

AGENDA

Broadband Advisory Council Virtual Meeting

May 14, 2021

10:00 a.m. to 12:00 p.m.

To access the meeting using video

<https://meet.google.com/xre-rdzh-fpn>

To access the meeting using audio

+1 617-675-4444 PIN: 621 492 128 8377#

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|-------|---|--|
| I. | Opening | |
| | a. Call to Order | Chairman |
| | b. Roll Call | DHCD Staff |
| II. | Consent Agenda | Chairman |
| | a. Approval of Minutes: December 4, 2020 meeting | |
| III. | Commonwealth Connect update | Evan Feinman, Chief Broadband Advisor |
| IV. | Virginia Telecommunication Initiative (VATI) update | Tamarah Holmes, Ph.D,
Director, Office of Broadband |
| V. | FY 2022 VATI Proposed Guidelines | DHCD Staff |
| VI. | Overview of Satellite Internet Broadband | Steve Hill, President
Satellite Broadband and Communications
Association |
| VII. | Public Comment | Chairman |
| VIII. | New Business | Council Members |
| IX. | Adjournment | Chairman |

BROADBAND ADVISORY COUNCIL
 UNAPPROVED MINUTES
 December 4, 2020
 2:00 PM
 Digital Meeting via Google Meets

Members Present

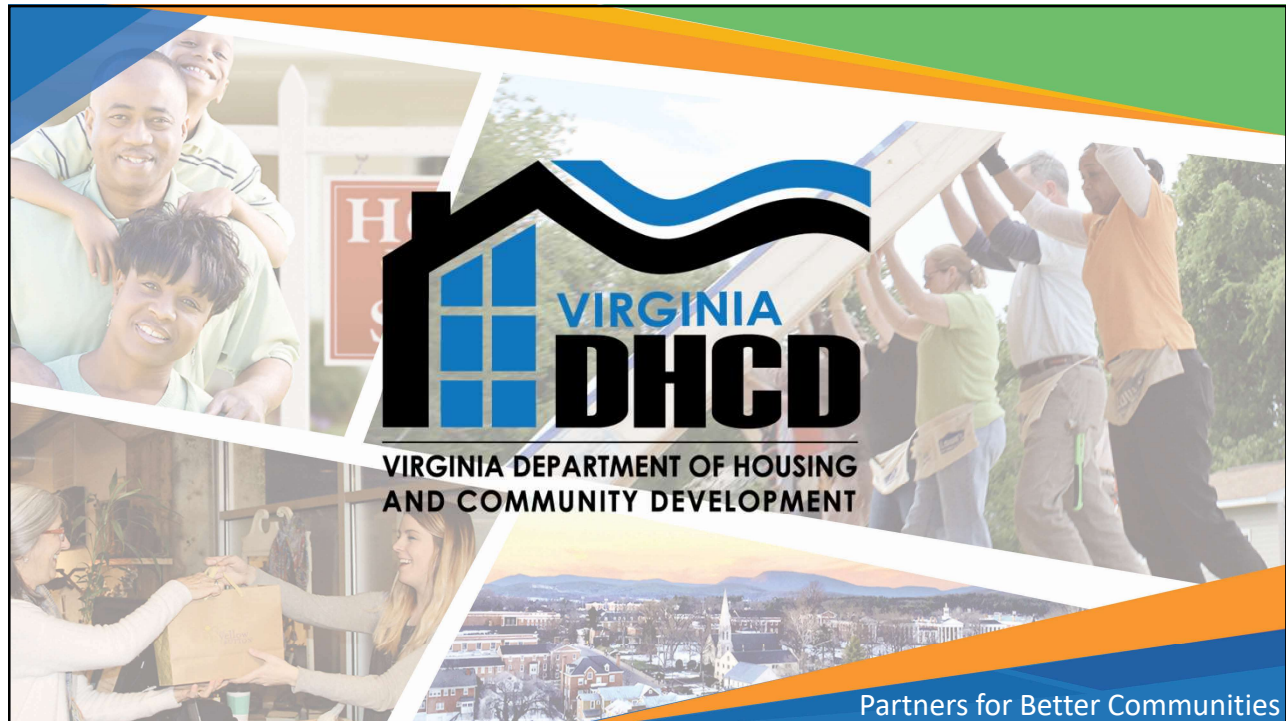
The Honorable Brian Ball (Proxy by Evan Feinman)
 Senator Jennifer Boysko, Chair
 James Carr
 Mike Culp
 Senator Ghazala Hashmi
 Kristie Helmick Proctor
 Delegate Chris Hurst
 Mike Keyser
 Delegate Paul E. Krizek
 Ray LaMura
 Delegate James A. Leftwich, Jr.
 Senator Lynwood W. Lewis, Jr.
 Steve Sandy
 Richard Schollman
 The Honorable Bettina K. Ring
 Delegate Roslyn C. Tyler, Vice Chair
 Senator Lynwood W. Lewis

Members Absent

Call to Order	Senator Jennifer Boysko, Chair of the Broadband Advisory Council, called the meeting to order at 2:02 p.m.
COVID-19 Virtual Meeting Statement	Mr. Chandler Vaughan, Policy Analyst for the Office of Broadband at the Virginia Department of Housing and Community Development (DHCD), announced that due to the Governor's Declared State of Emergency due to COVID-19, it is impracticable and unsafe for the Broadband Advisory Council to assemble in a single location, so the council meeting will be held electronically, by video conference and telephone options, pursuant to 2020 Amendments to the 2020 Appropriation Act. The purpose of the meeting is to discuss or transact the business statutorily required or necessary to continue operations of the Commission on Local Government and the discharge of its lawful purposes, duties, and responsibilities. The public is welcome to use the link and phone number options made available by staff to attend the meeting electronically. The Commission on Local Government will make available a recording or transcript of the meeting on its website in

	accordance with the timeframes established in Sections 2.2-3707 and 2.2-3701.1 of the Code of Virginia.
Roll Call	Mr. Vaughan called the roll and stated that a quorum was present.
Public Comment	<p>Catharine Rice, Chair of the City of Alexandria’s IT Commission, spoke in favor of allowing broadband authorities to apply directly to the Virginia Telecommunications Initiative (VATI) without investment from the private sector.</p> <p>Sherri Neil, Intergovernmental Affairs Manager for the City of Portsmouth, noting the need for broadband access, supported the options of the Broadband Advisory Council that would allow broadband authorities to apply directly to VATI funds without a private sector partner.</p> <p>Pat Coady, resident of the Eastern Shore, noting his experience in broadband infrastructure expansion, spoke in support of allowing broadband authorities to apply for VATI funds without investment from the private sector.</p> <p>David Ludwig, resident of Albemarle County, regarding the items likely to be considered in the 2021 General Assembly Session, spoke in favor of a Dig Once Policy, requiring applicable parties to deploy broadband infrastructure when actively working on their right-of-way.</p>
Approval of Minutes	A motion was made by Mr. Feinman, Chief Broadband Advisor, and properly seconded by Delegate Hurst to approve the minutes of the August 14, 2020 meeting of the Broadband Advisory Council. The motion passed (Yea: Hurst, Leftwich, Krizek, Tyler, Hashmi, Boysko, Lewis, Carr, Proctor, Keyser, LaMura, Sandy, Culp, Schollman, Ring, Feinman; Nay: None)
Overview of Options to Recommend to House Appropriations and Senate Finance and Appropriation Committee Chairs	Mr. Feinman provided an overview of budget language directing the Broadband Advisory Council to evaluate a possible policy change to allow public broadband authorities to apply directly for VATI funds without investment from the private sector. Mr. Feinman also presented potential options to the Broadband Advisory Council concerning the budget language directive.

<p>Budget Language Recommendation</p>	<p>After discussion and several motions that were withdrawn, a motion was made by Delegate Krizek and properly seconded by Steve Sandy to recommend to the House Appropriations and Senate Finance and Appropriation Committee Chairs that they direct the Department of Housing and Community Development to create a pilot program within VATI, with awards not to exceed 10% of total available VATI funds in FY22, to which public broadband authorities may apply without investment from the private sector. The motion passed (Yea: Hurst, Leftwich, Krizek, Tyler, Hashmi, Boysko, Lewis, Carr, Proctor, LaMura, Sandy, Culp, Schollman, Ring, Feinman; Nay: Keyser)</p>
<p>Items likely to be considered in the 2021 Session</p>	<p>Mr. Feinman provided an overview of potential items to be considered in the 2021 legislative session, including:</p> <ul style="list-style-type: none"> • Rail crossings • Municipal broadband • Broadband authorities • Pole attachments • Unserved/Underserved definitions • Mapping
<p>Adjournment</p>	<p>Upon a motion made by Delegate Krizek and seconded by Delegate Leftwich, the meeting was adjourned.</p>



FY2021 VATI Accomplishments

FY2021 Virginia Telecommunication Initiative Requests

- 45 applications
- \$105 million requested

FY2021 Virginia Telecommunication Initiative Awards

- 16 awarded projects over 28 counties
- \$49.2 million awarded
- \$53,997,350 leveraged in local and private investment
- 24,615 Virginians Connected

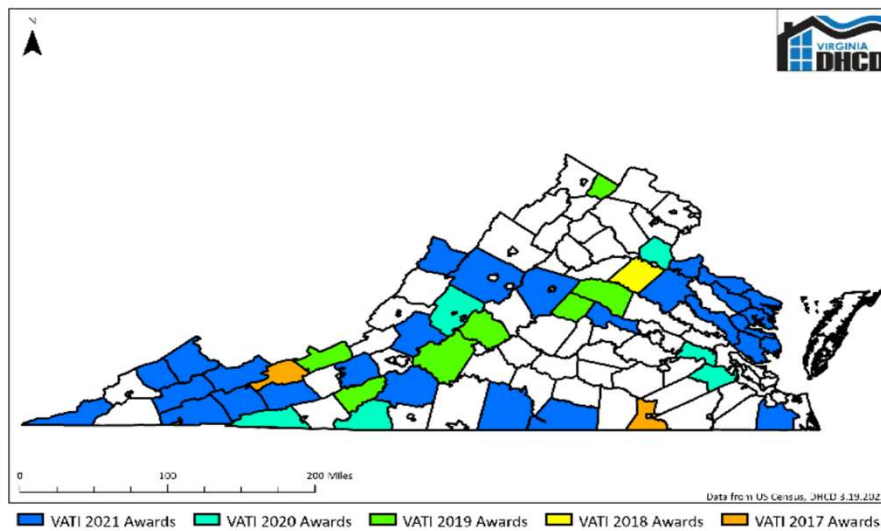
VATI Impact and Demand 2017-2021

- 145 Applications
- \$166,439,630 requested
- \$74 million awarded
- \$86,310,641 leveraged
- 78,035 connections
- 47 projects awarded across 44 localities

Partners for Better Communities



Virginia Telecommunications Initiative (VATI) Grant Awards 2017 - 2021



In some circumstances, localities have received awards for more than one year. The color for each reflects the most recent year for which an award was made. For details on localities that received awards for more than one year, please contact DHCD staff.





**VIRGINIA DEPARTMENT OF HOUSING
AND COMMUNITY DEVELOPMENT**

**2022 Virginia Telecommunication Initiative Guideline
Broadband Advisory Council Consultation**

May 14, 2021

Partners for Better Communities

Provide financial assistance to supplement construction costs by internet service providers to extend services to areas that are presently unserved by any broadband provider.

\$49.7 million in state funding for FY2022 VATI

FY 2022 Virginia Telecommunication Initiative Draft Guidelines and Criteria

- **April 16** – Draft Guidelines Released for Opening of Public Comment Period
- **April 27, 10am-12pm & May 4, 10am-12pm** – Public Input Sessions on Draft Guidelines
- **May 17** – Deadline for submission of Public Comments
- **June 4** – DHCD releases Final Guidelines for the FY2022 VATI Round

- In FY 2022, VATI will implement a one-year pilot program in which public broadband authorities may apply directly for VATI funds without investment from the private sector.
 - Awards shall not exceed 10 percent of total available VATI funds in FY2022.
 - Applications submitted without a private sector co-applicant will be evaluated alongside other applications.

- For a **wireline project**, a proposed project area is considered eligible if 10 percent or fewer of serviceable units have access to service with no additional special construction costs from any provider as of the date of the application.
- For a **wireless project**, a proposed area is considered eligible if 25 percent or fewer of serviceable units have access to service with no additional special construction costs from any provider as of the date of the application.

Areas with service by satellite providers are not considered served under VATI definitions. Therefore, Rural Digital Opportunity Fund (RDOF) areas preliminarily awarded to satellite internet service providers will not be considered as overlap and are allowed be included in VATI applications.

- To accelerate broadband access in RDOF awarded areas, passings in those areas may be included in the VATI application.
 - The auction winner and the VATI co-applicant are the same.
 - All RDOF passings included in a VATI application that is awarded funding must be provided access to broadband service within the VATI contractual period.
 - Each RDOF passing included in a VATI application will be awarded $\frac{1}{4}$ of the scoring value of one VATI passing.

*If RDOF areas are included in a VATI application, that application must achieve functionally **universal coverage** in the county, or counties, in the application.*

- Any RDOF passings for which VATI funds accelerate construction must lead to an **equal number of passings** being completed ahead of RDOF milestones for completion percentage.

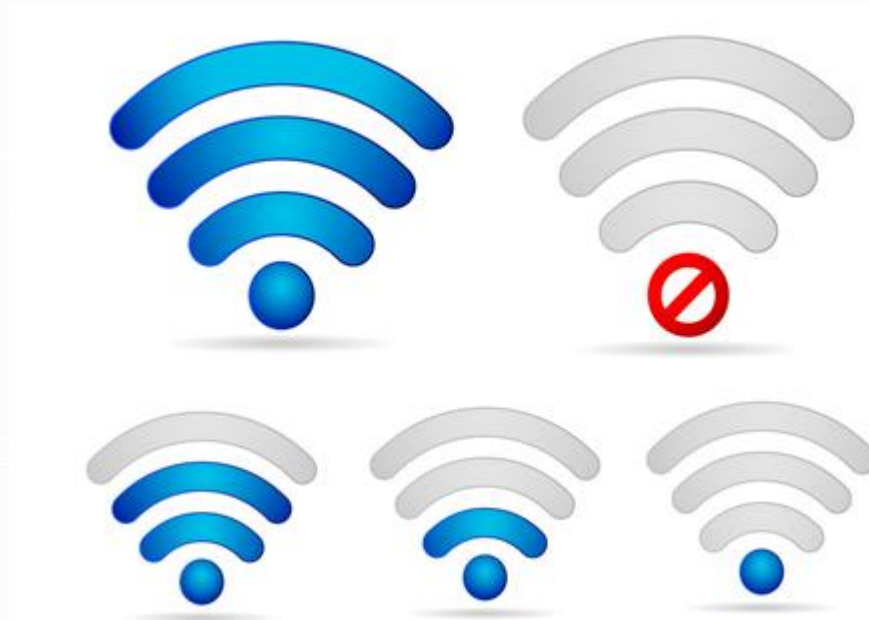
Example Scenario

If an internet service provider(ISP) won 1000 RDOF locations, and had to complete 400 of those by year 3, if 200 RDOF passings are accelerated due to VATI funding, the awarded ISP must have completed 600 passings by year three, barring any agreed contract extensions related to extenuating circumstances.

- Applicants are required to submit point and polygon shapefile(s) of the proposed project area as defined in the guidelines.
- Wireless co-applicants are required to include shapefiles of heat maps indicating projected received signal strength indicator (RSSI) measures in the project area.

Note: *Point and polygon shapefiles submitted with VATI applications are subject to the Freedom of Information Act (FOIA) and will not be provided FOIA exemption. RSSI measures in the project area(s) are eligible for Freedom of Information Act exemption.*

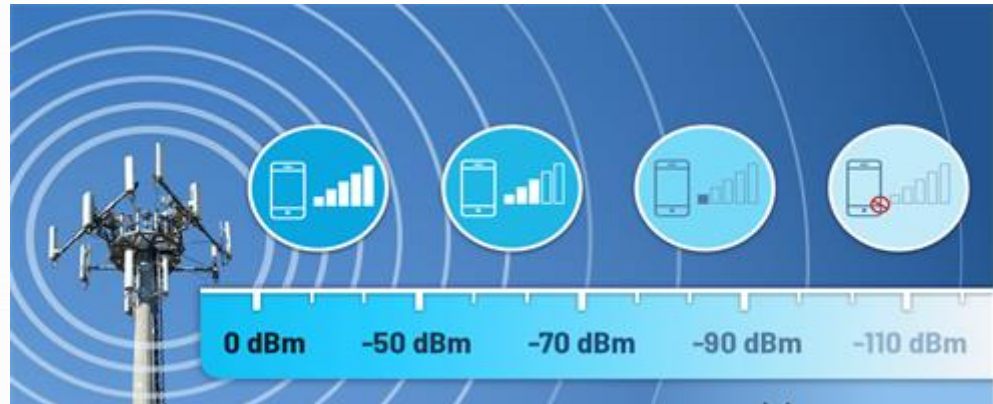
- RSSI: Received Signal Strength Indicator is a measure of power level that a wireless client device is receiving from an access point or router.



Ex: WiFi Signal from strong to weak

Received Signal Strength Indicator

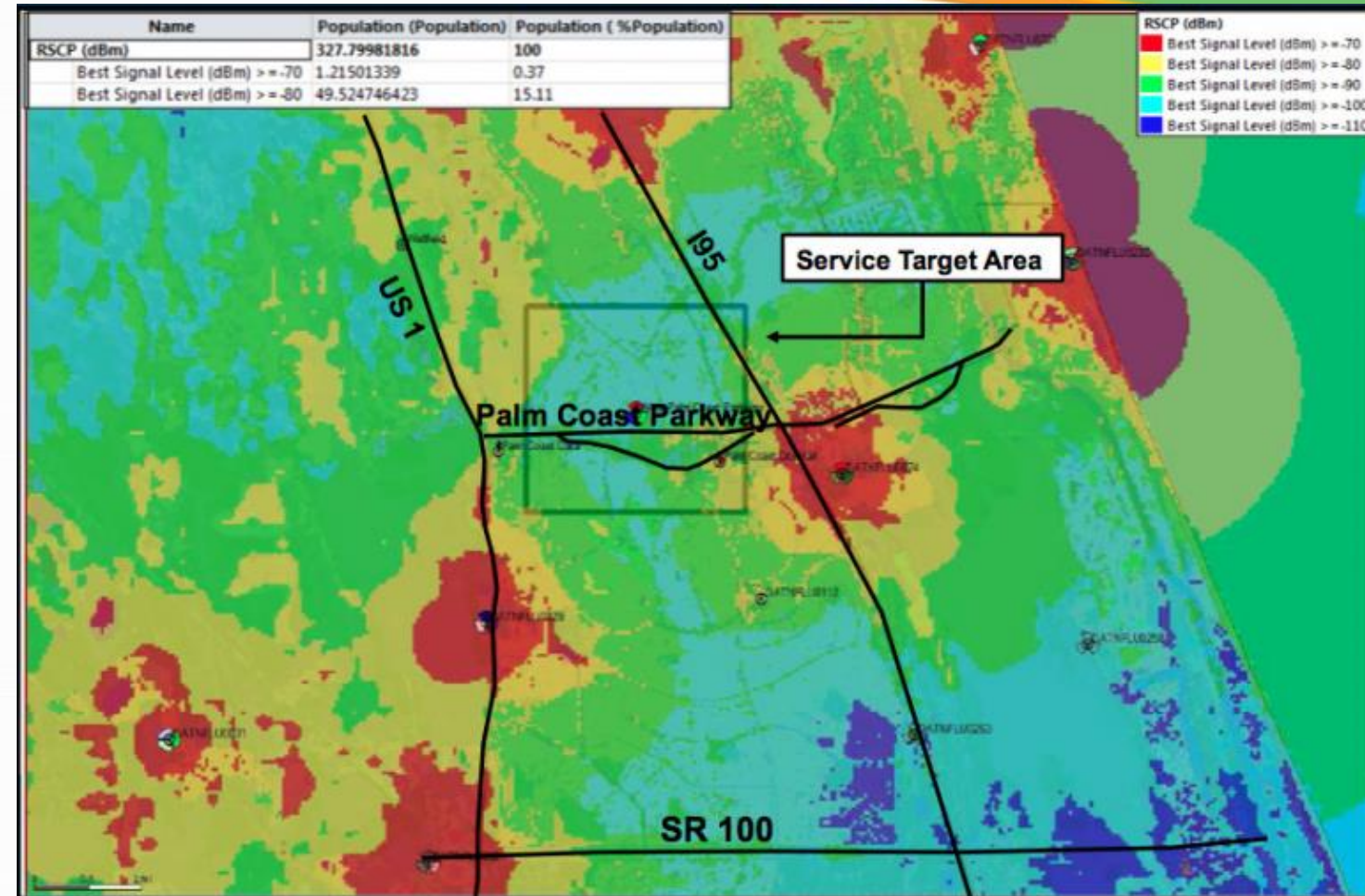
- As the signal travels away from the transmitter (Antenna):
 - The signal becomes weaker
 - And the wireless data rates become slower, leading to a lower overall data throughput.



Signal levels around the tower

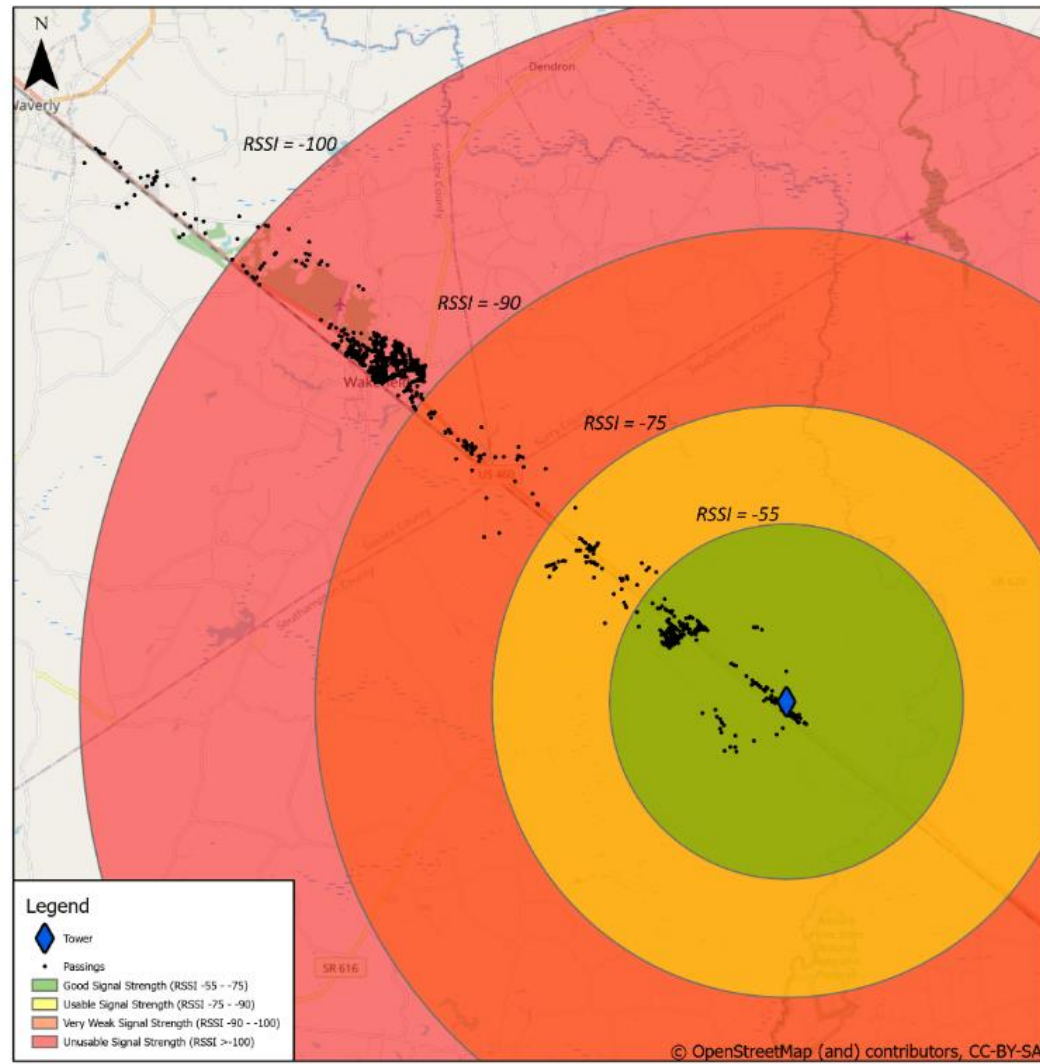
Received Signal Strength Indicator

- RSSI is measured in decibels (dBm) usually ranging from 0 to -120.
- The closer the value to 0 the stronger the signal will be. -55 dBm is considered the best practical signal.



Ex:RSSI Distribution Prediction

Sample RSSI (Signal Strength) Map with Passings



- Levels of -90 dBm and below usually considered unusable signal.
- Indoor best practices for mixed use networks usually see RSSI values of -75 to -80 and for session based networks (Video Conferencing, WiFi calling, etc) - 60 to -65

- Challengers must provide point and polygon shapefile(s) as defined in the guidelines.
 - *Wireless challengers will be required to submit shapefiles of heat maps indicating received signal strength indicator (RSSI) measures in the challenged area.*
- Wireless projects will be allowed to exceed the 25% overlap allowance of existing networks, provided the wireless signal strength, measured in received signal strength indicator (RSSI), is less than -90 in those areas.

It is the determination of DHCD that RSSI measures below -90 are unable to reliably deliver broadband.

Note: *Point and polygon shapefiles, including shapefiles of heat maps indicating RSSI measures submitted by challengers are eligible for FOIA exemption.*

Point Shapefiles – shapefiles that show each proposed passing in the application area as a singular mapped point, in the application or challenged area containing attribute data showing the addresses of each point.

Polygon Shapefiles - shapefiles delineating the general project area(s).

RSSI - Received Signal Strength Indicator, or RSSI, is a measure of power level that a wireless client device is receiving from an access point or router.

Proposed Change – Evaluation Criteria


Category	2021 Points	2022 Points
Project Description and Need	120	85
Project Readiness	60	40
Budget and Cost Appropriateness	70	135
Commonwealth Priorities	50	40
Total	300	300


Next Steps & Contact

- **May 17** – Public Comment Period on Draft Guidelines Closes
- **June 4** – DHCD releases Final Guidelines for the FY2022 VATI Round
- **June 17, 2- 4pm** – VATI How-to-Apply Webinar
- **June 17** – Applications Open
- **TODAY thru September 13 – VATI Technical Assistance and Project Development Sessions**
- **July 27** – Notice of Applications Due
- **August 3** – DHCD Posts Notices of Application on VATI website
- **September 14** – Applications Due
- **September 21** – DHCD Posts Applications on VATI Website
- **October 21** – Challenges Due
- **October 28** – DHCD Notifies Challenged Applicants
- **November 18** – Deadline for Challenge Rebuttals
- **December 3** – DHCD Notifies All Parties of Challenge Determination
- **Late December** – Anticipated Announcement of Awards

Office of Broadband

Email: vati@dhcd.virginia.gov






**Satellite Broadband:
High Speed Internet Everywhere**


Steven Hill
President
Satellite Broadcasting & Communications Association
schill@sbca.org

www.sbca.org | 800-541-5981 | info@sbca.org




Satellite Broadband – Past

- First generation product
- Slow speed
- Data constraints
- Limited capacity
- Over 1,000,000 customers




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Satellite Broadband - Today

- 2 Service providers
- New satellites in 2017
- 25/3+Mbps
- 100Mbps in select markets
- Unlimited plans
- No hard data limits
- Focus on rural and underserved markets
- Over 2,200,000 customers




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Satellite Broadband-Applications

- Streaming
- Residential
- Business
- Distance Learning
- Government
- Tele-health
- Airlines
- VoIP
- Agriculture
- Public Safety
- Continuity




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Satellite Broadband - Benefits

- 3-5 day install
- Increased bonus data time
- Demand from small business
- Reliable
- Cost efficient to deploy



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Satellite Broadband – Small Business

HughesNet Survey:

- 67% of small business respondents have home-based businesses.
- 10% of small business respondents are farms.
- 30% of small business respondents operate a business like an accounting firm, law office, salon or health practice.

Common Uses:

1. Email and web browsing
2. To access business services like accounting, security monitoring and payroll
3. Running company website
4. Business social media accounts
5. Process credit card transactions
6. As back-up connectivity to another method

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Satellite Broadband – Disaster Recovery and Relief



- Easy set up and removal
- Fast high-speed communications
- Short and long-term relief
- Recovery centers
- Medical
- Public safety
- Government

- Currently supporting hurricane, fire, flood and tornado relief
- Puerto Rico, Louisiana, Sonoma County, South Texas and many more locations.
- Over 250,000 hours of service donated

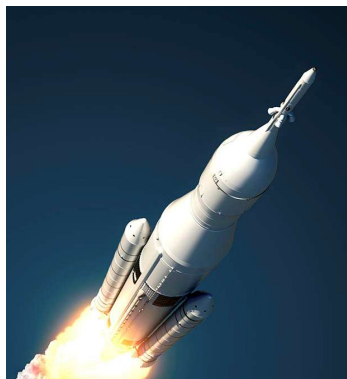


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Satellite Broadband – Next Generation GEO 22000

- Hughes and ViaSat launch new satellites in 2022
- 8-10X more capacity
- 100Mbps++ nationally
- 100% private investment
- Proven technology




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Satellite Broadband – Low Earth Satellites (LEO) 300

- SpaceX, Amazon, One Web
- Requires 30,000 + satellites
- Full deployment 2027+
- Billions to deploy
- Current Status- In beta




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Satellite Broadband-Future

- Telemedicine
- Smart Agriculture
- IoT
- 5G
- Continued investment



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Satellite Broadband-Conclusion

- Proven technology
- Most cost efficient to reach rural areas
- Timely deployment
- Continued advancement



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Questions

www.sbca.org | 800-541-5981 | info@sbca.org