



FSA Amendment #1

Frontier Confidential

THIS AMENDMENT NUMBER 1 shall be attached to and become a part of the Frontier Services Agreement (“FSA”) dated July 1, 2019 (“FSA Effective Date”) located at 670 E Gilbert Street, San Bernardino, CA 92415-0915 by and between **San Bernardino County** or “Customer” and **Frontier Communications of America, Inc.** on behalf of itself and its affiliates (“Frontier”).

WHEREAS, the parties agree to amend the Service Schedule as set forth herein.

NOW THEREFORE, in consideration of the promises herein and other good and valuable consideration, the parties agree as follows:

1. All references to “County of San Bernardino” in the Agreement are amended to read “San Bernardino County”.
2. The FSA shall include the terms and conditions of the Schedule attached to this Amendment under **Attachment 1 - SIP Trunking Schedule**.
3. All provisions of the FSA shall remain in full force and effect except as modified by this Amendment.

This Amendment shall be effective on the date last signed below. This Amendment may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, and such counterparts shall together constitute one and the same Amendment. The parties shall be entitled to sign and transmit an electronic signature of this Amendment (whether by facsimile, PDF or other email transmission), which signature shall be binding on the party whose name is contained therein. Each party providing an electronic signature agrees to promptly execute and deliver to the other party an original signed Amendment upon request.

Frontier Communications of America, Inc.	San Bernardino County
<i>Frontier's Signature:</i>	<i>Customer's Signature:</i>
Printed Name:	Printed Name: Dawn Rowe
Title:	Title: Chair, Board of Supervisors
Date:	Date:



Attachment 1 SIP Trunking Schedule

This is Schedule Number S-5550062483 to the Frontier Services Agreement dated 7/1/2019 (“FSA”) by and between SAN BERNARDINO COUNTY (“Customer”) and Frontier Communications of America, Inc. on behalf of itself and its affiliates (“Frontier”). Customer orders and Frontier agrees to provide the Services and Equipment identified in the Schedule below.

Primary Service Location: 777 E Rialto Ave, 92415-1005

Schedule Date: 2022-07-18

SPOC: Valerie Collins

Schedule Type/Purpose: Order for new Services

Service Term: 18 Months

Service Location: 670 East Gilbert Street, San Bernardino, CA 92405

	Quantity	MRC	Total MRC	NRC
SIP Trunking (Concurrent Call Session) Service Type: SIP – Hand Off	240	\$8.19	\$1,965.60	\$0.00
DID Number - Included Included DID 500				
LD Block of Time - Included 40000 minutes @ \$0/mo., \$0.025/min				

Service Location: 777 E Rialto Ave, San Bernardino, CA 924151005

	Quantity	MRC	Total MRC	NRC
SIP Trunking (Concurrent Call Session) Service Type: SIP – Hand Off	240	\$8.19	\$1,965.60	\$0.00
DID Number - Included Included DID 500				
LD Block of Time - Included 40000 minutes @ \$0/mo., \$0.025/min				
Total:			\$3,931.20	\$0.00

1. Service Descriptions.

A. SIP Trunking

1. Service Description.

- A. Frontier SIP Trunking Service is a business voice communications service using Internet Protocol (IP) technology. It provides voice communications between a station on an IP-capable PBX (IP-PBX) on Customer's local area network (LAN) and (i) for off-net Services, a station on the Public Switched Telephone Network ("PSTN"); (ii) for on-net Services, a station on Frontier's converged services network, in each case using IP technology and SIP Trunking service functionality.
- B. Frontier SIP Trunking Service provides the following:
- Access to the PSTN, or additional ports on Frontier's converged services network
 - VoIP service using the Session Initiation Protocol (SIP) to provide telephone services to Customer's equipped with a SIP-based private branch exchange (IP-PBX)
 - Access to 9-1-1 Emergency Services, subject to the limitations and terms in this Schedule.

B. SIP Service with TDM Handoff

1. Service Description.

- A. SIP Service with TDM Handoff is a business voice communications service using Internet Protocol (IP) technology. It provides voice communications between a station on a TDM-capable PBX on Customer's local area network (LAN) and (i) for off-net Services, a station on the Public Switched Telephone Network ("PSTN"); (ii) for on-net Services, a station on Frontier's converged services network, in each case using IP technology and SIP Trunking service functionality.
- B. Frontier **SIP Service with TDM Handoff** provides the following:
- Access to the PSTN, or additional ports on Frontier's converged services network
 - VoIP service using the Session Initiation Protocol (SIP) to provide telephone services via an IAD to Customer's equipped with a TDM-based private branch exchange (PBX)
 - Access to 9-1-1 Emergency Services, subject to the limitations and terms in this Schedule
- C. Service related to the IAD consists of the following:
- **Configuration.** Frontier will configure the IAD based on documented Customer requirements.
 - **Response.** Frontier will work to isolate and determine the source and severity of the problems. If a problem is caused by either the network transport or the IAD, Frontier and Customer will cooperate to restore the IAD to operational condition. If the source of the problem is within the IAD, Frontier will be responsible for the repair or replacement of the IAD, in Frontier's sole discretion. If the source of the problem is not the IAD, at Customer's request Frontier will cooperate with Customer to conduct testing and repair activities, subject to Frontier's standard technician rates.
 - **Exclusions.** Frontier has no responsibility with respect to: (i) electrical work external to the IAD, including but not limited to power or back-up power to or from the IAD; (ii) IAD failures caused by factors not related to the IAD or outside Frontier's control, including but not limited to failure of the Service Location or any of Customer's other network equipment or facilities to conform with Frontier's specifications; (iii) use of the IAD for any purpose other than as intended by the manufacturer; (iv) damage caused by anyone other than an Frontier employee or representative; (v) IAD supplies, accessories, painting, or refurbishing; and (vi) any activity related to anything not furnished by Frontier, or use of IAD which fails to conform to manufacturer or Frontier specifications.

C. **Ethernet Virtual Private Line (EVPL)** is a data transport configuration providing point-to-point or point-to-multipoint Ethernet connections between a pair of User Network Interfaces (UNIs). EVPL as a point-to-point configuration can be used to support delivery of eligible Frontier services to a designated Customer. Location (e.g. Frontier Connect—Cloud). EVPL is a carrier grade data networking service featuring Quality of Service (QoS) and the following progressively higher Class of Service (CoS) levels: Platinum Service (Real Time). Frontier provides EVPL Silver Service on a standard best efforts' basis and subject to unspecified variable bit rate, latency, and packet loss with dependencies on current traffic load(s) within Frontier's Shared Infrastructure. EVPL will be designed, provisioned and implemented according to standard switched Ethernet components consisting of service multiplexed capability over UNIs and Ethernet Virtual Connections (EVCs) through the use of Virtual Local Area Networks (VLANs) in order to secure traffic separation, privacy and security between Customer's Service Locations over Frontier's shared switch and backbone infrastructure. Ethernet Virtual Private Line will accept and carry untagged and or tagged traffic as described per IEEE 802.1Q networking standards specific to Frontier's Ordering Guidelines for this Service. Physical termination shall conform to applicable rules and regulations with respect to Minimum point of entry (MPOE) and demarcation point. If Customer requests extensions beyond the MPOE, such extension (s) shall be subject to Frontier's cabling service policies and Frontier's charges related thereto per separate Frontier Cabling Service and Fee Schedule.

2. Emergency 911 Service.

A. **E911 LIMITATION ISSUES:** Customer acknowledges that the Service is provided directly to Customer's IP PBX server, and the outgoing telephone number or numbers (Emergency Location Identification Numbers, or "ELIN") sent to Frontier's network and used for Automatic Number Identification ("ANI") for locating the origination position of an E911 call is/are provisioned and programmed into the PBX. Customer understands and acknowledges that changing the Service location affects emergency 911 location services, and agrees that the SIP Trunking Service will not be used at any location other than the Primary Service Location identified in this Schedule. Customer requests and agrees that all emergency 911 calls made through Frontier's network will be sent to the Public Safety Answering Point serving the Primary Service Location. If Customer wishes to change the Primary Service Location, Customer will contact Frontier, and Frontier will provide Customer with information about how to update the registered location of the Equipment. Customer is responsible for managing and maintaining the accuracy of ANI with respect to the Services, including but not limited to providing timely, accurate and inclusive information



to Frontier for submission into the E911 database. Frontier assumes no liability for use of the Service other than as described herein. Customer is responsible for notifying each individual using the Service that the Equipment can not be used for any calls (including but not limited to emergency calls) if the broadband connection or electrical power to the Equipment fails. CUSTOMER SPECIFICALLY ACKNOWLEDGES RECEIPT OF AND UNDERSTANDS THE LIMITATIONS OUTLINED HEREIN. TO THE EXTENT PERMITTED UNDER APPLICABLE LAW, CUSTOMER WILL DEFEND, INDEMNIFY, AND HOLD FRONTIER HARMLESS FROM ANY LOSS, COST, EXPENSE OR LIABILITY (I) ARISING FROM OR IN ANY WAY RELATED TO CUSTOMER'S FAILURE TO PROVIDE THE REQUIRED NOTICES, OR (II) OTHERWISE RELATED TO THE USE OF E-911 SERVICES, EXCEPT TO THE EXTENT CAUSED BY FRONTIER'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT.

B. DISCLAIMER: 911 SERVICE IS OFFERED SOLELY AS AN AID IN CONTACTING AN APPROPRIATE PSAP IN CONNECTION WITH FIRE, POLICE AND OTHER EMERGENCIES. EXCEPT ARISING FROM FRONTIER'S GROSS NEGLIGENCE, WILLFUL MISCONDUCT, OR VIOLATION OF LAW, FRONTIER IS NOT RESPONSIBLE FOR ANY LOSSES, CLAIMS, DEMANDS, SUITS OR ANY LIABILITY WHATSOEVER, WHETHER SUFFERED, MADE, INSTITUTED OR ASSERTED BY CUSTOMER OR BY ANY OTHER PARTY OR PERSON FOR ANY PERSONAL INJURY TO OR DEATH OF ANY PERSON OR PERSONS, AND FOR ANY LOSS, DAMAGE OR DESTRUCTION OF ANY PROPERTY, WHETHER OWNED BY CUSTOMER OR OTHERS, CAUSED OR CLAIMED TO HAVE BEEN CAUSED BY: (1) MISTAKES, OMISSIONS, INTERRUPTIONS, DELAYS, ERRORS OR OTHER DEFECTS IN THE PROVISION OF EMERGENCY 911 SERVICE, OR (2) INSTALLATION, OPERATION, FAILURE TO OPERATE, MAINTENANCE, REMOVAL, PRESENCE, CONDITION, LOCATION OR USE OF ANY EQUIPMENT AND FACILITIES FURNISHING THIS SERVICE. FRONTIER IS NOT RESPONSIBLE FOR ANY INFRINGEMENT OR INVASION OF THE RIGHT OF PRIVACY OF ANY PERSON OR PERSONS, CAUSED OR CLAIMED TO HAVE BEEN CAUSED, DIRECTLY OR INDIRECTLY, BY THE INSTALLATION, OPERATION, FAILURE TO OPERATE, MAINTENANCE, REMOVAL, PRESENCE, CONDITION, OCCASION OR USE OF EMERGENCY 911 SERVICE AND THE EQUIPMENT ASSOCIATED THEREWITH, OR BY ANY SERVICES FURNISHED BY FRONTIER INCLUDING, BUT NOT LIMITED TO, THE IDENTIFICATION OF THE TELEPHONE NUMBER, ADDRESS OR NAME ASSOCIATED WITH THE PHONE USED BY THE PARTY OR PARTIES ACCESSING EMERGENCY 911 SERVICE, AND WHICH ARISE OUT OF THE NEGLIGENCE OR OTHER WRONGFUL ACT OF FRONTIER, CUSTOMER, ITS END USERS, AGENCIES OR MUNICIPALITIES, OR THE EMPLOYEES OR AGENTS OF ANY ONE OF THEM.

3. Service Availability.

A. Customer's Local Area Network ("LAN") environment must meet the requirements for speed, duplex, bandwidth, and appropriate "Managed Switch" support. LAN wiring must be Category 5 (CAT5) or better. Any IP-PBX used by Customer must be validated by Frontier for service availability. Frontier's IP-VPN (without limitation) is not available at all locations, depending on the availability of appropriate enabling facilities and the condition of the facilities serving Customer's location.

B. Customer is responsible for the correct setup and Customer is responsible for maintaining the quality and condition of its LAN, and thus, Frontier is not responsible for poor quality or outages of the Service that result from the quality or condition of Customer's LAN. Frontier reserves the right to reject any order for Services for any reason, including without limitation the inability or impracticality of providing such Service in a particular geographic area in which Frontier does not have sufficient presence, capacity, corporate infrastructure or network technical infrastructure to effectively support the requested Service. In addition, Customer understands that use of the Services is restricted in the following manner: (i) At any given time, Customer may only place as many concurrent calls as it has purchased simultaneous calling capacity; (ii) Customer may modify Frontier installed design and/or configuration at their own risk; (iii) Customer may not utilize auto-dialers or any similar type of device in connection with Frontier SIP Trunking Service; and (iv) Customer may not use Frontier SIP Trunking Service for telemarketing, fax broadcasting, fax blasting, or continuous or extensive call forwarding. CUSTOMER EXPRESSLY ACKNOWLEDGES THAT ANY VIOLATION OF THE FOREGOING RESTRICTIONS ON ITS USE OF THE SERVICE MAY RESULT IN THE IMMEDIATE TERMINATION OF THE SERVICE BY FRONTIER.

4. Obligations of Customer.

A. Customer shall properly use any equipment or software, and all pass codes, personal identification numbers ("PINs") or other access capability obtained from Frontier or an affiliate or vendor of Frontier and shall surrender the equipment and software in good working order to Frontier at a place specified by Frontier and terminate all use of any access capability upon termination or expiration of this Schedule. Customer shall be responsible for all uses of PINs, pass codes or other access capability during or after the term hereof.

B. Except as otherwise expressly stated herein, Customer is responsible for obtaining, installing, configuring and maintaining all equipment (including, but not limited to, SIP phones, and firewalls), software, wiring, power sources, telephone connections and/or communications services necessary for interconnection with Frontier's network or otherwise for use in conjunction with IP Service (Facilities). Customer is responsible for ensuring that such Facilities are compatible with Frontier's requirements and that they continue to be compatible with subsequent revision levels of Company-provided equipment, software and services. Frontier is not responsible for the availability, capacity and/or condition of any Facilities not provided by Frontier. Customer is responsible for operation and configuration of its computer(s) and LAN/WAN. If Customer connects any Facilities to IP Service that Customer reasonably should know may not be compatible with IP Service, Customer is solely responsible for any effects that arise from that connection and Customer waives any claims against Frontier relating to the performance of IP Service. Customer may purchase CPE necessary for use of the Services, as well as extended Maintenance in such CPE from Frontier under the terms of a separate Equipment Purchase, Installation and Maintenance agreement.

C. Use of IP Service, like other network-based services, carries certain security risks to the systems and networks of Customer, Frontier and third parties including, but not limited to: misuse; unauthorized access; alterations; theft; destruction; corruption; and attacks ("Occurrences"). Customer shall, at its own expense, take security measures including but not limited to use of firewalls, passwords, access restrictions, encryption, policies, and physical access restrictions ("Security Measures") to protect from Occurrences all Services, IP traffic, Facilities and other equipment, software, data and systems located on Customer's premises or otherwise in Customer's control and used in connection with IP Service, whether owned by Customer, Frontier, or Frontier's subcontractors.

D. Customer agrees that Frontier is not liable, in contract, tort, or on any other basis, for any loss resulting from any Occurrences or use of Services, Facilities or other equipment, software, data and systems. Customer is responsible for all security measures, even if Customer uses a third party or Frontier to configure and implement them.

E. Customer is responsible to ensure appropriate processes and protocols are in place for rate shaping to the amount of throughput ordered. Customer acknowledges that failure to comply with this responsibility may negatively impact Service performance.

F. Customer shall permit Frontier to access the Router's Simple Network Management Protocol (SNMP) variables, and Customer shall, at Frontier's request, permit one or more Frontier network management systems to be the recipient of SNMP trap messages. Frontier will perform monitoring based on standard SNMP traps received from the Router. Frontier will work to isolate and determine the source and severity of the problems. If a problem is caused by either the network transport or the Router, Frontier and Customer will cooperate to restore the Router to operational condition. If the source of the problem is within the Router, Frontier will be responsible for the repair or replacement of the Router, in Frontier's sole discretion. If the source of the problem is not the Router, at Customer's request Frontier will cooperate with Customer to conduct testing and repair activities, subject to Frontier's standard technician rates. Frontier has no responsibility with respect to: (i) electrical work external to the Router, including but not limited to power or back-up power to or from the Router; (ii) Router failures caused by factors not related to the Router or outside Frontier's control, including but not limited to failure of the Service Location or any of Customer's other network equipment or facilities to conform with Frontier's specifications; (iii) use of the Router for any purpose other than as intended by the manufacturer; (iv) damage caused by anyone other than an Frontier employee or representative; (v) Router supplies, accessories, painting, or refurbishing; and (vi) any activity related to anything not furnished by Frontier, or use of Router which fails to conform to manufacturer or Frontier specifications.

5. Equipment or Software Not Provided by Frontier.

A. Upon notice from Frontier that the facilities, services, equipment or software not provided or approved by Frontier is causing or is likely to cause hazard, interference or service obstruction, Customer shall immediately eliminate the likelihood of hazard, interference or service obstruction. If Customer requests Frontier to troubleshoot difficulties caused by the equipment or software not provided by Frontier, and Frontier agrees to do so, Customer shall pay Frontier at its then current rates.

B. Frontier reserves the right to approve/reject the make, model and or software of the Customer-provided router and modem to be used as the gateway to the Frontier network. Frontier will identify for Customer makes or models of routers and modems with which it has experience, but no such information shall be deemed a recommendation, representation or warranty with respect to such equipment.

C. Frontier and Customer will cooperatively establish the initial configuration for the Customer-provided router's interface with the Frontier network.

D. Frontier may, from time to time, procure Services or facilities from an affiliate of Frontier, and in doing so, may act as an agent and not a principal for the affiliated entity with respect to the procurement and provision of the Service or facility. The Service or facility may be provided by an affiliate or vendor that is a common carrier, in which case the provision of the service or facility may be provided pursuant to terms and conditions stated in a filed federal or state tariff, which Customer agrees will govern the provision of the service or the facility.

6. Pre-installation cancellation fees, FOC Notice and Special Construction.

(a) Pre-installation cancellation fees. Notwithstanding any provision of the FSA: (1) If Customer cancels any Service or Equipment prior to delivery of any Equipment or installation of the Service or Equipment, Customer shall pay a processing fee of \$750 (the "Processing Fee") and (2) Frontier will provide Customer with notice (the "FOC Notice") of the project completion date (the "FOC Date") as soon as possible in light of the requested services and customer's location. If Customer cancels more than ten (10) business days after the issuance of the FOC Notice, Customer shall pay the Processing Fee and the total costs and expenditures of Frontier in connection with establishing the Service and / or providing the Equipment prior to Frontier's receipt of notice of cancellation including but not limited to any construction and engineering costs and Equipment restocking fees.

(b) Special Construction. All Services are subject to availability and Frontier Network limitations. The rates identified in this Schedule are estimated based on standard installation costs and Services may not be available at all service locations at the rates identified. If Frontier determines, in its reasonable discretion, that the costs of provisioning Service to any service location are materially higher than normal, Frontier will notify Customer of the additional costs associated with provision of the Services and request Customer's acceptance of such costs as a condition to proceeding ("Special Construction"). Upon notification that Special Construction is required, Customer will have ten (10) business days to notify Frontier of its acceptance. If the Customer does not agree to the Special Construction within ten (10) business days, the Customer shall be deemed to have cancelled the Service Schedule without further liability. If the Customer agrees to the Special Construction, Frontier and Customer will execute a replacement Schedule. Notwithstanding the foregoing, Customer shall not be required to pay construction, engineering and Processing Fees if the cancellation is within ten (10) business days of receipt of Frontier's notification of additional special construction and engineering costs pursuant to this Service Schedule.

7. SERVICE LEVEL AGREEMENT. The Ethernet Service Level Agreement for the described Ethernet Services is attached hereto and incorporated herein as Exhibit 1.



FSA Amendment #1

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This Schedule is not effective and pricing, dates and terms are subject to change until the FSA Amendment is signed by both parties, and may not be effective until approved by the FCC and/or applicable State Commission. This Schedule and any of the provisions hereof may not be modified in any manner except by mutual written agreement. The above rates do not include any taxes, fees or surcharges applicable to the Service. This Schedule, and all terms and conditions of the FSA, is the entire agreement between the parties with respect to the Services described herein, and supersedes any and all prior or contemporaneous agreements, representations, statements, negotiations, and undertakings written or oral with respect to the subject matter hereof.

EXHIBIT 1

ETHERNET SERVICE LEVEL AGREEMENT

This E-LINE Service Level Agreement (“SLA”) applies to Ethernet Services ordered pursuant to an E-LINE Ethernet Virtual Private Line (EVPL), Ethernet Private Line (EPL) Schedule executed by and between SAN BERNARDINO COUNTY (“Customer”) and Frontier Communications of America, Inc. (“Frontier”). The terms of this SLA apply exclusively to the Ethernet network elements directly within Frontier’s management responsibility and control (“E-LINE Service”).

1. Operational Objectives (EVPL)

A. **Availability:** Circuit Availability is the ability to exchange data packets with the nearest Frontier Internet Point of Presence or E-LINE Customer egress port (Z location) via the ingress port (A location). “Service Outage” occurs when packet transport is unavailable or when the output signal is outside the limits of this service guarantee. Availability is measured by the number of minutes during a calendar month that the E-LINE Service is operational, divided by the total minutes in that calendar month. Calculation is based on the stop-clock method beginning at the date and time of the Customer-initiated trouble ticket and ends when Frontier restores SLA-compliant circuit operation. Frontier’s E-LINE Service Availability commitment and applicable Service credit are outlined in Table 1A, subject to Sections 3 and 4 below.

Table 1A: EVPL		
Circuit Availability		MRC Service Credit
Availability	99.99%	Below 99.99% Service Credit 30% MRC

B. **Mean Time to Repair (MTTR):** MTTR is a monthly calculation of the average duration of time between Trouble Ticket initiation (in accordance with Section 2B) and Frontier’s reinstatement of the E-LINE Service to meet the Availability performance objective. The MTTR objectives, and credits applicable to a failure to meet such objectives, are outlined in Table 1B, subject to Sections 3 and 4 below.

Table 1B: EVPL		
Mean Time To Repair		MRC Service Credit
MTTR	4 Hours	25 % MRC above 4 hrs
		50% MRC above 6 hrs.

2. Performance Objectives

A. **Packet Delivery:** The Frame Loss Ratio (FLR) is a round trip measurement between ingress and egress ports (NIDs) at the Customer’s A and Z locations of packet delivery efficiency. FLR is the ratio of packets lost, round trip, vs. packets sent. Packet delivery statistics are collected for one calendar month. Credits will be based on Frontier’s verification of packet delivery performance between NIDs at Customer’s Service Location. The packet delivery SLA applies to CIR-compliant packets on Ethernet LAN / WAN circuits only. This packet delivery guarantee does not apply to Ethernet Internet services. Frontier offers three FLR Quality of Service (QoS) levels for Ethernet Data Service. The applicable SLA is based on the QoS level, as outlined in Table 1C. Ethernet Gold and Platinum are premium level services designed to support commercial customers’ mission-critical and real time applications.

- **Silver QoS** service is Frontier’s basic business class data service with improved performance across all standard performance parameters. Ethernet Silver SLA, termed Standard Data (SD) Service, is Frontier’s upgraded replacement of *Best Effort* Ethernet designed specifically for the commercial customer.
- **Gold QoS** service is a premium business data service featuring enhanced performance parameters with packet forwarding priority set to *Priority Data*.
- **Platinum QoS** service carries Frontier’s highest QoS performance parameters and includes voice grade packet forwarding priority set to *Real Time*.

If packet delivery performance falls below the applicable packet delivery percentage, Customer will be entitled to a Service credit as outlined in Table 1C, subject to Sections 3 and 4 below.

Table 1C: E-LINE Frame Loss Ratio (FLR)				
Packet Loss QoS Level	Frame Loss Ratio (FLR) CITY	Frame Loss Ratio (FLR) STATE	Frame Loss Ratio (FLR) Inter-STATE	MRC Service Credit
Silver [Standard Data Service]	0.10%	0.10%	0.10%	10%
Gold [Priority Data Service]	0.01%	0.01%	0.025%	15%
Platinum [Real Time Data Service]	0.01%	0.01%	0.025%	20%

- B. **Latency:** Latency, Frame Transfer Delay (FTD), is the maximum packet delivery time measured round-trip between Customer's A and Z locations at the Committed Information Rate (CIR). Latency is measured across On-Net Service paths between ingress and egress NIDs. Measurements are taken at one-hour intervals over a one month period. Credits are based on round-trip latency of 95th percentile packet. Customer must meet the following criteria to qualify for Service credits on the E-LINE Latency SLA outlined in **Table 1D**:
- Access loops at Customer locations A and Z may be fiber or copper connectivity from the Serving Wire Center to the NIDs at each premise to qualify for the circuit SLA.
 - Each SLA guarantee is associated with ONLY one QoS Level. Frontier will honor the Service credit associated with the QoS level ordered for On-Net Services. Customer will be entitled to Service credits if the Service fails to meet applicable Performance Objective as outlined in **Table 1D** subject to Sections 3 and 4 below

Table 1D: E-LINE Frame Transfer Delay (FTD):				
Latency QoS Level	Round Trip Delay CITY	Round Trip Delay STATE	Round Trip Delay Inter-STATE	MRC Service Credit
Silver [Standard Data Service]	≤ 56 ms	≤ 100 ms	≤ 250 ms	10%
Gold [Priority Data Service]	≤ 26 ms	≤ 60 ms	≤ 160 ms	15%
Platinum [Real Time Data Service]	≤ 14 ms	≤ 36 ms	≤ 140 ms	20%

- C. **Jitter:** Packet Jitter, Frame Delay Variance (FDV), is the difference in end-to-end one way delay between selected packets in a data stream with any lost packets being ignored. Frontier guarantees average FDV (inter-packet differential) performance on E-LINE Service transmissions will meet performance parameters outlined in the table below. Credits are based on the monthly average Frame Delay Variance. Customer must meet the following criteria to qualify for Service credits on the E-LINE Jitter SLA:
- Access loops at Customer Service Locations A and Z may be fiber or copper connectivity from the Serving Wire Center to the NIDs at each Service Location to qualify for Fiber Loop FDV SLA.
 - Each SLA guarantee is associated with ONLY one QoS Level. Frontier will honor the Service credit associated with the QoS level ordered for E-LINE Services, as outlined in the applicable Ethernet Service Schedule. Customer will be entitled to the credit as outlined in **Table 1E** if E-LINE Services fail to meet applicable service level objectives, subject to Sections 3 and 4 below.

Table 1E: E-LINE Frame Delay Variance (FDV):				
Jitter QoS Level	Average Jitter Per Site CITY	Average Jitter Per Site STATE	Average Jitter Per Site Inter-STATE	MRC Service Credit
Silver [Standard Data Service]	n/s	n/s	n/s	10%
Gold [Priority Data Service]	≤ 8 ms	≤ 40 ms	≤ 40 ms	15%
Platinum [Real Time Data Service]	≤ 3 ms	≤ 8 ms	≤ 10 ms	20%

3. Service Outage Reporting Procedure.

- A. Frontier will maintain a point-of-contact for Customer to report a Service Outage, twenty-four (24) hours a day, seven (7) days a week.
- B. When E-LINE Service is suffering from a Service Outage, Customer must contact Frontier's commercial customer support center (also known as the "NOC") at 1-(888) 637-9620 to identify the Service Outage and initiate an investigation of the cause ("Trouble Ticket"). Responsibility for Trouble Ticket initiation rests solely with Customer. Once the Trouble Ticket has been opened, the appropriate Frontier departments will initiate diagnostic testing and isolation activities to determine the source. In the event of a Service Outage, Frontier and Customer will cooperate to restore the Service. If the cause of a Service Outage is a failure of Frontier's equipment or facilities, Frontier will be responsible for the repair. If the degradation is caused by a factor outside the control of Frontier, Frontier will cooperate with Customer to conduct testing and repair activities at Customer's cost and at Frontier's standard technician rates.
- C. A Service Outage begins when a Trouble Ticket is initiated and ends when the affected E-LINE Service is Available; provided that if the Customer reports a problem with a Service but declines to allow Frontier access for testing and repair, the Service will be considered to be impaired, but will not be deemed a Service Outage subject to these terms.
- D. If Frontier dispatches a field technician to perform diagnostic troubleshooting and the failure was caused by the acts or omissions of Customer or its employees, affiliates, contractors, agents, representatives or invitees; then Customer will pay Frontier for all related time and material costs at



Frontier's standard rates.

4. Credit Request and Eligibility.

- A. In the event of a Service Outage, Customer may be entitled to a credit against the applicable On-Net Service MRC if (i) Customer initiated a TroubleTicket; (ii) the Service Outage was caused by a failure of Frontier's equipment, facilities or personnel; (iii) the Service Outage warrants a credit based on the terms of Section 1; and (iv) Customer requests the credit within thirty (30) days of last day of the calendar month in which the Service Outage occurred.
- B. Credits do not apply to Service Outages caused, in whole or in part, by one or more of the following: (i) the acts or omissions of Customer or its employees, affiliates, contractors, agents, representatives or invitees; (ii) failure of power; (iii) the failure or malfunction of non-Frontier equipment or systems; (iv) circumstances or causes beyond the control of Frontier or its representatives; (v) a Planned Service Interruption; (vi) Emergency Maintenance or (vii) interruptions resulting from Force Majeure events as defined in Customer's FSA. In addition, Customer will not be issued credits for a Service Outage during any period in which Frontier is not provided with access to the Service location or any Frontier network element, or while Customer is testing and/or verifying that the problem has been resolved. "Planned Service Interruption" means any Service Outage caused by scheduled maintenance, planned enhancements or upgrades to the Frontier network; provided that Frontier will endeavor to provide at least five (5) business days' notice prior to any such activity if it will impact the Services provided to Customer. "Emergency Maintenance" means maintenance which, if not performed promptly, could result in a serious degradation or loss of service over the Frontier network.
- C. Notwithstanding anything to the contrary, all credit allowances will be limited to maximum of 50% of the MRC for the impacted E-LINE Service, per month. For cascading failures, only the primary or causal failure is used in determining Service Outage and associated consequences. Only one service level component metric can be used for determining Service credits. In the event of the failure of the Service to meet multiple metrics in a one-month period, the highest Service credit will apply, not the sum of multiple Service credits.
- D. This SLA guarantees service performance of Frontier's Ethernet data services only. This SLA does not cover TDM services [DS1, NxDS1, or DS3 services] or other voice or data services provided by Frontier. This SLA does not apply to services provided over third party non-partner facilities, through a carrier hotel, or over Frontier facilities which terminate through a meet point circuit with a third party non-partner carrier.
- E. The final determination of whether Frontier has or has not met SLA metrics will be based on Frontier's methodology for assessment of compliant performance. Service Outage credits are calculated based on the duration of the Service Outage, regardless of whether such Service Outage is the result of failure of the Service to meet one or more performance metric.
- F. Credit allowances, if any, will be deducted from the charges payable by Customer hereunder and will be expressly indicated on a subsequent bill to Customer. Credits provided pursuant to this SLA shall be Customer's sole remedy with regard to Service Outages.

5. **Chronic Outage:** An individual E-LINE Service qualifies for "Chronic Outage" status if such service fails to meet the Availability objectives, and one or more of the following: (a) a single Trouble Ticket extends for longer than 24 hours, (b) more than 3 Trouble Tickets extend for more than 8 hours, during a rolling 6 month period, or (c) 15 separate Trouble Tickets of any duration within a calendar month. If an E-LINE Service reaches Chronic Outage status, then Customer may terminate the affected E-LINE Service without penalty; provided that Customer must exercise such right within ten (10) days of the E-LINE Service reaching Chronic Outage status and provide a minimum of 15 days prior written notice to Frontier of the intent to exercise such termination right.