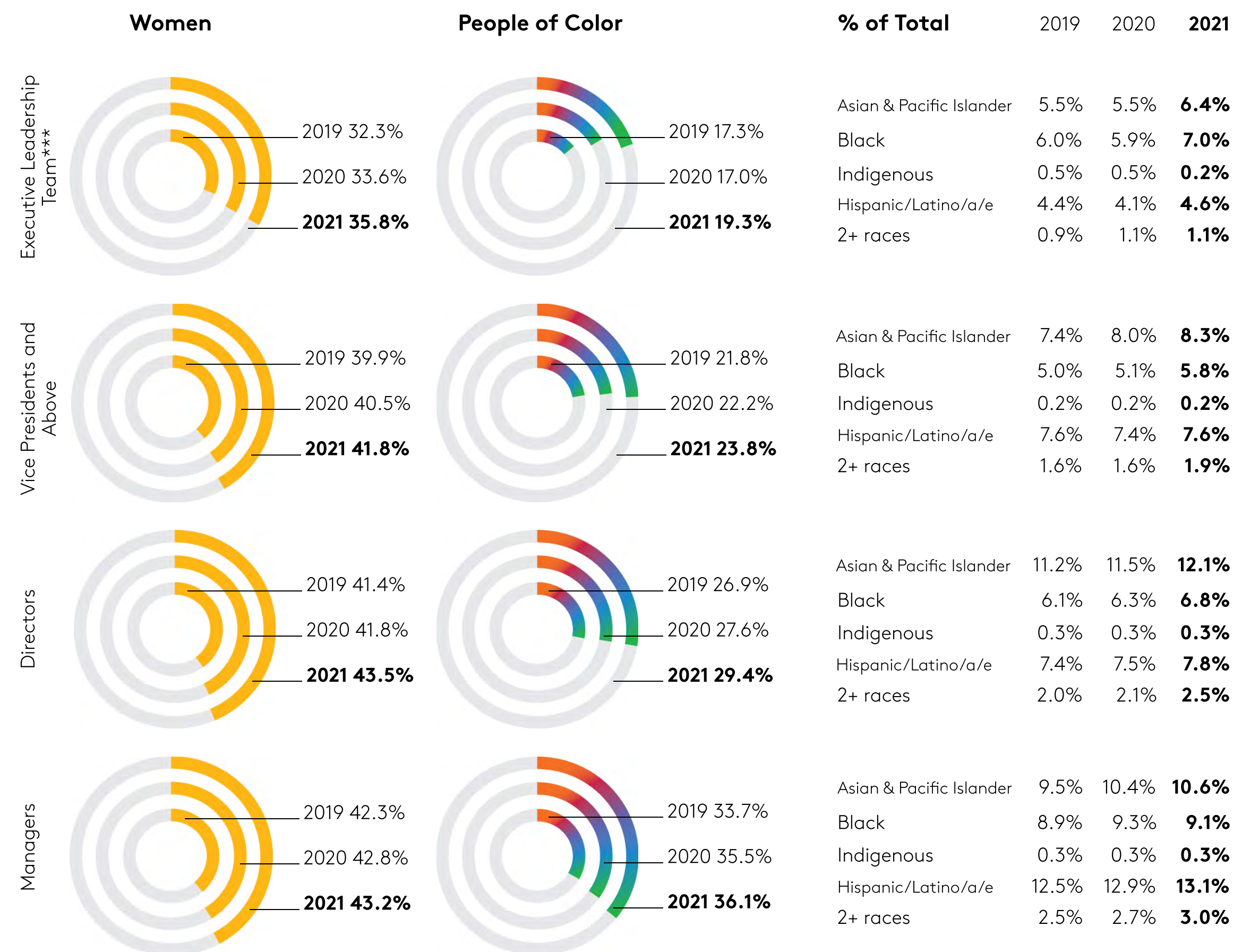
OVERALL WORKFORCE YE 2021



* All diversity data in this report are for Comcast NBCUniversal only. Workforce metrics are reflective of our U.S. full-time employees.

** Ethnic diversity numbers may not sum to total due to rounding.

LEADERSHIP YE 2021

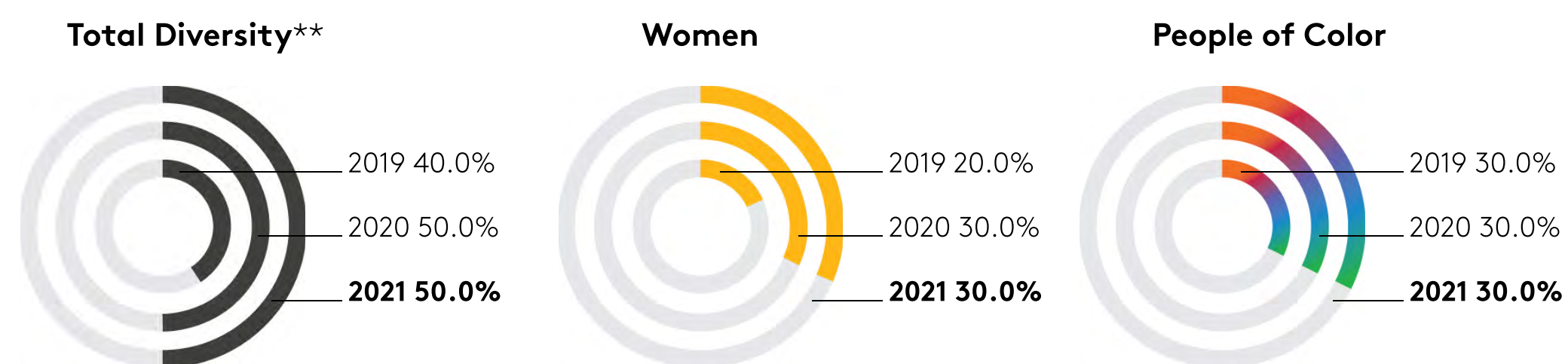


*** Our Executive Leadership Team includes Comcast's Senior Vice Presidents and above, as well as NBCUniversal's Executive and Management Committees. These metrics reflect a subset of the VP+ metrics.

Governance

Our commitment to diversity starts at the top. As of year-end 2021, our Board of Directors included 30% women and 30% people of color.*

BOARD OF DIRECTORS



% of Total	2019	2020	2021
Asian & Pacific Islander	10%	10%	10%
Black	10%	10%	10%
Indigenous	0%	0%	0%
Hispanic/Latino/a/e	10%	10%	10%
2+ races	0%	0%	0%

* As of the date of the annual meeting on June 1, 2022, when Nomi Bergman's directorship ends, our Board of Directors will include 22% women and 33% people of color.

* * Total Diversity refers to people of color and women, without double-counting women of color.

Supplier Diversity

Comcast NBCUniversal's supplier diversity program is designed to promote, increase, and improve the participation of diverse businesses within our corporate supply chain — including companies owned by women, people of color, veterans, people with disabilities, and lesbian, gay, bisexual, transgender, and queer individuals. We track our spending with both Tier 1 (direct purchases from approximately 3,250 diverse suppliers) and Tier 2, direct and indirect subcontracting spend reported from non-diverse owned suppliers.

PROCUREMENT

Tier 1 Diverse Spend

2019

\$3.9B

2020

\$3.7B

Tier 2 Diverse Spend

2019

\$449M

2020

\$320M

2021

\$4.3B

2021

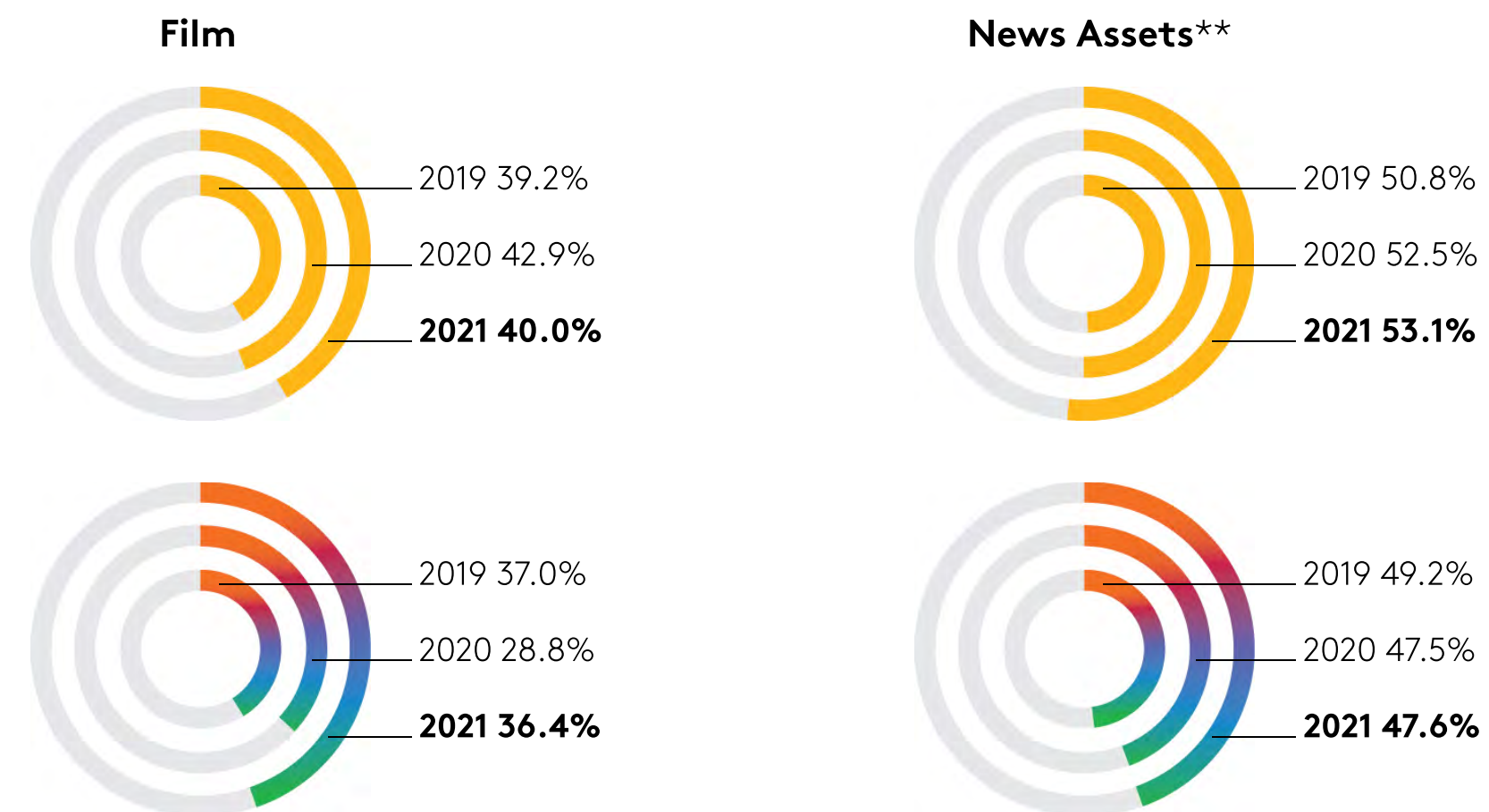
\$390M

NBCUniversal Programming

In film and on TV, the representation of diverse individuals, cultures, and stories on screen is vitally important to our viewers and our company. To ensure we're telling authentic stories that resonate with a wide range of audiences, we strive to have diverse perspectives in every aspect of our programming at NBCUniversal.*

ON AIR

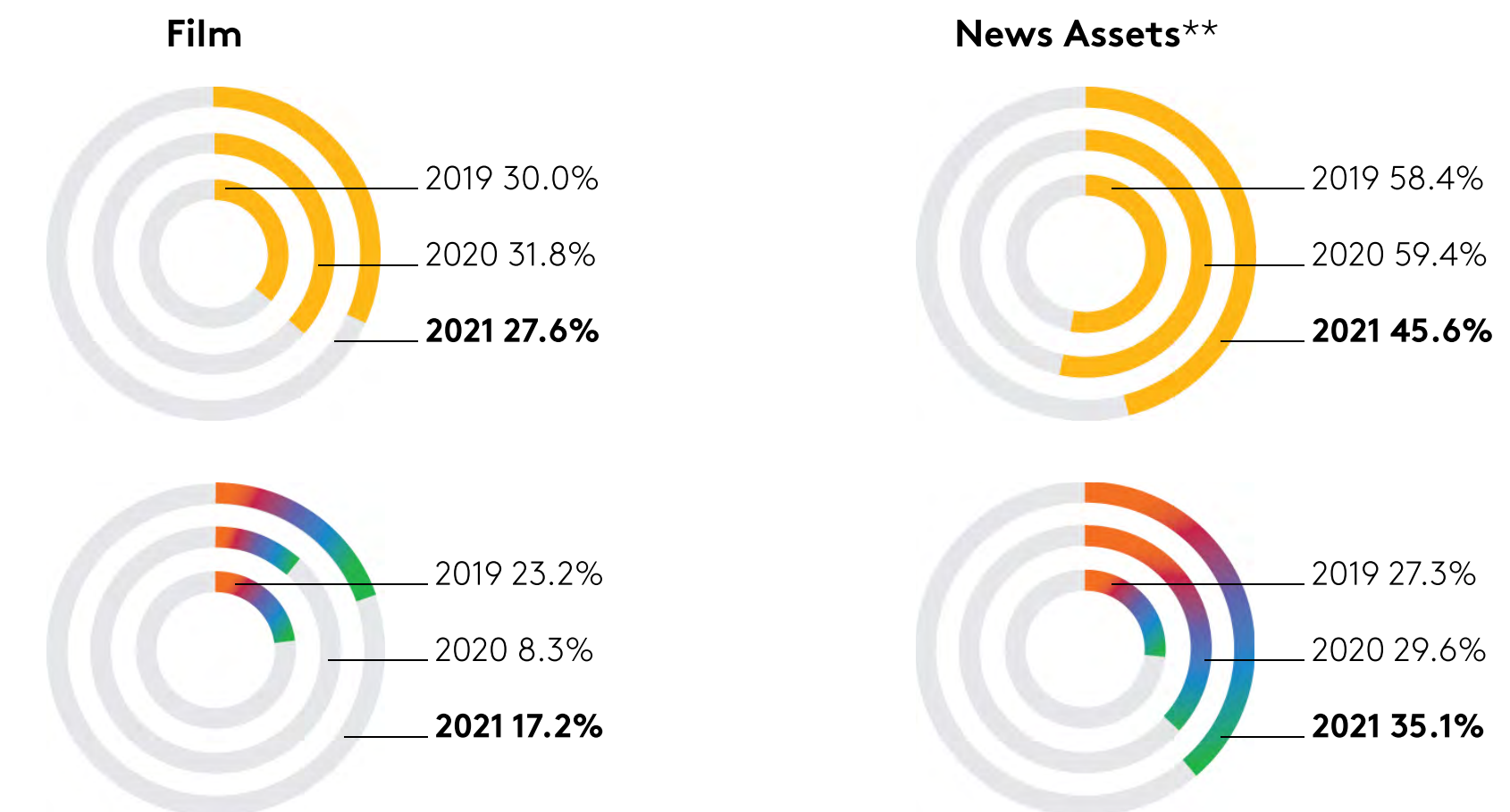
KEY ■ Women ■ ■ ■ People of Color



* Metrics refer to the NBCUniversal on screen/on air and behind the camera workforce; we do not have the metrics for the content on our Xfinity platforms.



BEHIND THE CAMERA



** News Assets includes NBC News, MSNBC, CNBC, and NBC-owned stations, but does not include Telemundo Network News or Telemundo stations.

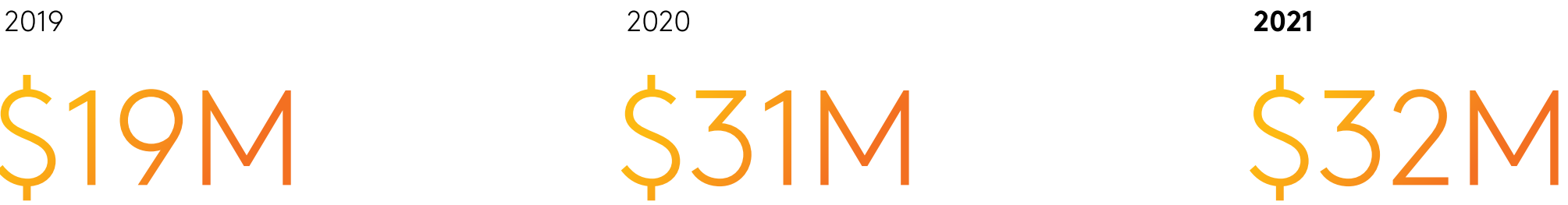
Community Impact

As a company uniquely positioned to educate, entertain, and empower, we are committed to bringing together diverse communities and inspiring our customers, audiences, and employees to make a positive social impact. Over the last three years, we’ve invested \$594 million total in cash and in-kind giving benefiting people of color.



CASH GIVING

To organizations led by and serving people of color



To organizations led by and serving women



CASH/IN-KIND DONATIONS INVESTED IN COMMUNITIES



2021 Employee Giving



ENVIRONMENT

At Comcast, we believe in protecting the environment where we live and work to ensure a sustainable planet now — and long into the future. That's why we've set a goal to be carbon neutral by 2035.

The Path to Carbon Neutral

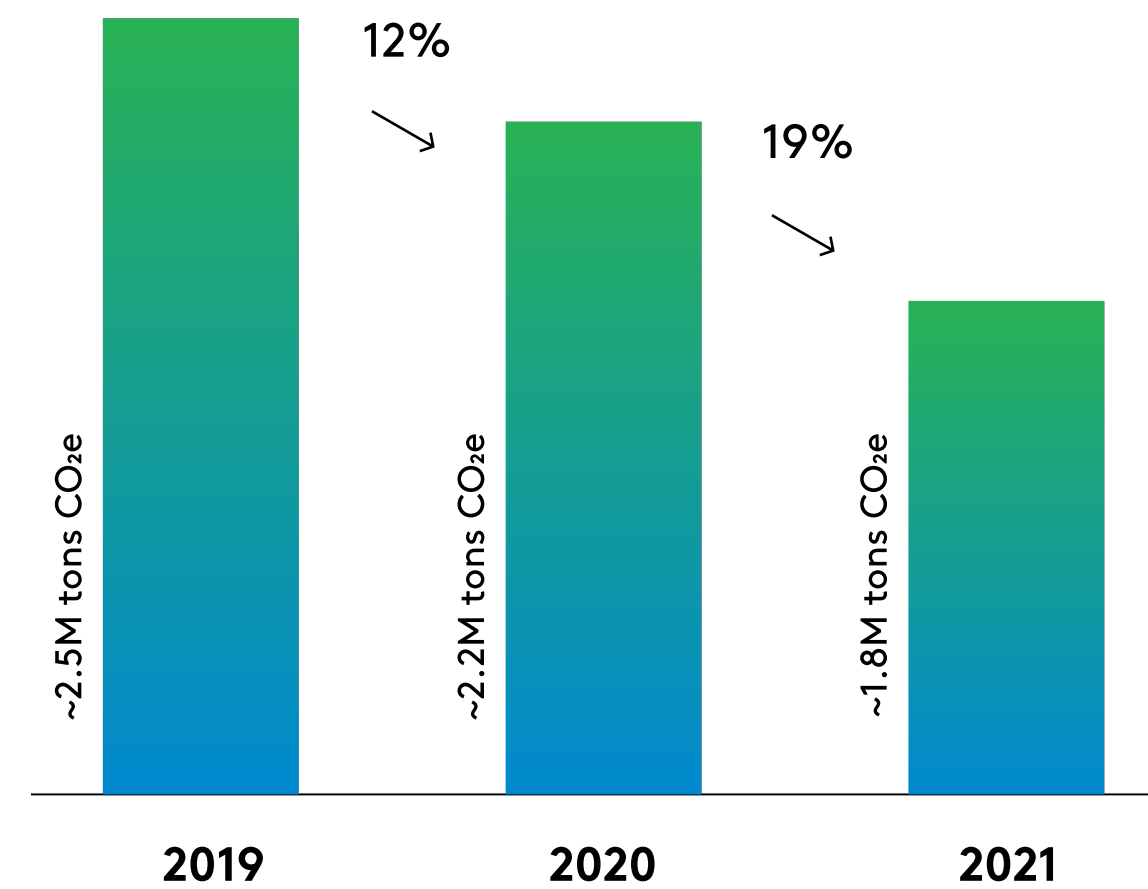
Our goal to be carbon neutral by 2035 means reducing our Scope 1 and 2 emissions, or the direct and indirect emissions we own and control across our global operations.

We're proud of the progress we made in 2021, reducing our emissions 19% over 2020. The main drivers of this reduction were sourcing more renewable electricity and reducing energy usage — all while growing our business. The greening of the U.S. electricity grid also contributed to our emissions reductions.

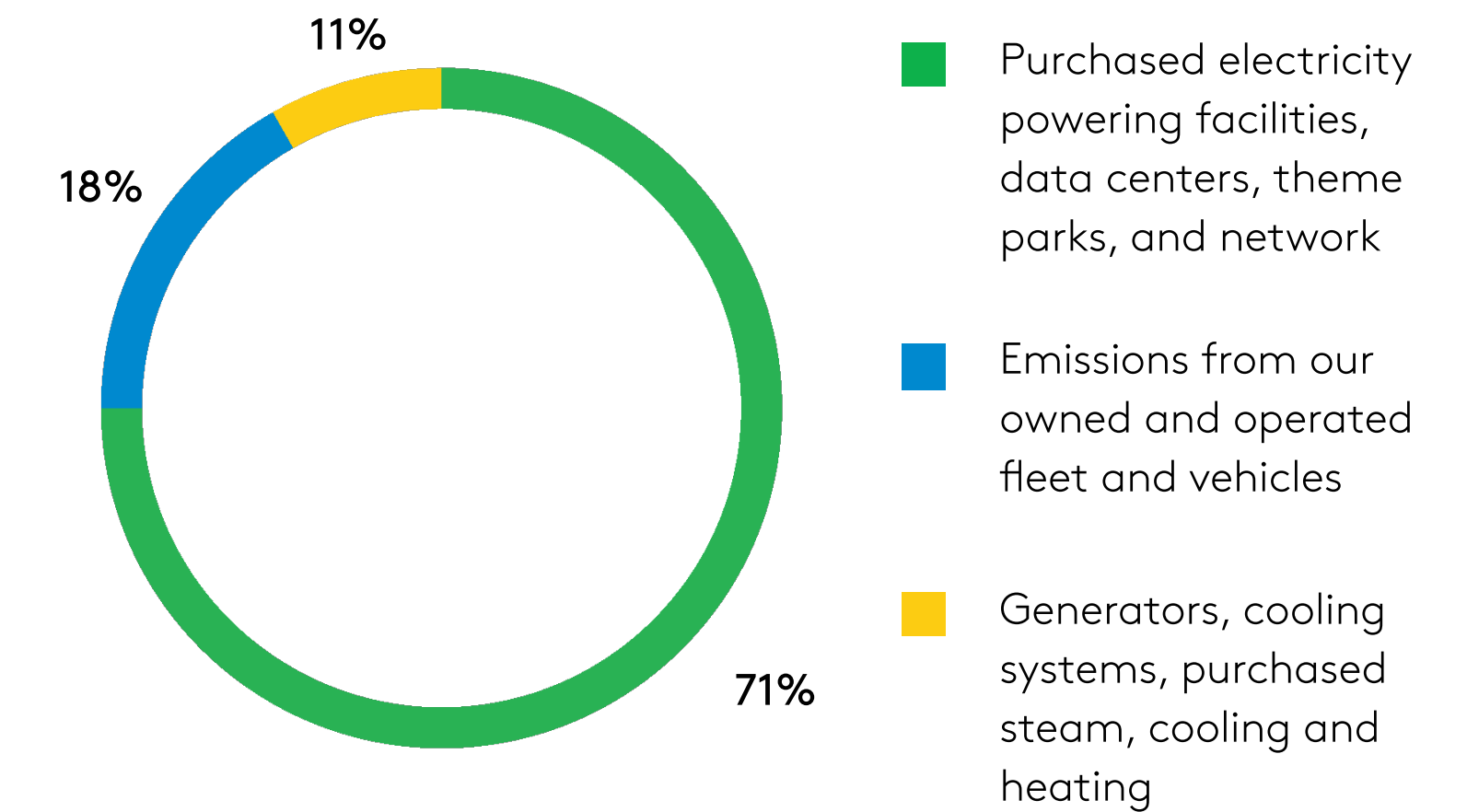
With purchased electricity accounting for the majority of our emissions, we are continuing to invest in clean, renewable energy. This means shifting to solar, wind, and other clean sources of electricity.

For our fleet, we are piloting electric and hybrid vehicles, working with drivers to reduce idle time, and installing telematics and fuel efficiency technology to reduce vehicle emissions. We also are developing solutions to achieve energy

Emissions from Global Operations



Our 2021 Scope 1 and 2 Emissions



For more information, please visit our [Carbon Footprint Data Report](#)

How We Measure and Report on Our Scope 1 and 2 Emissions

To provide transparency and help drive improvement, we are reporting data using the Greenhouse Gas (GHG) Protocol consistent with the Sustainability Accounting Standards Board (SASB) and Task Force on Climate-related Financial Disclosures (TCFD) frameworks. We have partnered with a leading consulting firm to guide us through this and help develop our reporting and estimation approach.

efficiency gains across multiple aspects of our business, from our facilities and theme parks to our network and data centers.

We expect that, over time, our attention to sourcing renewable energy and honing efficiency across our global operations will bring us close to our carbon neutral goal. We will likely need to address any remaining emissions we cannot eliminate directly by purchasing carbon offsets.

Beyond Carbon Neutral

We are making strides in many other areas beyond our carbon neutral commitment, including reducing waste through industry-leading recycling solutions, offering new sustainable products and packaging, and drawing upon the creativity of our sets and storytellers — to showcase the possibilities of a sustainable future — one we can all create together.



Electric Tram

Universal Studios Hollywood

The Path to Carbon Neutral

Managing the Challenges Ahead

Sourcing renewable energy and transitioning to an electric fleet may sound like simple solutions for decarbonizing our business, but there are myriad challenges that will need to be overcome to meet our carbon neutral goal and the decarbonization goals of society at large.

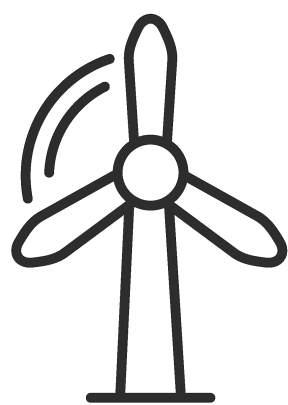
These challenges include certain factors beyond our control, including political, economic, regulatory, and geopolitical conditions, the evolution of carbon offset markets, and limited large-scale public- and private-sector investments and innovations in technology and infrastructure. For example, a widescale clean energy transition will require expanded policies and market mechanisms, enhanced grid resiliency, and greater energy innovation.

In addition, most next-generation technologies beyond renewables are still too costly for large-scale deployment or are not yet available. For example, certain types of electric vehicles, such as the bucket trucks used in our operations, do not exist today and may not be manufactured for years to come.

Harnessing Renewable Energy to Drive Down Emissions

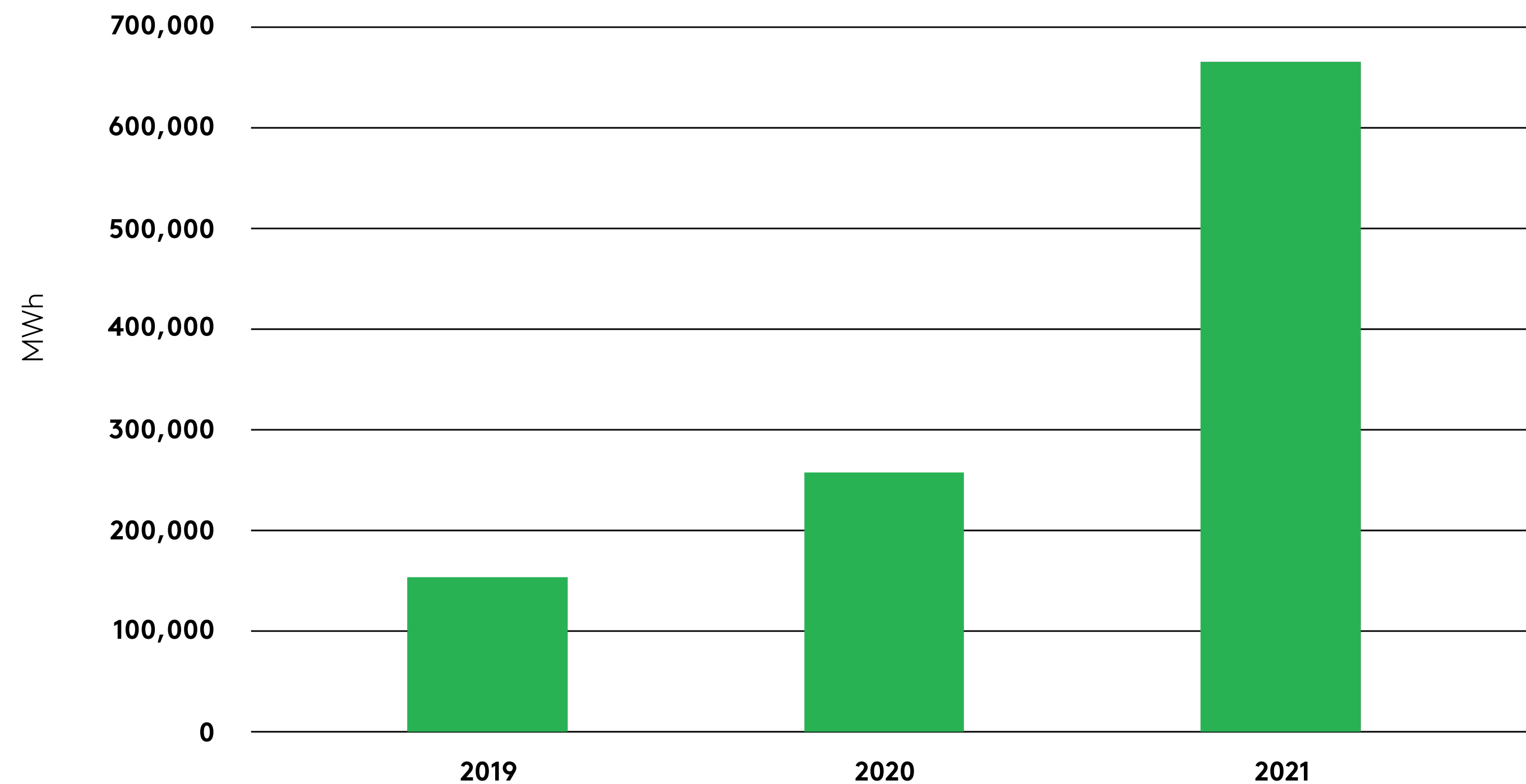
Our carbon neutral strategy is centered around shifting to zero carbon, renewable electricity. To accelerate progress, we are pursuing a variety of sourcing options, including:

1. Power purchase agreements (PPAs) and other supplier contracts that create additional renewable energy capacity.
2. On-site renewables where feasible.
3. Existing renewable energy available through supplier programs and renewable energy certificates (RECs).



From 2020 to 2021, Comcast more than **doubled our use of renewable electricity** across our global operations, from approximately 254,858 megawatt-hours (MWh) to 662,544 MWh.

RENEWABLE ELECTRICITY USAGE



Securing Renewable Energy Now and for the Future

In 2021, we signed Comcast’s first large-scale renewable energy agreement to purchase 250 megawatts (MW) of solar electricity that will power approximately 12% of our current U.S. operations with renewable energy beginning in 2025. The deal will allow Comcast to reduce the carbon dioxide emissions associated with its energy use by nearly 360,000 metric tons annually – equivalent to avoiding the emissions from more than 65,000 homes’ electricity use for a year.

“

This marks the first of many major green investments that are already underway or on the immediate horizon which demonstrate our commitment to sustainable, responsible business.

Peter Kiriacoulacos

Executive Vice President & Chief Procurement Officer

Comcast

Comcast Cable has several renewable electricity contracts underway. In Houston, Comcast is already purchasing 100% renewable energy for our cable facilities and network operations. In Georgia, Comcast will source 13 MW of renewable resources for 10 years, covering approximately 20% of Comcast Cable’s operations in the state. In Portland, Comcast will source local electricity from a new solar project that will deliver approximately 20% of the Oregon/Southwest Washington Region’s energy load.

Comcast Spectacor, which operates the Wells Fargo Center, committed in 2021 to source Green-e RECs to provide facilities for the Philadelphia Flyers and the National Lacrosse League’s Philadelphia Wings with 100% renewable electricity.

Finally, across Europe, Sky continues to source 100% renewable electricity in line with its 2020 commitment through on-site renewable electricity generation, renewable tariffs, and energy credits backed by Guarantees of Origin.



Harnessing
Renewable Energy to
Drive Down Emissions

On-Site Solar for Greener Facilities

In addition to sourcing more renewable energy, we are installing clean energy solutions on our own buildings and facilities to reduce our carbon footprint.

In Hillsborough, New Jersey, Comcast Cable recently completed the construction of a 487 kilowatt (kW) solar system to provide approximately 50% of the facility's annual energy consumption. A second phase of the project initiated in early 2022 includes installation of a microgrid to store excess power from the solar system.

In Orlando, Florida, NBCUniversal completed construction of a 250 kW floating solar system located at Universal Orlando Resort in 2021. Across the country in Los Angeles, NBCUniversal has installed 548 kW of solar panels on the roofs of four sound stages at the Universal Studios Lot to generate enough power for more than half of the site's energy needs. Eight new sound stages are currently under construction at the Universal Studios Lot and will feature a combined 1 MW of rooftop solar. NBCUniversal is assessing more options for on-site solar at locations across its Orlando and Los Angeles theme parks and campuses.



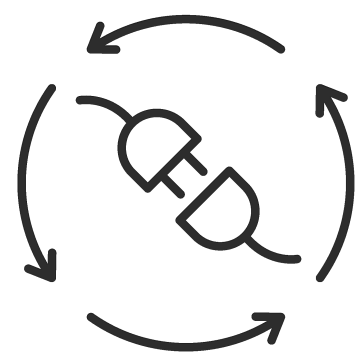
In the United Kingdom, Sky Studios Elstree has the ambition to be the world's most sustainable film and TV studio when it opens this fall. The project is tracking a 24% reduction in embodied carbon in construction, and plans are in place to install over 10,000 square meters of solar panels on available roof space. All additional energy needs not generated on-site will be sourced from 100% renewable electricity. No gas or fossil fuels will be used to power day-to-day operations and all studio vehicles will be electric. Sky will also harvest rainwater to irrigate landscaping and pre-vet all preferred suppliers with sustainability in mind.

Boosting Network
Efficiency, Resilience,
and Reliability

Boosting Network Efficiency, Resilience, and Reliability

Sourcing renewable energy is essential to delivering a low-carbon network. So is driving network efficiency. This means shifting to newer, more energy-efficient technologies, facilities, and systems across the thousands of miles of our network.

Comcast Cable's network serves more than 34 million residential and business customers. Powering this nationwide network and cooling its critical equipment drives significant electricity consumption, but investments in innovation, software, AI, and other virtual and physical critical infrastructure are enabling us to grow the capacity of our network while achieving efficiency gains for energy consumption, capital investment, facility space, and cooling requirements.



From 2019 to 2021, the company's energy per consumed terabyte **decreased nearly 30%.**



Our commitment to continuously improving our systems and solutions is ultimately rooted in the principle that the most reliable network is a resilient one. That's why our teams are working simultaneously to both manage risk and harden the network to minimize service disruptions during crises.

We have invested nearly \$20 billion over the last five years to help meet rapid changes in customer demand and keep our network and operations running as reliably and efficiently as possible, including during severe weather events.

“

Because of the size and geographic diversity of our network, we are continuously engineering our physical network architecture to perform optimally under the widest possible range of conditions to help ensure our teams and technologies are ready to meet whatever comes.

Elad Nafshi
Chief Network Officer
Comcast

For example, when a record-breaking heat wave scorched the Pacific Northwest in June 2021, Comcast Cable's West Division responded quickly, ensuring we never lost a headend or hub so our Seattle customers remained connected.

All in all, our critical facilities operate through more than 350 commercial power interruptions on average per month, helping to ensure our network remains uninterrupted for millions of customers.

Innovating Sustainably, From Product to Packaging

Introducing the World's First CarbonNeutral® TV

Our commitment to sustainable innovation includes designing environmentally friendly products and packaging that improve the entertainment experience, save our



customers energy and money, and lower our impact on the planet.

Many people may not think of reducing energy use while watching TV, but we do. In 2021, Sky Glass was introduced as the world's first TV certified as a CarbonNeutral® product. The smart-streaming TV, which debuted in the U.K. and will launch across Europe in 2022, integrates all hardware, software, and Sky Inside content into a single device, helping customers reduce electricity use compared to running a separate TV, soundbar and Sky Q set top box. Built-in power-saving features include an auto-off mode and auto-adjusting screen brightness. All Sky Glass packaging is 100% recyclable, includes Forest Stewardship Council (FSC) certified cardboard, and no single-use plastic.

To offset the energy the Sky Glass TV does use, as well as the embedded carbon in the manufacturing process, Sky purchases Energy Attribute Certificates and obtains carbon offsets from renewable energy generation. In addition, Sky Glass has supported a reforestation project in Scotland, planting 200,000 native trees.

“

We set out to design innovative packaging as a core part of the project. Working on this from the very start means that we now offer market-leading packaging with a minimal environmental footprint.

Chris Moore

Director of Manufacturing

Sky



100% Recyclable Packaging
Free From Single-Use Plastics

Creating Conscious Packaging

We are designing our packaging to be more environmentally conscious and user-friendly. In 2021, Comcast introduced the **Xfinity Eco Capsule™**, a 100% recyclable and reusable modular packaging system for select Xfinity Video and Internet products. The patented package is made with select, renewable, FSC-certified materials such as responsibly sourced bamboo, sugarcane, paper, and soy ink.

On-package messaging encourages customers to reuse and store their favorite items in the capsule or recycle it with other paper products. The Xfinity Eco Capsule™ is catching the eye of both customers and industry organizations; it recently won the prestigious Red Dot Design Award and a Gold International Design Excellence Award from the Industrial Designers Society of America.

Improving the Energy Efficiency of Set-Top Boxes

Knowing that we cannot solve today's energy challenges alone, we teamed up with other industry peers in 2013 to collectively improve the energy efficiency of TV set-top boxes. In 2020, our efforts delivered more than 4.3 terawatt-hours of energy savings, equivalent to approximately 3 million metric tons of greenhouse gas emissions and \$569 million in



Xfinity Eco Capsule

customer energy cost savings. Several factors have contributed to this substantial decline in energy use, including the deployment of whole-home digital video recorders (DVRs), migration of DVRs to the cloud, and migration to

Internet Protocol (IP) video with much-lower-power IP boxes. Additionally, we are part of a similar peer group working to improve energy efficiency in small network equipment, including broadband modems and routers.



Recycling Cable Waste

Our efforts to eliminate waste extend to a variety of products and materials, as Comcast aims to recycle or divert cable equipment waste from landfills. Comcast Cable has internal e-waste management programs requiring device recycling business partners to be Responsible Recycling ("R2") certified, which is a widely accepted international certification for responsible electronics recycling.

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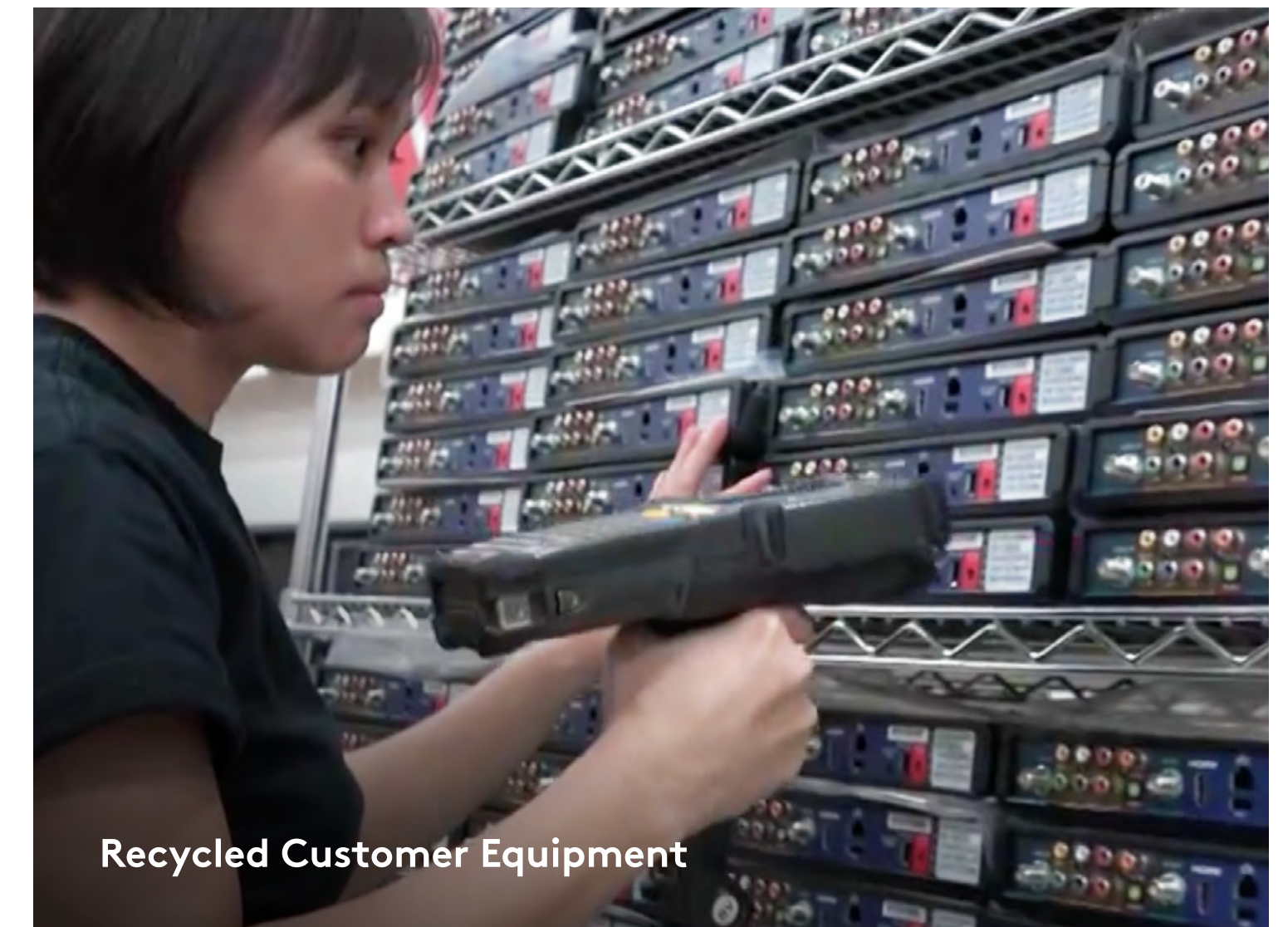
Comcast works to continually recycle or divert cable equipment waste, and we have been in constant search for new technologies to maximize the recyclability and reusability of coax cable materials at end of life.

Tom Vogel

Senior Vice President of Supply Chain & Logistics

Comcast Cable

In 2021, Comcast Cable partnered with Echo Environmental to recycle coaxial cables at the end of their lifecycle. Echo Environmental's pioneering recycling technology breaks down these multilayered cables — which consist of an aluminum and copper shield with an outer plastic jacket — into raw materials that can be reintroduced and resold — helping to significantly reduce landfill waste and bring approximately 70% of Comcast Cable's annual cable and coax waste into the circular economy.



Recycled Customer Equipment

Supporting Sustainability through Storytelling and Production

Our commitment to environmental stewardship extends to the set and the screen through responsible production practices and compelling storytelling that showcases the possibilities of a sustainable future.

This commitment starts before the cameras roll. Launched in 2009, the NBCUniversal Sustainable Production Program empowers production teams to integrate environmental best practices into on-set protocols for NBCUniversal film and TV productions—from using lower-emission fuels and electric vehicles to reducing waste through set material reuse, recycling, and composting.

Over 70 productions across our film and TV portfolio participate each year. For example, the 2022 Focus Feature film, “Downton Abbey: A New Era,” embraced a host of sustainable production practices, including using renewable diesel in generators and vehicles, contacting vendors and suppliers to ensure they had sustainability practices in place, and using sustainable plywood for set walls.

“

‘Downton’ went above and beyond in their sustainability efforts. From lovingly reusing older sets, to traveling by train in lieu of domestic flights, they really embraced the program and understood the importance of reducing their environmental impact.

Charlotte Ashby
Head of Production
Carnival Films



Downton Abbey: A New Era



Working Together for Change

NBCUniversal is also a member of the Sustainable Production Alliance, a consortium of film, television, and streaming companies dedicated to reducing the entertainment industry's environmental impact by advancing sustainability initiatives through advocacy, education, and innovation. The companies work together to knowledge-share and align on best practices across the industry. They also partner with the Producers Guild of America Foundation's PGA Green Initiative to host GreenProductionGuide.com, a free resource to all filmmakers that includes tools, green vendors, and detailed reports dedicated to advancing sustainable production.

Sky has also implemented sustainable production principles and a "Planet Test" for entertainment content to help

production and editorial teams actively consider the environment and champion sustainability both on and off screen. The test gives all new Sky Original programming a pre-production guide to help determine if the content can raise awareness of key environmental issues and show positive action.

Across all of Sky's productions, teams are reducing their carbon footprint as part of Sky's commitment to become net zero by 2030. Certified by albert, the organization leading the U.K. TV and film industry in the charge against climate change, all U.K.-commissioned Sky productions have been carbon neutral since 2019, and all Sky Sports U.K. host outside broadcasts have been carbon neutral since January 2021. Sky Sports News channel has also now become a carbon neutral production.

Green Seal of Approval



The Environmental Media Association (EMA) Green Seal program recognizes progress in sustainable production. In 2021, 46 NBCUniversal film and TV shows received EMA Green Seals for their sustainability efforts behind the scenes. Additionally, NBCUniversal took home two EMA Awards.



Sky Sports Studios
London

SKY Game Zero: The First Net Zero Carbon Football Game



In September 2021, Sky set out to present the world's first net zero carbon football game at an elite level — and inspire millions of fans to reduce their own carbon footprint.

To achieve this for the Premier League match between Tottenham Hotspur and Chelsea, Sky measured the baseline emissions of a previous match held at the Tottenham Hotspur Stadium. For the net zero carbon game, the football club employed creative ways to lower these emissions: Players traveled to the stadium in buses powered by green biodiesel, and fans were encouraged to walk, take the train, or drive electric or hybrid cars. On match day, everything at Tottenham Hotspur Stadium was powered by 100% renewable energy, and all food served was locally and sustainably sourced. The Sky Sports broadcast of the match achieved a 70% reduction in emissions compared to the baseline.

Sky worked with Natural Capital Partners to offset remaining emissions through a community reforestation project in East Africa.



“

We hope that Game Zero is the first of many major net zero carbon sporting events and will inspire long-term change.

Jonathan Licht
Managing Director
Sky Sports

Programming with a Purpose

As content creators and platform owners, we use our voice to acknowledge and raise awareness of the environmental issues that impact us all.

We are using our programming to spread awareness in many other ways. In 2021, we leveraged the reach of our programming and personalities to spotlight pressing climate challenges facing our world. The goal? Inspiring thoughtful conversation on creating a more sustainable planet.

For example, TODAY Climate takes a deep-dive review of climate changes, extremes, strategies, and solutions through its climate coverage, led by Al Roker on TODAY, TODAY.com, TODAY All Day, and social media. The Sky News Daily Climate Show follows correspondents as they investigate how climate change is changing our landscape and lives.

In September 2021, The Tonight Show Starring Jimmy Fallon and Late Night With Seth Meyers joined their late-night counterparts for "Climate Night," focusing their programming on climate change during Climate Week NYC.



Al Roker on TODAY

Sky and COP26: Driving Climate Action

In 2021, Sky was a Principal Partner and Media Partner of COP26, the United Nations Climate Change Conference, an event where government and business leaders gather to help build a better future for our planet.

At the conference in Glasgow, Sky Group CEO Dana Strong co-presented a study designed to help content creators and broadcasters inspire viewers to take action to address climate change. The report, “The Power of TV: Nudging Viewers to Decarbonize their Lifestyles,” found 80% of poll respondents support the idea of broadcasters using content and advertising to encourage people to adopt more environmentally positive behaviors.

“

At Sky, we have set out our pathway to achieve net zero carbon, but we know this alone won't be enough. We're publishing these research results in full as an open tool for content creators and broadcasters to work together to deliver the behavior change required to meet our net zero ambitions.

Dana Strong

CEO

Sky Group





We are committed to using the power of our platforms, our people, and our reach to create positive change and a more equitable society. By supporting local communities, our teammates, and our planet we can help create a world of open possibilities — so together, we can build a future that benefits generations to come.

We thank our employees, partners, customers, and communities for their partnership, dedication, and support.

Internet» essentials

FROM COMCAST

Internet Essentials is the nation's largest and most successful broadband adoption program, connecting a cumulative total of more than 10M low-income Americans to the power of the Internet at home, a WiFi enabled device, and access to free digital skills training. Internet Essentials is backed by Project UP, Comcast's 10-year \$1B commitment to advance digital equity and build a future of unlimited possibilities.





Al Roker of NBC and TODAY surprises Digital Harbor High School Principal Swinton-Buck and students with free laptops and Internet Essentials service during Sunday Night Football (September 2021.)

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Letter from Broderick Johnson

10M

low-income Americans
connected to Internet
Essentials cumulatively
since the launch of the
program in 2011

Just over 10 years ago, Comcast began an unprecedented journey to help connect under-resourced and unconnected Americans to the life-changing power of the Internet.

At one of our earliest Internet Essentials events, we were joined by the legendary civil rights leader Congressman John Lewis, who said that “availability and access to the Internet is the civil rights issue of the 21st century.” We stood with late Congressman Lewis then, and we are proud to stand now with those who are devoting their time, energy, and resources to achieving digital equity.

A decade of hard work and partnerships with thousands of nonprofits and community leaders has seen Internet Essentials grow to become the largest, most comprehensive, and most successful private-sector high-speed broadband adoption program for low-income Americans. Since launching in 2011, we have connected a staggering cumulative total of more than 10 million low-income Americans to the Internet at home.

As technology advances, the urgency of being connected is only increasing. Connection enables millions of children to stay plugged in to their school; furloughed workers the chance to learn new skills; families to exercise online, in the comfort of their own homes; doctors and patients the ability to share critical information using telemedicine; and proud parents the opportunity to introduce a newborn to family on the other side of the country or the world.

In 2020, we established our award-winning “Lift Zones” initiative to complement our Internet Essentials program. Working with our network of thousands of non-profit partners and city leaders, we launched more than 1,000 Lift Zones during 2021. Lift Zones provide free, robust WiFi in community centers to support students who, for a variety of reasons (including homelessness or housing insecurity), are simply unable to participate in distance learning at home. Lift Zones also serve diverse adult populations, as they enable access to hundreds of hours of free digital skills training for remote work, telehealth services, and more.

Looking ahead to the next 10 years, we are committed to expanding our impact through Project UP, our comprehensive initiative to advance digital equity and help build a future of unlimited possibilities. Backed by a **\$1 billion commitment to reach tens of millions of people**, Project UP encompasses the programs and community partnerships—including Internet Essentials and Lift Zones—across Comcast, NBCUniversal, and Sky that connect people to the Internet, advance economic mobility, and open doors for the next generation of innovators, entrepreneurs, storytellers, and creators.

As we continue to make substantial investments in digital equity through our own initiatives, we are also grateful for, and proud to participate in, the federal government’s massive investments in broadband access and adoption. Through the Infrastructure Investment and Jobs Act (IIJA), the government aims to improve broadband Internet access in rural areas, make broadband more affordable for lower-income households across the U.S., and promote broadband adoption initiatives like digital navigator programs.

We know families face many complex barriers to broadband adoption, including lack of awareness and digital skills, housing insecurity, distrust, and more. We pledge to bring the knowledge, experience, and best practices learned from the Internet Essentials program to the rollout of IIJA to support our thousands of non-profit partners, communities, and local governments, and to other ISPs looking to bring the transformative power of the Internet to low-income homes across their service areas.

We are committed to this because connection is at the core of Comcast’s corporate purpose, and it is at the heart of what we do. We pledge to honor that commitment, connecting the people who need it most to unlimited possibilities.

Sincerely,
Broderick Johnson
Executive Vice President
Public Policy & Executive Vice President, Digital Equity
Comcast Corporation

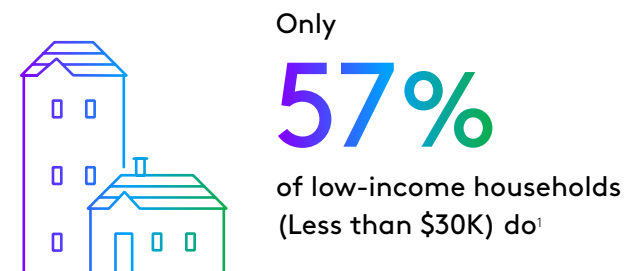
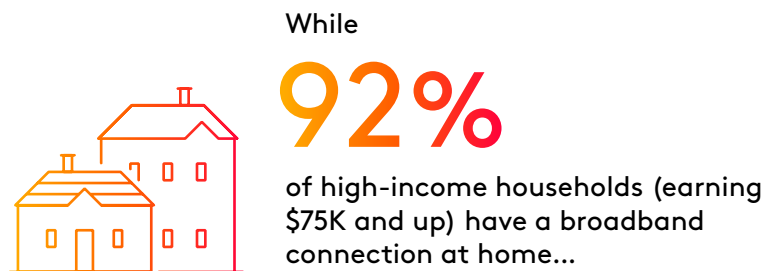


Project UP is our comprehensive initiative to advance digital equity and help build a future of unlimited possibilities



Digital Divide in the U.S.

For more than a decade, Comcast's unwavering commitment to spreading awareness about the benefits of a home connection and the skills to take advantage of the world of opportunity the Internet provides. We are steadfast in our support of the federal government's recently formed subsidy programs like the Affordable Connectivity Program (ACP) and the Emergency Connectivity Fund (ECF). These programs, along with others in the Infrastructure Investment Jobs Act, will continue to make a considerable impact on the digital divide in the years to come.



¹Internet/Broadband Fact Sheet. Pew Research Center, April 7, 2021.



Comcast teamed up with one of the company's Lift Zones and the Sacramento City Unified School District to host a drive through laptop giveaway where more than 1,000 laptops and school supply kits were distributed to residents in Sacramento.

Here at Comcast, we've worked for more than a decade to encourage all households to take advantage of the benefits of a home broadband connection. With focused attention from city, county, and state partners, nonprofits, and the federal government, collectively, we have made tremendous progress. Prior to the pandemic, in our service area, 40% of the growth in broadband adoption among low-income households with school-age children could be attributed to the Internet Essentials program.¹ And just since March of 2020, programs to enable distance learning during the pandemic reduced the number of students without home broadband service by 25%.² Yet, the digital divide persists. While fewer than 3% of Americans lack access to fixed terrestrial broadband,³ 23% do not currently subscribe.⁴ In other words, while availability gaps remain in rural areas, the larger, more significant driver of the digital divide is the broadband adoption gap.

¹ Zuo, G. "Wired and Hired: Employment Effects of Subsidized Broadband Internet for Low-Income Americans." American Economic Journal: Economic Policy, August 2021.

² "The U.S. K-12 Digital Divide Has Narrowed, but Must Close to Eliminate Risks to Students and the Economy." Common Sense Media, 26 Jan. 2021.

³ FCC Broadband Map data as of Dec 2020

⁴ Internet/Broadband Fact Sheet. Pew Research Center, April 7, 2021.

Program Impact

Since March 2020, we have worked harder than ever to bring even more fresh solutions to an old challenge. At the start of the pandemic, we rapidly innovated to launch our Internet Essentials Partnership Program (IEPP) and Lift Zones initiatives, providing vital access to school, work, financial resources, healthcare, and more. As the pandemic persists, we have connected and continue to connect low-income Americans through Internet Essentials, the Emergency Broadband Benefit, the Affordable Connectivity Program, the Emergency Connectivity Fund, IEPP, and Lift Zones.

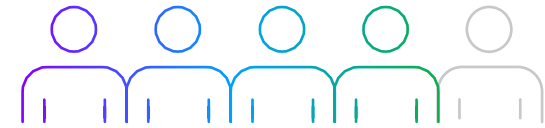
41%

of Internet Essentials customers say that without Internet Essentials they would only have an Internet connection over their mobile phone and...



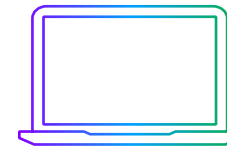
23%

say they wouldn't have Internet at all



80%

of Internet Essentials customers did not have broadband Internet prior to signing up for the program



200k

devices subsidized or donated since 2011, including...

35k

Laptops Donated

during the pandemic alone

LIFT ZONE/HGTV PARTNERSHIP

In 2021, Comcast and home improvement channel HGTV partnered to bring hosts Ben and Erin Napier's "Home Town Takeover" treatment to three Lift Zones: Girls, Inc., Atlanta; Boys & Girls Club of Metro Baltimore—Brooklyn Club; and Inukai Boys & Girls Club in Hillsboro, OR. The partnership worked to rebuild spaces and amplify community spirit with HGTV donating \$150,000 toward the revitalization of the Lift Zones. HGTV also commissioned artists to create inspirational murals in each of the selected cities.



Program Timeline

Since 2011, Comcast has worked closely with our community partners to enhance the Internet Essentials program in meaningful ways and expand the program's eligibility more than a dozen times, without ever increasing the price of the service. The COVID-19 pandemic brought many more partners into the digital equity space. And for the first time, a large-scale national effort with federal support for connectivity—including both access and adoption through the IJJA—signals a faster end to the digital divide. Through Project UP, we are committed to continue advancing digital equity within the communities we serve.

2011-2019

- Program launch for public-school students receiving free lunch
- Extended the program indefinitely, beyond initial three-year commitment
- 12 Eligibility expansions
- 4 Speed increases
- 6 Application enhancements
- Offered free in- and out-of-home WiFi for customers
- Launched free online Learning Center
- Launched option to purchase subsidized, low-cost devices
- Cumulative total of 8 Million low-income Americans connected



2020

- Convened 2 Internet Essentials Impact Summits (see page 27)
- Implemented key COVID-19 response measures
 - 60 days free service for new Internet Essentials customers
 - Increased speeds to 25/3 Mbps
 - Launched the Internet Essentials Partnership Program (see page 22)
 - Launched award-winning Lift Zones initiative (see page 24)



PROGRAM ENHANCEMENTS



14

expansions of eligibility (available to all who qualify for the Affordable Connectivity Program and more)



17

enhancements to quality and value of the service (including speed, in- and out-of-home WiFi, computer options)



20+

product innovations (including improving our streamlined application process and supporting organizations using the Emergency Connectivity Fund)



12

innovations in digital literacy (including the creation of 1,000+ Lift Zones, \$100M Digital Equity Fund, Cybersplash)

2021

- Celebrated 10 years of advancing digital equity
- Launched Project UP, our 10 year, \$1B commitment to advancing digital equity
- 2 speed increases, 50/10 Mbps
- Introduced Internet Essentials Plus with speeds of 100/10 Mbps
- Expanded eligibility to Federal Pell Grant recipients
- Fully participated in federal Emergency Broadband Benefit (EBB)
- Connected all 1,000+ Lift Zones two years ahead of schedule
- Committed to install an additional 250 Lift Zones by end of 2022
- Convened third Internet Essentials National Impact Summit
- Committed to install up to 100 Lift Zones inside veteran-serving organizations



2022

- Launched full participation in federal Affordable Connectivity Program (ACP)
- Expanded eligibility to include all ACP participants
- Expanded ACP offers with Internet Essentials Plus and Xfinity Mobile bundle
- Lift Zones awarded People's Choice in SXSW 2022 Innovation Awards
- More to come...



Our Blueprint for Success

Internet Essentials has always strived to bring more than high-speed Internet into the home. From the beginning, we designed our program to address what comprehensive and consistent research has told us are the three main barriers to broadband adoption: 1) a lack of perceived need for or interest in (and even fear of) the Internet, mostly stemming from limited digital skills, 2) not having a functional computer, and 3) the cost of a monthly service subscription. These factors, coupled with a lack of awareness of low-cost offers and free government subsidies, **are focus areas for Comcast's digital equity strategy.**

We continue to rely on external research, as well as sponsoring and conducting our own, to expand our understanding of these complex and evolving issues.

A Comprehensive Approach

According to a 2021 U.S. Census and NTIA Internet Use Survey, the top reasons people do not subscribe to Internet at home include:



Lack of need for, interest in,
fear of the Internet



Cost of the monthly service



No computer, inadequate
equipment

To address these barriers, **Comcast designed Internet Essentials as a holistic solution that includes:**



Awareness & Training: We work with a network of partners to offer free in-person, online, and printed digital literacy training materials and classes.



Low-Cost & Free Service: We provide low-cost, high-speed broadband to low-income households across our service area. Customers can choose between two speeds of service: 50/10 Mbps for \$9.95 + tax or 100/10 Mbps for \$29.95 + tax. Both tiers are free when customers apply their \$30/month Affordable Connectivity Program credit.



Equipment: Internet Essentials customers can purchase a new, heavily subsidized and discounted computer for less than \$150 through our partnership with Dell Technologies, Inc.

Affordable Connectivity Program

The Affordable Connectivity Program (ACP) is a permanent extension of the federal government's Emergency Broadband Benefit (EBB) program designed to help low-income households connect to the Internet. Comcast participated in the EBB program since its inception in May 2021 and is proud to continue participating in ACP. Through EBB, current and new Comcast Internet customers with verified eligibility were able to receive a monthly credit of up to \$50 per month (up to \$75 in Tribal lands) toward their Internet service and leased Internet equipment. With ACP, this credit is now up to \$30 per month (\$75 in Tribal lands) for households enrolling in the benefit.

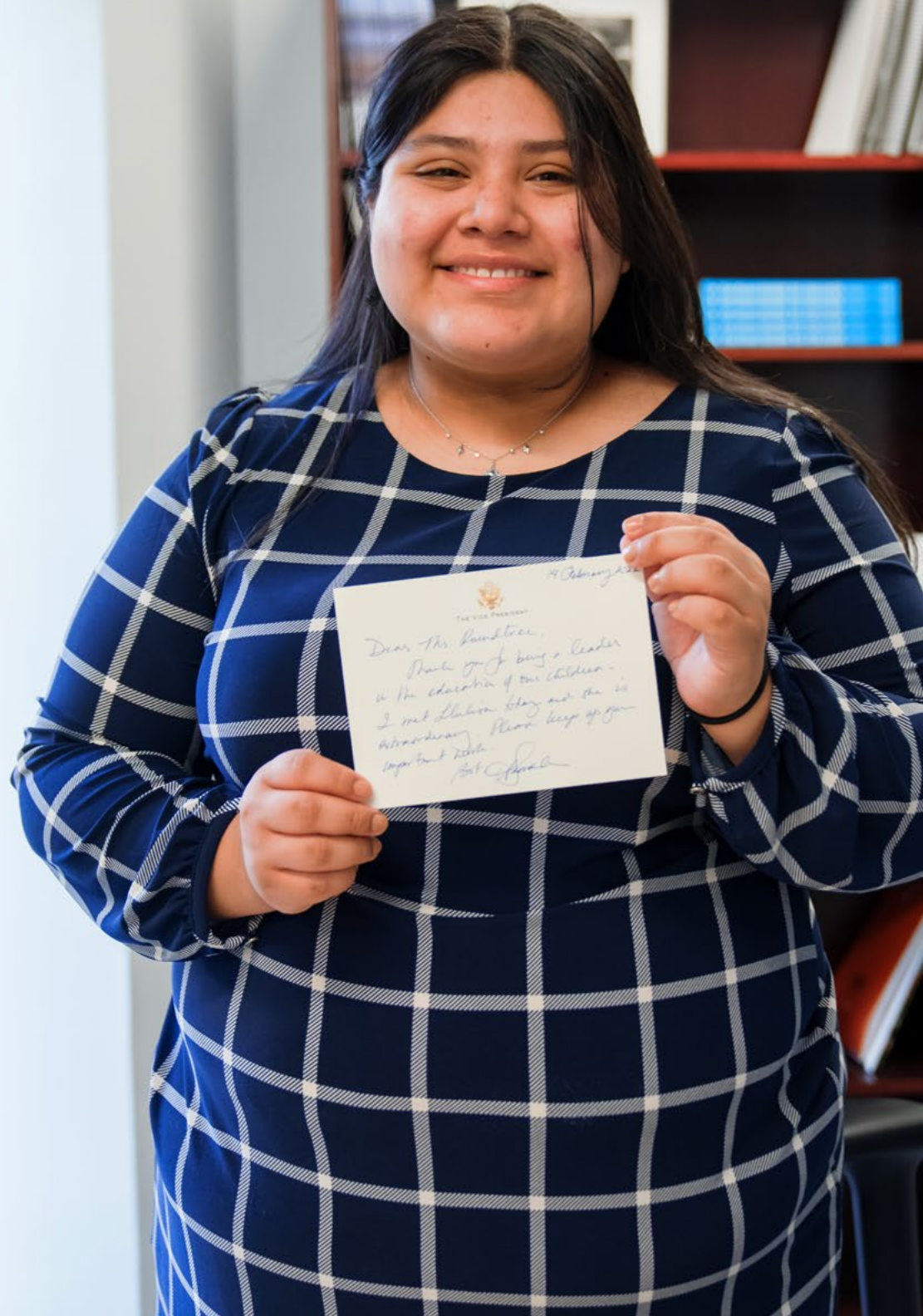
MEETING THE VICE PRESIDENT—LLULISA

Like many others, the Valdivia family did not subscribe to home Internet prior to the pandemic—they had not felt it was a necessity. As education and work moved online, the Valdivias signed up for Internet Essentials to allow their children, including their daughter Llulisa, to continue excelling in school. And when the federal government's Affordable Connectivity Program (ACP) became available, the Valdivias quickly applied for the monthly credit that would cover the cost of their home Internet subscription. On February 14, 2022, Llulisa joined Vice President Kamala Harris and other government leaders at the White House to tell her story about achieving her goal of being the first in her family to go to college. There, she spoke of the power of the Internet to connect her to resources that helped her complete her homework and apply to colleges online. Llulisa, who wants to be an immigration lawyer one day, is just one example of millions of people across the country benefitting from access to the Internet through programs like ACP, which offers a \$30/month discount on Internet service.



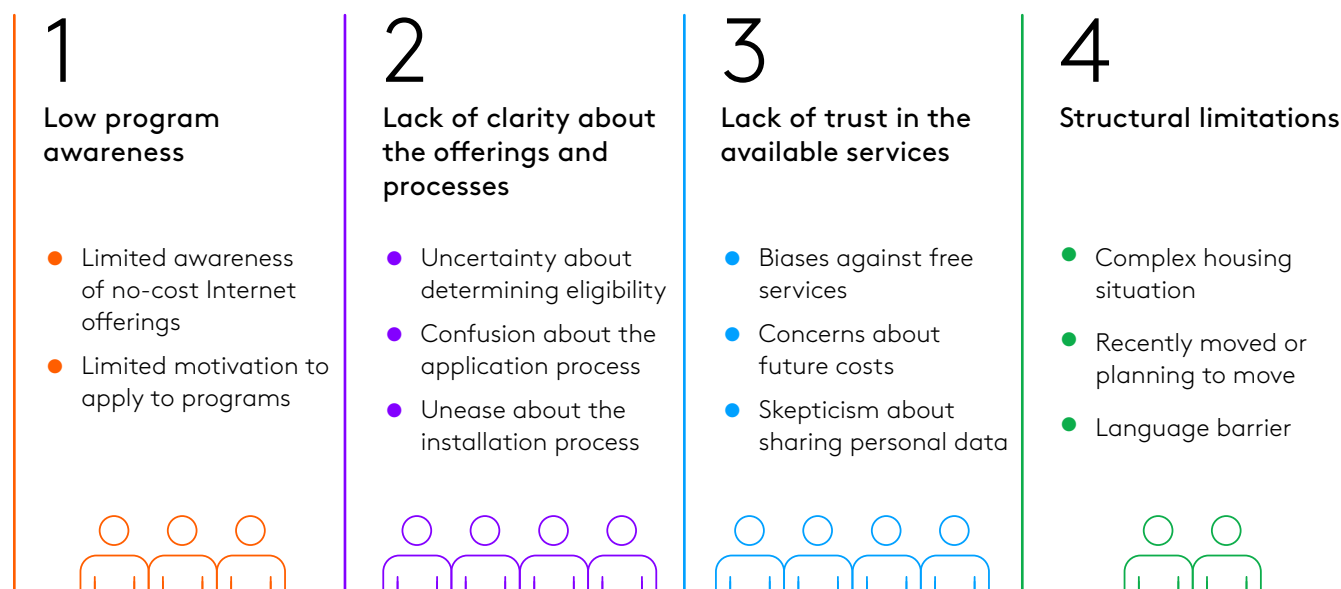
*I will be the first from my family to go to college,
but not the last.*

Llulisa Valdivia



Refining Our Approach

In 2021, we partnered with the Boston Consulting Group to better understand the barriers to broadband adoption, especially when the service was offered for free. Our research found four factors that hinder enrollment in sponsored-service programs:



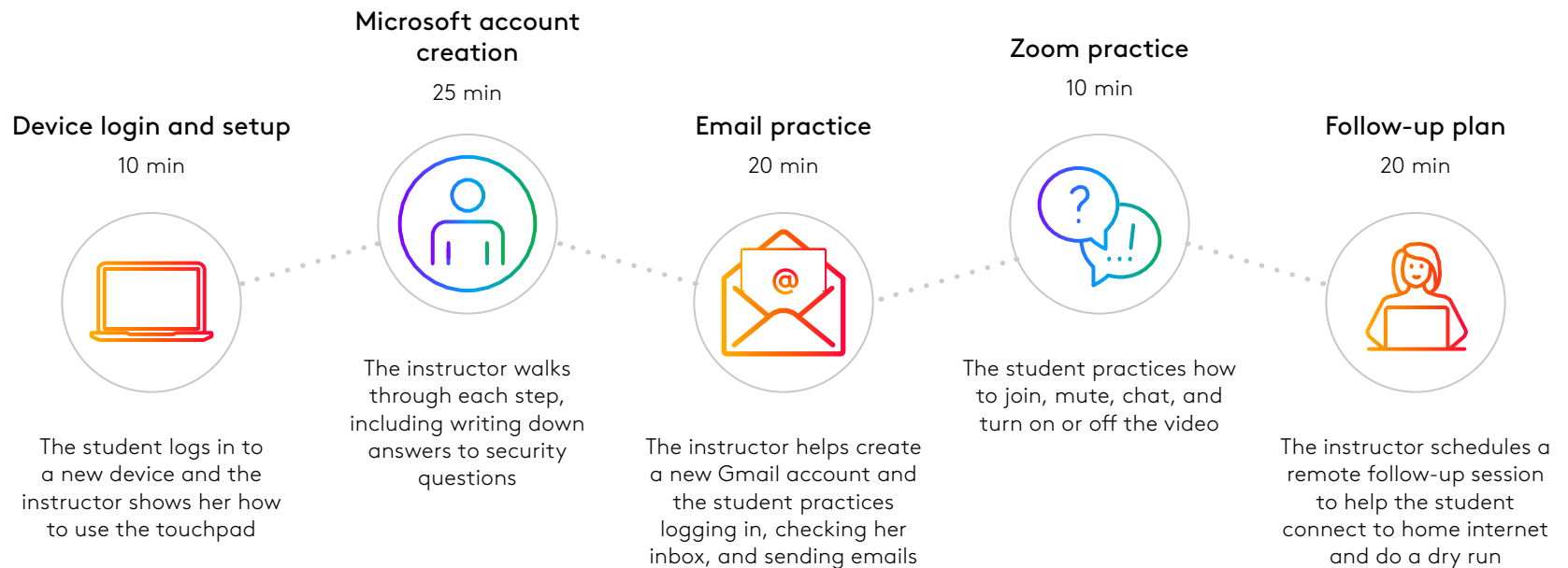
Eligible households affected (%)

Source: BCG's National Survey on Digital Adoption, January 6–11, 2021.

Overcoming Barriers with Digital Navigators

Just this year, we again partnered with the Boston Consulting Group to take a closer look at the key role our partners play in overcoming these barriers using Digital Navigators. Digital Navigators are individuals who address barriers to adoption with community members through repeated interactions. Our research found that trust and time are key components of successful Digital Navigator programs. Typically, Digital Navigator users require hands-on support from an instructor for more than a single one-on-one session. **Overwhelmingly, Digital Navigator users say their instructors quickly addressed their needs, fixed issues, and provided helpful instruction.**

An Example of a One-on-One Session with a Digital Navigator



Source: Kalmus, Matt. Hill, Hannah. Lee, Jean. Goodchild, Chris. Webb, David. (2022). A Human Approach to Closing the Digital Divide.

While time-consuming, the work done by Digital Navigators significantly impacts adoption barriers, digital usage, and digital comfort for users. Digital Navigators are particularly helpful to individuals who need step-by-step support in the sign-up process, assistance with self-installation kits, and setting up a device. **They are also critically helpful in building comfort with basic digital activities and connecting to the Internet.**



of Digital Navigator users now have Internet or computer / tablet at home



of Digital Navigator users have used more tech, incl. for healthcare, benefits, and jobs



of Digital Navigator users feel more confident or safer using technology¹

Deep Dive:
Digital Usage

% of Digital Navigator users

44% got better healthcare

43% got help with food, rent, etc.

37% got new job/higher income



Comcast and Onward Eugene joined the Project Hope Back-to-School Giveaway in Eugene, Oregon. Comcast donated 150 new laptops to help Lane County-area school kids kick off a successful school year.

8.4M

PSAs aired in 2021, valued at more than

\$93M

Supporting Our Partners to Support Our Communities

Closing the digital divide takes nothing short of a movement. We would not be successful without our network of partner organizations who serve as trusted voices in under-resourced communities. Empowering unconnected Americans to adopt the Internet at home, unlocking pathways to unlimited possibilities, requires a marketing mix and digital navigation. It requires both traditional methods, like direct mail and airing PSAs on TV, as well as grassroots partnerships with local voices like schools, public housing authorities, churches, libraries, social workers, and neighborhood businesses. Comcast teams cultivate these relationships, share outreach materials, host sign-up events that help increase awareness, and support Digital Navigator programs.

Our community partners range from large national nonprofits like the Boys & Girls Clubs of America, the National Urban League, and UnidosUS, to thousands of local nonprofits who not only help promote the program but also form the bedrock of our digital literacy training efforts. Nonprofit partners are supported by a corps of volunteer Ambassadors, Comcast employees who share information about the program with their friends and neighbors, who give their most valuable resource—time—to support their communities.



WEBINARS & PUBLIC AWARENESS: EMERGENCY CONNECTIVITY FUND

Working with the Consortium on School Networking, the National School Board Association, and the American Library Association, Comcast hosted two webinars in 2021 for hundreds of partners to learn about the Emergency Connectivity Fund. Partners had the opportunity to learn about ways they could work with us to help connect students and their families to Internet at home.

REGIONAL SIGNUP EVENT

Partnering with Total Life Prosperity and a regional bank branch, Comcast hosted digital equity and financial literacy events for residents of three Flint Housing Commission facilities, which also serve as Lift Zone partners. During these community engagements, Comcast representatives shared information about Internet Essentials and the Affordable Connectivity Program (ACP) and helped interested community members sign up for both. Comcast and the bank also provided catered meals for all attendees, and the bank shared financial literacy information and resources.

Tens of thousands

of community partners



OATS SENIORS PHONE EVENT IN WASHINGTON, DC; DETROIT; BOSTON

Older Adults Technology Services (OATS), in collaboration with Comcast and 18 local senior-focused organizations, is helping drive broadband and Affordable Connectivity Program (ACP) adoption with Internet Essentials in Washington, DC; Detroit, MI; and Boston, MA through targeted grassroots initiatives. In 2021, OATS organized a virtual resources fair, launched a senior-focused awareness campaign reaching senior centers across Washington, DC, and leveraged its Digital Navigators' helpline to support senior connectivity in Boston and Detroit. In addition, Detroit's Saint Patrick's Senior Center is leveraging a Comcast-sponsored computer lab to help seniors sign up for connectivity and gain new digital skills training.



GOODWILL

Internet Essentials from Comcast is supporting Goodwill Industries International's Workforce Opportunity Accelerator Program in 10 Comcast markets to help drive digital skills training, workforce certification, and Internet Essentials enrollment. Through our partnership, hundreds of individuals will gain the connectivity, skills, and support they need to upskill and obtain new employment in this increasingly digital world. We are also participating in Goodwill's Rising Together Initiative, joining a long list of industry leaders committed to helping support our communities and job seekers with the resources they need to obtain employment.

INTERNET ESSENTIALS AMBASSADORS

Our success closing the digital divide is in large part thanks to the work of our 3,000-plus Internet Essentials Ambassadors, Comcast employees who volunteer their time to share information about Internet Essentials with families who need help connecting to the Internet at home. These amazing teammates spread the word to their neighbors, friends, and customers through outreach at back-to-school nights, church fairs, block parties, and more. To celebrate their hard work, each year we acknowledge four Ambassadors for their commitment and dedication to connecting their communities. To honor these Ambassadors and the great work they are doing in their communities, we surprised each of them with \$10,000 to contribute to a nonprofit organization of their choice.

Nearly

3k

current volunteer
Ambassadors

20k

outreach engagements by
Ambassadors since 2013

OUR 2021 AMBASSADORS OF THE YEAR



Nicole Roma, Community Account Sales Representative, Manchester, NH



Oliver Hoang, Retail Store Manager, Tukwila, WA



Adyna Lungu, Sr. Technician, Customer Experience Strategy & Operations, Headquarters



Antonio Chaidez, Sr. Residential Technician, Installation & Service, McCook, IL

1.3M

unique Learning Center visits
in 2021

200+

videos, courses, and modules
covering from basic digital skills
training to career development and
STEAM curriculum available on the
Internet Essentials Learning Center

Promoting Digital Skills for Digital Equity

Time and again, research has shown how challenging it is to connect the unconnected,¹ as households that do not subscribe to broadband often face a range of challenging and interrelated barriers.

While it may surprise some to learn that many households do not sign up for free Internet service, the fact is people who use the Internet regularly take for granted how challenging it can be. A home broadband connection typically requires some degree of literacy, stable housing, and the digital skills necessary to understand how to safely and efficiently acquire reliable services and trustworthy information from the Internet. The digital divide is more pronounced in communities of color that have been historically disadvantaged, and many unconnected households do not believe that simply getting online offers a better future.

This focus on digital relevancy and digital skills development resonates, as research shows that enrolling in Internet Essentials increases the likelihood that a family will have a child who uses the Internet daily, that parents will use the Internet to be responsive to issues at the child's school, and that the Internet will be used to complete homework.¹

One of the ways that Comcast promotes the development of digital skills in communities is by investing in hyper-local organizations and special projects that build digital literacy skills for today's workforce economy. This work includes increasing basic digital and tech skills; advancing skills in online banking, telehealth, online safety, career development and STEAM; furthering awareness of Internet Essentials; accelerating broadband adoption; expanding workforce training/certifications for adults; and strengthening and forging partnerships to meet local business and community needs, and via Digital Navigator programs.

¹ Horrigan, John B. "Access and Impacts: Exploring how Internet access at home and online training shape people's online behavior and perspectives about their lives." *Technology Policy Institute*, May 2021.



CYBERSPLASH

Since the launch of Internet Essentials, online safety has been an important pillar for our teams and communities. Now more than ever, students are engaging online, and it is paramount that we provide our partners, parents, and young people with the tools they need to stay safe. Comcast's cybersecurity team stepped up during the pandemic and leveraged their expertise, resources, and people to create CyberSplash, a fun online interactive learning module aimed at teaching students necessary online safety skills. The game has been played over 100,000 times online since its launch in February 2021.

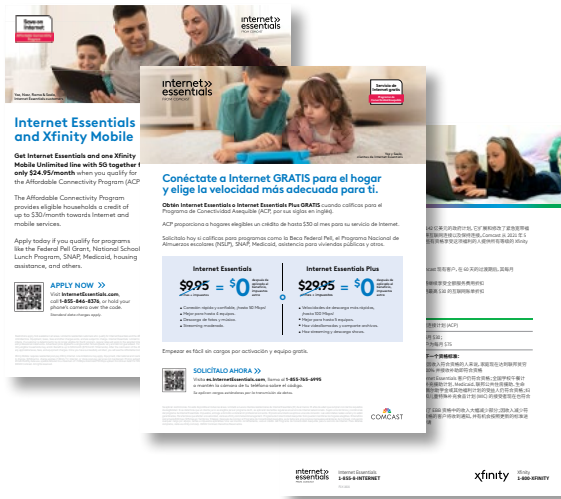


GBH PBS KIDS

Internet Essentials partnered with WGBH Boston to produce a set of online safety videos for kids titled "Search It Up," which were released in 2020. The videos have been viewed more than 13 million times and received two Public Media Awards from the National Educational Telecommunications Association. As an extension of those videos, and in partnership with WGBH, we released an Online Safety Interactive Module for kids using the themes and videos from our series. "Search It Up" educational modules educate kids ages 4–8 on how to safely explore and enjoy the world of smartphones, tablets, sharing, and the Internet. Each education journey is based on a fun, kid-friendly theme (animals, parties, food) and contains content based on the learning goals of online safety, healthy digital habits, technical information, and more.

35

The partner portal offers outreach and training materials in up to 35 different languages, including Arabic, Chinese, and Somali



Building Trust in Communities & Removing Structural Barriers

For many of the communities that find themselves on the wrong side of the digital divide, lack of trust in free or affordable offers is the key barrier. Without community partners serving as advocates, we at Comcast could not move the needle.

In addition to forging strong partnerships with community-based organizations that serve as trusted voices, we have also built trust by consistently communicating the benefits of the program for more than 10 years, including with materials that we co-brand with our partners. Based on the feedback from customers and partners alike, we know this consistency has been a key factor in our success.

To ensure busy households can easily sign up for Internet Essentials, the enrollment process has been streamlined so most applicants are approved within 10 minutes. To meet customers where they are, customers can sign up online or with one of our call center agents, who can provide support in more than 240 languages, including American Sign Language, via our chat feature online, or in our retail centers. We regularly host local sign-up events and empower our partners and their digital navigators with training and materials to support the enrollment process. These tactics help ensure low-income families consistently learn about the benefits of the Internet Essentials program, can easily have their questions answered, and have access to a fast and convenient enrollment process.



7

InternetEssentials.com and the Internet Essentials application are available in seven languages



Comcast donated \$10,000 and 100 laptops to the Boys and Girls Club of South Puget Sound through an existing event hosted by Team Xfinity gaming influencer, Marcel Cunningham.

INTERNET ESSENTIALS PARTNERSHIP PROGRAM

The COVID-19 crisis created an urgent need for a scalable solution to support school districts and partner organizations across the country. Through the Internet Essentials Partnership Program (IEPP), cities, school districts, and community-based organizations can sponsor connectivity for large numbers of low-income students and families to the Internet. In Philadelphia and Chicago, for example, Comcast partnered with cities, school districts, philanthropies, and multiple local institutions to create funds that would ensure every K-12 student has Internet service at no cost.



Comcast is proud to participate in Chicago Connected, Chicago Public Schools' program to connect thousands of low-income students across the city's 77 neighborhoods to broadband Internet service at home. The first and largest program of its kind, Chicago Connected creates a support system for city households by providing free access to high-speed Internet services already available in their neighborhoods. Utilizing Digital Navigators as key components to its outreach strategy, the program has been successful because it brings together the philanthropic community, non-profit and faith-based organizations, Internet Service Providers, and the city to make sure students have the resources they need to succeed in school and participate in an increasingly digital world.

EMERGENCY CONNECTIVITY FUND

The Emergency Connectivity Fund is a \$7.17 billion program funded by the American Rescue Plan Act of 2021 to help schools and libraries support remote learning. The program provides funding to schools and libraries for the reasonable cost of eligible equipment and services for students, teachers, and library patrons who lack connected devices, such as laptop or tablet computers, and/or lack broadband access during the pandemic. Comcast is proud to support connectivity and distance learning capabilities for students, school staff, and library patrons using funding from ECF, through our Internet Essentials Partnership Program (IEPP).

Partner Portal

Our Internet Essentials partner portal empowers nonprofits and volunteers with free digital and printed outreach and marketing materials, in up to 35 languages. These materials include brochures about Internet Essentials, federal subsidy programs, and online safety tips that have been proven to help connect the unconnected, which helps our partners spread digital equity across their communities.



72M

pieces of collateral distributed in up to 35 languages since 2011

Dozens

of outreach and digital skills training materials available

Expanding Free WiFi Access Through Lift Zones

Working with our network of thousands of non-profit partners and city leaders, we launched more than 1,000 Lift Zones during 2021. Our award-winning Lift Zones program complements Internet Essentials and helps those students and individuals who, for a variety of reasons (including homelessness, or housing insecurity), are unable to participate in distance learning from home, but need a place to get online for free.

Lift Zones provide a robust WiFi solution, powered by Comcast Business, inside nonprofits, community centers, gyms, parks and recreation facilities, and even small businesses. Lift Zones not only provide free Internet connectivity, but also access to hundreds of hours of educational and digital skills content to help families and site coordinators navigate online learning and digital skills training through the Internet Essentials Learning Center.

50%

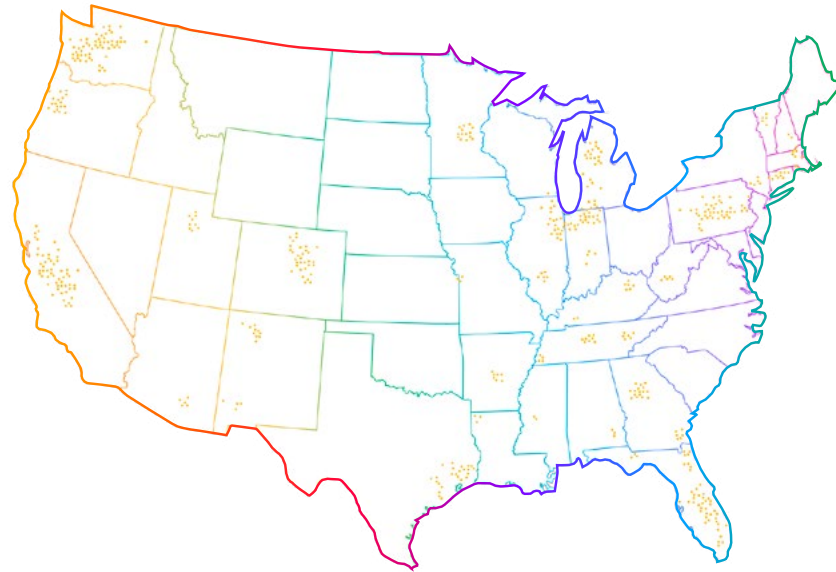
of low-income households have a Lift Zone in their neighborhood*

1,000+

Lift Zones launched

2M+

Lift Zones sessions between
February 1, 2021 and
December 21, 2021



*In counties that have the most Lift Zones, over half of low-income households live near a Lift Zone (Philadelphia, Washington DC, Suffolk, Hennepin, and San Francisco counties). Low Income is defined as eligibility for NSLP. Neighborhood is defined as within .5 miles to 1 mile, depending on commute type. Demographic data sourced from the Census' American Community Survey.



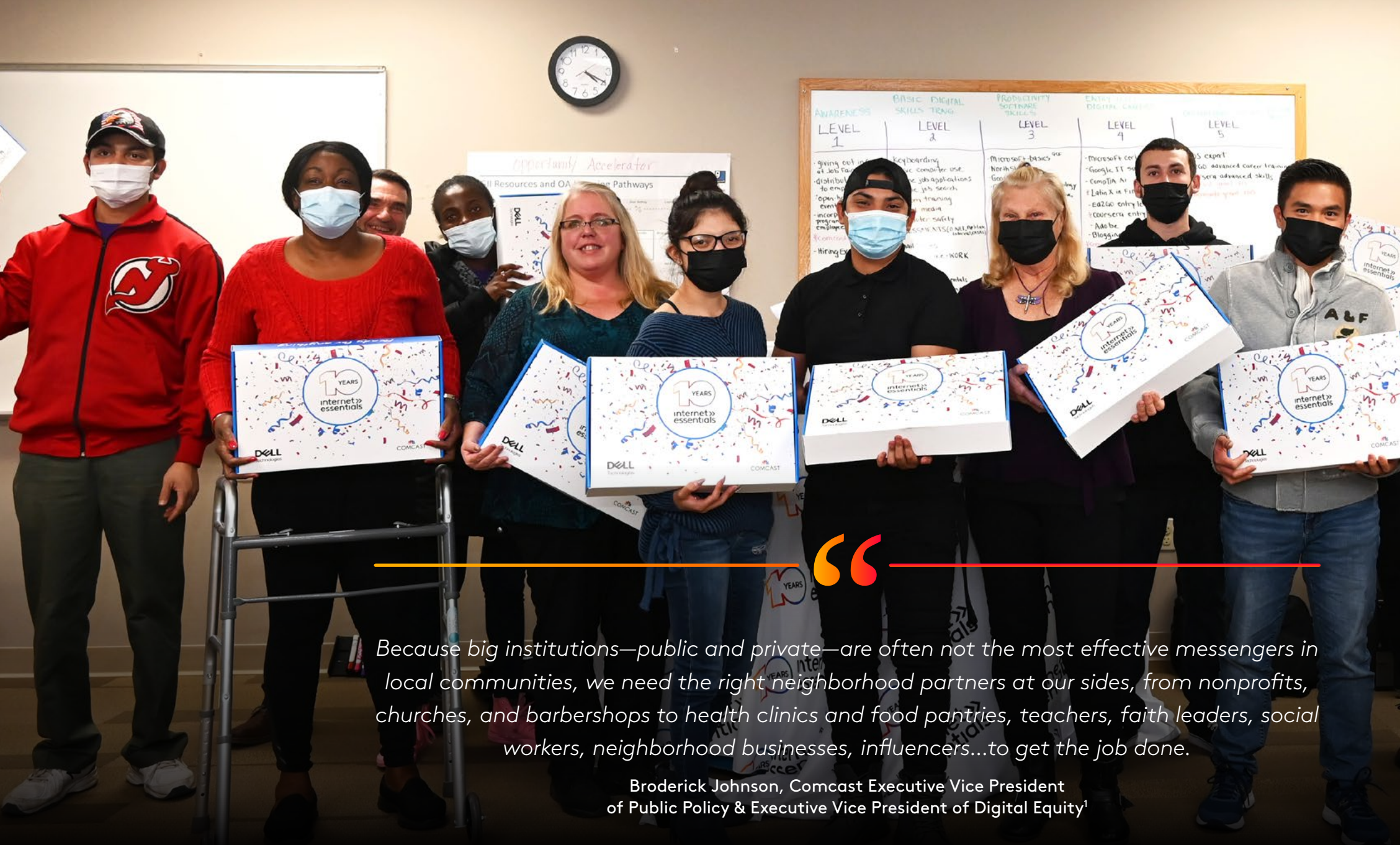
25M

homework hours in 2022



Comcast's Lift Zones initiative and pandemic response in 2021 won the People's Choice Award at SXSW 2022 in the category of "Innovation in Connecting People"

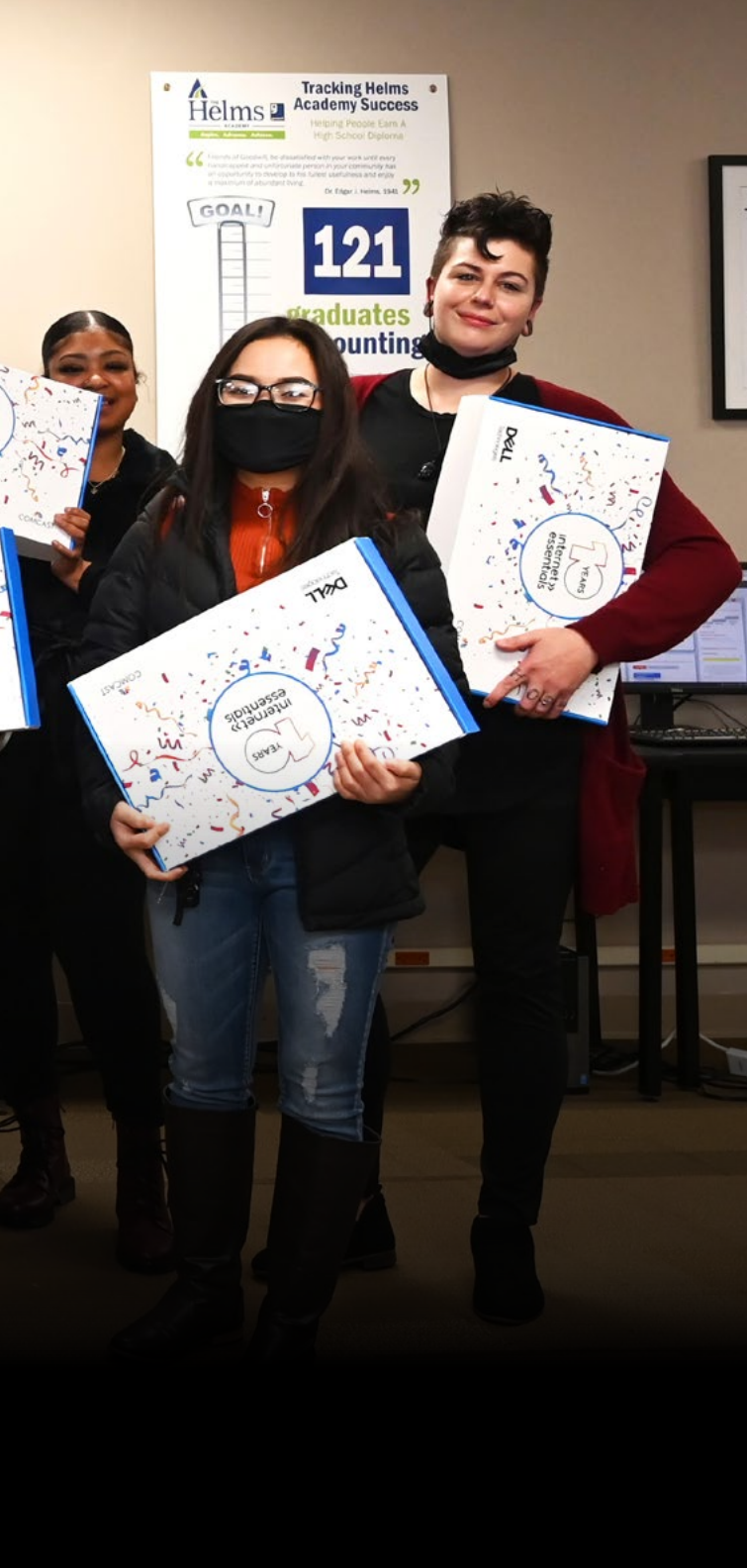




Because big institutions—public and private—are often not the most effective messengers in local communities, we need the right neighborhood partners at our sides, from nonprofits, churches, and barbershops to health clinics and food pantries, teachers, faith leaders, social workers, neighborhood businesses, influencers...to get the job done.

Broderick Johnson, Comcast Executive Vice President
of Public Policy & Executive Vice President of Digital Equity¹

¹"No more excuses' attitude to encouraging broadband adoption." *Baltimore Sun*, Dec 14, 2021.



IMPACT

ON WORKFORCE
DEVELOPMENT

INTERNET ESSENTIALS IMPACT ON WORKFORCE DEVELOPMENT SUMMIT

On November 17, 2021, Internet Essentials, in partnership with Goodwill Industries International, hosted its third Impact Series summit, focusing on the relationship between connectivity, positive workforce outcomes, and economic mobility. During the virtual event, leading experts and partners explored the ways public, private, and nonprofit partners can complement each other to ensure low-income communities have access to both foundational digital skills, as well as the occupational digital skills necessary to participate in today and tomorrow's workforce.

At the launch of a Lift Zone at Goodwill Industries of Southern New Jersey and Philadelphia's Stratford, NJ, location, Comcast donated grants totaling \$35,000 to support Goodwill's digital equity, inclusion, and literacy efforts. Comcast also donated 500 new laptops to support local job seekers receiving training services through Goodwill.

Project UP

Through Project UP—our comprehensive initiative to advance digital equity and build a future of unlimited possibilities—we’re committing \$1 billion to help ensure everyone has the resources and opportunities they need to participate and excel in today’s digital world. Project UP encompasses the programs and community partnerships across Comcast, NBCUniversal, and Sky that connect people to the Internet, advance economic mobility, and open doors for the next generation of innovators, entrepreneurs, storytellers, and creators.



BRIDGING THE CONNECTIVITY GAP

Building on a decade of progress and success, we are accelerating our work to connect people to the power of the Internet and address barriers to digital adoption.



10M

Connected more than **10M** people to the Internet and distributed **200,000** free and subsidized laptops since 2011.



1,000+

Opened more than **1,000** WiFi-enabled Lift Zones to help students and families connect to the Internet at community centers nationwide.

Participating in the **Affordable Connectivity Program** to further connect low-income Americans to the Internet at home.

Empowering thousands of digital navigators to educate the unconnected about the benefits of getting online.

EMPOWERING SMALL BUSINESS OWNERS

Through Comcast RISE, we’re equipping entrepreneurs and small business owners with the digital opportunities and resources they need to thrive.



6,700

To date, we’ve reached **6,700 small businesses** owned by people of color through Comcast RISE.

\$60 million

We awarded over **\$60 million in grants**, marketing support, and technology upgrades in 2021.

13,000

We’re on track to reach **13,000 small business** owners and entrepreneurs by the end of 2022.

BUILDING DIGITAL SKILLS

Through our programs and partners, we’re helping to provide technology and digital skills training and create equitable pathways to careers in media and technology.

1 million

Together with our partners, we are able to reach over **1 million** people each year with skills training.

\$60 million

We contributed over **\$60 million** in cash to our digital equity partners in 2021 alone.



What's Next

When we started on this journey, there was no roadmap and we weren't certain how far the program would go or how many people we could reach. The nation had just begun to focus on the importance of a home Internet connection, and the FCC had only recently released its 2010 National Broadband Plan, highlighting research on broadband adoption and digital inclusion.

We pledged then to listen to and learn from our partners, modify by trial and error, and rely on the best research in the field to build a program that would reach as many people as we could.

Now, more than 10 years later, as the federal government strengthens its commitment to broadband adoption through ACP and ECF, we are more committed than ever to building on this foundation and expanding our impact through Project UP, our comprehensive initiative backed by a \$1B commitment to advance digital equity and help build a future of unlimited possibilities in the years to come.

We are incredibly excited by what the future has in store. Whether it's sending one of our technicians to connect another family to Internet Essentials, opening a new Lift Zone at a neighborhood community center, or working with our nonprofit, government, and community partners around the nation to implement the Internet provisions of the IIJA, we are as ready as ever to bring the life-changing power of the Internet to as many people around the country as possible.

Thank you to all our partners for making this program possible. We can't wait to show you what's next.

2020

2021

2022



In May of 2021, Tommy graduated with honors from Florida State University and is now enrolled in a PhD program.

Appreciation

Our progress has been made possible thanks to the hard work of the Internet Essentials team, our colleagues across Comcast, and the many partners we have worked with over the last 10-plus years. Together, we have developed and refined innumerable expansions and enhancements to the Internet Essentials program to put the Internet, technology, and resources in the hands of more of the people who need it most. As we look forward to the next 10 years, we would like to thank everyone who has been part of this journey so far.



I am so proud of the Internet Essentials team, and all of our partners, employees, and customers who have worked tirelessly to ensure connectivity for everyone. The resilience, hope, and determination of our Internet Essentials families is what continues to drive our work forward to empower unlimited possibilities for millions more like Tommy.

Trinity Thorpe-Lubneuski, Executive Director, Internet Essentials at Comcast
Internet Essentials team member for seven years and counting



**internet»
essentials**
FROM COMCAST

1-855-8-INTERNET (1-855-846-8376)

1-855-SOLO-995 (1-855-765-6995)

InternetEssentials.com | es.InternetEssentials.com


COMCAST

corporate.comcast.com/impact/project-up

DETAILS

BY: JOHN CURRAN
MAY 9, 2022
4:26 PM

White House Lines up Broadband Providers, Websites for ACP

RECENT

[NSTAC Urges CISA Action to Boost Security of Feds' OT Systems](#)

[Federal Experts Want More Visibility Into the FedRAMP Process](#)

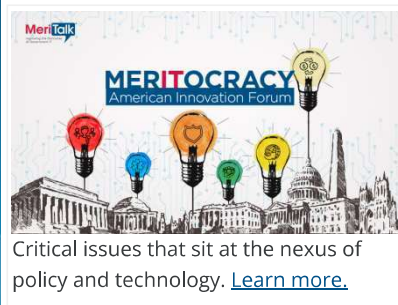
[Rep. Connolly Sets Sights on Oversight and Reform Committee Leadership](#)

The White House [said today](#) it has lined up 20 service providers that will offer high-speed broadband service within the price points set forth in the government's Affordable Connectivity Program (ACP), and also went live with a Federal website that people can use to find the services.

The Federal Communications Commission [launched](#) the ACP – the successor to its Emergency Broadband Benefit program – in January of this year. The \$14.2 billion ACP will build on the Emergency Broadband Benefit program's efforts, which helped almost nine million people to afford internet access during the COVID-19 pandemic.

The transition to the ACP follows congressional directives in the Infrastructure Investment and Jobs Act, which appropriated \$65 billion for numerous efforts to improve affordable access to high-speed broadband services in the United States, particularly in underserved areas and for people who need help affording it.

As part of ACP, eligible households can receive up to a \$30 per month discount toward internet service, and up to \$75 per month for households on qualifying Tribal lands. Additionally, eligible households can receive a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than \$10 and less than \$50 toward the purchase price.



The White House today unveiled a roster of 20 broadband service providers who have committed to “either increase speeds or cut prices, making sure they all offer ACP-eligible households high-speed, high-quality internet plans for no more than \$30/month.”

The companies signing onto the commitment include very large providers – AT&T, Comcast, Verizon – all the way down to state-level providers including Comporium in North Carolina and the Jackson Energy Authority in Tennessee. Collectively, the companies' service areas cover about 80 percent of the U.S. population.

The result, the White House said, is that the commitments will allow “tens of millions of ACP-eligible households to receive high-speed internet at no cost.”

MORE TOPICS

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ABOUT
JOHN CURRAN



John Curran is MeriTalk's Managing Editor covering the intersection of government and technology.

TAGS

[ACP](#)
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[Broadband](#)
[White House](#)

To spread the news, the White House said it is launching the GetInternet.gov website to explain which ACP-eligible households can sign up and find participating service providers.

In addition, Federal agencies that provide a variety of benefits to citizens will coordinate reach-out efforts for ACP. Households qualify for ACP based on income, or through participation in Federal programs including Pell Grants, Medicaid, or Supplemental Security Income, among many others.

On the state and local level, governments including those of Michigan, Massachusetts, Philadelphia, Mesa, Arizona, and New York City will text millions of eligible households about ACP availability, the White House said.

Talking about the potential size of the ACP population, the White House today cited experts who believe that 48 million U.S. households – or about 40 percent of all U.S. households – qualify for ACP.

“When we connect people with high-speed internet, we connect them with opportunity: the opportunity to get an education, to train for a new career, to build a business, to keep in touch with loved ones who are far away,” said Vice President Kamala Harris at a White House ceremony today publicizing the new broadband service provider commitments.

“Earlier this year, our administration called on internet service providers to take action to help folks get internet connected, in part by offering more affordable high-speed internet plans to their customers,” she said. “The providers joining us today have answered that call.”

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NEW: @GerryConnolly, long one of the prime movers in Congress on Federal #ITmodernization issues, said today he plans to run to become the top Democrat on the House Oversight and Reform Committee next year when the 118th Congress convenes. @OversightDems meritalk.com/articles/rep-c...

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DIGITAL EQUITY

Comcast Expands Affordable Connectivity Program Offers with Faster Internet Essentials Service and Xfinity Mobile

Mar 01, 2022



Comcast is participating in the federal government's Affordable Connectivity Program (ACP) and the \$30/month benefit can be applied to any tier of Xfinity Internet service.

Today, Comcast introduced two new ways for customers to connect through ACP and both are available to any customer who qualifies in all the company's service areas. Customers can sign up for Internet Essentials Plus, which includes 100 Mbps download speeds, a cable modem, and WiFi router, and is free after the government's ACP credit is applied. Additionally, Xfinity Internet customers participating in ACP now can add mobile service through Xfinity Mobile.

"As a company and a society, it is imperative that we work together to help people connect to the transformative power of the Internet both at home and on the go," said Broderick Johnson, Executive Vice President, Public Policy and Digital Equity, Comcast Corporation. "The Affordable Connectivity Program is a once in a lifetime opportunity that Comcast is proud to support. Connectivity is just the beginning, however. We will continue to partner with nonprofit organizations across the country to deliver digital literacy skills training so more people can learn how to take full advantage of everything the Internet has to offer."

For more than a decade, Comcast has been working with trusted community partners, businesses, and government to help millions of low-income households connect to the Internet and the technology they need to participate in the digital world. On February 14, 2022, the world saw how these efforts can produce inspirational results when Llulisa, a Comcast Internet Essentials customer who is enrolled in ACP, joined government leaders at the White House to tell her story about achieving her goal of being the first in her family to go to college.

Llulisa is just one example of millions of people across the country benefitting from access to the Internet through programs like ACP, which offers a \$30/month discount on Internet service (\$75/month on Tribal lands). Any Xfinity Internet or Internet Essentials customer who qualifies can use it to save money on their Internet bill. Comcast's expanded ACP offers include:

Internet Essentials Plus

Internet Essentials Plus is a new tier of service for Comcast's hallmark digital equity program that is available in all Comcast service areas to any customer who qualifies. It offers twice the download speed – up to 100 Mbps – of the traditional Internet Essentials service, which has a 50 Mbps download speed. Internet Essentials Plus is available for \$29.95/month to new customers who qualify. Existing Internet Essentials customers can upgrade to this new, faster tier at any time. Customers who subscribe to Internet Essentials Plus and enroll in ACP will effectively get broadband for free after the \$30/month government discount is applied.

Xfinity Mobile

Comcast's top-rated Xfinity Mobile service, which includes 5G, is now available to customers enrolled in ACP, giving them the ability to save money on their connectivity needs inside and out of the home. Internet Essentials customers can use their \$30/month ACP discount to pay for both Xfinity Internet and Xfinity Mobile service. For example, an Internet Essentials customer (paying \$9.95/month) can add one line of Unlimited on Xfinity Mobile (\$45/month) for \$24.95/month after applying the ACP discount.

Xfinity Mobile has no line access or activation fees and comes with unlimited talk and text, so customers only pay for cellular data. Customers can mix and match between two straightforward plans on Xfinity Mobile with 5G included, Unlimited or By the Gig, and pair these mobile plans with any tier of Internet service to provide ultimate flexibility. They can also switch back and forth between Unlimited and By the Gig mobile plans at any time. In addition, Xfinity Mobile devices automatically connect to millions of Xfinity WiFi hotspots across the country to reduce customers' dependence on cellular and save money.

Signing up for ACP

New and existing Xfinity Internet or Internet Essentials customers can visit www.xfinity.com/acp <http://www.xfinity.com/acp> or call 844-389-4681 for more information, to determine eligibility, and sign up.

Customers can also call to speak to a dedicated ACP Enrollment and Support Center that is available from 8AM to 12AM daily, with multi-lingual capabilities to assist anyone interested in the program.

Project UP and Comcast's \$1 Billion Commitment to Advance Digital Equity

Connecting more people to the Internet and the technology they need to participate and excel in an increasingly digital world has been a core focus for Comcast. Looking toward the next ten years, Comcast is building on that foundation and expanding its impact through Project UP, a comprehensive initiative to advance digital equity and help build a future of unlimited possibilities. Backed by a \$1 billion commitment to reach tens of millions of people, Project UP encompasses the programs and community partnerships across Comcast, NBCUniversal, and Sky that connect people to the Internet, advance economic mobility and open doors for the next generation of innovators, entrepreneurs, storytellers, and creators. For more information on Project UP and the latest news on efforts to address digital inequities visit <https://corporate.comcast.com/impact/project-up> <https://corporate.comcast.com/impact/project-up>.

Together We Build



ABOUT COMCAST

We have consistent and strong financial results which allow us to constantly innovate and invest.

As of Q4 2021...

1963

Year Founded

Philadelphia

Headquarters

#26

Fortune 500 Rank

**Largest Converged IP
Network in the US**

\$4.2 Billion

Comcast's investment in 2021 to strengthen, expand, and evolve the network in the United States

**34 Million Comcast Cable
Customer Relationships**

Across the United States

\$1 Billion

Our commitment to invest in Digital Equity over the next decade

61 Million

Homes and businesses passed in the United States

189,000

Employees

OUR TEAM

The scale and resiliency of our business have enabled us to attract and develop top talent and make positive impacts in the communities where we live, serve, and work.

Here are a few recent awards, recognitions, and honors received by Comcast and its leadership.



#16 on the '100 Best Companies to Work For' list by Great Place to Work and Fortune



Comcast Business: 2021 and 2022 Most Innovative Technology Company of the Year by American Business Awards



#1 Best for Vets Employer by Military Times



Latino Leaders' Magazine's 25 Best Companies For Latinos



4 Technology & Engineering EMMY Awards for Innovation Technologies



Best Places to Work for LGBTQ Equality Based on HRC Foundation's 2021 Corporate Equality Index

OUR NETWORK

We're building a better network,
every single day, with a simple
purpose:
keeping our customers
connected — always.

As connectivity becomes even more important, we're working hard to build and evolve a smart, reliable network that delivers fast Internet speeds for customers to browse, video-conference, stream, and game.

With this work, we are further evolving the network that reliably delivered above-advertised speeds throughout the historic COVID-19 surge and is paired with ultra-advanced WiFi technology, giving customers a unique combination of speed, coverage throughout the home, advanced cybersecurity, and ultimate control of every connected device.

60M

Nation's largest provider of gig speeds
available to 60M homes and
businesses.

\$4.2B

In 2021 alone, we invested more than
\$4.2B to strengthen, evolve, and expand
our network—more than any previous
year.



A SIGNIFICANT EDGE IN CONSTRUCTION

Comcast has been a global leader in advancing network technology and delivering progressively faster, more robust service to our customers to not just meet customers' current needs but to stay well ahead of future demand.

We have a talented team of technicians and engineers who've done this for years. Today we offer some of the fastest speeds available anywhere, and we have the technological capacity and know-how to increase those even further in a way that is cost effective and minimally disruptive.



NETWORK INNOVATION & THE ROAD TO 10G

Investing billions to strengthen and grow our network is important...but it's only the beginning of building a smart network that's ready for anything.

Our network architects and software engineers continuously innovate and evolve our network technology to increase speeds, strengthen reliability, and improve overall performance.

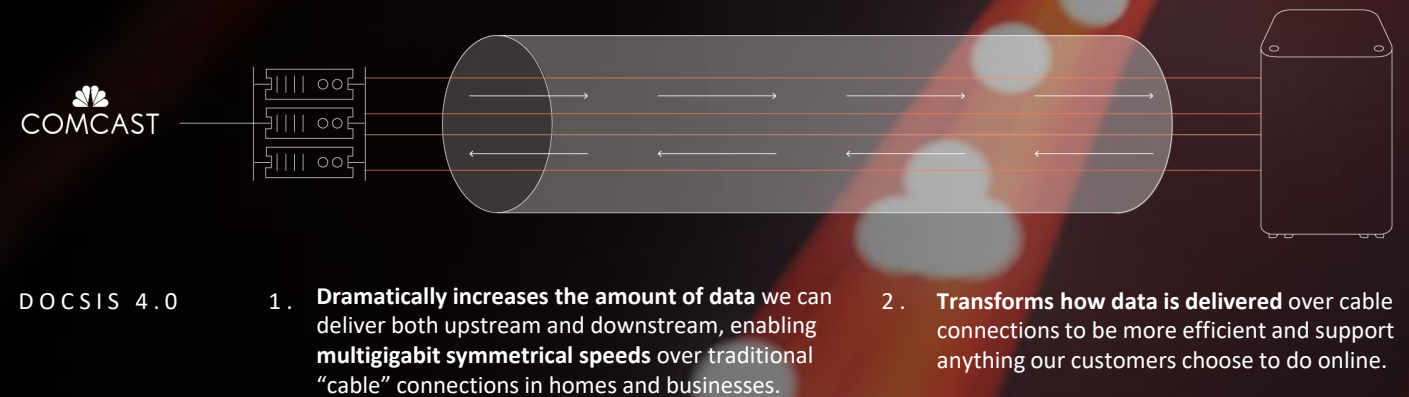
Innovating for Reliability

XMF, a new network technology, **reduces the amount of time** it takes for a technician to **find and isolate a fiber cut from 2 hours down to one-and-a-half minutes**. The XMF platform monitors hundreds of thousands of local broadband optical links every minute across the Comcast network, measuring both the optical spectrum and testing the length and quality of the fiber links. In practical terms, that means that with XMF installed network engineers can pinpoint the exact point at which a local fiber network is experiencing an issue and share the precise geolocation with local technicians.

Leading the Way on 10G

We are evolving our network to 10G, a technology which will allow Comcast to deliver **multigigabit upload and download speeds** to tens of millions Americans **over the cable broadband connections already installed** in their homes and businesses. In 2021, our work on 10G technologies kicked into high gear:

- In April, we conducted a lab test of DOCSIS 4.0 technology and showed ability to deliver 4-gig upload and download speeds.
- In October, we conducted **the world's first test of a 10G connection** all the way from our network to a modem. The team activated a virtualized cable modem termination system (vCMTS) powered by Full Duplex DOCSIS 4.0 Technology, another world's first.



CYBERSECURITY

Our team of security experts works 24/7 to monitor our network using a mix of highly sophisticated technologies, threat intelligence, and proprietary AI-powered software which helps us process hundreds of thousands of cyber events every second.

6B cyberthreats blocked

by xFi Advanced Security in our customers' homes between Jan and Aug 2020

104 cyberthreats per household

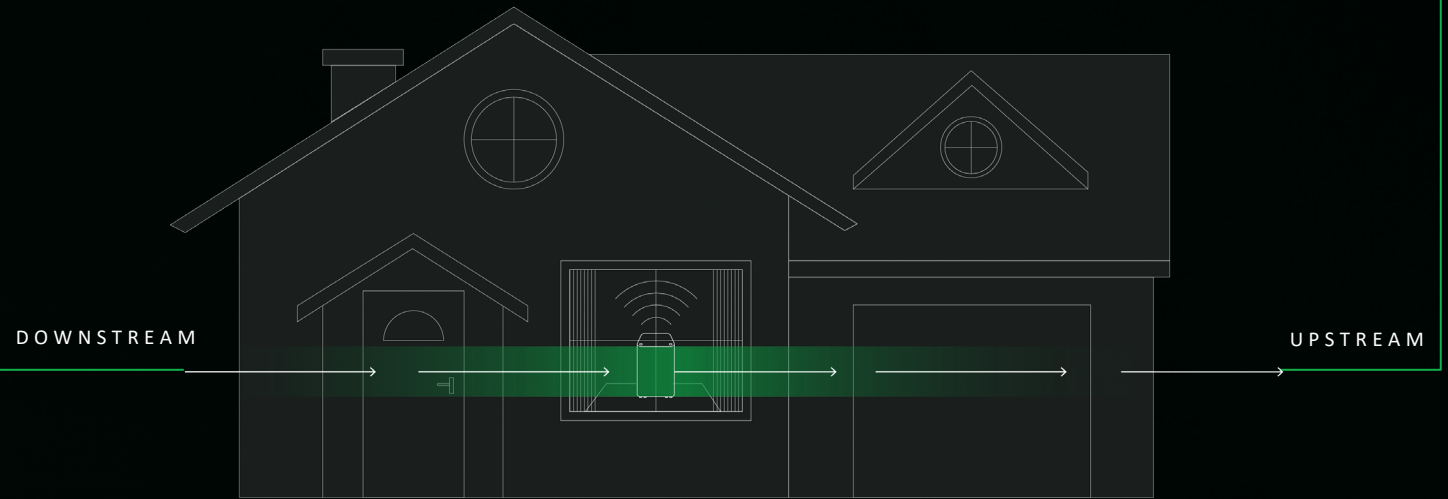
on average each month

Trusted by the Department of Defense

Comcast Business was awarded a 10-year contract by the United States Defense Information Systems Agency (DISA) to establish Commercial Ethernet Gateways providing Ethernet connections to its Defense Information Systems Network (DISN) in the Northeastern United States.

TRAFFIC

In 2021, peak traffic growth continued to climb, even from record highs set in 2020. Peak downstream traffic grew 2x faster than upstream traffic, more closely mirroring pre-pandemic trends.



+11%

Peak **downstream** traffic increased approximately 11 percent over 2020 levels.

+5%

Peak **upstream** traffic increased approximately 5 percent over 2020 levels.

Asymmetrical usage: Network asymmetry increased throughout the year, with total downstream traffic volumes **12.4x higher** than upstream for the first 6 months of the year, and 14.5x higher for the last six months.

Daily peak times shifted toward pre-pandemic norms throughout the year – peak upstream traffic times were 10am in January, 3pm in June, and 10pm in December.

10:00 AM

JAN

3:00 PM

JUN

10:00 PM

DEC

NETWORK MANAGEMENT
&
SUPPORT UNLIKE ANY OTHER

We work around the clock
to constantly improve
America's Largest
Gig-Speed Broadband Network
so it's better today
and even better tomorrow.

Comcast has thousands of technicians, engineers, cybersecurity professionals, highly-trained customer care agents, and other frontline team members who are always working to ensure fast, reliable Internet service. These heroes are in your neighborhood expanding access and improving connectivity, in our operations centers performing health checks to pinpoint potential issues, and across the country monitoring for privacy and security attacks.

Dedicated, seamless support

through various channels for your businesses, residents and community

Highly-trained agents

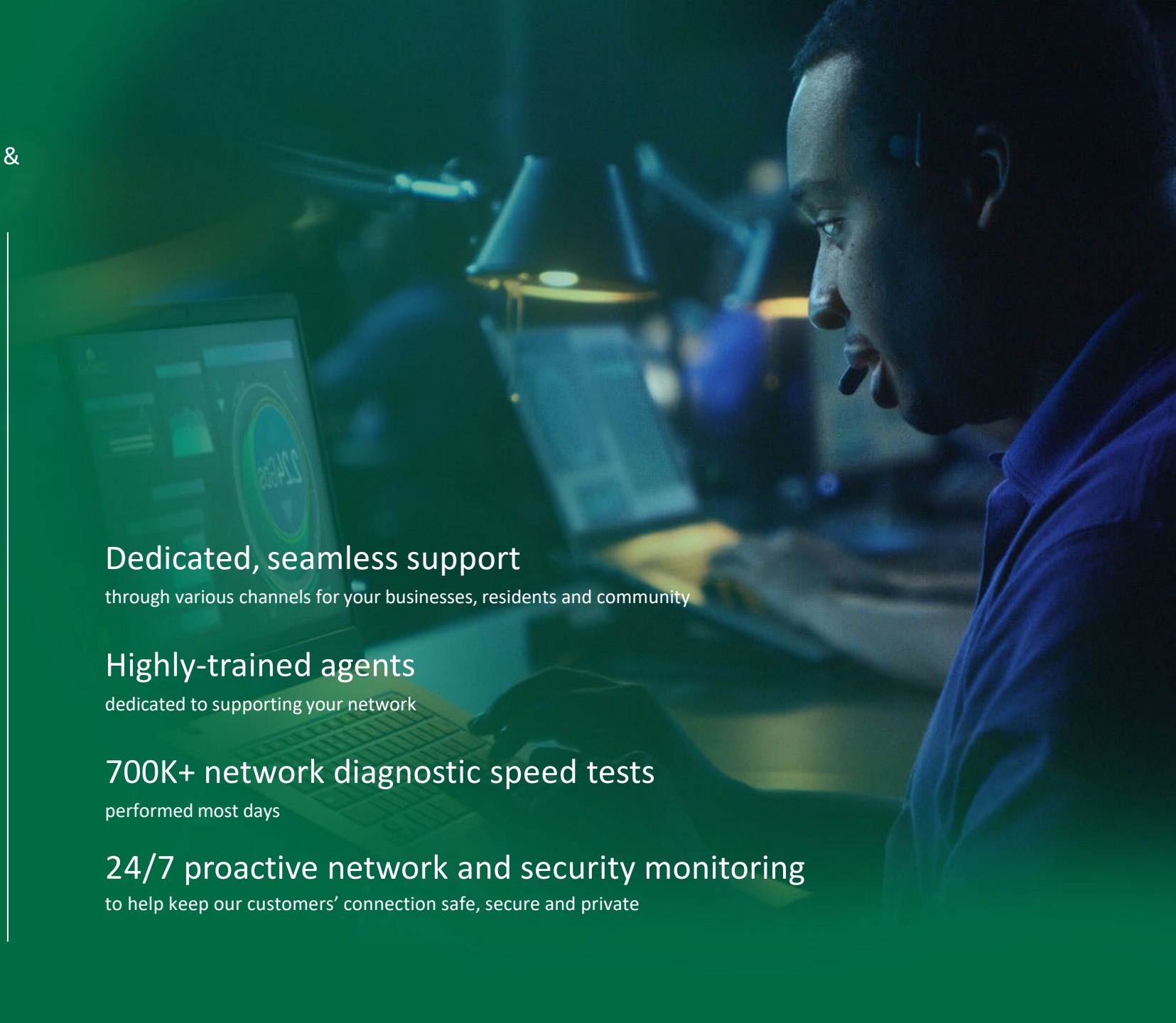
dedicated to supporting your network

700K+ network diagnostic speed tests

performed most days

24/7 proactive network and security monitoring

to help keep our customers' connection safe, secure and private



FIBER-RICH NETWORK

Whatever the future holds, our fiber-rich network will be ready to support anything your community can imagine.

+50K

Since 2017, we have built over 50k new miles of fiber into our network.

2x

We've doubled our network capacity every 2.5 years to stay well ahead of demand.



PRODUCTS & INNOVATIONS



We are always evolving and investing in our network to bring our customers the best and most innovative products.

With Xfinity, Comcast delivers the best in Internet, entertainment, mobile, voice, and home security, all working seamlessly together to connect customers to more of what they love.

Internet

Powerful, secure WiFi unlocked through the xFi Gateway. With Advanced Security included, protecting customers from **billions of cyberthreats a year**.

Entertainment

All the best entertainment, all in one place, starting at free for our Internet customers. With an award-winning voice remote to easily search and watch the latest shows and movies.

Mobile

Unmatched savings and the **most reliable 5G network**. With the flexibility to mix and match data options and switch between plans anytime.

Home Security

A choice of protection solutions, including **24/7 professional monitoring** and the option for customers to keep an eye on their home through the Xfinity app.



COMCAST BUSINESS

COMCAST BUSINESS

From Main Street to Wall Street
and across every industry, we
keep businesses prepared for
what's next with the best
technology solutions, support,
and expertise.

More businesses are powered by Comcast Business than any other provider. We are proud to serve businesses in a variety of industries with expansive experience in Retail, Financial Services, Hospitality, Food & Beverage, Education (including eRate services for schools and libraries), and Local, State and Federal government entities through GSA's Schedule 70 contract vehicle and direct partnerships.

Leading Network

Largest, fastest, and reliable network to more small businesses than any other provider

Most reliable 5G mobile network

Portfolio Breadth and Reach

Global, secure networking capabilities plus 50+ points of presence in cities around the world

Extensive on-premise and cloud-based options offering end-to-end secure network solutions

Advanced Security

Advanced security to protect your business from cyberthreats

Help protect all your connected devices at your business or on the go

Trusted Partnership with a Human Touch

Single provider that can customize and deliver solutions right for your business

Flexible delivery model to manage solution – fully manage, co-manage



W I F I

The fastest network is only as good as its WiFi.

That's why we've paired our network advancements with smart, supersonic WiFi that ensures customers have the best-connected experiences however and wherever they connect.

Billions

Unique devices: Nearly a **billion** unique devices connected to WiFi in Xfinity households as of 2021, a 1,000 percent increase from 2018.

xFi Advanced Security: Proactively blocks billions of cybersecurity threats before they reach our customers' devices and is included with our xFi Gateway.

Millions

Smartphones: Continuing to be the main device connected in our customers' homes, smartphones make up **1/3** of all devices connected to Xfinity WiFi.

xFi Pods: Help to cover the home with strong and reliable WiFi. **90-100 million** devices are connecting through our Pods in the U.S. and Europe each day.

Pause/unpause: Xfinity customers used the pause/unpause WiFi feature nearly **100 million times**.

Parental Controls: More than **1 million** Xfinity customers are using xFi parental controls to help manage WiFi in their home.

Gig speeds: Even as demand on the network continued to grow, Comcast has continued to increase speeds for all of its speed tiers, including increasing gig speeds to **1.2 Gbps**.

xFi Advanced Gateway: Comcast's most powerful device to date, the next generation xFi Advanced Gateway incorporates WiFi 6E, offering customers an unbeatable broadband experience with a faster, more reliable wireless connection. The gateway boosts capacity in the home with three WiFi bands – 2.4 GHz, 5 GHz, and a new, 6 GHz band.



PROJECT UP

As the world becomes more digital, it's our responsibility to use media and technology to ensure that everyone has the resources and opportunities they need to participate and excel in today's society. Project UP is our comprehensive initiative to advance digital equity and help build a future of unlimited possibilities.

PROJECT UP

Backed by a \$1 billion commitment, Project UP encompasses the programs and community partnerships across Comcast, NBCUniversal, and Sky that connect people to the Internet, advance economic mobility, and open doors for the next generation of innovators, entrepreneurs, storytellers, and creators. Three of these programs are featured below:

internet» essentials FROM COMCAST

We have been committed to creating and supporting digital equity within the communities we serve for more than a decade. We launched Internet Essentials in 2011 to bring affordable, high-speed Internet to low-income families connecting a cumulative total of more than 10 million people from low-income families to the Internet at home in 10 years.



Comcast began launching Lift Zones nationwide in 2020 to provide spaces for students to access free, high-capacity WiFi. By the end of 2021, we surpassed our goal to install 1,000 Lift Zones in community centers across the country together with nonprofit partners and city leaders.



The Comcast RISE Investment Fund has granted \$11 million to 1,100 small businesses owned by people of color, and the program will support 13,000 small businesses by the end of 2022. A program offering grants, marketing services, and technology upgrades, Comcast RISE stands for "Representation, Investment, Strength, and Empowerment," and was created to strengthen and empower small businesses hard hit by COVID-19.

Comcast's Management Team includes:

- **Michael Parker** serves as the Senior Vice President of Comcast's Beltway Region. In this role, he leads multidisciplinary teams of thousands of employees focused on transforming the customer experience and delivering Comcast's best-in-class products to millions of customers in Maryland, Virginia and Washington, D.C., as well as parts of Delaware, North Carolina and West Virginia.

Mr. Parker joined the Northeast Division as Senior Vice President of Comcast's Western New England Region and was most recently the Senior Vice President of Comcast's Keystone Region. In this role, he was the head executive responsible for operations, financial performance and customer service for approximately 1.7 million customers in Pennsylvania, Ohio and parts of Maryland and West Virginia. He has also held roles as Vice President of Operations for Comcast's Greater Chicago Region, Area Vice President for Comcast's systems in New York and Connecticut, Vice President & General Manager for the company's Baltimore City system, Vice President of Government & Regulatory Affairs for Comcast's Greater Detroit Region, and Vice President & General Manager of the company's Detroit system. Mike also worked for Tele-Communications, Inc. (TCI) and began his career serving as Illinois Assistant Attorney General.

Mr. Parker is a graduate of NAMIC's Executive Leadership Development Program, CTAM's Executive Management Program, the Society of Cable Telecommunications Engineer's (SCTE's) Tuck Executive Leadership Program and Comcast's Executive Leadership Forum. He has been recognized numerous times as one of CableFax: The Magazine's "Most Influential Minorities" and was honored on the "Top 50 Under 50" list of Black MBA Magazine.

Mr. Parker holds an MBA from the Kellogg Graduate School of Management at Northwestern University and earned degrees from the University of Miami School of Law and Lake Forest College. He is also a graduate of the Officer Candidates School in Quantico, Virginia, and attained the rank of First Lieutenant during his service with the U.S. Marine Corps Reserve.

- **Ray Roundtree** is the Vice President of Finance & Accounting for Comcast's Beltway Region. In his role, Mr. Roundtree leads all financial and accounting functions, and oversees the region's Facilities and Warehouse teams and operations. Most recently, Mr. Roundtree was the Vice President of Finance and Business Operations for Comcast's Florida Region.

Mr. Roundtree has more than 21 years of financial management leadership at Comcast in roles of progressive responsibility. Before joining the Florida Region, he was the Vice President of Finance and Business Operations for the Keystone Region. His prior experience within the

company includes Vice President of Finance and Business Operations for the Central Pennsylvania Region, Area Director of Business Operations for South Jersey, and General Manager for Chester and Lancaster Counties.

Mr. Roundtree served as the Executive Sponsor for the Florida Region's Black Employee Network Employee Resource Group (ERG) and was the co-lead for the Region's Diversity, Equity & Inclusion Council.

- As Vice President of Government and Community Affairs for Comcast's Beltway Region, **Misty Allen** leads the government, regulatory and community affairs teams the Beltway Region. Prior to joining Comcast, Ms. Allen led state and local government affairs strategies at Baltimore Gas and Electric (BGE) as the Director of Government and Legislative Affairs. Ms. Allen also served as Vice President of Asset Management for GenOn Energy Inc., a competitive power generator of wholesale electricity, where she contributed to the development of company legislative and regulatory policy and business development efforts in New Jersey, Maryland, and Virginia.

Ms. Allen is a graduate of Creighton University in Nebraska and earned a Bachelor of Science degree in Business Administration and a Juris Doctor degree. She also received a certificate in Nonprofit Leadership and Administration from Northern Virginia Community College. Beyond work, Misty serves on the Board of Directors for the Greater Washington Board of Trade, Maryland State Chamber of Commerce, Virginia Cable Telecommunications Association and Christmas in April - Prince George's County.

- As Regional Vice President of Comcast Business for the Beltway Region, **Dan Carr** has regional responsibility for all sales, sales support, revenue, operating P&L and customer satisfaction for Comcast Business products and services. Before joining the Senior Leadership Team in Beltway, Mr. Carr had national responsibility for sales operations and support for Comcast Business, supporting the development of a high-performing field sales organization. He was directly responsible for the day-to-day support of the Enterprise Sales Channel and the critical functions to sales force productivity across all sales channels.

Prior to Comcast, Mr. Carr served as Senior Director at Level 3 Communications (now Lumen Technologies) and was responsible for leading pre and post-sale engineering activities for large accounts. While at Broadwing Communications (now Lumen Technologies) he led a sales operations team responsible for sales force productivity across the enterprise market. He has held various sales and technical leadership positions at MCI Communications (now Verizon Communications).

Mr. Carr holds an MBA from Saint Joseph's University and a BS in Computer Science from Widener University.

- As Vice President of Technical Operations for the Beltway Region, **Robert Jones** leads the day-to-day operations for the Installation & Service team and works with Headquarters and Northeast Division Technical Operations leaders to implement strategies focused on delivering the best customer and employee experiences.

Previously, Mr. Jones spent a year leading the Florida region's Tech Ops and Fulfillment teams, and prior to that spent three years as the Area Vice President of Technical Operations for Greater Philadelphia. He brings more than 30 years of experience in the telecommunications industry including as Senior Director of Operations for DIRECTV and field operations leader in Washington, D.C. and Chicago, IL for TCL.

Mr. Jones is a strong proponent of Diversity, Equity and Inclusion, and developing talent at Comcast, having served as the co-lead for the Black Employee Network Employee Resource Group in the Freedom Region. He received his B.A. from Southern New Hampshire University,).

- **Tom Kearney** is the Vice President of Network Engineering for the Beltway Region. In this role, Mr. Kearney manages all network maintenance and construction teams who expand and maintain the Beltway Region's vast networks and also implement new technology-based products and services. ___-Mr. Kearney brings 22 years of experience in the broadband and cable industry – 17 of them working for Comcast – to this role. Previously, he served as Area Vice President for Comcast in the Metro-DC Area and Senior Director of Engineering and Technical Operations. Prior to joining the industry, Mr. Kearney served as a Lieutenant in the U.S. Navy, served on board the USS Kinkaid (DD-965) and other stations and was deployed to the Persian Gulf and Western Pacific in support of various campaigns.

Mr. Kearney holds a Bachelor of Science (Mechanical Engineering) from Villanova University and a Master's degree in Business Administration from University of Baltimore. He graduated from the TUCK Executive Leadership Program in 2014 and from Comcast's Executive Leadership Forum in 2012. Currently, Mr. Kearney serves as the initial Executive Champion for the Beltway Region's VetNet ERG.

- **Jackie MayBeck** serves as the Vice President of Sales & Marketing for Comcast's Beltway Region. Jackie joined the Region in 2019 as Vice President of Sales, responsible for executing our go-to-market strategies across all sales channels – Retail, Direct, Indirect and Inbound Sales – while

driving a best-in-class customer experience. Jackie currently serves as a Co-Lead for Beltway's OUT chapter.

Prior to joining the Beltway Region, Jackie began her Comcast career in 2013 leading the Houston Region Retail channels. She was instrumental in developing a strong retail long-range plan. In 2016, Jackie joined the California Region team to lead Xfinity Communities with a specific focus on becoming a loved brand in the robust Multiple Dwelling Units of the region. She next led California's Retail channel, including 46 Xfinity Stores and more than 600 employees. Under Jackie's leadership, the California team transformed 17 Xfinity Stores and moved from last to first place in performance, claiming the West Division Elite award in 2018. Before working at Comcast, Jackie held various leadership positions within the wireless industry including Cricket, Verizon, Sprint, and Southwestern Bell Wireless. Jackie holds an MBA from the University of Houston-Downtown and received her bachelor's degree in Accounting from Sam Houston State University.