COMMONWEALTH of VIRGINIA
DEPARTMENT OF EDUCATION
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**Before the**

**Federal Communications Commission**

**Washington, D.C., 20554**

In the Matter of

The Emergency Connectivity Fund For
Educational Connections and Devices to
Address the Homework Gap During the Pandemic

# INITIAL COMMENTS ON THE EMERGENCY CONNECTIVITY FUND FOR EDUCATIONAL CONNECTIONS AND DEVICES TO ADDRESS THE HOMEWORK GAP DURING THE PANDEMIC

**(WC Docket 21-93; DA 21-318)**

The Virginia Department of Education (VDOE) submits these Comments in response to the Public Notice DA 21-318 seeking comments on implementing regulations for the $7.171 billion Emergency Connectivity Fund ("ECF") under the American Rescue Plan Act of 2021 ("Act"). The VDOE sought comment and feedback from the K-12 Information Technology Advisory composed of technology leaders from the eight Superintendent's regions in the state. The K-12 IT Advisory advises the VDOE on issues and innovations in IT. Comment was also sought from Virginia school division technology leaders on several, but not all of the FCC questions presented in the Public Notice. There are 132 schools divisions in Virginia. School districts are referred to in Virginia as "school divisions or "divisions."

**When asked if the Commission should reimburse for purchases of eligible equipment and services made by eligible schools since January 2020,** 53 of 132 school division technology leaders in Virginia responded with an overwhelming affirmative in response to this question. Divisions stated that they would like to be reimbursed for items not covered by CARES Act funding that was distributed from the VDOE for the Virginia Initiative to Support Internet Outside of Schools Network (VISION) grant funding. These competitive grant funds were already used by divisions to support the technology infrastructure needed for remote learning.

**When asked to comment on the <u>connected devices</u> that should be eligible for reimbursement, and to be specific in their comments,** 55 of 132 school technology leaders commented that the following technologies should be eligible:

- Wi-Fi hotspots, data services that support Wi-Fi hotspots, device management for Wi-Fi hotspots, and filtering for Wi-Fi hotpots.
- Chromebooks, laptops, tablets, iPads, document cameras, computer cameras, and computer monitors
- LTE Enabled Tablets and Chromebooks
- Wireless access points (WAP) for outdoor use
- Reimbursement for the portion of school division expenditure for discount home internet access offered to low-income students through community broadband providers.
- Switching equipment, routers, and Firewalls with advanced security features
- Allow rural schools to partner with local ISPs to get cabling/fiber to the last mile.
- Wireless on Wheels, Microcell deployments, LTE repeaters, outdoor wireless mesh Access Points and related equipment.
- Starlink Equipment Package (Satellite Receiver and Wi-fi Router), cable modems
- Interactive whiteboards for remote learning

**When asked whether the Commission should consider minimum system requirements for connected devices,** 54 of 132 school division leaders responded that as long as the device is internet enabled, and allows students to connect to their classmates, teachers, and school work, they do not see the need to be overly prescriptive about system requirements. Technology leaders also commented that due to supply issues with computing devices, divisions may have to purchase used or refurbished hardware to meet distance learning needs and these types of purchases may not meet even minimum system requirements. Most commenters suggested that system requirements should be decided at the local level. Technology leaders strongly support having flexibility in determining the system requirements of students and staff.

Some technology leaders however, did discuss requirements and suggested that 8 Gb Ram, 64 SSD, WI-FI 6, 14 inch screens, USB C, USB 4.0, HDMI, Bluetooth, with no headphone or mic jacks should be a requirement. Some respondents suggested that computing devices such as Chromebooks should have minimum requirements including being Wi-Fi enabled, touchscreen capable and have a camera.

**When asked whether the Commission should consider requiring that connected devices be Wi-Fi enabled and have video camera functions to enable remote learning,** 55 of 132 respondents commented in the following ways. Devices should at a minimum have Wi-Fi and a video camera. The specifics of the Wi-Fi and specifications of the camera should be decided by the divisions. Some technology leaders said that Wi-Fi was more important as a consideration but that all students do not turn their cameras on during remote learning for certain reasons such as privacy. Other technology leaders pointed out that, there are non-Wi-Fi enabled devices that are necessary for remote learning such as web cams, document cameras, so there should not be a requirement for Wi-Fi enabled devices only.

**When asked about any rules the Commission should adopt to ensure that connected devices are accessible for students and staff with disabilities to ensure full engagement with remote learning,** most technology leaders stated that there are already rules covered under the ADA and IDEA for this purpose. Some technology directors indicated that computing devices should support assistive technologies, but again, they emphasized having the flexibility to determine how to support students with special needs in terms of computing hardware and software.

**When asked what <u>specific equipment and services are necessary</u> to facilitate and support the connectivity required to meet students, school staff, and remote learning needs,** 53 of 132 school technology leaders recommended that the following equipment and services are needed to support remote learning:

- Wi-Fi hotspots, web cams, wireless headsets, Chromebooks or laptops
- Managed services to support Wi-Fi hotspots and computing devices
- Content filtering
- Low-cost internet programs with sufficient bandwidth for remote learning – video instruction
- Device management systems/ services for software delivery and inventory management
- Cameras and audio systems in classrooms to support remote learners
- LTE CEP's, Broadcast Equipment for 3.5 GHz CBRS LTE-A, radio antennas for CBRS LTE-A, solar equipment for remote hotspots, LTE modems, WI-FI radios, trailers to hold remote WI-FI equipment and solar equipment, radio towers, point to point wireless equipment, LTE hotspots, POE Injectors, POE Switches
- Larger device screens for staff, possible 2nd monitor, minimum 14'" monitors, document cameras
- Security services for Firewalls, software to operate large/distributed switch infrastructure and access point infrastructure
- Satellite service and equipment for geographically isolated students and staff
- Ability to partner with an ISP to provide Internet access
- Antivirus software services for computing devices
- Startup costs for satellite systems

- The funding should be used as incentives for ISPs to bring fiber to residents in rural areas that lack any option that will support remote learning
- Computing device cases
- Warehouse space to support the amount of equipment coming in to process, fix, send out, and repair devices
- Wi-Fi antennas, Wi-Fi extenders
- Ability to provide cyber security solutions including advanced threat protection software and hardware, as well as advanced tools for remote access of end user devices

**When asked whether the FCC should provide support for video conferencing platforms or other software necessary to ensure full participation in remote learning activities,** division technology leaders recommended the following in summary:

Enterprise/school division licensing for video conferencing was a luxury pre-pandemic and a necessity now. While federal CARES funding is likely covering this cost of these expenses into next fiscal year, divisions will need another funding source to help cover these costs in the long term.

Video conferencing platforms that contain security requirements set by the FCC should be supported. This may force vendors to adjust their security policies and systems to be able to become a participating vendor for this Funding.

**When asked if there are other places schools should be able to place Wi-Fi hotspots to provide broadband to students, school staff, who currently lack broadband access,** division technology leaders believe that apartment buildings, multi-unit housing, the top of water towers, public parks and community buildings, and grocery store parking lots should be allowable. School leaders also stated that Day Care Centers should be places to install Wi-Fi hotspots for students. They also commented that churches and community centers should be places where Wi-Fi can be deployed as well as any public locations in neighborhoods with no or poor connectivity.

**When asked whether there are other approaches to funding broadband access to multiple students that the Commission should incorporate into its rules implementing the Emergency Connectivity Fund,** schools recommended the following actions. There are several rural areas of Virginia that do not have adequate cellular service. As a result hotspots are useless. Therefore funding should be used as an incentive for cellular providers to build infrastructure such as towers in locations without access to service with the appropriate backhauls. The same goes for broadband. The funding should be used as incentives for ISPs to bring fiber to residents in rural areas that lack any option that will support remote learning. Technology leaders also suggested that subsidies directly to Internet providers to address affordability would be another approach that would work for them. One technology director recommended that the FCC require broadband companies to allow schools to manage in aggregate low cost essentials accounts.

**When asked if the Commission should impose restrictions on what locations can receive wireline and fixed wireless services supported by this Fund for remote learning,** the respondents commented with more variation. Some school leaders suggested that only locations that work in partnership with local schools should be allowed services. Others say restrictions should be based on free and reduced lunch counts. Some schools responded no to this question as this would further increase the digital divide that already exists for students. If you impose restrictions on what locations can receive wireline and fixed wireless services for remote learning, it would only create more inequities.

**When asked if the Commission should impose any per-location limitation on Wi-Fi hotspots, schools provided the following comments.**

One hotspot per household is not an effective measure as many households have multiple students that cannot be supported on one hotspot. Routers that support multiple users should be encouraged instead. Moreover, Wi-Fi hotspots are not designed for heavy use or many users. Households with multiple children could benefit from more than one Wi-Fi hotspot.

**Conclusion**

The Virginia Department of Education believes that creating a basic framework that is easy to understand for applying, receiving reimbursements, ensuring compliance, and flexibility is the key to assisting schools during a pandemic. The VDOE further believes that the FCC should adopt funding caps to ensure reasonable costs are reimbursed and account for differences between urban and rural schools. Managed services that assist schools with the technical support of devices and networking equipment should be funded. Schools repeatedly share with the department that they lack the human support needed for additional devices and network infrastructure being purchased with federal, state, and local funds to support remote learning.

The VDOE and Virginia school division technology directors respectfully ask the Commission to adopt an order consistent with these initial comments.

Respectfully submitted,

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