

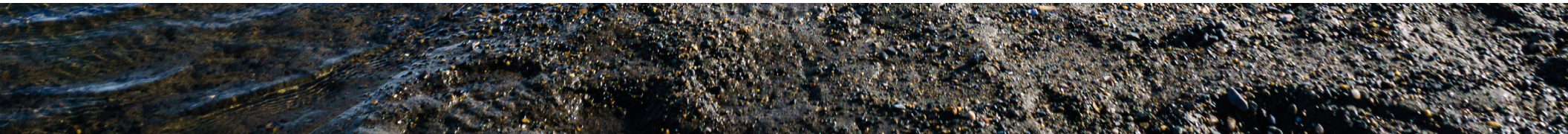


# Education Proposal

PREPARED FOR: **North Slope Borough School District**

IN RESPONSE TO A REQUEST FOR: **FY24 NSBSD RFP; Form 470 #240021574: Internet Access and Data Transmission Services**

DATE: **March 15, 2024**





# Proposal Overview

It is with sincere pleasure that we at GCI Education offer this proposal to continue as the North Slope Borough School District's (NSBSD) communications provider and education partner. We believe a robust education system is foundational to supporting the health and wellness of all Alaskan communities and sustaining the diversity of backgrounds that make our state so unique.

As an Alaskan born and raised company, GCI Education is uniquely capable of providing a solution for the countless challenges faced by Alaskan educators. We provide resilient networks that deliver the best available technology, backed by a support team that works closely with your IT staff.

We understand the challenges that districts face today in meeting the demand for more low-latency bandwidth and increased reliability while also staying within budget. For NSBSD, that means utilizing a combination of fiber, microwave and satellite to reach all your communities.

We hope we have the opportunity to continue working with NSBSD as you develop the next generation of Alaskans.

Our team is oriented around the July 1, 2024 requirement for delivery. This proposal is crafted and offered in accordance with the requirements outlined in NSBSD's RFP and E-rate filings. The information and price contained within this submission will remain valid for 90 days from the date submitted. Please contact Bryce Coryell at (907) 230-8062 or bcoryell@gci.com with your questions.

## Important Highlights

### **Making the Complex Simple**

GCI is providing a fully-managed and unified network combining multiple technologies into a simple, reliable and cost-effective solution.

### **Better Value**

GCI's blended delivery provides increased reliability and performance without increasing cost. Growth options provide a lower cost path to improved performance.

### **Unparalleled Support**

Support is led by Kevin Fradley and embodies his commitment to rural Alaska and willingness to meet customers where they are. Our metric of success is preventing technology issues from disrupting education.

### **Reliability**

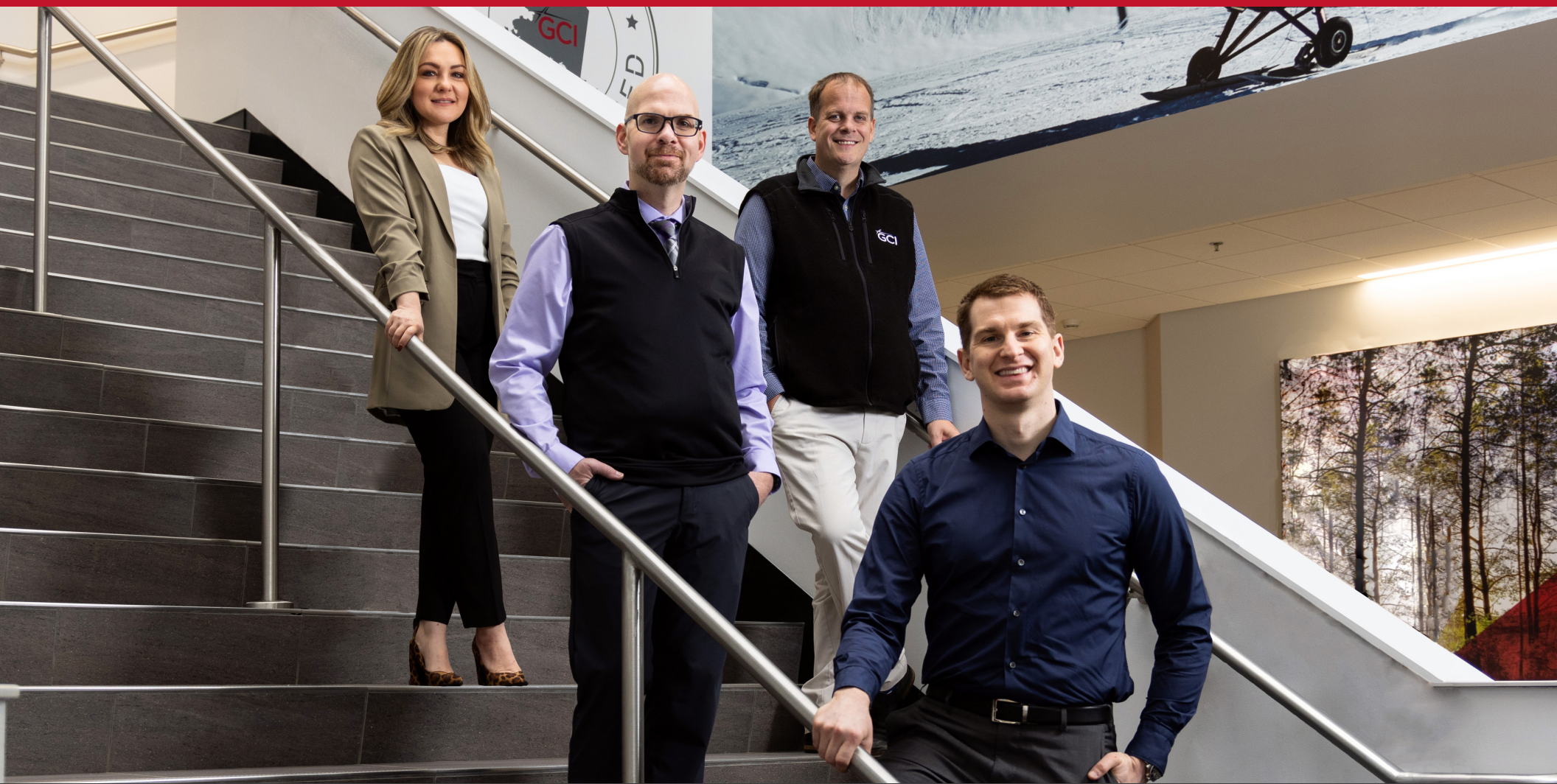
Single path solutions are no longer sufficient for education use. Our network provides the resiliency you require with at least two paths out of every community. If an issue arises, we have the available equipment and staff to quickly mobilize.

# RFP Requirements

Criteria	GCI Summary Response
<b>Bidder must agree to participate in the Schools and Libraries Universal Service program (otherwise known as E-rate) for the corresponding funding years of the contract.</b>	GCI agrees to participate in the Schools and Libraries Universal Service program for the corresponding funding years of the contract.
<b>Please include the correct Service Provider Identification Number (SPIN) on your bid and certify that the Provider is current with FCC Form 473, Service Provider Annual Certification (SPAC) Form, in that they will comply with program rules.</b>	GCI is a documented service provider with the Universal Service Administrative Company (USAC) and has been since the first year of the program. Our 498 ID (formerly referred to as a SPIN) is 143001199. We have a Service Provider Information Form, FCC Form 498, on file with USAC. Our FCC Form 473 (Service Provider Annual Certification Form) is current for this funding year. GCI is in good standing with the FCC, USAC, and USF.
<b>Bidders should include all information necessary to respond to all the RFP requirements listed above.</b>	GCI crafted this response as outlined in your RFP and has included all required information.
<b>Bidders must agree to the rollout schedule designated in the RFP.</b>	As NSBSD's current provider, GCI can begin service immediately on July 1, 2024 and without need for any testing or migration time.
<b>Bidders should include all information relevant to their ability to support the requirements laid out in the RFP.</b>	Please refer to details on our support and service desk function on page 12.
<b>Bidders should provide a commitment to service reliability.</b>	Please refer to details on our service assurance capability on page 12 and our service level commitments beginning on page 15.
<b>Bidders must include latency speed, service level agreement descriptions, contention ratio, and price per Mbps.</b>	Please refer to the sidebar information in the Menu Price sheets, beginning on page 15.
<b>Bidders should provide two (2) references, preferably from school districts with a comparable make-up to NSBSD.</b>	<p><b>Northwest Arctic Borough School District</b> Amy Eakin, Director of Technology, (907) 442-1803, aeakin@nwarctic.org</p> <p>GCI Education supports NWABSD connectivity with Internet and WAN services. Our services are based on microwave, fiber, satellite. They use GCI Education for firewall/filtering as well. Their IT team works closely with Kevin and the GCI team.</p> <p><b>Galena City School District</b> Chris Javier, Director of Technology, (907) 562-4332, chris.javier@ideafamilies.org</p> <p>GCI Education supports GCSD and IDEA home schools with the best and most cost effective technology available in each location including TERRA microwave and cable modems. GCSD also uses GCI colocation and works closely with GCI's education support team.</p>



# Your Education Partners



## **Karolina Bednarska**

*E-RATE SPECIALIST*

**Managing** compliance and risk.

## **Jason Tomberlin**

*EDUCATION LEADER*

**Advocating** for progress inside and outside of GCI.

## **Kevin Fradley**

*SOLUTIONS EXPERT*

**Solving** problems the right way.

## **Bryce Coryell**

*TECHNOLOGY CONSULTANT*

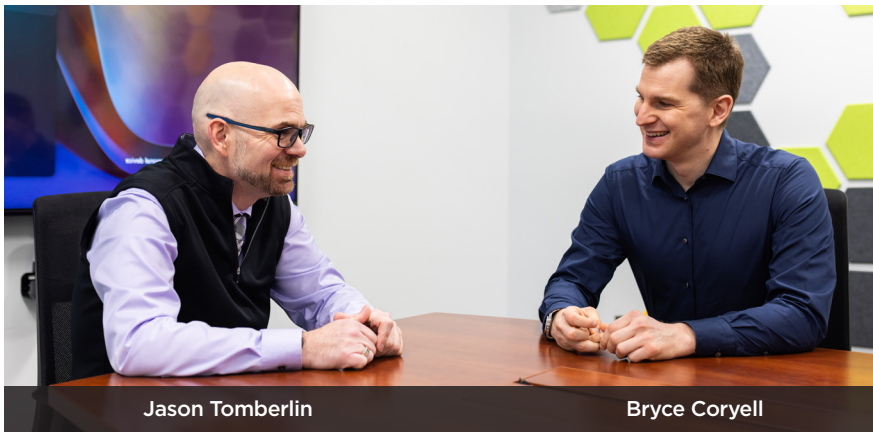
**Developing** solutions to fit within your means and requirements.



# Commitment to Rural Education

At GCI education we care about the success of Alaska's schools and students. Our team is built on a layered understanding of the education community's needs, challenges, and future. Drawing from a combined 50 years of experience in rural Alaska education, we work with school districts like yours, to advocate on your behalf, support the resources you rely on, and provide solutions for your unique needs.

As your dedicated Education team, we leverage GCI to benefit the Education community. This includes corporate advocacy, technical consulting, and support and funding for classroom resources. Our unique team approach empowers action, engages passion, and engenders loyalty. From Jason Tomberlin's education technology leadership to Bryce Coryell's ability to guide customers to the right solution, our team is the difference that enables us to deliver the value Alaska's schools deserve.



GCI's rural Alaska investments are driven by the Education community's need for improved performance. What started with our commitment to Terrestrial to Every Rural Region of Alaska (TERRA), has continued with the construction of new fiber facilities and the deployment of 2.5 Gbps Internet to a dozen rural communities in the coming year.

Beyond infrastructure, we also continue to invest in the resources and organizations that matter most to Alaska's schools. From our 20+ year partnership and support to groups like AASB, ASTE, and ASAA to the millions we've provided in funding to organizations like Alaska Resource Education, Comp Fire, and Alaska Excel, we're committed to ensuring a better future for education in Alaska.

## Local Empowerment

Life is changing in rural Alaska. Hundreds of millions of dollars are flowing into the state to build out infrastructure. Opportunities abound, many new players are entering the market, and some exciting, but unproven, new services are available today. In short, rural Alaska is having a moment.

As the anchor in your community, where you choose to spend your money matters. To meet your student and teacher's needs, you need a high-performance, reliable service with local support. Partnering with GCI creates a multiplier effect on your dollars that leads to local investment in urban-level infrastructure to bridge the digital divide.

GCI is an Alaska-born-and-raised organization and is invested in the future of the state. For more than 40 years, we've partnered with communities to keep and grow jobs in local economies, jump-starts new fiber infrastructure builds, supports local LECs, and fuel education advocacy efforts.



# Partners in Support & Compliance



Kevin Fradley

## Passionate Support for Our Customers

A key element in our offering to your district is a comprehensive support approach. Our support function provides your team with personalized services backed by transparency and quality measures to ensure your needs are met consistently.

For more than twenty years, Kevin Fradley has played a critical role in GCI Education's support for school districts. His love for rural Alaska and the relationships he's developed with customers have shaped the way he leads the service desk and how he trains his team to think.

Spending time on-site allows Kevin to better understand the unique challenges facing schools and gives him added perspective for solving problems when customers call. In addition to his day-job, Kevin also provides technical support on special Alaska projects, such as the Native Youth Olympics and the Iditarod.

## Guiding Your Successful Participation in E-Rate

Since its inception, the GCI Education team has helped school districts leverage the support provided by USAC Schools and Libraries to successfully participate in the E-Rate program. From start to finish, we help you comply with E-Rate guidelines, manage billing and compliance, and offer support for the funding process. We are in good standing with the FCC, USAC, USF, and are current on all documentation required to participate in the USF program. GCI supports SPI billing, which allows districts to receive services at the E-rate subsidized level (i.e. discounted billing) prior to the receipt of approved E-rate disbursements.

As GCI Education's E-Rate specialist, Karolina Bednarska's job is to make sure that GCI and its customers continue to benefit from the services and subsidies of the E-Rate program. To the extent allowed by FCC rules, Karolina is available to help guide customers through the E-Rate application and funding process. She works with them to assist with their FCC Forms 471 and Program Integrity Assurance audits.



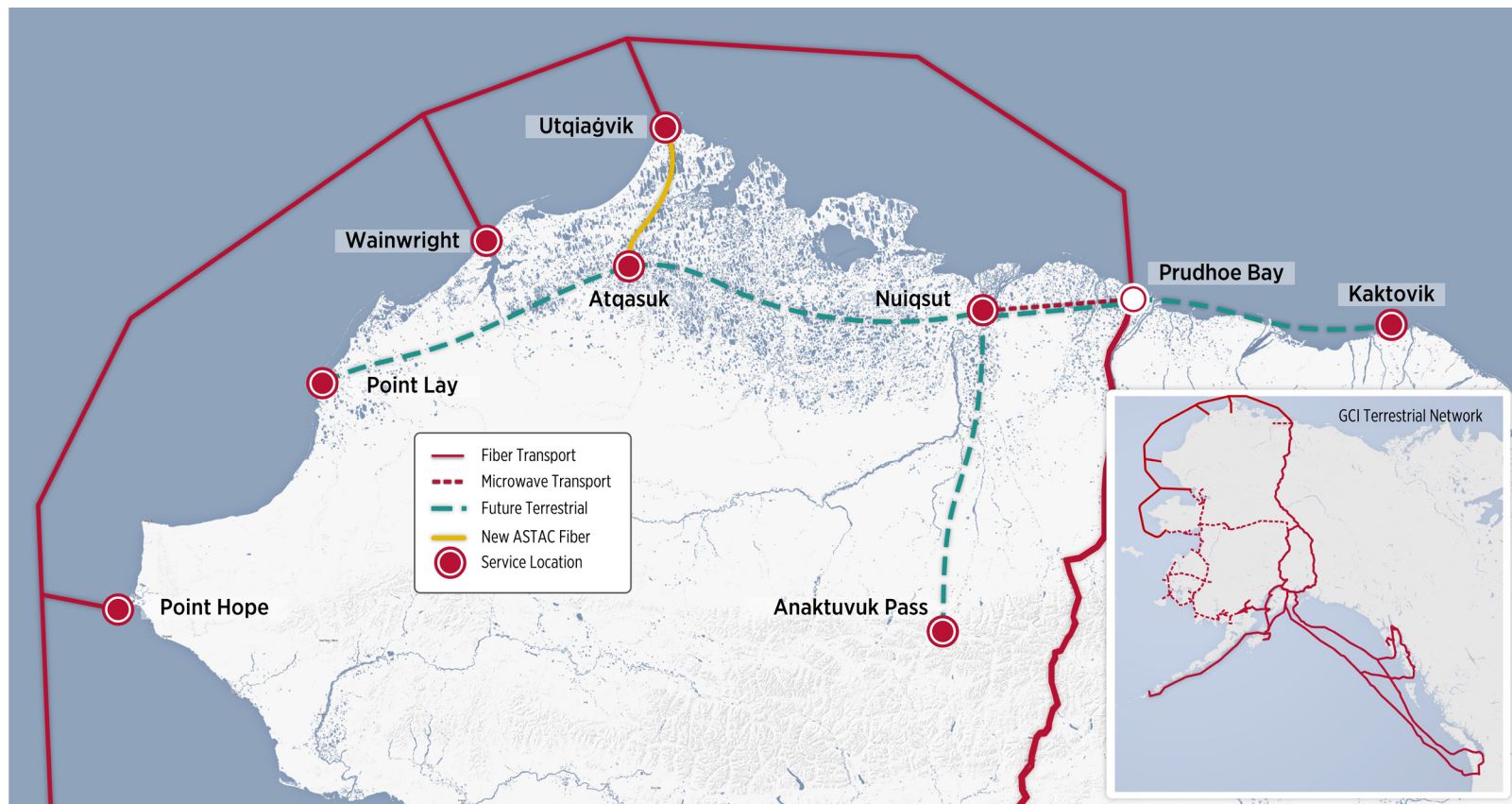
Karolina Bednarska



# Your Solution

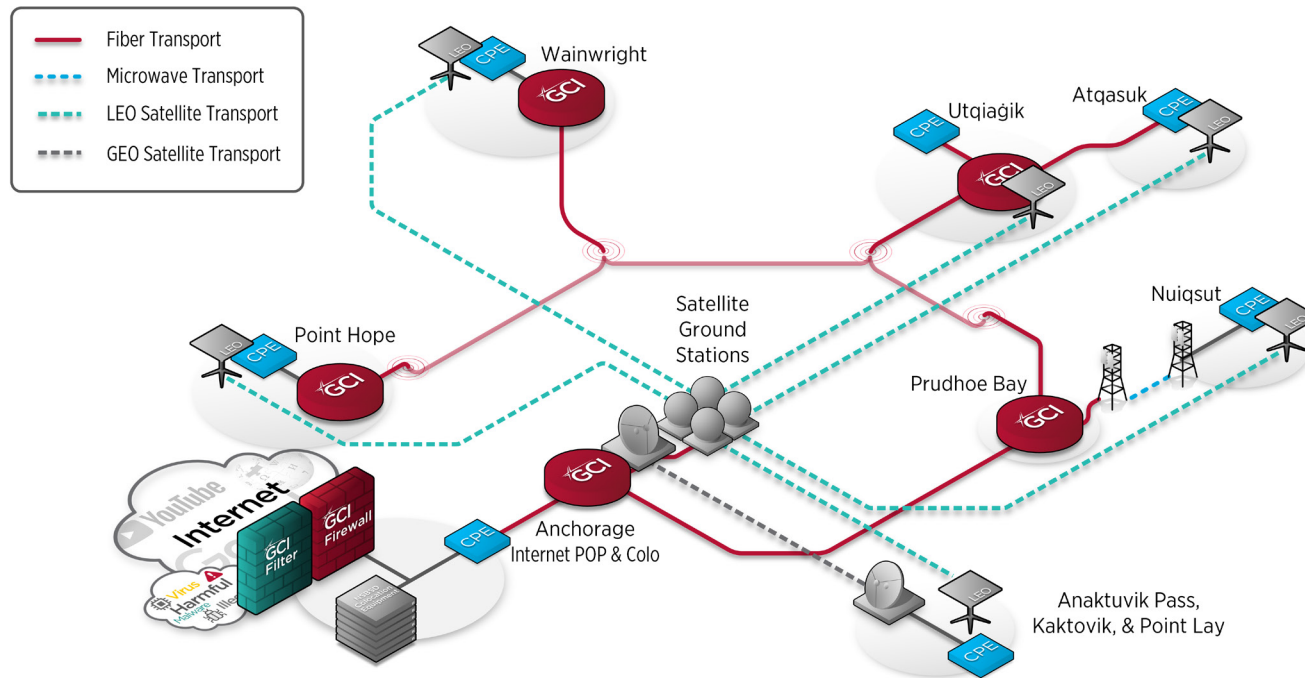
GCI Education strives to be the premier education technology partner for Alaskan school districts. We embrace new technology and work together with our customers to select the best combination of service and transport to meet the unique requirements of each district. For NSBSD, we are combining the best available technologies to offer a customized and flexible solution with consistent performance and reliability.

The proposed network access services are custom to North Slope Borough School District and its technical requirements. As we learned during the recent Quintillion Networks outage, a single path solution leaves the district at risk. We also learned that the performance difference between services can have a greater impact on the user experience than ever before. Our updated solution further leverages GCI's willingness to work closely with other carriers like Quintillion and ASTAC to provide a fully integrated network with high-performance and redundant connectivity. As your current provider, as Alaska's largest E-rate participant and as a carrier with more diverse network experiences than any other, we have assembled a resilient design that addresses all of NSBSD's needs for today and creates a path to future network improvements.





# Your Solution (cont.)



## Technical Design

As your partner, we have worked closely with the technology and education staff to transition NSBSD from an all high-latency satellite network to a higher performance mix of satellite, fiber, and microwave facilities as they have become available. Going forward, our solution is a district-wide integrated network. The near-term design minimizes high-latency satellite and provides at least two transport paths out of every community, including at least one low-latency transport. This solution focuses on providing the District with the best user experience, using the best technology available in each location today with the flexibility to improve over time.

Given the evolving nature of transport networks throughout Alaska, we will be offering options for multiple platforms across the district including facilities that are in place today and others that are yet to be built. As new terrestrial facilities and better satellite technologies become available, we will work with NSBSD to keep the District's technical profile as advanced as possible.

## 2024 Delivery

For Utqiagvik, Point Hope, and Wainwright, the primary path will leverage Quintillion Network's fiber to GCI's backbone in Prudhoe Bay. In Nuiqsut the preferred path will be ASTAC microwave to Prudhoe Bay. Atkasuk will transition to ASTAC fiber to Utqiagvik where it will share transport to Prudhoe Bay. The remaining facilities will leverage GCI's satellite facilities as they do today. In all communities GCI will have LEO transport as an alternate or primary path to provide the best user experience and improved availability.

This design uses the lessons learned from the Quintillion Networks outage, and the rapid development and deployment of hybrid LEO systems throughout the effected communities. With SDWAN capabilities at each location, our solution enables split traffic routing and automatic failover between transport paths. We are also able to provide a single management interface for NSBSD staff and GCI support personnel to manage district wide security, routing, and failover.

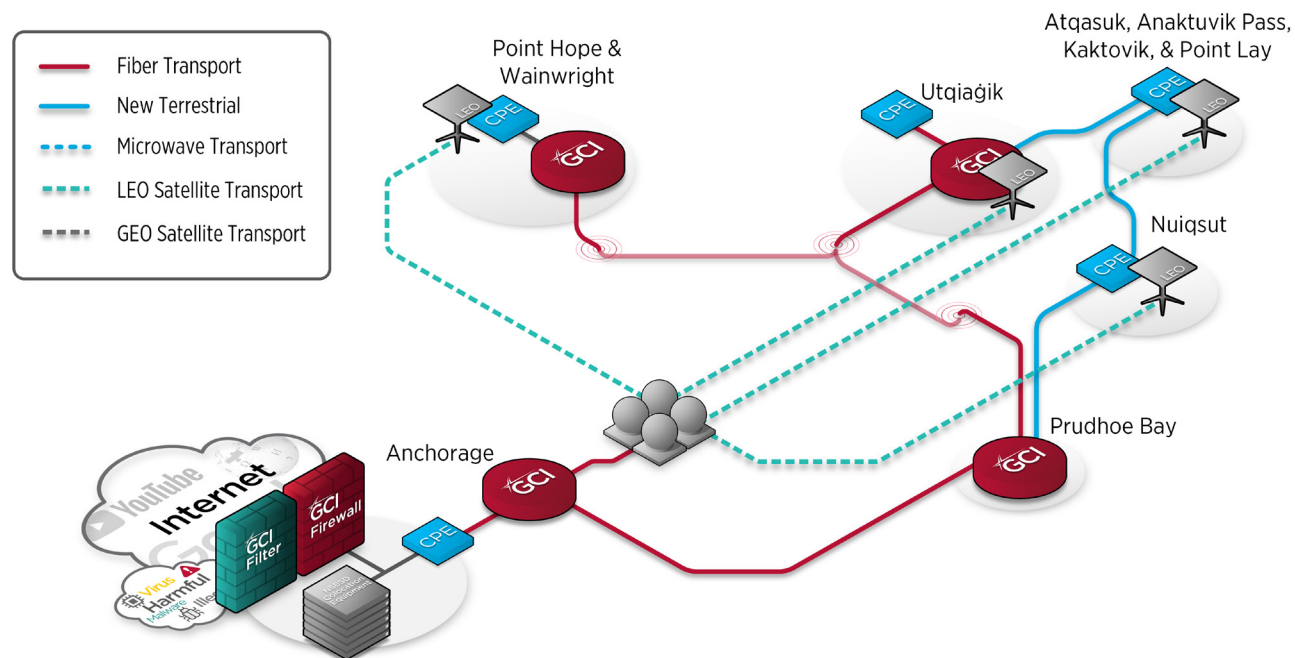


# Your Solution (cont.)

## Beyond 2024

Given the significant investments in the North Slope, our intention is to transition the District onto higher-performance facilities as they become available. In anticipation of this change, we have engineered our solutions to enable a transition to occur seamlessly and potentially mid-year assuming proper E-rate filings are made. We will continue to keep a close watch on the construction of new facilities and provide notice of potential installs to support the district's transition. Our bid also includes these future facilities for inclusion in the contract to eliminate the need to go out to bid before the end of your contract or limit your savings by signing shorter term agreements.

We see a future where every community has access to a terrestrial path with LEO satellite redundancy providing significant improvements across the North Slope. ASTAC's plan for fiber between Utqiagvik, Atkasuk, and Prudhoe Bay, along with Quintillion can provide additional path resilience and capacity for future needs. Once the terrestrial paths to Anaktuvik Pass, Kaktovik, and Point Lay are completed, the last high-latency satellite can be removed from the network.



## Network Architecture

Our proposed design delivers a private, dedicated layer-3 managed network for both WAN and Internet transport. The solution can support dynamic routing with OSPF, iBGP, and RIPv2 to enable secure private routing without injection of public or external (third party) routes. Every site will have multiple paths for traffic and will leverage intelligent gateways at each location. A combination of dynamic routing and path failure detection protocols will enable both preferred path routing and rerouting to keep sites operating in an optimal configuration regardless of the underlying transport status. This solution includes support for up to a /24 subnet of Internet routable IPv4 addresses with reverse DNS configurability, as required.

## Utqiagvik Delivery

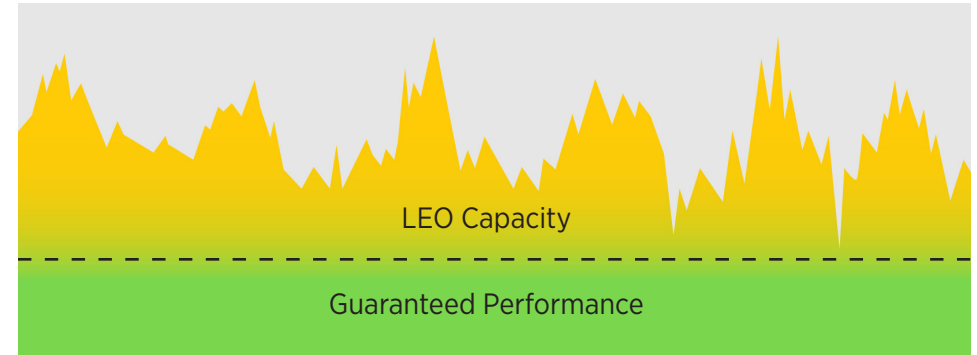
GCI's service delivery within Utqiagvik is flexible to the needs of the District. For example, NSBSD has the ability to determine how GCI should allocate the bandwidth delivered to the Maintenance & Operations building, either all to the M&O for the District to distribute or allocated directly to each facility. Both options provide the flexibility for unused bandwidth to be dynamically allocated to higher demand sites if desired. Service in Utqiagvik will be delivered through the M&O building using GCI's local fiber as the last-mile, with available paths out of Utqiagvik including GEO and LEO satellite.

# Delivery Methods

## Blended Delivery

To bring the latest technology with the highest performance and cost benefits to our customers, GCI has partnered with other providers to blend services into a **single cost-effective solution**.

This easy-to-use approach ensures the performance and guarantees associated with your contracted bandwidth are always available and are enhanced with an additional LEO connection at each site to improve network redundancy and availability. As other delivery options become available, they can be added to your blended service.



### Fiber/Microwave Transport

Terrestrial service enables the best performance and reliability. Though bandwidth and speeds vary between facilities, they are generally much higher and have lower latency than any satellite system. This performance and stability are critical to interactive applications like Zoom and can have significant impacts on testing and business applications. The two metrics that most impact these systems are packet-loss and latency, and in all cases, GCI offers superior guarantees across all terrestrial deliveries.

#### Actual Measured Performance \*

Facility	Packet Loss	Latency
Urban	0.0% - 0.01%	2 - 20 ms
Rural	0.0% - 0.5%	30 - 37 ms

### LEO Satellite Transport

Low-Earth Orbit (LEO) satellites are a compelling alternative to GEO satellites because they offer both lower latency and higher bandwidths for lower cost. Despite the benefits, there are some trade-offs. LEO terminals must actively track multiple satellites and transfer data between them, which can result in some interruptions and occasional outages. LEO satellites are a good option for high-speed demanding applications that can accept some packet loss and interruptions.

#### Actual Measured Performance \*

Facility	Packet Loss	Latency
Starlink	0.0% - 1.2%	95 - 115 ms
OneWeb	0.0% - 2.3%	190 - 600 ms

### GEO Satellite Transport

Geostationary Earth Orbit (GEO) satellite services offer reliability and consistent performance. As with Terrestrial, GEO satellite delivery can offer guaranteed performance with service commitments specific to both packet-loss and latency.

#### Actual Measured Performance \*

Facility	Packet Loss	Latency
GCI Satellite	0.0% - 0.01%	620 - 700 ms

\*Actual measured performance is between service location and GCI core.



# Services



## Internet Connections

Introducing the next generation of Internet Connections, our fully E-Rate eligible Internet and Transport service that integrates multiple transport technologies, including fiber, microwave, and LEO satellite, to cost-effectively deliver the *fastest and most reliable Internet*.

### With Internet Connections, you can:

- Customized delivery to optimize for value and performance.
- Designate networks or applications over a preferred path, keeping critical applications working optimally no matter the state of the network.
- Leverage performance guarantees to ensure a consistent user experience.
- Enable a private WAN without additional equipment or loss of performance from a VPN.
- Share bandwidth in communities with multiple schools/facilities.

### Basic Firewall Included

We include basic firewall functionality at no additional cost to ensure a secure and safe Internet education network for your teachers, students, and staff. This service provides customizable security policies based on applications, protocols, and IP address. With user and group identification through optional directory service integration, a more granular rule enforcement is possible. Explicitly E-rate ineligible features such as content filtering are excluded.

## Filtering Essentials

As your trusted technology partner, we can support your needs in meeting CIPA obligations and keeping both your data and users safe with our advanced feature enablement service, Filtering Essentials. This service enables the full capabilities of our firewall solutions beyond what the E-rate program allows for Category 1 support.

- **Security Focused Filtering:** Network anti-virus and anti-malware protection along with advanced intrusion detection and prevention capabilities.
- **Content Filtering:** Includes category and URL-based policies to the already robust rule set available under basic firewall to support CIPA.

# Support

The Service Desk is at the heart of GCI Education. Our mission is to provide your students, teachers, and administrators with an outstanding experience. To accomplish that, we focus on three aspects of support:

## Partnership

## Responsiveness

## Rapid Resolution

The service experience begins with partnership. Our Education Service Desk has been working together for over a decade, supporting our customers' technology needs. We believe the foundation of an outstanding customer service experience is providing support beyond troubleshooting and repair. It is acting as an advocate and a team member, putting the customer's concerns first, and taking responsibility. Success to us is when our customers see us as part of their team. We stand ready 24x7 to troubleshoot any technical challenges that may occur.

## Business Continuity Planning

GCI's Business Continuity Plan is built and maintained on the Recovery Pac 8.0 system and includes modules for network, site, equipment and event specific procedures. These resources are available on the GCI network for use by authorized GCI personnel associated with on-site response, recovery and restoration activities.

## Service Assurance

GCI maintains capacity on a multitude of networks, builds in redundancy, and actively manages its systems to ensure service resiliency for all customers. The network automatically re-routes traffic to available capacity and fails over to redundant equipment and power systems on demand.

This year GCI Education is bringing this capability right to the edge with multi-path resiliency at every school using our updated Internet Connections service. GCI's network will keep you connected, regardless of where an event may occur.

GCI proactively manages the network with defined escalation paths for every incident. In the event of a service issue, a priority is assigned based on the impact. The priority assignment criteria are defined in the SLA along with performance assurance metrics. In the unlikely event that GCI fails to meet its commitment, a progressive credit structure is in place to ensure that you never pay for an inferior service.

## Critical Outage

Total loss of service to the extent where NSBSD is unable to use it and is prepared to release it for immediate testing.

- Notification within **15 minutes**
- Updates every **30 minutes**
- Target restoral within **1 hour**
- Escalation after **1 hour**
- Eligible for **Credits**

## Degraded Service

The Circuit is degraded; IP routing issues or SLA metric performing below average.

- Notification within **15 minutes**
- Updates every **2 hours**
- Target restoral within **12 hours**
- Escalation after **4 hours**
- Eligible for **Credits**

## Other Requests

A configuration change request or the service is not working as desired but the district is not prepared to release it for testing.

- Notification within **15 minutes**
- Updates **Daily**



# Contacts & Escalation

## Key Contacts

### Initial Trouble Reporting, Triage, and Event Monitoring

- GCI Education Service Desk
  - (855) 770-3024
  - gcticket@gci.com

### High Priority Support

- Education Support Lead, Kevin Fradley
  - (907) 868-5697
  - kfradley@gci.com

### Tier II Escalation

- Tier III – Senior Manager, David Kampsen
  - (206) 747-8634
  - dkampsen@gci.com

### Tier III Critical Event Escalation

- Tier IV – Director, Jane Bushor
  - (907) 854-4579
  - jrbushor@gci.com

## Flexible Contact Methods

- The Service Desk can also communicate with customers using the methods they prefer, such as text, Google chat, Skype, iMessage, and more.

## Service Approach and Escalation

All customers have a page created within our support system to house contact information, network drawings, and pertinent documentation for escalations. When a ticket is opened, the Technician will perform the following tasks:

- Identify the trouble and its impact
- Attempt to resolve
- Escalate if unable to resolve
- Follow priority level notification plan
- Track issues through resolution

Service Desk staff are empowered to make decisions that solve customer problems, whether it's chartering flights or pulling in additional, expert resources.

## Management and Reporting

GCI provides access to network monitoring tools for real-time monitoring of bandwidth usage and traffic identification. The monitoring system uses statistics pulled directly from the on-premise devices into a web-based network monitoring portal for real-time access to performance metrics. Reports offer granular detail on the type of traffic flowing through the network. The data is automatically collected every minute and available for customer view. Data is maintained for a year.



Jason Kauke

Kevin Fradley

# Example Configurations - 3 Year Term

Current Configuration				Proposed Services at Current Level				Out-of-Pocket Savings	
Location	Delivery	Bandwidth	MRC	Delivery	Bandwidth	MRC	BAG		
Utqiagvik - M&O	Fiber	250 Mbps	\$226,800	Fiber / LEO	250 Mbps	\$225,000	\$0	\$360	
Kiita Learning Community	Fiber	25 Mbps	\$22,500	Fiber / LEO	25 Mbps	\$22,500	\$0	\$0	
Eben Hopson Middle School	Fiber	25 Mbps	\$22,500	Fiber / LEO	25 Mbps	\$22,500	\$0	\$0	
Fred Ipalook Elementary	Fiber	25 Mbps	\$22,500	Fiber / LEO	25 Mbps	\$22,500	\$0	\$0	
Barrow High School	Fiber	25 Mbps	\$22,500	Fiber / LEO	25 Mbps	\$22,500	\$0	\$0	
Alak School	Fiber	55 Mbps	\$51,300	Fiber / LEO	55 Mbps	\$49,500	\$0	\$360	
Tikigaq School	Fiber	80 Mbps	\$73,800	Fiber / LEO	80 Mbps	\$72,000	\$0	\$360	
Nuiqsut Trapper School	Microwave	45 Mbps	\$22,050	Microwave & Fiber / LEO	45 Mbps	\$20,250	\$0	\$360	
Meade River School	Satellite	25/10 Mbps	\$31,500	Microwave & Fiber / LEO	25 Mbps	\$11,250	\$0	\$4,050	
Nunamiut School	Satellite	25/10 Mbps	\$31,500	Satellite GEO / LEO	25/10 Mbps	\$19,000	\$0	\$2,500	
Harold Kaveolook School	Satellite	25/10 Mbps	\$31,500	Satellite GEO / LEO	25/10 Mbps	\$19,000	\$0	\$2,500	
Kali School	Satellite	25/10 Mbps	\$31,500	Satellite GEO / LEO	25/10 Mbps	\$19,000	\$0	\$2,500	
TOTAL:			\$589,950	TOTAL:			\$525,000	\$0	\$12,990

New contract savings of **2%**

Atqasuk **terrestrial**

Every location will have **LEO**

BAG 100 Out-of-Pocket is **0%**

Increased bandwidth with BAG 100 is **400%**

Location	Proposed Services with BAG 100				Out-of-Pocket Savings
	Delivery	Bandwidth	MRC	BAG	
Utqiagvik - M&O	Fiber / LEO	250 Mbps	\$225,000	\$0	\$360
Kiita Learning Community	Fiber / LEO	100 Mbps	\$90,000	\$13,500	\$0
Eben Hopson Middle School	Fiber / LEO	100 Mbps	\$90,000	\$13,500	\$0
Fred Ipalook Elementary	Fiber / LEO	100 Mbps	\$90,000	\$13,500	\$0
Barrow High School	Fiber / LEO	100 Mbps	\$90,000	\$13,500	\$0
Alak School	Fiber / LEO	100 Mbps	\$90,000	\$7,740	\$0
Tikigaq School	Fiber / LEO	100 Mbps	\$90,000	\$3,240	\$0
Nuiqsut Trapper School	Microwave & Fiber / LEO	100 Mbps	\$45,000	\$4,590	\$0
Meade River School	Microwave & Fiber / LEO	100 Mbps	\$45,000	\$2,700	\$0
Nunamiut School	Satellite GEO / LEO	100/40 Mbps	\$35,000	\$700	\$0
Harold Kaveolook School	Satellite GEO / LEO	100/40 Mbps	\$35,000	\$700	\$0
Kali School	Satellite GEO / LEO	100/40 Mbps	\$35,000	\$700	\$0
TOTAL:			\$960,000	\$74,370	\$360

\* BAG award estimated based on 2023 costs.



# Menu Pricing

SERVICE  
**Internet Connections**

TRANSPORT  
**Fiber**

## ADDITIONAL INFORMATION

- E-Rate **Eligible** Internet Access and Data Transmission Service.
- This service is a blended delivery of the above transport and LEO satellite.
- Pricing is valid for facilities traversing Quintillion Network's fiber.
- Eligible for support from 25 Mbps up to 750 Mbps, all bandwidths are symmetric, same upload and download speeds.
- Service level commitments:
  - Latency:  $\leq 65$  ms
  - Packet Loss:  $\leq 0.1\%$
  - Availability:  $\geq 99.9\%$
  - Jitter:  $\leq 40$  ms

		3 - Year Term MRC	1 - Year Term MRC
Fiber	25 Mbps	\$22,500	\$24,750
	30 Mbps	\$27,000	\$29,700
	40 Mbps	\$36,000	\$39,600
	50 Mbps	\$45,000	\$49,500
	60 Mbps	\$54,000	\$59,400
	80 Mbps	\$72,000	\$79,200
	100 Mbps	\$90,000	\$99,000
	250 Mbps	\$225,000	\$247,500
	500 Mbps	\$450,000	\$495,000
	750 Mbps	\$675,000	\$742,500
Cost per 1 Mbps		\$900	\$990

*Any bandwidth rate can be calculated using the cost per 1 Mbps price.*

*All bandwidths are megabits per second - download/upload.*

*All services and bandwidth configuration are subject to availability at time of order.*

*All pricing is per location and local loops are included.*

# Menu Pricing

SERVICE  
**Internet Connections**

TRANSPORT  
**Microwave/Fiber**

## ADDITIONAL INFORMATION

- E-Rate **Eligible** Internet Access and Data Transmission Service.
- This service is a blended delivery of the above transport and LEO satellite.
- Pricing is valid for facilities not traversing Quintillion Network's fiber.
- Eligible for support from 25 Mbps up to 750 Mbps, all bandwidths are symmetric, same upload and download speeds.
- Service level commitments:
  - Latency:  $\leq 65$  ms
  - Packet Loss:  $\leq 0.1\%$
  - Availability:  $\geq 99.9\%$
  - Jitter:  $\leq 40$  ms

		3 - Year Term MRC	1 - Year Term MRC
Terrestrial	25 Mbps	\$11,250	\$12,375
	30 Mbps	\$13,500	\$14,850
	40 Mbps	\$18,000	\$19,800
	50 Mbps	\$22,500	\$24,750
	60 Mbps	\$27,000	\$29,700
	80 Mbps	\$36,000	\$39,600
	100 Mbps	\$45,000	\$49,500
	250 Mbps	\$112,500	\$123,750
	500 Mbps	\$225,000	\$247,500
	750 Mbps	\$337,500	\$371,250
Cost per 1 Mbps		\$450	\$495

*Any bandwidth rate can be calculated using the cost per 1 Mbps price.*

*All bandwidths are megabits per second - download/upload.*

*All services and bandwidth configuration are subject to availability at time of order.*

*All pricing is per location and local loops are included.*



# Menu Pricing

SERVICE  
**Network Connections**

TRANSPORT  
**Microwave/Fiber**

## ADDITIONAL INFORMATION

- E-Rate **Eligible** Internet Access and Data Transmission Service.
- This service is a blended delivery of the above transport and LEO satellite.
- Pricing is valid for facilities not traversing Quintillion Network's fiber.
- Eligible for support from 25 Mbps up to 750 Mbps, all bandwidths are symmetric, same upload and download speeds.
- Service level commitments:
  - Latency:  $\leq 65$  ms
  - Packet Loss:  $\leq 0.1\%$
  - Availability:  $\geq 99.9\%$
  - Jitter:  $\leq 40$  ms

		3 - Year Term MRC	1 - Year Term MRC
Terrestrial	25 Mbps	\$11,250	\$12,375
	30 Mbps	\$13,500	\$14,850
	40 Mbps	\$18,000	\$19,800
	50 Mbps	\$22,500	\$24,750
	60 Mbps	\$27,000	\$29,700
	80 Mbps	\$36,000	\$39,600
	100 Mbps	\$45,000	\$49,500
	250 Mbps	\$112,500	\$123,750
	500 Mbps	\$225,000	\$247,500
	750 Mbps	\$337,500	\$371,250
Cost per 1 Mbps		\$450	\$495

*Any bandwidth rate can be calculated using the cost per 1 Mbps price.*

*All bandwidths are megabits per second - download/upload.*

*All services and bandwidth configuration are subject to availability at time of order.*

*All pricing is per location and local loops are included.*

# Menu Pricing

SERVICE

Internet Connections

TRANSPORT

Satellite

ADDITIONAL INFORMATION

- E-Rate **Eligible** Internet Access and Data Transmission Service.
- This service is a blended delivery of GEO and LEO satellite.
- Eligible for support from 25 Mbps up to 750 Mbps.
- Normal operating latency is less than 100 ms.
- MIR is not subject to SLA and does not have a defined contention ratio but is designed to perform up to the speeds listed.
- CIR has a 1:1 contention ratio, and service levels apply.
- Service level commitments:
  - Latency: ≤ 625 ms
  - Packet Loss: ≤ 0.1%
  - Availability: ≥ 99.95%
  - Jitter: ≤ 40 ms

SERVICE

Filtering Essentials

ADDITIONAL INFORMATION

- **NOT** Eligible for E-Rate support.
- CIPA compliant content filtering and security service.
- No term commitment required.

3-Year Term	MIR	100/40 Mbps	100/10 Mbps	25/10 Mbps
	CIR	25/10 Mbps	25/10 Mbps	25/10 Mbps
	MRC	\$35,000	\$30,000	\$19,000
	NRC	\$0	\$0	\$0
1-Year Term	MIR	100/40 Mbps	100/10 Mbps	25/10 Mbps
	CIR	25/10 Mbps	25/10 Mbps	25/10 Mbps
	MRC	\$37,000	\$32,000	\$21,000
	NRC	\$0	\$0	\$0

MIR: Maximum Information Rate (highest achievable bandwidth)

CIR: Committed Information Rate (guaranteed bandwidth)

MRC: Monthly Recurring Charge

NRC: Non-Recurring Charge

Filtering	MRC	\$100

Additional configuration options available upon request, following USAC competitive bidding rules.

All bandwidths are megabits per second - download/upload.

All services and bandwidth configuration are subject to availability at time of order.

All pricing is per location and local loops are included.

# Appendix

## Form 470: 240021574

Service Location Name	Service Location Address	Entity #
Bus Barn-Transportation Building	1693 Okpik Street, Barrow, AK 99723	16023227
Maintenance & Operations	1695 Okpik Street, Barrow, AK 99723	16023226
Central Office Annex	1849 Momeganna, Barrow, AK 99723	16023225
Central Office	829 Aivik, Barrow, AK 99723	16023224
Kiita Learning Center	5246 Karluk Street, Barrow, AK 99723	16043205
Hopson Middle School	6501 Transit Street, Barrow, AK 99723	117498
Ipalook Elementary School	2070 Ahkovak Street, Barrow, AK 99723	117497
Barrow High School	1684 Okpik Street, Barrow, AK 99723	117499
Nunamiut School	114 Illinois Street, Anaktuvuk Pass, AK 99721	117495
Meade River School	4001 Kippi Street, Atqasuk, AK 99791	117579
Kaveolook School	2001 Barter, Avkaktovik, AK 99747	117527
Nuiqsut Trapper School	3310 3rd Ave, Nuiqsut, AK 99789	117578
Tikigaq School	1837 Tikigaq Ave, Point Hope, AK 99766	117555
Kali School	1029 Qasigialik Street, Point Lay, AK 99759	117542
Alak School	567 Main Street, Wainwright, AK 99782	117572





**We look forward to working  
with you and your district.**

Please contact Bryce Coryell at (907) 230-8062 or [bcoryell@gci.com](mailto:bcoryell@gci.com) with any questions.