

**AMENDMENT FIVE
OF CONTRACT FA-09-25220-00 / 2904**

This Amendment is made and entered by and between the State of Tennessee, Department of Finance and Administration, hereinafter referred to as the "State" and AT&T Corp., hereinafter referred to as the "Contractor." It is mutually understood and agreed by and between said, undersigned contracting parties that the subject Contract is hereby amended as follows:

1. Contract section E.17.d.ix. is deleted in its entirety and replaced with the following:

E.17.d.ix. The cost of the independent benchmark analysis shall be paid by the Contractor directly to the State's benchmarking telecommunications consultation contractor.
2. Attachment B is deleted in its entirety and replaced with the new Attachment B attached hereto.

The revisions set forth herein shall be effective December 7, 2011. All other terms and conditions of this Contract not expressly amended herein shall remain in full force and effect.

**IN WITNESS WHEREOF,
AT&T CORP.**

SIGNATURE

DATE

PRINTED NAME AND TITLE OF SIGNATORY (above)

DEPARTMENT OF FINANCE AND ADMINISTRATION:

MARK EMKES, COMMISSIONER

DATE

Attachment B – NetTN Catalog of Service Offerings

In the tables that follow the time periods for the various contract “Years” shall be:	
Year 1	From July 1, 2008 through June 30, 2009
Year 2	From July 1, 2009 through June 30, 2010
Year 3	From July 1, 2010 through June 30, 2011
Year 4	From July 1, 2011 through June 30, 2012
Year 5	From July 1, 2012 through June 30, 2013
Year 6	From July 1, 2013 through June 30, 2014
Year 7	From July 1, 2014 through June 30, 2015
Year 8	From July 1, 2015 through June 30, 2016
Year 9	From July 1, 2016 through June 30, 2017
Year 10	From July 1, 2017 through June 30, 2018

NetTN Catalog of Service Offerings

<i>Description Detail</i>	<i>Unit</i>	<i>Year 1 Unit Cost</i>	<i>Year 2 Unit Cost</i>	<i>Year 3 Unit Cost</i>	<i>Year 4 Unit Cost</i>	<i>Year 5 Unit Cost</i>	<i>Year 6 Unit Cost</i>	<i>Year 7 Unit Cost</i>	<i>Year 8 Unit Cost</i>	<i>Year 9 Unit Cost</i>	<i>Year 10 Unit Cost</i>
End Site WAN Circuit with Internet access.	DSL (1.5 x 256k)	/month	\$279.45	\$279.45	\$279.45	\$279.45	\$279.45	\$279.45	\$279.45	\$279.45	\$279.45
	DSL (3M x 384k)	/month	\$310.50	\$310.50	\$310.50	\$310.50	\$310.50	\$310.50	\$310.50	\$310.50	\$310.50
	DSL (6M x 384k)	/month	\$345.01	\$345.01	\$345.01	\$345.01	\$345.01	\$345.01	\$345.01	\$345.01	\$345.01
	384kbps	/month	\$475.00	\$475.00	\$475.00	\$475.00	\$475.00	\$475.00	\$475.00	\$475.00	\$475.00
	1.544 Mbps	/month	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00
	3 Mbps	/month	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99
	4.5 Mbps	/month	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99
	6 Mbps	/month	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99
	7.5 Mbps	/month	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99
	9 Mbps	/month	\$2,524.99	\$2,524.99	\$2,524.99	\$2,524.99	\$2,524.99	\$2,524.99	\$2,524.99	\$2,524.99	\$2,524.99
	10.5 Mbps	/month	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99
	16 Mbps	/month	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73
	25 Mbps	/month	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29
	DS3 – 45 Mbps	/month	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54
	Metro Ethernet 2 Mbps	/month	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49
	Metro Ethernet 4 Mbps	/month	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00
	Metro Ethernet 8 Mbps	/month	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00
Metro Ethernet 10 Mbps	/month	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	
Metro Ethernet 20 Mbps	/month	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	

Mbps												
Metro Ethernet 50 Mbps	/month	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00
Metro Ethernet 100 Mbps	/month	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00
Metro Ethernet 200 Mbps	/month	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00
Metro Ethernet 300 Mbps	/month	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00
Metro Ethernet 450 Mbps	/month	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00
Metro Ethernet 600 Mbps	/month	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00
Metro Ethernet 750 Mbps	/month	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00
Metro Ethernet 900 Mbps	/month	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00
Metro Ethernet 1 Gbps	/month	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00
Monday – Sunday 24 X 7 Coverage	/month	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$0.00
Metro Ethernet Protection – Note 1												
Automatic Protection Switching Feature (APS), Route protection, per APS less than 10 miles	/month				\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40
Automatic Protection Switching Feature (APS), Route protection, per APS – 10 to 25 route miles	/month				\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56

Automatic Protection Switching Feature (APS), Route protection, per APS -26 to 35 route miles	/month					\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70
Automatic Protection Switching Feature (APS), Structural Protection, per APS less than 10 route miles	/month					\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10
Automatic Protection Switching Feature (APS), Structural protection, per APS – 10 to 25 route miles	/month					\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60
Automatic Protection Switching Feature (APS), Structural protection, per APS -26 to 35 route miles	/month					\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14
Core Trunk Automatic Failover Feature, per CTAF, less than 10 airline miles	/month					\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20
Core Trunk Automatic Failover Feature, per CTAF, 10 to 25 airline miles	/month					\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80
Core Trunk Automatic Failover Feature, per CTAF, 26 to 35 airline miles	/month					\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80

Explanation: This section is used for ordering data circuits to the End Site locations. The cost per month includes the local loop, long haul circuits, all associated end site and network hardware, appropriate LAN Interfaces with minimum (2) 10/100 Mbps ports, Internet Access, NetTN security, network management and operation support, includes 7 a.m. - 6 p.m. local time coverage Monday - Saturday.

Note 1 – Automatic Protection Switching Service-Automatic Protection Switching (APS) provides 1:1 fiber path protection between the customer premises and the serving Ethernet switch. This is access protection, as opposed to core network protection provided by Core Automatic Trunk Failure (CATF).

ATT installs a protection switch and optical splitter at both the customer premises and Ethernet equipped CO. A secondary fiber path, which can be diversely routed from the primary path, is provisioned between the customer location and the central office. Both fiber paths connect to the protection switches installed on each end of the fiber loop. The protection switch connects to a single port on the Metro Ethernet switch. The protection path is used only when a primary path failover occurs. When an outage occurs the protection switch will automatically switch the customer's traffic over to the secondary path.

APS only provides fiber route diversity. APS does not provide port diversity, switch diversity, or optical protection. APS is provisioned between the customer's premises and the Ethernet equipped central office. APS is available to a customer with Metro Ethernet Service connection of 10 Mbps or higher.

APS may be ordered as a structurally diverse transport path (Structural Protection) or a route diverse transport path (Route Protection).

Structural Protection APS is defined as the APS secondary facility and the primary Metro Ethernet Connection facility being in separate sheaths that are in separate structures located along the same route.

Route Protection APS is defined as the APS secondary facility being in a separate sheath and in an underground, aerial, or direct buried structure that runs along a separate physical path from the facility associated with the primary Metro Ethernet connection. Route protection provides physical route diversity from the Metro Ethernet-equipped central office to the customer's property line or servicing wire center.

Core Trunk Automatic Failover Feature - Core protection is configured using two (2) or more redundant and diverse trunks between two Metro Ethernet switch routers. The designed diversity between the two trunk paths will utilize separate IOF routes and separate Metro Ethernet switch ports (will also use separate interface cards where available). The automatic failover between trunks is supported by industry standard IEEE 802.3ad Link Aggregation Control Protocol (LACP). Link Aggregation allows the Metro Ethernet switch to combine several physical inter-switch trunks with diverse paths between two switches into a single logical trunk. If there is an outage with one of the physical trunks, the customer's traffic will continue over the unaffected trunk member. CATF provides core protection only; it does not provide access protection, defined as protection on the link between the serving Metro Ethernet switch and the customer premises.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1 Unit Cost</u>	<u>Year 2 Unit Cost</u>	<u>Year 3 Unit Cost</u>	<u>Year 4 Unit Cost</u>	<u>Year 5 Unit Cost</u>	<u>Year 6 Unit Cost</u>	<u>Year 7 Unit Cost</u>	<u>Year 8 Unit Cost</u>	<u>Year 9 Unit Cost</u>	<u>Year 10 Unit Cost</u>
End Site WAN Circuit with Internet access for K-12	1.544 Mbps	/month	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00
	3 Mbps	/month	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99
	4.5 Mbps	/month	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99
	6 Mbps	/month	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99
	7.5 Mbps	/month	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99
	10.5 Mbps	/month	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99
	16 Mbps	/month	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73	\$3,363.73
	25 Mbps	/month	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29	\$3,868.29
	DS3 – 45 Mbps	/month	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54	\$4,448.54
	Metro Ethernet 2 Mbps	/month	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49	\$787.49
	Metro Ethernet 4 Mbps	/month	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00	\$900.00
	Metro Ethernet 8 Mbps	/month	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00	\$1,150.00
	Metro Ethernet 10 Mbps	/month	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00	\$1,495.00
	Metro Ethernet 20 Mbps	/month	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00	\$2,150.00
	Metro Ethernet 50 Mbps	/month	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00	\$2,495.00
	Metro Ethernet 100 Mbps	/month	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00	\$2,795.00
	Metro Ethernet 200 Mbps	/month	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00	\$4,891.00
	Metro Ethernet 300 Mbps	/month	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00	\$7,826.00

Metro Ethernet 450 Mbps	/month	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00	\$9,500.00
Metro Ethernet 600 Mbps	/month	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00	\$11,000.00
Metro Ethernet 750 Mbps	/month	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00	\$12,500.00
Metro Ethernet 900 Mbps	/month	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00	\$14,000.00
Metro Ethernet 1 Gbps	/month	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00	\$15,500.00
Incremental 50Mbps upgrade to existing 50Mbps circuit	/month	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00
Monday – Sunday 24 X 7 Coverage	/month	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
Metro Ethernet Protection – Note 2											
Automatic Protection Switching Feature (APS), Route protection, per APS less than 10 miles	/month				\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40
Automatic Protection Switching Feature (APS), Route protection, per APS – 10 to 25 route miles	/month				\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56
Automatic Protection Switching Feature (APS), Route protection, per APS -26 to 35 route miles	/month				\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70
Automatic Protection Switching Feature (APS), Structural Protection, per APS less than 10 route miles	/month				\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10
Automatic Protection Switching Feature (APS), Structural protection, per APS – 10 to 25 route miles	/month				\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60
Automatic Protection	/month										

	Switching Feature (APS), Structural protection, per APS -26 to 35 route miles					\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14
	Core Trunk Automatic Failover Feature, per CTAF, less than 10 airline miles	/month				\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20
	Core Trunk Automatic Failover Feature, per CTAF, 10 to 25 airline miles	/month				\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80
	Core Trunk Automatic Failover Feature, per CTAF, 26 to 35 airline miles	/month				\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80
K12 WAN Circuit Managed point to point without Internet access- Note 1	1.544 Mbps	/month		\$525.00	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00	\$525.00
	3 Mbps	/month		\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99	\$924.99
	4.5 Mbps	/month		\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99	\$1,324.99
	6 Mbps	/month		\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99	\$1,724.99
	7.5 Mbps	/month		\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99	\$2,124.99
	10.5 Mbps	/month		\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99	\$2,924.99
	Metro Ethernet 10 Mbps	/month		\$750.00	\$750.00	\$750.00	\$750.00	\$750.00	\$750.00	\$750.00	\$750.00	\$750.00
	Metro Ethernet 100 Mbps	/month	\$1,187.00	\$1,187.00	\$1,187.00	\$1,187.00	\$1,187.00	\$1,187.00	\$1,187.00	\$1,187.00	\$1,187.00	\$1,187.00
	Metro Ethernet 1 Gbps	/month	\$2,037.00	\$2,037.00	\$2,037.00	\$2,037.00	\$2,037.00	\$2,037.00	\$2,037.00	\$2,037.00	\$2,037.00	\$2,037.00

Explanation: This section is used for ordering data circuits to the End Site locations. The cost per month includes the local loop, long haul circuits, all associated end site and network hardware, appropriate LAN Interfaces with minimum (2) 10/100 Mbps ports, Internet Access, email services, DNS services/management, site connectivity, NetTN security, network management and operation support, includes 7 a.m. - 6 p.m. local time coverage Monday - Friday.

Note1: This section is used for ordering data circuits to the End Site locations. The cost per month includes the local loop, all associated end site and network hardware, appropriate LAN Interfaces with minimum (2) 10/100 Mbps ports, site connectivity, network management and operation support, includes 7 a.m. - 6 p.m. local time coverage Monday - Friday. This pricing is contingent upon a design ratio of 8:1 Metro Ethernet connections ("Spoke" sites) to a Metro Ethernet Hub site. All configurations must be approved by the State and the Contractor on an individual case basis. "Spoke" sites receive NetTN SLAs A.14, A.15, and A.16 only.

Note 2 – Automatic Protection Switching Service-Automatic Protection Switching (APS) provides 1:1 fiber path protection between the customer premises and the serving Ethernet switch. This is access protection, as opposed to core network protection provided by Core Automatic Trunk Failure (CATF).

ATT installs a protection switch and optical splitter at both the customer premises and Ethernet equipped CO. A secondary fiber path, which can be diversely routed from the primary path, is provisioned between the customer location and the central office. Both fiber paths connect to the protection switches installed on each end of the fiber loop. The protection switch connects to a single port on the Metro Ethernet switch. The protection path is used only when a primary path failover occurs. When an outage occurs the protection switch will automatically switch the customer's traffic over to the secondary path.

APS only provides fiber route diversity. APS does not provide port diversity, switch diversity, or optical protection. APS is provisioned between the customer's premises and the Ethernet equipped central office. APS is available to a customer with Metro Ethernet Service connection of 10 Mbps or higher.

APS may be ordered as a structurally diverse transport path (Structural Protection) or a route diverse transport path (Route Protection).

Structural Protection APS is defined as the APS secondary facility and the primary Metro Ethernet Connection facility being in separate sheaths that are in separate structures located along the same route.

Route Protection APS is defined as the APS secondary facility being in a separate sheath and in an underground, aerial, or direct buried structure that runs along a separate physical path from the facility associated with the primary Metro Ethernet connection. Route protection provides physical route diversity from the Metro Ethernet-equipped central office to the customer's property line or servicing wire center.

Core Trunk Automatic Failover Feature - Core protection is configured using two (2) or more redundant and diverse trunks between two Metro Ethernet switch routers. The designed diversity between the two trunk paths will utilize separate IOF routes and separate Metro Ethernet switch ports (will also use separate interface cards where available). The automatic failover between trunks is supported by industry standard IEEE 802.3ad Link Aggregation Control Protocol (LACP). Link Aggregation allows the Metro Ethernet switch to combine several physical inter-switch trunks with diverse paths between two switches into a single logical trunk. If there is an outage with one of the physical trunks, the customer's traffic will continue over the unaffected trunk member. CATF provides core protection only; it does not provide access protection, defined as protection on the link between the serving Metro Ethernet switch and the customer premises.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1 Unit Cost</u>	<u>Year 2 Unit Cost</u>	<u>Year 3 Unit Cost</u>	<u>Year 4 Unit Cost</u>	<u>Year 5 Unit Cost</u>	<u>Year 6 Unit Cost</u>	<u>Year 7 Unit Cost</u>	<u>Year 8 Unit Cost</u>	<u>Year 9 Unit Cost</u>	<u>Year 10 Unit Cost</u>
End Site WAN Circuit without Internet access.	DSL (1.5 x 256k)	/month	\$251.50	\$251.50	\$251.50	\$251.50	\$251.50	\$251.50	\$251.50	\$251.50	\$251.50	\$251.50
	384kbps	/month	\$427.50	\$427.50	\$427.50	\$427.50	\$427.50	\$427.50	\$427.50	\$427.50	\$427.50	\$427.50
	1.544 Mbps	/month	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00
	3 Mbps	/month	\$878.74	\$878.74	\$878.74	\$878.74	\$878.74	\$878.74	\$878.74	\$878.74	\$878.74	\$878.74
	4.5 Mbps	/month	\$1,192.49	\$1,192.49	\$1,192.49	\$1,192.49	\$1,192.49	\$1,192.49	\$1,192.49	\$1,192.49	\$1,192.49	\$1,192.49
	6 Mbps	/month	\$1,552.49	\$1,552.49	\$1,552.49	\$1,552.49	\$1,552.49	\$1,552.49	\$1,552.49	\$1,552.49	\$1,552.49	\$1,552.49
	7.5 Mbps	/month	\$1,912.49	\$1,912.49	\$1,912.49	\$1,912.49	\$1,912.49	\$1,912.49	\$1,912.49	\$1,912.49	\$1,912.49	\$1,912.49
	9 Mbps	/month	\$2,272.49	\$2,272.49	\$2,272.49	\$2,272.49	\$2,272.49	\$2,272.49	\$2,272.49	\$2,272.49	\$2,272.49	\$2,272.49
	16 Mbps	/month	\$3,027.36	\$3,027.36	\$3,027.36	\$3,027.36	\$3,027.36	\$3,027.36	\$3,027.36	\$3,027.36	\$3,027.36	\$3,027.36
	DS3 – 45 Mbps	/month	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68
	Metro Ethernet 2 Mbps	/month	\$708.74	\$708.74	\$708.74	\$708.74	\$708.74	\$708.74	\$708.74	\$708.74	\$708.74	\$708.74
	Metro Ethernet 4 Mbps	/month	\$810.00	\$810.00	\$810.00	\$810.00	\$810.00	\$810.00	\$810.00	\$810.00	\$810.00	\$810.00
	Metro Ethernet 8 Mbps	/month	\$1,035.00	\$1,035.00	\$1,035.00	\$1,035.00	\$1,035.00	\$1,035.00	\$1,035.00	\$1,035.00	\$1,035.00	\$1,035.00
Metro Ethernet 10 Mbps	/month	\$1,345.50	\$1,345.50	\$1,345.50	\$1,345.50	\$1,345.50	\$1,345.50	\$1,345.50	\$1,345.50	\$1,345.50	\$1,345.50	

Metro Ethernet 20 Mbps	/month	\$1,935.00	\$1,935.00	\$1,935.00	\$1,935.00	\$1,935.00	\$1,935.00	\$1,935.00	\$1,935.00	\$1,935.00	\$1,935.00
Metro Ethernet 50 Mbps	/month	\$2,245.50	\$2,245.50	\$2,245.50	\$2,245.50	\$2,245.50	\$2,245.50	\$2,245.50	\$2,245.50	\$2,245.50	\$2,245.50
Metro Ethernet 100 Mbps	/month	\$2,515.50	\$2,515.50	\$2,515.50	\$2,515.50	\$2,515.50	\$2,515.50	\$2,515.50	\$2,515.50	\$2,515.50	\$2,515.50
Metro Ethernet 200 Mbps	/month	\$4,541.00	\$4,541.00	\$4,541.00	\$4,541.00	\$4,541.00	\$4,541.00	\$4,541.00	\$4,541.00	\$4,541.00	\$4,541.00
Metro Ethernet 600 Mbps	/month	\$10,500.00	\$10,500.00	\$10,500.00	\$10,500.00	\$10,500.00	\$10,500.00	\$10,500.00	\$10,500.00	\$10,500.00	\$10,500.00
Metro Ethernet 1 Gbps	/month	\$14,250.00	\$14,250.00	\$14,250.00	\$14,250.00	\$14,250.00	\$14,250.00	\$14,250.00	\$14,250.00	\$14,250.00	\$14,250.00
Monday – Sunday 24 X 7 Coverage	/month	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00
Metro Ethernet Protection – Note 1											
Automatic Protection Switching Feature (APS), Route protection, per APS less than 10 miles	/month				\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40
Automatic Protection Switching Feature (APS), Route protection, per APS – 10 to 25 route miles	/month				\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56
Automatic Protection Switching Feature (APS), Route protection, per APS -26 to 35 route miles	/month				\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70
Automatic Protection Switching Feature (APS), Structural Protection, per APS less than 10 route miles	/month				\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10

Automatic Protection Switching Feature (APS), Structural protection, per APS – 10 to 25 route miles	/month					\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60
Automatic Protection Switching Feature (APS), Structural protection, per APS -26 to 35 route miles	/month					\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14
Core Trunk Automatic Failover Feature, per CTAF, less than 10 airline miles	/month					\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20
Core Trunk Automatic Failover Feature, per CTAF, 10 to 25 airline miles	/month					\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80
Core Trunk Automatic Failover Feature, per CTAF, 26 to 35 airline miles	/month					\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80

Explanation: This section is used for ordering data circuits to the End Site locations. The cost per month includes the local loop, long haul circuits, all associated end site and network hardware, appropriate LAN Interfaces with minimum (2) 10/100 Mbps ports, NetTN security, network management and operation support, includes 7 a.m. - 6 p.m. local time coverage Monday - Saturday.

Note 1 – Automatic Protection Switching Service-Automatic Protection Switching (APS) provides 1:1 fiber path protection between the customer premises and the serving Ethernet switch. This is access protection, as opposed to core network protection provided by Core Automatic Trunk Failure (CATF).

ATT installs a protection switch and optical splitter at both the customer premises and Ethernet equipped CO. A secondary fiber path, which can be diversely routed from the primary path, is provisioned between the customer location and the central office. Both fiber paths connect to the protection switches installed on each end of the fiber loop. The protection switch connects to a single port on the Metro Ethernet switch. The protection path is used only when a primary path failover occurs. When an outage occurs the protection switch will automatically switch the customer's traffic over to the secondary path.

APS only provides fiber route diversity. APS does not provide port diversity, switch diversity, or optical protection. APS is provisioned between the customer's premises and the Ethernet equipped central office. APS is available to a customer with Metro Ethernet Service connection of 10 Mbps or higher.

APS may be ordered as a structurally diverse transport path (Structural Protection) or a route diverse transport path (Route Protection).

Structural Protection APS is defined as the APS secondary facility and the primary Metro Ethernet Connection facility being in separate sheaths that are in separate structures located along the same route.

Route Protection APS is defined as the APS secondary facility being in a separate sheath and in an underground, aerial, or direct buried structure that runs along a separate physical path from the facility associated with the primary Metro Ethernet connection. Route protection provides physical route diversity from the Metro Ethernet-equipped central office to the customer's property line or servicing wire center.

Core Trunk Automatic Failover Feature - Core protection is configured using two (2) or more redundant and diverse trunks between two Metro Ethernet switch routers. The designed diversity between the two trunk paths will utilize separate IOF routes and separate Metro Ethernet switch ports (will also use separate interface cards where available). The automatic failover between trunks is supported by industry standard IEEE 802.3ad Link Aggregation Control Protocol (LACP). Link Aggregation allows the Metro Ethernet switch to combine several physical inter-switch trunks with diverse paths between two switches into a single logical trunk. If there is an outage with one of the physical trunks, the customer's traffic will continue over the unaffected trunk member. CATF provides core protection only; it does not provide access protection, defined as protection on the link between the serving Metro Ethernet switch and the customer premises.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>	
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Higher Education Research WAN Circuit	Metro Ethernet 750 Mbps	/month	\$9,000.00	\$9,000.00	\$9,000.00	\$9,000.00	\$9,000.00	\$9,000.00	\$9,000.00	\$9,000.00	\$9,000.00	\$9,000.00	
	Metro Ethernet 1 Gbps	/month	\$12,000.00	\$12,000.00	\$12,000.00	\$12,000.00	\$12,000.00	\$12,000.00	\$12,000.00	\$12,000.00	\$12,000.00	\$12,000.00	
	Wavelength 1.25Gbps	/month	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	
	Wavelength 2.5Gbps	/month	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	\$18,000.00	
	Wavelength OC3	/month	\$8,538.39	\$8,538.39	\$8,538.39	\$8,538.39	\$8,538.39	\$8,538.39	\$8,538.39	\$8,538.39	\$8,538.39	\$8,538.39	
	Wavelength OC12	/month	\$14,942.18	\$14,942.18	\$14,942.18	\$14,942.18	\$14,942.18	\$14,942.18	\$14,942.18	\$14,942.18	\$14,942.18	\$14,942.18	
	Wavelength OC48	/month	\$19,000.00	\$19,000.00	\$19,000.00	\$19,000.00	\$19,000.00	\$19,000.00	\$19,000.00	\$19,000.00	\$19,000.00	\$19,000.00	
	Wavelength OC192	/month	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	
	Wavelength 10 Gbps	/month	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	\$22,250.00	
	Metro Ethernet Protection – Note 1												
		Automatic Protection Switching Feature (APS), Route protection, per APS less than 10 miles	/month				\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40
		Automatic Protection Switching Feature (APS), Route protection, per APS – 10 to 25 route miles	/month				\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56
		Automatic Protection Switching Feature (APS), Route protection, per APS -26 to 35 route miles	/month				\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70
	Automatic Protection Switching Feature (APS), Structural Protection, per APS less than 10 route miles	/month				\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	
	Automatic Protection Switching												

Feature (APS), Structural protection, per APS – 10 to 25 route miles	/month					\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60
Automatic Protection Switching Feature (APS), Structural protection, per APS -26 to 35 route miles	/month					\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14
Core Trunk Automatic Failover Feature, per CTAF, less than 10 airline miles	/month					\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20
Core Trunk Automatic Failover Feature, per CTAF, 10 to 25 airline miles	/month					\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80
Core Trunk Automatic Failover Feature, per CTAF, 26 to 35 airline miles	/month					\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80

Explanation: This section is used for ordering data circuits to the End Site locations. The cost per month includes the local loop, long haul circuits, all associated end site and network hardware, appropriate LAN Interface, Internet Access, NetTN security, network management and operation support, includes 24 X 7 coverage.

Note 1 – Automatic Protection Switching Service-Automatic Protection Switching (APS) provides 1:1 fiber path protection between the customer premises and the serving Ethernet switch. This is access protection, as opposed to core network protection provided by Core Automatic Trunk Failure (CATF).

ATT installs a protection switch and optical splitter at both the customer premises and Ethernet equipped CO. A secondary fiber path, which can be diversely routed from the primary path, is provisioned between the customer location and the central office. Both fiber paths connect to the protection switches installed on each end of the fiber loop. The protection switch connects to a single port on the Metro Ethernet switch. The protection path is used only when a primary path failover occurs. When an outage occurs the protection switch will automatically switch the customer's traffic over to the secondary path.

APS only provides fiber route diversity. APS does not provide port diversity, switch diversity, or optical protection. APS is provisioned between the customer's premises and the Ethernet equipped central office. APS is available to a customer with Metro Ethernet Service connection of 10 Mbps or higher.

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Core Trunk Automatic Failover Feature - Core protection is configured using two (2) or more redundant and diverse trunks between two Metro Ethernet switch routers. The designed diversity between the two trunk paths will utilize separate IOF routes and separate Metro Ethernet switch ports (will also use separate interface cards where available). The automatic failover between trunks is supported by industry standard IEEE 802.3ad Link Aggregation Control Protocol (LACP). Link Aggregation allows the Metro Ethernet switch to combine several physical inter-switch trunks with diverse paths between two switches into a single logical trunk. If there is an outage with one of the physical trunks, the customer's traffic will continue over the unaffected trunk member. CATF provides core protection only; it does not provide access protection, defined as protection on the link between the serving Metro Ethernet switch and the customer premises.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
SONET												
	OC12 - Note 1	/month	\$210.00	\$210.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	OC48 - Note 1	/month	\$840.00	\$840.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	OC192 - Note 1	/month	\$5,750.00	\$5,750.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Local Channel per quarter mile	/month	\$245.00	\$55.24	\$55.24	\$55.24	\$55.24	\$55.24	\$55.24	\$55.24	\$55.24	\$55.24
	Interoffice Channel per air mile	/month	\$125.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Customer node	/month	\$1,750.00	\$1,750.00	\$1,750.00	\$1,750.00	\$1,750.00	\$1,750.00	\$1,750.00	\$1,750.00	\$1,750.00	\$1,750.00
	Per Local Channel	/month		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Interoffice Channel Fixed – OC3 capacity	/month		\$25.58	\$25.58	\$25.58	\$25.58	\$25.58	\$25.58	\$25.58	\$25.58	\$25.58
	Interoffice Channel Fixed – OC12 capacity	/month		\$61.20	\$61.20	\$61.20	\$61.20	\$61.20	\$61.20	\$61.20	\$61.20	\$61.20
	Interoffice Channel per quarter mile –OC3	/month	\$125.00	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20
	Interoffice Channel per quarter mile –OC12	/month		\$20.70	\$20.70	\$20.70	\$20.70	\$20.70	\$20.70	\$20.70	\$20.70	\$20.70
	Customer Node OC-3 capacity	/month		\$741.26	\$741.26	\$741.26	\$741.26	\$741.26	\$741.26	\$741.26	\$741.26	\$741.26
	Customer Node OC-12 capacity	/month		\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69
	Central office node –OC3 Capacity	/month		\$741.26	\$741.26	\$741.26	\$741.26	\$741.26	\$741.26	\$741.26	\$741.26	\$741.26
	Central office node –OC12 Capacity	/month		\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69	\$1,410.69
	Customer Channel Interface- per DS1	/month		\$17.64	\$17.64	\$17.64	\$17.64	\$17.64	\$17.64	\$17.64	\$17.64	\$17.64
	Customer Channel Interface- per DS3	/month		\$103.46	\$103.46	\$103.46	\$103.46	\$103.46	\$103.46	\$103.46	\$103.46	\$103.46
	Customer Channel Interface – per 10Mbps	/month		\$125.95	\$125.95	\$125.95	\$125.95	\$125.95	\$125.95	\$125.95	\$125.95	\$125.95
	Customer Channel Interface – per Flex DS1	/month		\$17.80	\$17.80	\$17.80	\$17.80	\$17.80	\$17.80	\$17.80	\$17.80	\$17.80
	CO Channel Interface- per DS1	/month		\$17.64	\$17.64	\$17.64	\$17.64	\$17.64	\$17.64	\$17.64	\$17.64	\$17.64
	CO Channel Interface- per DS3	/month		\$63.54	\$63.54	\$63.54	\$63.54	\$63.54	\$63.54	\$63.54	\$63.54	\$63.54
	CO Channel Interface – per 10Mbps	/month		\$125.95	\$125.95	\$125.95	\$125.95	\$125.95	\$125.95	\$125.95	\$125.95	\$125.95
	CO Channel Interface – per Flex DS1	/month		\$17.80	\$17.80	\$17.80	\$17.80	\$17.80	\$17.80	\$17.80	\$17.80	\$17.80
	CO Channel Interface – per 28 DS1 Channel System (DS3) per node	/month		\$394.44	\$394.44	\$394.44	\$394.44	\$394.44	\$394.44	\$394.44	\$394.44	\$394.44
	CO Channel Interface – per DS1 on 28 DS1 Channel System (DS3) per node	/month		\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40	\$5.40

Explanation: This section is used for ordering SONET ring based technology with 100% survivability.

Note 1 – The State has discontinued OC 12, OC48 and OC 192 in contract Amendment 5, therefore there are no costs in the table above for contract years 3 through 10.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1 Unit Cost</u>	<u>Year 2 Unit Cost</u>	<u>Year 3 Unit Cost</u>	<u>Year 4 Unit Cost</u>	<u>Year 5 Unit Cost</u>	<u>Year 6 Unit Cost</u>	<u>Year 7 Unit Cost</u>	<u>Year 8 Unit Cost</u>	<u>Year 9 Unit Cost</u>	<u>Year 10 Unit Cost</u>
End Site WAN Circuit with Internet Access over SONET	3 Mbps	/month	\$832.49	\$832.49	\$832.49	\$832.49	\$832.49	\$832.49	\$832.49	\$832.49	\$832.49	\$832.49
	DS3 – 45 Mbps	/month	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68	\$4,003.68
	Metro Ethernet 100 Mbps	/month	\$5,336.49	\$5,336.49	\$5,336.49	\$5,336.49	\$5,336.49	\$5,336.49	\$5,336.49	\$5,336.49	\$5,336.49	\$5,336.49
	Metro Ethernet 1 Gbps	/month	\$19,121.62	\$19,121.62	\$19,121.62	\$19,121.62	\$19,121.62	\$19,121.62	\$19,121.62	\$19,121.62	\$19,121.62	\$19,121.62

Explanation: These services are available to customers installing SONET or who have existing SONET services. The Sonet Ring is ordered separately. The SONET provides the transport portion of the WAN data circuit. All NetTN Service Level Agreements apply for the WAN Circuit riding the SONET.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
End Site WAN Circuit without Internet Access over SONET	Metro Ethernet 100 Mbps	/month	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00
	Metro Ethernet 600 Mbps	/month	\$9,221.46	\$9,221.46	\$9,221.46	\$9,221.46	\$9,221.46	\$9,221.46	\$9,221.46	\$9,221.46	\$9,221.46	\$9,221.46
	Metro Ethernet 1 Gbps	/month	\$17,209.45	\$17,209.45	\$17,209.45	\$17,209.45	\$17,209.45	\$17,209.45	\$17,209.45	\$17,209.45	\$17,209.45	\$17,209.45

Explanation: These services are available to customers installing SONET or who have existing SONET services. The Sonet Ring is ordered separately. The SONET provides the transport portion of the WAN data circuit. All NetTN Service Level Agreements apply for the WAN Circuit riding the SONET.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1 Unit Cost</u>	<u>Year 2 Unit Cost</u>	<u>Year 3 Unit Cost</u>	<u>Year 4 Unit Cost</u>	<u>Year 5 Unit Cost</u>	<u>Year 6 Unit Cost</u>	<u>Year 7 Unit Cost</u>	<u>Year 8 Unit Cost</u>	<u>Year 9 Unit Cost</u>	<u>Year 10 Unit Cost</u>
TDOT ITS SmartWay	TDOT ITS T1's Point-to-Point	/month	\$205.00	\$205.00	\$205.00	\$205.00	\$205.00	\$205.00	\$205.00	\$205.00	\$205.00	\$205.00
	TDOT ITS 9.6 Synchronet per end point	/month	\$76.35	\$76.35	\$76.35	\$76.35	\$76.35	\$76.35	\$76.35	\$76.35	\$76.35	\$76.35

Explanation: This section is for ordering T1's and 9.6 Synchronet circuits for Tennessee's Department of Transportation ITS SmartWay System. ITS stands for Intelligent Transportation Systems, a system of advanced communications technologies designed to improve transportation safety and mobility. TDOT Smartway is Tennessee's intelligent transportation system. Circuits will terminate at 6603 Centennial Boulevard, Nashville, TN on SONET. The SONET ring is ordered separately.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Point to Point/Ethernet/Wavelength	DS1 - 5 miles or less	/mileage	\$45.00	\$45.00	\$45.00	\$45.00	\$45.00	\$45.00	\$45.00	\$45.00	\$45.00	\$45.00
	DS1 – 6 miles and over Interoffice mileage – Note 1	/mileage	\$10.50	\$10.50	\$10.50	\$10.50	\$10.50	\$10.50	\$10.50	\$10.50	\$10.50	\$10.50
	DS1 – 6 miles and over Local channels – Note 1	/month	\$88.91	\$88.91	\$88.91	\$88.91	\$88.91	\$88.91	\$88.91	\$88.91	\$88.91	\$88.91
	Flat Rate DS1 IntraLATA/InterLATA – Note 2	/month	\$680.00	\$680.00	\$680.00	\$680.00	\$680.00	\$680.00	\$680.00	\$680.00	\$680.00	\$680.00
	Intralata DS3	/mileage	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00	\$700.00
	Interlata DS3	/mileage	\$95.00	\$95.00	\$95.00	\$95.00	\$95.00	\$95.00	\$95.00	\$95.00	\$95.00	\$95.00
	Interstate DS1	/mileage	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00
	Interstate DS3	/mileage	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00
	Metro Ethernet 2 Mbps Basic IntraLATA/IntraState –Note 3	/month	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00
	Metro Ethernet 2 Mbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$389.64	\$389.64	\$389.64	\$389.64	\$389.64	\$389.64	\$389.64	\$389.64	\$389.64
	Metro Ethernet 4 Mbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$421.26	\$421.26	\$421.26	\$421.26	\$421.26	\$421.26	\$421.26	\$421.26	\$421.26
	Metro Ethernet 8 Mbps Basic IntraLATA/IntraState -Note 3	/month	\$425.00	\$425.00	\$425.00	\$425.00	\$425.00	\$425.00	\$425.00	\$425.00	\$425.00	\$425.00
	Metro Ethernet 8 Mbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$456.96	\$456.96	\$456.96	\$456.96	\$456.96	\$456.96	\$456.96	\$456.96	\$456.96
	Metro Ethernet 10 Mbps Basic IntraLATA/IntraState - note 3	/month	\$446.33	\$446.33	\$446.33	\$446.33	\$446.33	\$446.33	\$446.33	\$446.33	\$446.33	\$446.33
	Metro Ethernet 10 Mbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$495.72	\$495.72	\$495.72	\$495.72	\$495.72	\$495.72	\$495.72	\$495.72	\$495.72
	Metro Ethernet 10 Mbps Premium Burst IntraLATA/IntraState –Note 5	/month		\$660.96	\$660.96	\$660.96	\$660.96	\$660.96	\$660.96	\$660.96	\$660.96	\$660.96
	Metro Ethernet 20 Mbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$624.24	\$624.24	\$624.24	\$624.24	\$624.24	\$624.24	\$624.24	\$624.24	\$624.24
Metro Ethernet 20 Mbps Premium Burst IntraLATA/IntraState –Note 5	/month		\$746.64	\$746.64	\$746.64	\$746.64	\$746.64	\$746.64	\$746.64	\$746.64	\$746.64	

Metro Ethernet 50 Mbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$820.08	\$820.08	\$820.08	\$820.08	\$820.08	\$820.08	\$820.08	\$820.08	\$820.08
Metro Ethernet 50 Mbps Premium Burst IntraLATA/IntraState –Note 5	/month		\$905.76	\$905.76	\$905.76	\$905.76	\$905.76	\$905.76	\$905.76	\$905.76	\$905.76
Metro Ethernet 100 Mbps Basic IntraLATA/IntraState -Note 3	/month	\$975.00	\$975.00	\$975.00	\$975.00	\$975.00	\$975.00	\$975.00	\$975.00	\$975.00	\$975.00
Metro Ethernet 100 Mbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$991.44	\$991.44	\$991.44	\$991.44	\$991.44	\$991.44	\$991.44	\$991.44	\$991.44
Metro Ethernet 100 Mbps Premium Burst IntraLATA/IntraState –Note 5	/month		\$1,187.28	\$1,187.28	\$1,187.28	\$1,187.28	\$1,187.28	\$1,187.28	\$1,187.28	\$1,187.28	\$1,187.28
Metro Ethernet 250 Mbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$1,242.36	\$1,242.36	\$1,242.36	\$1,242.36	\$1,242.36	\$1,242.36	\$1,242.36	\$1,242.36	\$1,242.36
Metro Ethernet 250 Mbps Premium Burst IntraLATA/IntraState –Note 5	/month		\$1,425.96	\$1,425.96	\$1,425.96	\$1,425.96	\$1,425.96	\$1,425.96	\$1,425.96	\$1,425.96	\$1,425.96
Metro Ethernet 500 Mbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$1,646.28	\$1,646.28	\$1,646.28	\$1,646.28	\$1,646.28	\$1,646.28	\$1,646.28	\$1,646.28	\$1,646.28
Metro Ethernet 500 Mbps Premium Burst IntraLATA/IntraState –Note 5	/month		\$1,817.64	\$1,817.64	\$1,817.64	\$1,817.64	\$1,817.64	\$1,817.64	\$1,817.64	\$1,817.64	\$1,817.64
Metro Ethernet 1Gbps Basic IntraLATA/IntraState –Note 3	/month		\$1,652.40	\$1,652.40	\$1,652.40	\$1,652.40	\$1,652.40	\$1,652.40	\$1,652.40	\$1,652.40	\$1,652.40
Metro Ethernet 1Gbps Premium Fixed IntraLATA/IntraState –Note 4	/month		\$2,362.32	\$2,362.32	\$2,362.32	\$2,362.32	\$2,362.32	\$2,362.32	\$2,362.32	\$2,362.32	\$2,362.32
Wavelength 1.25 Gbps IntraLATA/IntraState	/month	\$2,070.00	\$2,070.00	\$2,070.00	\$2,070.00	\$2,070.00	\$2,070.00	\$2,070.00	\$2,070.00	\$2,070.00	\$2,070.00
Wavelength 2.5 Gbps IntraLATA/IntraState	/month	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
Wavelength 10 Gbps IntraLATA/IntraState	/month	\$4,787.75	\$4,787.75	\$4,787.75	\$4,787.75	\$4,787.75	\$4,787.75	\$4,787.75	\$4,787.75	\$4,787.75	\$4,787.75
Metro Ethernet Premium 2- 9 Mbps additional mileage charge – Note 6											
From 10 to 25 miles per connection	/month	\$178.50	\$178.50	\$178.50	\$178.50	\$178.50	\$178.50	\$178.50	\$178.50	\$178.50	\$178.50
From 26 to 35 miles per connection	/month	\$298.35	\$298.35	\$298.35	\$298.35	\$298.35	\$298.35	\$298.35	\$298.35	\$298.35	\$298.35
From 36 to 50 miles per connection	/month	\$471.75	\$471.75	\$471.75	\$471.75	\$471.75	\$471.75	\$471.75	\$471.75	\$471.75	\$471.75
Metro Premium Ethernet 10- 99 Mbps additional mileage charge – Note 6											

From 10 to 25 miles per connection	/month	\$188.70	\$188.70	\$188.70	\$188.70	\$188.70	\$188.70	\$188.70	\$188.70	\$188.70	\$188.70
From 26 to 35 miles per connection	/month	\$316.20	\$316.20	\$316.20	\$316.20	\$316.20	\$316.20	\$316.20	\$316.20	\$316.20	\$316.20
From 36 to 50 miles per connection	/month	\$494.70	\$494.70	\$494.70	\$494.70	\$494.70	\$494.70	\$494.70	\$494.70	\$494.70	\$494.70
Metro Ethernet Premium 100- 499 Mbps additional mileage charge – Note 6											
From 10 to 25 miles per connection	/month	\$234.60	\$234.60	\$234.60	\$234.60	\$234.60	\$234.60	\$234.60	\$234.60	\$234.60	\$234.60
From 26 to 35 miles per connection	/month	\$397.80	\$397.80	\$397.80	\$397.80	\$397.80	\$397.80	\$397.80	\$397.80	\$397.80	\$397.80
From 36 to 50 miles per connection	/month	\$617.10	\$617.10	\$617.10	\$617.10	\$617.10	\$617.10	\$617.10	\$617.10	\$617.10	\$617.10
Metro Ethernet Premium 500-1000 Mbps and Basic Ethernet 1Gbps additional mileage charge – Note 6											
From 10 to 25 miles per connection	/month	\$285.60	\$285.60	\$285.60	\$285.60	\$285.60	\$285.60	\$285.60	\$285.60	\$285.60	\$285.60
From 26 to 35 miles per connection	/month	\$474.30	\$474.30	\$474.30	\$474.30	\$474.30	\$474.30	\$474.30	\$474.30	\$474.30	\$474.30
From 36 to 50 miles per Connection	/month	\$744.60	\$744.60	\$744.60	\$744.60	\$744.60	\$744.60	\$744.60	\$744.60	\$744.60	\$744.60
Premium Ethernet optional Features											
Priority Plus – NOTE 7	/month	\$55.08	\$55.08	\$55.08	\$55.08	\$55.08	\$55.08	\$55.08	\$55.08	\$55.08	\$55.08
Q-Forwarding – NOTE 8	/month	\$42.84	\$42.84	\$42.84	\$42.84	\$42.84	\$42.84	\$42.84	\$42.84	\$42.84	\$42.84
Q-Forwarding- Service Establishment Charge	/incident	\$510.00	\$510.00	\$510.00	\$510.00	\$510.00	\$510.00	\$510.00	\$510.00	\$510.00	\$510.00
Metro Ethernet Reporting Charge per connection-Note 9	month	\$4.90	\$4.90	\$4.90	\$4.90	\$4.90	\$4.90	\$4.90	\$4.90	\$4.90	\$4.90
Metro Ethernet Web Interface Charge –Note 9	month	\$18.36	\$18.36	\$18.36	\$18.36	\$18.36	\$18.36	\$18.36	\$18.36	\$18.36	\$18.36
Metro Ethernet Web Interface Charge – 1x charge	Per/Acct	\$76.50	\$76.50	\$76.50	\$76.50	\$76.50	\$76.50	\$76.50	\$76.50	\$76.50	\$76.50
Metro Ethernet Reporting Security Card -Note 10	Per/Acct	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00
Metro Ethernet Reporting Service Establishment – 1x charge – Note 10	Per/Acct	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00
Metro Ethernet Protection – Note 11											
Automatic Protection Switching Feature (APS), Route protection, per APS less than 10 miles	/month			\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40	\$785.40
Automatic Protection Switching Feature (APS), Route protection, per APS – 10 to 25 route miles	/month			\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56	\$946.56
Automatic Protection Switching Feature (APS), Route protection, per APS -26 to 35 route miles	/month			\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70	\$1,208.70
Automatic Protection Switching Feature (APS), Structural Protection, per APS less than 10 route miles	/month			\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10	\$668.10

Automatic Protection Switching Feature (APS), Structural protection, per APS – 10 to 25 route miles	/month				\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60	\$795.60
Automatic Protection Switching Feature (APS), Structural protection, per APS -26 to 35 route miles	/month				\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14	\$1,027.14
Core Trunk Automatic Failover Feature, per CTAF, less than 10 airline miles	/month				\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20	\$265.20
Core Trunk Automatic Failover Feature, per CTAF, 10 to 25 airline miles	/month				\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80	\$448.80
Core Trunk Automatic Failover Feature, per CTAF, 26 to 35 airline miles	/month				\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80	\$652.80

Explanation: This section is for ordering additional circuits. The TNII Association partner ordering this service is responsible for the management and maintenance of the required equipment to support this service.

Note 1 – DS1 circuits that are a total of 6 miles or more require 2 Local Channels and Interoffice Channel Mileage for the distance between Central Offices for the two end site locations. For example:

Site 1 – Franklin, TN – LOCAL CHANNEL (\$88.91)

Site 2 - Brentwood, TN – LOCAL CHANNEL (\$88.91)

Interoffice Mileage from Franklin Central Office to Brentwood Central Office is 8.6 miles. $\$10.50 \times 9 \text{ miles} = \94.50

Total monthly service cost - \$272.32

DS1 mileages are rounded up to the next whole number; e.g. 8.1 up to 8.9 miles are rounded up to 9 miles.

Note 2 – Existing circuits will be transferred from other contracts to the NetTN Contract and will receive \$680.00 Monthly Rate upon transition. Orders for additional circuits must be approved by CONTRACTOR on availability basis.

Note 3- Basic Ethernet provides full-duplex transmission of port connections. This service arrangement provides best effort, high speed connection for customer premise to another premise with Basic metro Ethernet.

Note 4 – Premium Fixed Ethernet provides the Committed Bandwidth speed.

Note 5 – Premium Burst Ethernet provides the ability to burst above the committed bandwidth rate when excess bandwidth is available.

Note 6 – Metro Ethernet Additional Mileage applies to all Ethernet 1Gbps and/or Premium connections that are 10 miles or more from the serving Metro-E central office. Mileage does not apply to Basic Ethernet services except for 1Gbps.

Note 7 – Metro Ethernet Priority Plus dedicates 25% of the circuit bandwidth as high-priority traffic e.g. VoIP. This is statically assigned and cannot be dynamically reallocated when the high-priority traffic volume is less than 25% of the total traffic in use at a particular time.

Note 8 – Metro Ethernet Q-Forwarding – This feature provides the ability to stack Virtual Local Area Networks (VLANs) onto one Metro Ethernet Premium connection port utilizing IEEE 802.1Q protocol and transporting multiple customer LAN traffic to a single location.

Note 9 – Metro Ethernet Reporting (MER) is a tariff service that provides alarm surveillance, performance reporting and SLA reporting for Metro Ethernet network components. It is only available to customers who subscribe to premium service.

Note 10 - ME Security Card – MER offers a web-enabled GUI. To access reports, the customer logs into the MER server. Log-ins, passwords and secure ID cards are provided to the customer.

Note 11 – Automatic Protection Switching Service-Automatic Protection Switching (APS) provides 1:1 fiber path protection between the customer premises and the serving Ethernet switch. This is access protection, as opposed to core network protection provided by Core Automatic Trunk Failure (CATF).

ATT installs a protection switch and optical splitter at both the customer premises and Ethernet equipped CO. A secondary fiber path, which can be diversely routed from the primary path, is provisioned between the customer location and the central office. Both fiber paths connect to the protection switches installed on each end of the fiber loop. The protection switch connects to a single port on the Metro Ethernet switch. The protection path is used only when a primary path failover occurs. When an outage occurs the protection switch will automatically switch the customer's traffic over to the secondary path.

APS only provides fiber route diversity. APS does not provide port diversity, switch diversity, or optical protection. APS is provisioned between the customer's premises and the Ethernet equipped central office. APS is available to a customer with Metro Ethernet Service connection of 10 Mbps or higher.

APS may be ordered a structurally diverse transport path (Structural Protection) or a route diverse transport path (Route Protection).

Structural Protection APS is defined as the APS secondary facility and the primary Metro Ethernet Connection facility being in separate sheaths that are in separate structures located along the same route.

Route Protection APS is defined as the APS secondary facility being in a separate sheath and in an underground, aerial, or direct buried structure that runs along a separate physical path from the facility associated with the primary Metro Ethernet connection. Route protection provides physical route diversity from the Metro Ethernet-equipped central office to the customer's property line or servicing wire center.

Core Trunk Automatic Failover Feature - Core protection is configured using two (2) or more redundant and diverse trunks between two Metro Ethernet switch routers. The designed diversity between the two trunk paths will utilize separate IOF routes and separate Metro Ethernet switch ports (will also use separate interface cards where available). The automatic failover between trunks is supported by industry standard IEEE 802.3ad Link Aggregation Control Protocol (LACP). Link Aggregation allows the Metro Ethernet switch to combine several physical inter-switch trunks with diverse paths between two switches into a single logical trunk. If there is an outage with one of the physical trunks, the customer's traffic will continue over the unaffected trunk member. CATF provides core protection only; it does not provide access protection, defined as protection on the link between the serving Metro Ethernet switch and the customer premises.

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
(AVPN) AT&T's Virtual Private Network Port Only	LD Domestic AVPN Flat Rate 1.544Mbps/ Port/FR,ATM	/month	\$312.69	\$312.69	\$312.69	\$312.69	\$312.69	\$312.69	\$312.69	\$312.69	\$312.69
	LD Domestic AVPN Flat Rate 10Mbps/ Port/Ethernet or ATM	/month	\$978.54	\$978.54	\$978.54	\$978.54	\$978.54	\$978.54	\$978.54	\$978.54	\$978.54
	LD Domestic AVPN Flat Rate 15Mbps/ Port/FR,ATM	/month	\$1,135.05	\$1,135.05	\$1,135.05	\$1,135.05	\$1,135.05	\$1,135.05	\$1,135.05	\$1,135.05	\$1,135.05
	LD Domestic AVPN Flat Rate 20Mbps/ Port/FR,ATM	/month	\$1,447.58	\$1,447.58	\$1,447.58	\$1,447.58	\$1,447.58	\$1,447.58	\$1,447.58	\$1,447.58	\$1,447.58
	LD Domestic AVPN Flat Rate 25Mbps/ Port/FR,ATM	/month	\$1,791.12	\$1,791.12	\$1,791.12	\$1,791.12	\$1,791.12	\$1,791.12	\$1,791.12	\$1,791.12	\$1,791.12
	LD Domestic AVPN Flat Rate 30Mbps/ Port/FR,ATM	/month	\$2,083.24	\$2,083.24	\$2,083.24	\$2,083.24	\$2,083.24	\$2,083.24	\$2,083.24	\$2,083.24	\$2,083.24
	LD Domestic AVPN Flat Rate 45Mbps/ Port/FR,ATM	/month	\$2,625.88	\$2,625.88	\$2,625.88	\$2,625.88	\$2,625.88	\$2,625.88	\$2,625.88	\$2,625.88	\$2,625.88
	LD Domestic AVPN Flat Rate 100Mbps/Port/Ethernet or ATM	/month	\$5,580.62	\$5,580.62	\$5,580.62	\$5,580.62	\$5,580.62	\$5,580.62	\$5,580.62	\$5,580.62	\$5,580.62
	CoS Pkg Multimedia Std/1.544Mbps	/month	\$39.16	\$39.16	\$39.16	\$39.16	\$39.16	\$39.16	\$39.16	\$39.16	\$39.16
	CoS Pkg Multimedia Std/10Mbps	/month	\$122.29	\$122.29	\$122.29	\$122.29	\$122.29	\$122.29	\$122.29	\$122.29	\$122.29
	CoS Pkg Multimedia Std/15Mbps	/month	\$141.88	\$141.88	\$141.88	\$141.88	\$141.88	\$141.88	\$141.88	\$141.88	\$141.88
	CoS Pkg Multimedia Std/20Mbps	/month	\$180.94	\$180.94	\$180.94	\$180.94	\$180.94	\$180.94	\$180.94	\$180.94	\$180.94
	CoS Pkg Multimedia Std/25Mbps	/month	\$223.89	\$223.89	\$223.89	\$223.89	\$223.89	\$223.89	\$223.89	\$223.89	\$223.89
	CoS Pkg Multimedia Std/30Mbps	/month	\$260.40	\$260.40	\$260.40	\$260.40	\$260.40	\$260.40	\$260.40	\$260.40	\$260.40
CoS Pkg Multimedia Std/45Mbps	/month	\$328.23	\$328.23	\$328.23	\$328.23	\$328.23	\$328.23	\$328.23	\$328.23	\$328.23	
CoS Pkg Multimedia Std/100Mbps	/month	\$697.58	\$697.58	\$697.58	\$697.58	\$697.58	\$697.58	\$697.58	\$697.58	\$697.58	

Explanation: This section for ordering port access to AT&T's Virtual Private Network for global reach. The AVPN access circuits are ordered separately. The CoS package allows traffic prioritization, the term "Multimedia Standard CoS" refers to specific set of prioritization profiles which will be selected at time of order.

Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
AVPN Local Access	AVPN 1.544 Mbps Circuit and mileage – 0 up to 10 miles fixed rate	/month	\$259.18	\$259.18	\$259.18	\$259.18	\$259.18	\$259.18	\$259.18	\$259.18	\$259.18	\$259.18
	AVPN 1.544 Mbps Circuit and mileage – 11 miles up to 20 miles fixed rate	/month		\$320.44	\$320.44	\$320.44	\$320.44	\$320.44	\$320.44	\$320.44	\$320.44	\$320.44
	AVPN 1.544 Mbps Circuit and mileage – 21 miles up to 50 miles fixed rate	/month		\$457.78	\$457.78	\$457.78	\$457.78	\$457.78	\$457.78	\$457.78	\$457.78	\$457.78
	AVPN 1.544 Mbps Circuit – 51 and over miles -Note 1	/month		\$346.80	\$346.80	\$346.80	\$346.80	\$346.80	\$346.80	\$346.80	\$346.80	\$346.80
	Additional per mile charge for AVPN 1.544 Mbps Circuit - 51 miles and over – Note 1	/per mile		\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51	\$4.51
	AVPN DS3 Access	/month	\$2,144.14	\$2,144.14	\$2,144.14	\$2,144.14	\$2,144.14	\$2,144.14	\$2,144.14	\$2,144.14	\$2,144.14	\$2,144.14
	AVPN 100 Mbps Ethernet Access	/month	\$4,926.73	\$4,926.73	\$4,926.73	\$4,926.73	\$4,926.73	\$4,926.73	\$4,926.73	\$4,926.73	\$4,926.73	\$4,926.73

Explanation: This section is for ordering local access circuits within AT&T LEC network to AT&T's Virtual Private Network for NetTN global reach outside the State of Tennessee. AVPN DS3 and 100 Mbps Ethernet Access Circuits greater than 10 miles or outside AT&T LEC network are priced on a case-by-case basis and must be approved by the State and the Contractor. The Mileage is rounded up to the next whole number; e.g. 10.1 up to 10.9 miles are rounded up to 11 miles. AVPN port is ordered separately.

Note 1 – The additional per mile and per month charges apply to AVPN 1.544 Mbps circuits >=51 miles. For instance: circuit that is 60 miles is charged \$346.80 per month plus 60 miles times \$4.51 (\$270.60) for a total circuit cost of \$617.40 per month.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Point to Point – OIR – Note 2	Wavelength 1.25 Gbps Transparent Transport Optical Network Protected - IntraLATA	/month	\$3,638.40	\$3,638.40	\$3,638.40	\$3,638.40	\$3,638.40	\$3,638.40	\$3,638.40	\$3,638.40	\$3,638.40	\$3,638.40
	Wavelength 2.5 Gbps Transparent Transport Optical Network Protected - IntraLATA	/month	\$6,494.40	\$6,494.40	\$6,494.40	\$6,494.40	\$6,494.40	\$6,494.40	\$6,494.40	\$6,494.40	\$6,494.40	\$6,494.40
	Wavelength 10 Gbps Transparent Transport Optical Network Protected - IntraLATA	/month	\$12,226.40	\$12,226.40	\$12,226.40	\$12,226.40	\$12,226.40	\$12,226.40	\$12,226.40	\$12,226.40	\$12,226.40	\$12,226.40
	Primary System Single Bay	/month	\$4,574.70	\$4,574.70	\$4,574.70	\$4,574.70	\$4,574.70	\$4,574.70	\$4,574.70	\$4,574.70	\$4,574.70	\$4,574.70
	Wavelength WAN 10 Gbps Transparent Optical Network Protected - IntraLATA	/month		\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16
	Wavelength LAN 10 Gbps Transparent Optical Network Optical Signal Amplification	/month		\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16
		/month		\$918.00	\$918.00	\$918.00	\$918.00	\$918.00	\$918.00	\$918.00	\$918.00	\$918.00
	Wavelength Channel Per Gigabit Ethernet At 1Gbps Wavelength Transport Protected	/month		\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66
	Per Fibre Connection, Channel Wavelength Transport Optical Network	/month		\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66
	Per Enterprise System Connection – SBCON Channel Wavelength Protected	/month		\$977.82	\$977.82	\$977.82	\$977.82	\$977.82	\$977.82	\$977.82	\$977.82	\$977.82
	Per OC-3 Wavelength protected	/month		\$1,459.16	\$1,459.16	\$1,459.16	\$1,459.16	\$1,459.16	\$1,459.16	\$1,459.16	\$1,459.16	\$1,459.16
	Per OC-12 Wavelength Protected	/month		\$1,907.40	\$1,907.40	\$1,907.40	\$1,907.40	\$1,907.40	\$1,907.40	\$1,907.40	\$1,907.40	\$1,907.40
	Per OC-48 Wavelength protected	/month		\$3,442.86	\$3,442.86	\$3,442.86	\$3,442.86	\$3,442.86	\$3,442.86	\$3,442.86	\$3,442.86	\$3,442.86
	Per OC-192 Wavelength protected	/month		\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16	\$6,485.16
	Per Fibre Channel 100 Wavelength Protected	/month		\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66	\$1,716.66
	Per Fibre Channel 200 Wavelength Protected	/month		\$3,099.53	\$3,099.53	\$3,099.53	\$3,099.53	\$3,099.53	\$3,099.53	\$3,099.53	\$3,099.53	\$3,099.53
	Per Fast Ethernet 100 Wavelength Protected	/month		\$944.16	\$944.16	\$944.16	\$944.16	\$944.16	\$944.16	\$944.16	\$944.16	\$944.16

Channelized DS3 - OIR

SmartRing Service-OIR- Note 2

Dedicated Ring Expansion System	/month		\$1,224.00	\$1,224.00	\$1,224.00	\$1,224.00	\$1,224.00	\$1,224.00	\$1,224.00	\$1,224.00	\$1,224.00
Central Office DS1 Channel Interface per DS1 Interface	/month		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Channelized DS3 (Note 1) – per DS3-Note 1	/month		\$1,233.18	\$1,233.18	\$1,233.18	\$1,233.18	\$1,233.18	\$1,233.18	\$1,233.18	\$1,233.18	\$1,233.18
Customer Node OC-192	/month		\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00
Central Office Node –OC192	/month		\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00	\$5,750.00
Per Local Channel	/month		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Local Channel per quarter mile	/month		\$55.24	\$55.24	\$55.24	\$55.24	\$55.24	\$55.24	\$55.24	\$55.24	\$55.24
Interoffice Channel Fixed – OC192	/month		\$324.36	\$324.36	\$324.36	\$324.36	\$324.36	\$324.36	\$324.36	\$324.36	\$324.36
Interoffice Channel per quarter mile –OC192	/month		\$20.12	\$20.12	\$20.12	\$20.12	\$20.12	\$20.12	\$20.12	\$20.12	\$20.12
Alternate Central Office Local Channel	/month		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Alternate Central Office Local Channel per Quarter mile	/month		\$119.91	\$119.91	\$119.91	\$119.91	\$119.91	\$119.91	\$119.91	\$119.91	\$119.91
Customer Channel Interface – per Fractional 1000 Mbps-single mode	/month		\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35
Customer Channel Interface – per 1000 Mbps-ME backbone, per node	/month		\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35
Customer Channel Interface – per 1000 Mbps-600Mbps, per node	/month		\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88
CO Channel Interface – per 1000 Mbps ME Backbone	/month		\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35
CO Channel Interface – per 1000 Mbps-600Mbps, per node	/month		\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88

OIR Diversity Circuit – Note 3	CO Channel Interface – per Fractional 1000 Mbps 1000 Mbps per node	/month											
			\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35	\$382.35
	CO Channel Interface – per Fractional 1000 Mbps 600 Mbps per node	/month											
			\$357.44	\$357.44	\$357.44	\$357.44	\$357.44	\$357.44	\$357.44	\$357.44	\$357.44	\$357.44	\$357.44
CO Channel Interface – per Fractional 1000 Mbps 600 Mbps ME Backbone 600 Mbps per node	/month												
			\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88	\$287.88
100Mbps TNTower to Chattanooga NetTN NAP – Note 4	/month												
		\$18,235.00	\$18,235.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Explanation: This section is for ordering OIR Data Center point to point circuits. This service is subject to NetTN Service Level Agreements A.4. OIR is responsible for the management and maintenance of the required equipment to support this service.

Note 1 - Service includes the DS3 Channel system at the CO, the Local channel up to 1 mile, 28 DS1 interfaces at the CO and a DS3 Interface at the customer site. Customer is responsible for end-site equipment to terminate this service.

Note 2 – Wavelength and SmartRing services to provide necessary bandwidth and route diversity between the 2 OIR data centers per NetTN contract Attachment E, Section.4.

Note 3 – NetTN Solution to replace the TNII diversity circuit under the TNII contract.

Note 4 – The State has discontinued the OIR Diversity Circuit in contract Amendment 5, therefore there are no costs in the table above for contract years 3 through 10.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Broadband Internet Services - DSL	DSL (1.5 X 256k)	/month	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00	\$55.00
	DSL (3M x 384k)	/month	\$64.30	\$64.30	\$64.30	\$64.30	\$64.30	\$64.30	\$64.30	\$64.30	\$64.30	\$64.30
	DSL (6M x 384k)	/month	\$84.31	\$84.31	\$84.31	\$84.31	\$84.31	\$84.31	\$84.31	\$84.31	\$84.31	\$84.31

Explanation: This section is used for ordering Statewide DSL connections to the Internet only. NetTN Service Level Agreements do not apply. The customer will be responsible for obtaining a VPN account for access to State resources.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u> <u>Unit Cost</u>	<u>Year 2</u> <u>Unit Cost</u>	<u>Year 3</u> <u>Unit Cost</u>	<u>Year 4</u> <u>Unit Cost</u>	<u>Year 5</u> <u>Unit Cost</u>	<u>Year 6</u> <u>Unit Cost</u>	<u>Year 7</u> <u>Unit Cost</u>	<u>Year 8</u> <u>Unit Cost</u>	<u>Year 9</u> <u>Unit Cost</u>	<u>Year 10</u> <u>Unit Cost</u>
Broadband Internet Services Cable	384kbps x 4Mbps	/month	\$145.00	\$145.00	\$145.00	\$145.00	\$145.00	\$145.00	\$145.00	\$145.00	\$145.00	\$145.00

Explanation: This section is used for ordering cable connections to the Internet only. NetTN Service Level Agreements do not apply. The customer will be responsible for obtaining a VPN account for access to State resources.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Remote Access User	Analog up to 56kbps, per account	/month	\$10.95	\$10.95	\$10.95	\$10.95	\$10.95	\$10.95	\$10.95	\$10.95	\$10.95	\$10.95
	Interstate 800 services for RA access	/minute	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03
	3G/4G Wireless Air Card User, per Account, with static IP addresses	/month	\$40.78	\$40.78	\$40.78	\$40.78	\$40.78	\$40.78	\$40.78	\$40.78	\$40.78	\$40.78
	SSL VPN Server implementation/installation-2000 users – Note 1	/1x install	\$8,464.00	\$8,464.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	SSL monthly fee w/ browser for web applications-1000 users – Note 1	/month	\$3,875.00	\$3,875.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	SSL monthly fee w/ browser for web applications-2000 users – Note 1	/month	\$6,629.00	\$6,629.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Multi-factor Hard Token	per user/mth	\$7.81	\$7.81	\$7.81	\$7.81	\$7.81	\$7.81	\$7.81	\$7.81	\$7.81	\$7.81
	Multi-factor server license & token with 3-yr battery	/annually per user	\$62.12	\$62.12	\$62.12	\$60.12	\$60.12	\$60.12	\$60.12	\$60.12	\$60.12	\$60.12
	Multi-factor server license maintenance	/annually per user	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36	\$3.36

Explanation: This section is for dial-up and broadband remote access, SSL and multi-factor authentication for an individual.

Note 4 – The State has discontinued SSL Service in contract Amendment 5, therefore there are no costs in the table above for contract years 3 through 10.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Video Conferencing Services.	Dial Out – 384 Kbps ISDN	/30min	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20
	Multipoint Audio Service	/30min	\$3.03	\$3.03	\$3.03	\$3.03	\$3.03	\$3.03	\$3.03	\$3.03	\$3.03	\$3.03
	H.323 Directory Listing Service	/incident	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	384 Kbps Video Multipoint Service Per Half Hour	/30min	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20	\$16.20
	768 Kbps Video Multipoint Service Per Half Hour	/30min	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00
	1.544Mbps Video Multipoint Service Per Half Hour	/30 min	\$37.80	\$37.80	\$37.80	\$37.80	\$37.80	\$37.80	\$37.80	\$37.80	\$37.80	\$37.80
	Unlimited Video Usage – Note 1	/month	\$1,560.60	\$1,560.60	\$1,560.60	\$1,560.60	\$1,560.60	\$1,560.60	\$1,560.60	\$1,560.60	\$1,560.60	\$1,560.60
	Video Bridge Subscription to Video Control Panel – Note 1	/month	\$520.20	\$520.20	\$520.20	\$520.20	\$520.20	\$520.20	\$520.20	\$520.20	\$520.20	\$520.20
	Unlimited Video Bridge 3 Year Maintenance – Note 1	/month	\$2,317.88	\$2,317.88	\$2,317.88	\$2,317.88	\$2,317.88	\$2,317.88	\$2,317.88	\$2,317.88	\$2,317.88	\$2,317.88
	Video Bridge Call Launch Fee Note 2	/per call	\$286.11	\$286.11	\$286.11	\$286.11	\$286.11	\$286.11	\$286.11	\$286.11	\$286.11	\$286.11

Explanation: This section is for ordering video conferencing service. There are no other costs associated with point to point H.323 QoS connections. When requiring multipoint services, half hour usage options are based on available connection bandwidth. This cost includes any scheduling or management functions for H.323-based multipoint services.

Note 1 – This service is for ordering unlimited video service utilizing a dedicated MCU with a web-scheduler within the NetTN network. Read-only access will be provided to NetTN Partners for management and trouble shooting fault management tickets. This is Basic service only, providing 384 up to 1.544Mbps speeds, no encryption. AT&T will provide maintenance, management, monitoring and help-desk support. All applicable NetTN SLAs apply. All three components are required, unlimited video usage, video bridge subscription to video control panel and unlimited video Bridge 3 yr maintenance.

Note 2 – This is an optional component for having AT&T manually schedule the conference instead of using web-scheduler.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Direct Internet Access	DS1 – (1.544)	/month	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00
	3 Mbps	/month	\$1,040.00	\$1,040.00	\$1,040.00	\$1,040.00	\$1,040.00	\$1,040.00	\$1,040.00	\$1,040.00	\$1,040.00	\$1,040.00
	6 Mbps	/month	\$1,810.00	\$1,810.00	\$1,810.00	\$1,810.00	\$1,810.00	\$1,810.00	\$1,810.00	\$1,810.00	\$1,810.00	\$1,810.00
	Metro Ethernet 10Mbps	/month	\$1,720.00	\$1,720.00	\$1,720.00	\$1,720.00	\$1,720.00	\$1,720.00	\$1,720.00	\$1,720.00	\$1,720.00	\$1,720.00
	Metro Ethernet 20Mbps	/month	\$3,240.00	\$3,240.00	\$3,240.00	\$3,240.00	\$3,240.00	\$3,240.00	\$3,240.00	\$3,240.00	\$3,240.00	\$3,240.00
	Metro Ethernet 50Mbps	/month	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00
	Metro Ethernet 100Mbps	/month	\$6,500.00	\$6,500.00	\$6,500.00	\$6,500.00	\$6,500.00	\$6,500.00	\$6,500.00	\$6,500.00	\$6,500.00	\$6,500.00
	Metro Ethernet 250Mbps	/month	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00
	Metro Ethernet 500Mbps	/month	\$27,000.00	\$27,000.00	\$27,000.00	\$27,000.00	\$27,000.00	\$27,000.00	\$27,000.00	\$27,000.00	\$27,000.00	\$27,000.00
	Metro Ethernet 1Gbps	/month	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00	\$45,000.00

Explanation: This section is used for ordering Internet access that is not part of the NetTN infrastructure. The NetTN end site ordering this service is responsible for the management and maintenance of the required equipment to support this service. The DIA Service will not connect to any NetTN equipment that is on site for the delivery of any other service. Direct Internet Access is direct access from the end site to the Internet POP.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
OIR Direct Internet Access	Metro Ethernet 250Mbps	/month	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00	\$16,400.00
	Metro Ethernet 1Gbps	/month	\$45,000.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00
	Alternate ISP ME 1 Gbps	/month		\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00	\$34,995.00

Explanation: This section is used for ordering Internet access that is not part of the NetTN infrastructure. OIR is responsible for the management and maintenance of the required equipment to support this service. This Service will not connect to any NetTN equipment that is on site for the delivery of any other service. Direct Internet Access is direct access from the end site to the Internet POP. This service is subject to SLA A.3.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Internet/Intranet	Name Space Management, per zone	/month	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00
	Email, per account (100 Mbps storage)	/month	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00	\$15.00
	Content Filtering per user	/month	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25
	K-12 Content Filtering per user	/month	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25

Explanation: This section is for ordering Internet/Intranet services. Further detail of these service offerings is provided in their respective RFP response sections.

<u>Description</u>	<u>Detail</u>		<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
		<u>Unit</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Internet 2	Metro E 100Mbps Connection	/month	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00	\$1,850.00
	Metro E 1 Gbps Connection	/month	\$3,550.00	\$3,550.00	\$3,550.00	\$3,550.00	\$3,550.00	\$3,550.00	\$3,550.00	\$3,550.00	\$3,550.00	\$3,550.00

Explanation: This section is used for ordering access to Internet 2 peering connection. The first 3 Metro E 100mbps connections will be no charge for the life of the NetTN Contract. Any additional circuits will be charged at contracted rates.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>	
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	
Primary Rate ISDN Services	Access Line & Interfaces-Voice/Data-each	/month	\$534.00	\$534.00	\$534.00	\$534.00	\$534.00	\$534.00	\$534.00	\$534.00	\$534.00	\$534.00	
	B-Channels-Voice/Data-each	/month	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	
	Primary Rate Installation	/incident	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Telephone Numbers (per number)	/month	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	
	E911 (Surcharges) – Note 1	/month	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	
	Remove Primary Rate ISDN Screening Table, per central office, per trunk group – Note 2	/per incident			\$40.80	\$40.80	\$40.80	\$40.80	\$40.80	\$40.80	\$40.80	\$40.80	\$40.80
	Remove CLI Option from Screening Table, Per PRI trunk group (DMS only) – note 2	/per incident			\$40.80	\$40.80	\$40.80	\$40.80	\$40.80	\$40.80	\$40.80	\$40.80	\$40.80
	Remove Primary Rate telephone numbers from DMS screening table, Per TN or block of TN's (DMS only) – Note 2	/per incident			\$3.06	\$3.06	\$3.06	\$3.06	\$3.06	\$3.06	\$3.06	\$3.06	\$3.06
Flat Rate Business Line (1FB)	Flat Rate Main Station Line, Business, within CONTRACTOR serving area, including Single Point of Contact	/month			\$30.97	\$30.97	\$30.97	\$30.97	\$30.97	\$30.97	\$30.97	\$30.97	
	Flat Rate Main Station Line, Business, outside CONTRACTOR serving area, including Single Point of Contact	/month			\$51.25	\$51.25	\$51.25	\$51.25	\$51.25	\$51.25	\$51.25	\$51.25	
	End User Common Line Charge	/month			\$7.50	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50	\$7.50	
	Universal Service Funding Fee	/month			\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	\$1.50	

Explanation: This service is used for local transport only. No customer provided equipment is included. It will not connect to the NetTN backbone. NetTN Service Level Agreements do not apply. Primary Rate ISDN (PRI) Voice/Data option provides two-way voice and/or data transmission and includes the functionality of hunting and calling line identification (i.e. PBX Trunk Aggregation).

Note 1 – The E911 surcharge rate allows collection of E911 surcharges at the county established rate. The State of Tennessee will not pay for any charges that are not driven down to a billing number (circuit, telephone number of unique billing number).

Note 2 – Primary rate feature to strip out number displayed when scheduling appointments and replacing with number selected by the agency.

Note 3 – AT&T will provide a help desk, which is a single point of contact, with a specific 800 number for end-users to call for the following services:

Ordering- New, moves, Adds, Changes, Disconnect/Cancel Services, Fault Management and billing inquires

Normal Help Desk hours are 8 a.m. to 5 p.m., Monday through Friday, customer site local time, excluding Customer Holidays. Service orders, i.e., Move, Add, Change, and Delete (MACD) are handled during these normal hours.

On the Customer's behalf, AT&T will be the single point of contact to coordinate Customer's Fault Management, Carrier order activities and other Services, as applicable, with Customer service vendors under Third Party Agreements, and any local carrier provider (LEC's and CLEC)

Consolidated Billing/Invoicing - On a monthly basis, AT&T will create for the customer a consolidated invoice.

Customer responsibilities:

- Customer will provide all letters of agency, transfer of service authorizations, or any other documentation required by any third party vendor, including any IXC's, LEC's and CLEC's to the extent permitted by State or Local laws, regulations, or policies..
- Customer will provide a current electronic copy of site and station detail in AT&T specified file/format with a minimum accuracy level of 95%. Where Customer cannot provide this data in AT&T's specified file format or meet the accuracy level, AT&T may separately charge for the added time and material for data conversion.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Primary Rate ISDN Services over SONET	Access Line & Interfaces-Voice/Data-each	/month	\$434.00	\$434.00	\$434.00	\$434.00	\$434.00	\$434.00	\$434.00	\$434.00	\$434.00	\$434.00
	B-Channels-Voice/Data-Each	/month	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92	\$0.92
	Telephone Numbers (per number)	/month	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19
	E911 (per number)	/month	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00

Explanation: This service is for the Primary Rate ISDN Services over SONET. SONET is ordered separately. No customer equipment is included. NetTN Service Level Agreements do not apply. Primary Rate ISDN (PRI) Voice/Data option provides two-way voice and/or data transmission and includes the functionality of hunting and calling line identification (i.e. PBX Trunk Aggregation).

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Failover Circuit	Failover Managed Circuit 1.544 mbps	/month	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00	\$595.00

Explanation: This section is used for End Sites to order a back-up NetTN managed WAN circuit with Internet access to any alternate NetTN NAP. Service must provide automated failover capability. All NetTN Service Level Agreements apply.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
End Site Router Equipment	End Site Router 10/100 24 Switch Ports	/month	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
	End Site Router 10/100 48 Switch Ports	/month	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00
	End Site Router PoE 802.af	/month	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
	End Site Router Wireless Option (802.11b/g)	/month	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00

Explanation: This section is used for ordering equipment to connect to the NetTN End Site Managed Services or NetTN unmanaged services.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u> <u>Unit</u> <u>Cost</u>	<u>Year 2</u> <u>Unit</u> <u>Cost</u>	<u>Year 3</u> <u>Unit</u> <u>Cost</u>	<u>Year 4</u> <u>Unit</u> <u>Cost</u>	<u>Year 5</u> <u>Unit</u> <u>Cost</u>	<u>Year 6</u> <u>Unit</u> <u>Cost</u>	<u>Year 7</u> <u>Unit</u> <u>Cost</u>	<u>Year 8</u> <u>Unit</u> <u>Cost</u>	<u>Year 9</u> <u>Unit</u> <u>Cost</u>	<u>Year 10</u> <u>Unit</u> <u>Cost</u>
Additional End Site WAN Data LAN Connection	Ethernet 10 Mbps	/month	\$9.90	\$9.90	\$9.90	\$9.90	\$9.90	\$9.90	\$9.90	\$9.90	\$9.90	\$9.90
	Ethernet 100 Mbps	/month	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00	\$27.00

Explanation: This section is for ordering additional data LAN connection(s) to the End Site. In a campus environment or multi-agency building, an end site may require more than one LAN interface. In the event that the router must be upgraded to accommodate multiple LAN interfaces, the router upgrade and associated cost will be the responsibility of the NetTN Service provider. A managed WAN circuit includes (2) 10/100 Mbps LAN interface ports between the router and LAN switch.

Description	Detail	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
			Unit Cost	Unit Cost	Unit Cost	Unit Cost	Unit Cost	Unit Cost	Unit Cost	Unit Cost	Unit Cost	Unit Cost	
End Site Services	Cutover implementation	/incident	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	New services	/incident	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	
	On-site work order hardware configuration change	/incident	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	
	Consulting Services												
	Principal Architect Consulting Services- Note 1	/hour		\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00
	Program Manager Consulting Services – Note 1	/hour		\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00	\$210.00
	Sr. Consultant Consulting Services – Note 1	/hour		\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00	\$204.00
	Technology/Security Consulting Services – Note 1	/hour		\$192.00	\$192.00	\$192.00	\$192.00	\$192.00	\$192.00	\$192.00	\$192.00	\$192.00	\$192.00
	Senior Engineer Consulting Service – Note 1	/hour		\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00
	Project Manager II Consulting Services – Note 1	/hour		\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00	\$172.00
	Project Manager I Consulting Services – Note 1	/hour		\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00
	Engineer Consulting Services – Note 1	/hour		\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00	\$131.00
	Technician Consulting Services – Note 1	/hour		\$83.00	\$83.00	\$83.00	\$83.00	\$83.00	\$83.00	\$83.00	\$83.00	\$83.00	\$83.00
	Site Survey	/incident	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00
	Load Testing Point-to-Point Circuits	/incident	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00
	Migration end site order processing	/order	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Expedite charges/per WAN Circuit	/incident	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00
	TACACS Additional user accounts 7-12 users –Note 2	/incident		\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00	\$255.00
	TACACS Additional user accounts 13-25 users – Note 2	/incident		\$765.00	\$765.00	\$765.00	\$765.00	\$765.00	\$765.00	\$765.00	\$765.00	\$765.00	\$765.00

Telecommunications Service Priority (TSP) – per circuit – Note 3	/Monthly		\$1.13	\$1.13	\$1.13	\$1.13	\$1.13	\$1.13	\$1.13	\$1.13	\$1.13
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Explanation: This section is for ordering integration service whether it is for the initial cutover implementation, new services for new end sites or existing end sites, or consulting services.

Reminder: All End Sites that are cutover onto the NetTN WAN infrastructure shall include the managed service offerings as specified in the RFP document. NetTN WAN equipment software or configuration changes, modifications, enhancements, and improvements are to be considered part of the managed service offerings.

Clarification: The following further clarifies the definition of the above labor or services that can be charged by the NetTN Service Provider to the appropriate TNII Association Partner:

Cutover Implementation refers to the migration of an existing TNII Association end site to the new NetTN WAN infrastructure. Embedded in the cost are the migration planning, hardware and software configurations, on-site installation services, end site documentation, and acceptance tests.

New Services are for new end sites.

On Site work order hardware configuration changes refer to situations where a technician needs to travel to the customer premise to change the NetTN provided equipment only where the end site WAN circuit is not changing.

Consulting Services are available on a per hour basis for consulting on NetTN Scope of Services.

Note 1 – A statement of work will be developed and agreed upon between the State and the Contractor for specific categories of consulting services.

Load Testing Point-to-Point Circuits: Validating the actual throughput that the circuit can handle.

Note 2 - TACACS - Read only access for up to 3000 NetTN managed routers via Telnet. If the number of concurrent sessions is exceeded the State will ensure that Enabled Employees log off the sessions if requested to do so by CONTRACTOR personnel.

Note 3 - Telecommunications Service Priority – FEMA telecommunications restoral priority.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Enhanced Firewall	Enhanced Firewall – stand alone Firewall at end-site	/month	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
	Enhanced Firewall-IDS	/month	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00

Explanation: This section is used for ordering equipment to connect to the NetTN End Site Managed Services or NetTN unmanaged services.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Managed End Site Firewall and Managed End Site Switch	End Site Integrated FW IOS – Note 8	/month	\$200.00	\$200.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	End Site 24 Port Integrated Switch	/month	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00	\$550.00
	End Site 48 Port Integrated Switch	/month	\$650.00	\$650.00	\$650.00	\$650.00	\$650.00	\$650.00	\$650.00	\$650.00	\$650.00	\$650.00
	End Site Integrated FW IOS / 24 Port Integrated Switch – Note 8	/month	\$750.00	\$750.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	End Site Integrated FW IOS / 48 Port Integrated Switch – Note 8	/month	\$850.00	\$850.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	End Site Cisco ASA 5510, Note 1 & 2	/month	\$459.00	\$459.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00
	End Site Cisco ASA 5520, Note 1& 3	/month	\$1,387.20	\$1,387.20	\$760.00	\$760.00	\$760.00	\$760.00	\$760.00	\$760.00	\$760.00	\$760.00
	End Site Cisco ASA 5520 High Availability-Note 1 & 4	/month	\$2,774.40	\$2,774.40	\$1,520.00	\$1,520.00	\$1,520.00	\$1,520.00	\$1,520.00	\$1,520.00	\$1,520.00	\$1,520.00
	End Site Cisco ASA 5540 -Note 1 & 5 See Note 8	/month	\$4,855.20	\$4,855.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	End Site Cisco ASA 5540HA GigE - Note 1 & 6	/month	\$5,202.00	\$5,202.00	\$2,660.00	\$2,660.00	\$2,660.00	\$2,660.00	\$2,660.00	\$2,660.00	\$2,660.00	\$2,660.00
	End Site Cisco ASA 5550HA GigE - Note 1 & 7	/month	\$10,404.00	\$10,404.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00	\$5,700.00

Explanation: This section is used for ordering end site firewall and LAN switch. Cost per month includes all hardware, software, operations support and management for firewall and switch. These services may be ordered with any managed end site circuit with or without Internet access.

Note 1 - This is a premise-based firewall, fully managed and monitored by CONTRACTOR. CONTRACTOR provides the following support for this managed firewall:

- Proactive 7x24 monitoring and management, maintenance and updates.
- Initial consultation for the activation of the firewall service, and testing at customer location.
- Change/configuration Management – Customers may request up to 6 change requests per month, per device.
- On-site maintenance response is available 7 days/week, 24 hours/day. NetTN SLAs A.14, A.15, A.18, A.19 and A.21 apply.

Note 2 – Small Office with approved Throughput = 2 x T1

Note 3 – Medium Office with approved Throughput = T1 / DS3

Note 4 – Medium Office, high availability* with approved Throughput = T1 / DS3

Note 5 - Large Office, high availability* with approved Throughput = OC-3

Note 6 - Large Office, high availability* with approved Throughput = OC-3

Note 7 - X-large Office, high availability* with approved Throughput = OC-3 plus

Note 8 – The State has discontinued these services in contract Amendment 5, therefore there are no costs in the table above for contract years 3 through 10.

* High Availability option can be configured as a two-Firewall cluster including Active/Standby mode with automatic failover in the case of hardware failure.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
			<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>	<u>Unit Cost</u>
Co-location Services	Racks/Cabinet Installation	/incident	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
	19" Open Rack	/month	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00
	23" Open Rack	/month	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00	\$1,600.00
	Cabinet	/month	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00
	Cage/Square Footage	/month	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Power - 48v DC 20 Amps A/B	/month	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
	Power - 48v DC 30 Amps A/B	/month	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00
	Power - 48v DC 40 Amps A/B	/month	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00
	Power - 48v DC 50 Amps A/B	/month	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00
	Power - 48v DC 60 Amps A/B	/month	\$600.00	\$600.00	\$600.00	\$600.00	\$600.00	\$600.00	\$600.00	\$600.00	\$600.00	\$600.00
	Cross Connect - DS1	/incident	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00
	Cross Connect - DS1	/month	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Cross Connect - DS3/Coax	/incident	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00
	Cross Connect - DS3/Coax	/month	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Cross Connect - Ethernet/Cat 5	/incident	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00
	Cross Connect - Ethernet/Cat 5	/month	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Cross Connect - Fiber	/incident	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00
	Cross Connect - Fiber	/month	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Explanation: This is for a customer who wishes to co-locate equipment within the NetTN Service Provider's NAP or POP facilities for special purposes, such as SAN servers. Included in this cost is the physical space, air conditioning and restricted access privileges.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1</u> <u>Unit Cost</u>	<u>Year 2</u> <u>Unit Cost</u>	<u>Year 3</u> <u>Unit Cost</u>	<u>Year 4</u> <u>Unit Cost</u>	<u>Year 5</u> <u>Unit Cost</u>	<u>Year 6</u> <u>Unit Cost</u>	<u>Year 7</u> <u>Unit Cost</u>	<u>Year 8</u> <u>Unit Cost</u>	<u>Year 9</u> <u>Unit Cost</u>	<u>Year 10</u> <u>Unit Cost</u>
Hosted Identity Management	Authentication – Note 1 & 4	Per user /month	\$10.80	\$10.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Authentication – Note 2 & 4	Per user /month	\$4.05	\$4.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Authentication – Note 3 & 4	Per user /month	\$0.0000	\$0.0000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Explanation: This section is for ordering Hosted Identity Management for eHealth and future defined NetTN Association Partner VRFs. This service is subject to NetTN Service Level Agreements.

Note 1 – This includes all users that require identity authentication through the Trusted Authentication Manager (Log directly into the TN eHealth Network portal). All users will be eligible for Customer support levels one through three as defined below.

Note 2 – This includes all users that authenticate their identity through their organization's Web Identity and Access Management system and then federate the user's credentials to the CONTRACTOR Trusted Identity Broker. CONTRACTOR is responsible to transform the federation protocol of the user's credentials to whatever protocol required by the relying endpoint and then pass on the user's credentials to the relying party endpoint. Users in this scenario are eligible for customer support levels two and three as defined below, whereas the Identity provider organization is responsible for level one customer support.

CONTRACTOR, through its subcontractor relationship(s) shall provide access to Help Desk services for the purposes of reporting TN eHealth Network-related problems, as described

below:

Definition of Customer Support Levels:

Support Level 1 – The problem is affecting time-critical applications with production work at a standstill. The TN eHealth Portal is completely unusable and no work-around is currently known. The Help Desk and not the Change Control Process would address resolution of this problem.

Support Level 2 - The Trusted Broker Platform does not function properly, but key business processes are not interrupted. The TN eHealth Portal is significantly impaired such that key business processes cannot be conducted and no known workaround is currently available. The CONTRACTOR Help Desk and not the Change Control Process would address resolution of this problem.

Support Level 3 – The Trusted Broker Platform is functioning, but specific User (s) is affected and cannot conduct work as needed.

Note 3 - State of Tennessee Health agencies/employees will authenticate to the NetTN network. Such State of Tennessee Health agencies/employees will not be subject to authentication charges by the NetTN contractor.

Note 4 – The State has discontinued Hosted Identity Management in contract Amendment 5, therefore there are no costs in the table above for contract years 3 through 10.

<u>Description</u>	<u>Detail</u>	<u>Unit</u>	<u>Year 1 Unit Cost</u>	<u>Year 2 Unit Cost</u>	<u>Year 3 Unit Cost</u>	<u>Year 4 Unit Cost</u>	<u>Year 5 Unit Cost</u>	<u>Year 6 Unit Cost</u>	<u>Year 7 Unit Cost</u>	<u>Year 8 Unit Cost</u>	<u>Year 9 Unit Cost</u>	<u>Year 10 Unit Cost</u>
Next Generation 9-1-1 (NG -911)	Aggregation Point – NHVL,Knox, Chatt & Memphis Facilities	/incident		\$137,634.88	\$137,634.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Aggregation -Hardware	/incident		\$272,939.82	\$272,939.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Aggregation -Installation	/incident		\$234,666.00	\$234,666.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Network Control Center – Facilities & Build out	/incident		\$137,634.88	\$137,634.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	NCC-Hardware -	/incident		\$667,186.22	\$667,186.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	NCC -Installation	/incident		\$572,473.35	\$572,473.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Call delivery & Monitoring Software	/incident		\$1,166,725.34	\$1,166,725.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	PSAPs Edge Hardware	/incident		\$10,487.44	\$10,487.44	\$10,487.44	\$10,487.44	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	PSAPs Edge Installation	/incident		\$6,991.62	\$6,991.62	\$6,991.62	\$6,991.62	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Network Usage Information, Traffic reports per measurement ID, per report	/incident		\$20.40	\$20.40	\$20.40	\$20.40	\$20.40	\$20.40	\$20.40	\$20.40	\$20.40
	E-911 SS7 Trunk group – per one way trunk group	/incident		\$706.86	\$706.86	\$706.86	\$706.86	\$706.86	\$706.86	\$706.86	\$706.86	\$706.86
	E-911 SS7 Trunk group – per one way trunk group	/month		\$10.20	\$10.20	\$10.20	\$10.20	\$10.20	\$10.20	\$10.20	\$10.20	\$10.20
	E-911 SS7 DSO Trunk – 1 st mile Per trunk – initial trunk group	/incident		\$329.46	\$329.46	\$329.46	\$329.46	\$329.46	\$329.46	\$329.46	\$329.46	\$329.46
	E-911 SS7 DSO Trunk – 1 st mile Per trunk – initial trunk group	/month		\$11.22	\$11.22	\$11.22	\$11.22	\$11.22	\$11.22	\$11.22	\$11.22	\$11.22
E-911 SS7 DSO Trunk – ea. additional mile per Trunk	/month		\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	

E-911 SS7 DSO Trunk, 1 st mile per trunk, subsequent to initial group setup	/incident		\$496.74	\$496.74	\$496.74	\$496.74	\$496.74	\$496.74	\$496.74	\$496.74	\$496.74
E-911 SS7 DSO Trunk, 1 st mile per trunk, subsequent to initial group setup	/month		\$11.22	\$11.22	\$11.22	\$11.22	\$11.22	\$11.22	\$11.22	\$11.22	\$11.22
Custom Routing, Per PSAP Routing Number	/incident		\$16.32	\$16.32	\$16.32	\$16.32	\$16.32	\$16.32	\$16.32	\$16.32	\$16.32
Speed Call List, Per EMNT trunk, initial or rearrangement	/incident		\$52.02	\$52.02	\$52.02	\$52.02	\$52.02	\$52.02	\$52.02	\$52.02	\$52.02
Core hardware Maintenance	/month		\$27,741.96	\$27,742.96	\$27,741.96	\$27,742.96	\$27,741.96	\$27,742.96	\$27,741.96	\$27,742.96	\$27,741.96
Software Maintenance-Call delivery & monitoring	/month		\$42,685.98	\$42,685.98	\$42,685.98	\$42,685.98	\$42,685.98	\$42,685.98	\$42,685.98	\$42,685.98	\$42,685.98
Edge PSAP Hardware Mtc.	/month		\$345.14	\$345.14	\$345.14	\$345.14	\$345.14	\$345.14	\$345.14	\$345.14	\$345.14
NetTN 9-1-1 Support Services	/month		\$54,655.68	\$54,655.68	\$54,655.68	\$54,655.68	\$54,655.68	\$54,655.68	\$54,655.68	\$54,655.68	\$54,655.68

Explanation: **This section is for NG-9-1-1 over NetTN.** This service is subject to NetTN Service Level Agreements. **This project will be implemented in three stages as described below:**

Stage 1: The Aggregation Points and NetTN Control Centers will be deployed. Wireless Carriers and VoIP Providers will move their 9-1-1 call traffic from the legacy 9-1-1 selective routers to the Aggregation Points. 9-1-1 Calls will be delivered from the 9-1-1 Over NetTN Control Centers (NCC) to the appropriate legacy selective router for delivery to the PSAP. This places the Aggregation Points and NCCs into service without making any changes that will directly impact the PSAPs.

Stage 2: NetTN Call Delivery to the PSAPs. Edge devices and firewalls will be deployed at the PSAPs and NetTN connections will be installed. 9-1-1 Calls will be delivered from the NCC directly to the PSAP over NetTN.

Stage 3: All remaining originating 9-1-1 call traffic (landline 9-1-1 calls) will be migrated off the legacy selective routers and connected to the managed IP network at designated edge routers and the legacy 9-1-1- selective router may be decommissioned.