Application to DHCD Submitted through CAMS

County of Henrico

Henrico County Universal Broadband Initiative 2022

Application ID:	86508122021151549
Application Status:	Pending
Program Name:	Virginia Telecommunications Initiative 2022
Organization Name:	County of Henrico
Organization Address:	4301 East Parham Road Henrico, VA 23228
Profile Manager Name:	David Sacks
Profile Manager Phone:	(804) 501-7611
Profile Manager Email:	sac01@henrico.us

Project Name:	Henrico County Universal Broadband Initiative 2022
Project Contact Name:	Travis Sparrow
Project Contact Phone:	(804) 501-5976
Project Contact Email:	spa62@henrico.us
Project Location:	4301 E. Parham Road, Suite 200 Henrico, VA 23228-2745
Project Service Area:	Henrico County

Total Requested Amount: $3,360,771.00

Required Annual Audit Status: No Current Audits Found

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Budget Information:

Cost/Activity Category	DHCD Request	Other Funding	Total
Telecommunications	**$3,360,771.00**	**$1,440,329.00**	**$4,801,100.00**
Construction	$3,360,771.00	$1,440,329.00	$4,801,100.00
Total:	**$3,360,771.00**	**$1,440,329.00**	**$4,801,100.00**

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:

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Henrico County Universal Broadband Initiative 2022

Henrico County ("Partner" or "County") and Comcast of Virginia, LLC ("Comcast") 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 201 residential addresses, seven home-based business addresses, twelve business addresses, eight community anchor institutions, and six non-residential property addresses.

Currently, the overwhelming majority of Henrico County is well served by existing providers of broadband across the County's highly-varied suburban, urban, and rural community. Nevertheless, a few small areas of the County remain unserved because of geographical and economic barriers that make extension of broadband service difficult through traditional private sector buildout efforts. These barriers are unlikely to be overcome without substantial public sector collaboration with private sector partners. The need for broadband in parts of the community was keenly felt throughout 2020 and 2021, as both school children and businesses relied heavily on internet connectivity to learn and conduct business during the COVID-19 pandemic emergency. The County gained a sense of the challenge through programs offering wireless hotspots to all public-school children and conducting broadband availability surveys (https://speedtest.henrico.us) around the community to identify areas lacking sufficient service.

To overcome these barriers and meet the community's needs, the County and Comcast collaborated for this Grant Application to identify the small, isolated unserved areas that need the kind of assistance offered through the VATI program to receive effective broadband service.

The geographic area for this proposed project (the " Henrico County Project") includes approximately 70 miles of new underground fiber/coaxial broadband infrastructure generally dispersed throughout Henrico County, with most of the improvements being made in the more rural eastern portion of the County, as noted on the attached Project Area map and further detailed below.

The project area was selected after consultation between the County and Comcast and 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 was also selected to meet eligibility criteria for the Coronavirus State Fiscal Recovery Fund and/or the Coronavirus Local Fiscal Recovery 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 of up to 1.2 gigabit per second ("Gbps") over a hybrid fiber coaxial network for residential customers and 10 Gbps for Business customers.

The County has researched internet service availability, including soliciting community engagement. The County has received many comments from citizens and businesses on the lack of adequate internet in areas of the County. This information led to the development of a broadband plan that identifies unserved areas of the County that should be targeted for internet service.

The geographic area for this proposed project is throughout the County as needed in order to provide universal broadband access. However, most of the need exists in the more rural areas along the southern and south-eastern areas of Henrico. This includes areas adjacent to the Lower James River, portions of the County that are close to the border with Charles City County, and in areas that are separated by natural and historic features from existing infrastructure (including the national battlefield park and other parks and areas of "open space" that make expansion of broadband less economically attractive to the private market). These are areas that are more challenging to reach with broadband because of their relatively remote locations and low number of houses per road mile.

If this grant is awarded Comcast and Henrico County will complete a detailed site review of each identified parcel and address to ensure its appropriate inclusion in the construction and deployment of the broadband infrastructure.

2. List existing providers in the proposed project area and the speeds offered. Please do not include satellite. Describe your outreach efforts to identify existing providers and how this information was compiled with source(s).

Answer:

The proposed project locations and addresses are not served by existing providers. The County has two major existing providers - Comcast and Verizon, neither of which currently serve the proposed project area or addresses, based on the best information available to the County and Comcast. The County identified these providers and their coverage areas through existing Cable Franchise Agreements with the providers. In addition, the County maintains many of the roads in the project area and is generally familiar with providers operating in County rights of way. Therefore, the only internet access available in the identified project area/addresses is via cellular signal using commercial cell phone service. The speeds available with these services are impacted by terrain, weather, the type of device being used, and a host of other variables.

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. Do not include areas awarded to satellite broadband providers. Label Map: Attachment 2 – Documentation on Federal Funding Area.

Answer:

The 2020 RDOF auction by the FCC awarded certain areas/census blocks to ConnectEveryone, LLC. The map of these awarded areas is included in Attachment 2. In addition, we have identified the properties that are included in both the ConnectEveryone award and in the Henrico/Comcast VATI application. This list of overlapping properties is also provided in Attachment 3. It is worth noting that ConnectEveryone has not made any contact with Henrico County, and, to the best of our knowledge, no work has been planned by ConnectEveryone.

4. Describe if any blocks awarded in Rural Digital Opportunity Fund (RDOF), excluding those awarded to satellite internet service providers, are included in the VATI application area. If RDOF areas awarded to terrestrial internet service providers 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 3 – RDOF Awarded Areas Form in VATI Area

Answer:

The Henrico County Project area has 21 passings that lie within Rural Digital Opportunity Fund ("RDOF") eligible census blocks. This information is shown within the documents of Attachment 3.

5. 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 25/3 mbps and with less than 25% service overlap within the project area for wireless projects and 10% 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 4 – Documentation Unserved Area VATI Criteria.

Answer:

The project area and the addresses identified in the scope of work are unserved based on data available through the FCC's publicly available Form 477 website and from broadband providers. Henrico County conducted diligent outreach with existing wireline, wireless, and satellite internet service providers to determine if the areas proposed as part of the grant application had access to broadband internet service. Comcast and Henrico County anticipate no service overlap within the project area as there are no current broadband providers. While the attached map of FCC Form 477 data shows providers offering internet service in this area, Henrico County has verified that none of these providers offer service that would result in classifying the project area as served according to VATI guidelines.

In summary, the project area is unserved based on data available through the FCC's publicly available Form 477 website, broadband providers, and Henrico County.

6.

Total Passings: Provide the number of total serviceable units in the project area. Applicants are encouraged to prioritize areas lacking 10 Megabits per second download and 1 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 5 – 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. (Up to 10 points for businesses and community anchor institutions)

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 10/1 mbps or less. Describe the methodology used for these projections. (up to 15 points)

Answer:

A. Comcast will extend service to 201 unserved residential addresses, seven home-based business addresses, twelve business addresses, eight community anchor institutions, and six non-residential property addresses.

Community Anchor Institutions (using Google Maps and County property records):

Several important community anchor institutions will be connected to broadband service within this plan. They include the following:

1. 3201 Milburn Avenue - One of the largest African American cemeteries in the Central Virginia area, which has been the focus of renovation in recent years. A visitors center / interpretive center is planned for this facility.
2. 500 Wilton Farm Road - 1,194 acre tract of very historic property along the James River that was recently acquired by Henrico County; it's future includes residential and business development, a welcome center/museum, and secondary education programming for Henrico County Public Schools;
3. 9525 Deep Bottom Rd. - A county park with several facilities including an active public boat landing;
4. 9729 Malvern Hill Ln. - A 427 acre historic conservation area with numerous historic structures and improvement
5. 9544 Hoke Brady Rd. - The Richmond Yacht Basin, a public/private marina that houses numerous permanent residents (people living permanently on house boats)
6. 9505 Deep Bottom Rd – County Recreation and Park facility
7. 9515 Deep Bottom Rd – County Recreation and Park facility
8. 9401 WRVA Rd. - County Emergency 911 Radio telecommunications tower site. The School Board identified 15 unique residential addresses with 26 current K-12 students located in the Henrico County Project area.

B. The Henrico County Project area has 21 passings that lie within Rural Digital Opportunity Fund ("RDOF") eligible census blocks. The breakdown of these 21 passings is shown within Attachment 3.

C. The goal of this project is to ensure universal broadband access throughout Henrico County. To achieve this universal coverage, 234 passings were identified as unserved. All 234 of these passings are included in this scope of work and each will require special construction cost. In every case, hard-wired broadband service currently is not available. In every case, a fiber coaxial cable will be installed, with a connection back to Comcast's hub, to the identified addresses and structures. This will result in a one-time cost to build out the infrastructure to these 234 addresses across 70 miles of road/driveway and right of way.

D. The goal of this project is to ensure universal broadband access throughout Henrico County. To achieve this universal coverage, 234 passings were identified as unserved. All 234 of these passings are included in this scope of work and each will require special construction cost. In every case, hard-wired broadband service currently is not available. In every case, a coaxial fiber cable will be installed, with a connection back to Comcast's hub, to the identified addresses and structures. This will result in a one-time cost to build out the infrastructure to these 234 addresses across 70 miles of road/driveway and right of way.

E. Based on data available through the FCC's publicly available Form 477 website, Comcast estimates there are 234 passings in the Project Area that have access to Internet speeds of 10/1 Mbps or less (In fact, these addresses do not have access to any hard-wired broadband service.).

Comcast and the County performed an internal analysis of passings that do not have access to Internet speeds of 10/1 Mbps or less in census blocks from the Form 477 website showing existing Comcast service.

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:

N/A

8.

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 25/3 mbps. (up to 10 points)

Answer:

Upon completion of the project Comcast will offer the following services, in addition to video, VOIP, and wireless services, all backed up by outstanding customer service:

High-Speed Internet Services. Comcast's robust high-speed Internet services provide a range of fast, reliable Internet speed tiers to fit customers' needs, as well as access to over 20 million secure Wi-Fi hotspots nationwide so that customers can stay connected on the go. Customers also have access to the Xfinity app to optimize their home connections, view their plans, pay their bills, and get 24/7 real-time support. And they also have access to xFi – a simple, digital dashboard for customers to control their home Wi-Fi network. In addition to parental control features like pausing Wi-Fi and screen time scheduling, xFi provides content filters that ensure younger children can only access age -appropriate content. xFi now also comes with xFi Advanced Security, that protects all the devices connected to a customers' home network from malware and other security threats.

Comcast Business Services. Comcast Business Services offers a variety of products and services to businesses. 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 backup 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 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.

Upon completion of the project, Comcast will be able to offer customers multiple choices of residential and commercial broadband services, depending on the customers' specific needs:

Residential Service Tiers

Tier

Speeds Up To

Standalone Pricing

With Xfinity TV or Voice Service

Performance Starter

50 Mbps / 5 Mbps

$54.95

$49.95

Performance

100 Mbps / 5 Mbps

$80.95

$64.95

Performance Pro

200 Mbps / 5 Mbps

$95.95

$79.95

Blast!

400 Mbps / 10 Mbps

$100.95

$84.95

Extreme Pro

800 Mbps / 15 Mbps

$105.95

$89.95

Gigabit

1.2 Gbps / 35 Mbps

$110.95

$94.95

Gigabit Pro

2 Gbps / 2 Gbps

$299.95

N/A

Comcast Business Tier[1]

Tier	Speeds Up To
Business Internet 100	100 Mbps / 15 Mbps
Business Internet 200	200 Mbps / 20 Mbps
Business Internet 300 Plus	300 Mbps / 30 Mbps
Business Internet 600	

600 Mbps / 35 Mbps

Business Internet 1G

1.2 Gbps / 35 Mbps

[1] Speeds of up to 100 Gbps for medium to large businesses available in certain areas

Note: Prices do not include equipment or applicable taxes, fees and surcharges.

In addition to the multiple residential broadband options above, Comcast also makes available its Internet Essentials program to qualifying low-income customers in its service areas, which is the nation's largest, most successful, and most comprehensive broadband adoption program for low-income households, and Comcast's number one community impact initiative. Internet Essentials currently provides customers with broadband service at speeds of up to 50 Mbps/5 Mbps for $9.95/month plus applicable taxes, fees and surcharges, as well as free digital skills training in person and online. Customers also have the option to purchase a low-cost Internet-ready computer.

In addition, Comcast customers who subscribe to an Xfinity Internet package will have access to Xfinity WiFi hotspots, including those that would be newly added to the Project, for no additional cost. Moreover, these customers would be able to access any of Comcast's hotspots throughout Virginia and across the country. Comcast has the country's largest WiFi network, including more than 20 million hotspots nationwide. Combined with the company's recently launched Xfinity xFi platform, a new and personalized home WiFi experience, Comcast will provide its customers in the Project with the fastest speeds, the best WiFi coverage, and ultimate WiFi control in their homes. Xfinity Internet customers may also have the option to sign up for Xfinity Mobile service, which includes up to five lines with unlimited talk and text.

9. 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 more than 191,000 route miles of fiber– using the industry's most advanced optics/lasers and IP routing technologies. Dozens of converged regional area networks interconnect to create this fiber backbone that delivers video, voice, and high-speed Internet 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." Comcast has been building fiber into its network incrementally over the past decade. In 2015, Comcast introduced Gigabit Pro, the industry's first residential fiber-to-the-home 2 Gbps service ever offered by an Internet service provider in the United States.

Comcast proposes to construct the project with a highly scalable hybrid fiber-coaxial ("HFC") solution, emanating from the closest facility to the project. Fiber-optic cables would be constructed to the service area, commonly referred to as a serving node, where optical signals would be converted to electrical or radio frequency for distribution over the coaxial network to subscriber's homes, businesses, and/or community anchor institutions.

Currently, Comcast employs Data Over Cable Service Interface Specification (DOCSIS) 3.1 technology in its broadband network infrastructure and plans to use DOCSIS 3.1 for this project. DOCSIS is an international telecommunications standard that permits the addition of high bandwidth data transfer to an existing cable TV system. The technology is employed by many cable operators to provide Internet access over existing HFC infrastructure. DOCSIS is a proven, flexible protocol which offers the technological foundation upon which Comcast can meet any current or future anticipated need. As a highly scalable technology, it has, to-date, allowed Comcast to enhance the residential broadband speeds it offers from 50 Mbps to 1.2 Gbps, an almost 25-fold increase.

DOCSIS 3.1 was introduced in 2013 and will support a maximum downstream capacity of 10 Gbps and maximum upstream capacity of 1-2 Gbps. DOCSIS architecture includes two primary components – a cable modem, located at a customer's home or business, and a cable modem termination system (CMTS), located at the cable system head end. Comcast leases the cable modem to customers as a component of the service, or customers can provide their own modem, and the CMTS for this proposed project is located in Comcast's head end serving the Project area.

The design for the proposed project is based upon the current industry standards as developed by the Society for Cable Television Engineers (SCTE) and Comcast standards of broadband deployment. Comcast utilizes ARRIS cable modems and CMTS devices both of which have been certified by CableLabs for use with DOCSIS technology.

The industry continues to innovate, working through CableLabs, a joint non-profit research and development laboratory, to develop the next iteration of DOCSIS, named 10G. The 10G platform is a combination of technologies that will deliver Internet speeds 10 times faster than today's networks and 100 times faster than what most consumers currently experience. This technological development will allow Comcast to offer gigabit symmetrical service in the coming years over its existing HFC network throughout our entire footprint, as well as lower latencies, enhanced reliability, and better security in a scalable manner. Comcast began field trials of 10G earlier this year. This combination of technologies will result in much faster speeds, more reliability, stronger security, and even lower latency. The network will be able to transmit up to 50% more data, thereby augmenting the quality of video conferencing, telehealth, and connected devices, among many other things. Additional information about these exciting developments is available at https://www.cablelabs.com/path-10g-2020-update.

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 Henrico County 2020-25 Consolidated Plan (Section MA-60) highlights that the majority of the County has reliable access to broadband service through experienced providers, like Comcast. Indeed, most census tracts in the County show at least some service available. However, identifying and "filling" areas that lack service remains a top priority of the County, and, to the best of our knowledge, we believe this project will achieve universal broadband coverage in Henrico County.

We are proud to present a proposed project that identifies and fills the remaining unserved areas of the County. The County believes these areas will continue to be unserved without significant collaboration between the public and private sectors. Programs like VATI are one of the few ways to fill the unserved areas of the County, and, therefore, filling these areas through participation in VATI is an essential component of the County's plan to achieve universal broadband for the community.

Comcast is a leading communications provider in the United States, currently operating throughout 39 states and the District of Columbia. With over 31.4 million residential and business services broadband customers, 19 million video customers, and 10.8 million voice customers, Comcast passes over 60 million homes and businesses.

Over the past several decades, Comcast has invested in technology to build an advanced, highly scalable network that delivers among the fastest broadband speeds in the country, ranging from 25 Mbps to 2 Gbps for residential customers and up to 10 Gbps for business customers. Comcast is the nation's largest gigabit Internet provider, and nearly all of our 60 million homes and businesses passed in our service territory can access our ultra-fast Xfinity Gigabit Internet and Comcast Business Gigabit services, including our customers in Virginia. Moreover, approximately 85 percent of our residential High-Speed Internet customers subscribe to speeds of 100 Mbps or higher.

To support the growing needs of the digital world, Comcast is working hard to make its network smarter, by leveraging cloud, backbone, and architecture advancements to provide a faster, stronger, and more flexible network. By optimizing traffic routing and moving resources closer to where they are needed, Comcast's network provides the key to managing the ever-increasing traffic demands of today's Internet. The powerful combination of our broadband and Wi-Fi network and the cloud is enabling us to innovate and bring transformative products to market, redefining how customers enjoy entertainment, connect, and communicate inside and outside of their home or office.

Comcast has spent nearly $30 billion in the last decade building an expansive fiber-dense network comprised of 191,000 route miles that carries an immense amount of traffic and has demonstrated extraordinary performance throughout the pandemic.

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 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 20 points)

Answer:

This grant will enable the partnership to extend broadband service at speeds ranging from 50 mbps to 1.2 Gbps to 201 unserved residential addresses, seven home-based business addresses, twelve business addresses, eight community anchor institutions, and six non-residential property addresses in the proposed service area. The proposed project area will have access to some of the fastest and most reliable broadband speeds available nationwide.

Comcast has completed the planning and preliminary engineering phase for the proposed project area. Final design and construction shall commence upon the award of the grant. Workflow is included in the attached project management plan. The specific initial tasks include project engineering and right of way preparation. Comcast will need to obtain the necessary permits from the Virginia Department of Transportation, the County, and any other government entities as needed. Comcast will work with the County to obtain the necessary permits and power supplies expeditiously. This coordination will need to begin immediately upon notice of the grant award. Comcast anticipates completing the project within 18 months after contract execution between the County and DHCD. As contemplated by the 2022 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 Service Delivery Major Milestones:

- Outside and Inside Surveys – Comcast will conduct outside plant and customer site surveys.
- Permits & Right of Entry Agreements – Comcast will obtain required permits and work with property owner to obtain Right of Entry/Access agreements.
- Service Configurations – Comcast National Team will implement Network Core Configurations.
- Outside and Inside Fiber/Coax Construction – Comcast will complete outside and inside construction.
- Customer Premise Equipment Installation/Plant Test Date (PTD) – Comcast will dispatch to the customer's premise to install CPE, connect CPE to Fiber, and call Comcast Test & Turn-up to complete plant test.

***Comcast Responsibilities*:**

- Construct all OSP and ISP fiber optic and coaxial cabling up to the agreed upon locations from the site survey forms and connect [XX] locations.
- Call for locates of public utilities in the right of way.
- Restoration of disturbed grounds.
- Assemble, configure, and install all Comcast provided network equipment on customer premise.
- Test and verify all appropriate fiber and coaxial connections.
- Test and verify all appropriate data interfaces/connections and verify throughput.
- Provide 24x7x365 network monitoring.
- Provide contact list information including escalation procedures and NOC information.
- Provide documentation detail services including customer network interface drawings.
- And any additional agreements per site survey document. Detailed information regarding the customer responsibilities is available in the Technical Specifications section of the proposal. Additional information can be provided upon request.

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:

Between 2017 and 2020, Comcast received four Virginia Telecommunications Initiative ("VATI") grants from the Virginia Department of Housing and Community Development, and has now successfully deployed broadband to residences and businesses throughout each of the project footprints.

A summary list of projects is noted below:

- 2017: Albemarle County – 178 serviceable units
- 2017: Spotsylvania County – 153 serviceable units
- 2018: Clarke County – 97 serviceable units
- 2019: Charles City County – 2,350 serviceable units

13. Matching funds: Complete the funding sources table indicating the cash match and inkind 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 minimum20% match is required to be eligible for VATI, the private sector provider must provide10% 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. Label Attachments: Attachment 9 - Funding Sources Table; Attachment 10 – Documentation of Match Funding

Answer:

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The proposed project represents a partnership between Comcast and Henrico County. Comcast and Henrico County, upon award of the VATI grant, will be responsible for any matching funds. Comcast will provide the labor and materials to complete the provision of services to the area delineated in the attached map. Comcast will provide approximately 10 % of the projected construction costs of $4,801,100, totaling approximately $480,100. Henrico County will provide 20% of the project cost and will assist in providing in-kind contributions including application analysis and preparation, coordination with the Department of Housing and Community Development, public education/awareness efforts, 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 attached below.

Name

Locations

Mileage

HP/Mile

Total Cost

Comcast Cost

Henrico County Cost

Requested Gap Funding

VATI Gap Funding

Henrico CountyProject

Countywide

70

3.3

$4,801,100

$480,109

$960,220

$3,360,771

70 %

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:

No leverage funding being provided. Funding would be provided by DHCD, Henrico County, and Comcast, as noted on Attachment 9 – Funding Sources Table.

15. Marketing: Describe the broadband adoption plan.

a. 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)

b. 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's business model is not dependent upon a particular take rate. 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 positively enhance the take rate.

All the factors combined inform our estimate that, on the high end, some 45-55% of residents may take service within the first year after project completion. These projections for overall subscriber levels are dependent on several factors and even an initial prediction may change as the project progresses. 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. For example, Comcast take rates may vary from those of other providers because Comcast offers more services than broadband alone – including video, telephone, mobile telephone, and home security –and the company offers bundled pricing promotions from time to time. These additional products and pricing options can change the value proposition of Comcast service for each household that is unique among providers.

Comcast undertakes various actions to make residents aware that service is available. During the construction phase, before the service is active, the presence of Comcast vehicles alerts residents that service is coming. Comcast personnel involved with the construction in the public rights of way are often asked about availability. Soon after completing construction, Comcast provides notice to potential customers of service availability on a rolling basis. Notices can include direct mail pieces or event sponsorships. These efforts augment existing advertising campaigns already in place Henrico for Comcast's existing customer base. Once service is established, Comcast may communicate with residents through direct mail, direct e-mail, radio ads, video ads, and other marketing tactics.

If conditions allow, a public meeting will be held to inform the residents about the upcoming work and answer questions. Additional meetings will be held to educate potential customers on the proposed services and to encourage sign-ups and answer questions.

B. Henrico County won a Nation Association of Counties' award in 2020 for its digital literacy efforts through its public library system ("HCPL").

Specifically, HCPL sought to modernize its services and meet the needs of jobseekers with advanced digital literacy and skill-building classes in its Digital Media Labs. HCPL opened its first Digital Media Lab at the Libbie Mill Library in 2015 after piloting the concept at its Twin Hickory location. Library staff created curricula to develop digital literacy skills in applications like Adobe Creative Suite software, 3D modeling and printing, and coding while continuing to offer traditional computer classes like Microsoft Office and Internet Basics. The Varina Area Library opened in 2016 with a Digital Media Lab, and staff created applied concept

classes like 3D printed crafting, video game programming, and other engaging subjects that offered an accessible entry point to learning digital skills for patrons of all ages. The new Fairfield Area Library opened in 2019 with a Digital Media Lab, and HCPL updated the Twin Hickory and Tuckahoe Area Libraries' labs with comparable technology to the existing labs. Now all five Area Libraries, one in each magisterial district in Henrico County, provide free access to high-tech digital literacy education and digital content creation tools, removing barriers to developing digital skills. Digital Media Lab classes are among HCPL's most popular offerings county-wide. Classes in 3D design, Photoshop, Illustrator, and programming languages like HTML and Javascript require registration and often fill up well in advance with a healthy waiting list. At the Libbie Mill Library alone, between July 2016 and January 2020, the DML had 263 programs with 2,276 attendees. Patrons of all ages and skill levels use the Digital Media Lab. Attendance is strong and representative of the community with diversity of age, gender, race, and socioeconomic background among participants. People using the lab include entrepreneurs designing prototypes, startup nonprofits using free Adobe Software, and a teenager who 3D printed parts of a winning fashion design for a contest at the Virginia Museum of Fine Arts. Henrico County Public Schools also has a strong and expansive plan for digital access to learning. Information on that program is included in Attachment 17 – Henrico Schools Digital Access to Learning Plan. Comcast's Internet Essentials program has a significant digital literacy component. Since creating the program in 2011, Internet Essentials built up an online learning center (accessible at https://www.internetessentials.com/learning) that includes more than 200 digital literacy training videos, guides, and reports that are free to anyone to use, including non-customers.

Last year, Comcast created its Internet Essentials Partnership Program to help schools, school districts, and other community organizations collaborate to fund and connect large numbers of low-income students and families to the Internet at home. Hundreds of schools and school districts have signed up already.

Additionally, Comcast instituted a number of COVID-19 response measures, including offering any new Internet Essentials customer 60 days of Internet service for free and waiving the requirement that customers not have back debt due so that even more families can get connected.

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. 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 11 – Letters of Support.

Answer:

-

Name

Title

Responsibility

Nathan Daugherty

Sr. Manager, Comcast Government Affairs

Project Coordination

Steve Hill

Sr. Director Network Engineering

Construction Supervision

Anthony McDowell

Deputy County Manager, Henrico County

25+ years of project management including land acquisition, construction oversight, and procurement. Oversaw the development of Henrico County's $40 million emergency communications radio system including the construction of nine new communications towers and installation and testing of new fixed network equipment. 15 years of experience with Federal and state grants from various agencies, oversees the Henrico County Department of Community Revitalization which receives numerous DHCD and Federal grants.

Travis Sparrow

Director of Information Technology, Henrico County

Serves as the chief technology officer for Henrico County government, overseeing all hardware and software systems, data governance and integration, geographic information systems, and related infrastructure. Prior to joining Henrico County, served as an outside plant engineer and right of way acquisition agent for another major service provider in the area. Multiple years' experience with underground and aerial cable plant design and construction. Also, in current role as Director of Information Technology for Henrico County, have managed the budget and installation of multiple private fiber-optic outside cabling plant installations throughout the county's network of facilities.

-

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As might be expected of a locality of its size, Henrico County has extensive experience administering grant awards from all levels of government and the private sector. Henrico County would bring that significant experience to bear in administering the VATI grant, if awarded.

Comcast has significant experience constructing broadband communications facilities. It is a leading communications provider in Virginia, offering video, high-speed Internet, home security, and phone services to residential customers under the Xfinity brand and also providing services to businesses through its Comcast Business suite of products. Comcast has invested in technology to build an advanced network that delivers among the fastest broadband speeds, and brings customers personalized video, communications, and home management offerings. Comcast has invested billions of dollars to create a network across the U.S. that makes broadband widely available, as part of its commitment to provide superior services to its customers.

Since 2011, Comcast made more than $1.8 billion in technology and infrastructure investments in Virginia to offer reliably fast speeds even during peak use periods. The company has invested significant resources in both local and national Network Operations Centers ("XOC") to ensure continued proactive monitoring of network health.

In Virginia, Comcast employs over 1,900 people. In 2019 it invested more than $216 million annually in payroll, benefits, and training for its Virginia workforce. The company maintains a large, locally based engineering technical operations team that works around the clock to maintain network reliability and to directly support the company's business and residential customers. For many decades, Comcast, through its Beltway Region, has served over 140 communities in Virginia. Many of these communities are very rural in nature.

Comcast has experience partnering with public agencies to deploy broadband infrastructure in unserved areas. As noted above, Comcast was awarded four Virginia Telecommunications Initiative grants in 2018, 2019, and 2020.

In 2018 Comcast also earned a Last Mile Broadband grant from the Virginia Tobacco Region Revitalization Commission to provide broadband access to nearly 7,000 homes and businesses. With construction expected to be complete in

2020 and ahead of schedule, Comcast has already provided access to more homes and addresses than originally estimated.

In Massachusetts, Comcast was awarded a grant of $4,000,000 from the Massachusetts Technology Collaborative ("Mass Tech") for construction of line extensions to areas in nine towns whose costs to construct exceeded Comcast's economic standards. Comcast completed the project on time, on budget, and reached 20% more homes than the 1,000 originally anticipated. Comcast was also awarded a grant of $805,800 by Mass Tech for construction of approximately 27 miles of line extensions in Montgomery, Massachusetts, a town which is currently unserved. Comcast is currently deploying broadband in three additional unserved towns in partnership with the MBI.

In 2013 and 2014, Comcast received two grants from the Vermont Telecommunication Authority ("VTA") totaling $336,558 to provide service to areas that were economically unfeasible for construction. In 2015 and 2017, the Vermont Department of Public Service ("DPS") twice awarded Comcast funds from its Connectivity Initiative grant totaling $359,850. The DPS awarded Comcast another grant to deploy broadband in unserved areas of Cavendish VT. Comcast has either fulfilled or is on schedule to fulfill its grant obligations to the VTA and DPS.

Supportive documents are included in Attachment 11 - Letters of Support.

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:

The following supportive documents are included as attachments:

- Attachment 12 – Derivation of Costs
- Attachment 13 – Documentation of Supporting Cost Estimates

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:
a. Total VATI funding request

b. Number of serviceable units
(up to 125 points)

Answer:

A. **$**3,360,771

B. 234

19. **Commonwealth Priorities (Up to 40 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 25/3 mbps.

Answer:

A. Several important community anchors will be connected to broadband service within this plan. They include the following:

1. 3201 Milburn Avenue - One of the largest African American cemeteries in the Central Virginia area, which has been the focus of renovation in recent years. A visitors center / interpretive center is planned for this facility.
2. 500 Wilton Farm Road - 1,194 acre tract of very historic property along the James River that was recently acquired by Henrico County; it's future includes some residential and business development, a welcome center/museum, and secondary education programming for Henrico County Public Schools
3. 9525 Deep Bottom Rd. - A county park and boat landing
4. 9729 Malvern Hill Ln. - A 427 acre historic conservation area with numerous historic structures and improvements
5. 9544 Hoke Brady Rd. - The Richmond Yacht Basin, a public/private marina
6. 9505 Deep Bottom Rd – County Recreation and Park facility
7. 9515 Deep Bottom Rd – County Recreation and Park facility
8. 9401 WRVA Rd. - County Emergency 911 Radio telecommunications tower site

B. N/A

C. 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/5 Mbps for $9.95/month plus applicable taxes, fees and surcharges, as well as free digital skills training in person and online. 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.

Moreover, Comcast is proud to be an approved provider supporting the FCC's Emergency Broadband Benefit (EBB) subsidy program. Under the temporary EBB subsidy, qualifying customers may apply a credit of up to $50 per month ($75 per month in Tribal lands) to any Xfinity Internet service tier, including Internet Essentials.

Last year, Comcast launched the new "Internet Essentials Partnership Program," which is designed to help accelerate Internet adoption as distance learning plans roll out across the county due to the coronavirus. The program relies on public-private partnerships and enables communities to work together to coordinate funding to help connect K-12 students, including two months of free Internet service for new Internet Essentials customers.

20. **Additional Information**

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 14 – Two most recent Form 477 submitted to the FCC or equivalent

b. Attachment 15 - Point and Polygon shapefiles, in.zip file form, showing proposed passings and project area

c. Attachment 16 - For wireless applicants: shapefiles, in .zip file form, indicating RSSI projections in the application area

d. Attachment 17 – XXXXXXX

e. Attachment 18 – XXXXXXX

f. Attachment 19 – XXXXXXX

g. Attachment 20 – XXXXXXX

Answer:

The following items are attached:

- Attachment 14 - Two most recent Form 477 submitted to the FCC
- Attachment 15 - Point and Polygon Shapefiles
- Attachment 17 - Henrico Schools Digital Access to Learning Plan
- Attachment 18 - Comcast Digital Literacy
- Attachment 19 - Comcast Rates Card

Attachments:

Map(s) of project area, including proposed infrastructure

Att1ProjectAreaMap914202114048.pdf

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

Att2DocumentationofFederalFundingArea9142021104254.pdf

RDOF Awarded Areas included in VATI Application (Use template provided)

Att3RDOFAwardedAreasIncludedinVATIApplication914202133247.pdf

Application to DHCD Submitted through CAMS

County of Henrico

Henrico County Universal Broadband Initiative 2022

Documentation that proposed project area is unserved based on VATI criteria

Att4DocumentationUnservedAreaVATICriteria9142021104414.pdf

Passings Form (Use template provided)

Att5PassingsForm914202114455.pdf

Timeline/Project Management Plan

Attachment7TimelineProjectMgmtPlan914202161051.pdf

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

Att8MOUMOAbetweenApplicantCoAppliantDraft914202160642.pdf

Funding Sources Table (Use template provided)

Att9FundingSourcesTable914202163711.pdf

Documentation of Match Funding

Att10DocumentationofMatchFunding914202161238.pdf

Letters of Support

Att11LettersofSupport914202110159.pdf

Derivation of Cost/Project Budget (Use template provided)

Attachment12DerivationofCosts914202162818.pdf

Documentation of Supporting Cost Estimates

Attachment13HenricoDocumentationofSupportingCostEstimates914202163141.pdf

Two most recent Form 477 submitted to the FCC or equivalent

Attachment14TwomostrecentForm477submittedtotheFCCorequivalent914202163336.pdf

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

Attachment15PointandPolygonShapefiles914202180133.zip

Application to DHCD Submitted through CAMS

County of Henrico

Henrico County Universal Broadband Initiative 2022

Optional

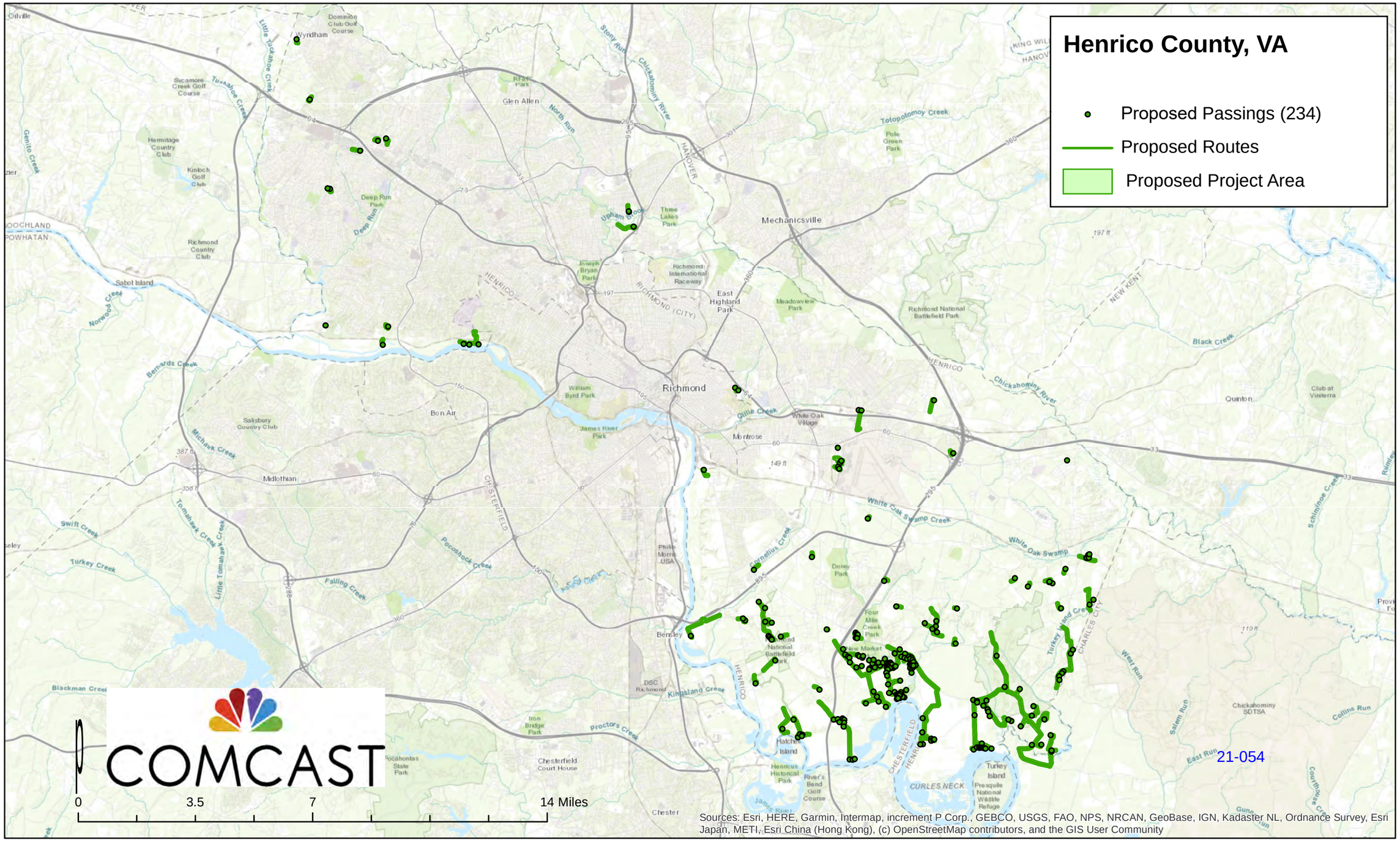
Att17HenricoSchoolsDigitalAccesstoLearningPlan9142021105053.pdf

Optional

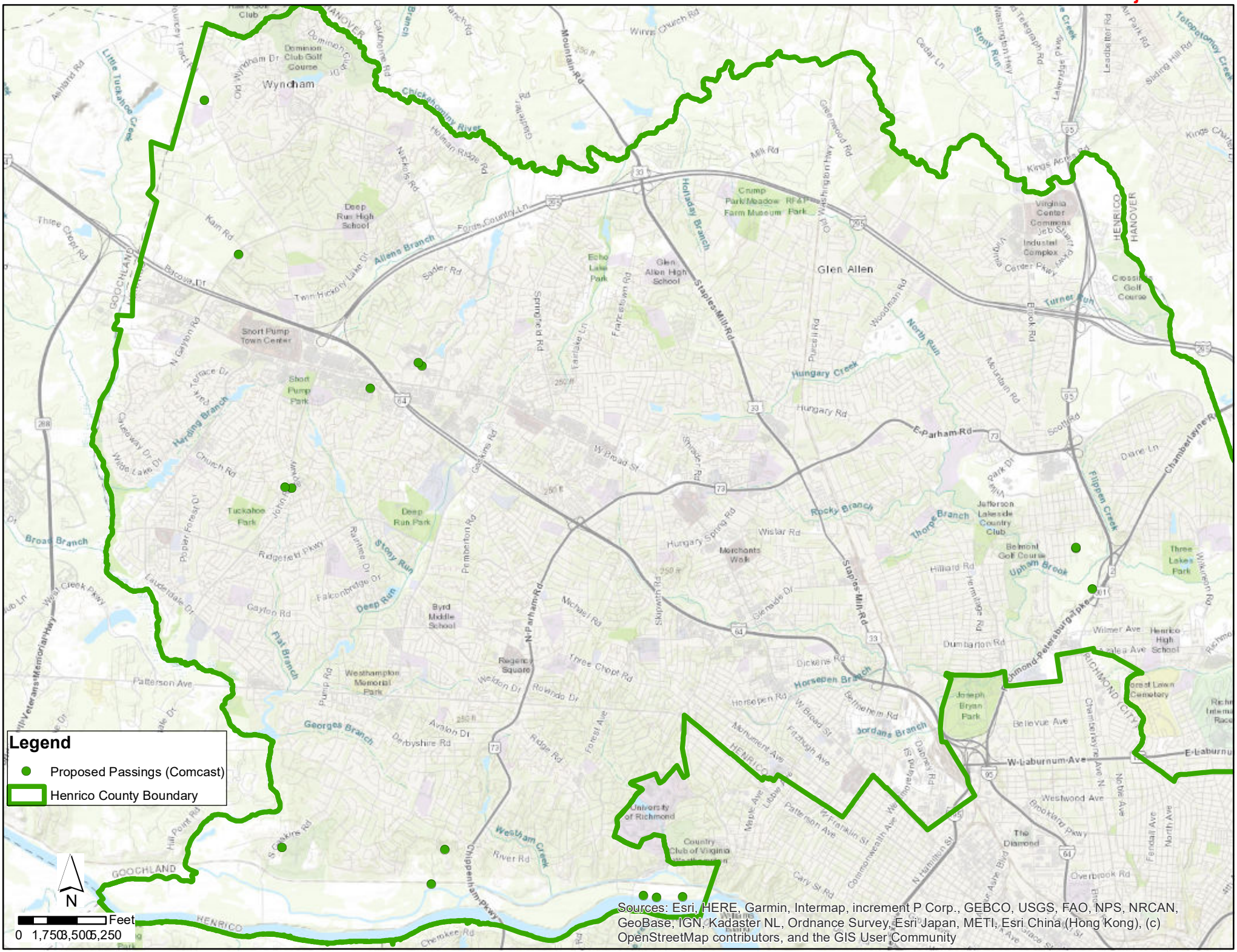
Attachment18ComcastDigitalLiteracyandEquitymaterialsfull914202164557.pdf

Optional

Attachment19ratecardHenricoCounty914202164617.pdf


Henrico County, VA
Proposed Passings (234)
Proposed Routes
Proposed Project Area
COMCAST
0
3.5
7
14 Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
21-054

Attachment 1 - Project Area Map


Legend
Proposed Passings (Comcast)
Henrico County Boundary
N
Feet
0 1,750 3,500 5,250
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
Wyndham
Glen Allen
Short Pump Town Center
Deep Run High School
Glen Allen High School
Byrd Middle School
Henrico High School
Three Chopt Rd
Broad Branch
Stony Run
Deep Run
Hungary Creek
Rocky Branch
Thorpe Branch
Horsepen Branch
Jordans Branch
Georges Branch
Westham Creek
Allens Branch
Holladay Branch
Turner Run
North Run
Upham Brook
Flippen Creek
Chickahominy River
Little Tuckahoe Creek
Tuckahoe Park
Short Pump Park
Deep Run Park
Crump Park/Meadow Farm Museum
Echo Lake Park
Three Lakes Park
Joseph Bryan Park
Great Lawn Cemetery
Westhampton Memorial Park
Regency Square
Merchants Walk
Jefferson Lakeside Country Club
Belmont Golf Course
Country Club of Virginia
University of Richmond
The Diamond
Staples Mill Rd
N Parham Rd
E Parham Rd
W Broad St
Hungary Rd
Hungary Spring Rd
Ridgefield Pkwy
Three Chopt Rd
Patterson Ave
W Laburnum Ave
E Laburnum
Bethlehem Rd
Dumbarton Rd
Westwood Ave
Overbrook Rd
Cary St Rd
River Rd
Derbyshire Rd
Gaskins Rd
Pump Rd
Pemberton Rd
Ridge Rd
Mountain Rd
Mill Rd
Nuckols Rd
Francistown Rd
Springfield Rd
Woodman Rd
Parcel Rd
Brook Rd
Scotfield
Chamberlayne Rd
Richmond-Petersburg Pike
Virginia Center Commons
Jeb Stuart Industrial Complex
Virginia Center Pkwy
Kings Acre Rd
Sliding Hill Rd
Stony Run
Telegraph Rd
Lakeridge Pkwy
Leadbetter Rd
Air Park Rd
Totopotomoy Creek
Cedar Ln
Greenwood Rd
Washington Hwy
Old Wyndham Dr
Dominion Club Golf Course
Holman Ridge Rd
Kain Rd
Three Chopt Rd
Bacova Dr
Twin Hickory Lake Dr
Sadler Rd
Fords Country Ln
Terrace Dr
N Gayton Rd
Lakeway Dr
Wilde Lake Dr
Church Rd
Hording Branch
Poplar Forest Dr
Ridgefield Pkwy
Rainlee Dr
Falconbridge Dr
Lauderdale Dr
Gayton Rd
Flat Branch
Patterson Ave
Veterans Memorial Hwy
West Creek Pkwy
Hill Point Rd
S Gaskins Rd
Chippenham Pkwy
Cherokee Rd
Avalon Dr
Weldon Dr
Rowindo Dr
Michael Rd
Skipwith Rd
Glenside Dr
Wistar Rd
Hillard Rd
Dickens Rd
Fitzhugh Ave
Monument Ave
Forest Ave
Maple Ave
Libbie
Patterson Ave
W Franklin St
Commonwealth Ave
N Hamilton St
Dabney Rd
Belvedere
Bellevue Ave
Brookland Pkwy
Nolde Ave
Fendall Ave
North Ave
Wilmer Ave
Azalea Ave
Dunne Ln
Park Dr
Wilkinson Rd
Ashland Rd
Little Tuckahoe Creek
Branch
Mountain Rd
Wirvs Church Rd
Cedar Ln
Stony Run
Telegraph Rd
Lakeridge Pkwy
Leadbetter Rd
Air Park Rd
Totopotomoy Creek
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Kings Acre Rd
Virginia Center Commons
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W Broad St
Shrader Rd
Rocky Branch
Thorpe Branch
Jefferson Lakeside Country Club
Belmont Golf Course
Merchants Walk
Hungary Spring Rd
Wistar Rd
Hillard Rd
Dickens Rd
Glenside Dr
Skipwith Rd
Michael Rd
N Parham Rd
Staples Mill Rd
E Parham Rd
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Mountain Rd
Mill Rd
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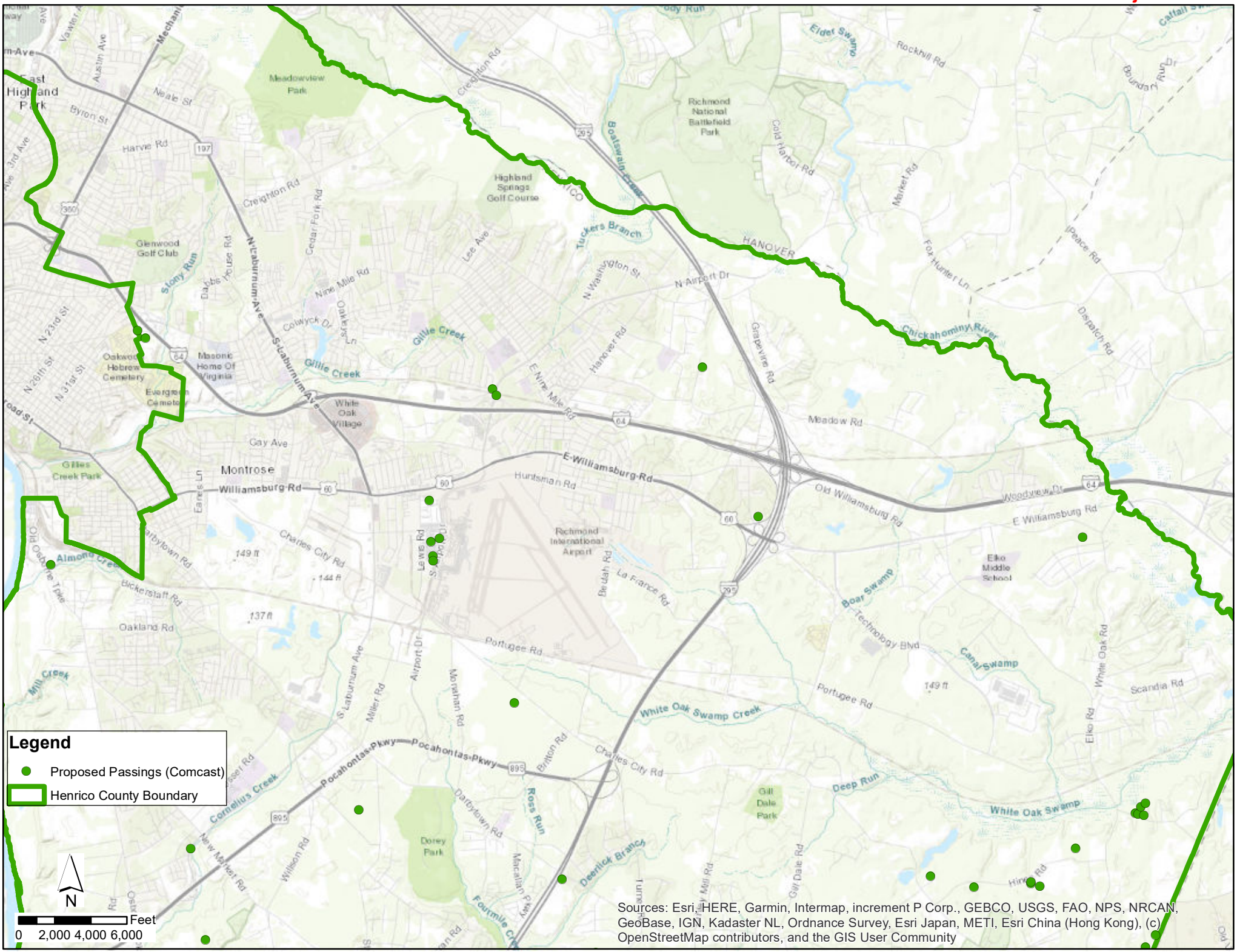
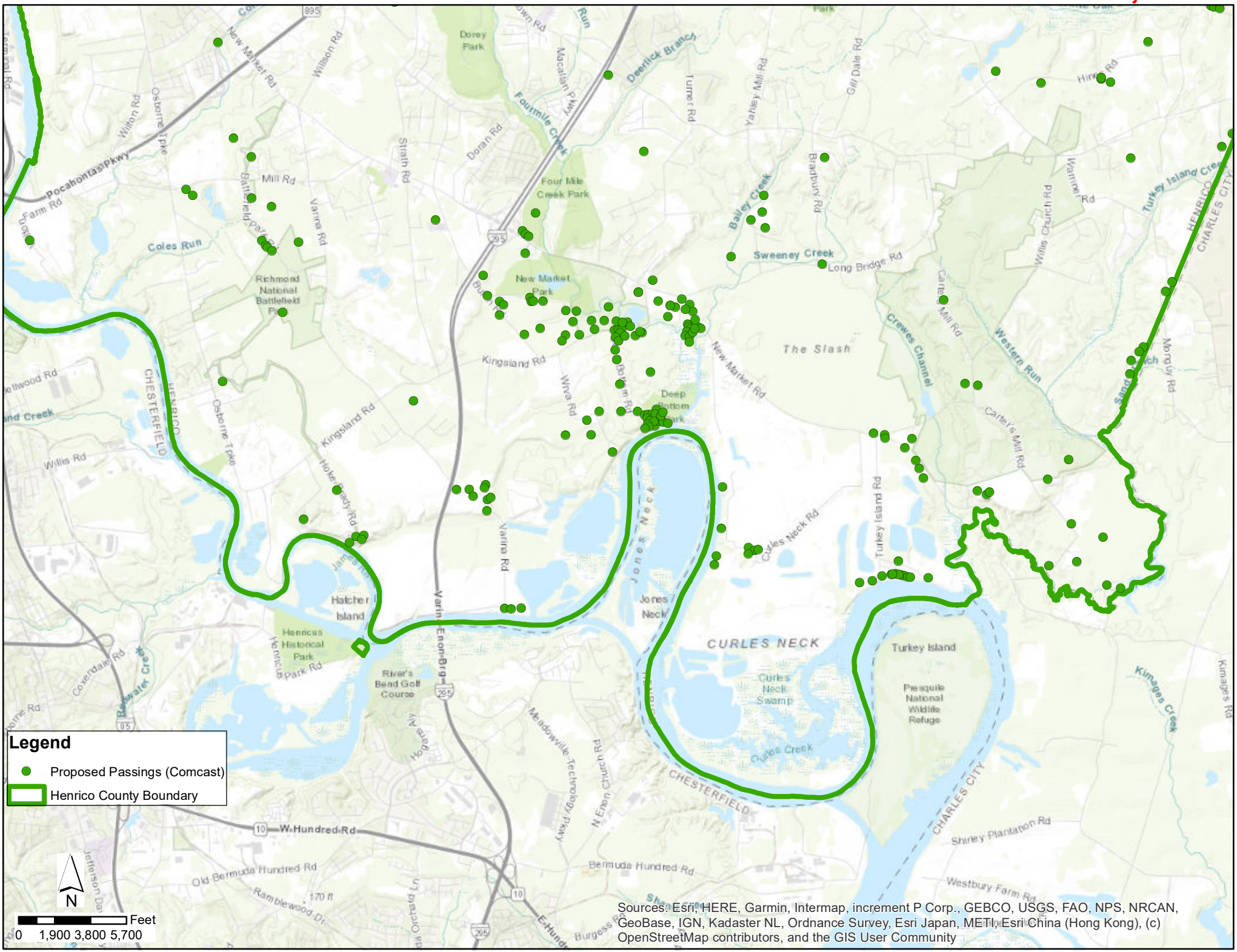
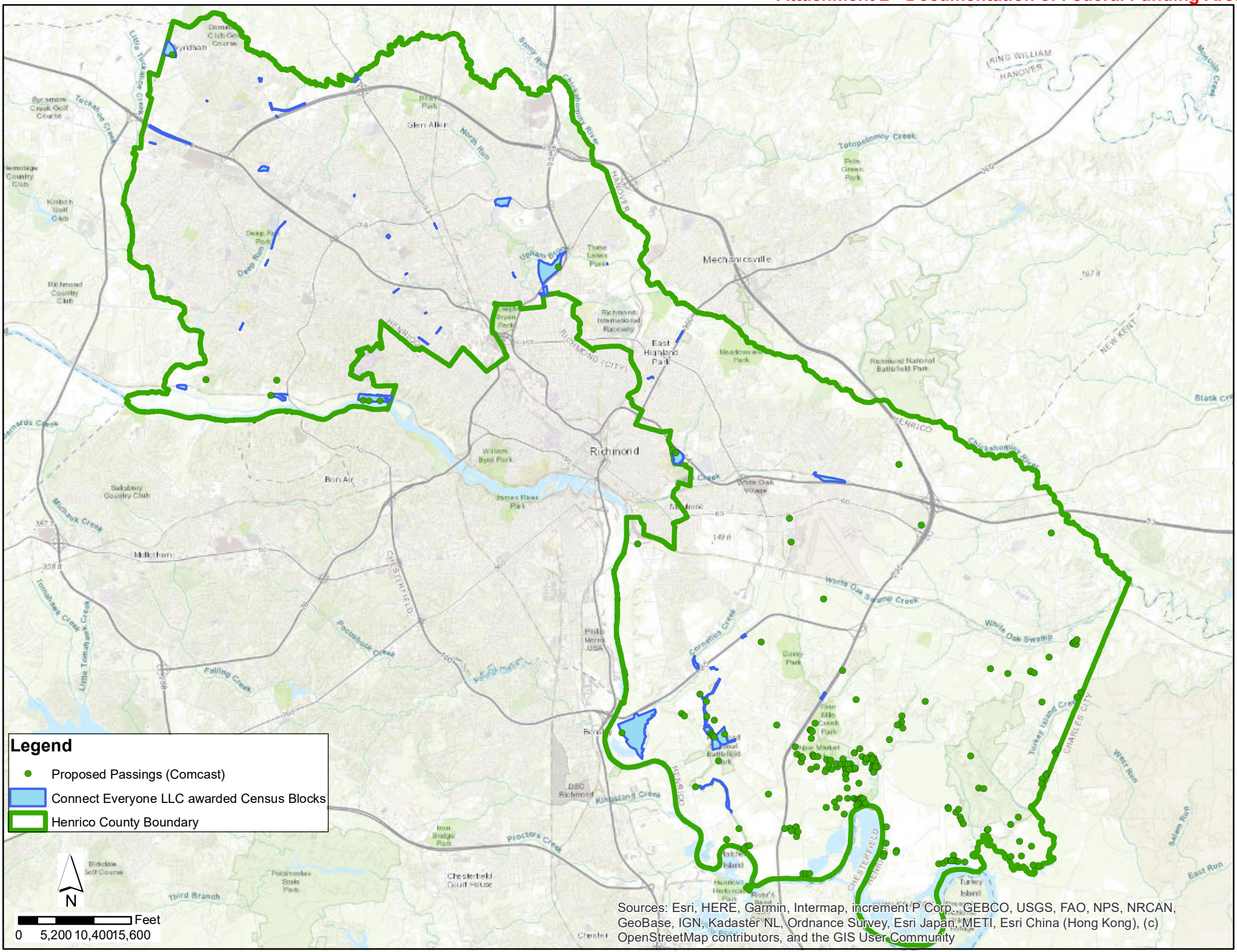
Park Dr
Joseph Bryan Park
Great Lawn Cemetery
Westhampton Memorial Park
Regency Square
Three Chopt Rd
Patterson Ave
Rowindo Dr
Weldon Dr
Avalon Dr
Derbyshire Rd
Georges Branch
Horsepen Branch
Jordans Branch
Bethlehem Rd
W Broad St
Fitzhugh Ave
Monument Ave
Forest Ave
Maple Ave
Libbie
Patterson Ave
W Franklin St
Commonwealth Ave
N Hamilton St
Dabney Rd
Belvedere
Bellevue Ave
W Laburnum Ave
E Laburnum
Westwood Ave
Brookland Pkwy
Nolde Ave
Fendall Ave
North Ave
The Diamond
Overbrook Rd
Cary St Rd
River Rd
Derbyshire Rd
Gaskins Rd
Pump Rd
Pemberton Rd
Ridge Rd
Hill Point Rd
S Gaskins Rd
Chippenham Pkwy
Cherokee Rd
Avalon Dr
Weldon Dr
Rowindo Dr
Michael Rd
Skipwith Rd
Glenside Dr
Wistar Rd
Hillard Rd
Dickens Rd

Attachment 1 - Project Area Map



Attachment 1 - Project Area Map




Legend
Proposed Passings (Comcast)
Connect Everyone LLC awarded Census Blocks
Henrico County Boundary
N
Feet
0 5,200 10,400 15,600
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
Richmond
Mechanicsville
Glen Allen
Bon Air
Midlothian
East Highland Park
Richmond International Raceway
Richmond National Battlefield Park
Chesterfield Court House
Pocahontas State Park
Meadow Farm Park
Three Lakes Park
Upham Brook Park
Joseph Bryan Park
William Byrd Park
James River Park
White Oak Village
Dorey Park
Four Mile Creek Park
Deep Run Park
Pete Green Park
Totopotomoy Creek
North Run
Deep Run
Upham Brook
Three Lakes
Falling Creek
Tomahawk Creek
Little Tomahawk Creek
Michaux Creek
Pocoshock Creek
Cornelius Creek
White Oak Swamp Creek
White Oak Swamp
Kingsland Creek
Proctors Creek
Third Branch
Turkey Island Creek
West Run
Salem Run
East Run
Black Creek
Bernards Creek
Stony Run
Chickahominy River
Little Tuckahoe Creek
Tuckahoe Creek
Moncure Creek
Sycamore Creek Golf Course
Kinloch Golf Club
Richmond Country Club
Salisbury Country Club
Belvedere Golf Course
Birkdale Golf Course
Dominion Club Golf Course
Wyndham
Armitage Country Club
DSC Richmond
Philip Morris USA
Bermuda
Henrico
Chesterfield
Richmond (City)
New Kent
King William
Hanover
Charles City
Drewry's Bluff
Battle of Chaffin's Farm
Battle of New Market Heights
Battle of Fair Oaks
Battle of Seven Pines
Battle of Gaines' Mill
Battle of Malvern Hill
Battle of Glendale
Battle of Frayser's Farm
Battle of Savage's Station
Battle of Peach Orchard
Battle of Allen's Farm
Battle of Beaver Dam Creek
Battle of Mechanicsville
Battle of Ellerson's Mill
Battle of Oak Grove
Battle of Golding's Farm
Battle of Garnett's & Golding's Farm
Battle of White Oak Swamp
Battle of Glendale
Battle of Malvern Hill
Battle of Chaffin's Farm
Battle of New Market Heights
Battle of Fair Oaks
Battle of Seven Pines
Battle of Gaines' Mill
Battle of Malvern Hill
Battle of Glendale
Battle of Frayser's Farm
Battle of Savage's Station
Battle of Peach Orchard
Battle of Allen's Farm
Battle of Beaver Dam Creek
Battle of Mechanicsville
Battle of Ellerson's Mill
Battle of Oak Grove
Battle of Golding's Farm
Battle of Garnett's & Golding's Farm
Battle of White Oak Swamp

2022 Virginia Telecommunication Initiative (VATI)
RDOF Passings Form

Type of Passings	Total Number of Passings in the Project Area that lie within Preliminarily Awarded RDOF Areas [1]
Residential	**13**
Businesses (non-home based)	**4**
Businesses (home-based)	**1**
Community Anchors	**2**
Non-residential	**1**
Total Number of RDOF Passings	**21**

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

Definitions

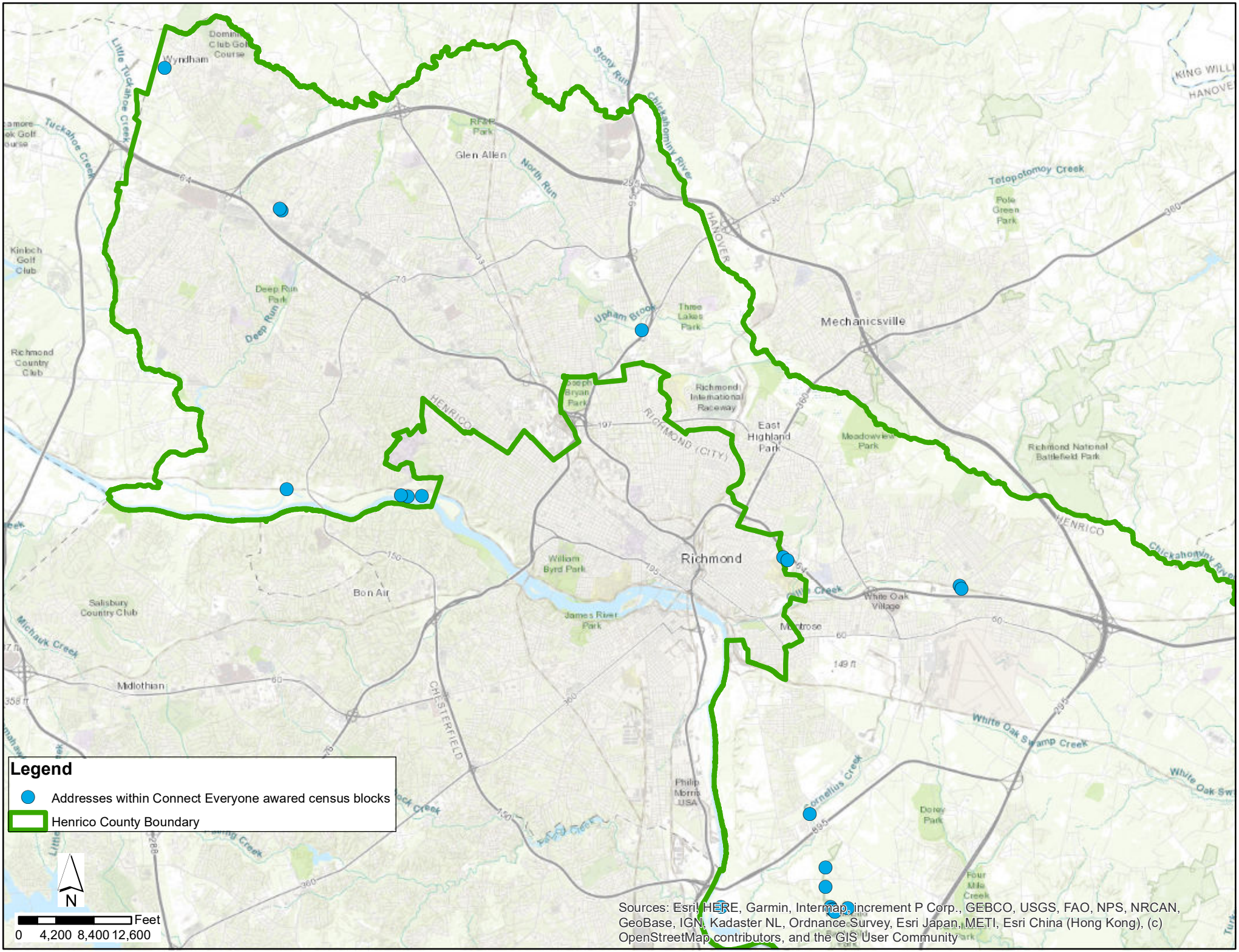
Passing – any structure that can receive service. Multi-unit structures may be counted as more than 1 passing, provided individual connections and account are planned at that structure.

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.

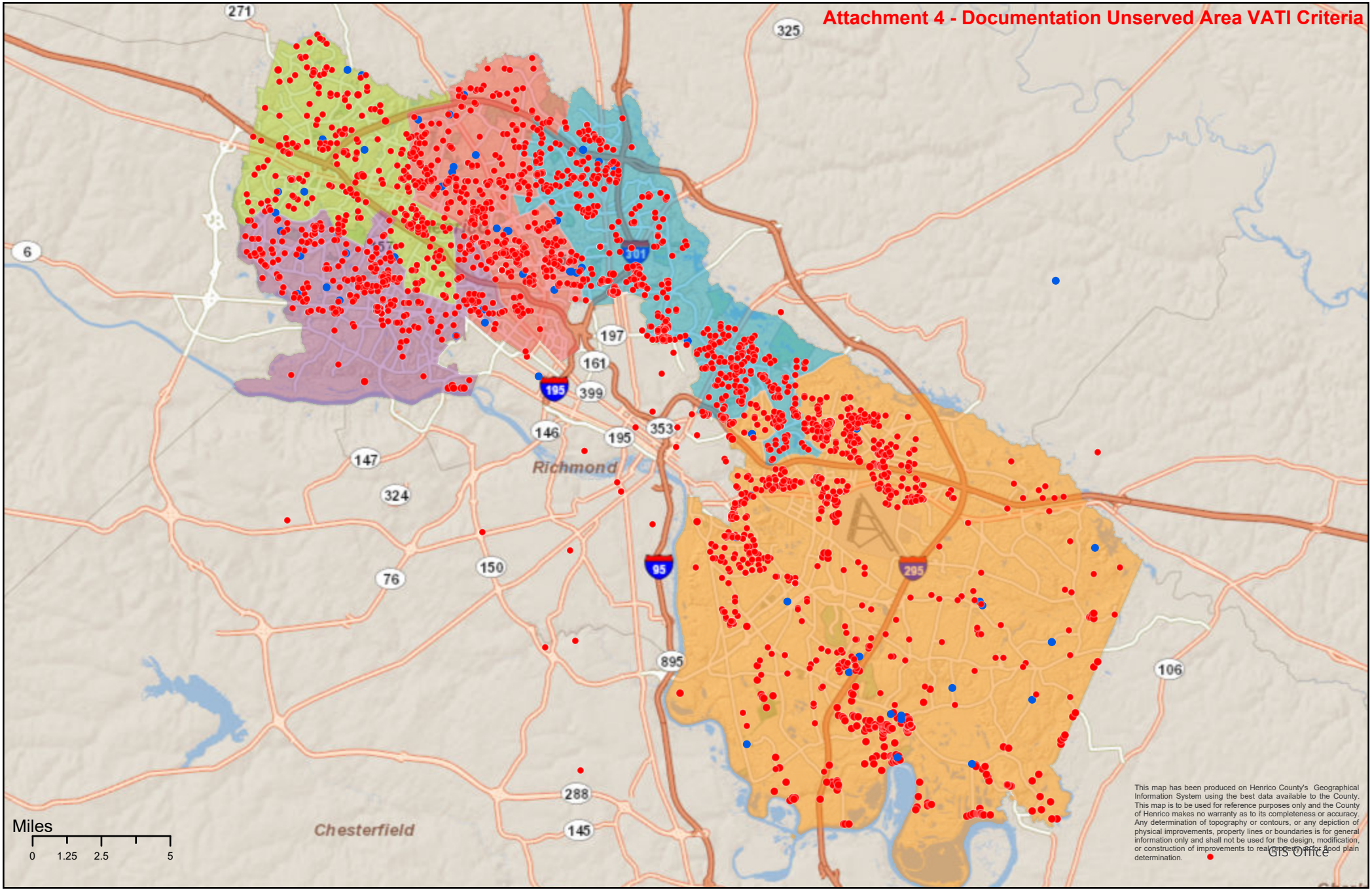
Non-Residential Passing – places of worship, federal, state, or local facilities or other potential customers that are neither a residence, business or a community anchor as defined above.

Attachment 3 - RDOF Awarded Areas Included in VATI Application



Address
1585 S LABURNUM AVE
19 WAYLAND ST
3201 MILBURN AVE
500 WILTON FARM RD
581 EASTPARK CT
5999 RIVER RD
6061 RIVER RD
6521 WESTHAM STATION RD
7953 BATTLEFIELD PARK RD
8181 BATTLEFIELD PARK RD
8380 BATTLEFIELD PARK RD
8384 BATTLEFIELD PARK RD
8388 BATTLEFIELD PARK RD
8400 BATTLEFIELD PARK RD
401 S AIRPORT DR
4200 DOMINION BLVD
4240 DOMINION BLVD
12580 QUARRY HILL LN
5400 BROOK RD
800 DRYDEN LN
8368 VARINA RD

Attachment 4 - Documentation Unserved Area VATI Criteria

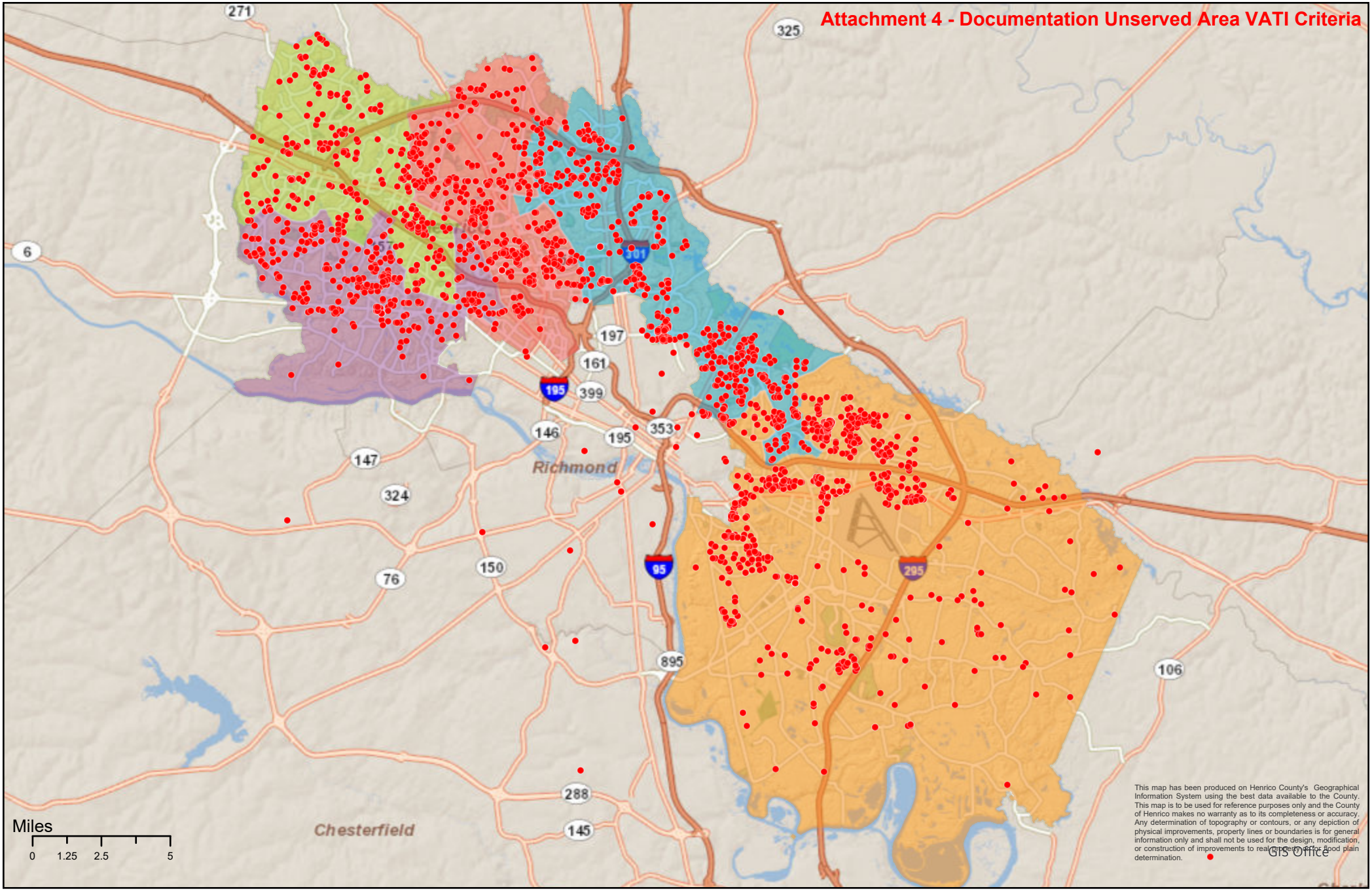


Henrico Composite Results
(HCPS Hotspot Distribution, Survey Results, RDOF)

Author:

Date: 9/13/2021

Attachment 4 - Documentation Unserved Area VATI Criteria

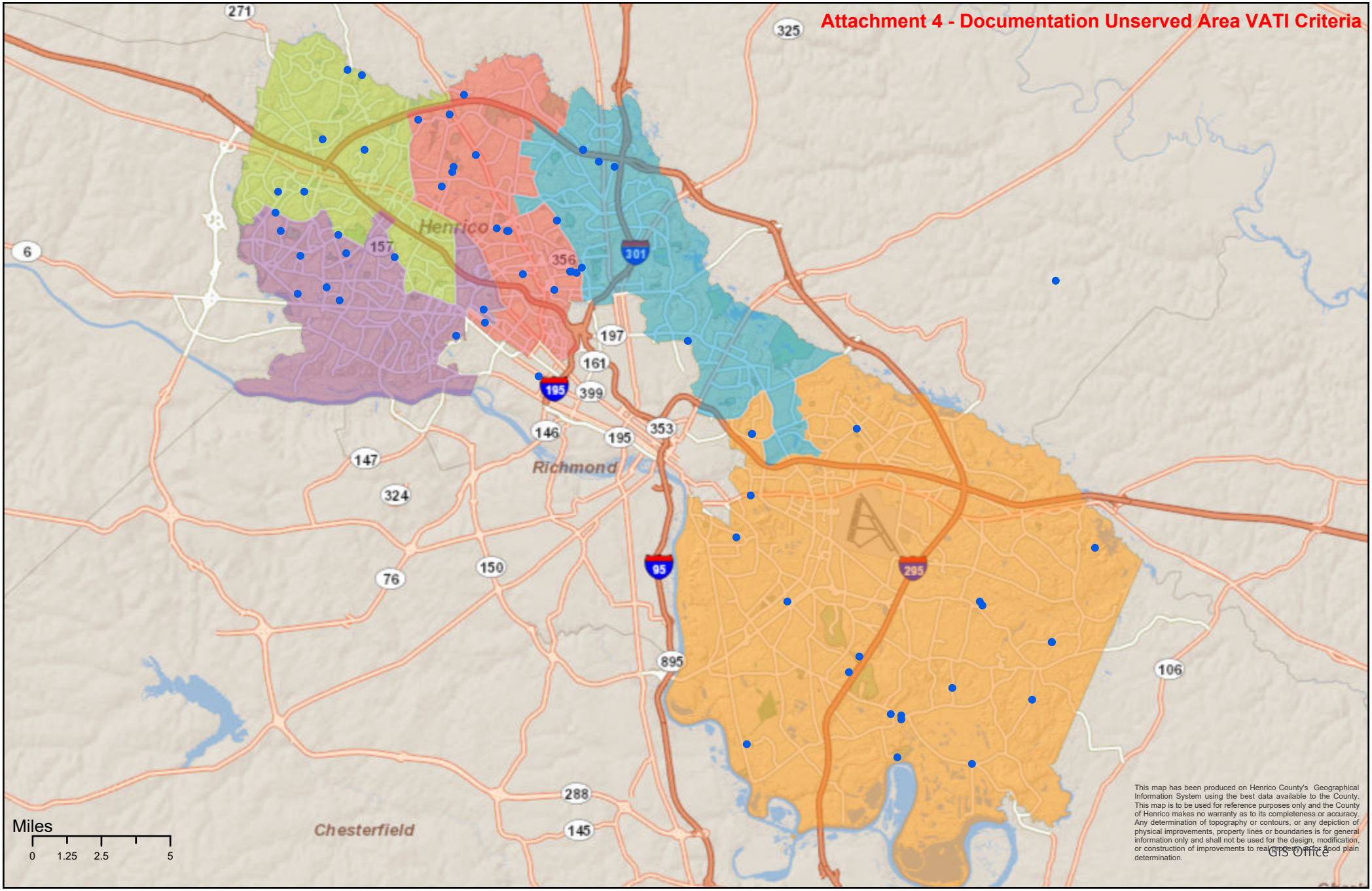


Henrico County Public Schools - Hotspot Distribution

Author:

Date: 9/13/2021

Attachment 4 - Documentation Unserved Area VATI Criteria

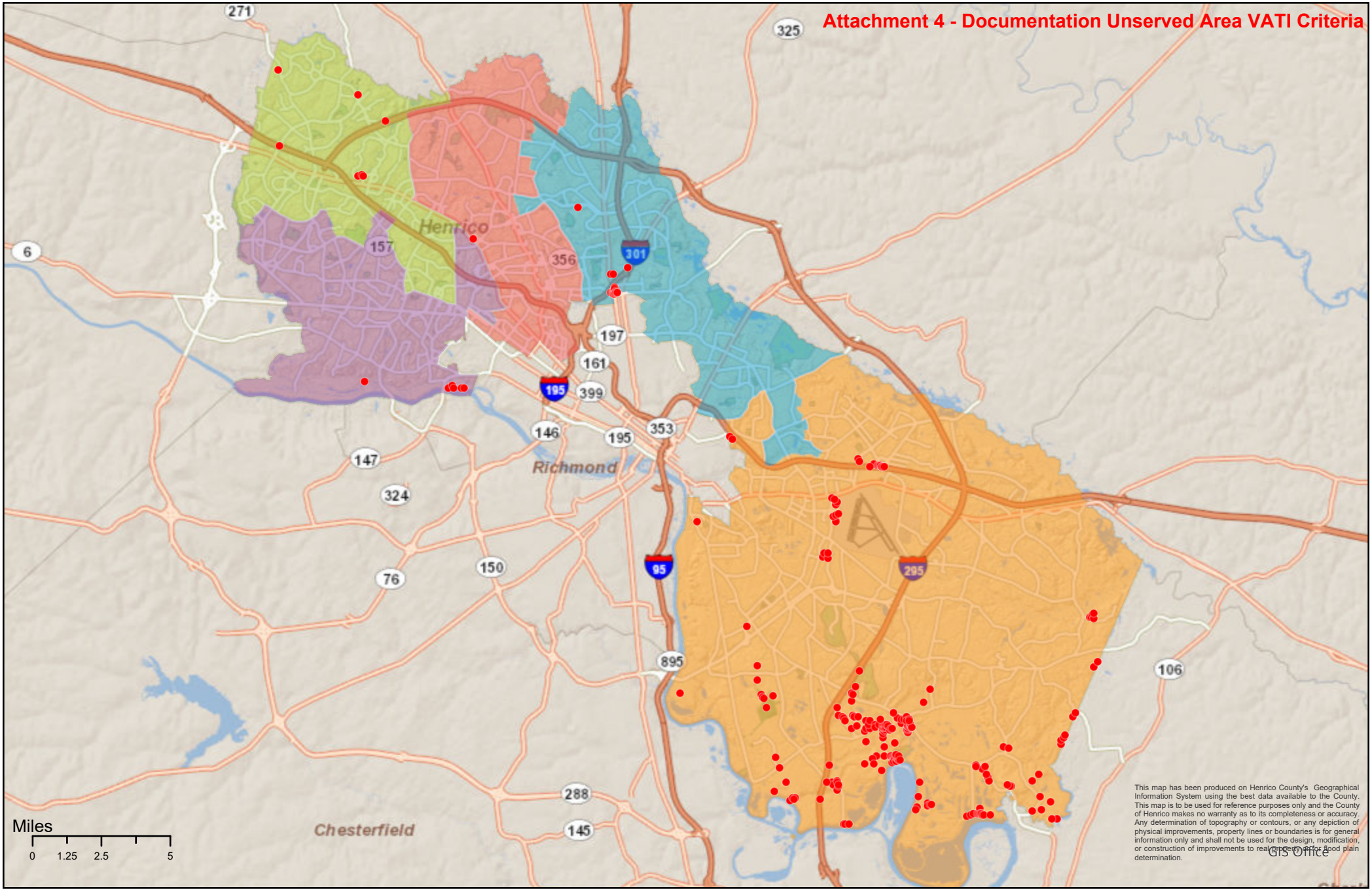


Henrico Broadband Survey Results (<25Mbps Download)

Author:

Date: 9/13/2021

Attachment 4 - Documentation Unserved Area VATI Criteria



Henrico RDOF Auction Award Locations

Author:

Date: 9/13/2021

2022 Virginia Telecommunication Initiative (VATI)
Passing Form

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 10/1 or below in Project Area [4]
Residential	201	0	201	201
Businesses (non-home based)	12	0	12	12
Businesses (home-based)	7	0	7	7
Community Anchors	8	0	8	8
Non-residential	6	0	6	6
Total	234	0	234	234

***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.

Definitions

Passing – any structure that can receive service. Multi-unit structures may be counted as more than 1 passing, provided individual connections and account are planned at that structure.

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.

Attachment 7 - Timeline Project Management Plan

1215 E. Fort Avenue
Suite 103
Baltimore, MD 21230

Comcast - FY22 Virginia Telecommunication Initiative Estimated Project Schedule																								
		2021				2022												2023						
Task	Responsible Entity	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Application submission	Comcast / County																							
Award announcement	VA DHCD																							
Finalize grant agreement(s)	Comcast, County, VA DHCD																							
Project engineering	Comcast																							
Obtain necessary permits for right of way access and/or pole attachments	Comcast / County																							
Materials procurement	Comcast																							
Construction/installation of fiber	Comcast																							
Turn-up, test and database work	Comcast																							
Service availability notification to potential customers	Comcast																							
Final field inspection	Comcast																							

MEMORANDUM OF UNDERSTANDING

The parties to this Memorandum of Understanding (MOU) are Henrico County and Comcast. The purpose of this MOU is to establish a commitment by the parties to participate in the development of a grant proposal in 2021 for the FY22 Virginia Telecommunication Initiative (VATI) program established by the Virginia Department of Housing and Community Development (DHCD). Henrico County and Comcast agree to work jointly to coordinate a complete VATI application, making decisions on roles and responsibilities where necessary to facilitate an effective submission of necessary information. Although a partnership between Henrico County and Comcast has not yet been formalized for this proposed project, both parties are collaborating on an agreement to be executed if DHCD awards them a VATI grant. An agreement would cover the following areas:

Comcast commits to:

a. Draft a Project Management Plan;
b. Complete all Grant Activities described in pertinent DHCD agreements, as mutually agreed;
c. Provide regular updates to Henrico County on the status of the project;
d. Notify Henrico County if its assistance is needed;
e. Submit requests for payment (no more frequently than monthly) to Henrico County as work is completed;
f. Complete all work within the required timeframe;
g. Provide Henrico County information on the locations where broadband had been enabled; and
h. Propose any required nondisclosure agreements if Comcast were requested to share confidential information.

Henrico County commits to:

a. Processing requests for payment in a timely manner;
b. Review information provided by Comcast and submit requests for additional information in a timely manner;
c. Complete any necessary non-disclosure agreements;
d. Complete all Grant Activities described in pertinent DHCD agreements;
e. Assist Comcast in obtaining necessary rights of way within the scope of Henrico County's authority; and
f. Assist in contacting residents and others as appropriate to foster completion of the project within the required timeframe.

COMCAST	HENRICO COUNTY
Name (printed):_____	Name (printed):_____
Title:_____	Title:_____
Signature:_____	Signature:_____
Date:_____	Date:_____

DRAFT

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	$ 3,360,771	70%	Pending
HENRICO COUNTY	$960,220	20%	SECURED
COMCAST	$ 480,109	10%	SECURED
TOTAL	**$ 4,801,100**	**100 %**	

COMMONWEALTH OF VIRGINIA

COUNTY OF HENRICO

John A. Vithoulkas
County Manager

September 10, 2021

Mr. Erik Johnston, Director
Virginia Department of Housing & Community Development
600 E Main St #300
Richmond, VA 23219

RE: Documentation of Match Funding

Dear Mr. Johnston:

Henrico County and Comcast of Virginia are jointly submitting a VATI request that, if awarded, will provide universal access to high-speed broadband internet service throughout Henrico County.

This letter serves as official "documentation of match funding" that Henrico County will provide match funding equal to 20% of the total project cost, or approximately $960,220. These funds are currently reserved for this purpose within our General Fund Balance and will be appropriated upon receipt of grant award.

Sincerely,

John A. Vithoulkas
County Manager

Attachment 10 - Documentation of Match Funding

COMCAST

1215 E. Fort Avenue
Suite 103
Baltimore, MD 21230

September 14, 2021

John Vithoulkas
Henrico County Administrator
P.O. Box 90775
Henrico, VA 23273-0775

Dear Mr. Vithoulkas:

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

The proposed project represents a partnership between Comcast and Henrico County. As indicated in the application, Comcast will provide approximately 10% of the projected construction costs of $4,801,109, totaling approximately $480,109. Henrico County will provide approximately 20% of the projected construction costs, totaling approximately $960,220, 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,

Misty Allen
Regional Vice President, Government & Regulatory Affairs

A. DONALD MCEACHIN
4TH DISTRICT, VIRGINIA

WASHINGTON OFFICE
314 CANNON HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-6365

RICHMOND DISTRICT OFFICE
110 N. ROBINSON ST. SUITE 403
RICHMOND, VA 23220
(804) 486-1840

SUFFOLK DISTRICT OFFICE
131 N. SARATOGA STREET, SUITE B
SUFFOLK, VA 23434
(757) 942-6050

Congress of the United States
House of Representatives
Washington, DC 20515-4604

COMMITTEE ON ENERGY AND COMMERCE
COMMUNICATIONS AND TECHNOLOGY SUBCOMMITTEE
ENERGY SUBCOMMITTEE
ENVIRONMENT AND CLIMATE CHANGE SUBCOMMITTEE

COMMITTEE ON NATURAL RESOURCES
ENERGY AND MINERAL RESOURCES SUBCOMMITTEE
OVERSIGHT AND INVESTIGATIONS SUBCOMMITTEE

September 13, 2021

Tamarah Holmes, Ph.D.
Director
Office of Broadband
Department of Housing and Community Development
600 East Main Street, Ste 300
Richmond, VA 23219

Dear Ms. Holmes:

I write to bring to your attention an application from Henrico County and Comcast Cable for grant funding through the Virgina Telecommunication Initiative grant fund for their project to extend universal broadband service to all areas of Henrico County. I ask for your full and fair consideration of their request.

In today's world access to broadband internet is a necessity when performing nearly every daily function. Education, many professions, and medical necessities have seen a reformation during the unprecedented COVID-19 pandemic and the common need amongst all these functions is access to high-speed internet. Everyone from school age children to professional adults need access to broadband internet and now with a global pandemic keeping us apart, access can be crucial to providing for your family, keeping children in school, and access to medical care around the clock.

Henrico faces unique challenges with some of the county being more rural and having less houses per road mile. This creates a unique barrier to broadband access when working with providers to provide coverage for every County resident and property. Henrico has proposed a unique plan to meet these challenges in partnership with a service provider to connect over 200 properties, free of charge. Access to high-speed internet is crucial for every home and nearly every new business; this coverage would encourage businesses to the area and offer more opportunities for telework in more rural areas of the County while we continue to battle the COVID-19 pandemic.

As a Representative of a district with major broadband gaps, I am committed to providing my constituents with high-speed internet access that will increase their opportunities in the job market, education, and now more than ever a way to stay safe during this unprecedented pandemic. Again, I ask for your full and fair consideration of Henrico County for grant funding through the Virginia Telecommunication Initiative grant.

Sincerely,

A. Donald McEachin

A. Donald McEachin
Member of Congress

COMMONWEALTH OF VIRGINIA

HOUSE OF DELEGATES
RICHMOND

DELORES L. MCQUINN
POST OFFICE BOX 406
RICHMOND, VIRGINIA 23218

SEVENTIETH DISTRICT

COMMITTEE ASSIGNMENTS:
TRANSPORTATION (CHAIR)
EDUCATION
APPROPRIATIONS
RULES

September 13, 2021

John A Vithoulkas, County Manager
4301 E. Parham Road
Henrico, VA 23228

I am writing to offer my strong support for the VATI grant application submitted by Henrico County and Comcast Cable, to extend universal broadband service to all areas of Henrico County.

This project, if approved, will result in below-ground installation of almost seventy miles of fiber/coaxial cable extend along 244 driveways and private roads. Service will be extended to those 244 properties and allow for service connections to each house or property at no cost to the property owner.

This project will focus on areas of Henrico that have been considered very challenging to connect to broadband because of the rural nature of the area and the relatively low number of houses per road mile. Therefore, without an investment from both the State and the County, as well as from the service provider, it will be nearly impossible to connect these property owners with the high speed service that they need.

By committing to fund 20% of the project cost, Henrico County is demonstrating its strong commitment to ensuring all residents of the County have equal access to this critical service, regardless of their geographical location.

Delegate McQuinn

Virginia House of Delegates
70th District

COMMONWEALTH OF VIRGINIA

HOUSE OF DELEGATES

RICHMOND

LAMONT BAGBY
Pocahontas Building
Post Office Box 406
Richmond, Virginia 23218

SEVENTY-FOURTH DISTRICT

COMMITTEE ASSIGNMENTS:
EDUCATION
LABOR AND COMMERCE
TRANSPORTATION
RULES

September 10, 2021

John A. Vithoulkas, County Manager
County of Henrico
P.O. Box 90775
Henrico, VA 23273-0775

Dear Mr. Vithoulkas,

I am writing to offer my strong support for the VATI grant application submitted by Henrico County and Comcast Cable, to extend universal broadband service to all areas of Henrico County.

This project, if approved, will result in below-ground installation of almost seventy miles of fiber/coaxial cable extend along 244 driveways and private roads. Service will be extended to those 244 properties and allow for service connections to each house or property at no cost to the property owner.

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By committing to fund 20% of the project cost, Henrico County is demonstrating its strong commitment to ensuring all residents of the County have equal access to this critical service, regardless of their geographical location.

Sincerely,

Lamont Bagby
Member, 74th District
Virginia House of Delegates
Chair, Virginia Legislative Black Caucus

1215 E. Fort Avenue
Suite 103
Baltimore, MD 21230

Product	Total	VATI	Non-VATI	Source of Estimate	Date
EXAMPLE					
Construction					
Broadband Construction – 69.58 miles	$4,801,100	$3,360,771	$1,440,329	Comcast	9/14/2020

COMCAST

1215 E. Fort Avenue
Suite 103
Baltimore, MD 21230

September 14, 2021

John Vithoulkas
Henrico County Manager
P.O. Box 90775
Henrico, VA 23273-0775

Dear Mr. Vithoulkas:

The purpose of this Letter is to provide information and supporting documentation for cost estimates for the Henrico County Project proposed to the Virginia Telecommunication Initiative ("VATI") program. Comcast's Construction and Design team managed projects that added thousands of miles to Comcast's regional hybrid fiber coaxial network in 2020-2021. Comcast's construction estimates are determined though 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. The total build is estimated to be 70 miles of infrastructure and laterals. Estimated budget costs for construction are:

Project	Number of Passings	Material Costs	Labor	Project Management	Total Project Cost
Henrico County	244	$1,440,330.00	$2,880,660.00	$480,110.00	$4,801,100.00

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.
The precise amount to be spend on contract labor versus in house resources will be determined when the grant is approved, and the work commences. The allocation of work will depend on the level of construction activity at that time. Any contracted engineering and design work outlined in this proposal will be performed by Comcast approved contractors.

Should you have any questions regarding the information listed above, please do not hesitate to contact Nathan Daugherty at Nathan_daugherty@comcast.com or 434-238-0729.

Sincerely,

Steve Hill

Steve Hill
Senior Director, Network Engineering

COMCAST

September 14, 2021

Tamarah Holmes, Ph.D.
Director, Office of Broadband
Virginia Department of Housing and Community Development
Main Street Centre
600 East Main Street, Suite 300
Richmond, Virginia 23219

Re: Attachment 14 – Two most recent Form 477 submitted to the FCC or equivalent

Dear Dr. Holmes,

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,

Kevin Broadhurst
Vice President of Government and Regulatory Affairs

Henrico County Public Schools

Digital Learning Artifacts

Attachment for Henrico County's Broadband Internet Connectivity Grant

This document includes links to resources that Henrico County Public Schools uses to promote Academic Excellence for all Henrico learners with an emphasis on digital access, digital learning, and digital citizenship for all students.

Academic Excellence

- **Overview of the Goal:** To prepare students to be ready for life and have the knowledge, skills, experiences, and attributes to be successful in a rapidly changing world, Henrico County Public Schools will redesign its curricular, instructional and assessment support around a research-based, common-learning model to go beyond Standards of Learning requirements. The model will provide all learners with personalized pathways through four Deeper Learning pillars, where learning is: anytime and anywhere; authentic and connected; student owned; and community-supported.
- **Strategic Goal:** Henrico County Public Schools will achieve academic excellence by transforming teaching and learning to provide engaging learner-centered experiences for all students.
- **Equity Focus:** Equity, Opportunity and Fairness
- **Objective:** Students will have LifeReady experiences during their educational careers that lead to college or career readiness.

Digital Learning : Enhance Personalized, Equitable Student Learning Experiences with Technology

Promote and support student personalized, deeper learning experiences to demonstrate workplace readiness by creatively solving complex problems, thinking critically, collaborating, communicating and demonstrating responsible citizenship.

- Digital Resources for All Schools: This page provides an overview of the resources that were researched, vetted, and developed to provide innovative, personalized and deeper learning experiences for all students.
- Learning Management System (LMS): Henrico's LMS that supports a fully digital curriculum for all students and teachers. This link includes an overview of the number of users and examples of learning structures. The use of this resource supported the equitable distribution of digital curriculum and content creation tools and was recognized by the National Association of Counties for the aligned learning program.
- Schoology for Families: Resources that support families with the district LMS.

- Seesaw for Schools: In addition to the Schoology LMS, Seesaw is provided for all students in grades PK-3 creating a powerful learning loop between students, teachers, and families. Students use built-in multimodal tools to capture what they know by taking pictures, drawing, recording videos, and more in Seesaw's digital portfolio so teachers see all stages of student thinking and progress which enables them to personalize teaching. Families also gain a window into their student's learning and engage in home-to-school connections. Seesaw NTA 2021)
- Digital Overview for Families: This website provides families with resources that support digital learning PK-12. It is updated regularly and shared with families through the Henrico Schools website as well as school-based websites and efforts.
- Family Orientations to Digital Learning: This is an example of a school-based parent training that is provided for all Henrico families through their schools. It supports a hands-on experience aligned to the resources shared above.
- Henrico Edflix - Virtual Learning Initiative : Edflix was Henrico's response to pandemic school closures. It includes a variety of digital learning resources that was used to ensure learning continued. This effort was recognized by the National Association of Counties as evidenced here.
- Google Workspace**:** Henrico provides every learner and teacher with access to Google's powerful content design and creation tools that support the development of critical skills as defined by the Henrico Learner Profile.
- Videoconferencing in HCPS: This site serves as a curation of resources to support Henrico County Public Schools' stakeholders.
- Innovative Learning Coach Role Profile - Every school has an ILC to help students and teachers navigate the digital world.
- Henrico Virtual Academy: Henrico's first fully virtual school provided as a full-time option for students for the time this academic year (21-22).
- Wellness Wednesday - A digital learning opportunity for all HCPS students PK-5.
- LifeReady Learning Exhibition - H21 Smiles | Program | Video - An annual showcase that highlights efforts with digital learning, literacy, and access for all HCPS students, families, and communities. Includes an engagement with families on the safe and responsible use of Technology for learning.
- Technology and Computer Science cross-curricular connections start in elementary schools across all disciplines to provide all students with authentic opportunities to apply knowledge and skills that promote deeper learning aligned with the Virginia Standards of Learning.

Digital Literacy : Development of knowledge and skills necessary to access, evaluate, use and create information using technology.

The Virginia Department of Education's Standards of Learning for Digital Learning Integration describe a progressive development of knowledge and skills necessary to access, evaluate, use and create information using technology. The focus is on learning to use technology effectively and wisely rather than learning about technology. This section includes links to resources Henrico Schools use with all stakeholders to develop these competencies.

- Henrico LifeReady Literacy **-** LifeReady Literacy is the ability to identify, understand, interpret, **create, compute, and communicate using visual, audible, and digital materials** across disciplines and in any context.
    - What is LifeReady Digital Literacy (Video)
        - Digital Literacy Focus - Virginia English Standards of Learning > Communication and Multimodal Literacy Strand > **Students analyze, develop and produce media messages**.

- Henrico Multimodal Literacy Across the Curriculum Title iV grant 2020-2022
    - WeVideo - Grant purchased for all students in grades PK-12 so they can share their learning via. Video Portfolios and reflection.
    - Padcasters - Grant purchased one Padcaster starter kit for each school, supporting every learner in Henrico's ability to develop and produce media messages across all content areas and supports LifeReady Literacy
    - Verse Vlogger - Grant purchased one Vlogger for each school, supporting every learner in Henrico's ability to develop and produce media messages across all content areas and supports LifeReady Literacy

Digital Literacy Supports

- Students and Families -
    - Cool Tools for Student Learning- Resources for students that support digital learning and citizenship.
        - 2021 NACo Awards
            - Virtual Classroom
            - Edflix Virtual Learning Experience
            - Help Chats for Virtual Learning
    - Sora - An online digital library with books at all levels for students to access anytime, anywhere
        - 2021 NACO Award
            - Modified Circulation System Gets Books Into Students' Hands
- **Teachers and Leaders -**
    - Tech Tips for Teachers - Resources for teachers that support teaching and learning using digital tools
    - HCPS University - HCPS U is a staff personalized professional learning catalog, organized by grade or content, with digital literacy professional learning opportunities.
        - 2021 NACo Award - HCPS University

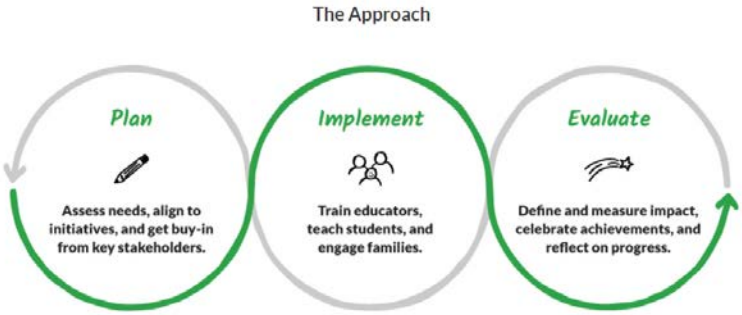
Digital Citizenship : Development of knowledge and skills needed to successfully utilize technology for learning and life.

Preparing students, teachers, and families with the knowledge and skills they need to successfully utilize technology for learning and life is a key priority for Henrico Schools. As we support the Virginia Department of Education's Profile of a Virginia Graduate and Deeper Learning, we remain committed to ensuring that all stakeholders have what they need to successfully and safely harness technology.

- Safety & Security Audit Protocol - HCPS Office of Safety and Security reviews all safety procedures and protocols annually to ensure they reflect State guidelines and national best practices, which include digital citizenship. We exceed State requirements with our Comprehensive Safety Audit process. Section 12: Technology Safety and Security > Henrico Digital Citizenship Planning Guide 21/22
    - Become a Common Sense District - HCPS has earned the Common Sense District recognition for the last 4 years, 2018-2022.

- Earning recognition as a Common Sense District shows your community that your district is committed to providing safe and innovative spaces for students to thrive as they harness the potential of technology for learning and life. To earn your district badge:
  - Seventy-five percent of schools in your district must have a current Common Sense School badge, earning recognition during the previous or current school year.
  - Engage families district-wide in at least three ways with Common Sense resources.

- HCPS uses Common Sense Education resources for digital citizenship to help students take ownership of their digital lives. All students need digital citizenship skills to participate fully in their communities and make smart choices online and in life.
  Common Sense offers an award-winning K–12 Digital Citizenship Curriculum which:
  - Addresses top concerns for schools.
  - Prepares students with critical 21st-century skills.
  - Supports educators with training and recognition.
  - Engages the whole community through family outreach.



<u>Digital Equity and Access</u> : Promote and support a secure and robust technology infrastructure to support access, adequacy, and equity.

Henrico County Public Schools will create community-friendly schools in which families, students, and employees feel valued, respected, and acknowledged**.**

- Participation in the Greater Richmond Area Education Technology Consortium (GRAETC) Executive Committee for support across our Region (14 divisions). GRAETC's mission: To positively impact the Greater Richmond Area educational community by providing connected learning opportunities to build capacity around innovative and sound pedagogical use of instructional technology resources.
- Equity of Division Wide Resources per Level - Henrico has made it a point to offer consistent division level resources to all students at each of our 73 Schools.

- Clever Portal - Students can access their digital resources via. The Clever portal. This offers bookmarks and Single Sign On for many of the resources specific to the division and their school.
- The Connection - Online services page- This page offers support to families to understand digital systems for learning and support on how to monitor their child's learning.
- Cool Tools for Students Learning: Device Support - this section provides additional device specific support for students as they leverage the power of the technologies available to them.
- 1:1 devices for all PK-12 students and full time staff. The device access supports virtual learning anytime (PK-K: iPad, 1-5th: Chromebooks, 6-12th: Windows 10 laptops, additional W10 chart in each elementary school are provided to utilize resources that may not be available on the Chromebooks or iPads)
- Over 3,000 Henrico County Public School students' families have expressed a dire need for **permanent**, broadband internet access in their homes for virtual learning.
- Innovative Learning Coach role profile: (67 ILCs supporting 73HCPS schools): The Innovative Learning Coach work collaboratively with teachers and administrators to implement evidence-based instructional practices that promote innovation and the purposeful use of technology to support Life Ready outcomes for all students per the Educational Technology Plan for Virginia and Destination 2025.
- Over 3,000 T- Mobile hotspots issued during pandemic to student families in need
- Interactive Panels in all schools (2021-2022)
- Technology Support Technicians (x number supporting 73 HCPS schools)
- Creation of Henrico Virtual Academy - Offered as an option to meet the needs of students who learn best in a virtual setting as well as a temporary year long commitment for families who did not feel comfortable sending their children back to school in-person during Covid.
- Academic Planning - Academic and Career Planning is a student-driven, adult-supported process designed to guide students through the creation of a personalized vision for life after graduation. Through self-exploration, career exploration, and skill development, students will be prepared to accomplish their #LifeReady goals.

Digital Learning, Literacy, Citizenship and Access related NACo Awards >

ABOUT NACo

The National Association of Counties (NACo) strengthens America's counties, serving nearly 40,000 county elected officials and 3.6 million county employees. Founded in 1935, NACo unites county officials to:

- Advocate county priorities in federal policymaking
- Promote exemplary county policies and practices
- Nurture leadership skills and expand knowledge networks
- Optimize county and taxpayer resources and cost savings, and
- Enrich the public's understanding of county government.

Henrico NACo Awards that demonstrate ongoing efforts to promote digital learning, digital literacy, and digital citizenship include;

2021

- Edflix Virtual Learning Experience
- Help Chats for Virtual Learning
- Creating Courses to Support Online Learning
- Creating a School Online Enrollment System
- Virtual Classroom
- Parallel Hybrid Instruction
- HCPS University
- Student-Built Classroom: If You Build it, They Will Come

2020

- A No-Cost Camp Expands Access to Robotics, Engineering and Coding
- CTE NOW: Podcast Explores, Promotes Career and Technical Education
- Creating a Culture of Life-Ready Learners
- Advanced Digital Literacy Skill Building at the Library

2017

- Digital Citizenship Program
- Schoology
- Virtual Town Halls: Government at Your Fingertips

internet essentials FROM COMCAST

Pathways to Connection

Connectivity opens the door to a world of opportunity.

At Comcast, we believe deeply in the power of connection. That is why we recently announced a $1 billion commitment over the next 10 years to reach up to 50 million people from low-income families and provide them with the training, tools, and resources they need to succeed in a digital world.

We have always said closing the broadband adoption gap would take a comprehensive movement, and that is exactly what is happening today. There are more pathways than ever for students, families, and individuals to get connected and learn digital skills, at little or no cost to them.

If you or someone in your community needs to get connected today, the good news is there are a variety of resources available, including billions of dollars in federal benefits to cover the costs. These include:

RESOURCES FOR INDIVIDUALS & FAMILIES

Internet Essentials

Internet Essentials is the nation's largest and most comprehensive broadband adoption program, providing high-speed Internet service to low-income families. Over the past ten years, Internet Essentials has connected a cumulative total of more than 10 million people to the power of the Internet at home. The program has expanded its eligibility more than a dozen times, now including Federal Pell Grant recipients. New customers who sign up for Internet Essentials before June 30, 2022 will receive 60 days of complimentary service. Visit **InternetEssentials.com** on any web-enabled device or call 1-855-846-8376 to learn more about eligibility and apply today.

Emergency Broadband Benefit

Comcast is proud to participate in the federal government's Emergency Broadband Benefit program. This temporary benefit provides up to a $50/month credit per household for their Internet bill (up to a $75 credit in Tribal areas). To date, the Federal Communications Commission has enrolled more than 4.2 million U.S. households. While this program is set to expire 6 months after the Department of Health and Human Services declares an end to the pandemic, the federal Infrastructure bill calls for a permanent plan, which would provide $30/month for eligible applicants. Visit **www.xfinity.com/EBB** or call 1-855-846-8376 to learn more. call 1-855-846-8376 to learn more.

Lift Zones

Comcast Lift Zones are a first-of-their-kind digital equity initiative in community centers across our service area. Partnering with local organizations, non-profits, and city leaders, we are equipping community centers with complimentary WiFi, called "Lift Zones," where students and families can access the Internet. Lift Zones allow students, veterans, seniors, and other individuals, customers and non-customers alike, to get online and do their schoolwork, look for a job, stay in touch with family and friends, and so much more. Comcast has pledged to open more than 1,000 Lift Zones in underserved communities by the end of this year.
Visit **https://internetessentials.com/learningsearchpage** to find a Lift Zone near you.

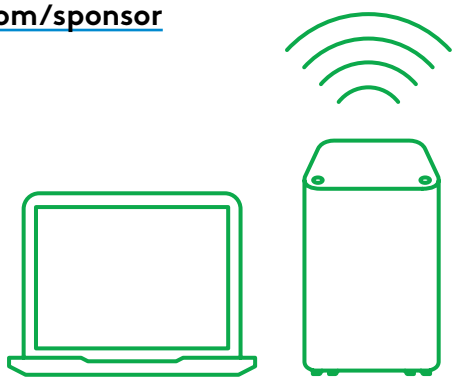
RESOURCES FOR SCHOOLS & PARTNER ORGANIZATIONS

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. The Internet Essentials Partnership Program (IEPP) is designed to help connect large numbers of households at a critical time. The program provides the opportunity for schools, school districts, government entities, foundations, and other organizations to pay for students' and families' broadband Internet service at home. Creating strong and innovative public-private partnerships enables entire communities to work together to coordinate funding for a few months or a few years. Organizations interested in becoming IEPP partners or partnering with Comcast on the Emergency Connectivity Fund can fill out **this form** to receive more information or begin the sponsorship process.

Emergency Connectivity Fund

The FCC's Emergency Connectivity Fund (ECF) is a $7.17 billion government program to help schools and libraries provide the tools and services needed for remote learning during the COVID-19 emergency period. Comcast is proud to support schools and libraries as they work to connect even more households to the power of the Internet at home through ECF. Leveraging IEPP, we have a streamlined process for eligible entities to seek ECF funds and quickly connect individuals in need to broadband access at home through our acclaimed Internet Essentials program. Schools and libraries interested in working with Comcast can visit **InternetEssentials.com/sponsor** to learn more.



Internet Essentials from Comcast

Bring low-cost, high-speed Internet home so you're ready for anything.

With a fast, reliable connection, you can work and learn from home, make video calls, stream movies and more.

Apply today if you qualify for programs like the National School Lunch Program, SNAP, housing assistance, Medicaid, and others.

$9.95
Per Month + Tax
after 2 free months

No credit check.
No term contract.
No cancellation fees.

APPLY NOW »
InternetEssentials.com
or call 1-855-846-8376

Promo ends 12/31/21. Restrictions apply. Not available in all areas. Limited to Internet Essentials ("IE") service from Comcast for new residential customers meeting certain eligibility criteria. Offer limited to 2 months of complimentary Internet Essentials service. Taxes, home drop-off, and professional install extra. After promotion, regular rates apply. Comcast's current rate is $9.95/month (subject to change). Advertised price applies to a single outlet. Actual speeds may vary and are not guaranteed. For factors affecting speed visit www.xfinity.com/networkmanagement. Access to Xfinity WiFi hotspots included with Xfinity post-pay Internet. If a customer is determined to be no longer eligible for the IE program, regular rates will apply to the selected Internet service. Subject to Internet Essentials program terms and conditions. May not be combined with other offers. Call 1-855-846-8376 for restrictions and complete details or visit InternetEssentials.com. © 2021 Comcast. All rights reserved. PCA-PHO-BIL-PRO-0721

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FROM COMCAST

Internet Essentials de Comcast

Trae Internet de alta velocidad y bajo costo a tu hogar para estar preparado para todo.

Con una conexión rápida y confiable, puedes trabajar y aprender desde tu hogar, hacer videollamadas, hacer streaming de películas y más.

Solicítalo hoy si calificas para programas como el Programa Nacional de Almuerzos escolares (NSLP), cupones para alimentos (SNAP), asistencia para viviendas públicas, Medicaid y otros.

$9.95
al mes + impuestos
después de 2 meses gratis

Sin revisión de crédito.
Sin contrato.
Sin cargos por cancelación.

SOLICÍTALO AHORA »

es.InternetEssentials.com
o llama al 855-765-6995

La promoción termina en 12/31/21. Se aplican restricciones. No está disponible en todas las áreas. Limitado al servicio de Internet Essentials ("IE") de Comcast para nuevos clientes residenciales que cumplan con ciertos requisitos de elegibilidad. Oferta limitada a 2 meses de servicio de Internet Essentials gratuito. Impuestos, entrega a domicilio e instalación profesional son extra. Después de la promoción, se aplican las tarifas regulares. La tarifa actual de Comcast es $9.95/mes (sujeta a cambios) El precio anunciado se aplica a una sola conexión. Las velocidades reales pueden variar y no están garantizadas. Para factores que afectan a la velocidad, visite es.xfinity.com/networkmanagement. El acceso a los hotspots de Xfinity WiFi está incluido con Xfinity Internet pospago. Si se determina que un cliente ya no es elegible para el programa de IE, se aplicarán las tarifas regulares al servicio de Internet seleccionado. Sujeto a los términos y condiciones del programa de Internet Essentials. No se puede combinar con otras ofertas. Llame al 1-855-765-6995 para obtener las restricciones y detalles completos o visite es.InternetEssentials.com. © 2021 Comcast. Derechos Reservados. PCA-PHO-BIL-PRO-0721

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FROM COMCAST

NOW TWICE AS FAST!

Ready for anything.

Internet Essentials from Comcast

Get home Internet with 2 months FREE!

Promo ends 12/31/21

Get low-cost, high-speed Internet at home! With a fast, reliable connection, you can work and learn from home, make video calls, stream movies and more.

Apply today if you qualify for programs like the National School Lunch Program, SNAP, housing assistance, Medicaid, and others.

$9.95 Per Month + Tax after 2 free months

No credit check. No term contract.
No cancellation fees.

APPLY NOW »

InternetEssentials.com
or call 1-855-846-8376

Promo ends 12/31/21. Restrictions apply. Not available in all areas. Limited to Internet Essentials ("IE") service from Comcast for new residential customers meeting certain eligibility criteria. Offer limited to 2 months of complimentary Internet Essentials service. Taxes, home drop-off, and professional install extra. After promotion, regular rates apply. Comcast's current rate is $9.95/month (subject to change). Advertised price applies to a single outlet. Actual speeds may vary and are not guaranteed. For factors affecting speed visit www.xfinity.com/networkmanagement. Access to Xfinity WiFi hotspots included with Xfinity post-pay Internet. If a customer is determined to be no longer eligible for the IE program, regular rates will apply to the selected Internet service. Subject to Internet Essentials program terms and conditions. May not be combined with other offers. Call 1-855-846-8376 for restrictions and complete details or visit InternetEssentials.com. © 2021 Comcast. All rights reserved. FLY-ILL-BIL-PRO-0721

internet» essentials
FROM COMCAST

¡AHORA EL DOBLE DE RÁPIDO!

Preparados para todo.

Internet Essentials de Comcast

¡Obtén Internet para el hogar con 2 meses GRATIS!

La promoción termina en 12/31/21

¡Obtén Internet de alta velocidad y bajo costo en el hogar! Con una conexión rápida y confiable, puedes trabajar y aprender desde tu hogar, hacer videollamadas, hacer streaming de películas y más.

Solicítalo hoy si calificas para programas como el Programa Nacional de Almuerzos escolares (NSLP), cupones para alimentos (SNAP), asistencia para viviendas públicas, Medicaid y otros.

$9.95 al mes + impuestos después de 2 meses gratis

Sin revisión de crédito. Sin contrato. Sin cargos por cancelación.

SOLICÍTALO AHORA »

es.InternetEssentials.com o llama al 1-855-765-6995

La promoción termina en 12/31/21. Se aplican restricciones. No está disponible en todas las áreas. Limitado al servicio de Internet Essentials ("IE") de Comcast para nuevos clientes residenciales que cumplan con ciertos requisitos de elegibilidad. Oferta limitada a 2 meses de servicio de Internet Essentials gratuito. Impuestos, entrega a domicilio e instalación profesional son extra. Después de la promoción, se aplican las tarifas regulares. La tarifa actual de Comcast es $9.95/mes (sujeta a cambios). El precio anunciado se aplica a una sola conexión. Las velocidades reales pueden variar y no están garantizadas. Para factores que afectan a la velocidad, visite es.xfinity.com/networkmanagement. El acceso a los hotspots de Xfinity WiFi están incluidos con Xfinity Internet pospago. Si se determina que un cliente ya no es elegible para el programa de IE, se aplicarán las tarifas regulares al servicio de Internet seleccionado. Sujeto a los términos y condiciones del programa de Internet Essentials. No se puede combinar con otras ofertas. Llame al 1-855-765-6995 para obtener restricciones y detalles completos o visite es.InternetEssentials.com. © 2021 Comcast. Derechos Reservados. FLY-ILL-BIL-PRO-0721

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PRESS RELEASE
Comcast
One Comcast Center
Philadelphia, PA 19103
www.comcastcorporation.com

COMCAST COMMITS TO INVESTING $1 BILLION OVER NEXT 10 YEARS TO REACH 50 MILLION LOW-INCOME AMERICANS WITH TOOLS AND RESOURCES TO SUCCEED IN DIGITAL WORLD

Comcast's Internet Essentials Program Has Now Connected More Than 10 Million People Over the Past 10 Years

PHILADELPHIA, PA – MARCH 24, 2021 – On the 10th anniversary of its Internet Essentials program, Comcast today announced it would invest $1 billion over the next 10 years to help further close the digital divide and give even more low-income Americans the tools and resources they need to succeed in an increasingly digital world. The announcement coincides with the release of a 10-year Progress Report showing that, since 2011, the company, working in collaboration with its network of thousands of nonprofit partners, has connected a cumulative total of more than 10 million people in America to broadband Internet at home, the overwhelming majority of whom were not connected prior to signing up.

Comcast's $1 billion commitment will include investments in a number of critical areas, including: additional support for its ongoing Lift Zone initiative, which establishes WiFi-connected safe spaces in 1,000+ community centers nationwide for students and adults by the end of 2021; new laptop and computer donations; grants for nonprofit community organizations to create opportunities for low-income Americans, particularly in media, technology, and entrepreneurship; and continued investment in the company's landmark Internet Essentials program. It is estimated that these new commitments will impact as many as 50 million Americans over the next 10 years. In 2021 alone, Comcast estimates students will be able to complete more than 25 million hours of remote learning lessons to further address the "homework gap" at the hundreds of Lift Zone locations that have already opened or will open soon.

"Ten years is a remarkable milestone, signifying an extraordinary amount of work and collaboration with our incredible community partners across the country," said Dave Watson, Chief Executive Officer, Comcast Cable. "Together, we have been able to connect millions of people to the power of the Internet at home, and to the endless opportunity, education, growth, and discovery it provides. Today, we are rededicating ourselves to this mission to ensure that the next generation of students in America has the tools, resources, and abilities they need to succeed in an increasingly digital world."

"For more than a decade, Comcast has been a leader in working with communities to close the Digital Divide through its Internet Essentials program," said Marc H. Morial, President and CEO of the National Urban League. "From its beginning as a pilot program with the Wilmington Urban League to today, Comcast's Internet Essentials program has transformed millions of lives by connecting low-income households to the power of broadband. While the ongoing COVID-19 pandemic placed a spotlight on the digital divide, for the past decade Comcast, in partnership with organizations like the National Urban League, has been leading the effort to close the digital divide, address the homework gap, and ensure low-income communities have the necessary digital skills."

"Last year, we partnered with Comcast on a major campaign to encourage Americans to participate in the first-ever digital census," added Rebecca DeHart, CEO, Fair Count. "We are so proud to have partnered with Comcast on this valuable work—connectivity is incredibly essential to civic participation. It gives communities a voice and it enables individuals to take part in the cultural conversations that need to take place in this country. Broadband adoption, just like census participation, can mean the difference between communities growing and thriving or being left behind. For the past decade, the Internet

Essentials program has successfully helped to narrow these digital divides. We look forward to the next 10 years of Internet Essentials and join Comcast in celebrating this significant achievement."

"For a decade Comcast's Internet Essentials program has provided Latino families with tools and resources to access high speed Internet at home. Hispanic Federation has been proud to partner with Comcast and work with this program to bridge the digital divide and offer Latino communities the opportunity to access health, educational, and economic resources online," said Brent Wilkes, Senior Vice President at the Hispanic Federation. "We look forward to the next ten years of partnership with Comcast as we tackle more challenges in our ever-changing digital world."

In addition to capturing the total number of connections Internet Essentials has provided, the 10-Year Progress Report also highlights other key metrics about the program, including having:

- Increased the program's Internet speeds six times, from 1.5 Mbps in 2011 to 50 Mbps today, without ever increasing the price of the program, which has remained $9.95/month.
- Launched its Lift Zones program, which aims to connect more than 1,000 community centers with free WiFi by the end of 2021.
- Developed an Internet Essentials Partnership Program that has signed up hundreds of schools, school districts, and other organizations that have come together to help connect tens of thousands of students to the Internet during the COVID-19 pandemic.
- Offered 60 days of free Internet service to any new Internet Essentials customer who needed to get online during the coronavirus outbreak.
- Expanded the number of languages our Internet Essentials call center agents can speak to more than 240, plus American Sign Language, to help ensure we break down language barriers that can prevent people from applying or getting online.
- Built up an online learning center that includes more than 200 digital literacy training videos, guides, and reports that are free to anyone to use, including non-customers.
- Developed an employee network of 3,000 Internet Essentials Ambassadors who volunteer their time to help spread the word about the program in their communities.

This new commitment comes on the heels of a series of initiatives announced during the COVID-19 pandemic that reinforced the company's commitment to addressing the digital divide and the homework gap by upping speeds to 50 Mbps downstream without changing the program's $9.95/month price. The company also continues to offer 60 days of free Internet service to new Internet Essentials customers who sign up before June 30, 2021.

About Internet Essentials

Internet Essentials is Comcast's signature digital equity initiative and the nation's largest and most comprehensive broadband adoption program. In 10 years, it has helped connect 10 million low-income Americans to broadband Internet at home, most for the very first time. Internet Essentials has a comprehensive design that addresses each of the three major barriers to broadband adoption. This includes: multiple options to access free digital literacy training in print, online, and in person; the option to purchase a heavily subsidized, low-cost Internet-ready computer; and low-cost, high-speed Internet service for $9.95 a month, plus tax. The program is structured as a partnership between Comcast and tens of thousands of school districts, libraries, elected officials, and nonprofit community partners. Comcast has never raised the price of the program. For more information about Internet Essentials and Comcast's commitment to education and digital equity, please visit https://corporate.comcast.com/education. To apply, visit www.internetessentials.com or call 1-855-846-8376 for English or 1-855-765-6995 for Spanish.

About Comcast Corporation

Comcast Corporation (Nasdaq: CMCSA) is a global media and technology company that connects people to moments that matter. We are principally focused on broadband, aggregation, and streaming with over 56 million customer relationships across the United States and Europe. We deliver broadband, wireless,

and video through our Xfinity, Comcast Business, and Sky brands; create, distribute, and stream leading entertainment, sports, and news through Universal Filmed Entertainment Group, Universal Studio Group, Sky Studios, the NBC and Telemundo broadcast networks, Peacock, NBC News, NBC Sports, Sky News, and Sky Sports; and provide memorable experiences at Universal Parks and Resorts in the United States and Asia. Visit www.comcastcorporation.com for more information.

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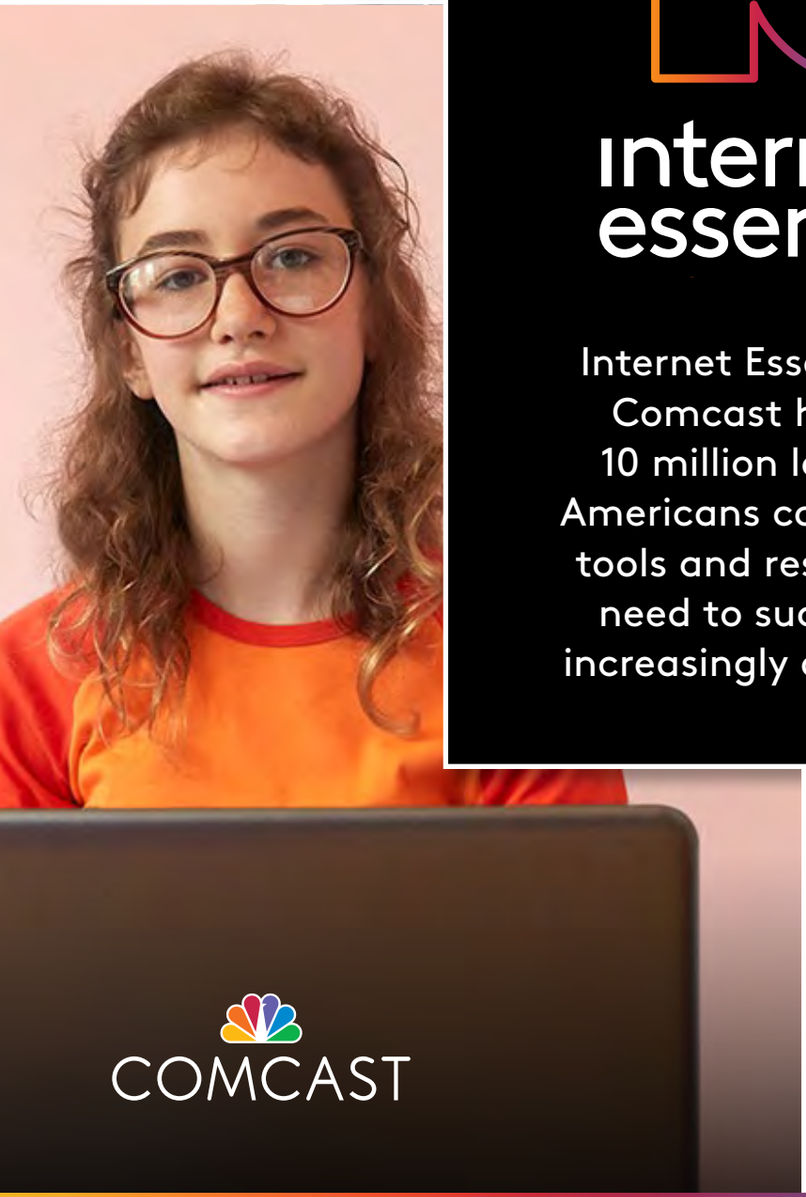
Charlie Douglas
charlie_douglas@comcast.com
(215) 264-8020

10 YEARS

internet essentials

Internet Essentials from Comcast has helped 10 million low-income Americans connect to the tools and resources they need to succeed in an increasingly digital world.



COMCAST

Student from Northeast High School

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Letter from Dave Watson about Comcast's Commitment to Digital Equity

When we launched Internet Essentials 10 years ago, we began an ambitious journey to connect low-income Americans to the Internet. Thanks to the hard work and support of so many, Internet Essentials is now the largest and most comprehensive Internet adoption program in the country, connecting more than 10 million* people.

Ten million people over 10 years is an exciting milestone, but it's just the beginning of our next chapter. We are proud to share that over the next 10 years, Comcast is committing $1 billion to reach 50 million people from low-income families and provide them with the training, tools, and resources they need to succeed in a digital world. This investment will allow us to continue providing grants to nonprofit partners, supporting Internet adoption and digital skills training, and investing in underserved communities.

$1B

commitment over the next 10 years to reach 50 million people from low-income families with connectivity, skills, training, and resources.

This is not the first time we have accelerated our efforts to bridge the digital divide, nor will it be our last. Since the earliest days of the Internet Essentials program, we have partnered with incredible organizations to include more people, improve the program, and create a bigger impact. We have expanded the reach of Internet Essentials 12 times, most recently to include all low-income households in our service area, including veterans, seniors, people with disabilities, and more. We have increased speeds, from 1.5 Mbps in 2011 to 50 Mbps today, and subsidized or donated 150,000 desktop and laptop computers. Along the way, we have brought home the transformative power of connection to more than 10 million people and offered digital skills training and tools to millions more.

When the COVID-19 pandemic struck, we expanded again by launching a first-of-its kind connectivity initiative in community centers. Partnering with local organizations, non-profit partners, and city leaders, we equipped community centers across the country with WiFi-connected safe spaces, called "Lift Zones", where students and families can access the Internet. We plan to launch 1,000+ Lift Zones by the end of this year, reaching millions more people in our communities.

*Cumulative total since 2011

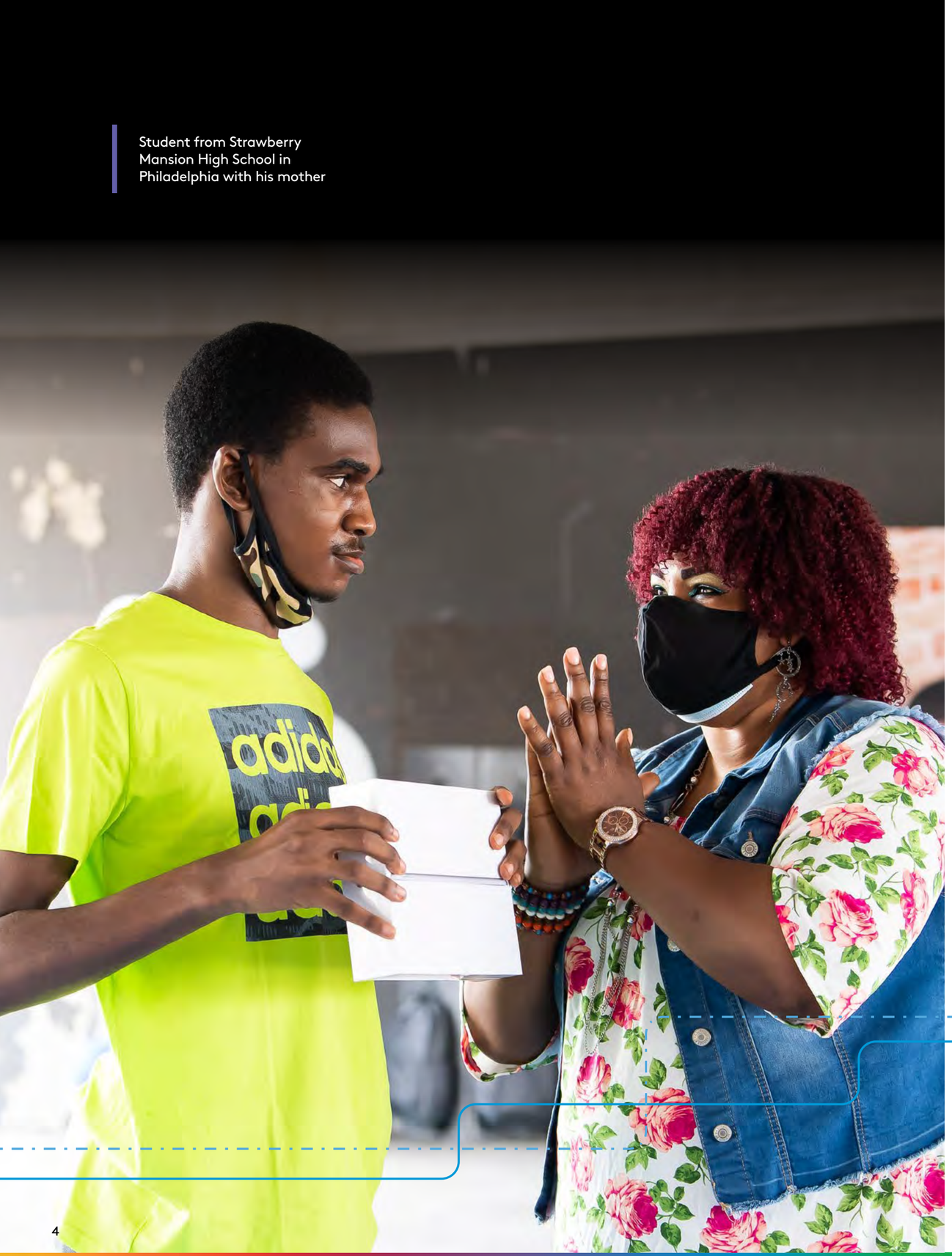
Students and Head of School of the Pennsylvania School for the Deaf

Ten years is a remarkable moment signifying an extraordinary amount of work, and we did not do it alone. The launch of Internet Essentials, as well as its tremendous growth and success over the past decade, is a result of those who paved the way through research, tireless advocacy for digital equity, and the creation and adaptation of digital skills training models to meet the needs of community members. I invite you to continue reading to learn more about the journey of Internet Essentials and the work of our team and our extraordinary partners.

We are proud of our progress, but we have more to do and more to learn. We are excited and energized to take these next steps, and we look forward to working with all of you to get there.

Sincerely,

DAVE WATSON
President and Chief Executive Officer
Comcast Cable



Student from Strawberry Mansion High School in Philadelphia with his mother

Digital Divide in the U.S.

We believe deeply in the power of connection. It is unacceptable that we have a digital divide in this country, which keeps so many families from the powerful skills, tools, and resources they need to succeed. Approximately 25% of American households do not subscribe to broadband Internet at home. Ten years ago, we created Internet Essentials to help address the digital divide and the homework gap and give low-income families the opportunity to experience the transformative power of the Internet in their own homes. Over the last decade, we've worked with thousands of partners across the country and have collectively made tremendous progress. **In our service area, 40% of the growth in broadband adoption among low-income households with school-age children can be attributed to the Internet Essentials program.***

CITY COMPARISON

Up to 95% of households

in affluent cities have a home broadband subscription.

VS.

Only 50% of households

in cities with high poverty rates have a home broadband subscription.

This 45-percentage-point gap represents the digital divide in the United States.**

*Zuo, G., 2021 (In Press). "Wired and Hired: Employment Effects of Subsidized Broadband Internet for Low-Income Americans." To be published in *American Economic Journal: Economic Policy.*

**U.S. Census 2019 American Community Survey

Program Timeline

For Comcast, addressing the need for digital equity has been a decade-long pursuit. In 2010, the Federal Communications Commission released the National Broadband Plan (NBP), articulating the barriers to broadband adoption and digital inclusion, and focusing attention on the importance of having a home Internet connection. In 2011, Internet Essentials was the first comprehensive programmatic response by a major Internet service provider to address the main barriers to broadband adoption.

For 10 years, we have worked closely with our partners to refine the program in meaningful ways and expanded the eligible population numerous times. Together, we are committed to creating and supporting digital equity within the communities we serve.

2011

- Program launch for public-school students receiving free lunch

2012

- Expanded to public-school students eligible for a reduced-price lunch

2013

- Expanded eligibility to include public, charter, parochial, private, cyberschool, and homeschooled students
- Included any family with a school-age student from Head Start through the 12th grade

2014

- Extended program indefinitely, beyond initial three-year commitment
- Provide amnesty to eligible families with past due Comcast debt older than one year

2015

- Pilot launch for low-income seniors
- Pilot launch for low-income community college students

2016

- Pilot launch for HUD-housing recipients
- Expansion of pilot to all HUD-housing recipients

2017

- Expansion of pilot for low-income seniors

2018

- Expansion to low-income veterans

2019

- Expansion to all low-income people including those with disabilities

2020

- Convened the first Internet Essentials National Impact Summit
- Implemented key COVID-19 response measures

2021

- Celebrating 10 years of advancing digital equity
- Increased speeds to 50/5 Mbps

and more to come...

COVID-19 Response

- 60 days free service offer for new Internet Essentials customers through December 31, 2021
- Increased speeds to 50/5 Mbps
- Waived bad-debt program eligibility requirement through December 31, 2021
- Suspended disconnects for late payments
- Launched the Internet Essentials Partnership Program to connect large numbers of students to Internet Essentials
- Introduced xFi parental controls to Internet Essentials subscribers at no additional cost
- Unlimited access for Internet Essentials customers to Xfinity WiFi hotspots
- Began the rollout of 1,000 Lift Zones

12 expansions of eligibility (available to all eligible low-income households)

18 innovations (including improving our streamlined application process and launching the Internet Essentials Partnership Program)

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

9 innovations in digital literacy, including the creation of 1,000+ Lift Zones

Program Retrospective

in 10 years, we have...

CONNECTED **MORE THAN** 10M LOW-INCOME AMERICANS TO THE INTERNET AT HOME

In 10 years, our commitment to bridging the digital divide has transformed into an enormous investment in advancing digital equity. Our newly created Internet Essentials Partnership Program and Lift Zone initiative are manifestations of this, as is our significant increase in investment in digital equity partners.

Program Design

Internet Essentials is about far more than bringing high-speed Internet into a home. From the beginning, we have designed our program based on comprehensive and consistent research which tells us there are 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 functioning equipment, and 3) the cost of a monthly service subscription. Internet Essentials has been designed to address all of these barriers head-on. 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.

$700M

invested in the past 10 years to connect more than 10 million low-income people to the power of the Internet at home, provide digital skills training, and subsidize or donate devices.

A COMPREHENSIVE APPROACH

According to a 2019 U.S. Census Bureau and National Telecommunications and Information Administration survey, **among the top reasons people do not subscribe to Internet at home are:**

60% **cite lack of need for, or interest in, the Internet**

19% **cite cost of monthly service**

3% **cite no computer, inadequate equipment, or cost of a computer**

To address these barriers, Comcast designed Internet Essentials as a wraparound solution.

Awareness & Training

Comcast works with a network of partners to offer free in-person, online, and printed digital literacy training materials and classes.

Low-Cost Service

Comcast provides low-cost, high-speed Internet to low-income households across Comcast's service area for less than $10 per month.

Equipment

Internet Essentials customers can purchase a subsidized and discounted computer for less than $150

LOW-COST CONNECTIONS

We've made tremendous progress toward closing the digital divide. In ten years, we've connected millions of low-income people to the Internet at home, more than 80% of whom were not connected prior to signing up. The program is available to ALL low-income households including those participating in programs like NSLP, Medicaid, SNAP, SSI, and many more.

Since 2011, we've continued to improve our application process, including adding and expanding an expedited application review, and working to make the application and onboarding process easier and more convenient so that our customers have the best possible experience.

Just last year, we added two-factor ID verification to support applicants who are uncomfortable or unable to provide a social security number to verify their identity.

Continuous Improvement to Our Customer Experience

Since the beginning, we have pledged 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 to reach as many people as possible.

240

languages available through our call center, seven languages available in our online application.

Expedited Review

Available to students attending Title I schools or those participating in the Internet Essentials Partnership Program, HUD housing residents, and households living in high-poverty areas.

Customer Satisfaction

90% of Internet Essentials customers surveyed are highly satisfied with the service they receive.

AWARENESS & TRAINING

Digital skills training is the most important facilitator for getting people connected. Since 2011, we have made nine enhancements to our digital skills training portfolio, including developing Online Safety Toolkits, working with partners to design best-in-class curricula to engage senior citizens, and providing computer labs and other equipment to support digital participation at community centers across the country. We are proud to support **digital skills training** via a network of tens of thousands of partners who share our vision of bringing the Internet to everyone.

8.5M

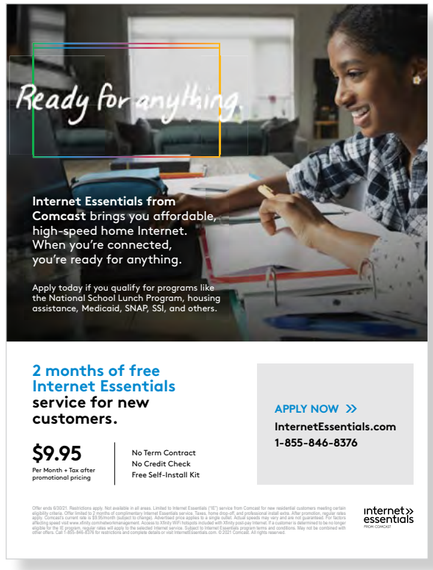
lifetime visitors to our online Learning Center, accessing more than 200 training videos, guides, and reports.

67M+

marketing materials have been sent at no cost to partners.

21M

PSAs aired valued at more than $255 million.



Dale

CUSTOMER SPOTLIGHT

Dale learned about Internet Essentials from the Ed Snider Youth Hockey Foundation in Philadelphia while he was still in high school. When he and his family connected, the service benefited both Dale and his five brothers and sisters. Dale is in his sophomore year at Kutztown University of Pennsylvania.

EQUIPMENT

An Internet connection is only as good as the device through which it is accessed. That's why we offer the option to purchase a low-cost computer for less than $150. Internet Essentials customers can choose an Internet-ready laptop with a 1-year mail in warranty to get up and running.

We also know that innovations in technology happen every day, and we strive to bring those same innovations to all of our customers. Since 2011, we have made nine enhancements to the value of the service under the Internet Essentials program, including improving the quality and options of our computer offering.

25K

laptops personally donated to the School District of Philadelphia by the Roberts family.

130K computers provided

Comcast has provided 130,000 low-income people with affordable subsidized computers.

20K computers donated

Comcast has donated more than 20,000 Internet-ready devices to households and community-based organizations since 2015.

GIVEAWAY SPOTLIGHT

In an exciting moment of Comcast NBCUniversal synergy, we partnered with TODAY and Craig Melvin to pull off the biggest laptop and connectivity surprise giveaway in Internet Essentials' history. On September 18, 2020, we surprised the McKeesport Area High School and Founders Hall Middle School in Pennsylvania with 2,500 Dell Technologies laptops and Internet Essentials Opportunity Cards for 12 months of complimentary service—enough for every high school and middle school student, as well as the faculty and staff, to connect to school from home.

CUSTOMER SPOTLIGHT

At the start of the pandemic, LaJoy Johnson-Law knew her daughter's education would depend on having home Internet and the technology through which to access it. Since connecting to Internet Essentials, LaJoy has also used the service to access information and resources related to her daughter's special needs and to become a fierce community advocate herself. While her 2020 DC State Board of Education campaign run was unsuccessful, LaJoy remains committed to ensuring that all families are represented and all students have the opportunity to achieve greatness.

Elements of Success

Comcast is focused on shaping the future by driving innovation through technology—and staying connected to the communities we serve. These principles are core to our company and form the driving ethos of our community impact philosophy, which was first established by our founder, Ralph J. Roberts: when the communities we serve thrive, the company thrives as well. Empowering communities, supporting prosperity, and advocating and building skills for social inclusion and participation are essential to the program's success and to the success of the company as a whole.

EMPOWERING COMMUNITIES

Nothing we do in the Community Impact space has as much effect on our communities as the Internet Essentials program.

Partners and Ambassadors

The ten years of tremendous success we have had with the Internet Essentials program belongs to our internal and external partners—the communities we collaborate with and our employee volunteers, all of whom work tirelessly to build honest, meaningful, and long-lasting relationships that raise awareness for the program and drive participation.

tens of thousands

of community partners

3K+

current volunteer Ambassadors

20K

outreach engagements by Ambassadors since 2013

We have taken a consistent and integrated approach to work with government and elected officials, school districts, libraries, nonprofits, community-based organizations, and other partners to address the digital divide. Our community partners range from large national nonprofits like the Boys & Girls Clubs of America, the YMCA, the National Urban League, and UnidosUS, to hundreds of local nonprofits who not only help promote the program, but also form the bedrock of our digital literacy training efforts.

Our local Internet Essentials partnerships are built, in large part, on the relationships our employees have developed and fostered. Nonprofit partners are supported by a corps of volunteer Ambassadors who give their most valuable resource—time—to support their communities.

> **The work I do as an IE Ambassador is not only a mission in helping to connect low-income families to affordable Internet, but also a personal journey in reconnecting with my roots. As a Chinese immigrant raised in a low-income family, I know first-hand what education and Internet means to these families.**
>
> Minzhi 'Jay' Chen, QA Lead, Xfinity Mobile

Minzhi 'Jay' Chen, Amrita Pannu, Justin Van Patten, and Jeanette Walton were selected as 2020 Internet Essentials Ambassadors of the Year for their commitment to advancing digital equity in their communities.

Internet Essentials Partnership Program

The Internet Essentials Partnership Program (IEPP) is designed to help connect large numbers of K-12 students at a critical time. The program provides the opportunity for schools, school districts, government entities, foundations, and other organizations to pay for students' and their families' broadband Internet service at home. Creating strong and innovative public-private partnerships enables entire communities to work together to coordinate funding for a few months or a few years. This sponsorship program enables more families to access all the benefits Internet Essentials has to offer, while allowing community-based partners to use their expertise to empower families to take on the challenges of today while preparing for the future.

IEPP began as a pilot in 2019, based on requests and feedback from partners. When schools around the country shifted to a virtual environment due to COVID-19, we were able to expedite formalization of the program in order to meet the extraordinary need.

Featured Partners

Chicago Connected

Atlanta Public Schools

Sacramento City Unified School District

PHL ConnectED

Pittsburgh Public Schools

PPS

Lift Zones

Working with our network of thousands of non-profit partners and city leaders, we are creating safe spaces for students and families to connect and learn. Together, we are creating more than 1,000 Lift Zones in community centers to provide internet connectivity and a safe place for students and families to get online.

Lift Zone at the Boys & Girls Club in Miami

25M homework hours

In 2021 alone, WiFi-enabled Lift Zones across the country will allow students to complete over 25 million hours of homework and remote learning.

1K+

Lift Zones to be operational by end of 2021.

SUPPORTING ECONOMIC PROSPERITY

By increasing digital adoption rates, we will improve educational achievement and workforce preparedness—and that will help generate greater economic growth in which all of our citizens can share.

8%+

increase in the employment rate among households who subscribe to Internet Essentials.*

$1,385

annual increase in earnings for households who subscribe to Internet Essentials.*

BUILDING SKILLS & ADVOCATING FOR SOCIAL INCLUSION & PARTICIPATION

With social and civic engagement activities increasingly moving online, it's vital that everyone have an opportunity to participate and a platform to be heard.

2020 Census Awareness Campaign

Comcast partnered with the U.S. Census Bureau and Telemundo on a campaign to encourage Americans to participate in the first ever digital census.

$120K donated toward the cost of print materials for hundreds of Census Partner Toolkits, tens of thousands of direct mailers that targeted hard-to-count communities, and doorhangers for field operations.

*Zuo, G., 2021 (In Press). "Wired and Hired: Employment Effects of Subsidized Broadband Internet for Low-Income Americans." To be published in *American Economic Journal: Economic Policy*.

Program Impact

Our work toward digital equity begins by connecting the unconnected, but it doesn't end there. Through our community partnerships to support educational success, build skills for a digital economy, access healthcare, and promote online safety, we are deeply committed to supporting positive change in our customers' lives.

EDUCATION

COVID-19 has more fully exposed systemic inequities across the board. Prior to the pandemic, we understood that access to an Internet connection was fundamental to the success of students and families around the country. As we started the 2020-2021 school year, many districts and states did not have students return to any form of in-person learning, while others returned with a hybrid approach. Because of existing digital inequities, combined with the global pandemic, low-income students suffer the most without a home broadband connection.

That's why in 2020, we launched two new initiatives: the Internet Essentials Partnership Program, allowing for a family's service to be sponsored by a third-party organization; and Lift Zones, 1,000+ WiFi-connected safe spaces in which students and their families can connect to the Internet. Our goal is to have launched all 1,000 of our Lift Zones by the end of 2021.

90%+

of parents surveyed say the service has a positive impact on their child's grades.*

5M

low-income students connected to the Internet via Internet Essentials.

*Comcast Annual Internet Essentials Customer Survey and internal application data

***Foundational Digital Skills for Career Progress*, Ian Hecker and Pamela Loprest, Urban Institute, August 2019

WORKFORCE

Prior to the COVID-19 crisis, there was a clear and pressing need to prepare the workforce for digitization. With the majority of education and business moving online, it is more important than ever to develop a workforce that is able to respond quickly to rapid shifts in a fast-evolving economy.

Workers who lack the digital skills required to create a resume, write an email, or apply for a job online face an ever-shrinking job market. The increasingly technological nature of work means that a baseline of digital skills is necessary to thrive in today's workplace—including in occupations that have not traditionally required technology, like home health aides or welders.**

Increasing digital adoption rates will improve both educational achievement and workforce preparedness, and that will help generate greater economic growth in which all Americans can share.

76%

of customers feel their service has already helped someone in the household locate or obtain employment.*

78%

of households say the service has helped them learn a new skill.*

CUSTOMER SPOTLIGHT

Everel and her family first learned about Internet Essentials from a community-based organization where her children received after-school care while she searched for employment. After receiving a certification in health management, Everel landed a job at a Baltimore hospital. She currently works and serves on the board of the same community organization where she learned about the program.

HEALTHCARE

Before COVID-19, telehealth was a less burdensome option for doctor visits, particularly for people or families managing multiple work schedules or struggling with reliable childcare and transportation. Opting for a telehealth appointment can reduce the total time spent on a doctor's visit from two hours to 15 minutes* and eliminate a number of the logistical barriers, especially for people with disabilities and those who have limited transportation.

The COVID-19 pandemic has led to a massive shift in healthcare delivery. Healthcare systems and physician offices have accelerated digital health solutions at record speed, making telehealth a critical component of flattening the COVID-19 curve.

As a result, telehealth is no longer a convenient option, but an indispensable option.

> **Recent events have made it abundantly clear that connectivity is a lifeline and an essential element in managing one's healthcare from home. Working with Comcast, a leader in making connectivity accessible for seniors, has allowed OATS to provide telehealth training and information on reliable online health resources to thousands of older adults sheltering in place.**
>
> Thomas Kamber, Executive Director
> Older Adults Technology Services (OATS)

88%

of customers say the service has helped them remain connected to healthcare during COVID-19.

Of those who experienced difficulty getting medical treatment,

90%

of customers say that having Internet service at home helped them access healthcare services.

*Ray, K.N., Chari, A.V., Engberg, J., Bertolet, M. and Mehrotra, A., 2015. *Opportunity Costs of Ambulatory Medical Care in the United States. American Journal of Managed Care,* 21(8), pp.567-574.

ONLINE SAFETY

With the COVID-19 crisis shifting so much of our lives to the virtual world, online safety concerns for at-risk populations, like children, seniors, and the underserved, are becoming even more pronounced.

Our company first launched its national Online Safety initiative in the fall of 2017, when we announced an Internet Essentials partnership with Pennsylvania Attorney General Josh Shapiro to educate seniors, parents, and children about how to stay safe online. In 2018, we built on this work by entering into an ambitious partnership with the Conference of Western Attorneys General (CWAG) to further promote Internet safety for seniors and families.

Partnering with **more than 20 State Attorneys General**, Common Sense Media, ConnectSafely, FOSI (Family Online Safety Institute), and WGBH, we have delivered a comprehensive Online Safety Toolkit for law enforcement officials, provided significant investments in cybersecurity training classes, produced public service announcements, and distributed tens of thousands of online safety brochures for seniors and parents.

50+

Online Safety Toolkits delivered to Attorneys General across the country.

The Online Safety Toolkit provides chief law enforcement officers with up-to-date materials to help spread awareness about the importance of online safety and digital citizenship, and contains information about the latest cybersecurity pitfalls.

7M+

views in 2020 of WGBH PBS KIDS "Search It Up", 2021 winner of NETA's Annual Public Media Awards for Best Short Form.

In collaboration with Internet Essentials, WGBH produced, **"Search It Up" A Mini-Series About Kids and Technology**, featuring nine unscripted, live-action, short-form videos where children explore online safety and best practices for Internet use. **Click here** to view.

What's Next

In 2020, Comcast's Internet Essentials launched the Impact summits, a series of national and regional virtual convenings, bringing thought leaders, public officials, subject matter experts, and nonprofit partners together to discuss digital equity and the challenges related to COVID-19.

The first in a series of virtual convenings, the Impact Summit in March 2020 amassed the knowledge, experience, and skills of our partners to drive greater impact in the communities we serve. The event focused on three areas—education, workforce development, and healthcare—for Internet Essentials to understand its impact and refine its outreach and partnership strategies.

Our second event, the Impact on Education Summit, held in the fall of 2020, focused on discussing and disseminating best practices for communities across the country to ensure every student, teacher, and school has the tools necessary to create a high-quality online learning experience. Soon after, a series of virtual regional summits were held which also focused on best practices for communities across the country such as K-12 education, veterans, telemedicine, and seniors.

We plan to continue in 2021 with events that explore our efforts to bridge the digital divide in education as well as in other areas including online safety and workforce development.

KEY INSIGHTS WE LEARNED

Click here to download our **Impact Summit Recap Report.**

1. One of the most impactful roles Comcast can play is as a convener for business, government, and nonprofits, all working to close the digital divide.

2. Connectivity is seen by our partners as only a part of a multi-pronged solution to economic mobility, driving education equity, improving healthcare outcomes, and generating innovation.

3. Even as Internet Essentials expands its scope and reach, we must continue to build and strengthen our partnerships and constantly refine our strategy to ensure the possibilities of the Internet are available to as many people as possible.

STRAWBERRY MANSION

Philadelphia's Strawberry Mansion High School received a grant from Comcast in 2020 to support its performing arts program. All 180 students also received free iPads along with 12 months of free Internet Essentials service.

IMPACT ON EDUCATION

MAURICE

Maurice Douyon, Internet Essentials customer and Florida Community Christian freshman, received a scholarship from Comcast in 2020 to help him achieve his academic dreams.

Commitment to Digital Equity

Since the program's inception a decade ago, Internet Essentials has connected more than 10 million people across the country to low-cost, high-speed Internet at home, and provided free digital skills training and subsidized devices. However, our commitment to addressing digital inequities in underrepresented communities extends beyond this work. That is why we are pledging to invest more than $1 billion over the next 10 years to empower an additional 50 million low-income Americans with the tools and resources necessary to succeed in today's digital world. We will continue working hand-in-hand with our network of community partners across the country as we accelerate our goals to innovate and expand upon the Internet Essentials program.

"Advancing digital equity has been core to our company's DNA and it's an issue we've recommitted to during this critical time. Our mission is to create a more connected and equitable society. That begins with ensuring that every student—and adult—has access to the training and education resources they need to build a brighter future.

Brian L. Roberts
Chairman & CEO
Comcast Corporation

$1B

committed by Comcast over the next 10 years to the critical work of advancing digital equity.

50M

Americans empowered to take advantage of a world of knowledge and opportunity through our initiatives by 2031.

Ummi, customer

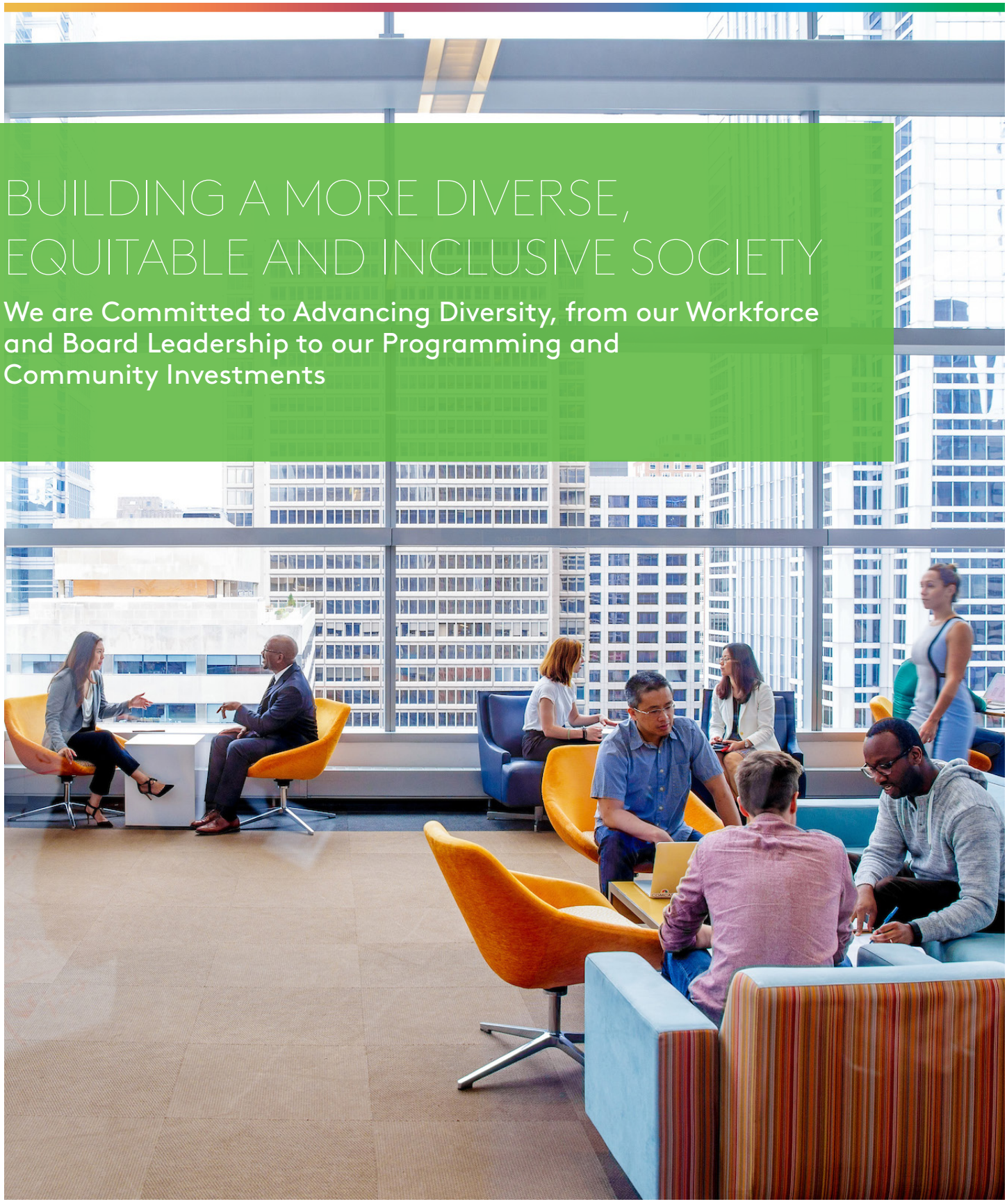
Lift Zone at the Boys & Girls Club in Miami

1-855-8-INTERNET (1-855-846-8376)
1-855-SOLO-995 (1-855-765-6995)
InternetEssentials.com | es.InternetEssentials.com

10 YEARS internet essentials

COMCAST

COMCAST



BUILDING A MORE DIVERSE, EQUITABLE AND INCLUSIVE SOCIETY

We are Committed to Advancing Diversity, from our Workforce and Board Leadership to our Programming and Community Investments

Comcast NBCUniversal embraces diversity of background, culture, and experience throughout every aspect of our business — from the people who power our teams to the products we create, the stories we tell, and the organizations we support. We believe that a diverse, equitable, and inclusive company is also a more innovative and successful one.

Our Multi-Year $100 Million Plan to Advance Social Justice

In the wake of growing public focus on issues of racial justice and equality in 2020, we pledged an additional $100 million to fight injustice and inequality. We also announced Dalila Wilson-Scott as our new Chief Diversity Officer to spearhead our Diversity, Equity, and Inclusion initiatives. We are partnering with, and providing significant grants to, organizations working to promote equity and inclusion. We are also accelerating our internal efforts in all areas of Diversity, Equity & Inclusion — including employee advancement, hiring, and training as well as highlighting underrepresented voices on our media platforms. We continue to deepen our long-standing commitment to promoting digital equity and supporting small businesses owned by people of color that have been affected by extended closures in the wake of COVID-19.

Our Longstanding Commitment to Diversity, Equity & Inclusion

Our company-wide **Diversity, Equity & Inclusion (DE&I)** initiatives are embedded in our business and culture and are shaped by our close and long-standing partnerships with many of the nation's leading civil rights organizations. Further, we commit to measurable goals in our board representation and governance, our programming, workforce, supplier diversity, and our community investment.

We also work in close partnership with our **Joint Diversity Advisory Council (JDC)**, which we founded a decade ago and which is composed of civil rights and political leaders representing the African American, Asian Pacific American, Hispanic, Native American, LGBTQ, military communities, women, and people with disabilities. These leaders monitor our progress and provide counsel on our DE&I initiatives. Nearly a decade after its founding, the JDC remains the largest external diversity council in corporate America, by a large margin.

Recognized as One of America's Most Inclusive Employers

Fortune: One of America's 20 Best Employers for Diversity in 2020

Fortune: One of America's 25 Best Large Workplaces for Women in 2020 and one of America's 30 Best Workplaces for Diversity in 2019

DiversityInc: #7 Company for Diversity in 2020

People Magazine: Named to "50 Companies that Care" list for the 3rd straight year in 2020

Human Rights Campaign: Received a score of 100 for "Best Places to Work for LGBTQ Equality" in 2020

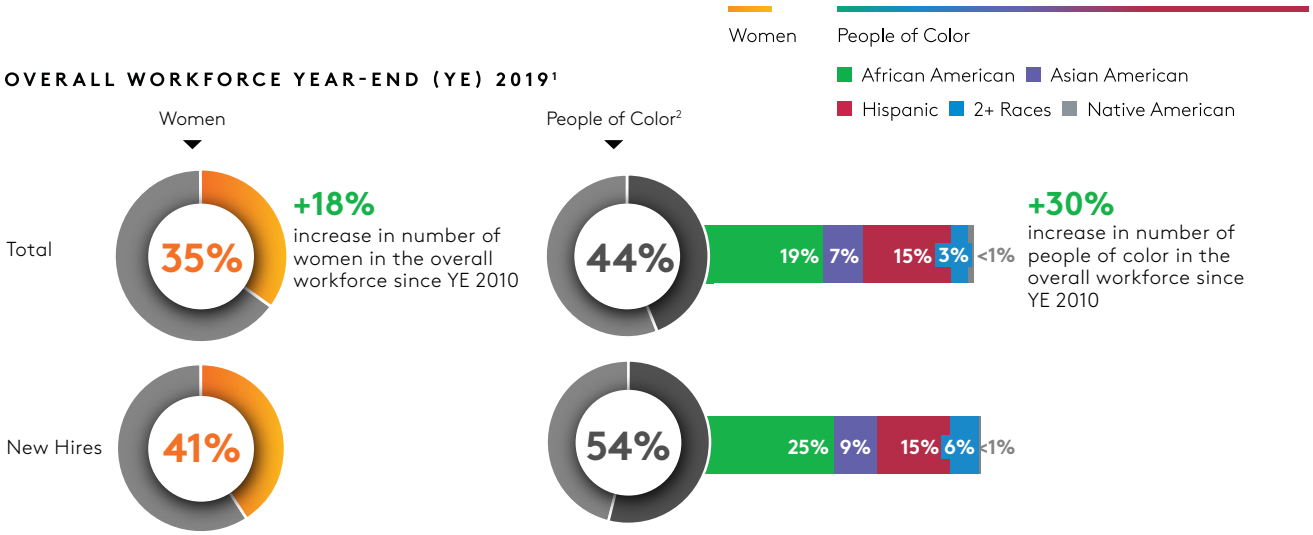
Disability Equality Index: Received a score of 100 for "Best Places to Work for Disability Inclusion" in 2020

Hispanic Association of Corporate Responsibility: Recognized as a "5-Star Company" on the 2020 Corporate Inclusion Index

Military Times: #1 Ranked Company on MT's "Best for Vets: Employers" 2020 List

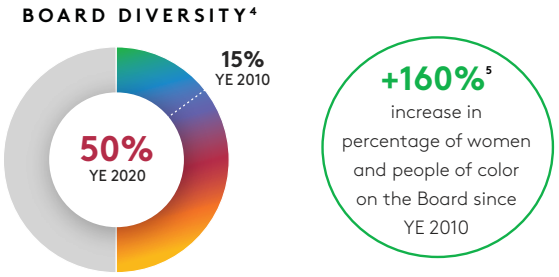
Building a Diverse and Inclusive Workforce

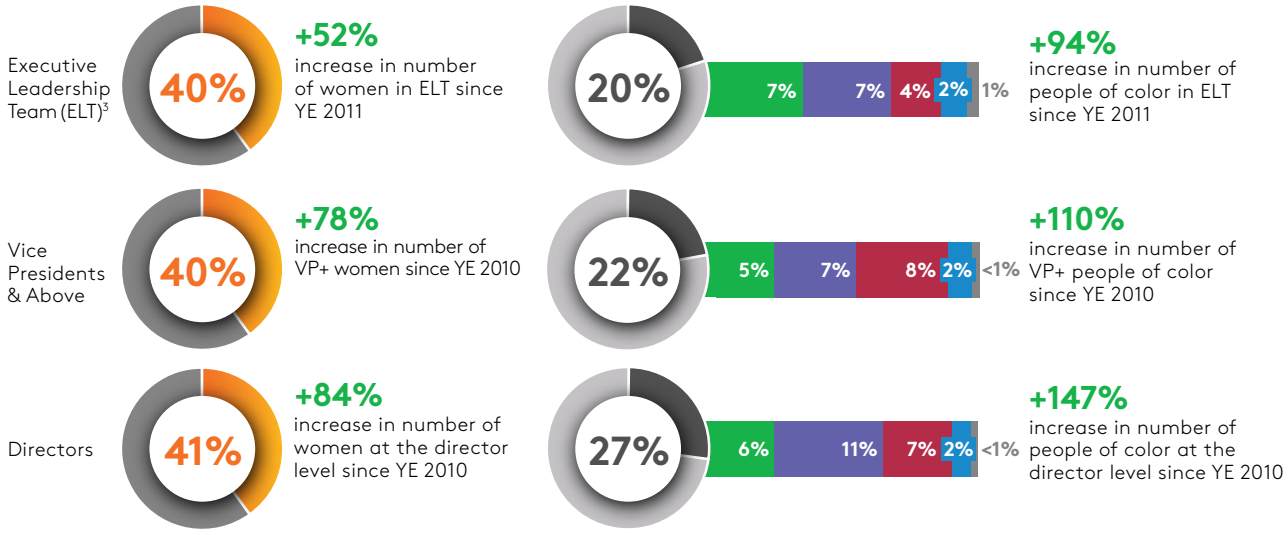
We are proud that our workforce composition reflects the diversity of the communities we serve. In 2019, 62% of our workforce and 71% of new hires were women or people of color. Currently, 50% of our board of directors are women or people of color.



GOVERNANCE

Our commitment to diversity starts at the top, with our Board of Directors. The diversity of our Board has nearly tripled since YE 2010.





1 Workforce metrics are reflective of our U.S. full-time employees.
2 Ethnic diversity numbers may not sum to total due to rounding.
3 Our Executive Leadership Team includes the CEOs and their first- and second-level direct reports
4 "Diversity" data refer to people of color and women, without double-counting women of color.
5 Throughout this document, changes in percentage representation refer to the growth rate of percentage representation between a starting point and an ending point. For example, an increase from 10% to 15% is a growth rate of +50%.

A Commitment to Diverse Storytelling Across Our Platforms

We lead the entertainment industry in empowering diverse content creators and using our storytelling platforms to deliver programming that represents the audiences we serve and features stories and diverse casts that reflect real life experiences in diverse communities. We carry more than 100 diverse networks on Xfinity platforms, and we offered more than 24,000 hours of diverse content on our on-demand and online platforms in 2019.

Further, we also curate easy-to-browse special content collections on our X1 platform featuring thousands of hours of culturally relevant programming.

Recent X1 content collections include:

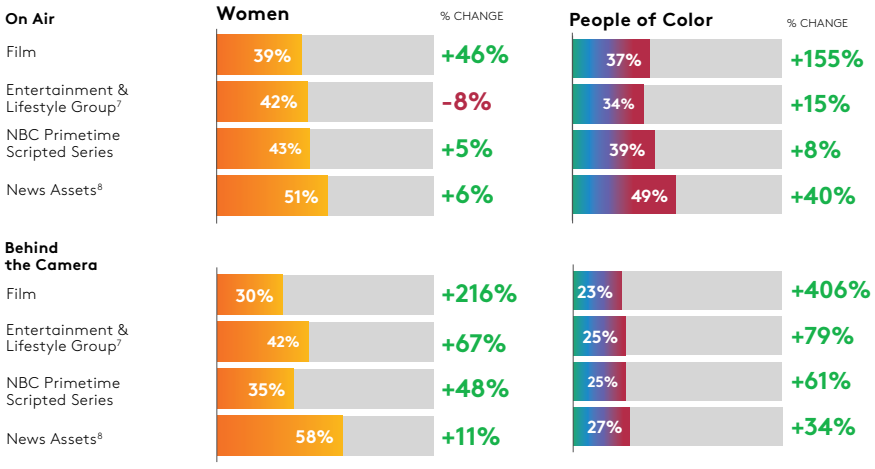
- **Black Voices. Black Stories.** — A collection of bold movies, documentaries, TV series, and specials reflecting the country's long history of racial discrimination and injustice, designed to educate and drive awareness.
- **Echando Pa'lante Juntos** — Thousands of hours of programming designed to amplify and celebrate Latinx voices and Hispanic culture, history, and community.
- **Native American Heritage Month Content Collection** — Movies, programs, and documentaries that pay tribute to Native American culture and history, including popular Native American dramas, thrillers, and westerns.

Additionally, this year we've entered into multiple content partnerships with diverse content creators including Lebron James, Ava DuVernay, Sean Combs, Justin Lin, and Tanya Saracho.

Expanding Diversity in Front of and Behind the Camera

At Comcast NBCUniversal, we take pride in creating opportunities in the media industry for women and people of diverse backgrounds and experiences — both in front of and behind the camera.

NBCUNIVERSAL DIVERSITY YE 2019[6]



** Increases and decreases next to each graph represent the growth rate of percentage representation. For women the numbers reflect the growth rate since YE 2013; for people of color they reflect the growth rate since YE 2010.
† Entertainment & Lifestyle Group includes USA and Syfy.
◊ News assets includes NBC News, MSNBC, CNBC, and NBC-owned stations, but does not include Telemundo Network News or Telemundo stations.

Addressing Digital Inequities

Our **Internet Essentials** broadband adoption initiative, launched in 2011, has connected more than 8 million low-income individuals to residential broadband — more than 90 percent of whom were not previously connected. The NAACP has hailed Internet Essentials as "the largest experiment ever attempted to close the digital divide."

In response to the unprecedented COVID-19 emergency, we've built on the success of Internet Essentials to launch the **Internet Essentials Partnership Program (IEPP)**, a new initiative that works with school districts, local government, and philanthropic partners to get unconnected students online at home.

In 2020, Comcast also launched **Lift Zones**, a cooperative effort with local community and government leaders to open 1,000 WiFi-connected facilities in community centers nationwide. These centers offer students free connectivity, digital literacy training, and support for online learning.

Since September, we've announced new partnerships with organizations that share our commitment to creating a more connected and equitable world, helping to provide critical skills training to youth and adults to ensure everyone has the opportunity to succeed. Examples include:

- **Saga Education:** We partner with Saga Education to bring their world-class tutoring online and invested in the organization to help expand their reach and impact.
- **Coded by Kids:** We support Coded by Kids, whose founder and CEO Sylvester Mobley and team recently launched OnE Philadelphia — a new initiative focused on transforming the city into a pipeline for high-level tech talent and tech startup leaders in communities of color in Philadelphia.

Building a Diverse Supply Chain

Since 2011, Comcast NBCUniversal has spent over $25 billion with diverse Tier 1 and Tier 2 businesses owned by women, people of color, veterans, individuals with disabilities, and members of the LGBTQ community members.

In that time, we've quadrupled our annual spending with diverse Tier I suppliers (vendors). We've also increased our spending with Tier II suppliers (subcontractors) by 221% since launching our Tier II program in 2012. We're proud to work with more than 3,000 diverse suppliers.

Comcast NBCUniversal Supplier Diversity at a Glance

$22.7B
spent with diverse Tier I suppliers since 2011

$2.9B
spent with diverse Tier II suppliers since 2012

3K+
diverse suppliers

Comcast RISE: Helping BIPOC-Owned Businesses Impacted By Covid

The COVID-19 pandemic decimated many minority-owned businesses. The National Bureau of Economic Research reported that just between February and April 2020, the number of active Black-owned businesses declined by 41%, Latinx-owned businesses declined by 32%, and Asian-owned businesses dropped by 25%, versus just 21% for the general population.

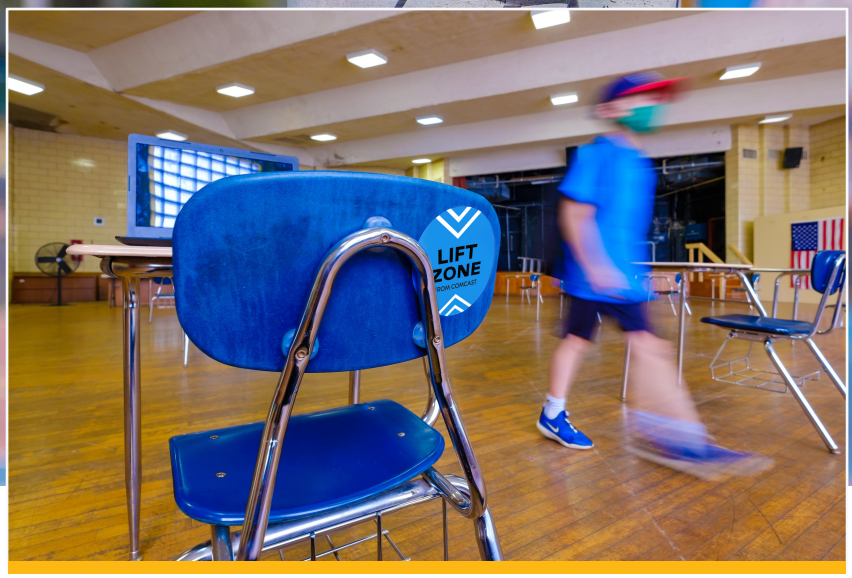
We recently announced Comcast RISE, a multi-year initiative to help thousands of small businesses impacted by COVID-19. Beginning in November 2020, all Black, Indigenous, and People of Color (BIPOC) business owners will be eligible to apply for Comcast RISE.

Through this initiative, we will give meaningful support to the small businesses that are shaping our communities, including:

- Advertising and marketing consultations
- Production of a 30-second TV commercial
- A 90-day TV advertising campaign
- Computer equipment and Internet, voice, and cybersecurity services for 12 months
- Monetary Grants

For more information:

- Comcast's 2020 Values Report
- Comcast Values: Diversity, Equity & Inclusion
- Comcast CEO Brian Roberts' open letter announcing our new $100 million commitment to fight inequality and injustice



What are **Lift Zones**?

In September of 2020, Comcast announced a multiyear program to launch more than 1,000 WiFi-connected “Lift Zones” in community centers nationwide for anyone to use, including students, adults, seniors, and veterans. We have since accelerated that commitment to establish 1000+ Lift Zones by the end of this year.

The COVID-19 crisis has put many low-income students at risk of being left behind and has accelerated the need for comprehensive digital equity and Internet adoption programs to support them. Lift Zones are designed to help those students who, for a variety of reasons, are unable to participate in distance learning at home.

This initiative will provide free hotspot connectivity, and also access to hundreds of hours of educational and digital skills content to help families and site coordinators navigate online learning. Lift Zones complement Comcast’s Internet Essentials program, which, since 2011, has helped connect more than 10 million low-income people to the Internet at home. A Lift Zone is a facility primarily designed to help provide low-income students with a safe, clean space to participate in distance learning during the day or to do homework before or after school. However, adults, seniors, and veterans can also use the site for remote work, to look for or apply for a job, or learn digital skills. Hundreds of Lift Zones are already up and running across the country in cities like Baltimore, Chicago, Philadelphia, Denver, Oakland, and the Twin Cities.

To find a Lift Zone near you, please visit:

https://internetessentials.com/learningsearchpage

internet essentials FROM COMCAST

COMCAST

Richmond, Chesterfield, Charles City County & Caroline County

BUNDLED PACKAGES[1,2]

QUAD PLAY PACKAGES

QUAD PLAY PACKAGE PRICING BELOW IS ADDITIONAL TO TRIPLE PLAY PACKAGE PRICING

with Xfinity Home Security add[26]	$30.00
with Xfinity Home Security Plus add[27]	$40.00

TRIPLE PLAY PACKAGES[42]

Standard+ More Includes Limited Basic, Expanded Basic and HD programming for primary outlet, 20 Hour DVR Service, Performance Pro Internet and Unlimited Voice	$130.99
SurePrice[37]	$124.99
- with Gigabit Pro Internet upgrade add[38]	$235.00
- with Xfinity Mobile save	$-10.00
- with DVR Service upgrade add	$10.00
- with Premium DVR Service upgrade add	$20.00
- with Blast! Internet upgrade add	$20.00
- with Extreme Pro Internet upgrade add	$25.00
- with Gigabit Internet upgrade add	$30.00
Select+ More Includes Limited Basic, Expanded Basic, Digital Preferred Tier and HD programming for primary outlet, DVR Service, Extreme Pro Internet and Unlimited Voice	$159.99
SurePrice[37]	$134.99
- with Gigabit Pro Internet upgrade add[38]	$235.00
- with Xfinity Mobile save	$-10.00
- with Premium DVR Service upgrade add	$10.00
- with Gigabit Internet upgrade add	$30.00
Signature+ More Includes Limited Basic, Expanded Basic, Digital Preferred Tier, Epix, and HD programming for primary outlet, Premium DVR Service, Gigabit Internet, Unlimited Voice and Netflix Standard HD Plan	$189.99
SurePrice[37]	$164.99
- with Gigabit Pro Internet upgrade add[38]	$235.00
- with Xfinity Mobile save	$-10.00
- with Netflix Premium UHD Plan upgrade add	$4.00
Super+ More Includes Limited Basic, Expanded Basic, Digital Preferred Tier, Epix, HBO Max, Showtime, TMC, More Sports & Entertainment Package and HD programming for primary outlet, Premium DVR Service, Gigabit Internet, Unlimited Voice and Netflix Standard HD Plan	$199.99
SurePrice[37]	$184.99
- with Gigabit Pro Internet upgrade add[38]	$235.00
- with Xfinity Mobile save	$-10.00
- with Netflix Premium UHD Plan upgrade add	$4.00

DOUBLE PLAY PACKAGES[36]

Choice Double Play[39] Includes Choice Limited TV and Performance Internet	$89.99
- with DVR Service upgrade add	$10.00
- with Premium DVR Service upgrade add	$20.00
- with Performance Pro Internet upgrade add	$15.00
- with Blast! Internet upgrade add	$20.00
- with Extreme Pro Internet upgrade add	$25.00
- with Gigabit Internet upgrade add	$30.00
- with Gigabit Pro Internet upgrade add[38]	$235.00
Standard+ Includes Limited Basic, Expanded Basic and HD programming for primary outlet, 20 Hour DVR Service, and Performance Pro Internet	$110.99
- with DVR Service upgrade add	$10.00
- with Premium DVR Service upgrade add	$20.00
- with Blast! Internet upgrade add	$20.00
- with Extreme Pro Internet upgrade add	$25.00
- with Gigabit Internet upgrade add	$30.00
- with Gigabit Pro Internet upgrade add[38]	$235.00
Select+ Includes Limited Basic, Expanded Basic, Digital Preferred Tier and HD programming for primary outlet, 20 Hour DVR Service, and Blast! Internet	$139.99
- with DVR Service upgrade add	$10.00
- with Premium DVR Service upgrade add	$20.00
- with Extreme Pro Internet upgrade add	$25.00
- with Gigabit Internet upgrade add	$30.00
- with Gigabit Pro Internet upgrade add[38]	$235.00
Signature+ Includes Limited Basic, Expanded Basic, Digital Preferred Tier, Epix, and HD programming for primary outlet, DVR Service, Extreme Pro Internet, and Netflix Standard HD Plan	$169.99
- with Premium DVR Service upgrade add	$10.00
- with Netflix Premium UHD Plan upgrade add	$4.00
- with Gigabit Internet upgrade add	$30.00
- with Gigabit Pro Internet upgrade add[38]	$235.00
Super+ Includes Limited Basic, Expanded Basic, Digital Preferred Tier, Epix, HBO Max, Showtime, TMC and HD programming for primary outlet, DVR Service, Extreme Pro Internet, and Netflix Standard HD Plan	$189.99
- with Premium DVR Service upgrade add	$10.00
- with Netflix Premium UHD Plan upgrade add	$4.00
- with Gigabit Internet upgrade add	$30.00
- with Gigabit Pro Internet upgrade add[38]	$235.00

XFINITY TV[1]

BASIC SERVICES

Limited Basic[7]	$22.95
Broadcast TV Fee[20]	$17.10
Expanded Basic[9] Includes Kids & Family, Entertainment and Sports & News	$44.32

XFINITY TV SERVICES

Choice Limited TV[33] Includes Limited Basic, Streampix, 10 hours DVR Service and HD programming	$30.00
Choice TV[34] Includes Limited Basic, Streampix, 20 hours DVR Service, HD programming and Broadcast TV Fee	$30.00
- with TV Box	$37.50
Genre Packs[24] Choose up to 2	
Kids & Family Includes kid and family-friendly channels including Disney Channel, Nickelodeon and Universal Kids	$10.00
Entertainment Includes entertainment channels including A&E, AMC, Bravo, Food Network, FX, TNT and VH1	$15.00
Sports & News Includes sports and news channels including CNBC, CNN, ESPN, Golf, MSNBC and NBC Sports	$30.00
Extra Includes Limited Basic, Expanded Basic, access to Pay-Per-View and On Demand programming and Music Choice	$67.27
Digital Preferred Tier[12] Includes over 65 channels including CBS College Sports, Destination America, Disney XD and Science Channel	$17.95

Digital Preferred Tier plus One Premium Includes Digital Preferred Tier and choice of Showtime, Cinemax, or The Movie Channel	$29.95
Digital Preferred Tier with HBO Max Includes Digital Preferred Tier and HBO Max	$32.94
Digital Premier Tier Includes Digital Preferred Tier, HBO Max, Showtime, Epix, Hitz and The Movie Channel	$64.95
More Sports & Entertainment Package[12] Includes over 15 channels including NFL Red Zone, ESPNews and TCM	$9.95
Deportes[9] Includes over 6 deportes channels including ESPN Deportes, FOX Deportes and NBC Universo	$5.00
Xfinity TV Latino [9] Includes over 50 channels of Spanish language programming	$17.95
With Choice Double Play or Standard, Select, Signature, Super Double or Triple Play Packages	$10.00
HBO Max[9]	$14.99
HBO[9]	$15.00
Showtime[9]	$12.00
Starz[9]	$8.99
Cinemax[9]	$12.00
The Movie Channel[9]	$12.00
Epix[23]	$5.99
Playboy[9]	$15.00
HD Technology Fee[8]	$9.95
DVR Service[32]	$10.00
Premium DVR Service[40]	$20.00
Service to Additional TV[11]	$7.50
with DVR Service	$17.50
with CableCARD or compatible customer owned device[25]	$0.00
Service to Additional TV with TV Adapter[10]	$7.50

INTERNATIONAL SELECTIONS[29]

ART: Arabic	$9.99
TV Globo: Brazilian	$19.99
Brazilian 2 Pack Includes TV Globo and SporTV	$24.99
Brazilian 4 Pack Includes TV Globo, SporTV, Band Internacional and Record TV	$34.99
Mandarin 2 Pack Includes Phoenix Info News and Phoenix North America	$6.99
Mandarin 4 Pack Includes CTI Zhong Tian, CCTV4, Phoenix Info News and Phoenix North America	$19.99
Filipino 2 Pack Includes GMA Pinoy w/ GMA Video On Demand and GMA Life	$14.99
Filipino 3 Pack Includes GMA Pinoy w/ GMA Video On Demand, GMA Life and TFC	$22.99
TV5MONDE: French With Cinema On Demand	$9.99
DW Deutsche +: German	$9.99
Antenna: Greek	$14.99
The Israeli Network	$19.99
Rai Italia: Italian	$9.99
Italian 2 Pack Includes Rai Italia and Mediaset	$14.99
TV JAPAN	$24.99
SIC: Portuguese	$9.99
Portuguese 2 Pack Includes RTPi and SIC	$14.99
Impact TV: Russian Add-on With any International package	$6.99
Russian 2 Pack Includes Channel One Russia and NTV America	$14.99
Russian 4 Pack Includes Channel One Russia, RTN, TV1000 Russian Kino and NTV America	$26.99
Russian 5 Pack Includes Channel One Russia, RTVi, NTV America, RTR-Planeta and Rossiya 24	$26.99
Russian 8 Pack includes Channel One Russia, RTN, RTVI, TV1000 Russian Kino, NTV America, RTR-Planeta, Rossiya 24 and CTC	$34.99
Willow: Cricket Add-on With any International package	$6.99
Willow: Cricket	$14.99
Zee TV: Hindi	$14.99
SET: Hindi	$14.99
Hindi 2 Pack Includes Zee TV and SET	$24.99
Hindi Pack Includes Zee TV, SET, TV Asia and NDTV 24x7	$29.99
Hindi Plus Pack Includes Zee TV, SET, TV Asia, NDTV 24x7, Eros Now and Willow	$39.99
SBTN: Vietnamese	$14.99
TVB Jade: Cantonese	$10.99
Record TV: Brazilian	$14.99
ABP News: Hindi	$7.99
TFC: Filipino	$11.99

PAY-PER-VIEW AND ON DEMAND SUBSCRIPTION SERVICES

Eros Now On Demand[31]	$12.99
Eros Now On Demand[31] w/a South Asian international selection	$9.99
here! TV On Demand[31]	$7.99
Filipino On Demand[31]	$7.99
Filipino On Demand[31] w/a Filipino international selection	$5.99
The Jewish Channel On Demand[31]	$6.99
Kidstream On Demand[31]	$4.99
History Vault On Demand[31]	$4.99
Gaiam TV Fit & Yoga On Demand[31]	$7.99
Grokker Yoga Fitness On Demand[31]	$6.99
UP Faith and Family On Demand[31]	$5.99
Lifetime Movie Club On Demand[31]	$3.99
Anime Network On Demand[31]	$6.99
Stingray Karaoke On Demand[31]	$6.99
DOGTV On Demand[31]	$4.99
Gaia On Demand[31]	$11.99
AMC + On Demand[31]	$6.99
Stingray Classica On Demand[31]	$6.99
TumbleBooksTV On Demand[31]	$4.99
FitFusion On Demand[31]	$6.99
CuriosityStream On Demand[31]	$2.99
PlayKids On Demand[22]	$6.99
MagellanTV History On Demand[22]	$5.99
Disney Story Central On Demand[31]	$4.99
Acorn TV On Demand[31]	$5.99
Daily Burn On Demand[22]	$14.99
Xive TV On Demand[22]	$4.99
Quark On Demand[22]	$4.99
Stephens Drum Shed On Demand[22]	$4.99
Pro Guitar Lessons On Demand[22]	$4.99
Touchfit TV On Demand[22]	$4.99
Lion Mountain TV On Demand[22]	$3.99
Craftsy On Demand[31]	$7.99
WE tv + On Demand[31]	$5.99
The Great Courses Signature On Demand[22]	$7.99
DJAZZ On Demand[22]	$6.99
Pantaya On Demand[31]	$5.99
Outside TV Features On Demand[22]	$4.99
The Reading Corner On Demand[22]	$3.99
Hopster On Demand[22]	$6.99
Ride TV On Demand[22]	$4.99
Brown Sugar On Demand[22]	$3.99
Echoboom Sports On Demand[22]	$5.99
Stingray Qello On Demand[22]	$7.99
GOLFPASS On Demand[22]	$4.99
Hallmark Movies Now On Demand[22]	$5.99
Dove Channel On Demand[22]	$4.99

Kocowa On Demand[22]	$6.99
WHAM On Demand[22]	$2.99
Gravitas Movies On Demand[22]	$4.99
MHz Choice On Demand[22]	$7.99
Hi-YAH! On Demand[22]	$2.99
True Royalty On Demand[22]	$5.99
Real Vision On Demand[22]	$14.99
Docurama On Demand[22]	$4.99
Con TV On Demand[22]	$4.99
Walter Presents On Demand[22]	$6.99
Dekkoo On Demand[22]	$9.99
ZooMoo On Demand[22]	$2.99
Miniteve On Demand[22]	$1.99
WildBrain On Demand[22]	$5.99
Cinemoi On Demand[22]	$2.99
Fox Nation On Demand[31]	$5.99
Wanderlust On Demand[22]	$9.99
Music Choice Karaoke On Demand[22]	$6.99
Music Choice Relax On Demand[22]	$5.99
Curious World On Demand[22]	$3.99
kweliTV On Demand[22]	$5.99
Marquee TV On Demand[22]	$8.99
Passionflix On Demand[22]	$5.99
Conspiracy TV On Demand[22]	$4.99
FlixFling On Demand[22]	$7.99
A&E Crime Central On Demand[22]	$4.99
CultFlix On Demand[22]	$4.99
CineFest On Demand[22]	$4.99
PREMO On Demand[22]	$5.99
MyOutdoorTV On Demand[22]	$9.99
Hitz[28,31]	$12.00
Streampix[18,31]	$4.99
Pay-Per-View and On Demand Movies and Events[3,31] (per title or event)	Prices Vary
Revry On Demand[22]	$6.99
Too Much for TV On Demand[31]	$14.99
Vivid On Demand Subscription[13,31]	$19.99
Hustler On Demand Subscription[13,31]	$19.99
TEN On Demand Subscription[13,31]	$19.99
Urban Fantasy On Demand[13,31]	$19.99
Falcon On Demand[13,31]	$19.99
Homegrown Amateur On Demand[13,31]	$19.99
Evil Angel On Demand[13,31]	$19.99
Mature Lust On Demand[13,31]	$19.99
Penthouse On Demand[13,31]	$19.99
Girlfriends Films On Demand[13,31]	$19.99
Wicked On Demand[13,31]	$19.99
XTSY On Demand[13,31]	$19.99
Arouse On Demand[13,31]	$19.99

SPORTS PACKAGES[30]

MLB Extra Innings	Call 1-800-XFINITY for pricing
NHL Center Ice	Call 1-800-XFINITY for pricing
NBA League Pass	Call 1-800-XFINITY for pricing

XFINITY TV EQUIPMENT

TV Box Limited Basic	$7.10
TV Box	$7.10
Remote	$0.40
HD TV Box Limited Basic	$7.10
TV Adapter (Limited Basic — Primary TV)	$0.00
TV Adapter (Limited Basic — 1st and 2nd Additional TVs)	$0.00
TV Adapter (Limited Basic — 3rd Additional TV)	$0.50
CableCARD (first card in device)	$0.00

INSTALLATION (PER OCCURRENCE UNLESS NOTED)	**Initial Installation of Service**	**After Initial Installation of Service**	
Professional Installation[16,17]	$100.00	N/A	
Self Installation Plus[41]	$39.99	N/A	
In-Home Service Visit[35]	N/A	$70.00	
Hourly Service Charge[16] (Custom Installation)	$50.00	$50.00	
Xfinity Internet Gigabit Pro Professional Installation (per occurrence)			$500.00
Wireless Networking On-Site Professional Set-Up (Separate trip, per occurrence)			$99.95
Wireless Networking On-Site Professional Set-Up (each additional device over 4 devices per occurrence)			$29.95

REACTIVATION
(NO IN-HOME VISIT REQUIRED—PER OCCURRENCE UNLESS NOTED)

Reactivation - TV	$6.00
Reactivation - Internet	$6.00
Reactivation - Voice	$6.00

MISCELLANEOUS (PER OCCURRENCE UNLESS NOTED)

Customer-Owned Video Equipment Credit See www.xfinity.com/equipmentpolicy for additional information	$7.50
Regional Sports Fee[21] (per month)	$4.15
Field Collection Charge Visit to customer's residence required to collect past due balance or unreturned equipment	$30.00
Late Fee	5%
Agent Assisted Payment For payment made by phone with a Customer Care Representative	$5.99
Unreturned or Damaged Equipment Fees[4] (per piece)	Replacement Cost
Getting Started Kit Shipping and Handling (Standard Shipping)	$15.00
Getting Started Kit Shipping and Handling (Priority Shipping)	$29.95

XFINITY VOICE[1,5]

Xfinity Voice—Unlimited	$44.95
With TV and Internet Service	$39.95
Xfinity Voice—Local with More	$34.95
With TV or Internet Service	$24.95

XFINITY INTERNET[1,6]

	Xfinity Internet Service Only	**with Xfinity TV or Voice Service**[19]
Performance Starter	$54.95	$49.95
Performance	$80.95	$64.95
Performance Pro	$95.95	$79.95
Blast!	$100.95	$84.95
Extreme Pro[14]	$105.95	$89.95
Gigabit[14]	$110.95	$94.95
Gigabit Pro[14,15]	$299.95	$299.95
Modem Rental		$14.00
Wireless Adapter (each, one-time charge)		$30.00

Gigabit Pro Activation Fee (per occurrence)	$500.00
Unreturned or Damaged Equipment Fees[4] (per piece, per occurrence)	Replacement Cost

1 *Certain services available separately or as a part of other levels of service. Xfinity services are subject to Comcast's standard terms and conditions of service. Unless otherwise specified, prices shown are the monthly charge for the corresponding service, equipment or package. Prices shown do not include applicable taxes, franchise fees, FCC fees, Regulatory Cost Recovery, Public Access fees, other state or local fees or other applicable charges (e.g., per-call toll or international charges). Prices, services and features are subject to change. If you are an Xfinity TV customer and you own a compatible TV Box or CableCARD device, please call 1-800-XFINITY for pricing information or visit www.xfinity.com/equipmentpolicy. © 2021 Comcast. All rights reserved.*

2 *Requires a compatible modem and TV Box with remote, CableCARD or compatible customer owned device.*

3 *Price of Pay-Per-View and On Demand Movie or Event is displayed prior to the completion of the Pay-Per-View or On Demand ordering process.*

4 *Contact 1-800-XFINITY for questions regarding equipment replacement charges.*

5 *Requires a compatible modem. Unlimited Local and Long Distance package pricing applies only to direct dialed calls from home to locations included in the plan. Plans do not include other international calls. For more information regarding Xfinity Voice pricing go to https://www.xfinity.com/Corporate/About/PhoneTermsOfService/ComcastDigitalVoice/cdvresidential.*

6 *A compatible modem is required. For more information regarding Xfinity Internet go to http://www.xfinity.com/internet-service.html.*

7 *Requires TV Box, TV Adapter, CableCARD or compatible customer owned device.*

8 *Not available to customers with Limited Basic only. Must subscribe to HD Technology Fee to receive HD programming.*

9 *Requires Limited Basic, TV Box, CableCARD or compatible customer owned device.*

10 *Includes TV Adapter and remote. Digital service tier on additional TV corresponds to digital service tier on primary outlet. Does not include access to On Demand content, premium channels or channel numbers above 1000 unless otherwise noted on the channel lineup. Not available to customers with Limited Basic only.*

11 *Includes TV Box. Digital service tier on additional TV corresponds to digital service tier on primary outlet. HD programming requires HD Technology Fee. Not available to Limited Basic only customers*

12 *Requires Extra.*

13 *One month minimum purchase required. Not available in all areas.*

14 *Not available in all areas. May require installation and non-refundable installation charge.*

15 *Requires 2 year contract. Monthly rental of Gigabit Pro cable modem/router additional. Activation and professional installation fees additional. Gigabit Pro does not qualify for Comcast 30-day money back guarantee.*

16 *Standard installation includes installation of service line up to 125 feet from existing Comcast plant for the primary outlet only, except as otherwise required under local franchise agreement. Comcast does not perform custom installations, including installations which require in-wall wiring, wiring in extensive drop ceilings, basements, or crawl spaces.*

17 *Includes standard installation of Xfinity TV, Xfinity Internet and/or Xfinity Voice and installation of additional outlets and wireless networking set-up if requested at time order is placed. Does not include installations of Xfinity TV only, Xfinity Home Security or Xfinity Gigabit Pro Internet.*

18 *Requires Limited Basic and TV Box and remote or compatible customer owned device. Requires HD Technology Fee to receive HD programming.*

19 *Xfinity Internet discount does not apply to Xfinity Instant TV.*

20 *Applies to Limited Basic and Xfinity Instant TV.*

21 *Applies to Extra and above, and Sports & News.*

22 *Requires Limited Basic with X1 TV Box and Xfinity Internet service.*

23 *Requires Limited Basic, HD Technology Fee and TV Box, CableCARD or compatible customer owned device.*

24 *Requires Choice Double Play, Choice Limited TV or Choice TV. Cannot be combined with Limited Basic only.*

25 *Not available to customers with Limited Basic only. Includes a customer-owned video equipment credit. An additional charge will apply for additional CableCARDs in the same device.*

26 *Equipment required at an additional cost. For additional information go to http://www.xfinity.com/homesecurity.*

27 *Includes Xfinity Home Security and 24/7 Video Recording for up to 4 cameras. Equipment required at an additional cost. For more information on 24/7 Video Recording go to http://www.xfinity.com/videorecording.*

28 *Requires Limited Basic TV service and a compatible Xfinity TV Box or customer owned device.*

29 *Requires Limited Basic with X1 TV Box or compatible customer owned device and Xfinity Internet service.*

30 *Requires Limited Basic, HD Technology Fee, X1 TV Box with remote or compatible customer owned device. Sports Package subscriptions can be billed at once or in 4 total payments. Call 1-800-XFINITY to cancel subscription within 30 days of first charge to bill. Charges are non-refundable after 30 days of first charge to bill. Restrictions may apply.*

31 *Requires Limited Basic, TV Box or compatible customer owned device with Xfinity Internet.*

32 *Requires HD Technology Fee and TV Box or compatible customer owned device. DVR Service with compatible customer owned device limited to 60 hours DVR Service.*

33 *Requires TV Box, CableCARD or compatible customer owned device. 10 Hours DVR Service available with X1 TV Box (X1 TV Box requires subscription to one Genre Pack) or compatible customer owned device. Cannot be combined with Xfinity Voice or Xfinity Home Security.*

34 *Requires minimum of Xfinity Performance Internet service and an Xfinity Flex Streaming device. Choice TV available for ordering through the Flex box only. 20 hours DVR Service available with X1 TV Box or compatible customer owned device. Not eligible for multiproduct pricing on Xfinity Internet, Xfinity Voice or Xfinity Home Security.*

35 *Applies to installation, relocation and activation of additional outlets as well as upgrade downgrades of service after initial installation of service and in-home visits. Does not cover installation or in-home visits for Xfinity Home Security.*

36 *20 Hour DVR Service requires Xfinity Internet Service and either an X1 TV Box or compatible customer owned device.*

37 *SurePrice only available for 12 months to customers with Standard+ More, Select+ More, Signature+ More and Super+ More packages after qualifying 12 month promotional pricing.*

38 *Requires 2-year contract. Monthly rental of Gigabit Pro compatible modem/router additional. Activation and professional installation fees additional. Gigabit Pro does not qualify for Comcast 30-day money back guarantee.*

39 *Cannot be combined with Sports & News genre pack.*

40 *Requires Xfinity TV Latino, More Sports & Entertainment Package, Choice TV Double Play with one Genre Pack, Choice TV, or Extra or higher, Xfinity Internet, TV Box or compatible customer owned equipment.*

41 *Includes delivery of up to a total of three Get Started Kits for Xfinity TV, Xfinity Internet, or Xfinity Voice and a network signal test. Requires service address activation for Xfinity services within in the last 2 years. Does not include installation or relocation of outlets, equipment installation, setup or troubleshooting, or installation of Xfinity Home or Xfinity Gigabit Pro Internet.*

42 *20 Hour DVR Service requires Xfinity Internet Service and either an X1 TV Box or compatible customer owned device.*

Xfinity Home Security License Numbers:
AL: *001484, 001504;* **AR:** *12-030;* **AZ:** *ROC 280515, BTR 18287-0;* **CA:** *CSLB 974291, ACO 7118;* **CT:** *ELC 0189754-C5;* **DE:** *FAL-0299, FAC-0293, SSPS 11-123;* **FL:** *EF0000921, EF20001002, EF0001095;* **GA:** *LVU406303, LVU406264, LVU406190, LVU406354;* **IL:** *PACA 127-001503;* **LA:** *F1691;* **MA:** *SS-001968;* **MD:** *107-1776;* **ME:** *LM50017039;* **MI:** *3601206217;* **MN:** *TS674412;* **NC:** *2335-CSA, 29443-SP-FA/LV;* **NJ:** *Burglar and Fire Alarm Business Lic. # 34BF00047700;* **NM:** *373379;* **NY:** *licensed by the N.Y.S. Department of State 12000305421;* **OH:** *LIC# 53-89-1732;* **OR:** *CCB 192945;* **SC:** *BAC-13497, FAC-13440;* **TN:** *ACL 1597, ACL 1604;* **TX:** *ACR-1672104,-1818, B16922, B02571;* **UT:** *8226921-6501;* **VA:** *2705145289, DCJS 11-7361;* **VT:** *ES-02366;* **WA:** *COMCABS892DS;* **WASHINGTON, DC:** *ECS 902687, BBL 602512000005;* **WV:** *WV049211.*

MS: 15018010

Valid 1/1/21. See www.xfinity.com/home-security for current list.

82996000: 0050;0060;0070;0080;0090;0100;0110;0130;0140;1070;1100;1110;1120