# Dedicated Internet Access for Alaska Businesses

A Guide to Determining If DIA Is Right For You







# **Your Business Needs**

You may be wondering: is Dedicated Internet Access (DIA) right for your business? The answer is: it depends.

Other telecommunications companies push their customers toward DIA because they believe it is always the best Internet service available, but we take a more thoughtful approach to helping you understand whether DIA is right for your business.

At GCI, we believe in providing the most appropriate solution to meet your customers' needs. For most common business applications, Business Internet is a fast, flexible and reliable solution. For more performance with symmetrical speeds, Premium Business Internet is the right choice. For enterprise-level needs, DIA best meets a business' operating needs. Other times, a

custom solution with carrier diversity and multiple backups is the only way to ensure your connectivity is 100% reliable even is one service fails.

Our account managers and solutions engineers understand the complexities of operating a business in Alaska and have decades of experience crafting custom solutions to meet every business need. We can assess the right solution for you based on your answers to the questions on the next page.

In our experience, DIA is best suited for businesses for which reliability and predictability of service are missioncritical and cannot be delivered over other solutions. However, this varies based on the nature of the business and the speed at which it operates.

#### What Is DIA?

To understand DIA, we must first understand that the Internet is a solution consisting of two elements: transport and Internet access. Often, we refer to the Internet as a singular entity rather than a combination of these elements, but both are critical to our understanding of DIA.

For GCI, the Internet access is simple enough: we offer Alaska's most robust set of peering<sup>1</sup> connections into Lower 48 Internet providers. Once connected to the GCI network, customers will have access to all the Internet resources one would expect.

The variable when considering your Internet service is the transport: how is business traffic getting from your facility to the Internet? With our DIA service, the transport connection is a symmetric pathway. There is no contention<sup>2</sup> from your residential neighbors or other businesses in the area, and service is guaranteed.

### DIA in Alaska

Alaska's landscape raises challenges for telecommunications companies delivering DIA to businesses. Unlike in the Lower 48, where reliable DIA services can frequently be delivered over technologies such as copper telephone wires (as in T1 and DSL services), DIA in Alaska is usually delivered over a dedicated private line, often via fiber-optic cable.

Over the past 40 years, GCI has invested millions into building Alaska's largest and most robust statewide network, including 7,700 miles of fiber-optic cable. We strive to always provide the best connectivity options for every customer, in every situation, and in every community in Alaska. For DIA customers, this means your service will operate on Alaska's most advanced network and will benefit from the closed loops built into our network for geographic redundancy.<sup>3</sup>

Some organizations may not require low-latency,<sup>4</sup> SLA-backed services like DIA. Others will find that DIA is the best possible solution based on their unique needs, business applications, and locations, among other factors. No matter your use case or where you live in Alaska, we will work with you to craft the right DIA solution.

We believe delivering exceptional connectivity means more than just selecting a transport technology and a bandwidth level. It means working together to craft a unique solution that meets all a customer's connectivity needs. To do that, we back up our best-in-class transport technology with robust SLAs, 24/7 customer support through our Business Technical Support team, and continuous monitoring of the network. Together, these services create a next-level experience for GCI's DIA customers.

## Service Level Agreements (SLAs)

One of the key features of our DIA service is our 99.95% SLA. It allows us to guarantee high availability and performance to our customers, who can be assured that their business is covered by the best network in Alaska. If even higher performance guarantees are required, custom solutions are available.

# 24/7/365 Customer Support

Our Business Technical Support technicians provide 24/7/365 support to DIA customers. Our technicians are empowered to be responsive, owning, tracking, and managing all incidents to resolution. Most support is provided from Anchorage facilities. If issues require, we can respond by:

- Shipping replacement equipment.
- Deploying technicians and engineers to your site.
- Engaging GCI village agents for on-site troubleshooting.

#### **Continuous Monitoring**

With the DIA service, GCI provides a customer premise router to allow technicians to remotely monitor and manage delivery all the way to the customer premise. In the event of an issue, GCI will notify the customer (following the notification process jointly established between GCI and the customer), and Business Technical Support staff will take steps to correct the problem.

#### **IP Addresses and Routing**

As part of our DIA service, GCI can assign a customer a routed block of IPv4<sup>5</sup> and/or IPv6<sup>6</sup> addresses, which can scale up or down and switch facilities as needed as the business continues to grow. Should the customer require any additional diversity or failover functionality, these routed IP blocks will help facilitate that scaling up of services.

We believe in helping customers understand what they need based on their applications and business requirements. We can help determine the right solutions for the situation.



# Glossary

- **1. MPLS:** Multiprotocol label switching (MPLS) is a method for routing data efficiently and quickly within a network. Each data packet is assigned a unique label or identifier, which typically includes information such as the IP address of the destination, the bandwidth, or other important pieces of information.
- **2. VPN:** A virtual private network (VPN) is a private connection built over public network infrastructure. VPNs typically include security measures, such as encryption, that increase security when accessing a network or the Internet.
- **3. Peering:** An agreement between Internet service providers that enables them to share a direct network rather than route information over the Internet. This allows Internet service providers to more efficient high-speed services.
- **4. Contention:** When we talk about contention, we're generally referring to the contention ratio, which is the number of users sharing the same bandwidth on a network. Contention can reduce network performance if not managed carefully.
- **5. Redundancy:** In the context of connectivity, redundancy is a good thing that ensures the availability of the network in the event of a failure along a single network path or device. To build redundancy, providers install additional network infrastructure, such as equipment or connectivity technologies.
- **6. Low-latency:** Latency is defined as the total amount of time it takes for a data packet to travel from one node of a network to another. A low-latency connection enables high-speed data transfer.
- **7. IPv4:** Internet Protocol version 4 (IPv4) is the fourth version of the Internet Protocol, a set of rules for routing and addressing data packets. This version is based on the best-effort model of delivery.
- **8. IPv6:** Internet Protocol version 6 (IPv6) is the enhanced version of IPv4. It can support a larger number of connections between nodes (2128 to be exact).

As a vital member of Alaska's business community, you deserve a technology partner who understands the complexities of working in Alaska and knows how to craft solutions for every challenge Alaska businesses might face.

To speak with an expert about your network needs, reach out to us at bcs@gci.com using the contact button below.

