HOUSE FINANCE COMMITTEE
May 6, 2021
1:47 p.m.

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CALL TO ORDER

Co-Chair Merrick called the House Finance Committee meeting to order at 1:47 p.m.

MEMBERS PRESENT

Representative Neal Foster, Co-Chair
Representative Kelly Merrick, Co-Chair
Representative Dan Ortiz, Vice-Chair
Representative Ben Carpenter
Representative Bryce Edgmon
Representative DeLena Johnson
Representative Andy Josephson
Representative Bart LeBon
Representative Sara Rasmussen
Representative Steve Thompson
Representative Adam Wool

MEMBERS ABSENT

None

ALSO PRESENT

Representative Johnathan Kreiss-Tompkins.

PRESENT VIA TELECONFERENCE

Christine O'Connor, Executive Director, Alaska Telecom Association; Heidi Teshner, Director, Finance and Support Services, Department of Education and Early Development.

SUMMARY

HB 19 LIMITED TEACHER CERTIFICATES; LANGUAGES

CSHB 19(EDC) was REPORTED out of committee with five "do pass" recommendations and four "no recommend" recommendations and with one

previously published fiscal impact note: FN1(EED).

HB 70 APPROP: CAP; REAPPROP; SUPP; AMEND

HB 70 was HEARD and HELD in committee for further consideration.

HB 155 COURT SYSTEM PROVIDE VISITORS & EXPERTS

HB 155 was REPORTED out of committee with a "do pass" recommendation and with two previously published fiscal impact notes: FN1(ADM) and FN2(AJS).

HB 182 EXTEND FISHERY RESOURCE LAND. TAX CREDIT

HB 182 was REPORTED out of committee with a "do pass" recommendation and with one previously published fiscal impact note: FN1(REV).

Co-Chair Merrick reviewed the agenda for the day.

#hb70
HOUSE BILL NO. 70

"An Act making appropriations, including capital appropriations, reappropriations, and other appropriations; making supplemental appropriations; making appropriations to capitalize funds; and providing for an effective date."

1:48:16 PM

CHRISTINE O'CONNOR, EXECUTIVE DIRECTOR, ALASKA TELECOM ASSOCIATION (via teleconference), introduced the PowerPoint Presentation: "State of Broadband." She shared that she was a lifelong Alaskan who grew up in Bristol Bay and was "deeply committed" to increasing broadband access in Alaska. She discussed the Alaska Telecom Association's (ATA) providers, where they served, and the broadband capacity in the state presently and in the future.

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Ms. O'Connor turned to slide 2 titled "Alaska Telecom Association." She related that the association was formed

in 1949 and worked to support telecommunication services throughout Alaska. Over the past 20 years broadband was not only the focus but the mandate of the association. The association represented all Alaska-based carriers. She noted the broad diversity in membership from small family owned companies to statewide companies; seven were community owned cooperatives, four were privately owned companies, two companies were investor owned, one was a municipally owned utility, and one company was employee owned.

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Ms. O'Connor provided a map from the Regulatory Commission of Alaska (RCA) of the service areas of each company on slide 3.

Ms. O'Connor addressed slide 4 titled "Fixed Broadband Coverage" that depicted a map of the coverage around the state. The information was based on federal broadband reports, which were submitted by all internet providers twice each year to the Federal Communications Commission (FCC). She reported that recently the FCC required a much more finely detailed map that would include the broadband speeds available everywhere in the United States. She expected that the map would be completed in a year or so. Ms. O'Connor relayed that the map on slide 5 represented ATA's cellular coverage from 4G/LTE depicted in orange and blue to 3G service in yellow, based on the FCC report.

Ms. O'Connor continued to slide 6 titled "Last Mile" and explained how the networks were structured. The broadband networks were divided into two parts: last mile and middle mile. Last mile connected the end user to the provider. She stressed that the last mile was important because a "robust connection" was necessary for fast speeds.

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Ms. O'Connor spoke to slide 7 titled "Last Mile Expansion:" She indicated that last mile expansion was happening at a "rapid pace." Approximately 60 thousand locations were updated or deployed in recent years. She listed several projects by providers and noted that every provider was currently investing in last mile deployment. She relayed a few projects recently completed:

Alaska Communications has brought high-speed internet to 16,000 rural Alaska residents since 2017 and will reach another 16,000 rural Alaskans by 2025. Communities now served with new or upgraded internet speeds include Delta Junction, Fairbanks, Homer, Hope, Kenai, Klawock, Larsen Bay, Ninilchik, North Kenai, North Pole, Seldovia, Soldotna, Kake, Kasilof, Sterling and Thorne Bay.

Alaska Power & Telephone has completed FTTH in the Klawock Lake Subdivision, fiber to the school and clinic in Dot Lake, high speed broadband deployments in Tok and Wrangell, Skagway, Haines, Petersburg, Craig, and Metlakatla.

Copper Valley telecom completed a FTTH project supporting speeds of up 25 Mbps downstream in Tatitlek.

GCI – Increased wireless speeds in Dillingham and surrounding communities, and constructed new towers, in 2020-2021.

Co-Chair Merrick indicated that Representative Edgmon joined the meeting.

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Ms. O'Connor turned to slide 8 titled "Middle Mile - Fiber." She explained that the last mile connected to middle mile networks that connected to the world. Alaska's middle mile was a combination of technologies. Alaska had thousands of miles of fiber that allowed for huge capacity and very fast speeds and was the best method where possible. She characterized it as the "gold standard."

Ms. O'Connor spoke to slide 9 titled "Middle Mile - Microwave." She pointed out that since it was not always possible to build fiber, broadband providers constructed microwave networks extending hundreds of miles. The microwave networks allow for delivery of high speed broadband. However, the technology had lower capacity and higher operating costs when compared to fiber

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Ms. O'Connor continued to slide 10 titled "Middle Mile - Satellite." She offered that in Alaska there were still middle mile gaps in fiber or microwave connection. Satellites provided the backhaul connection to the world and had been used for decades. She delineated that multiple geosynchronous, or traditional, satellite providers served the state. However, Alaska still had large gaps where the only middle mile connection was through satellites, which were limited in capacity, experience latency (lag), and was vulnerable to interference. She noted that the Lower' 48 [Continental United States] had nearly ubiquitous access to fiber backbone connections and rarely considered the middle mile connection or its cost.

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Ms. O'Connor turned to slide 11: "Middle Mile is Key - 2010" and voiced that Alaska's middle mile networks were changing rapidly. The slide depicted a map of the middle mile network in 2010. She pointed to the undersea cables connecting Alaska to the Lower '48, the TERRA microwave network in Western Alaska, and the black dots showed the locations where schools were served solely by satellite.

Ms. O'Connor highlighted slide 12 titled "Middle Mile is Key - 2020." She expounded that in recent years massive investment in middle mile was made. She pointed to the map portraying new connectivity along the North Slope coast, expansion of microwave networks in southwest, northwest, and southeast Alaska, new fiber running up the Dalton Highway, and terrestrial links into Canada. The map would depict more fiber links as projects were being completed and funded.

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Ms. O'Connor reviewed slide 13 titled "New Middle Mile." She highlighted some recent new middle mile projects:

> Alaska Power & Telephone constructed an undersea cable between Juneau, Haines, and Skagway, and was doubling the capacity of their microwave network between Juneau and Ketchikan.
>
> Cordova Telecom expanded its microwave network in Prince William Sound.

GCI completed a multi-year upgrade to equipment at 42 microwave sites in Western Alaska, adding more capacity.

KPU completed Ketchikan 1, the first undersea connection to Canada, connecting to its Fiber to the Home (FTTH) network.

MTA constructed its AlcanOne project, the first terrestrial fiber connection from Alaska into Canada.

Nushagak Cooperative completed a major expansion of its microwave network.

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Ms. O'Connor commented that investment in projects like the one's listed resulted in nearly 80 percent of Alaskans having access to 100 Megabit speeds, or gigabyte speeds that were all fed by the expanding fiber middle mile networks.

Representative Rasmussen asked how much the companies listed on slide 13 expended in dollars on the projects. Ms. O'Connor responded that since 2017 ATA companies invested over $1.2 billion in capital expenditures.

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Representative Wool cited slide 12 and asked about middle mile locations. He related that he had good connectivity since fiber had been installed on his street. However, neighbors close to him in Fairbanks, did not have good internet connection. He understood that some sparsely populated neighborhoods were not economically feasible for internet service. He wondered who was responsible for providing service. He wondered if she would address the issues in her presentation.

Ms. O'Connor answered that she would talk about last mile spending opportunities. She emphasized that resources were needed for last mile and middle mile to fill the gaps.

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Ms. O'Connor addressed slide 14 titled "ReConnect Pilot Program Round 1." She relayed that on December 3, 2019, the

United States Department of Agriculture (USDA) awarded Cordova Telecom a $18.9 million grant to connect Yakutat. The program's mandate was to fast-track broadband grants. Cordova Telecom Company (CTC) would connect the village with a series of five tower sites, accessible by helicopter, which would create a microwave middle mile network and would then construct a FTTH network in Yakutat capable of high speeds.

Ms. O'Connor spoke to slide 15 titled "ReConnect Pilot Program Round 2." She reported that on October 12, 2020, the USDA awarded a $21.5 million grant to Alaska Power and Telephone (APT) for service to Coffman Cove and Kasaan on Prince of Wales Island. She indicated that round 2 of the ReConnect Pilot Program was even more successful for Alaska. Alaska Power and Telephone was building a new subsea cable between Juneau, Petersburg, and Prince of Wales Island. The undersea cable would support buildout and increased speeds across Prince of Wales Island.

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Ms. O'Connor discussed slide 16 titled "ReConnect Pilot Program Round 2." She conveyed that another round 2 ReConnect program was awarded to General Communication Incorporated (GCI) to build an 800 mile subsea fiber system from Kodiak along the south side of the Alaska Peninsula and the Aleutians to Unalaska. The fiber would come ashore in Larsen Bay, Chignik Bay, Sand Point, King Cove and Akutan, served by fixed wireless networks capable of providing 100Mbps of symmetric speeds.

Ms. O'Connor turned to slide 17 titled "ReConnect Pilot Program Round 2 – Kaktovik Microwave Project Scope." She detailed that on November 12, 2020, the USDA awarded a $5.3 million grant to Arctic Slope Telephone Association Cooperative (ASTAC) to connect Kaktovik. ASTAC would build a microwave connection to Kaktovik and FTTH connections throughout the village. In addition, ASTAC was also awarded a Community Connect grant from the USDA to build a fiber line extension between Utqiagvik and Atqasuk, and a FTTH in Atqasuk. She furthered that the application process for the grants was burdensome, as well as rigorous and expensive. She opined that the awards were a testament to the commitment of the companies.

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Ms. O'Connor advanced to slide 18 and continued to discuss the ReConnect Pilot Program Round 2. She communicated that on November 12, 2020, USDA awarded a $4.1 million grant to TelAlaska to build fiber connections from Nome to Teller and Brevig Mission and a $1.9 million grant to Matanuska Telephone Association to build FTTH connections to Caswell. She believed that the ReConnect program was a powerful example of what can happen when a new program aligned with existing state and federal programs and created a springboard for great advances in Alaska's broadband infrastructure. She characterized it as a missing puzzle piece that turns a need for connectivity into real projects that serve Alaskans.

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Representative Carpenter asked if Ms. O'Connor would speak to the amount of grant money received for last mile funding.

Ms. O'Connor would follow-up with the committee. She noted that the ReConnect grants included funding for both last mile and middle mile.

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Representative Carpenter commented that his community of Nikiski in Northern Kenai was not served by high speed internet. He wondered if other communities were in the same situation. He remarked that "a lot of money" supported the middle mile and wondered if the "business model was insufficient to address non-government spending at the last mile."

Ms. O'Connor agreed that there were many places in the same situation and feeling frustrated. She commented that "it was a balancing act" for providers trying to increase service with limited resources. She relayed that more resources were currently being distributed for broadband services. She believed the industry would finally have the resources and the opportunity to connect more places. The association was working arduously to obtain the resources.

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Ms. O'Connor moved to slide 19 titled "Low Earth Orbit Satellites (LEOS)." She announced that coming soon in the middle mile space was a new generation of satellites – the low earth orbit or LEOs. She deemed that the satellites might be game changers in connecting remote communities. Ms. O'Connor reported on satellite companies. She expounded that Starlink had launched over 1,200 satellites and were beta-testing their "better than nothing" service in the Lower '48. Starlink was waiting for approval from the FCC to complete their new constellation to cover the Arctic. OneWeb launched 110 satellites and predicted being in service in 2022. Telesat secured millions in funding from the Canadian government as it looked to deploy a smaller, more efficient constellation of nearly 300 LEO satellites by 2023. She noted that at least one Alaskan company was purchasing LEO capacity from Telestat. She posed several questions regarding how the technology could connect Alaskans, cost, timelines, capacity, lifespan, reliability, and sustainability. The questions were all things the ATA members were investigating.

Representative Carpenter asked if any of the LEOS would be placed in the Northern latitudes.

Ms. O'Connor responded in the affirmative. She indicated that satellites were being deployed to serve all of Alaska. The Arctic was currently a big interest to many entities for various reasons, and it was a very welcome change in deployment.

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Ms. O'Connor continued to slide 20 titled "2.5GHz Rural Tribal Spectrum." She purported that spectrum was a program set up by the FCC in the prior year. The 2.5 gigahertz (GHz) spectrum set aside was a unique opportunity for tribes in rural areas to directly access unassigned spectrum over tribal lands, subject to buildout requirements.

Ms. O'Connor presented slide 21 titled "How can we use 2.5Hz in Alaska?" She reported that there were a couple of potential uses for the spectrum. One way was using fixed wireless deployments that was effective but was challenged by trees and rugged terrain. She added that Alaska Communications had deployed many of these systems on the Kenai Peninsula and would soon expand service around

Fairbanks using free, unlicensed spectrum. She related that over a dozen Wireless Internet Service Providers (WISPs) in Alaska used this technology. Another possible use would be for a 5G mobile network.

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Ms. O'Connor addressed slide 22 titled "What's Next?

Private investment
Federal Programs
State
Congress

Ms. O'Connor posed the question of how the pieces worked together for the massive investment needed to serve Alaska's most remote communities. She indicated that currently, some of the pieces were working together. First was investment from Alaska's telecom community. She elaborated that in the past 4 years, ATA member companies have spent over $1.2 billion on capital expenditures. Nearly 85 percent of Alaskans to receive at least 25/3 Mbps service, and 80 percent were able to access 100Mbps or faster service. Second, she believed that it was critical to have stable, predictable programs at the federal level. Very often, federal programs made a project viable. She commented that the state played a role. She expounded that Administrative Order 310 (AO 310) directed the Department of Transportation and Public Facilities (DOT) and the Department of Natural Resources (DNR) to streamline its respective permitting processes for broadband facilities deployment projects. Right of way policies and fee structures can either accelerate or impede broadband deployment. She voiced that Congress played a large role. President Biden's American Jobs Act proposed $100 billion for broadband to build future-proof networks.

Ms. O'Connor continued to slide 23 titled "Federal Communications Commission (FCC):"

Emergency Broadband Benefit
Emergency Connectivity Fund
Connect America Fund

Ms. O'Connor spoke to some of the programs which support broadband at the FCC. She explained that Emergency Broadband Benefit (EEB) provided a $75 credit on broadband

services for qualifying low income consumers, until $3.2 billion was expended and began on May 12, 2021. The Emergency Connectivity Fund added $7 billion to the e-rate program to support connected devices for students. She furthered that the Connect America Fund provided critical support for both constructing and operating broadband networks in rural, high cost areas. Without the fund, Alaska's networks would not be where they are today. All the programs required meeting performance obligations and had strict accountability metrics. Every company reported financial information, performance benchmarks, and more to both the FCC and the Regulatory Commission of Alaska (RCA) throughout the year.

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Co-Chair Foster noted she mentioned that the application process for the EBB program began on by May 12, 2021. He inquired whether there was a deadline for applications. He also wondered if she had done any estimates as to when the $3.2 billion funding would run out.

Ms. O'Connor replied that there was no deadline and applications were available through the local telecom provider. She guessed that the program would last for six months unless Congress added funding.

Ms. O'Connor turned to slide 24 titled "USDA:"

ReConnect
Community Connect
Distance Learning & Telemedicine

Ms. O'Connor informed the committee that Round 3 of the ReConnect program would begin in the summer of 2021. The program was another opportunity to bring $1 billion injection of grant funding to Alaska and continue to advance broadband services to Alaskans. USDA also had the Community Connect grant program that offered grants to applicants to provide broadband service in rural, economically-challenged communities where service did not exist. The grants were up to $3 million for broadband projects. There have been multiple awards in Alaska in recent years including to ASTAC in Point Hope, Matanuska Telephone Association in Glacier View and Chickaloon, and Copper Valley Telecom in Tatitlek. Finally, the Distance Learning and Telemedicine grants helped rural communities

acquire the technology and training to connect educational and medical professionals with the teachers and medical providers who serve rural residents. The previous fall, USDA awarded $4.4 million to six projects in Alaska.

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Ms. O'Connor turned to slide 25 titled "National Telecommunications and Information Administration (NTIA):"

Tribal Broadband Connectivity Grants, $1B
Broadband Infrastructure Program, $300M
Connecting Minority Communities $300M

Ms. O'Connor discussed that the most recent COVID relief bill directed significant funding for broadband to NTIA. She elucidated that $1 billion went directly to tribes. The money was one-time funding. She defined "eligible entity" as a Tribal Government; a Tribal College or University; a Tribal organization; or a Native Corporation. The funding could be broadly used: expand access to and adoption of broadband service on Tribal land, or for remote learning, telework, or telehealth resources during the COVID-19 pandemic. She detailed that at a high level the funds could be used to support broadband service for students or people working from home. She emphasized that the tribal grants were not competitive, and every qualifying tribal entity had access to a share of the funding. She indicated that the Broadband Infrastructure Program was a partnership between states, municipalities, or boroughs and providers to support broadband infrastructure deployment to areas lacking broadband, especially rural areas. She qualified that the scoring criteria was not favorable for Alaska, and the awards were spread nationwide. There was also $300 million for the Connecting Minority Communities program that supported broadband for tribal colleges and those serving minority communities that included some University of Alaska rural campuses. The program was a pilot and was likely to become an ongoing program.

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Representative LeBon returned to slide 23. He cited the two bullet points: Emergency Broadband Benefit and the Emergency Connectivity Fund. He brought up the public safety issue of the 9-1-1 caller and location information

in rural Alaska. He asked Ms. O'Connor to update the committee on the issue.

Ms. O'Connor responded that ATA continued to work with the Public Safety Answering Points (PSAP) to help identify how they wanted calls routed and what technology and connections were needed. She related that a new technology called "rapid SOS" provided location information at no charge to the PSAP. The service had been deployed in many PSAPs because of the 9-1-1 working group from the prior year. When a call was received from a cell phone, the location popped up on a screen and pinpointed the caller, the system even reported a caller's movement.

Representative LeBon asked how close rapid SOS was to universal use.

Ms. O'Connor indicated that the technology was currently used in Alaska. Representative LeBon wondered how widespread the use was in rural Alaska. Ms. O'Connor answered that she did not recall all the locations but acknowledged that it was not in comprehensive use in all of rural Alaska. The software relied on the cellular network being data capable.

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Vice-Chair Ortiz referenced slide 25 and asked if Ms. O'Connor had provided information about how different tribes could access the grants.

Ms. O'Connor responded that the grants were administered through NTIA. The administration was holding a series of tribal engagements through webinars and calls. She furthered that any tribe that was interested could reach out to NTIA or ATA.

Ms. O'Connor moved to slide 26 titled "State - Potential Action Steps:"

Coordinate
Gather Data
Extend Availability
Support Affordability
Expedite Deployment

Ms. O'Connor declared that ATA's members had "incredible expertise and a decades-long successful track record" working closely with other stakeholders in education, healthcare, and commerce. ATA was eager to find opportunities and support broadband expansion. She understood that Governor Dunleavy was forming a working group of stakeholders. She observed that collaboration worked very effectively in the prior year when a broad group of stakeholders formed a working group focused on 9-1-1 services in Alaska where experts from multiple areas worked together to share expertise and made recommendations, with very broad consensus. She suggested the approach for the working group. She recommended that the group could gather data to identify the unserved areas lacking broadband connections or where speeds and capacity could be increased. She relayed that in urban areas more than 97 percent had access to 25/3 speeds and higher versus 64 percent in rural areas.

Representative LeBon asked what the legislature could do to help encourage the rapid SOS upgrades to extend the 9-1-1 capabilities in all of rural Alaska.

Ms. O'Connor thought coordination was important and could be accomplished through an advisory board made up of stakeholders to find the solutions to solve the technical issues. She shared that the 9-1-1 working group engaged in many hours of problem solving work. It was made possible by the state convening the group. She concluded that a coordinated advisory board would be a "very helpful next step."

Representative LeBon hoped that by next year the state made "tangible" progress.

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Ms. O'Connor continued with slide 26. She highlighted that extended availability was a goal that required extending networks. She made some recommendations. She suggested making funds available to support matching requirements of the next round of ReConnect that took advantage of the process and standards already built into the program. She proposed offering grants to add connections to the Lower 48, increasing capacity and reducing costs. She offered that perhaps funds could support more speed and capacity on existing satellite and fiber infrastructure. She stressed

that inviting feedback was important since every provider in Alaska has projects on the drawing board but were on hold due to lack of resources. The feedback would help policy makers in directing resources. Her next suggestion was to support affordability. She commented that Alaska had some "incredibly impressive networks" but in many areas it was extremely expensive to build and operate the networks, and those costs drove rates. She recommended providing funds during an interim period while more broadband infrastructure was deployed. Finally, she suggested expediting deployment. She remarked that a funded project could be delayed for years and even blocked due to permitting processes. The state could accelerate deployment through timely permit approval and reasonable fees. She deduced that the state could promote broadband projects by eliminating sublease surcharges which add significantly to the cost of a project.

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Ms. O'Connor turned to slide 27 titled "Congress." She reported that there were consistent discussions about broadband in Congress. She was very optimistic about President Biden's American Jobs Act that proposed $100 billion for broadband to build future-proof networks and the ambitious goal to, "bring affordable, reliable, high-speed broadband to every American." She believed it would bring significant infrastructure funding to Alaska.

Ms. O'Connor thanked the committee for the invitation to testify on behalf of ATA.

Representative Edgmon considered some of Representative Carpenter's comments about last mile investment. He wondered if the next phase of extending broadband in Alaska was obtaining more resources for the last mile. He wondered whether it was too broad a statement considering the work needed for the middle mile and other capabilities throughout the state.

Ms. O'Connor responded that it was both – "it was a chicken and egg situation." She reported that through Connect America funding significant resources was available to upgrade last mile but until the prior two years the funding to upgrade middle mile was lacking. She noted that if

either last mile or middle mile was missing service was inaccessible.

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Representative Wool realized that money was necessary for broadband projects, however, the last mile situation in many communities "was very real." He asked what the state could do to incentivize broadband installation in communities where it was not economically feasible "other than saying we need more resources."

Ms. O'Connor answered that how to enhance the buildout was the puzzle telecom companies wrestled with. The programs the telecom companies were involved with helped bring the extra pieces necessary to extend service. She emphasized that resources was funding and amounts such as the $1.2 billion invested in the previous 4 years was an example of funding being received and "pushed right back out." She concluded that the answer was "finding the resource and putting it where it was needed."

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Representative Wool relayed that in Fairbanks many teachers had to work from the school parking lot during COVID because they lacked adequate broadband to communicate with the classroom. He reported that the legislature had passed a $7 million bill that supported internet for rural Alaska [SB 74-Internet for Schools, Chapter 5 SLA 20, 03/25/2020]. He recalled that in a small rural school the internet bill was approximately $30 thousand per month. He wondered how costs could be trimmed down to an affordable level. He wondered about low orbital satellite and if that would alleviate the high costs.

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Ms. O'Connor replied that the SB 74 brought an important boost to schools that were only getting 10 megabits or less. She conveyed that a couple of things were happening in the e-Rate area that were lowering costs. There was more competition in the eRate arena. In addition, LEOS would influence costs. She delineated that many LEOS providers were expected to enter the market. Some new providers would likely sell lower cost capacity to existing providers and

drive prices down or provide service directly to the schools.

Representative Rasmussen clarified that the $7 million fiscal note associated with SB 74 was the state's share of a 90/10 federal/state match for federal grants. She delineated that the fiscal note was predicated on all districts being awarded grants. The fiscal note was expected to decrease as broadband capacity increased. She reiterated that the bill did not offer a full subsidy it was based on a 90/10 match with the federal government.

Representative Carpenter thought that much of the discussion was centered around growth funded at the state and federal level. He was concerned with business decisions at the last mile. He shared that his neighbors were willing to pay more for broadband, but it was not available. He shared that he wanted a Digital Subscriber Line (DSL) service and was told that the capacity was full. He thought that the issue was the company's decision not to add more service capacity. He considered that the situation equated to government owned telecommunication services because the only way service for the last mile was increased was via federal and state subsidies. He stated that the companies were promising broadband speeds but were not able to deliver it due to its business decisions. He was "a little frustrated with the rosy picture being painted" and not seeing increased service in his neighborhood due to business decisions and not lack of federal money. He was alarmed that the companies were not addressing the concerns of customers that were not receiving the service they were promised. Ms. O'Connor responded that she was unfamiliar with the representative's neighborhood situation. She elucidated that the problem was there was a finite set of resources available that were not based on federal funding. Private capital or cooperative members' money was being invested but was insufficient.

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Vice-Chair Ortiz was made aware that the RCA now had regulatory authority over broadband providers. He wondered if Ms. O'Connor saw that as a positive change that could assist in making broadband more affordable. Ms. O'Connor answered that the RCA had not yet publicly commented and was uncertain as to what it might be contemplating. Rep Ortiz wondered if RCA involvement was thought of as

favorable in the industry. He inquired whether she viewed the Regulatory Commission of Alaska's involvement as a potential avenue to make broadband more affordable. Ms. O'Connor replied that she was unsure the RCA could affect affordability because the issue was cost. She detailed that in some places 88 percent of the cost of the service was for the middle mile connection that was passed through in rates.

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Representative Rasmussen commented regarding frustration with speeds in various neighborhoods. She disclosed that her father had installed fiber in his job while she was growing up and that made her uniquely aware of the issues. She suggested that Alaska was the largest and youngest state in the nation with one of the lowest population levels. She stated that Alaska was "way behind where it should be" with internet capacity. She opined that state and private partnerships were necessary to move the state forward. She would never condone a private company for making a financially feasible decision. She thought Alaska could be a leader in broadband service, utilizing public/private partnerships and delivering equity throughout the state.

Co-Chair Merrick thanked Ms. O'Connor for her presentation.

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HEIDI TESHNER, DIRECTOR, FINANCE AND SUPPORT SERVICES, DEPARTMENT OF EDUCATION AND EARLY DEVELOPMENT (via teleconference), provided the committee with a brief review of the broadband needs within Alaska's school districts. She read from prepared remarks:

> This afternoon I will be providing a brief overview of the broadband needs within Alaska's school districts. The information I will be speaking to is only what the department is aware of; it is not an all-inclusive list of the broadband needs within Alaska's school districts.
>
> I'm going to start my presentation this afternoon by speaking briefly to the Elementary and Secondary School Emergency Relief Funds (also known as the ESSER III Funds) under the American Rescue Plan.

The department has been allocated two-thirds of the total ESSER III award. In order to receive the remaining one-third, the department needs to submit a State Plan. And part of the state plan development requires the department to gather stakeholder input. We have conducted a few stakeholder webinars earlier this week, and the department asked attendees the question: "What are the biggest needs in Alaska given the effects of the COVID-19 pandemic on teaching and learning?". And to help gather statewide feedback on this question, the department is using a tool called Thought Exchange (which online tool to collect responses and gives respondents an option to rank others' responses). The Thought Exchange opened this past Monday, May 3rd, and it will close on Sunday, May 16th, at 11:59PM. As of yesterday, we had 57 participants, 71 thoughts, and 510 ratings.

I share this with you because so far, the Highest ranked theme is Internet Connectivity. That is what respondents are saying.

The Highest ranked response is: "Reliable internet connectivity: It is not equitable. There are financial, geographic, and other barriers for students."

Other responses that we have received related to broadband include:

•Internet access in small, isolated, remote villages is needed for entire villages- so that we can provide level access to native Alaskans.

•And consistent and reliable internet access across the state is essential. Virtual instruction opens up an option for some families, but without statewide internet some communities will not have access.

These are just a few of the responses the department has received so far, but it is already evident that districts are in need of more bandwidth and internet connectivity. This is especially true if districts continue to provide remote instruction.

Also, districts are in need of hotspots within their district and communities, especially outside of school

locations where students can connect to the internet (especially for when school is closed due to the pandemic or due to some other reason why the school is closed).

In an effort to see what information the department already has on hand regarding the broadband needs of school districts in Alaska, we looked at our FY2022 Major Maintenance Grant Fund list to identify if any projects districts are already thinking about that are either fully or partially related to broadband infrastructure needs.

The department identified two projects that total approximately $1.3 million:

•One is a high school security upgrades project where they will be installing high-resolution cameras with remote monitoring capabilities around the exterior of the facility and additional network wiring.

•And an electrical and security project at a different elementary school in which part of the project includes data cable wiring.

Districts are already thinking about what they can use their money on, or they can go through the construction projects list to see what could get funded.

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In addition, the department looked at the budgets and budget narratives that districts submitted to the department for how they intend to spend their allocations under the federal ESSER I and II Funds under the CARES and CRRSA Acts. Through that review, the department identified approximately $7 million worth of planned broadband and technology related expenditures within 25 school districts.

The needs vary across district, and in scope and size.

Some of these broadband and technology related needs that districts are planning to address include:

•Increase Internet services and bandwidth for distance learning purposes.

•Purchase hardware to improve connectivity for remote and hybrid instruction.

•Purchase of hotspots and MiFi devices for students without internet access.

•High speed modems for home-internet services to support student home network use for low-income families.

•Purchase of equipment to upgrade the technology needs.

•Purchase of a web-based VPN (virtual private network) solution for employees working from home:

- •Teleconference lines.
- •Video-conferencing lines/equipment.

Districts are already planning to use some of their COVID relief funds to address their needs. This is not an all-inclusive look at the need, but a snap-shot.

2:58:17 PM

One option or recommendation that could be done with the $112 million, is that if it was the desire of the committee or legislature to provide additional funding to school districts for broadband needs, one option could be to appropriate the funds to the Department of Education and Early Development, and we do a competitive grant, because we don't know the full need, and then report back to the legislature on what that is. Again, just an option and a policy call for the committee to make. There are options out there beyond what they are already getting. We already have the School Broadband Assistance Grants which allows the reimbursement to districts, up to the 25 mbps, an already $7.8 million program, and FY2021 was about $6.0 million that was paid out to school districts.

I am available for questions but wanted to provide a brief overview of what we know of as the broadband and technology needs within districts.

2:59:34 PM

Representative Rasmussen asked how many districts participated in the school bag program. Ms. Teshner responded that 28 districts and 153 schools were reimbursed through the program. Representative Rasmussen asked if it was at the 25 megabit level. Ms. Teshner replied in the affirmative. Representative Rasmussen asked how many districts operated above the 25 megabit threshold. Ms. Teshner did not have the information available. Ms. Teshner would submit the information to the committee.

3:00:35 PM

Representative Rasmussen reminded the committee that one way streaming like Netflix used 3 to 5 megabits per device and a two way streaming activity used between 5 and 10 megabits per device. She asserted that broadband capacity in the state was extremely inadequate. She suggested that Alaska was well below desired speeds especially in rural areas.

3:01:37 PM

Representative Wool recounted the information regarding the legislation that provided the matching funds for the school bag grant program. He stated that the telecom companies favored the program in order to receive the millions of dollars in subsidies that allowed schools to afford the high internet rates. He asked how much of the grant funding had been used and if she could comment on the internet rates charged to rural schools. Ms. Teshner did not have the information but offered to reply later. She reported that roughly $6.1 million was distributed to the 28 school districts out of the approximately $8 million appropriation. Representative Wool assumed that the amount districts needed to pay for internet was 9 times what they requested. Ms. Teshner replied that for FY 21 the total cost of broadband for the state's schools and libraries was $133 million. She delineated that out of the total amount almost $110 million was the eRate contribution, $16.8 million was attributed to school and library contributions, $6.1 million was the total for the school bag access

grants, and $111 thousand was from the Online With Libraries (OWL) library assistance grants.

3:03:44 PM

Representative Wool thought there was significant federal money flowing into the telecommunication companies and he deduced that they were greatly profiting from it. He deemed that the telecom companies were hesitant to take on projects that were not as financially lucrative like installing highspeed broadband in some urban neighborhoods and in rural areas. He hoped the inequity could be addressed. He emphasized that tens of millions of dollars were obtainable, and the resources were available. He hoped the connectivity as described in the presentation would continue in all areas of the state.

Co-Chair Merrick thanked Ms. Teshner for being at the meeting.

HB 70 was HEARD and HELD in committee for further consideration.

Co-Chair Merrick indicated amendments for HB 19, HB 155, and HB 182 were due the prior day and none were received.

3:05:10 PM
AT EASE

3:07:02 PM
RECONVENED

#hb19
HOUSE BILL NO. 19

> "An Act relating to instruction in a language other than English; and establishing limited language immersion teacher certificates."

3:07:09 PM

Vice-Chair Ortiz MOVED to report CSHB 19(EDC) out of Committee with individual recommendations and the accompanying fiscal note.
There being NO OBJECTION, it was so ordered.

CSHB 19(EDC) was REPORTED out of committee with five "do pass" recommendations and four "no recommend" recommendations and with one previously published fiscal impact note: FN1(EED).

#hb182
HOUSE BILL NO. 182

> "An Act extending the fishery resource landing tax credit for certain taxpayers that harvest fishery resources under the provisions of a community development quota; providing for an effective date by amending the effective date of secs. 16 and 23, ch. 61, SLA 2014; and providing for an effective date."

3:07:48 PM

Vice-Chair Ortiz MOVED to report HB 182 out of Committee with individual recommendations and the accompanying fiscal note.

There being NO OBJECTION, it was so ordered.

HB 182 was REPORTED out of committee with a "do pass" recommendation and with one previously published fiscal impact note: FN1(REV).

#hb155
HOUSE BILL NO. 155

> "An Act relating to court-appointed visitors and experts; relating to the powers and duties of the office of public advocacy; relating to the powers and duties of the Alaska Court System; and providing for an effective date."

3:08:29 PM

Vice-Chair Ortiz MOVED to report HB 155 out of Committee with individual recommendations and the accompanying fiscal notes.

There being NO OBJECTION, it was so ordered.

HB 155 was REPORTED out of committee with a "do pass" recommendation and with two previously published fiscal impact notes: FN1(ADM) and FN2(AJS).

3:09:10 PM
AT EASE

3:12:27 PM
RECONVENNED

Co-Chair Merrick reviewed the agenda for the following morning meeting.

#
ADJOURNMENT
3:12:39 PM

The meeting was adjourned at 3:12 p.m.