Impact of the Termination of Vermont's $5.3 Million Digital Equity Capacity Grant

I. Impacts on Vermonters

The Digital Equity Act (DEA) is designed to bridge the digital divide by providing the funding necessary to overcome barriers to internet access by certain identified covered populations. In the Act, Congress expressed its concern that such access is "increasingly critical to how individuals participate in the society, economy and civic institutions of the United States and access health care and essential services, obtain education, and build careers." *Id*. at § 1722 (1). Congress further determined that failing to overcome these barriers constitutes digital exclusion which it found "carries a high societal and economic cost; materially harms the opportunity of an individual with respect to the economic success, educational achievement, positive health outcomes, social inclusion, and civic engagement of that individual and exacerbates existing wealth and income gaps, especially those experienced by covered populations." *Id*. at § 1722 (2).

In Vermont, 95.4% of the population (647,064) falls within the eight covered populations (617,600) identified in the Act.[1] The percentage of Vermont households which lack access to fixed broadband is 17.7%, and 7.3% lack computers, tablets or a broadband subscription. The decision to cancel the DE Capacity Grant compromises the state and federal government's investment in digital infrastructure and undermines the goal for all Vermonters to fully participate in society and the economy and perpetuates existing disparities. DE is a pillar to implement strategies, address gaps, and align with statewide outcomes. The loss of the capacity grant will eliminate the program as is. This will have significant consequences including slowed implementation, increasing unaffordability, unaddressed digital literacy needs, continued cyber-attacks, less economic growth, and threaten VCBB's ability to carry out its mandate to get all Vermonters connected.

1. Economic and Workforce Development

a. The cancellation of the DE Capacity Grant directly impacts Vermonters' economic opportunities, especially those in rural and low-income communities (89.8% and 16.3%). VCBB planned to implement a Capacity Building Program to address affordability in Vermont that would create campus Wi-Fi solution pilot programs to decrease costs for tenants-with an aim to prioritize low income, aging, and rural Vermonters. Limited access to technology and a lack of digital skills can hinder individuals' ability to find and apply for jobs, for instance, in fields like nursing that require competence with digital tools (Darney & Larwin, 2018). Research

[1] Households with income up to 150% of the Federal poverty level: 16.3%; Aged 60 or over: 29.8%; Incarcerated: 0.2%; Veteran: 5.3%; With a disability: 15.4%; With a language barrier: 10.1%; English learners: 1.2%; Low literacy: 12.8%; Racial or ethnic minority: 9.8%; Rural: 89.8%

has shown that broadband adoption is closely linked to higher job growth, increased business opportunities, and improved income (Weinstein et al., 2024). With nearly half of Vermont's low-income population reporting that the cost of broadband and devices are significant barriers (Vermont Digital Equity Plan, 2024), the cancellation of the DE Capacity Grant deprives these communities of critical support to overcome these challenges. Without targeted investments in digital access and literacy, many Vermonters will be unable to access the resources necessary for job training, career advancement, and economic mobility, ultimately deepening existing disparities and limiting opportunities for economic growth.

b. The cancellation of the DE Capacity Grant increases the digital divide for Vermont's veterans, who already face significant barriers to accessing technology and digital services. An analysis by the Benton Institute for Broadband & Society (2023) found that veterans have lower rates of internet access compared to non-veterans, a gap that becomes more pronounced as the U.S. Department of Veterans Affairs (VA) implements telemedicine and other technology-enabled services. Rural veterans, in particular, face compounded challenges due to geographic isolation, higher disability rates, and limited infrastructure (Heyworth et al., 2024; Nearing et al., 2021). The cancellation of the DE Capacity Grant deprives these veterans of the critical digital reskilling and upskilling opportunities they need to overcome these barriers, ultimately limiting their ability to access essential services and participate in the digital economy. Without targeted support for digital empowerment, rural veterans will remain at a significant disadvantage in accessing telehealth services, workforce opportunities, and community resources that could improve their quality of life.

c. The cancellation of the DE Capacity Grant significantly weakens Vermont's ability to prevent and respond to cybercrime, leaving residents more vulnerable to financial exploitation and digital threats. According to 2024 IC3 Annual report for Vermont, Vermonters have suffered substantial losses due to cyber-enabled crimes such as Business Email Compromise (BEC), investment scams, identity theft, and tech support fraud—collectively accounting for millions in losses. Tech support scams alone resulted in over $3.4 million in victim losses, while BEC and investment fraud caused more than $1 million and $1.8 million in losses, respectively. In addition, cybercrimes involving cryptocurrency resulted in over $3.5 million in losses, with another $684,467 linked to the use of cryptocurrency wallets. Older adults are especially at risk, with those aged 60 and over accounting for the highest victim count and over $4.1 million in total losses. Many of these crimes exploit a lack of digital literacy and awareness—challenges that DEA-funded programs were designed to

address through community-based digital skill education and cybersecurity training. Moreover, the absence of targeted digital literacy efforts undermines Vermont's economic resilience, as cybercrime damages consumer confidence, disrupts business operations, and discourages digital adoption in vulnerable communities. The termination of Vermont's Digital Empowerment Program halts critical efforts to expand cybersecurity education and outreach in Vermont, particularly those delivered through digital navigators and community-based workforce programs, delaying progress toward a more digitally secure and economically inclusive future.

d. A critical part of advancing digital equity and broadband adoption in Vermont is ensuring that residents can protect themselves online and avoid exposing personal or business data to cybersecurity and financial threats. Recent incidents highlight the urgency of this need. For example, Vermont Health Connect, the state's health insurance marketplace, experienced 10 data breaches between November 2020 and February 2021 ("Vermont Health Connect had 10 data breaches last winter," VTDigger April 18, 2021). Users reported logging into their accounts and seeing personal information belonging to other individuals, including names, birth dates, and even partial social security numbers. Similarly, in October 2020, the University of Vermont Medical Center was the target of a major cyberattack ("Cyber Case Study: UVM Health Network Ransomware Attack," by Kelli Young, Dec 6, 2021, Case Study, Cyber Liability Insurance) that shut down access to electronic health records, disrupted patient care, and caused an estimated $1.5 million in daily losses, totaling over $63 million in recovery costs. More recently, in February 2024, the Change Healthcare cyberattack disrupted operations for insurers and healthcare providers across Vermont, including Vermont Medicaid and major carriers like MVP Health Care and Blue Cross Blue Shield of Vermont, delaying prescriptions and claims processing (Change Healthcare Cyberattack: Consumer Impact and Fraud Warning March 13, 2024, State of Vermont, Dept. of Financial Regulation). Concerns about cybersecurity practices echoed throughout the VCBB's community engagement efforts, including listening sessions and focus groups. Many Vermonters shared fears about falling victim to online scams and predatory behavior, underscoring the need for more accessible cybersecurity education and support.

e. CORI Study - rural counties with broadband adoption rates of over 80% have significant advantages over those with low usage including:
    i. 213% higher business growth rates, as well as higher self-employment growth rates that are 10% higher, GDP growth rate that are 44% higher, and per capita income growth rate with 18% higher
        1. GDP impact: A 44% higher GDP growth rate (increasing from 5% to 7.2%) would produce an additional $1.005 billion

in annual economic output for Vermont, based on the Vermont GDP of $45.7 billion in 2024.

2. Self-employment growth impact: A 10% higher self-employment growth rate (increasing from 6.1% to 6.71%) would produce an additional 396 self-employed individuals based on that Vermont total number of non-employer establishments is 65,028 in 2023.
3. Business growth impact: Vermont experienced a 10.2% business growth rate from December 2021 to December 2022 (Vermont ranked fourth in the list of the best states for business growth, VermontBiz August 23, 2023), and there are 20,868 employer establishments in Vermont as of 2022 (U.S. Census Bureau). The national average small business annual revenue is $1,221,884 (2024 Small Business Revenue Statistics, Plus Tips To Boost Yours, July 16, 2024 Vena Solutions). If Vermont's business growth rate were to increase by 213% (from 10.2% to 31.926%), it could result in approximately 4,534 new businesses and an estimated $5.54 billion in additional annual revenue.
4. Per capita income growth: The per capita personal income in Vermont for 2023 was $66,932 and $70,086 in 2024 (Federal Reserve Bank of St. Louis), thus Vermont's per capita personal income grew by approximately 4.6% from 2023 to 2024. The estimated population of Vermont in 2024 is 648,493 (United States Census Bureau). If Vermont's per capita personal income growth rate were 18% higher than the baseline (from 4.6% to 5.56%), the total economic impact would be approximately $368 million in total additional personal income for the state.
5. Digital skilling impacts: Basic digital skills increased income by approximately 23%, advanced digital skills increased income an average of 45% and AI related skills boosted salaries up to 47% in the CORI study. Therefore, providing basic digital skills training may result in an increase in total Vermont income of approximately $1,000,000,000 dollars.

ii. Farming technology can leverage broadband to increase production and reduce costs through better feeding and caretaking for animals and more efficient field fertilization informed by AI and machine learning. The digital divide is a barrier to the adoption of these new technologies impacting the viability of farms and requiring costly mitigation measures to reduce the impact of pollution runoff from farms.

2. Impact on the Sustainability of State and Federally Funded Broadband Projects

The State of Vermont issued grants to private and public internet service providers (ISPs) based on various take rate assumptions. The loss of the

programmatic benefits derived from the activities planned via the DE Capacity Grant will result in lower take rates and a lack of wraparound services promoting digital literacy, cyber security, and device access. Combined, this will both increase costs and reduce take rate, negatively impacting the long-term business case for the grantees and the sustainability of these rural broadband projects.

1. Adoption drives the operating viability of networks. The DE Capacity Grant will drive adoption. More subscribers equal more money, boosting economic growth.
2. Customer acquisition expenses previously covered by the wraparound support provided by the grant will need to be funded by the ISPs. This increase in costs may result in increased subscription costs for consumers, which also further decreases take rate and hurts the sustainability of these networks.

3. Healthcare

a. Virtual medical care will be a key piece of meeting the growing costs and strained services of Vermont's health care system, especially for the most vulnerable. According to Peter Pronovost with University Hospitals Cleveland Medical Center speaking to the Green Mountain Care Board about reducing costs, "during intake, providers should check whether the site of service is correct. Options like telehealth, urgent care, and primary care offices should be weighed against the emergency department."

b. Barriers to accessing healthcare in Vermont include: weather conditions, rurality, lack of public transportation systems, and busy schedules. Telehealth mitigates these barriers, providing a safe and effective option on par with in-person visits, while lowering overall healthcare costs and increasing patient satisfaction. (Leighton, Erin M., "Telehealth Visits for Common Concerns in a Primary Care Setting: Establishing a Protocol" (2020). *College of Nursing and Health Sciences Doctor of Nursing Practice (DNP) Project Publications* 53.

c. The cancellation of the DE Capacity Grant poses significant setbacks for Vermont, where nearly 90% of the population lives in rural areas and nearly 30% are aging adults, far above national averages. These demographics face unique healthcare challenges, particularly as older adults often lack the digital skills needed to fully engage in the growing digital world, including critical services like telemedicine (Meylan & Alam, n.d.; California Community Economic Development Association, 2024; Hecker et al., 2021). Without DE Capacity Grant support, the opportunity to bridge these gaps with targeted digital literacy programs for older adults will be lost, further isolating these vulnerable populations. Virtual services like telemedicine can greatly reduce transportation costs and physical burdens, savings that are especially valuable in rural areas with limited public transportation. For instance, a 2021 evaluation of telehealth visits among cancer patients found that patients saved between $147 and $186

in transportation costs and lost wages for each virtual appointment (Patel et al., 2023). The cancellation of the DE Capacity Grant means that many older Vermonters will continue to face barriers to accessing these essential digital healthcare services, ultimately impacting their independence and increasing healthcare costs for both individuals and the state.

d. Healthcare facilities will lose the opportunity to increase revenue
    i. DEA would make it easier to improve health outcomes by permitting Vermonters to more readily seek medical care without having to miss work or school or arrange and/or fund transportation to medical facilities.
    ii. Assist people with mobility challenges to access healthcare
    iii. Maximize productivity for the healthcare workforce
    iv. Expand capacity without additional investment in facilities and staff.
    v. Increase geographic reach
    vi. Fewer cancellations of appointments when they are online
e. Healthcare facilities will lose the opportunity to decrease costs
    i. Less office space/ physical facilities means less costs for leasing/buying, taxes, insurance and maintenance
    ii. Reduce expensive/unnecessary emergency room visits because people get more preventative care
    iii. Reduce expensive interventions by using continuous patient monitoring and quick detection of health changes
    iv. Can easily and more cost effectively integrate interpreters
f. Lost opportunity to improve patient care
    i. Less spread of disease by keeping sick people at home and not around other patients, especially important for people who are chronically ill, pregnant, elderly, or immunocompromised
    ii. Easier and more equitable access to specialists
    iii. Easier for doctors to stay engaged with patients and identify/diagnose problems earlier
    iv. Keep patients more comfortable – avoid discomforts of leaving home.
    v. Less transportation (improved environmental factors and road safety)
    vi. Can have family members or other caregivers at your appointment remotely
    vii. More data and better tracking for providers. Opportunities to identify disparities in treatment in order to enable more equitable healthcare for all Vermonters
    viii. Enable use of patient portals to benefit both patients and providers

ix. Get a more complete picture of your patients by seeing them in their home setting allowing for more personalized and equitable care.

4. **Education**
    a. The findings from the K–12 Computer Science Access Report (Computer Science Access and Participation Data, Code Advocacy Coalition) reveal the digital divide in Vermont, particularly for rural high schools where 30% still lack access to foundational computer science courses including cybersecurity. This gap underscores the need for digital navigators, such as specialists who guide schools, educators, and students in accessing and effectively using technology and digital resources. Without the support and funding provided by the DE Capacity Grant, these rural schools will face even greater challenges in bridging the gap, leaving many students without essential digital skills and devices that are crucial for future success in the workforce.

5. **Civic and Social Engagement**
    a. The cancellation of the DE Capacity Grant undermines critical support for rural Vermonters who face layered digital barriers that go far beyond broadband infrastructure. While the Broadband Equity, Access, and Deployment (BEAD) Program is helping to close the rural broadband infrastructure gap and provides low and middle-income subscription plans, rural communities in Vermont, where nearly 90% of the population lives, continue to struggle with limited access to digital skills training and a lack of culturally relevant tools. Without the targeted investments and wraparound supports envisioned in the DEA, many rural residents, especially older adults, veterans, and individuals with disabilities, are at risk of being left behind. These communities not only experience geographic isolation but often lack access to local institutions that can provide digital training and assistance. Research (Rousseau et al. 2024) shows that even when broadband is available, rural residents frequently lack the confidence and experience needed to access essential services like digital healthcare. Vermont's Digital Equity Plan recognizes that infrastructure alone is not enough, it must be matched with localized, community-driven solutions focused on affordability, digital literacy, and device access. The loss of the DE Capacity Grant threatens to undermine these efforts, slowing progress toward true digital inclusion in one of the most rural states in the nation.
    b. Language access and cultural familiarity are essential for effective outreach, trust-building, and long-term engagement with Vermont's diverse communities. Recruiting digital navigators from within the communities they serve can strengthen cultural competency and ensure

language alignment. The Digital Navigator, now named the Digital Resource Program, can further support this approach by prioritizing Vermonters receiving resources to support their navigation of the internet safely and meaningfully. Resources will be culturally tailored, ensure accessibility-including language access, and identify providers offering support and listing the support type for easy navigation of where in the state resources are offered. The cancellation of the Digital Equity Act puts at risk vital efforts to ensure culturally and linguistically appropriate digital support and education for Vermont's diverse communities, limiting outreach, eroding trust, and reducing access for those who need it most.

c. The cancellation of the DE Capacity Grant threatens to halt promising community-led initiatives in Vermont.
    i. Vermont's Regional Device Program is a sustainable program that will recycle gently used devices to be distributed to partnering organizations that will provide the devices to the communities they serve. As part of the partnership, the participating organizations will commit to ensuring all recipients of the devices have the basic digital skills to use them. This would be a collaborative effort in donating devices from members of the public and entities.
    ii. Vermont's Learn to Earn Program is a sustainable program that partners with existing Vermont organizations that have staffing capacity to provide essential digital literacy skills to their communities. Partner organizations will receive refurbished devices at no cost and host learn to earn workshops where members of the public can learn how to use the device and then keep it at no cost to them following the completion of the workshop.
    iii. Vermont's Capacity Building Program is a sustainable program that focuses on community Wi-Fi solutions. The program will incentivize property managers, landlords and cooperatives to implement one Internet service plan strong and reliable enough to meet the needs of all nearby residents within a park, building, development or land to lower individuals' costs of internet service. Each resident will pay into the plan to receive access to Wi-Fi.
    iv. Vermont's Workforce Development Program will partner with Vermont based employers, education institutions, and organizations providing assistance in the workforce sector to improve digital skills, certifications, and job training to improve Vermont's economy.
d. An attendee at one of Vermont's virtual listening sessions, a woman in her 60's who had recently retired to northwestern Vermont, expressed her concerns about her mental health and loneliness living in an isolated area and not knowing many people around. She was excited about the possibility of using the Internet to make friends, but she also raised that

she was not confident in her digital skills. She was specifically concerned about falling victim to a scam or online fraud. She expressed hope that Vermont would expand its offering of digital skills resources (Vermont Digital Equity Plan, 2024). Social isolation, cyber vulnerability and lack of digital skills will continue to prevent all Vermonters negatively impacted by the digital divide from fully participating in the economy and society.

e. Access to online information technology enhances the accessibility, efficiency, and transparency of public services, making vital information immediately available and expediting benefits. Digitizing public services facilitates broader civic engagement and ensures that people can access services remotely, overcoming the challenges of in-person interactions. The federal government has prioritized digital transformation, exemplified by a White House memorandum in September 2023 urging agencies to digitize services [source: "Delivering a Digital-First Public Experience" (OMB M-23-22)]. The Vermont Digital Empowerment plan addresses these challenges by ensuring that public services are accessible online for all Vermonters, while also focusing on outreach and awareness initiatives like digital navigators to encourage widespread adoption of these digital resources. The cancellation of the DE Capacity Grant limits Vermonters' ability to access online public services and disrupts the current efforts to promote digital literacy, outreach, and adoption of e-government resources in Vermont. The cancellation will reduce the ability of Vermonters to participate in community programs and public processes, including government meetings, that are conducted online.

6. **Access to Courts**
   a. Access to broadband internet service has become a vital tool for staying connected in the digital age. For example, treatment court participants do face technological barriers to access when participating in remote court hearings. For example, 4% of court users reported not having reliable wi-fi or internet service to participate in services by video, and 3% indicated they lacked the necessary equipment to participate in services by video. https://judicature.duke.edu/articles/do-remote-hearings-help-or-hurt-access-to-justice/
   b. Studies have supported the idea that court attendance improves in virtual hearings. In some parts of North Dakota, appearance rates for criminal warrant hearings went from 80% before the pandemic to nearly 100%. New Jersey reported that its failure-to-appear rate in criminal cases dropped from 20% to 0.3% starting the week of March 16, 2020, when courts there began to conduct virtual hearings. Michigan's failure-to-appear rate went from 10.7% in April 2019 to 0.5% in April 2020. https://judicature.duke.edu/articles/do-remote-hearings-help-or-hurt-access-to-justice/

7. **Delivery of other essential services**
    a. Municipalities can introduce smart sewer technologies such as real-time monitoring, modeling, data processing and more to maximize infrastructure performance and reduce costs. Municipalities will need proficient digital skills to use the devices, software to track real time monitoring, data processing and other activities to maximize performance. They will also need the proper devices to manage the activities involved.
    b. Energy and Grid Resilience (Climate Change) - Electrification of the transportation sector will put large strains on the electric grid. Only fiber is capable of meeting the speeds the grid requires. This will require proper devices and skills to use devices to maintain the electric grid.

II. Immediate Impacts on the Vermont Community Broadband Board (VCBB)

1. **Job Loss and Funding Cuts**: DEA-funded positions are now at risk, leaving two dedicated full-time VCBB staff, representing approximately 20% of the entire staff, uncertain about their employment status and professional future. The Vermont Legislature created the VCBB to administer hundreds of millions of ARPA and upcoming BEAD funds to get all Vermonters connected to broadband. These funding and staff cuts threaten programs without which could result in the State's broadband buildout becoming a bridge to nowhere for the covered populations on the other side of the digital divide.
2. **Interrupted Progress**: The sudden funding cancellation disrupts DE programs midstream, and the lack of funding will make it impossible to complete the work as outlined in the Vermont DE Plan.
3. **Loss of Trust**: Partners including schools, libraries, community organizations, government agencies, and municipal leaders may lose trust in the state's ability to follow through on commitments. This undermines existing relationships and makes future collaboration more difficult. Stakeholders who invested time and resources into DEA-supported initiatives may feel abandoned, especially in underserved areas where expectations were set around improved access and support.
4. **Reputational Damage**: The VCBB risks reputational harm among community leaders, funders, and policymakers who may question the reliability of future initiatives if this cancellation is not addressed transparently and proactively.
5. **Cascading Impacts**: Broadband offices, including Vermont's, are funded by a web of interconnected federal grants and limited state-funding and run by a team of staff working on many different but connected programs. As a result, grant and staff cuts are felt with a cascading impact throughout the office. The reduction in capacity and shifting of priorities will impact work on all programs.