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## FISCAL IMPACT REPORT

**SPONSOR** Campos **ORIGINAL DATE** 02/04/21  
**LAST UPDATED** 03/13/21 **HB** \_\_\_\_\_

**SHORT TITLE** Remote Education Technology Infrastructure **SB** 144/ec/aHEC/aHAFC

**ANALYST** Liu/Fischer/Hitzman

### ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY21	FY22	FY23	3 Year Total Cost	Recurring or Nonrecurring	Fund Affected
<b>Total</b>		\$0.0 - \$7,500.0	\$0.0 - \$7,500.0	\$0.0 - \$15,000.0	Recurring	Public School Capital Outlay Fund

(Parenthesis ( ) Indicate Expenditure Decreases)

Relates to HB141, HB85, HB86, SB93, and HB10

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From

Public School Facilities Authority (PSFA)

Department of Information Technology (DoIT)

Higher Education Department (HED)

### SUMMARY

#### Synopsis of HAFC Amendment

The House Appropriations and Finance Committee amendment to Senate Bill 144 makes a technical correction by moving provisions relating to the statewide education technology infrastructure network to Section 22-24-4.5 NMSA 1978, the section of law that relates to education technology infrastructure deficiency corrections.

#### Synopsis of HEC Amendment

The House Education Committee amendment to Senate Bill 144 changes the education technology infrastructure definition to include services used to interconnect students, teachers, school districts, and school buildings necessary to support broadband connectivity and remote learning as determined by the Public School Capital Outlay Council.

Synopsis of Original Bill

This bill expands the authority of the Public School Capital Outlay Council (PSCOC) to provide grant assistance from the public school capital outlay fund for broadband projects that connect students, teachers, and educational resources to the Internet for schoolwork on a school campus or in a remote learning setting. The bill also requires PSCOC to develop guidelines for a statewide education technology infrastructure network and necessary technology projects for education. Additionally, the bill includes an emergency clause. This bill is endorsed by LFC.

**FISCAL IMPLICATIONS**

Current statutory provisions allow PSCOC to expend up to \$10 million of the public school capital outlay fund for education technology infrastructure, which the council has historically used to correct broadband deficiencies within school buildings. According to PSFA, the council has granted a yearly average of \$2.5 million for on-site school broadband projects, leaving up to \$7.5 million of remaining authority each year for other education technology infrastructure projects contemplated under the provisions of this bill.

For FY21 and FY22, New Mexico schools will receive substantial federal aid for education technology infrastructure and districts can also levy property taxes for educational technology or use cash balances for similar purposes. Federal aid from the Coronavirus Aid, Relief, and Economic Security (CARES) Act and Consolidation Appropriations Act (CAA) of 2021 will provide New Mexico schools over \$520 million by early 2021 to address pandemic-related costs, such as educational technology. According to the Public Education Department (PED), New Mexico has budgeted nearly \$46 million from federal CARES Act funds to provide students access to education technology in response to school closures in FY20 and FY21. Additionally, the governor directed \$2.9 million of CARES Act coronavirus relief funds to Cochiti Pueblo for broadband infrastructure.

The federal CAA includes \$3.2 billion to subsidize home Internet for low income families nationally by \$50 per month for most households or up to \$75 per month for households on tribal land. Initial estimates suggest New Mexico's portion of this funding could be \$16 million, equivalent to a \$75 Internet subscription for 213 thousand households. The CAA also includes \$1 billion in grants to tribes to build out broadband infrastructure, at least a portion of which will be available to tribes and pueblos in New Mexico.

DoIT notes the Federal Communications Commission (FCC) issued a request for comment on how best to administer the new \$3.2 billion Emergency Broadband Benefit Program to help low-income consumers access the Internet. Several states have petitioned the FCC to consider expanding the scope of work for the E-rate program for schools and libraries to include unserved and underserved home connectivity for public school students and school staff that qualify based on need due to the Covid-19 pandemic.

The General Appropriation Act of 2020 included \$18.9 million from the public school capital outlay fund for maintenance, repairs, and infrastructure at Impact Aid districts. PSFA notes Impact Aid districts can use this appropriation for technology related to distance learning.

In December 2020, the Federal Communications Commission approved \$165 million to 18 companies to build out broadband infrastructure in underserved areas of New Mexico. Over the

next 10 years, the funding is expected to support buildout of broadband services to 64 thousand houses, businesses, and other locations. And in October 2020, the U.S. Department of Agriculture (USDA) announced \$20 million of federal ReConnect funding would be targeted for broadband buildout in Eddy, Chaves, Lea, Lincoln, Otero, Cibola, and Sierra counties. USDA estimates the funding will establish connectivity for 1,400 homes and businesses.

## **SIGNIFICANT ISSUES**

On March 13, 2020, the governor ordered schools to close for three weeks, starting on March 16, in response to the Covid-19 pandemic. On March 27, the governor extended school closures through the remainder of the school year. Although PED provided guidance for schools to reopen in a remote or hybrid setting in September, the department limited in-person instruction to special education students, small school districts, and elementary grade levels. A March 2020 PSFA survey of school officials indicated 21.8 percent of students did not have access to Internet service at home and 31.9 percent of students did not have access to their own devices, such as a computer or smartphone. PSFA also found that 55 percent of students in Bureau of Indian Education (BIE) schools did not have access to the Internet, and 50 percent did not have access to their own device at home.

Continuous learning plans submitted by public schools in the last quarter of FY20 showed 82 percent of school districts reported distributing laptops, tablets, or other forms of technology to students. To provide students access to the Internet, 13.5 percent of districts provided Wi-Fi devices to students, 43.8 percent of districts established Wi-Fi hotspots at the school or in the community, and 53.9 percent of districts partnered with private or public sector companies to provide Wi-Fi or Internet access in student's homes. With the rapid ramping up of purchasing and distributing computers, about one in five districts report they will now have a device for every student.

The PSFA survey and FY20 continuous learning plans indicate a portion of districts were unable to provide home Internet options (about half of districts) or Chromebooks or other learning devices (about a quarter of districts.) In the PSFA survey, many rural districts expressed concerns about their ability to provide Internet access to their students, given the remoteness of the region. An estimated 20.5 thousand students live in a household without a computer and in a district without an existing 1:1 technology setup. Providing each of those students with a \$350 Chromebook would cost approximately \$7.2 million, with a recurring replacement cost every two to three years.

In the summer of 2020, LFC estimated 66.2 thousand, or 21 percent, of students in public schools did not have an Internet subscription (assuming 1.5 children per household, approximately 44.1 thousand households). Of the 66.2 thousand students, approximately:

- 19 thousand students (or 12 thousand households) live in areas with existing broadband infrastructure but no household Internet subscription, likely due to the monthly cost. In response to the Covid-19 public health emergency, many Internet service providers offered low-cost broadband to families during the pandemic—some as low as \$10 per month—and PSFA deployed an online quote portal for schools and districts to easily shop for quotes. Using a high-end estimate of \$30 per month for subsidized Internet service, providing one year of broadband service to 12 thousand households would cost \$4.3 million each year.
- 45.8 thousand students live in areas outside of current broadband reach but can access

basic cell service for texting, file sharing, and low-resolution video streaming. (See maps of 3G, 4G and LTE coverage at <https://nmbbmapping.org/mapping/>). While not as fast as broadband, residential cellular hotspots can provide Internet access that is immediately available to students without any additional infrastructure build-out. Providing each student with a hotspot and a year's data subscription would cost approximately \$300, or \$13.7 million statewide each year.

- 1,410 students live both outside of adequate cell and broadband coverage. For these students, satellite Internet is still an option but can be slow and cost-prohibitive. A household connection for satellite Internet can cost \$1,200 per year, or \$1.1 million statewide each year.

In FY21, the New Mexico Center on Law and Poverty, representing the *Yazzie* plaintiffs in the *Martinez-Yazzie* education sufficiency lawsuit, filed a new motion requesting further relief in the lawsuit for essential technology to at-risk students. The motion noted the state failed to provide students (particularly Native American students and students in rural districts) with reliable access to digital devices, high-speed Internet, and funding for district technical support while students were learning in remote settings and requested an order compelling the state to provide immediate funding for these purposes.

Acceding to PSFA, provisions of this bill would allow PSCOC to assist school districts in connecting students and teachers outside the school campus. The “physical hardware” necessary to provide broadband connectivity for students and teachers could possibly include:

- Capital equipment infrastructure for network security;
- End-user devices such as tablets and laptops (\$300 – \$500 per device);
- Capital equipment infrastructure such as cameras, microphones, audio devices, and other equipment to facilitate remote learning in a hybrid model (\$2,000 per classroom);
- WiFi equipment (e.g. parking lot WiFi; \$2,000 – \$3,000);
- WiFi network equipment to broadcast to student homes (\$3,000 – \$5,000);
- WiFi equipment on school busses (\$2,000 per bus); and
- Individual student connectivity equipment (e.g. mobile wireless hotspots, routers, firewalls, signal boosters; \$500 – \$1,000 per student).

PSFA notes Internet access on school busses is not currently eligible for E-rate funding, yet it may be beneficial for New Mexico – a large rural state with long bus routes. School-provided Wi-Fi service on school buses is more reliable and a safer way to deliver Internet access compared to individual phones and hot spots since the connection will benefit from security and filtering provided by the school network.

PSFA notes many states have been working to develop state education networks for decades, as the best way to optimize the delivery of Internet Access to schools and libraries. As a result, a majority of states have functional networks (or are working to develop them) that are often used to connect students and teachers, including on school buses, to digital learning. These types of networks allow for better broadband planning by coordinating a single competitive bidding processes, establishing long-term commitments, and other factors.

For the last five years, PSFA has helped school districts connect to high capacity fiber optic-based Internet circuits, paid primarily with federal (E-rate) funding. With support from several Regional Education Cooperatives (RECs), PSFA helped groups of districts and regional public libraries connect together to create five regional networks, by contracting with local Internet

Service Providers (ISP). These regional networks are leveraging bulk purchasing to lower costs, aggregate data traffic, can increase broadband capacity as needed, and are improving the quality of the service, also making possible the sharing of specialized resources (such as network management and cybersecurity).

PSFA notes the bill will build on the agency's previous work, supporting the development of standards and creating a process to incentivize and speed up the implementation of regional networks that will eventually become a statewide education network. A statewide education network can create neutral regional internet exchanges (points with low-cost, high-capacity, and high-quality Internet access). This network could allow local ISPs to cost-effectively expand service to more geographic locations.

## **PERFORMANCE IMPLICATIONS**

In light of school closures from the Covid-19 public health emergency, expansion of education technology infrastructure could improve access to online learning and extend instructional time for students without devices or Internet. Although multiple 2020 LFC evaluation reports on remote learning and school reopening found lower student engagement and lost learning time from school closures, the reports noted the lack of access to devices and Internet for at-risk students would further widen the achievement gap.

## **ADMINISTRATIVE IMPLICATIONS**

Provisions of this bill would require PSFA to develop guidelines and new adequacy standards for technology that is necessary for education and eligible for funding. PSCOC must also develop plans for a statewide education network and ensure grant funding is in alignment with the development of the statewide education network. PSFA's expertise in connecting schools to broadband could be leveraged to identify cost-efficient ways to connect students across the state, particularly in regions with significant demand and low coverage. This bill will increase the current volume of work for PSFA and could require adding 1 FTE for the broadband team. PSFA notes Wi-Fi on school buses will likely increase the workload and the cost associated with the school IT departments.

Section 14 of Article IX of the New Mexico Constitution prohibits the state or local governments to provide direct or indirect donations or aid to any person or organization. As such, PSCOC must award education technology infrastructure in a way that does not conflict with provisions of the anti-donation clause.

## **RELATIONSHIP**

The bill relates to House Bill 141, which provides the same amended definition of educational technology infrastructure. The bill relates to House Bill 85, which appropriates funds to establish tribal IT departments and infrastructure on tribal lands; House Bill 86, which appropriates capital funding for tribal broadband infrastructure; and House Bill 10 and Senate Bill 93, each of which creates a stand-alone division of broadband at the Department of Information Technology.

## **OTHER SUBSTANTIVE ISSUES**

In 2000, the 11th Judicial District Court ruled in the *Zuni Public District v. State of New Mexico*

lawsuit that New Mexico’s public school capital outlay system violated constitutional requirements, and ordered the state to establish and implement a uniform funding system for capital improvements and for correcting past inequities. Since the *Zuni* lawsuit, the state has spent \$2.7 billion to build school facilities up to the approved statewide adequacy standards. Despite significant improvements in statewide facility conditions, the *Zuni* lawsuit was never closed and, in December 2020, the court ruled in favor of plaintiff school districts on new claims of inequity. The major claim of the plaintiffs was their inability to raise sufficient local capital outlay revenue to maintain capital assets and build facilities that were outside of the statewide adequacy standards like other districts with available local resources. Expanding the use of the public school capital outlay fund for educational technology infrastructure may divert funding from the state’s effort to address the *Zuni* findings and PSCOC’s core function of replacing and renovating school facilities.

DoIT notes Section 9-27-6 NMSA 1978 requires DoIT, PED, and other entities to develop a statewide broadband network plan. In response to the Covid-19 pandemic, PED has provided home connectivity solutions for students, and DoIT has funded a few fiber projects throughout the state. However, the state has no single entity or agency tasked with tracking broadband investment funds and does not require private investments from Internet service providers to connect households. This bill would require PSFA to develop guidelines for deployment of broadband technology and infrastructure services to meet the educational needs of students, whether on a school site or for remote learning services, which could significantly improve oversight of investments for eligible education technology funding.

HED notes the New Mexico Homework Gap Team, a collaborative task force between PED, DoIT, PSFA, and several other state agencies and regional actors, identified approximately 20 thousand unserved students in serviceable areas and offered projects to Internet service providers (ISP) through an online marketplace. The public marketplace allows ISPs to compete and serve unserved locations, and potentially work to drive down the costs.

## **ALTERNATIVES**

Given the significant costs of providing broadband to extremely rural areas of the state and progress toward reopening schools following the rollout of the Covid-19 vaccine, the state may want to consider leveraging federal funds to address immediate connectivity and device needs.

Public schools can also use local revenues for education technology infrastructure. School districts and charter schools held a combined \$319.8 million in cash balances at the end of FY20, of which at least some portion could be used to support Internet and technology access and needs of students. Districts receiving HB33 and SB9 funding received about \$253.7 million collectively in FY19 – all of which could be used to purchase technology to support remote learning. SB9, the Public School Capital Improvements Act or the “two-mill levy,” this funding mechanism allows districts, with voter approval, to impose a levy of up to two mills for a maximum of six years. Funds can be used to purchase computer software and hardware for student use in classrooms. HB33, the Public Schools Building Act, allows districts to ask voters to approve the imposition of up to 10 mills for a maximum of six years on the net taxable value of property in the district.

To secure better cost-savings for broadband connectivity, the Department of Information Technology (DoIT) contracted with Burger, Carroll & Associates, Inc. in September 2020 for

assistance in issuing a request for quotes and procuring a multi-year statewide price agreement by March 2021. The price agreement will allow DoIT and other eligible agencies to secure better pricing for the necessary infrastructure for rural broadband, including fiber optics and fixed-wireless solutions, as well as broadband grant writing services. Schools and districts could potentially secure better pricing for infrastructure buildout and service expansion through use of the DoIT's planned statewide price agreement.

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