FULL PRICING EDITION

State of Oklahoma contract with HUGHES NETWORK SYSTEMS Contract NO. 1014

HUGHES PRICING NARRATIVE

Overview

Hughes' proposed network design for THE STATE OF OKLAHOMA leverages our NOC-centric architecture, and our seamless integration of multiple network access technologies to provide THE STATE OF OKLAHOMA with a broad range of secure transport options for both primary and backup services. THE STATE OF OKLAHOMA may choose from wireline services such as DSL, cable, fiber, and Ethernet; and/or wireless services such as cellular, wireless microwave, and satellite. Configurations may be chosen, and blended based on THE STATE OF OKLAHOMA's specific requirements. A primary combination consisting of a blend of all wireline access will provide the lowest latency network service, while a blend of DSL, and satellite will provide an overall lowest cost configuration. Irrespective of the access technology selected and implemented, Hughes will seamlessly integrate the site into the HughesON managed broadband network. All sites are proactively monitored, typically placed under Hughes' on-site field maintenance, and routinely viewable on Hughes' Customer Portal.

Hughes will install an HR4700 Branch Gateway at every field office in order to provide network management, network security, and network optimization. The HR4700 Branch Gateway incorporates industry-leading Fortinet security solutions, enabling Hughes to provide next generation firewall capabilities such as Intrusion Detection/Prevention, application control, and protection from advanced threats and other security technologies such as data leak prevention and vulnerability scanning and all centrally managed by the Hughes NOC. A key advantage to the Hughes design is the NOC-centric architecture, shown in Figure 1, which provides a multitude of benefits to THE STATE OF OKLAHOMA. The Hughes NOC serves as an aggregation point on behalf of THE STATE OF OKLAHOMA so that the various types of heterogeneous access technologies are consolidated and then backhauled to the THE STATE OF OKLAHOMA headquarters or data centers. Hughes provides a secure solution by managing an IPSec VPN tunnel from the field office locations to the Hughes NOC. All Layer 3 traffic sent to and from the field office is transmitted over this tunnel. Additionally, non-publically routable IP addresses are allocated for each site such that the traffic can get routed within the Hughes network only, but not outside the Hughes network without being sent through the Hughes NOC. Additionally, the NOC-centric architecture facilitates a higher level of network management, specifically the ability to monitor network utilization, either overall or by field office.
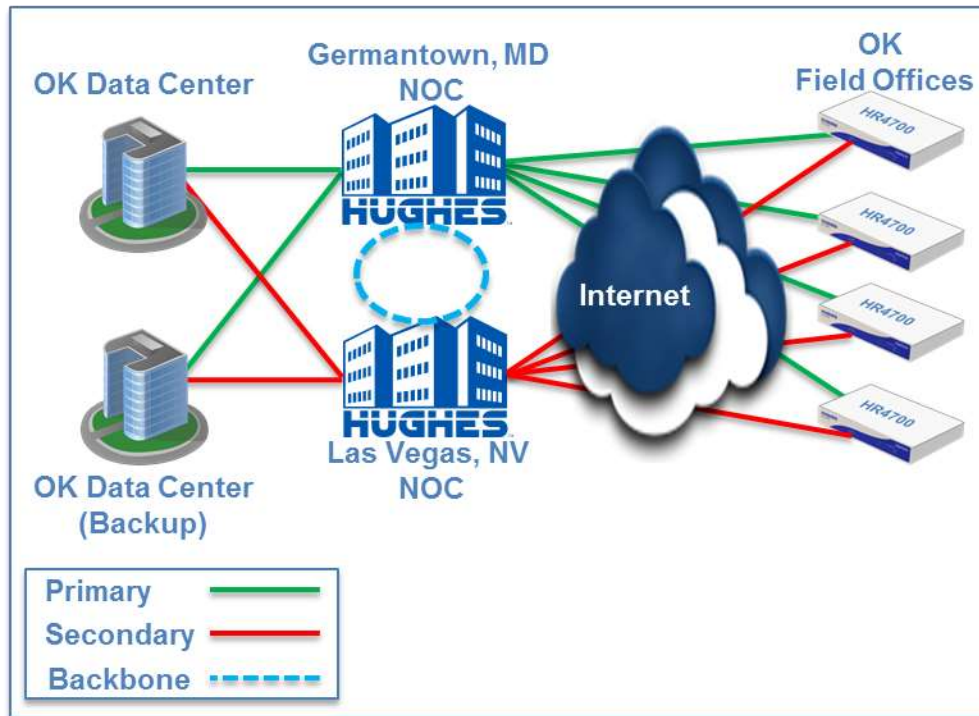
FIGURE 1: NETWORK REDUNDANCY

The Hughes managed services offering includes the following:

- PCI certified architectures, including maintenance of certification status
- SAS70 certification
- Network design and engineering
- Program Management
- The HR4700 Branch Gateway configuration and management – includes IPSec VPN tunnel
- Access circuit ordering and provisioning
- The HR4700 Branch Gateway installation, and commissioning (includes THE STATE OF OKLAHOMA specific install specification)
- 7x24 proactive monitoring of network, including the HR4700 Branch Gateway
- Network operations 7x24
- Help Desk 7x24
- Suite of optional onsite field maintenance plans
- Access to the unified Customer Gateway for install status, trouble ticketing, fault management, and performance management web portal.

All Hughes solutions for THE STATE OF OKLAHOMA leverage our innovative ActiveTechnologies^{TM} that transform ordinary broadband connections into enterprise-grade high performance WANs.

- **ActiveCompression^{TM}** can achieve up to 300% higher throughput rates leveraging our 2-stage adaptive compression process. This reduces network congestion and improves application performance, especially at bandwidth constrained branch sites.

- **ActiveClassifier^{TM}** uses algorithms to automatically and dynamically classify traffic based on flow behavior, it eliminates the time-consuming process of manually configuring and maintaining rules to classify and prioritize specific applications. URL and Domain-based policies can easily be applied to prioritize key cloud apps.

- **ActiveQoS^{TM}** uniquely measures end-to-end capacity on broadband links, dynamically updating multi-level path priority queues and traffic shapers to best maximize branch bandwidth usage. This results in dramatically improved performance for VoIP and video traffic in an environment where individual branches may be subjected to different service plans.

- **ActivePath^{TM}** is the core of our Software Defined – Wide Area Network (SD-WAN) solution. This newest feature incorporates novel algorithms and techniques that exploit the use of multiple branch paths. Intelligent Multipath Replication (IMR) ensures applications are delivered without interruption across the secure WAN overlay regardless of degradation on a single path.

THE STATE OF OKLAHOMA can choose between three options when designing the access network for each field office. Depending on the required availability of a field office THE STATE OF OKLAHOMA can choose between the Standard, High Availability Network (HAN), or SD-WAN network options. The table below shows the summary of the three options.

TABLE 1: NETWORK OPTIONS

Option	Network	Active Tech	Description
Standard	(1) HR4700 (1) Transport	ActiveCompression, ActiveQoS, and ActiveClassifier	Single Hughes HR4700 Branch Gateway, Single Transport, Broadband modem, Circuit Activation, Enterprise installation, Network Management, 24x7 Tier3 support, Same Day On-site Feld Maintenance, Program Manager
HAN	(1) HR4700 (2) Transports	ActiveCompression, ActiveQoS, and ActiveClassifier	Single Hughes HR4700 Branch Gateway, Two Transport (Primary Active, Secondary Backup), Broadband modems, Circuits Activation, , Enterprise installation, Network Management, 24x7 Tier3 support, Same Day On-site Feld Maintenance, Program Manager
SD-WAN	(2) HR4700 (2) Transports	ActiveCompression, ActiveQoS, ActiveClassifier, and ActivePath.	Two Hughes HR4700 Branch Gateway, Two Transport (Both Primary & Secondary are Active), Broadband modems, Circuits Activation, , Enterprise installation, Network Management, 24x7 Tier3 support, Same Day On-site Feld Maintenance, Program Manager

Standard Option

The Hughes solution provides THE STATE OF OKLAHOMA with the ability to select from a range of service offerings from DSL, cable, fiber, Ethernet, cellular, fixed wireless, and satellite access. This wide range of flexibility allows THE STATE OF OKLAHOMA to optimize the broadband solution based on price, performance, coverage, and security. This cost effective architecture provides reliable performance regardless of technology by utilizing a single transport and transmitting the data via IPSec VPN tunnel from the field offices to the Hughes NOC. Once data from the field office reaches the Hughes NOC, traffic from all of THE STATE OF OKLAHOMA field office will be aggregated, and delivered to the THE STATE OF OKLAHOMA via a dedicated circuit. This cost-effective approach creates a private "MPLS like" network using typical broadband technologies.

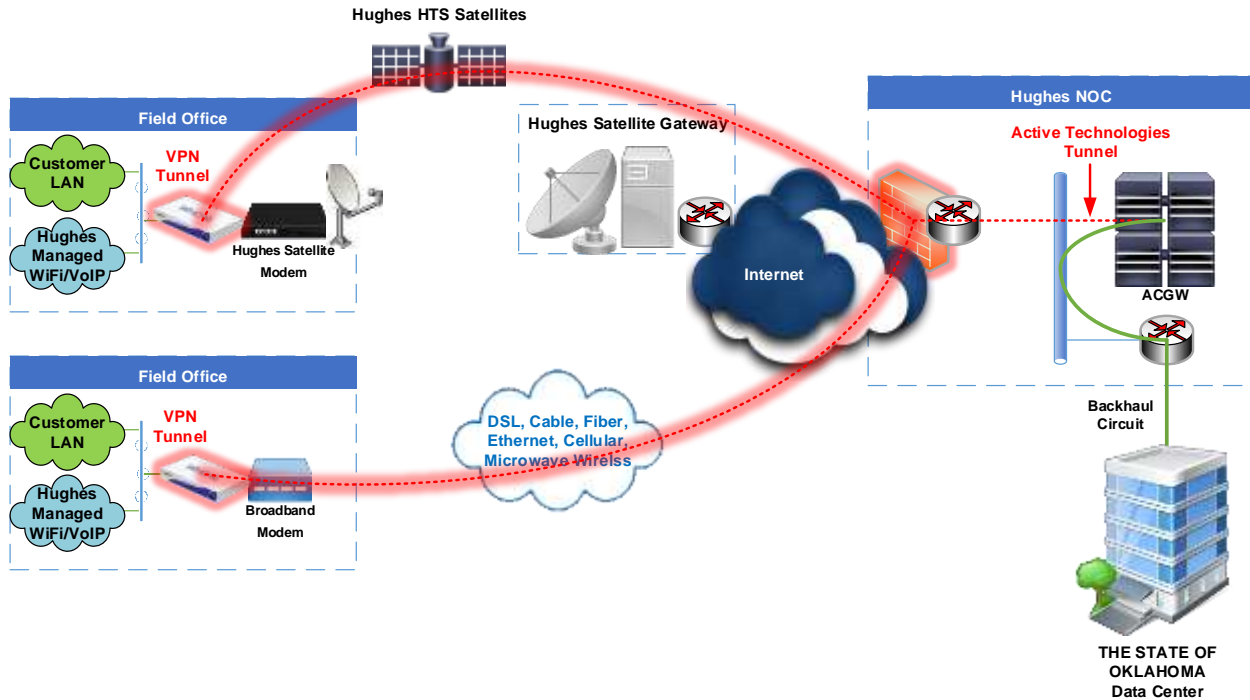The diagram illustrates the Standard Option for THE STATE OF OKLAHOMA network.

FIGURE 2: STANDARD NETWORK ARCHITECTURE

HAN Option

The Hughes HAN option provides THE STATE OF OKLAHOMA with higher reliability than the Standard Option by utilizing dual transports. The Hughes HAN option integrates two truly diverse routes; broadband wireline (DSL, cable, fiber, and Ethernet) as primary, and satellite or cellular as the secondary. The combination of these two route-diverse access technologies ensures that connectivity will be available in the event of a failure of the primary path. The broadband wireline modem will be configured for a hard failover to allow traffic at field office to automatically failover to the satellite or cellular link in the event of a failure of the primary path.

SD-WAN Option

THE STATE OF OKLAHOMA can also choose to implement the SD-WAN option which incorporates the Hughes ActivePath application to provide the highest reliability through the utilization of dual transports, and dual HR4700 Branch Gateways at the field offices. This option combines of two truly diverse routes. The two routes will perform load balancing to mitigate congestion over the network.

PRICING DESCRIPTION
Business Class Broadband Service

Hughes utilizes various service types DSL, CABLE, FIBER, and ASYM ETHERNET, to provide low cost Business Class Broadband to THE STATE OF OKLAHOMA.

The prices in Table 1 include the following:

- Non-Reoccurring Charge (NRC): HR4700 Branch Gateway, provisioning, standard installation and configuration, circuit installation, and circuit activation.

- Monthly Recurring Charge (MRC): Circuit charge, Hughes managed service, and standard network security.

Hughes request that THE STATE OF OKLAHOMA provide a list of field offices or other sites for prequalification. In order to obtain the best prequalification results, THE STATE OF OKLAHOMA should provide a valid address and landline phone number for each site.

Below are the list of Business Class Broadband options and the associated NRC and MRC for the implementation at each field office.

TABLE 2: BUSINESS CLASS BROADBAND SERVICE PRICING

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
DSL	ADSL - 768K/3.0M	$1,840.00	$156.98
	ADSL - 512K/6.0M	$1,840.00	$182.98
FIBER	FIBER - 1.0M/6.0M	$1,840.00	$128.98
	FIBER - 1.0M/12.0M	$1,840.00	$147.98
	FIBER - 1.0M/18.0M	$1,840.00	$163.98
	FIBER - 3.0M/24.0M	$1,840.00	$180.98
	FIBER - 6.0M/45.0M	$1,840.00	$197.98
	FIBER - 8.0M/75.0M	$1,840.00	$249.98
	FIBER FTTI- 75.0M/75.0M	$1,840.00	$314.98
	FIBER FTTI - 150.0M/150.0M	$1,840.00	$408.98
CABLE	Comcast Cable - 3.0M/16.0M	$1,840.00	$178.98
	Comcast Cable - 10.0M/25.0M	$1,840.00	$199.98
	Comcast Cable - 10.0M/50.0M	$1,840.00	$214.98
	Comcast Cable - 15.0M/75.0M	$1,840.00	$261.98
	Comcast Cable - 20.0M/100.0M	$1,840.00	$322.98
	Cox Cable - 10.0M/50.0M	$1,840.00	$241.98
	Cox Cable - 20.0M/100.0M	$1,840.00	$621.98
	Optimum Cable - 5.0M/25.0M	$1,840.00	$178.98
	Optimum Cable - 25.0M/60.0M	$1,840.00	$191.98
	SPECTRUM Cable 60M / 5.0M	$1,840.00	$172.98
	SPECTRUM Cable 100M / 10M	$1,840.00	$233.98
	SPECTRUM Cable 150M / 20M	$1,840.00	$325.98
	Non-Core Provider 1	$1,840.00	$48.99
	Non-Core Provider 2	$1,840.00	$48.99
	Non-Core Provider 3	$1,840.00	$48.99
	Non-Core Provider 4	$1,840.00	$48.99
	Non-Core Provider 5	$1,840.00	$48.99
Asymmetric Ethernet	Asym Ethernet 8/1	$1,840.00	$200.98
	Asym Ethernet 10/1	$1,840.00	$206.98
	Asym Ethernet 15/1	$1,840.00	$210.98
	Asym Ethernet 20/1	$1,840.00	$222.98
	Asym Ethernet 10/2	$1,840.00	$228.98
	Asym Ethernet 20/2	$1,840.00	$232.98
	Asym Ethernet 30/2	$1,840.00	$288.98
	Asym Ethernet 10/5	$1,840.00	$238.98
	Asym Ethernet 20/5	$1,840.00	$282.98
	Asym Ethernet 30/5	$1,840.00	$298.98
	Asym Ethernet 50/5	$1,840.00	$320.98
	Asym Ethernet 30/10	$1,840.00	$304.98
	Asym Ethernet 50/10	$1,840.00	$332.98

The HTS service is based on Hughes' industry leading satellite service. This service provides up to 25Mbps download and up to 3Mbps upload at each site. Plans range from Business 35 to Business 550 which correspond to the GB data allowance per month. Additional GB Tokens can also be purchased for additional incremental service usage that do not expire.

The prices in Table 2 include the following:

- Non-Reoccurring Charge (NRC): Provisioning, standard installation, and configuration of the HR4700 Branch Gateway and Hughes satellite terminal (HT2000 satellite modem/1 Watt radio/0.98 Meter Antenna).

- Monthly Recurring Charge (MRC): Circuit charge, Hughes managed service, and standard network security.

Each site requires valid address or Latitudes /Longitudes for service prequalification process. For the sites that qualify for Fixed Satellite Service after prequalification, the solution price is as follows:

TABLE 3: HTS SATELLITE SERVICE PRICING

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
Hughes HTS	Business 35 (One Year Commitment)	$2,348.05	$115.28
	Business 50 (One Year Commitment)	$2,348.05	$143.69
	Business 75 (One Year Commitment)	$2,348.05	$191.05
	Business 100 (One Year Commitment)	$2,348.05	$238.40
	Business 150 (One Year Commitment)	$2,348.05	$304.70
	Business 200 (One Year Commitment)	$2,348.05	$399.41
	Business 250 (One Year Commitment)	$2,348.05	$494.12
	Business 300 (One Year Commitment)	$2,348.05	$588.83
	Business 350 (One Year Commitment)	$2,348.05	$683.54
	Business 400 (One Year Commitment)	$2,348.05	$778.25
	Business 450 (One Year Commitment)	$2,348.05	$872.96
	Business 500 (One Year Commitment)	$2,348.05	$967.67
	Business 550 (One Year Commitment)	$2,348.05	$1,062.38
	Extra 1 GB of data	$3.00	$0.00
	Standard Site Survey	$375.00	$0.00
	Enhanced Site Survey (Lower 48 States)	$1,095.00	$0.00
	Enhanced Site Survey (OCONUS)	ICB	$0.00

Service Limitations

Customer acknowledges the following:

- The Hughes HTS Access Service requires an unobstructed view of the southern sky and is subject to the Hughes Acceptable Use Policy and Fair Use Policy which are available at http://legal.hughes.com.

- The Hughes HTS Access Service plans do not include a Static Routable Public IP address assignment to the HT terminal.

- Use of a VPN tunnel over a satellite connection typically causes a loss of speed performance due to the higher latency nature of the transport. If Customer chooses to run a VPN over the Hughes HTS Access Service, any benefits from internal HT WAN optimization techniques will be negated and overall application performance diminished.

Cellular Service

Hughes utilizes various cellular service providers to deliver 4G/LTE cellular service to THE STATE OF OKLAHOMA.

The prices in Table 3 include the following:

- Non-Reoccurring Charge (NRC): HR4700 Branch Gateway provisioning, standard installation, and configuration; circuit provisioning, standard installation and activation.

- Monthly Recurring Charge (MRC): Circuit charge, Hughes managed service, and standard network security.

Hughes request that THE STATE OF OKLAHOMA provide a list of field office site for prequalification. In order to obtain the best prequalification results, THE STATE OF OKLAHOMA should provide a valid address and landline phone number for each site.

Below are the list of High Speed Cellular Service options and the associated NRC and MRC for the implementation at each field office.

Each site requires valid address with phone number for service prequalification process. For the sites that qualifies for High Speed Cellular service after prequalification, the solution price is as follows:

TABLE 4: CELLULAR SERVICE PRICING

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
Cellular	250MB Pooled (Blended)	$2,215.97	$71.98
	1GB Pooled (Blended)	$2,215.97	$78.98
	2GB Pooled (Blended)	$2,215.97	$86.98
	5GB Pooled (Blended)	$2,215.97	$107.98
	10GB Pooled (Blended)	$2,215.97	$140.98
	4G Overage Charge - per GB	$20.00	$0.00

Microwave Wireless

Hughes utilizes various service providers to deliver Microwave Wireless to THE STATE OF OKLAHOMA.

The prices in Table 4 include the following:

- Non-Reoccurring Charge (NRC): HR4700 Branch Gateway provisioning, standard installation, and configuration; circuit provisioning, standard installation and activation.

- Monthly Recurring Charge (MRC): Circuit charge, Hughes managed service, and standard network security.

Hughes request that THE STATE OF OKLAHOMA provide a list of field offices or other sites for prequalification. In order to obtain the best prequalification results, THE STATE OF OKLAHOMA should provide a valid address and landline phone number for each site.

Below are the list of Fixed Wireless Service options and the associated NRC and MRC for the implementation at each field office.

TABLE 5: MICROWAVE WIRELESS PRICING

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
Fixed Wireless	3M x 1M Fixed Wireless	$3,089.98	$348.98
	5Mx2M Fixed Wireless	$3,089.98	$378.98
	10Mx2M Fixed Wireless	$3,089.98	$398.98
	15Mx3M Fixed Wireless	$3,089.98	$428.98
	20Mx5M Fixed Wireless	$3,089.98	$478.98

Managed Network Service
Hughes will install the HR4700 Branch Gateway at all field offices to provide Network Performance Optimization, Network Management, and Managed Security.

Performance Optimization
Standard Network Performance Optimization services that are paired with any transport consist of the HR4700 Branch Gateway Activation Fee (NRC), Hughes ActiveTechnologies which includes ActiveCompression, ActiveClassifier, and ActiveQoS (MRC). ActivePath (MRC) is optional and can be ordered separately for high reliability field offices that require dual transports. Network Performance Optimization prices are as follows:

TABLE 6: PERFORMANCE OPTIMIZATION PRICING

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
Performance	HR4700 - Performance Optimization (ActiveCompression, ActiveQoS, & ActiveClassifier)	$199.99	$12.99
Optimization	HR4700 - Performance Optimization (ActivePath)	$199.99	$12.99

Service Limitations

Customer acknowledges the following:

- Hughes ActiveCompression™ cannot be purchased and deployed independent of Hughes ActiveQoS™.

- Hughes ActiveClassifier™ is included with ActiveQoS™ and cannot be deployed independently.

- ActiveQoS is not qualified for use over Satellite Services or Cellular Wireless Services to support real-time applications such as VOIP due to the rapid changes in capacity.

- ActiveCompression generally is not qualified for Satellite Services, but is qualified for use on certain Jupiter-based Satellite Services provided by Hughes

- ActiveCompression does not support split-tunnel data traffic flows. This feature only works for peered (in VPN tunnel) traffic. Customer traffic split directly to the Internet will not be compressed.

- No additional performance SLAs are offered with the Optimization Service.

- The Optimization Service will not be available if the HR Branch Gateway CPE suffer a hardware failure.

Network Management
Network Management requires a HNMON and an Acceleration Gateways (quantities are based on network size) at Hughes NOC. The HNMON monitors each field office for connectivity to the network, while the Acceleration Gateways provide the termination points for the Active Technology applications. Network Management prices are as follows:

TABLE 7: NETWORK MANAGEMENT PRICING

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
Network Management	Acceleration GW (ACGW) - Max throughput 350 Mbps	$0.00	$397.50
	Acceleration GW (ACGW) - 1 for every 3	$0.00	$397.50
	HNMON	$0.00	$244.00
	Hardware Hosting - Full Rack (44U)	$0.00	$4,167.00
	Hardware Hosting - Half Rack (22U)	$0.00	$2,000.00
	Hardware Hosting - Quarter Rack (11U)	$0.00	$1,000.00
	Network Setup/Pilot Testing/Pilot Engineer/Network Engineer/Program Management	$10,000.00	$3,000.00

Managed Security

Hughes provides a variety of options for Managed Security. The standard service with any transport includes Standard Security featured on the HR4700 Branch Gateway. THE STATE OF OKLAHOMA can choose to upgrade their Managed Security offering to enhanced security or WiFi capable. Managed Security prices are as follows:

TABLE 8: MANAGED SECURITY PRICING

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
Managed Security	Standard w/Content Filtering, HR4700 Branch Gateway	$0.00	$29.99
	Enhanced, HR4700 Branch Gateway	$0.00	$39.99
	Standard w/Content Filtering, H4700 Branch Gateway w/ WIFI	$0.00	$29.99
	Enhanced, HR4700 Branch Gateway w/ WIFI	$0.00	$39.99

Service Limitations

1. Enabling IDS, Firewall Policy Denial, or Antivirus logging may significantly increase bandwidth usage for management traffic on the network, which could affect user performance.

2. Generating the Web Content Filtering reports requires pulling the log data from the HR4x00 across the wide area network. This may cause a reduction in user performance due to the volume of data contained in the log files.

3. If Customer desires to implement split tunneling with Standard Security Services and maintain PCI compliance, Customer is responsible to ensure that its network is either properly LAN segmented to accommodate the split tunneling or Customer provides the additional security functionality required to protect the card data environment.

4. For wireless sites, IDS monitoring and logging, Antivirus, and Firewall Policy Denial will generate WAN traffic that will count toward Customer's data usage in applicable 3G/4G data plans.

5. URL and Category based Web Content Filtering rules are defined at a network level with configurations pushed out to HR4x00 devices at the remote site. The filtering is performed at the remote site by the HR4x00 if split tunneling configurations are being used or in the absence of split tunneling, may be performed centrally at the Hughes NOC. Filtering rules are not uniquely configured at the site level. The Filtering rules are uniform across all Customer sites.

6. Hughes will update White/Black List of URL's and other CPE profile changes only during Hughes' scheduled monthly maintenance window. If a filter setting is preventing access to a

site to which Customer requires access, and such lack of access is having an adverse effect on Customer's business, Customer can request that the change be made immediately at no additional charge.

Hughes offer a complete portfolio of managed mobility services designed to address enterprise wireless needs. The service includes such functionality as captive portal, encrypted device authentication, Quality of Service (QoS), and Web content filtering.

Managed WIFI prices are as follows:

TABLE 9: WIFI SERVICES PRICING

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
WIFI	Aruba IAP103 (per AP)	$395.00	$0.00
	Aruba IAP205 (per AP)	$643.99	$0.00
	Passive Site Survey with floor plan	$349.99	$0.00
	Construction Site Survey onsite	$349.99	$0.00
	First AP Installation - with transport	$179.99	$0.00
	First AP Installation - Separate site visit	$389.99	$0.00
	Additional AP installation (per AP)	$109.00	$0.00
	Managed WiFi Base for HR4x00W	$0.00	$15.99
	Managed WiFi Base (1st Service w/Tier 3 Support) 1-3 AP's only	$0.00	$15.99
	Managed WiFi Base (1st Service w/Tier 3 + Tier 1 Support) 1-3 AP's only	$0.00	$23.99
	Managed WiFi Base (1st Service w/Tier 3 + Premium Support) 1-3 AP's only	$0.00	$20.99
	Managed WiFi Base (1st Service w/Tier 3 & Tier 1 Platinum Support) 1-3 AP's only	$0.00	$33.99
	Add 2nd Incremental Service (SSID)	$0.00	$3.99
	Add 3rd Incremntal Service (SSID)	$0.00	$3.99
	Enhanced Captive Portal per User per Month	$0.00	$3.00
	Aruba AP - Rogue Scanning	$695.00	$0.00
	Aruba AP - Standard Installation & Activation	$250.00	$0.00
	Aruba Rogue Wi-Fi scanning Service (New install) (per AP)	$0.00	$29.99
	Aruba Rogue Wi-Fi scanning (incremental to Wi-Fi Service) (per AP)	$0.00	$8.99
	Tier 1 Guest Help Desk Add-on , 1 -3 AP's only	$0.00	$3.99

Enterprise WiFi Service Limitations

The Customer acknowledges the following:

- Enterprise Wi-Fi Security/Firewall policies will generally be uniform across Customer's different format of locations
- Actual performance obtained when accessing remote server content is determined by the underlying WAN transport and the available capacity on the WAN. This is independent of the number of simultaneously connected users on the Wi-Fi service.
- When other non-Hughes provided access points are deployed within the same building, interference from those devices may result, causing performance of the Hughes-provided Enterprise Wi-Fi service to degrade.

Guest WiFi Service Limitations

Customer acknowledges the following:

- Security profiles must be uniform across Customer's locations.
- The Captive Portal can provide a single "Terms and Conditions for Acceptable Use" to all guest devices across all Customer locations.
- The Captive Portal does not provide integration with external services such as customer loyalty programs.
- Each AP can support up to 25 – 30 active user devices.The distance limitation for AP's to obtain power from a PoE switch / adapter is 300 feet. For AP cable runs that exceed this distance (e.g., multi-story locations), additional switch infrastructure may be required.

- Actual performance obtained when accessing Internet content is determined by the underlying WAN transport and the available capacity on the WAN. This is independent of the number of simultaneously connected users on the Wi-Fi service. For example, although a deployment of 2 APs may support up to 60 users, the WAN transport may only support 30 simultaneous users before performance degrades based on the available capacity of that WAN.
- When other non-Hughes provided access points are deployed within the same building, interference from those devices may result, causing performance of the Hughes-provided Guest Wi-Fi service to degrade. To minimize interference of other access points, Hughes-deployed access points will be mounted at least ten feet away from non-Hughes access points.
- The Guest Wi-Fi service is delivered only on the primary communications path for locations that have backup network services.

Hughes support options are as follows:

Tier 3: Standard Support *(required)*

"Tier 3" is "Customer Help Desk-to-Hughes ESC." This does not grant direct access for the end-user to the Hughes Enterprise Support Center (ESC), but assumes that the Customer's Help Desk provides the first and second levels of support with a Customer Help Desk of subject matter experts that ensure all required troubleshooting and or data gathering (as outlined during the Training and Certification process) has been completed before forwarding the issue to the Hughes ESC either by telephone or electronic ticket. The Hughes ESC does not interact with an end user/location directly unless Hughes deems it necessary to solve the issue.

The Hughes ESC will make every effort to resolve any issue remotely. However, if an "onsite visit" is required, we must have an authorized individual available onsite during the maintenance hours described in the contract. The Customer's Help Desk is responsible for communicating the appointment times to the end location and procuring all necessary approvals for the site visit, including any potential charges. If the site is not available for remote troubleshooting and/or on-site repair within the agreed-upon service level commitments, then they no longer apply to that incident. Once the issue is resolved, the Hughes ESC will electronically notify the Customer Help Desk of the resolution of the issue. The Customer Help Desk may approve closure or provide feedback for additional monitoring for a period of no more than 3 business days. If approval for closure is not received and service is stable, the Hughes ESC will close the ticket after 5 business days.

Access to the Hughes ESC will be provided via a toll-free (US only) telephone number and/or electronic ticketing via the Customer portal. The support will be provided out of the existing shared support teams. Although not guaranteed on each instance, we will make a best-effort attempt to answer 70% of calls waiting within 90 seconds, and respond to 90% of support tickets within 1 hour (not including issue resolution). This will be staffed 24/365 days per year. Hughes has the right to provide this support out of any of our present or future support centers, in any geographic location. Support will be provided in English only and does not include any end user/Customer, self-service functionality via IVR, email, or chat.

Hughes will provide training for the Customer's training staff through a "train-the-trainer" model. This will include technical support processes, necessary Hughes-provided tools, and knowledge base articles to support Hughes' products and services. This does not include PC/device, OS, networking, peripheral or other support outside the scope of the services and equipment provided by Hughes. The Customer will be responsible for developing and maintaining all materials and systems related to their systems, tools, and processes, as well as training delivery to its own staff. The Customer will also be responsible for integrating and maintaining all updates, edits, and/or revisions into their internal documentation and processes. Hughes will make these systems available as they would their own internal staff, which would include unavailability during maintenance windows. Hughes also reserves the right to replace any process, system, and/or tool with an equivalent replacement, at Hughes' discretion.

There is no further proactive event management beyond tickets/alerts generated from the automated system delivered via email or access, the Hughes Customer Portal, or ticket ebonding processes. The Customer is responsible for monitoring and initiating the support process. This includes completing the first and second tiers of support before forwarding to the Hughes ESC. Additionally, Hughes will manage the relationships for Hughes' partner telecom providers, allowing for a single point of contact for issue resolution to the Customer. This only includes support for Hughes-provided service and equipment. Hughes will not provide support of any kind for services or equipment not provided or purchased through Hughes.
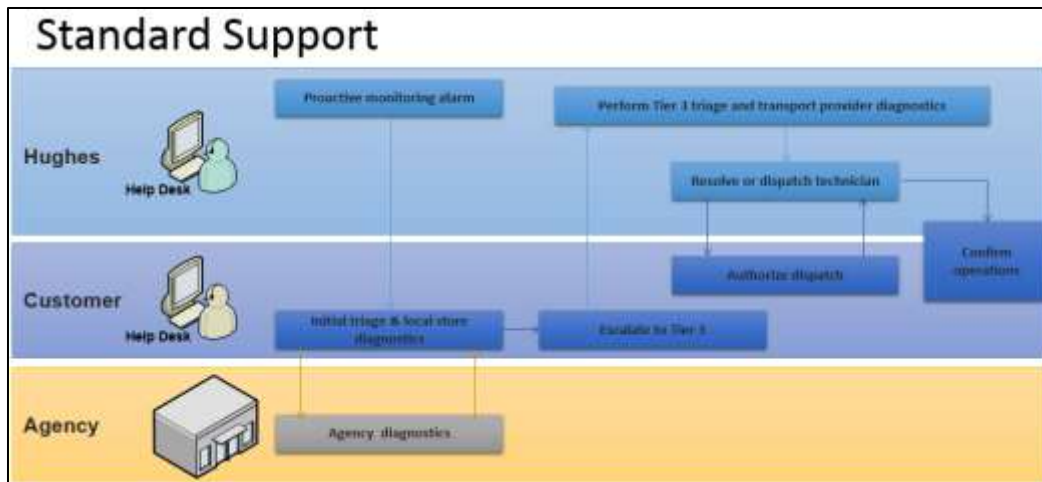
FIGURE 3: STANDARD SUPPORT

Tier 1: Technical Support Option (*Requires Tier 3*)

"Tier 1" is "end user-to- Hughes ESC." The option adds direct access for the end user to the Hughes ESC (excluding support to "guests or Customers" of Customers). It assumes that the end user or Customer Help Desk will initiate the contact with the Hughes ESC either by telephone or electronic ticket. If reported by the end-user, they will be required to have an authorized individual available with the access to Hughes' equipment and ability to assist with remote troubleshooting procedures for up to 3 hours after reporting an issue. That individual should also have the authority to approve an onsite repair visit and any possible associated costs.

Access to the Hughes ESC will be provided via a separate toll-free (US only) telephone number and/or electronic ticketing via the Customer Portal. The support will be provided out of the existing shared support teams. Although not guaranteed on each instance, we will make a best effort attempt to answer 70% of calls waiting within 90 seconds, and 90% of support tickets responded to within 1 hour (not including issue resolution). This will be staffed 24/365 days per year. Hughes has the right to provide this support out of any of our present or future support centers, in any geographic location. Support will be provided in English only and does not include any end user/Customer, self-service functionality via IVR, email, or chat.
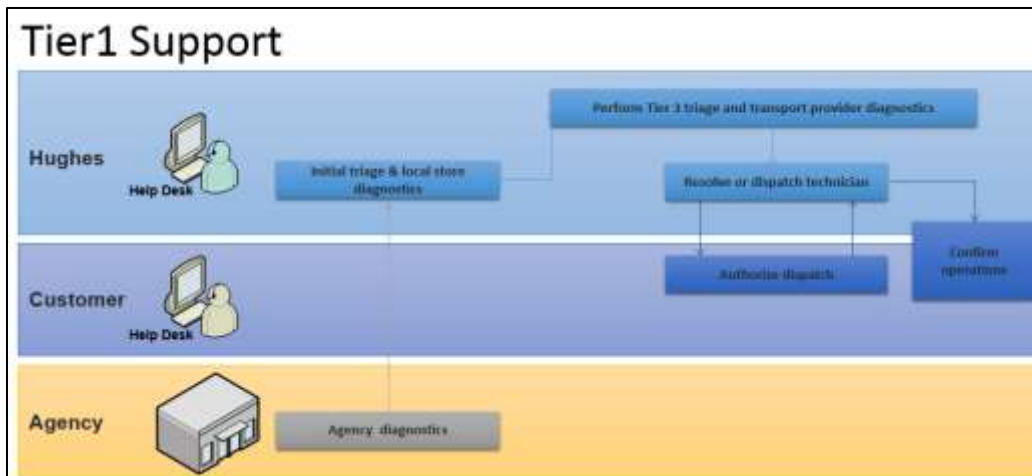
18

FIGURE 4: TIER 1 SUPPORT

Premium: Technical Support Option (Basic Event Management – Requires Minimum of Tier 3)
This adds basic Event Management. With this option, the Hughes ESC will monitor tickets/alerts generated from the automated system and initiate the support process. Hughes will make every reasonable effort to restore service remotely and update the ticket based on our actions. We will make every effort to at least have an acknowledgement/update posted to tickets generated by the automated system within 1 hour of its creation. If we are unable to resolve the ticket remotely, we will update the ticket with our findings and request for the Customer Help Desk to contact the end location to perform the first and second tiers of troubleshooting. The Customer Help Desk is then responsible for contacting Hughes to resume Tier 3 remote diagnostics, confirm operations/close the ticket, and/or request/schedule an "onsite" repair.

Other than stated above, this does not include any further proactive event management beyond tickets/alerts generated from the automated system. This only includes event management for Hughes-provided services and equipment. Hughes will not provide event management of any kind for services or equipment not provided or purchased through Hughes.
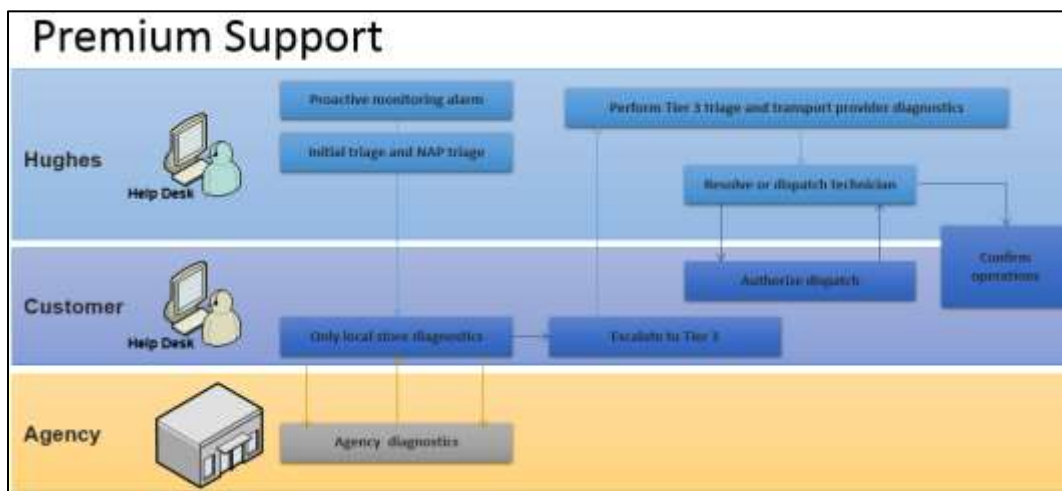

FIGURE 5: PREMIUM SUPPORT

This adds extended Event Management. With this option, the Hughes ESC will also proactively attempt to contact the Customer Help Desk *(Tier 3)* or end user *(Tier 1)* via a telephone call to notify of a suspected issue and begin remote diagnostics, schedule an onsite repair, and/or confirm the location to be operational. After three attempts to reach the location or if there is inaccurate contact information, the Customer is responsible for contacting Hughes to either continue remote diagnostics, schedule an onsite repair, and/or confirm operations/close the ticket within 24 hours. If Tier 1 is selected, the Customer should provide no more than one point of contact for each location. If Tier 3 is selected, there should be a single point of contact to handle all locations. The Customer is also responsible for maintaining accurate and up-to-date contact information in the Customer Portal.
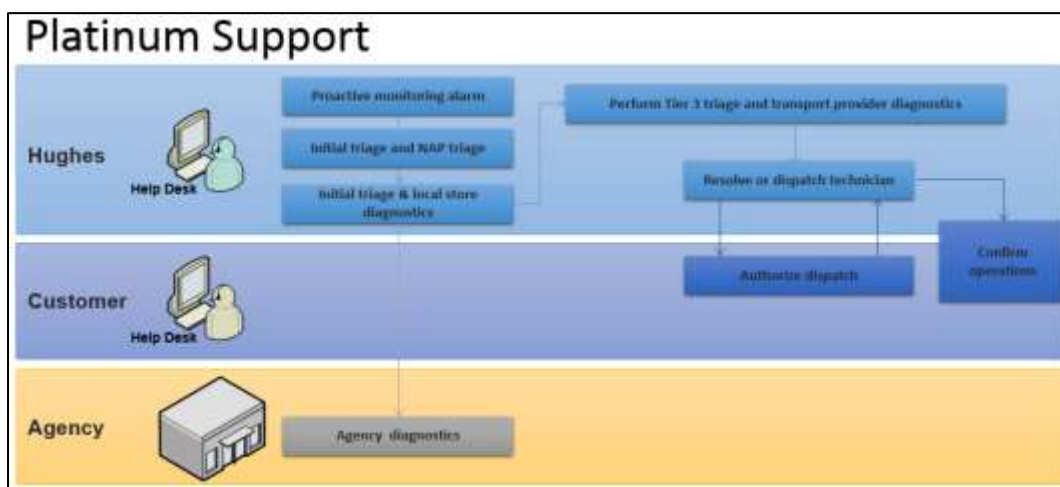

FIGURE 6: PLATINUM SUPPORT

Below are the list of support options and the associated NRC and MRC for each.

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
Support Options	Tier 3, Premium Support, Single Transport	$0.00	$15.99
	Tier 3 + Tier 1 Help Desk Support, Single Transport	$0.00	$12.99
	Tier 3 + Tier 1, Premium Support, Single Transport	$0.00	$20.99
	Tier 3 + Tier 1, Platinum Support, Single Transport	$0.00	$30.99
	Tier 3, Premium Support, 4G HAN/SD-WAN Transport	$0.00	$30.99
	Tier 3 + Tier 1 Help Desk Support, 4G HAN/SD-WAN Transport	$0.00	$24.99
	Tier 3 + Tier 1, Premium Support, 4G HAN/SD-WAN Transport	$0.00	$40.99
	Tier 3 + Tier 1, Platinum Support, 4G HAN/SD-WAN Transport	$0.00	$58.99
	Tier 3, Premium Support, VSAT HAN/SD-WAN Transport	$0.00	$19.99
	Tier 3 + Tier 1 Help Desk Support, VSAT HAN/SD-WAN Transport	$0.00	$15.99
	Tier 3 + Tier 1, Premium Support, VSAT HAN/SD-WAN Transport	$0.00	$25.99
	Tier 3 + Tier 1, Platinum Support, VSAT HAN/SD-WAN Transport	$0.00	$37.99
	Tier 3, Premium Support, HTS Transport	$0.00	$3.10
	Tier 3 + Tier 1 Help Desk Support, HTS Transport	$0.00	$2.80
	Tier 3 + Tier 1, Premium Support, HTS Transport	$0.00	$5.80
	Tier 3 + Tier 1, Platinum Support, HTS Transport	$0.00	$7.40

Maintenance Service

THE STATE OF OKLAHOMA can choose between Next Business Day and Next Calendar Day service for field maintenance options.

Below are the list of maintenance options and the associated NRC and MRC for each.

TABLE 10: MAINTENANCE SERVICE PRICING

Type	Service	Total (NRC Each Site)	Total (MRC Each Site)
Maintenance	HR4700 (Next Business Day)	$0.00	$21.00
	HR4700w (Next Business Day)	$0.00	$21.00
	HTS (Next Business Day)	$0.00	$23.00
	WIFI (Next Business Day)	$0.00	$4.99
	HR4700 (Next Calendar Day)	$0.00	$27.00
	HTS (Next Calendar Day)	$0.00	$23.00
	WIFI (Next Calendar Day)	$0.00	$5.99

Hughes Labor

For all services that require specialized Hughes support, THE STATE OF OKLAHOMA can request Hughes hourly support.

Below is the Hughes Labor Rate.

TABLE 11: HUGHES LABOR RATE PRICE

	Service	Hourly Rate
Hughes Labor Rate	This rate will be for specific installation, program support, program management or services required by government agency.	$165.00

Pricing Notes

1. Pricing is based on a minimum of twelve (12) to thirty six (36) months service term per site (Site Service Term) depending to the type of access.
2. The equipment and service charges set forth in this Pricing Volume will remain fixed for 60 months. Thereafter, Hughes may adjust such charges annually. Any such annual increase will be the lower of seven percent (7%) or the consumer price index (CPI) inflator using the Effective Date as the base month.
3. Customer acknowledges that an underlying carrier may discontinue service after installation. In such event, Hughes will provide customer notice and the opportunity to select an alternative service from the table above, if available. If no alternative service is available, Customer may terminate the service at affected sites with thirty (30) day notice without penalty.
4. Customer acknowledges that services are based on availability and Hughes cannot guarantee that any given wireline/wireless service is available for a site, regardless of prequalification results. In the event that the prequalified service is not available at any site, Customer may select a different broadband service from the table above.
5. There may be additional install costs, such as additional inside wiring charges, jacks, filters, etc., which may be assessed by the applicable telecom or cable companies. A site survey may need to be performed for sites for broadband, and Hughes will notify the Customer of buildout charges that may apply as other direct costs. Hughes will only proceed after receiving permission from the Customer.
6. Customer acknowledges that Hughes' suppliers require a minimum site service term to receive the pricing set forth in this price schedule. Customer will be responsible for the following early termination charges not to exceed those listed below in the event that Customer terminates Communications Services prior to the end of the time periods listed below.

Circuit Type	Early Termination Charges
ADSL, IDSL	Up to $150 per terminated site (waived after site completes 12 months of service)
Dedicated DSL	$99 (waived after site completes 24 months of service)
Cable (Charter/Time Warner/Spectrum)*	100% of remaining charges (waived after site completes 12 months of service)
Cable (Cox)*	$100 per terminated site (waived after site completes 36 months of service)
Cable (Comcast/Suddenlink/Mediacom)*	100% of remaining service charges (waived after site completes 36 months of service)
Cable (Optimum/Rogers)	$50 (waived after site completes 36 months of service)
Cellular Wireless	$200 per terminated site (waived after site completes 12 months of service)
FiOS	$320 per terminated site
FTTI, Bell Canada Bell Fibe	$50 per terminated site
Granite Grid, Spectrum Fiber	100% of remainder of service charges
U-Verse/IPBB	$199 per terminated site (waived after site completes 36 months of service)
Asymmetric Ethernet	100% of remainder of service charges, plus Customer is responsible to return the underlying provider's equipment.

	Upon ordering decommissioning of an Asymmetric Ethernet site, either Hughes or the provider will send Customer a postage prepaid label and box to be used for equipment return. If Customer does not return the provider's equipment within thirty (30) days, Customer will be responsible for an additional termination charge in the amount of $1,500 for the equipment.
Fixed Wireless	100% of remainder of service charges for first 12 months (if terminated in first 12 months), plus 45% of remaining service charges for months 13-36. In the event that Customer terminates Fixed Wireless services at a location for the purpose of relocation, Hughes will waive the above termination charge, and Customer shall pay a reinstallation charge of $500 for the new location. The 36 month term shall continue rather than restart upon reinstallation at the new location.

7. Hughes works with its cable providers to negotiate cable buildout waivers whenever possible, typically this requires a longer term commitment (typically 36 months per site). If customer terminates Services at a location prior to the end of the Site Service Term, Customer will be required to pay back any cable buildout waiver.
8. Pricing assumes that inside wiring between the location where the wireline circuit enters the building and the Customer office where the modem is located is already in place. Consequently, no inside wiring costs are included in the pricing listed above. If such inside wiring is required, additional charges will apply.
9. When Hughes places an order for a wireline circuit with an underlying carrier, the order is placed for a circuit with a particular service plan based on speed. Those speeds are based on what is anticipated to be the rate at which the modem will synchronize with the circuit. The speeds are "up to" speeds, as the modem may sync at a lower speed due to line conditions. Consequently, circuit speeds are not guaranteed. Additionally, for traffic carried within a secure tunnel across the circuit, the effective throughput will be reduced due to the packet and encryption overhead. The performance experienced by a user will also vary depending on potential areas of congestion within the general Internet, server loading, and application specific performance.
10. If a technician is dispatched to fix a reported problem at a site, and it is determined that the problem is not related to the broadband circuit, a $250 site visit charge applies for each visit if multiple visits are required. Customer shall provide to Hughes a monthly report of dispatches authorized by Customer. If a Provider technician must go to site, there will be a Time and Material (T&M) charge.
11. Time and Material (T&M) charges also apply for all Hughes site visits, including but not limited to:
    - Field maintenance visit to a Customer location for repair of physically damaged items, disconnected cables, or other diagnosis and repair of user equipment.
    - The T&M charge is the sum of the "Hourly Rate" plus the "Travel Zone Charge" shown below. The Travel Zone Charge is charged for each direction of travel. Material is charged at cost plus 20%.

Time Work is Performed	Hourly Rate
Normal Hours (8:00 AM – 5:00 PM, Monday through Friday)	$125/hour

After Hours Weekday (5:00 PM – 8:00 AM, Monday through Thursday)	$150/hour
Weekend (5:00 PM Friday – 8:00 AM Monday)	$150/hour

Distance	Travel Zone Charge
0 – 25 miles	$ 77
26 – 50 miles	$143
51 – 100 miles	$286
101+ miles	$473

Additional Installation Services

Standard inside wiring up to 100 ft. and circuit validation.	$350 / each
Inside wiring up to 300 ft. and circuit validation.	$850 / each
Standard Site Survey and Report	$350/each
Aborted or Cancelled Installation	$250 per site
"No Access" Fee (applies when the LEC needs access to the Customer premises and Customer denies access to the LEC)	$99 per site
Re-provisioning fee (applies when Customer's telephone line is disconnected and DSL must be re-provisioned) (note that a re-provisioning of service also restarts the clock for any minimum site term commitment and the calculation of any applicable circuit termination or cancellation charges)	$99 per site
Re-provisioning fee for "slamming" (applies when Customer has given authority to a third party to transfer DSL service and the HUGHES service must be re-provisioned)	$250 per site
Miscellaneous support services including, but not limited to: • Obtain permits and approvals • Provision of specially required additional or special documentation • Attendance at meeting before local planning or zoning boards	$90/hour plus all direct expenses at cost plus 20%

Union Labor/Electrician	Individual Case Basis
Plenum cable	Individual Case Basis