RESERVATION TELEPHONE COOPERATIVE
BROADBAND INTERNET SERVICE DISCLOSURES

Consistent with FCC regulations,[1] Reservation Telephone Cooperative ("RTC") provides this information about our broadband Internet access services. Our broadband Internet access services include our "High Speed Internet" service offered through four technologies:

- Wireline Digital Subscriber Line ("DSL")
- Wireline Fiber-to-the-Home ("FTTH")
- Fixed wireless service through 700 MHz licensed spectrum ("Fixed Wireless")
- Wireless Wi-Fi service through RTC wireless hot spots ("Wi-Fi")

We provide each of these High Speed Internet services through the network that we own and manage.

We also serve as sales and service agent for WildBlue Satellite Internet services ("WildBlue"). WildBlue does not travel on our network, and we do not manage the service. These disclosures apply to the High Speed Internet services offered on our network, and do not apply to WildBlue. For more information about WildBlue, please visit the company's website: http://www.wildblue.com/.

We welcome questions or comments about the information contained in these disclosures. You may contact us at rtc@restel.com or (800) 862-3115.

NETWORK PRACTICES

General description. We provide a variety of High Speed Internet service offerings to our residential and business customers. We provide the service over our broadband network and through third party fiber optic lines connecting to the Internet. We monitor our network and traffic patterns and make changes we deem necessary to manage and improve overall network performance. We use reasonable nondiscriminatory network management practices to improve overall network performance to ensure a high-quality online experience for all users. Our network management practices do not target any specific content, application, service, or device. As network management issues arise and as technology develops, we may employ additional or new network management practices. We will update these disclosures as necessary.

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[1] 47 CFR 8.3 and *In re: Preserving the Open Internet, Broadband Industry Practices, Report and Order*, 22 FCC Rcd 17905 (2010).

Related documents and disclosures. Our High Speed Internet service is also described and governed by:

- RTC Data Services page, available at http://www.rtc.coop/data/
- RTC Internet FAQ, available at http://www.rtc.coop/data/policies/
- RTC Acceptable Use Policy, available at http://www.rtc.coop/data/policies/
- RTC Privacy Policy, available at http://www.rtc.coop/privacy-policy/
- RTC High Speed Internet Customer Agreement, available at http://www.rtc.coop/data/policies/.

Congestion management. We describe in this section network management practices used to address congestion on our network.

Congestion management practices used.

Network monitoring. We monitor our network for utilization trends. We receive regular reports showing changes in network traffic and congestion. We use this information to plan increases in bandwidth available, port additions, or additional connectivity to the Internet.

Types of traffic affected. Our congestion management practices do not target any specific content, application, service, or device.

Purposes of congestion management practices. Our broadband Internet network is a shared network. This means that our customers share upstream and downstream bandwidth. The goal of our congestion management practices is to enable better network availability and speeds for all users. Our congestion management practices serve to:

- Help us adapt and upgrade our network to maintain or improve network performance as demand for our broadband Internet access service increases.
- Help us adapt and upgrade our network to maintain or improve network performance as demand for higher bandwidth applications increases. Some examples of higher bandwidth applications are gaming, streaming movies, and streaming high definition video.

Congestion management criteria.

Network monitoring. Our network monitoring provides data to help us plan upgrades to our network, equipment, technology, and connectivity to the Internet. As demand for our broadband Internet access service increases, and as demand for higher bandwidth applications increases, we monitor effects on network performance and plan upgrades as we deem necessary. We have not established specific criteria to govern our upgrade decisions.

Effects on end user experience. Because our High Speed Internet network is a shared network, periods of high network demand may result in Internet traffic congestion. End users may experience reduced bandwidth or speed during these times.

Typical frequency of congestion. Congestion tends to occur during periods of peak demand for higher bandwidth applications. Generally, the frequency of congestion tends to increase during 7 pm – 11 pm, especially on Friday and Saturday nights.

Application-Specific Practices. This section discloses any application-specific practices we use, if any.

Management of specific protocols or protocol ports. To protect the security of our network and our customers, we block known hostile ports.

Modification of protocol fields. None.

Applications or classes of applications inhibited or favored. None.

Device Attachment Rules. This section addresses any limitations on attaching lawful devices to our network.

General restrictions on types of devices to connect to network. We place no general restrictions on lawful devices that a customer may connect our network, so long as the device is: (i) compatible with our network; and (ii) does not harm our network or other users. Our High Speed Internet service works with most types of PCs and laptops including Macs, and other Internet compatible devices like game systems and Internet-enabled TVs. If a wireless router is connected to our High Speed Internet service, wireless Internet compatible devices including computers, tablets, smartphones, and other devices can connect to our network. If a customer or potential customer believes they have an unusual configuration, our customer service department will help determine if there is a compatibility problem.

Certain equipment is required to connect to our network for High Speed Internet service. The specific equipment varies with the type of service.

FTTH Equipment. To use our High Speed Internet service delivered via FTTH, we must install an Optical Network Terminal (OTN) at the customer's premises. The OTN then connects via a cable to a device called a Residential Gateway (RG). The customer connects a computer or other Internet enabled device to the RG through a Network Interface Card (NIC) for a wired connection or through a wireless antenna for a wireless device. A customer may obtain an RG from RTC or may use a compatible commercially available RG. If a customer has a question about RG compatibility, our customer service department will help.

DSL Equipment. To use our High Speed Internet service delivered via DSL, customer must have a DSL modem. The customer connects a computer or other Internet enabled device to the modem through a Network Interface Card (NIC) for a wired connection. Some DSL modems can also transmit a Wi-Fi signal for connecting wireless devices to our network. For DSL modems that do not transmit a Wi-Fi signal, a customer can attach a wireless router to the DSL modem for connecting wireless devices. A customer may obtain a DSL modem from RTC or may use a compatible commercially available DSL modem. If a customer has a question about DSL modem compatibility, our customer service department will help.

Fixed Wireless Equipment. To use our High Speed Internet service delivered via Fixed Wireless, customer must have a compatible wireless antenna. The customer can either connect a computer directly to the wireless antenna or can connect a wired or wireless router to the wireless antenna. Through the router, the customer can connect wired or wireless devices to our network. A customer may obtain a compatible wireless antenna from RTC or may use a compatible commercially available wireless antenna. If a customer has a question about wireless antenna compatibility, our customer service department will help.

Wi-Fi. We have established several Wi-Fi hotspots in our service area. A list of current hotspots is available at: http://www.rtc.coop/data/. At an RTC hotspot, an existing RTC High Speed Internet customer can access the Internet with any Wi-Fi compatible device like a laptop, a smartphone, or a tablet. Users that are not existing RTC customers can purchase Wi-Fi access on a daily, weekly, or monthly basis.

Network and End User Security. This section provides a general description of the practices we use to maintain security of our network.

Practices used to ensure end user security, including triggering conditions.

Hostile port blocking: We block known hostile ports to prevent unwanted files, browser hacking and virus attacks.

Virus and Spam filtering: We filter email and website traffic for virus activity and Spam using industry standard virus scanning and prevention techniques. Should an email message be found to contain a virus or other harmful content, the message will be deleted without notification given to either the sender or the intended recipient(s).

Firewalls: RGs and DSL modems obtained from RTC have firewalls enabled. The firewall provides some protection against persons or programs that attempt to gain access to your computers or other connected devices through the Internet.

Practices used to ensure security of the network, including triggering conditions.

Hostile port blocking: We block known hostile ports to prevent unwanted files, browser hacking and virus attacks.

Virus and Spam filtering: We offer email and personal web site hosting. We filter email and website traffic for virus activity and Spam using industry standard virus scanning and prevention techniques.

PERFORMANCE CHARACTERISTICS

General Service Description. Our High Speed Internet service enables a customer to connect an Internet-enabled device through either a wired or wireless connection. The equipment required to connect a computer or other device to the Internet depends on the type of High Speed Internet service used. For example, DSL requires a DSL modem, while Fixed Wireless requires a compatible wireless antenna. Through our High Speed Internet service, we serve as a local Internet service provider. Our High Speed Internet service enables residential and commercial subscribers to access all lawful content, applications, and services of their choice available on the Internet.

Service technology. We deliver our High Speed Internet service through four different service technologies, DSL, FTTH, Fixed Wireless, and Wi-Fi. The equipment required to connect a computer or other device to the Internet depends on the type of High Speed Internet service used. Our network is a shared network, which means that our customers share upstream and downstream bandwidth.

Expected and actual speeds and latency. We offer customers a variety High Speed Internet service levels. We provide a description of the expected maximum transfer speeds associated with each service level on our website, available at http://www.rtc.coop/data/.

> **Speed.** The speeds we identify for each High Speed Internet service level are the maximum upload and download speeds that customers are likely to experience. We provision our customers' modems and engineer our network to deliver the speeds to which our customers subscribe. However, we do not guarantee that a customer will actually achieve those speeds at all times. A variety of factors can affect upload and download speeds, including customer equipment, network equipment, congestion in our network, congestion beyond our network, performance issues with an Internet application, content, or service, and more.

> **Latency.** Latency is another measurement of Internet performance. Latency is the time delay in transmitting or receiving packets on a network. Latency is primarily a function of the distance between two points of transmission, but also can be affected by the quality of the network or networks used in transmission. Latency is typically measured in milliseconds, and generally has no significant impact on typical everyday Internet usage. As latency varies based on any number of factors, most importantly the distance between

a customer's computer and the ultimate Internet destination (as well as the number and variety of networks your packets cross), it is not possible to provide customers with a single figure that will define latency as part of a user experience.

Actual speed and latency performance. Actual speed and latency may vary depending upon network conditions and other factors. Actual performance of our High Speed Internet access service in most cases will conform to national wireline broadband Internet speed and latency levels reported by the FCC.[2]

> **DSL.** The FCC has reported that customers of DSL-based broadband Internet services receive mean download speeds that are within 82% of advertised speeds during non-peak hours, and 77.5% of advertised speeds during peak hours. In addition, the FCC has reported that these same customers experience average latency delays of 44 milliseconds, increasing by an average of 47 milliseconds during peak hours

> **Fiber-to-the-Home.** The FCC has reported that customers of fiber-to-the-home based broadband Internet services receive mean download speeds that are within 114% of advertised speeds during non-peak hours, and 113.5% of advertised speeds during peak hours. In addition, the FCC has reported that these same customers experience average latency delays of 17 milliseconds, increasing by an average of 18 milliseconds during peak hours.

> **Fixed Wireless.** The FCC has not reported average actual speed and latency for Fixed Wireless service. We anticipate average actual speed and latency will be similar to DSL.

> **Wi-Fi.** The FCC has not reported average actual speed and latency for Wi-Fi service. We anticipate average actual speed and latency will be similar to DSL.

Customer Speed Test. We provide an online speed test for our customers, available at http://speedtest.restel.com/. In addition, after conducting a speed test, if a customer believes the results indicate underperformance of the level of service he or she subscribes to, our website provides that customer with an option to provide us a 15 minute recording of his or her Internet connection.   We will use this information to troubleshoot our network.

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[2] See FCC's Office of Engineering and Technology and Consumer Affairs Bureau, *Measuring Broadband, A Report on Consumer Wireline Broadband Performance* in the U.S., OET CGB DOC-308828A1, pp. 4-6 (Aug. 2, 2011) (available at: http://transition.fcc.gov/cgb/measuringbroadbandreport/Measuring_U.S._-_Main_Report_Full.pdf).

Suitability of the Service for Real-time Applications. Our High Speed Internet service is suitable for typical real-time applications including messaging, voice applications, video chat applications, gaming, and Internet video. If users or developers have questions about particular real-time applications, please contact us through the contact information provided on page 1.

SPECIALIZED SERVICES.

Specialized services offered to end users. We offer several specialized services over our network, sharing network capacity with our High Speed Internet service. Specialized services include Internet Protocol Television, and dedicated bandwidth to high volume business users, and video monitoring services.

Effects of specialized services on availability and performance of broadband Internet access service. Our specialized services have no effect on the availability and performance of our High Speed Internet service.

COMMERCIAL TERMS

Prices. Monthly prices for our High Speed Internet service are available at: http://www.rtc.coop/data/.

Usage-based fees.

Fees for early termination.

Type of contract	Termination Fee
Month-to-Month	None
6-month term	$25
24-month term	$200

Fees for additional network services. Fees for certain additional network services are available at http://www.rtc.coop/data/.

Privacy Policies. We do not disclose High Speed Internet service customer or use information to third parties except: (i) as necessary to provide our High Speed Internet service and to manage our network; or (ii) in response to law enforcement requests, court order, or as otherwise required or authorized by law.

Inspection of network traffic. We routinely monitor network and traffic patterns.

Virus and Spam filtering: We filter email and website traffic for virus activity and Spam using industry standard virus scanning and prevention techniques. Should an email message be found to contain a virus or other harmful content, the message will be deleted without notification given to either the sender or the intended recipient(s).

Storage of network traffic information. Dynamic Host Configuration Protocol (DHCP) information is a code included in all network traffic that associates that traffic with a particular modem sending or receiving the traffic. We store DHCP information for at least 2 weeks.

Provision of network traffic information to third parties. We do not disclose High Speed Internet service customer or use information to third parties except: (i) as necessary to provide our High Speed Internet service and to manage our network; or (ii) in response to law enforcement requests, court order, or as otherwise required by law.

Use of network traffic information for non-network management purposes. We do not disclose High Speed Internet service customer or use information to third parties except: (i) as necessary to provide our High Speed Internet service and to manage our network; or (ii) in response to law enforcement requests, court order, or as otherwise required by law.

Redress Options. End users or edge providers with complaints or questions relating to these disclosures should contact us through the contact information provided on page 1.

Practices for resolving end-user and edge provider complaints and questions. We will endeavor to answer questions promptly via email or voice. For complaints, we will provide an initial response in writing within 15 business days of receipt. We will attempt to resolve complaints informally, escalating the matter to senior management if needed.