

Representative Kelly Merrick, Co-Chair
House Finance Committee
State Capitol, Rm. 500
120 4th St.
Juneau, AK 99801

April 14, 2022

Representative Neal Foster, Co-Chair
House Finance Committee
State Capitol, Rm. 505
120 4th St.
Juneau, AK 99801

Dear Co-Chair Merrick, Co-Chair Foster, and Members of the Committee,

Thank you for your continued work on HB 363 regarding a statewide broadband office. We appreciate the opportunity to offer written testimony in regard to this legislation.

Quintillion is the first and only telecommunications operator to build a subsea and terrestrial fiber optic cable network in the U.S. Arctic. We are a wholesale broadband service provider that offers middle mile service for last mile service providers. We bring high-speed broadband service to the most strategic and challenging environment on earth. Our fiber network is designed to withstand the world's harshest conditions and is the most secure form of data connectivity.

Quintillion has invested more than \$280 million in its existing network, which has been operational since 2017, and currently serves the Alaskan communities of Nome, Kotzebue, Point Hope, Wainwright, Utqiagvik, Oliktok Point, and Prudhoe Bay/Deadhorse, as well as the oil and gas infield. These locations are either receiving, or are capable of receiving, broadband services at speeds of 100Mbps up to 2Gbps service, with unlimited additional capacity to meet future broadband demand and to service other needs such as cellular backhaul, education, healthcare, and emergency responders. Our investment in fiber is designed to last 25 years or more.

In January of 2021, Quintillion completed the installation of its Arctic High Latitude Data Acquisition (HiLDA) ground station in Utqiagvik. This is the highest latitude satellite ground station on U.S. soil that is equipped to capture data from polar orbiting earth observation and communications satellites. Quintillion has plans to expand its ground station operations in the coming years.



Our business model is based on sales of broadband network services to government clients and commercial telecom providers. Quintillion also maintains strategic relationships with Alaska Native Corporations. This distribution model allows for multiple broadband access providers in markets where there was previously no competition, thereby incentivizing improved products, price, and services for end users.

The state broadband office, as proposed in HB 363, is a requirement for Alaska to receive its share of broadband funding from the Infrastructure, Investment and Jobs Act (IIJA). IIJA provides a unique opportunity for Alaska to close the digital divide and bring high speed broadband service to all Alaskans, and we do not want to waste this once in a lifetime opportunity. Therefore, we offer the following testimony, and specifically ask the Legislature and the Administration to pay attention to the issues of efficiency, sustainability, and affordability, as outlined below.

1. **Efficiency** – Evaluate and analyze the most efficient way to construct scalable and reliable networks using all broadband providers.

- Seek out the most efficient, scalable, and leverageable expansion plans. There will be projects and applications that overlap. The state should prioritize projects that leverage existing and available infrastructure to the extent it is scalable. A strong foundational platform is essential as we plan and construct network extensions.

- Overbuilding where existing scalable infrastructure exists should be discouraged if not inadmissible. However, over building network infrastructure that is at the end of its useful life should be allowed. This would permit incumbent local operators to upgrade existing systems to newer and more advanced broadband capable local networks.

2. **Sustainability** - Sustainability is of the utmost importance. Planning and constructing systems are a one-time event. There are many companies capable of initial construction. However, operating and maintaining the system (for the life of the system) is an expensive and long-term commitment. Projects must be sustainable not only from an initial capital cost perspective, but also from a long-term operations and maintenance perspective. Even the most well-constructed networks will have failures due to weather and various other factors. All applicants must demonstrate the ability to not only build the initial network, but to also operate the networks as well as repair network faults within reasonable timeframes. The service providers themselves should be experienced in these operational areas and sustainable from a financial standpoint as well.



- Set the bar high and prioritize applicants who are qualified service providers with existing systems in rural Alaska and have a successful history of delivering broadband service to rural Alaska.
 - Providers must own and operate a core network already connected to the major internet exchanges and cloud services providers.
 - Discourage one-time event players seeking equipment and satellite services commissions.
 - Awarded providers should be able to stand behind strict “service level agreements” SLA’s --- this is a key point!
 - SLAs should include commitments for:
 1. On-time delivery of services
 2. Up-time on the entire service
 3. Repair times
 - Service delivery should not be like the satellite TV model, which is simply shipping an antenna with self-install instructions and a customer service number. Broadband is a two-way and interactive experience and should therefore be supported at the same levels of quality as broadband subscribers in major metropolitan areas.
 - Professional installation and in-market support for network performance issues should be an applicant qualifier.
3. **Affordability** - Quintillion has promised to be transparent with our costs and resulting prices throughout the entire process.
- Affordability is the desired outcome, but not at the expense of quality and service performance.
 - Oversubscription rates of the service should be disclosed. Many applicants will attempt to economize and reduce costs by overleveraging middle mile capacity.
 - Cost and price transparency is preferable to price regulation. Regulations are great when the services are homogeneous, which service in Alaska is the furthest thing from. Providers should justify prices based on initial cost, maintenance cost, upgrade costs, and reasonable profit margins.



Quintillion is committed to collaborating with Tribes, Tribal consortiums, and other network operators. Not all Tribes have network construction and operations expertise, nor a core network interconnected with the internet. Conversely, service providers need tribes and local cooperation to manage successful network expansions. Unilateral and self-serving efforts will fail 100% of the time.

In closing, Quintillion respectfully advocates for more industry representation on the Advisory Board in HB 363. Since only one seat on that board is currently allocated for the broadband industry, we are concerned with the lack of input from the various providers that will be needed to close the digital divide. It is clearly a challenge to connect all rural Alaskans to broadband. There is no single middle mile technology that will be superior in all instances. We need all available tools in the toolkit – fiber, microwave, and satellite. Quintillion will continue working to deliver affordable, high-quality service to Alaskans through all of these technologies. When it comes to Alaska, not any one particular technology will solve the digital divide. Therefore, every single one of the various technologies needs a seat at the table.

Respectfully,
Mac McHale
Michael McHale
Chief Revenue officer
Quintillion

Signature: Michael McHale
Michael McHale (Apr 14, 2022 15:23 AKDT)

Email: mmchale@quintillionglobal.com

