

New England Telehealth Consortium

WAN Services & WAN Equipment
Scope Document 02

January 18, 2011

1. Statement of Purpose

- 1.1 The principal purpose of New England Telehealth Consortium is to create a consortium of healthcare providers with the objective of designing and implementing a private broadband regional telehealth network with Internet2 and commodity Internet connectivity; to link regional healthcare providers with urban public practices, research institutions, academic institutions, and medical specialists to provide greater efficiency in the sharing of information relevant to healthcare applications; to provide a shared broadband network with healthcare providers thereby increasing and validating telehealth and telemedicine opportunities in the region; to provide healthcare providers in rural areas with greater and easier access to current research, advances in medicine, expert support and team consults; to allow healthcare providers in the region access to a common network for provision of electronic health records, remote medical diagnostics, telehealth, telemedicine, population health database, remote surgery, teledentistry, telepsychiatry and behavioral health treatment; and for any other purpose determined by the Board of Directors and permitted by applicable law.
- 1.2 New England Telehealth Consortium (NETC) intends to purchase a high speed broadband Wide Area Network to support healthcare applications. The network will be IP based providing: any to any connectivity, IPv4 with support for IPv6, support for the creation of Communities of Interest for WAN replacement, Internet2, and connections to Internet2 for Commodity Internet Tier 1 provider access. The network will support any Layer 2 or Layer 3 transport that allows TCP/IP, although the preference is for Layer 2 services with Ethernet handoffs.
- 1.3 Functionality, reliability and scalability as well as high quality maintenance and service are critical concerns to NETC.

2. Project Correspondence And Questions

- 2.1 All project correspondence and questions shall be by e-mail to:
Brian Thibeau
New England Telehealth Consortium
262 Harlow Street
Bangor, ME 04401
E-mail: bthibeau@netelc.org

3. Schedule

- 3.1 Eight (8) hard copies and One (1) electronic copy (Microsoft Word or Adobe Acrobat PDF format) of the proposal shall be *received by 5pm on or before the 29th day following the posting of the RFP on the USAC website*. Proposals shall be submitted to Brian Thibeau, President, New England Telehealth Consortium, by email at bthibeau@netelc.org or by CDROM or USB Drive delivered to Brian Thibeau, President, New England Telehealth Consortium, and by mail to PO Box 1162, Bangor, ME 04402-1162 (Note, mail at Post Office Box is retrieved once each business day around 8 am in the morning) or by delivery service to 262 Harlow Street, Bangor, ME 04401. Use "NETC Network Services and Equipment Proposal" on package/envelope label or include in email subject line. New England Telehealth Consortium, 262 Harlow Street, Bangor, ME 04401 and bthibeau@netelc.org.

- 3.2 Any responses received after the stated deadline will be considered non-responsive to the RFP and will not be reviewed.
- 3.3 Installation of the selected WAN Services and WAN equipment shall start immediately after award with the goal of completion within one year.

4. Instructions to Responding Vendors

- 4.1 **Proposing Vendors shall use the numbering convention in this RFP when formatting their response.** The Proposing Vendor's response shall be explained in detail and shall indicate how the Proposing Vendor proposes to satisfy each requirement where necessary. **At the very least, the Proposing Vendor must indicate compliance, non-compliance, understood or exception for each line item.**
- 4.2 Proposing Vendors shall cite specific terms and conditions to which the Proposing Vendor takes exception. The Proposing Vendor shall state the exact requirement to which exception is taken. Any cost impact associated with an exception shall be identified and included in the proposal.
- 4.3 All proposals shall be hardcopy and also electronic and signed by the responding vendor.
- 4.4 Proposing Vendors should submit any questions, noted errors, discrepancies, ambiguities, exceptions, or deficiencies they have concerning this RFP by emailing such requests, with NETC WAN Services & WAN Equipment RFP in the subject line, to Brian Thibeau, NETC President at bthibeau@netelc.org on or before the 14th day following the posting of this RFP on the USAC website. Answers to all questions/requests will be posted on the NETC website, www.netelc.org, on or before the 20th day following the posting of this RFP on the USAC website. If applicable, state the section number being referenced.
- 4.5 Responding vendors shall take all responsibility for any errors or omissions in their quote or proposal.
- 4.6 No contract will be awarded except to responsible vendors capable of performing the work requested. Proposing Vendor's employees shall be trained and qualified to perform the work and operate all required equipment. Before the award of the Contract, any Proposing Vendor may be required to show that they have the necessary facilities, experience, ability and financial resources to perform the work in a satisfactory manner.
- 4.7 All proposals submitted shall be valid through June 30, 2011.
- 4.8 Negligence on the part of the Proposing Vendor in preparing the proposal confers no right of withdrawal after the time fixed for the receipt of the proposals.
- 4.9 All proposals shall provide a straightforward, concise delineation of the Proposing Vendor's capabilities to satisfy the requirements of this invitation. Emphasis should be on completeness and clarity of content.
- 4.10 NETC reserves the right to require Proposing Vendors to demonstrate a proof of concept of their offering.
- 4.11 It is the responsibility of the responding vendors to review, evaluate and request clarification prior to submittal of a proposal.

5. Authorized Negotiator

- 5.1 The proposal shall be signed by the person authorized to legally bind the proposal.
- 5.2 The proposal shall designate an authorized negotiator who shall be empowered to make binding commitments.

6. Responding Vendors Responsibility for Proposal Costs

- 6.1 The responding vendor shall be fully responsible for all proposal development and submittal costs. NETC assumes no contractual or financial obligation as a result of issuance of this RFP.

7. Compliance with Laws, Permits, Rules

- 7.1 The successful vendor shall comply with all rules, regulations, ordinances, codes and laws relating to the work or the conduct thereof and shall secure and pay for any permits and licenses necessary for the execution of the work.
- 7.2 The successful vendor shall be subject to the safety department's workplace rules at a given site.

8. Insurance

- 8.1 The successful vendor shall agree to maintain General Liability Insurance, Worker's Compensation and Employer's Liability Insurance, where applicable, to cover all its personnel engaged in the performance of the services herein described as well as damages arising as a result of the performance of such services. Proposing Vendor further agrees to require its subcontractor(s), if any, to maintain General Liability Insurance, Worker's Compensation and Employer's Liability Insurance, where applicable. The amounts of such coverage shall be as reasonably determined by Proposing Vendor.
- 8.2 Proof of policies shall be provided to NETC with proposal.

9. Performance Bond

- 9.1 It is important to NETC that the selected vendor(s) provides continuous service for the duration of the contract. A performance bond may be required. Proposing Vendor shall procure a performance bond that ensures vendor performance for 10 years or the duration of the negotiated contract, and indicate any additional applicable costs to NETC that would be incurred as a result of this performance bond.

10. Network Design

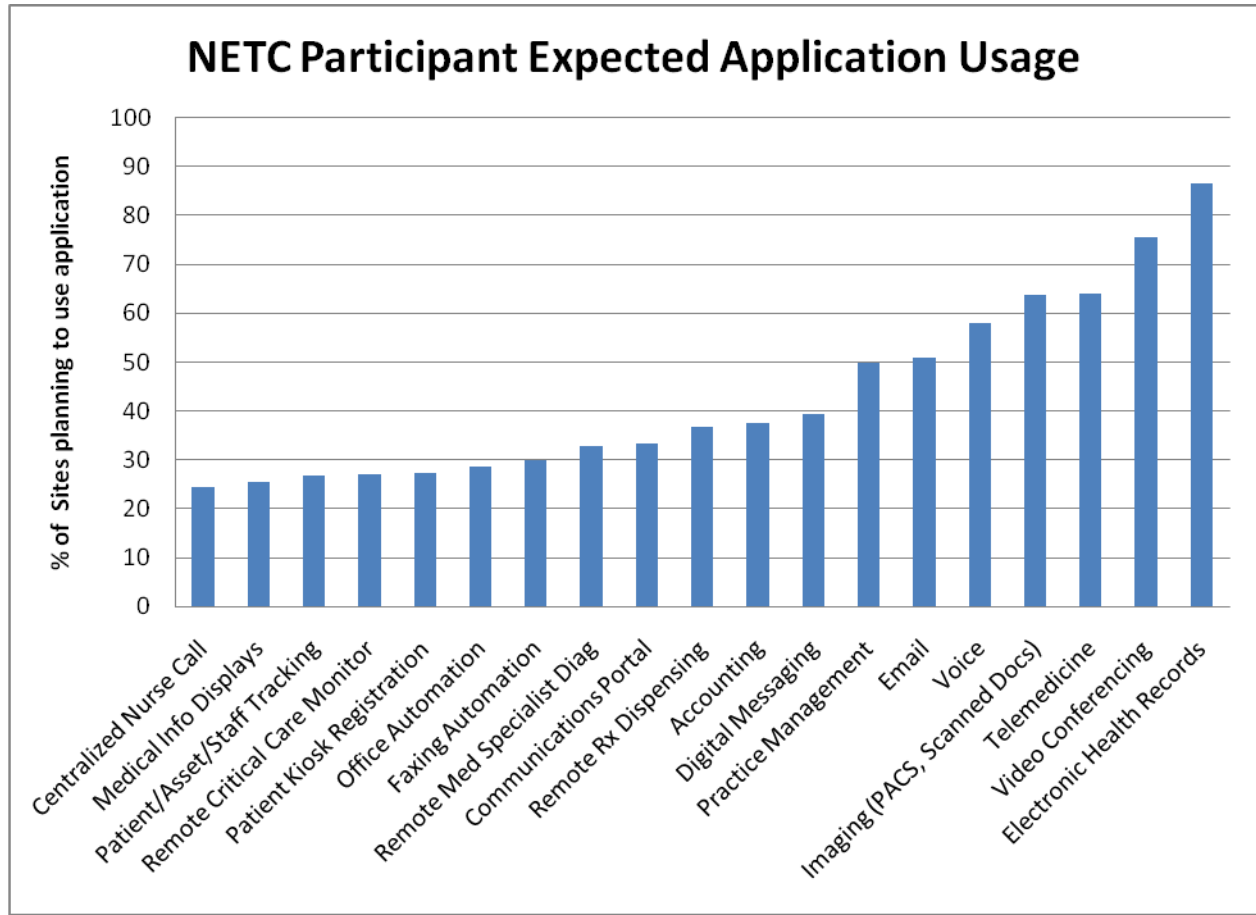
- 10.1 NETC has designed an IP based network that will provide: any to any connectivity, a design based on IPv4 with support for IPv6, support for the creation of Communities of Interest for WAN replacement, support for BGP peering, Internet2 and connections to Internet2 for Commodity Internet Tier 1 provider access. The NETC network will support any Layer 2 or Layer 3 transport that allows TCP/IP, although our preference is to obtain Layer 2 services from one or more carriers with Ethernet handoffs. Segments can be provisioned with dark fiber. NETC will obtain and utilize public IPv4 address space for the

network backbone, transport links, and participant allocation. The NETC network will be a broadband network consisting of two core nodes residing in data centers in Bangor, Maine and Lebanon, NH with redundant one-Gigabit (1Gb) connections between them. Each of the two core nodes will have a minimum 1Gb connection to Northern Crossroads (NOX) for Internet2 and Commodity Internet connectivity. The core NETC network will not provide encryption services, instead, each participating site will provide their own encryption mechanism.

- 10.2 The following table lists the applications that will be used on the NETC network, including the percentage of sites using the application.

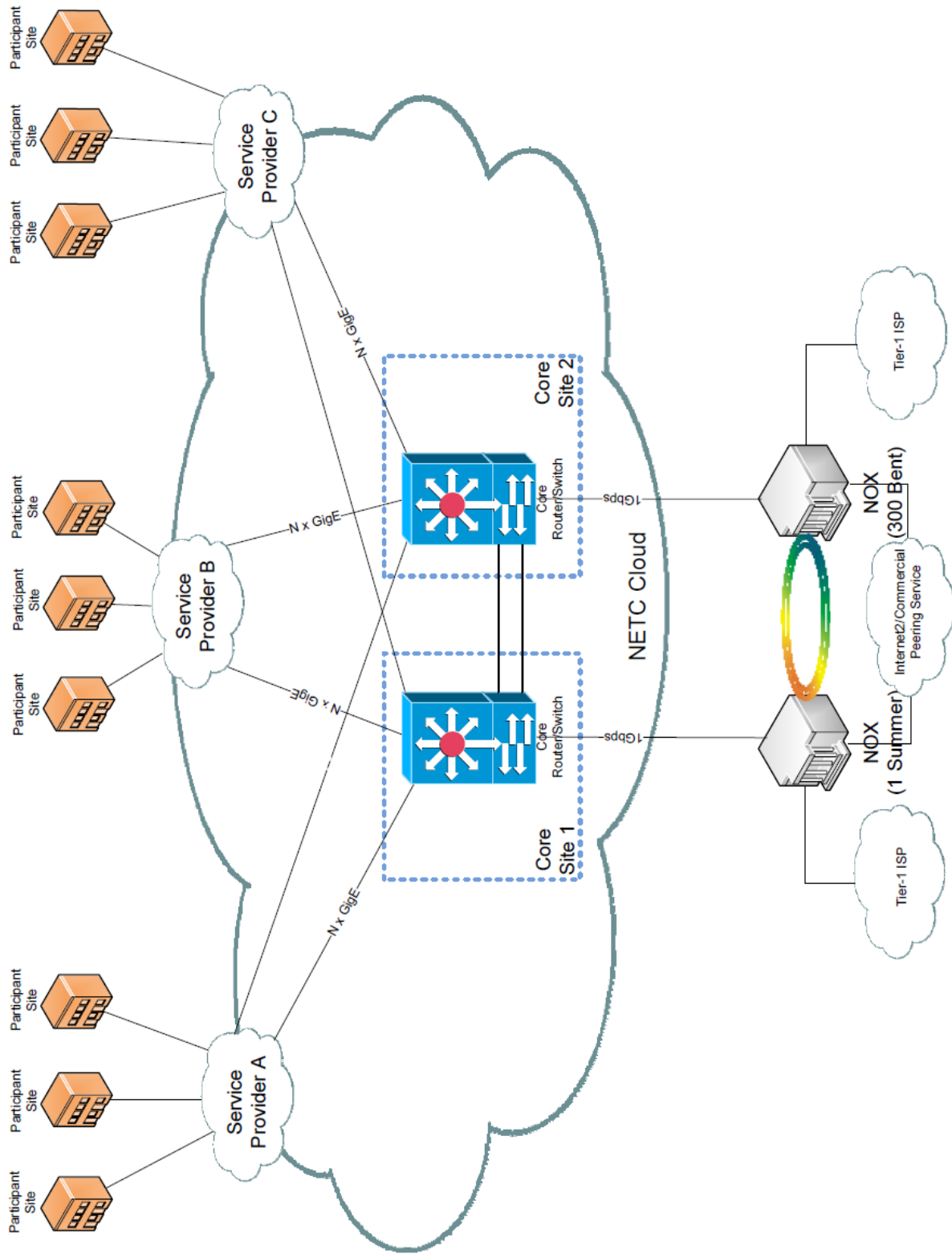
Application	% Sites
Accounting	37.47%
Centralized Nurse Call	24.52%
Communications Portal	33.33%
Digital Messaging	39.39%
Electronic Health Records	86.50%
Email	50.96%
Faxing Automation	30.03%
Imaging(PACS, Scanned Docs)	63.64%
Medical Info Displays	25.34%
Office Automation	28.65%
Patient Kiosk Registration	27.27%
Patient/Asset/Staff Tracking	26.72%
Practice Management	49.86%
Remote Critical Care Monitor	27.00%
Remote Med Specialist Diag	32.78%
Remote Rx Disp & Verification	36.64%
Telemedicine	63.91%
Video Conferencing	75.48%
Voice	57.85%

10.3 The following graph shows the application usage by NETC site.



10.4 In order for the NETC network to meet its desired goals of enabling advanced collaboration and communications capabilities among the healthcare facilities of Northern New England, the network infrastructure must be designed to be highly available. The target for high availability is 99.999% uptime, which means only 5 minutes of downtime permitted per year. While this goal may not be reachable, based upon the highly-outsourced nature (i.e. lack of direct control of facilities), it's the benchmark we should strive to reach. This is also the benchmark that service providers must meet in their SLAs.

10.5 The following diagram shows the structure of the NETC network.



10.6 Communities of Interest

- 10.6.1 The structure of the NETC network will be that of a large TCP/IP based cloud, where all participants can communicate with each other, as well as with Commodity Internet and Internet2 sites through upstream providers.
- 10.6.2 Within the NETC network design and this document, Communities of Interest are referred to interchangeably as private WAN emulation, Community of Interest, WAN replacement, and IP VPN.
- 10.6.3 The Communities of Interest will tie individual sites together into a private group, whereby all communication to and from sites in the group will be private.
- 10.6.4 It's been established through the design process that many (92.68%) of the NETC participant organizations want to use the NETC network to replace their current wide area network (WAN). To support this functionality, and create these "Communities of Interest", NETC will need to employ some form of tunneling or IP VPN.

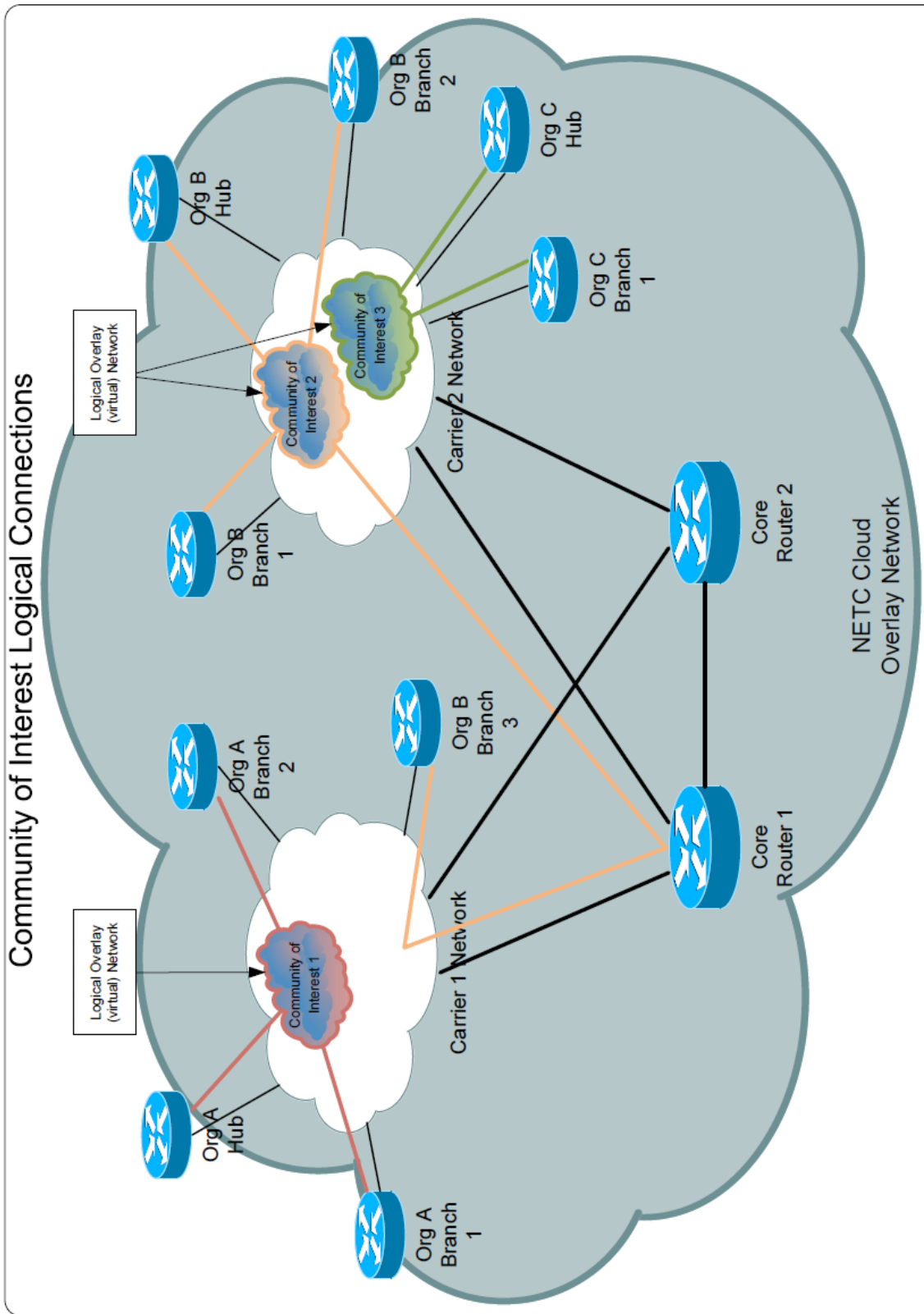
10.7 WAN Replacement (Virtual Networks)

- 10.7.1 We know that we will utilize some type of Layer 2 VLAN or IP Tunneling mechanism to facilitate the virtual networks necessary for the WAN Replacement service. While NETC could make a choice that would work across all transports, providers, etc., it is in NETC's best interest to wait until selected Service Providers have provided their proposed offerings before choosing a methodology. We don't want to preclude ourselves from selecting the best technology available.
- 10.7.2 Fortunately, many of the techniques NETC is likely to choose operate similarly, and have similar requirements. One of these requirements is the implementation of an IGP for reachability within each emulated WAN. This will provide participants with visibility into the state of their tunnel endpoints, and will simplify deployment and support of the tunneling environment. For these services to work properly, we will need to choose an IGP that meets the following requirements:
 - 10.7.2.1 Support Non-Broadcast Multi-Access medium
 - 10.7.2.2 Support dozens of prefixes
 - 10.7.2.3 Support dozens of neighbors
 - 10.7.2.4 Support use of hold down timers

10.8 WAN Replacement Service Design

- 10.8.1 The following diagram provides a high-level view of the anticipated logical Community of Interest architecture.

Community of Interest Logical Connections



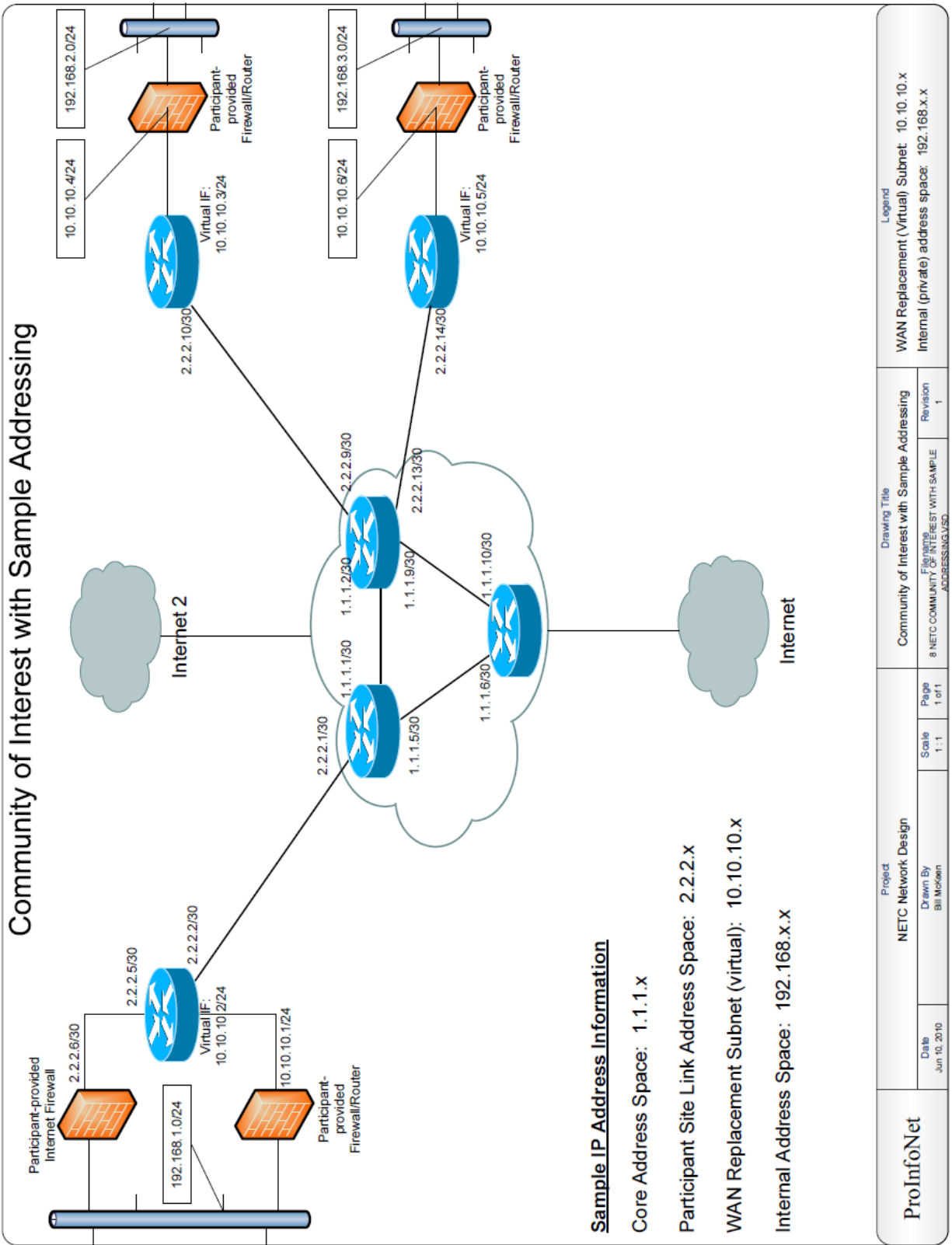
Logical Overlay (virtual) Network

Logical Overlay (virtual) Network

ProInfoNet	Project		Drawing Title		Legend	
	NETC Network Design		Community of Interest Logical Connections			
	Date	Drawn By	File Path	Revision		
Jun 10, 2010	Bill McKean	9\NETC-COMMUNITY-OF-INTEREST-LOGICAL-CONNECTIONS\DWG	1			
		Page	Scale			
		1 of 1	1:1			

- 10.8.2 The NETC network will likely consist of more than one transport provider, and is likely to consist of many different technologies (i.e. T1, metro Ethernet, private fiber, MPLS, etc.). This presents a somewhat challenging problem. We need to provide a mechanism to create this emulated private WAN service with functionality similar to RFC 2547 (MPLS VPNs), with neither control nor specific knowledge of the underlying Layer 1 and 2 technology being employed. There are several ways to accomplish this, but most involve some form of IP-based virtual networking (IP VPN). One key point to understand is that while we may call this service IP VPN, NETC is not providing any form of encryption. The emulated private WAN service will be logically private and separate, but will ride on the same underlying IP transport as all other traffic on the NETC WAN. For safety's sake, NETC participants should consider this private WAN service to be untrusted, and as such we recommend that it be firewalled from their internal networks. The private WAN will however, utilize private address space that is unique to the individual organization. Since this traffic will be tunneled through the NETC cloud, the address space for each organization need not be globally unique.
- 10.8.3 The following diagram provides a Community of Interest example with sample addressing.

Community of Interest with Sample Addressing



Sample IP Address Information

Core Address Space: 1.1.1.x

Participant Site Link Address Space: 2.2.2.x

WAN Replacement Subnet (virtual): 10.10.10.x

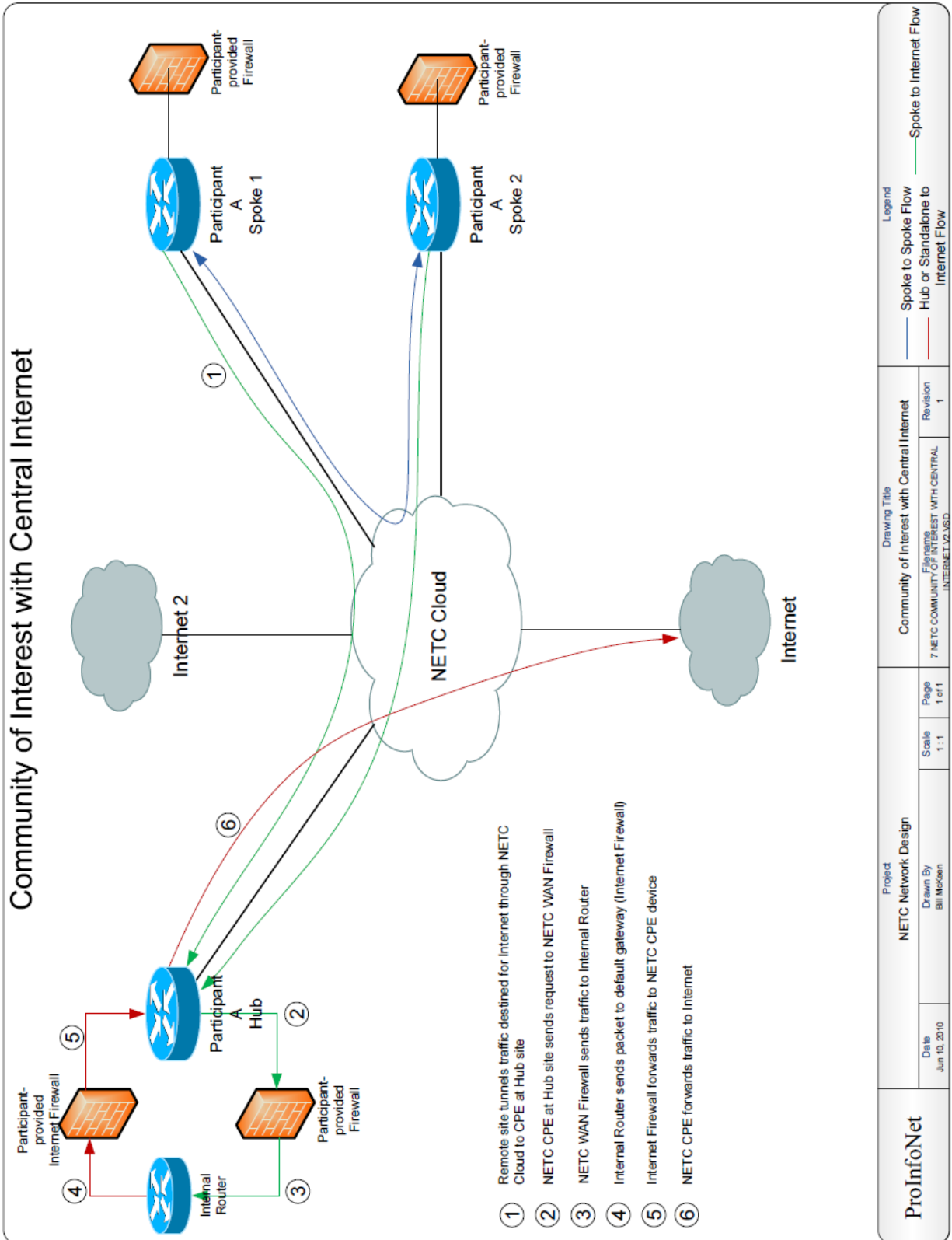
Internal Address Space: 192.168.x.x

ProInfoNet	Project NETC Network Design		Drawing Title Community of Interest with Sample Addressing		Legend WAN Replacement (Virtual) Subnet: 10.10.10.x Internal (private) address space: 192.168.x.x	
	Date Jun 10, 2010	Drawn By Bill Mooren	Scale 1:1	Page 1 of 1	Revision 1	8 NETC COMMUNITY OF INTEREST WITH SAMPLE ADDRESSING.VSD

10.8.4 NETC will offer the ability for participant organizations to choose which services will be offered at each site. Many organizations have stated an interest in creating a virtual hub and spoke WAN so that branch web traffic can be filtered at their main office. Therefore, the NETC network design will incorporate the ability to provide private WAN traffic on a separate physical interface from the open NETC

transport that organizations will use to communicate with other participants and the outside world.

10.8.5 The following logical connection diagram depicts Internet traffic flow in a Community of Interest that has a central firewall at a hub site.



10.9 Architecture Overview

- 10.9.1 Refer to the diagram in section 10.5 for the structure of the NETC network.
- 10.9.2 The NETC network is designed to be a TCP/IP based network providing any to any connectivity between participants for the purposes of collaboration, communication, and data sharing. The logical topology will be that of dual hub and spoke networks (with allowances for spoke to spoke traffic flow), where the hubs are interconnected redundantly. The selection of this design is due to the fact that NETC is not a facilities-based provider. Therefore, the network will be built using services from broadband providers, LECs, etc. Our desire is to obtain high-speed dedicated (private fiber, point to point Layer 2 circuit, etc.) connectivity from each participant site directly back to one of the NETC core locations over un-shared optical transport, but the practical reality is that NETC may need to obtain services transported over a carrier's shared TCP/IP backbone (MPLS, Metro Ethernet, pseudowire/VPLS, etc.). Knowing that the network will be built in this fashion forces us to design a network that is transport agnostic. We have to plan for any combination of radio (microwave, satellite, 3G), MPLS, private line, Metro Ethernet, etc.
- 10.9.3 While the logical topology will be hub and spoke, with allowances for direct spoke to spoke traffic, the physical reality may be very different. Each service provider will essentially be responsible for aggregating their traffic and handing off their sites to one of the NETC core locations. We expect that the physical network topology will vary dramatically by provider and service region. For instance, in the circumstance where some number of sites are connected to the NETC core via an MPLS provider, NETC could have these sites configured in a single MPLS L3 VPN providing meshed site to site connectivity through the service provider's network without forcing traffic to traverse a NETC core router. Unfortunately, MPLS will cost NETC the ability to natively utilize IPv6 and IP Multicast which are requirements of the NETC design.

11. NETC Location and Bandwidth Information

- 11.1 NETC has posted detailed site information about each site on the form 465 attachment which can be found on the USAC web site.
- 11.2 An alphabetical list of NETC participating sites along with site addresses, the minimum bandwidth requested and the optimal bandwidth requested is in Appendix A.
- 11.3 Responding service provider shall propose pricing for both the minimum requested bandwidth and the optimal requested bandwidth.

12. WAN Services for NETC Site Connectivity

- 12.1 NETC desires to obtain dedicated facilities from participant sites to its two core locations in Bangor, Maine and Lebanon, NH. Our intention is that a service provider would network together a group of NETC sites and connect them to the

two NETC core locations via two aggregate handoffs. Proposing Vendors shall provide a full description of the offering with current network diagrams.

12.2 Handoffs to NETC Core:

12.2.1 All handoffs shall be a minimum of 1Gb. Service providers shall provide as many gigabit handoffs as needed to supply oversubscription requirements. (Sites receiving bonded T1 service will be aggregated by the service provider and handed to NETC via Gigabit Ethernet, and separated using VLANs).

12.2.1.1 Vendors shall price the following:

12.2.1.1.1 One to One (no oversubscription)

12.2.1.1.2 Two to One Oversubscription

12.2.1.1.3 Three to One Oversubscription

12.2.1.1.4 Four to One Oversubscription

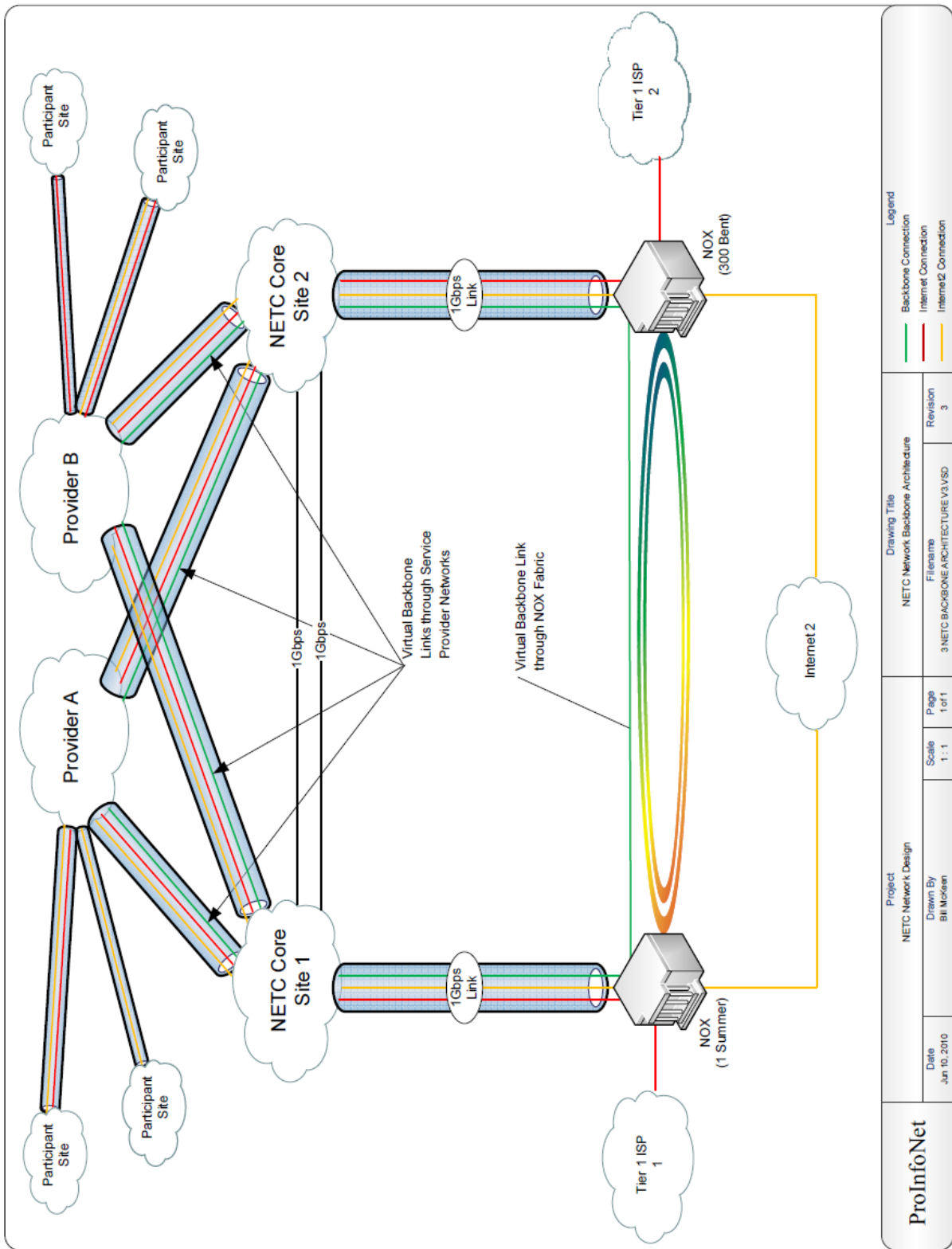
12.2.2 Service providers shall not oversubscribe bandwidth between participant sites and the NETC core. The total bandwidth of each handoff to the NETC core shall be equal to or greater than the aggregate bandwidth that a service provider provisions (for example, no more than ten 100Mbps participant sites may be trunked to NETC on a single Gigabit Ethernet connection).

12.2.3 Service Providers must support Ethernet QinQ VLAN trunking on all connections to NETC core locations.

12.2.4 NETC desires that each service provider deliver all of their participant sites via handoffs to each of NETC's two core locations.

12.2.5 There may be up to 3 VLANs per participant site.

12.2.6 Each service provider must provide a VLAN on each NETC core connection to be used for NETC core to core traffic. The following diagram shows how NETC could use these VLANs.



12.2.7 All core connections must support jumbo Ethernet frames.

12.3 Handoff to NETC CPE at NETC Participant Sites:

12.3.1 10/100/1000BaseTX Ethernet as appropriate based upon site requirements.

12.3.2 Service providers must support Ethernet 802.1Q VLAN trunking, and expect at least 2 VLANs for most sites.

- 12.3.3 All connections at 100Mbps or greater must support jumbo Ethernet frames.

12.4 Quality of Service:

- 12.4.1 It is required that all site connections will be carried over non-blocking backhaul to the NETC core locations at the provisioned rate.
- 12.4.2 If a service provider provides options for non-dedicated bandwidth, they must describe their support for priority queuing, and meet NETC QoS specifications.
- 12.4.3 Service providers must support and honor Ethernet Class of Service, and pass-through Layer 3 DSCP values.
- 12.4.4 Service providers must support the following quality of service metrics between any two sites connected to their network:
 - 12.4.4.1 **Latency** – No more than 20ms between any participant site and a NETC core site. No more than 20ms between any two participant sites connected to their network.
 - 12.4.4.2 **Packet Loss** – No more than 0.25% packet loss between any participant site and a NETC core site. No more than 0.25% packet loss between any two participant sites connected to their network.
 - 12.4.4.3 **Jitter** – No more than 15ms of jitter between any participant site and a NETC core site. No more than 15ms of jitter between any two participant sites connected to their network.
- 12.4.5 While not our preferred choice, any Layer 3-based service offering must honor NETC Layer-3 DSCP values.
- 12.4.6 OSI Layer 2 Class of Service and Layer 3 Type of Service (and DSCP) markings must be preserved across the service provider network.
- 12.4.7 Service providers must be able to automatically and quickly re-route traffic on a path failure. Service provider shall describe how this functionality is implemented.
- 12.4.8 Service Providers must provide published reliability statistics for the most recent twelve months indicating that their network maintains a 99.999% uptime.

12.5 NETC Core Locations

- 12.5.1 We have prequalified two NETC core locations in Bangor, ME and Lebanon, NH.
 - 12.5.1.1 NETC Data Center, 60 Summer Street, Bangor, ME 04401
 - 12.5.1.2 Dartmouth Regional Technology Center, 16 Cavendish Street, Lebanon, NH 03766
- 12.5.2 The core locations should be central in a region, have numerous fiber transports in or through the city, and have fiber connectivity that is

non-discriminatory and will allow competing carriers to connect with their own fiber, rented dark fiber, or lit services.

- 12.5.3 Each service provider is required to connect to each of NETC's core site locations. This will allow for re-routing between core locations in the case of failures or scheduled equipment maintenance. The diagram in section 12.2.6 shows the logical network architecture with two core locations and full redundancy.
- 12.5.4 The following items will be available for purchase at the prequalified core locations:
 - 12.5.4.1 Full rack space
 - 12.5.4.2 Power
 - 12.5.4.3 UPS
 - 12.5.4.4 Generator
 - 12.5.4.5 Fire suppression
 - 12.5.4.6 Air conditioning
 - 12.5.4.7 Unrestricted Personnel Access
 - 12.5.4.8 Fiber Transport
 - 12.5.4.8.1 Lit
 - 12.5.4.8.2 Dark
- 12.5.5 Other core locations in the Bangor, ME area and Lebanon, NH / White River Junction, VT area will be considered. Please provide data center specifications and pricing. Other proposed core locations must meet the requirements listed in 12.5.4.

12.6 Reliability

- 12.6.1 All service providers must provide published network reliability statistics for the most recent 12 months.
- 12.6.2 All service providers must be able to demonstrate a history of 99.999% core network uptime.

13. WAN Services for NETC core to core connectivity

- 13.1 Handoffs from a service provider to the NETC core shall be Gigabit Ethernet.
- 13.2 Service Providers must support Ethernet QinQ VLAN trunking on connections to NETC core locations.
- 13.3 All core connections must support jumbo Ethernet frames.
- 13.4 Service providers shall use two diverse paths to connect each core site.
- 13.5 **Quality of Service:**
 - 13.5.1 Service providers must support and honor Ethernet Class of Service, and pass-through Layer 3 DSCP values.
 - 13.5.2 Service providers must support the following quality of service metrics between NETC core sites:
 - 13.5.2.1 **Latency** – No more than 20ms between NETC core sites.

13.5.2.2 **Packet Loss** – No more than 0.25% packet loss between NETC core sites.

13.5.2.3 **Jitter** – No more than 15ms of jitter between NETC core sites.

13.5.3 OSI Layer 2 Class of Service and Layer 3 Type of Service (and DSCP) markings must be preserved.

13.6 Proposing Vendor shall price the following:

13.6.1 Two (2) – 1 Gb links

13.6.2 Two (2) – 2 Gb links

13.6.3 Two (2) – 5 Gb links

13.6.4 Two (2) – 10 Gb links

14. WAN Services Transport from Core sites to NOX/Internet2

14.1 Handoffs shall be Gigabit Ethernet.

14.2 Service Providers must support Ethernet QinQ VLAN trunking on all connections to NETC core locations.

14.3 All core connections must support jumbo Ethernet frames.

14.4 Proposing Vendors shall use 2 diverse paths.

14.4.1 Bangor, ME to 1 Summer Street, Boston, MA

14.4.2 Lebanon, NH to 300 Bent Street, Cambridge, MA

14.5 Quality of Service:

14.5.1 Service providers must support and honor Ethernet Class of Service, and pass-through Layer 3 DSCP values.

14.5.2 Service providers must support the following quality of service metrics between the NETC core and NOX/Internet2:

14.5.2.1 **Latency** – No more than 20ms.

14.5.2.2 **Packet Loss** – No more than 0.25% packet loss.

14.5.2.3 **Jitter** – No more than 15ms of jitter.

14.5.3 OSI Layer 2 Class of Service and Layer 3 Type of Service (and DSCP) markings must be preserved.

14.6 Proposing Vendor shall price the following:

14.6.1 Two (2) – 1 Gb links

14.6.2 Two (2) – 2 Gb links

14.6.3 Two (2) – 5 Gb links

14.6.4 Two (2) – 10 Gb links

15. Internet2

15.1 NETC will connect to Internet2 through the designated northeast Internet2 connector, Northern Crossroads (NOX) in Boston via two 1 Gb connections.

- 15.2 NETC will have one 1 Gb connection from each core location to NOX in Boston and Cambridge.
- 15.3 Since NETC is a new network and Internet2 will be a new service to NETC participants, we are unable to determine the Internet2 bandwidth that the NETC network will require. Internet2 and NOX shall provide prices for the following Internet2 bandwidths:
 - 15.3.1 25Mb
 - 15.3.2 50Mb
 - 15.3.3 100Mb
 - 15.3.4 500Mb
 - 15.3.5 1 Gb
 - 15.3.6 2 Gb

16. Commodity Internet

- 16.1 NETC will automatically have the ability to peer with Internet2's Commercial Peering Service (CPS) as part of its NOX/Internet2 connection. This will provide the ability to route to approximately half of Commodity Internet utilizing the Internet2 backbone. In order to provide the level of Commodity Internet needed by its participants, along with the redundancy requirements, NETC will need to obtain connections with at least two Commodity Internet providers. This can be easily and cheaply done at the Northern Crossroads (NOX) facilities in Boston, MA and Cambridge, MA, utilizing the same physical connection as Internet2. However, we will be using two connections to NOX for upstream connectivity.
- 16.2 NETC would like to purchase Commodity Internet services from providers at the following NOX addresses:
 - 16.2.1 NOX, 1 Summer Street, Boston, MA
 - 16.2.2 NOX, 300 Bent Street, Cambridge, MA
- 16.3 Price the following Commodity Internet services:
 - 16.3.1 500Mb
 - 16.3.2 1 Gb
 - 16.3.3 2 Gb
 - 16.3.4 5 Gb
 - 16.3.5 10 Gb

17. Wireless Services

17.1 The following sites require wireless services:

- 17.1.1 MSCM – Sunbeam Mobile Ship Clinic, Bar Harbor, ME
- 17.1.2 MMHP – Mobile Clinic 1, Fryeburg, ME
- 17.1.3 MMHP – Mobile Clinic 2, Cherryfield, ME
- 17.1.4 MMHP – Mobile Clinic 3, Oquossuc, ME
- 17.1.5 NOTCH Dental Clinic at MVU, Swanton, VT

17.1.6 Connection to NETC Core Sites: Bangor ME and Lebanon, NH

17.1.7 Each mobile clinic requires 1.5 Mbps

17.2 Proposing Vendors shall propose the following two wireless technologies

17.2.1 3G/EVDO

17.2.1.1 A data connection from a mobile clinic to the NETC network using 3G/EVDO technology provides a usable connection for video conferencing and transmission of data (i.e. EMR). The 3G/EVDO connection will support the following application specifications:

17.2.1.1.1 Telemed - Hi def

17.2.1.1.2 Maximum file size: 15MB

17.2.1.1.3 VideoConferencing at 30 frames per second

17.2.1.1.4 Support for SIP

17.2.1.1.5 Support for VoIP

17.2.1.1.6 Applications include: Video Conf, Rx dispensing, voice calls, EHR from referral providers, view digital images from a fixed hospital. Telemedicine, digital messages (text, cell, Outlook, email)

17.2.1.2 Proposing Vendor shall provide a direct connection to the NETC core site.

17.2.1.3 30 GB to 50 GB of monthly usage is required for each mobile clinic

17.2.1.4 Support for the TCP/IP Protocol

17.2.1.5 Support for Site Bandwidth of 1.5Mb full duplex

17.2.1.6 Proposing Vendor shall price a mobile antenna with the following characteristics:

17.2.1.6.1 Truck mounted or on a trailer

17.2.1.6.2 The antenna shall be approximately 50 to 60 feet in height, and pick up frequencies at 800/850MHz and 1900MHz

17.2.1.6.3 Viable alternatives to utilizing a 50' to 60' antenna will be considered.

17.2.2 Satellite

17.2.2.1 A data connection from a mobile clinic to the NETC network using satellite technology provides a usable connection for video conferencing and transmission of data (i.e. EMR). The satellite connection will support the following application specifications:

17.2.2.1.1 Telemed - Hi def

17.2.2.1.2 Maximum file size: 15MB

17.2.2.1.3 VideoConferencing at 30 frames per second

- 17.2.2.1.4 Support for SIP
- 17.2.2.1.5 Support for VoIP
- 17.2.2.1.6 Applications include: Video Conf, Rx dispensing, voice calls, EHR from referral providers, view digital images from a fixed hospital. Telemedicine, digital messages (text, cell, Outlook, email)
- 17.2.2.2 Support for the TCP/IP Protocol
- 17.2.2.3 Support for Site Bandwidth of 1.5Mb full duplex
- 17.2.2.4 Simultaneous aggregate bandwidth for all sites: 3Mbps (estimated)
- 17.2.2.5 Number of users per site: 2
- 17.2.2.6 Number of devices per site: 2
- 17.2.2.7 QoS Priority: Required
- 17.2.2.8 Proposing Vendor shall provide one of the following Base Station Connectivity options:
 - 17.2.2.8.1 A WAN connection between a satellite base station (i.e. Georgia, Nevada, Illinois, etc.) and the NETC core site
 - 17.2.2.8.2 A remote terminal on the roof of the NETC core site
- 17.2.2.9 Constant bit rate connectivity
- 17.2.2.10 Remote Terminal shall be retractable, auto synchronizing units on the roof of the vehicle

17.3 Wireless QoS Expectations

- 17.3.1 Service providers must support and honor Ethernet Class of Service, and pass-through Layer 3 DSCP values.
- 17.3.2 Service providers must support the following quality of service metrics between the NETC core and NOX/Internet2:
 - 17.3.2.1 **Latency** – No more than 20ms.
 - 17.3.2.2 **Packet Loss** – No more than 0.25% packet loss.
 - 17.3.2.3 **Jitter** – No more than 15ms of jitter.
- 17.3.3 OSI Layer 2 Class of Service and Layer 3 Type of Service (and DSCP) markings must be preserved.

18. WAN Equipment

18.1 Requirements common to all devices:

- 18.1.1 Hardware-based TCP/IP routing (V4 and V6)
- 18.1.2 Dynamic routing protocol support (minimum OSPF and BGPv4)
- 18.1.3 Multicast routing support (i.e. PIM)

- 18.1.4 Generic Route Encapsulation (GRE) tunnel support
- 18.1.5 Multipoint GRE support (optional)
- 18.1.6 One or more of the following segmentation techniques:
 - 18.1.6.1 MPLS L3 VPN (RFC2547)
 - 18.1.6.2 VPLS (RFC4761 and RFC4762 pseudowire Ethernet)
 - 18.1.6.3 802.1Q VLANs
- 18.1.7 PPP Encapsulation
- 18.1.8 Multilink PPP Bonding
- 18.1.9 Bridge Control Protocol (BCP) support
- 18.1.10 Support classification and marking of traffic using DSCP, IP Precedence (ToS), and Layer 2 Class of Service (CoS) fields of inbound and outbound packets.
- 18.1.11 Support Layer 2 interface queuing, with class-based prioritization.
- 18.1.12 Must support hierarchical (nested) QoS policies.
- 18.1.13 Must support rate-limiting at the interface and traffic class levels.
- 18.1.14 Must support traffic prioritization, queuing, and policing based upon class markings.
- 18.1.15 Secure Shell v2 support (encryption for administrative sessions)
- 18.1.16 AAA infrastructure support (radius or TACACS)
- 18.1.17 Public Key Infrastructure (digital certificate) support

18.2 Details specific to each class of device:

- 18.2.1 Edge - Small
 - 18.2.1.1 Throughput up to 10Mbps
 - 18.2.1.2 Three 10/100 BaseT interfaces
 - 18.2.1.3 Provide pricing for optional redundant power supply
 - 18.2.1.4 Provide pricing for 238 devices
- 18.2.2 Edge - Medium
 - 18.2.2.1 Throughput up to 45Mbps
 - 18.2.2.2 Three 10/100 BaseT interfaces
 - 18.2.2.3 Provide pricing for optional redundant power supply
 - 18.2.2.4 Provide pricing for 41 devices
- 18.2.3 Edge - Large
 - 18.2.3.1 Throughput up to 1000Mbps
 - 18.2.3.2 Three 10/100/1000 BaseT interfaces
 - 18.2.3.3 Provide pricing for optional redundant power supply
 - 18.2.3.4 Provide pricing for 192 devices
- 18.2.4 Core

- 18.2.4.1 Proposing Vendor shall propose equipment for both NETC Core locations.
- 18.2.4.2 Throughput up to 200Gb
- 18.2.4.3 Must have resources appropriate to support dozens of BGP peers and full Commodity Internet and Internet2 routing tables
- 18.2.4.4 Hardware-based Generic Route Encapsulation (GRE) tunnel support for up to 500 tunnels
- 18.2.4.5 QinQ Support (encapsulation of 802.1Q trunks over service provider transport)
- 18.2.4.6 Redundant processors supporting stateful failover
- 18.2.4.7 Redundant power supplies
- 18.2.4.8 Redundant backplane/switch fabric
- 18.2.4.9 Minimum of 96 1000BaseT interfaces which support multiple hardware queues including a strict priority queue
- 18.2.4.10 Interfaces must be spread across a minimum of 2 Line cards
- 18.2.4.11 Must support the ability to customize for random dropping of TCP packets (i.e. Weighted Random Early Discard) to avoid TCP synchronization issues.
- 18.2.4.12 Must support non-stop forwarding to ensure IP traffic flow continues in the event of a route processor failure.
- 18.2.4.13 Must support the ability to perform non-disruptive firmware upgrades/updates.

19. Dark Fiber Alternative

- 19.1 There is an interesting alternative to obtaining services from existing WAN providers in a large part of the NETC footprint. There are multiple optical fiber providers who would like to provide dark fiber to NETC at very attractive prices in part due to the influx of federal funds via the American Recovery and Reinvestment Act. This pricing is compelling enough that we feel it's appropriate to explore this option. In order to explore this option, NETC must allow optical equipment providers to present optical transport proposals that do not conform to our stated design requirements.
- 19.2 There are two primary classes of technologies that we recommend in order to utilize a dark fiber network: Dense Wavelength Division Multiplexing (DWDM) and Carrier Ethernet. They both play a part in large service provider networks, but either **could** be utilized to provide transport between NETC participant sites, and the NETC core.
- 19.3 Optical equipment vendors shall provide pricing to support connectivity to all NETC participant sites as part of their design and proposal. The optical transport networks will need to backhaul traffic to the two identified NETC Core Locations.

19.3.1 Optical DWDM Specifications:

- 19.3.1.1 Backbone rings should consist of 10Gb lambdas.
- 19.3.1.2 Optical nodes should be designed and placed appropriately to minimize fiber strand requirements.
- 19.3.1.3 Site to NETC core virtual circuits should be engineered and provisioned for dedicated bandwidth.
- 19.3.1.4 Support for add-drop multiplexing should be provided at each participant site to support handoff.
- 19.3.1.5 Site connections will be a 1Gb Ethernet handoff.
- 19.3.1.6 Provide the ability to engineer paths for WAN Replacement Communities of Interest.

19.3.2 Carrier Ethernet Specifications:

- 19.3.2.1 Backbone links will be 10Gb Ethernet.
- 19.3.2.2 Optical nodes should be designed and placed appropriately to minimize fiber strand requirements.
- 19.3.2.3 Solution must be based upon open standards.
- 19.3.2.4 Site connections will range from 10Mb to 1Gb Ethernet.
- 19.3.2.5 Solution should support standard 802.1Q trunking, QinQ trunking, and/or compliance with MEF version 9 and 14.
- 19.3.2.6 Support multipoint traffic to facilitate Layer 2 Communities of Interest.
- 19.3.2.7 Provide support for industry-standard Ethernet OAM&P (802.1ag) features.
- 19.3.2.8 Support both ring and hub and spoke topologies.

19.4 Dark Fiber Service Providers shall connect dark fiber to all sites and to both NETC core locations and connections to NoX.

20. Miscellaneous Fees

- 20.1 Proposing Vendor shall state the Universal Service Fund fee or percentage if applicable. If applicable, Proposing Vendor shall define the charge and describe how it is calculated.
- 20.2 Proposing Vendor shall describe any other fees that may apply.

21. Billing

- 21.1 Proposing Vendor shall bill using the following format:
 - 21.1.1 Site Bill
 - 21.1.2 Billing Entity Bill (grouping of sites)
 - 21.1.3 NETC Bill (all sites grouped by billing entity)
- 21.2 Paper bill and electronic bill.
- 21.3 Web-based account management.

22. Maintenance and Support Specifications

- 22.1 One year maintenance shall be included for all hardware and software for all equipment supplied.
- 22.2 Proposing Vendor shall be a Manufacturers Authorized Representative.
- 22.3 Proposing Vendor shall provide response by a technician who is technically certified for the proposed network equipment as follows.
 - 22.3.1 Proposing Vendor shall provide a 24 x 7 call window.
 - 22.3.2 Proposing Vendor shall provide a one (1) hour call back response.
 - 22.3.3 Proposing Vendor shall provide a two (2) hour remote diagnostic dial in response.
 - 22.3.4 Proposing Vendor shall provide a four (4) hour on-site response for critical failures.
 - 22.3.5 Proposing Vendor shall provide next day on-site response for non-critical failures.
 - 22.3.6 Proposing Vendor shall complete a hardware repair within a maximum one business day window.
- 22.4 Proposing Vendor shall provide prices for:
 - 22.4.1 8 to 5, M – F response
 - 22.4.2 24 x 7, 365 day response
- 22.5 Proposing Vendor shall provide highly secure remote access for remote programming and diagnostics.
- 22.6 Proposing Vendor shall furnish a chart which shows the escalation procedures to be followed to resolve problems.
- 22.7 Proposing Vendor shall list the type and frequency of preventative maintenance procedures that will be provided under warranty and included in the Proposing Vendor's maintenance contract.
- 22.8 Proposing Vendor shall itemize estimated annual hardware and software maintenance costs.
- 22.9 Proposing Vendor shall provide a mechanism for reporting bugs and enhancement requests.
- 22.10 Proposing Vendor shall provide a detailed description of all hardware and software including firmware, OS level, board revision levels, driver versions, etc.
- 22.11 Proposing Vendor will provide a response to the following:
 - 22.11.1 Where are Technicians dispatched from.
 - 22.11.2 Number of Technicians certified for proposed network equipment.
 - 22.11.3 Description of RMAT capabilities, facilities and staffing.
 - 22.11.4 Description of RMAT staff, level of training and certification.
 - 22.11.5 Availability of parts covered under maintenance contract.
 - 22.11.6 Inventory, on hand, of parts covered under maintenance contract.

- 22.12 Proposing Vendor shall provide prices for two hour and four hour on-site response time by a technician who is technically certified for the proposed network equipment.
- 22.13 Proposing Vendor shall specify the cost differential to have redundancy in the major components of the proposed network equipment.
- 22.14 Proposing Vendor shall provide backup capability for all data, scripts, etc.

23. Maintenance Agreement

- 23.1 The Proposing Vendor's Maintenance Agreement must cover the following: Analyzing and locating the trouble once contacted by the customer, correcting the problem and providing onsite support and assistance from the initial trouble report until the trouble is clear.
- 23.2 Each proposal shall include a copy of the maintenance contract that the customer would sign. NETC retains the right to sign the Maintenance agreement any time prior to the expiration of the Warranty.
- 23.3 Proposing Vendor shall quote a price for maintenance in Years 2 through 5 and 6 through 10, including any discounts for multi – year agreements.
- 23.4 Increases for maintenance prices in Years 2 through 10 shall not increase beyond the consumer price index for inflation.

24. Hands on Training

- 24.1 Proposing Vendor shall list the description, availability, cost and location of technical, administration, and support training that is offered on their product or service.

25. Warranty

- 25.1 Proposing Vendor shall warranty all purchased WAN equipment (parts, software upgrades and labor) for a one year period following NETC's final acceptance of the proposed network equipment.

26. General Requirements

- 26.1 Proposing Vendor shall provide a written project management and implementation plan.
- 26.2 Proposing Vendor must include a timeline for project completion. NETC desires that the network build out be completed within 12 months of receipt of the USAC funding commitment letter. Proposing Vendor shall delineate how many calendar days the project will take to complete and provide a GANTT, PERT or similar chart of project times and milestones.
- 26.3 NETC shall coordinate the network equipment and services installation and schedule.
 - 26.3.1 Proposing Vendor shall accommodate the NETC prescribed installation schedule.
 - 26.3.2 Proposing equipment vendor shall provide onsite personnel for installation of all equipment.

- 26.3.3 Proposing network services vendor shall provide onsite personnel for installation of all network services.
- 26.4 Testing of the Installed network equipment. The installed WAN equipment shall demonstrate the capability of providing the services enumerated in this RFP. Test equipment required for demonstration will be vendor provided. Proposing Vendor will also provide documented test results.
- 26.5 Testing of the Installed network services. The installed WAN services shall demonstrate the capability of providing the services enumerated in this RFP. Test equipment required for demonstration will be vendor provided. Proposing Vendor will also provide documented test results.
- 26.6 Based on the required interaction process with the FCC and USAC, it is not possible to determine a definitive project start date – as it is dependent on approvals and posting where NETC has limited control.
- 26.7 Each Proposing Vendor must clearly and specifically state their understanding of and adherence to the FCC/USAC Rural Healthcare Pilot Program payment procedures which allows for reimbursement only for incurred costs. Reimbursement for network services and network equipment must comply with RHCPP procedures (i.e., 15% invoiced to individual site first; 85% billed to USAC following vendor receipt of 15% payment from site). Initial payments are contingent upon delivery of service.
- 26.8 Each Proposing Vendor must name the project manager and the personnel/key staff that Proposing Vendor will assign to the project team along with a description of their qualifications.
- 26.9 Each Proposing Vendor must provide at least three professional references from similar or larger-scale projects including: contact name, mailing address, phone number, and email address.
- 26.10 NETC reserves the right to seek clarification of each Proposal or to make an award without further discussion of the Proposals received. Therefore, it is important that each Proposal be organized and submitted in a clear and complete manner.
- 26.11 Each Proposing Vendor must have a current FCC Registration Number (FRN). More information about obtaining an FRN can be found at <https://fjallfoss.fcc.gov/coresWeb/publicHome.do>.
- 26.12 Each Proposing Vendor must have a current USAC Service Provider Identification Number (SPIN). More information about obtaining an SPIN can be found at <http://www.usac.org/rhc-pilotprogram/vendors/step01/service-provider-id.aspx>.
- 26.13 Responses to this RFP are due by 5 pm on or before the 29th day following the posting of this RFP on the USAC website. Any responses received after the stated deadline will be considered non-responsive to the RFP and will not be reviewed.
- 26.14 All materials submitted in response to the RFP become the property of NETC. If there is any concern about confidentiality, mark the appropriate pages of your response “Confidential.” NETC will attempt to honor all reasonable requests for vendor confidentiality.

- 26.15 Proposing Vendor's Proposal will become part of the final contract. The Proposing Vendor will be bound to perform according to the terms of this RFP and their Proposal. Any contract issued as a result of this RFP shall be construed according to the laws of the State of Maine. Additionally, the Proposing Vendor shall comply with all local, state, and federal laws and regulations related to the performance of the contract to the extent that the same may be applicable.
- 26.16 A Proposal may be rejected in whole or in part if it limits or modifies any terms and conditions and/or specifications of this RFP.
- 26.17 By responding, the Proposing Vendor states that the Proposal is not made in connection with any competing Proposing Vendor submitting a separate response to the RFP and is, in all aspects, fair and without collusion or fraud.
- 26.18 Any and all information provided to vendors by NETC or its sites, is considered to be proprietary information and must be used solely for the purpose of preparing the proposal and is not to be released outside the Proposing Vendor organization without written permission from NETC or its sites.
- 26.19 Proposing Vendor shall describe their experience working with the FCC Rural Healthcare USF program and process.

27. Evaluation and Selection Criteria

- 27.1 NETC will select the most cost effective vendor per USAC requirements. Each Proposing Vendor is encouraged to provide detailed responses to demonstrate its experience and expertise in providing WAN services and WAN equipment for a large scale private network. NETC will evaluate proposals and select vendors based on: a Proposing Vendor Evaluation, a Proposal Evaluation and a Technical Evaluation. The selection will be based on all factors listed and may not go to the lowest price proposal if price is outweighed by a combination of other features and factors in the winning Proposing Vendor's proposal.
- 27.2 NETC reserves the right to select proposals which, in the sole judgment of NETC, most nearly conforms to the specifications set forth herein, will best serve the needs of NETC and its participants, and provides the most cost-effective means for producing those results.
- 27.3 NETC is not obligated to accept or select any proposal received in response to this RFP. In particular, NETC may select proposals in whole or in part, or it may reject all proposals received.
- 27.4 Changes in applicable laws and rules may affect the award process or any resulting contracts. Proposing Vendors are responsible for determining legal requirements and restrictions that may apply. Proposing Vendors are encouraged to visit the official Federal websites pertaining to the Rural Healthcare Pilot Project <http://www.fcc.gov/cgb/rural/rhcp.html>.
- 27.5 The selection decisions made by NETC and reported to USAC under this RFP are final, and appeals or re-submissions will not be considered.
- 27.6 NETC will evaluate proposals and select vendors based on the following:
 - 27.6.1 Proposing vendor's experience and expertise.
 - 27.6.2 Competitive Price.

- 27.6.3 Experience with the FCC Rural Healthcare USF program and process and commitment to comply with the FCC Rural Healthcare Pilot Program rules and process.
- 27.6.4 Quality of the vendor's proposal.
- 27.6.5 Technical Evaluation of the vendor's proposal.
- 27.6.6 Compliance with the price model and service level agreements.

28. Pricing

28.1 NETC price model goals and requirements for Network Services

- 28.1.1 NETC desires to purchase and provision a network that will be sustainable for 10 years, with very competitive rates for the 10 year sustainability period. These very competitive rates will make the network affordable and provide participating entities with affordable 10 year network costs.
- 28.1.2 Network services will primarily be leased over a 10 year period. NETC along with each site will enter into a 10 year contract for network services. Proposing Vendors providing network services will be required to secure performance bonds guaranteeing that the service purchased will be in place for the duration of the 10 year contract.
- 28.1.3 NETC desires that pricing be postalized and based on bandwidth and not on the geographic location of a NETC site.
- 28.1.4 NETC desires that responding vendors separate network services pricing into a non-recurring component and a recurring component. The non-recurring component would be paid in full up front or paid monthly starting in month 1 and continuing through month 24. The recurring component would be paid monthly starting in month 25 and continuing through month 120.
- 28.1.5 Proposing Vendor agrees that the non-recurring component will be paid with NETC's RHCPP 85% cost reimbursement money, in addition to eligible sites 15% contribution. The recurring component will be paid by each NETC site without any RHCPP reimbursement. Ineligible sites will pay their fair share.
- 28.1.6 For network services, NETC desires to have the ability to exercise one of the following options at the end of year 4 and year 7.
 - 28.1.6.1 Terminate the contract without any penalty or termination liability so that NETC can pursue new network technologies and/or additional subsidies at lower costs.
 - 28.1.6.1.1 ARRA funded fiber optic networks
 - 28.1.6.1.2 USF Rural Healthcare Program funding through required competitive bid process
 - 28.1.6.2 Renegotiate the contract pricing for remaining term.
 - 28.1.6.3 Continue to pay the same recurring component pricing for remaining term.

- 28.1.7 Within the one year installation, NETC desires that each of the billing entities select a contract start date tied to when their sites are implemented.
- 28.1.8 There currently is an extensive build out of fiber optic communications cable in Maine, New Hampshire and Vermont due to the expenditure of ARRA funds. This fiber optic communications cable will allow carriers to lower the transport and network costs associated with building a network for NETC. However, most of the ARRA funded projects will not be complete until 2013, well after NETC selects and implements their network. ARRA funded projects have announced prices as low as \$9.00 per strand mile per month. Therefore, in an effort for NETC to financially benefit from this build out of fiber optic communications cable in Maine, New Hampshire and Vermont with federal ARRA money, NETC will require one of the following obligations be incorporated into network service proposals to NETC.

- 28.1.8.1 The network service provider includes a clause in NETC's 10 year services contract that commits the Proposing Vendor to lower the cost of the NETC services network when and if they migrate to ARRA installed fiber optic cable that reduces their transport costs. In other words, if a service provider lowers their costs due to the use of federally provided fiber optic cable, the Proposing Vendor will pass those savings along to NETC.

- 28.1.8.2 The network service provider when proposing their services to NETC provides lower prices and/or additional discounts to NETC based on the service providers' projections of lower transport costs due to their migration to ARRA funded fiber optic cable.

- 28.1.9 Payments are contingent upon delivery of a service.

- 28.1.10 Ineligible sites will pay their fair share.

- 28.1.11 For NETC sites that are ineligible for the RHCPP reimbursement, NETC desires that the non-recurring component for ineligible sites be spread over a term of years. Options for the term include:

- 28.1.11.1 Three years

- 28.1.11.2 Five years

- 28.1.11.3 Seven years

- 28.1.11.4 Ten years

- 28.2 NETC price model goals and requirements for Network Equipment

- 28.2.1 NETC desires that installation prices be waived or set at a very low price.

- 28.2.2 Equipment will be purchased as implemented.

- 28.2.3 Payments are contingent upon delivery of equipment.

- 28.2.4 NETC sites will purchase network edge equipment with NETC's RHCPP 85% cost reimbursement money, in addition to eligible sites 15% contribution.
- 28.2.5 Ineligible sites will pay their fair share.
- 28.2.6 NETC will purchase network core equipment with NETC's RHCPP 85% cost reimbursement money, in addition to eligible sites 15% contribution. Ineligible sites will pay their fair share.
- 28.2.7 Proposing Vendor shall provide prices for hardware and software maintenance contracts with the following term options.
 - 28.2.7.1 One year
 - 28.2.7.2 Three year
 - 28.2.7.3 Five year
 - 28.2.7.4 Ten year
- 28.2.8 Proposing Vendor shall provide prices for equipment support contracts with the following term options.
 - 28.2.8.1 One year
 - 28.2.8.2 Three year
 - 28.2.8.3 Five year
 - 28.2.8.4 Ten year
- 28.3 Cost to complete all aspects of the network services or network equipment as outlined in this RFP must be clearly stated in the proposal, must include all costs including travel and out of pocket costs, and the cost quoted must be specified as either a "fixed" or "not to exceed" price.
- 28.4 Costs should be categorized in broad categories to allow evaluation of cost elements.
- 28.5 Service Level Agreements (SLA) will be required. The SLAs will be based on QoS requirements listed in Section 12.4. Penalties will be negotiated with selected vendors.
- 28.6 NETC desires the ability to move contracted circuits, add new circuits, remove contracted circuits, and increase bandwidth within the terms of the contract. Proposing Vendor shall describe how they would accommodate this desire. The details will be negotiated in the final contract with selected vendors.

29. Rejection/Negotiation Rights

- 29.1 NETC reserves the right to accept, reject or negotiate the terms of any and all proposal(s), if it is deemed to be in their best interest.
- 29.2 NETC reserves the right to select multiple service providers, including which circuits NETC will purchase from selected service providers.
- 29.3 NETC reserves the right to select multiple equipment providers, including which equipment NETC will purchase from selected equipment providers.
- 29.4 The contents of the proposal submitted by the successful vendor and applicable sections of this RFP and all amendments will become a part of the final contract agreed upon by the parties.

Appendix A

Site Name	Address	City	State	Zip	Min BW	Opt BW
Alice Peck Day Memorial Hospital	125 Mascoma Street	Lebanon	NH	03766	5	10
Alice Peck Day Memorial Hospital/Dartmouth Regional Technology Center (DRTC)	16 Cavendish Court	Lebanon	NH	03766	5	10
Ammonoosuc Community Health Services/Franconia	155 Main Street	Franconia	NH	03580	1.5	1000
Ammonoosuc Community Health Services/Littleton	25 Mt. Eustis Road	Littleton	NH	03561	4.5	1000
Ammonoosuc Community Health Services/Warren	333 Route 25, Main Street	Warren	NH	03279	1.5	1000
Ammonoosuc Community Health Services/Whitefield	14 Kings Square	Whitefield	NH	03598	1.5	1000
Ammonoosuc Community Health Services/Woodsville	79 Swiftwater Road	Woodsville	NH	03785	1.5	1000
Androscoggin Valley Hospital/Lab Broadway Street	2 Broadway Street	Gorham	NH	03581	5	10
Androscoggin Valley Hospital/Lab Pleasant Street	133 Pleasant Street	Berlin	NH	03570	5	10
Androscoggin Valley Hospital/Page Hill Road	59 Page Hill Road	Berlin	NH	03570	25	100
Androscoggin Valley Hospital/Rehab Gorham	138 Main Street	Gorham	NH	03581	5	10
Androscoggin Valley Hospital/Sound Medical Imaging	24 Pleasant Street	Conway	NH	03818	5	10
Androscoggin Valley Hospital/Weeks ENT	170 Middle Street	Lancaster	NH	03584	5	10
Behavioral Health Network of Vermont	2 Prospect Street	Montpelier	VT	05602	1.5	4.5
Brattleboro Memorial Hospital	17 Belmont Avenue	Brattleboro	VT	05301	6	10
Brattleboro Retreat	75 Anna Marsh Lane	Brattleboro	VT	05302	10	15
Bucksport Regional Health Center	110 Broadway	Bucksport	ME	04416	10	20
Calais Regional Hospital	24 Hospital Lane	Calais	ME	04619	3	1000
Cary Medical Center	163 Van Buren Road	Caribou	ME	04736	10	45
Cary Medical Center/Pines Family Health Center	66 Spruce St., Suite 4	Presque Isle	ME	04769	10	45
Cary Medical Center/Pines General Surgery	7 Prospect Street, Suite 160	Caribou	ME	04736	10	45
Cary Medical Center/Pines Health Center	74 Access Highway	Caribou	ME	04736	10	45
Cary Medical Center/Pines Loring Health Center	6 North Carolina Road	Limestone	ME	04750	10	45
Cary Medical Center/Pines Ophthalmology	647 Main St.	Caribou	ME	04736	10	45
Cary Medical Center/St. John Valley Health Center	4 Main St.	Van Buren	ME	04785	10	45
Catholic Medical Center	100 McGregor Street	Manchester	NH	03102	100	1000

Site Name	Address	City	State	Zip	Min BW	Opt BW
Central Vermont Medical Center	130 Fisher Road	Berlin	VT	05602	100	200
Cheshire Medical Center	580 Court Street	Keene	NH	03431	10	100
Cheshire Medical Center/Dartmouth-Hitchcock Keene (Brattleboro Family Health Center)	53 Fairview St.	Brattleboro	VT	05301	1.5	10
Cheshire Medical Center/Dartmouth-Hitchcock Keene (Dartmouth-Hitchcock Keene -- Dermatology)	Suite Two, Building A; 54 Railroad Street	Keene	NH	03431	1.5	10
Cheshire Medical Center/Dartmouth-Hitchcock Keene (Dartmouth-Hitchcock Keene Urology and Ophthalmology Center)	Center at Keene 149 Emerald St. Unit J, Keene, NH	Keene	NH	03431	1.5	10
Cheshire Medical Center/Dartmouth-Hitchcock Keene (Dartmouth-Hitchcock Peterborough Urology Services)	452 Old Street Road, Suite 208	Peterborough	NH	03458	1.5	10
Cheshire Medical Center/Dartmouth-Hitchcock Keene (Dartmouth-Hitchcock Walpole)	11 Westminster Street	Walpole	NH	03608	1.5	10
Cheshire Medical Center/Dartmouth-Hitchcock Keene (Dartmouth-Hitchcock Winchester)	20 Warwick Road	Winchester	NH	03470	1.5	10
Cheshire Medical Center/Dartmouth-Hitchcock Keene (Jaffrey Family Medicine and Specialty Services)	82 Peterborough Street	Jaffrey	NH	03452	1.5	10
Cheshire Medical Center/Dartmouth-Hitchcock Keene (The Family Medicine Center at Island St.)	69-C Island St.	Keene	NH	03431	1.5	10
Clara Martin Center - 100 Berl	100 Hospitality Drive	Montpelier	VT	05601	3	10
Clara Martin Center - 11 Main Street Randolph	11 N Main Street	Randolph	VT	05060	6	10
Clara Martin Center - 1483 Lower Plain Rd Bradford	1483 Lower Plain Road	Bradford	VT	05033	3	10
Clara Martin Center - 24 Main Street Randolph	24 S Main Street	Randolph	VT	05060	3	10
Clara Martin Center - 39 Fogg Farm Road Wilder	39 Fogg Farm Road	Wilder	VT	05088	3	10
Clara Martin Center - BIS	23 Bank Street	Lebanon	NH	03766	3	10
Community Health Center of Burlington/Pearl Street Clinic	179 Pearl Street	Burlington	VT	05401	1.5	1000
Community Health Center of Burlington/Riverside Avenue	617 Riverside Avenue	Burlington	VT	05401	6	1000
Community Health Center of Burlington/Safe Harbor Clinic	184 South Winooski Avenue	Burlington	VT	05401	1.5	1000
Community Health Centers of the Rutland Region/Brandon Medical Center	420 Grove Street	Brandon	VT	05733	5	10
Community Health Centers of the Rutland Region/Castleton Family Health Center	275 Route 30 North	Bomoseen	VT	05732	1.5	3
Community Health Centers of the Rutland Region/CHCRR Dental Office	71 Grove Street	Rutland	VT	05701	1.5	3
Community Health Centers of the Rutland Region/Mettowee Valley Family Health Center	278 Vermont Route 149	West Pawlet	VT	05775	1.5	3
Community Health Centers of the Rutland Region/Rutland Community Health Center	69 Allen St., Suite 6	Rutland	VT	05701	1.5	3
Community Health Centers of the Rutland Region/Rutland Community Health Center-Stratton Road	215 Stratton Road	Rutland	VT	05701	1.5	3
Community Health Centers of the Rutland Region/The Network Managers	5 Prospect Street	Tilton	NH	03276	1.5	3

Site Name	Address	City	State	Zip	Min BW	Opt BW
Copley Hospital	528 Washington Highway	Morrisville	VT	05661	10	100
Copley Professional Services Group/Dental Practice	66 Morrisville Shopping Plaza	Morrisville	VT	05661	44	50
Copley Professional Services Group/Morrisville Family Healthcare	560 Washington Hwy	Morrisville	VT	05661	44	50
Copley Professional Services Group/Stowe Family Practice	1878 Mountain Road	Stowe	VT	05672	44	50
Counseling Service of Addison County	67 Catamount Park	Middlebury	VT	05733	1.5	15
Counseling Service of Addison County - Main Street	89 Main Street	Middlebury	VT	05733	1.5	15
Dartmouth-Hitchcock Medical Center	1 Medical Center Drive	Lebanon	NH	03756	100	1000
DFD Russell Medical Center - Leeds	180 Church Hill Road	Leeds	ME	04263	4.5	10
DFD Russell Medical Center - Monmouth	11 Academy Road	Monmouth	ME	04259	1.5	5
DFD Russell Medical Center - Turner	7 So. Main Street	Turner	ME	04282	1.5	5
Down East Community Hospital/Down East Community Hospital	RR-1 Box 11 Upper Court Street	Machias	ME	04654	10	100
Down East Community Hospital/Machias Medical Center	Route 1 East	Machias	ME	04654	1.5	10
Down East Community Hospital/Milbridge Medical Center	24 School Street	Milbridge	ME	04658	1.5	10
Down East Community Hospital/Sunrise Care Facility	11 Ocean Street	Jonesport	ME	04649	1.5	10
Eastern Maine Healthcare Systems	489 State Street	Bangor	ME	04401	100	1000
Eastern Maine Healthcare Systems/Aroostook Valley Health Center	33 Walker Street	Ashland	ME	04732	1.5	5
Eastern Maine Healthcare Systems/Brewer Family Practice	234 State Street	Brewer	ME	04412	1.5	5
Eastern Maine Healthcare Systems/C.A. Dean - Northwoods Healthcare-Guilford	22 Haley Court	Sangerville	ME	04479	1.5	5
Eastern Maine Healthcare Systems/C.A. Dean - Northwoods Healthcare-Monson	7 Greenville Road	Monson	ME	04464	1.5	5
Eastern Maine Healthcare Systems/Charles A. Dean Memorial Hospital	364 Pritham Ave	Greenville	ME	04441	10	40
Eastern Maine Healthcare Systems/Community General Hospital	23 High Street	Fort Fairfield	ME	04742	1.5	5
Eastern Maine Healthcare Systems/Eastern Maine Medical Center (PACS)	417 State Street	Bangor	ME	04401	100	1000
Eastern Maine Healthcare Systems/Ellsworth Dialysis	11 Short Street	Ellsworth	ME	04605	5	10
Eastern Maine Healthcare Systems/EMMC - Clinic at Walmart - Bangor	900 Stillwater Avenue	Bangor	ME	04401	1.5	5
Eastern Maine Healthcare Systems/EMMC - Clinic at Walmart - Brewer	24 Walton Drive	Brewer	ME	04412	1.5	5
Eastern Maine Healthcare Systems/Inland Hospital - Clinic at Walmart - Waterville	80 Waterville Commons Drive	Waterville	ME	04901	1.5	5
Eastern Maine Healthcare Systems/Inland Hospital - Inland Orthopedics	35 Kennedy Memorial Drive Building D	Waterville	ME	04901	5	10

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Eastern Maine Healthcare Systems/Inland Hospital - New Horizons - Dr Bajpai	121 Main Street	Fairfield	ME	04937	5	10
Eastern Maine Healthcare Systems/Inland Hospital - New Horizons - Madison	344 Lakewood Rd	Madison	ME	04950	5	10
Eastern Maine Healthcare Systems/Inland Hospital - New Horizons - North Anson	167 North Main	N Anson	ME	04958	5	10
Eastern Maine Healthcare Systems/Inland Hospital - New Horizons - Oakland	74 Water Street	Oakland	ME	04963	5	10
Eastern Maine Healthcare Systems/Inland Hospital - New Horizons - Unity	80 Main	Unity	ME	04988	5	10
Eastern Maine Healthcare Systems/Inland Hospital - New Horizons - Waterville	10 Washington Street	Waterville	ME	04901	5	10
Eastern Maine Healthcare Systems/Inland Hospital - Sleep Lab - Oakland	25 First Park, Suite B	Oakland	ME	04963	1.5	5
Eastern Maine Healthcare Systems/Inland Hospital - Waterville-180	180 Kennedy Memorial Drive	Waterville	ME	04901	100	1000
Eastern Maine Healthcare Systems/Inland Hospital - Waterville-200	200 Kennedy Memorial Drive	Waterville	ME	04901	5	10
Eastern Maine Healthcare Systems/Lincoln Dialysis	250 Enfield Road	Lincoln	ME	04457	5	10
Eastern Maine Healthcare Systems/Neuropsych	824 Stillwater Ave	Bangor	ME	04401	5	10
Eastern Maine Healthcare Systems/Orono Physicans	84 Kelley Road	Orono	ME	04473	5	10
Eastern Maine Healthcare Systems/Sebastcook Valley Hospital	447 North Main Street	Pittsfield	ME	04967	100	1000
Eastern Maine Healthcare Systems/SVH - Clinic at Walmart - Palmyra	1573 Main Street	Palmyra	ME	04965	1.5	5
Eastern Maine Healthcare Systems/SVH - Eastern Maine Urology/Somerset Surgical	72 North Road	Detroit	ME	04929	5	10
Eastern Maine Healthcare Systems/SVH - Professional Provider Center - 169	453 Main Street	Pittsfield	ME	04967	1.5	5
Eastern Maine Healthcare Systems/SVH - Regional Family Care - Clinton	1309 Main Street	Clinton	ME	04927	5	10
Eastern Maine Healthcare Systems/SVH - Rehabilitation Services	118 Moosehead Trail, Suite 3	Newport	ME	04953	1.5	5
Eastern Maine Healthcare Systems/SVH - Sebastcook Regional Family Care - Carmel	447 Main Road	Carmel	ME	04419	5	10
Eastern Maine Healthcare Systems/SVH - Sebastcook Regional Family Care-Newport	8 Main Street	Newport	ME	04953	5	10
Eastern Maine Healthcare Systems/SVH - Sebastcook Regional Family Care-Pittsfield	470 Somerset Avenue	Pittsfield	ME	04967	5	10
Eastern Maine Healthcare Systems/TAMC - Central Aroostook Medical Healthcare - Mars Hill	106 Main Street	Mars Hill	ME	04758	1.5	5
Eastern Maine Healthcare Systems/TAMC - Clinic at Walmart - Presque Isle	781 Main Street	Presque Isle	ME	04769	1.5	5
Eastern Maine Healthcare Systems/The Aroostook Medical Center - 140 Academy	140 Academy Street	Presque Isle	ME	04769	100	1000
Eastern Maine Healthcare Systems/The Aroostook Medical Center - 172 Academy	172 Academy Street	Presque Isle	ME	04769	10	20
Eastern Maine Healthcare Systems/The Aroostook Medical Center - Caribou	118 Bennett Drive, Suite 130	Caribou	ME	04736	1.5	5
Eastern Maine Healthcare Systems/The Cianchette Building Brewer	43 Whiting Hill Rd	Brewer	ME	04412	100	1000

Site Name	Address	City	State	Zip	Min BW	Opt BW
Eastport Health Care	30 Boynton Street	Eastport	ME	04631	6.1	100
Eastport Health Care/Calais	55 Franklin Street	Calais	ME	04619	6.1	100
Eastport Health Care/Machias	11 Freemont Street	Machias	ME	04654	6.1	100
Edith Nourse Rogers Memorial Veterans Hospital	200 Spring Road	Bedford	MA	01730	1.5	4.5
Fish River Rural Health - Eagle Lake	10 Carter Street	Eagle Lake	ME	04739	5	10
Fish River Rural Health - Fort Kent	194 East Main St, Second Floor	Fort Kent	ME	04743	5	10
Fletcher Allen Health Care	111 Colchester Avenue	Burlington	VT	05401	100	1000
Fletcher Allen Health Care - Aesculapius Medical Center	1 Timber Lane	South Burlington	VT	05403	4.5	50
Fletcher Allen Health Care - Aquatic Rehabilitation	In Winooski Community Center, 32 Mallets Bay Avenue	Winooski	VT	05404	1.5	4.5
Fletcher Allen Health Care - Bennington Dialysis	100 Hospital Drive	Bennington	VT	05201	1.5	4.5
Fletcher Allen Health Care - Berlin Family Practice / ENT/ Dialysis	130 Fisher Road, Suite 3-1	Berlin	VT	05641	4.5	50
Fletcher Allen Health Care - Berlin Ophthalmology	58 East View Lane	Berlin	VT	05602	1.5	10
Fletcher Allen Health Care - BSQ Campus	One Burlington Square	Burlington	VT	05401	50	100
Fletcher Allen Health Care - Chittenden County Dialysis	35 Joy Drive	South Burlington	VT	05403	1.5	10
Fletcher Allen Health Care - Colchester Family Practice	883 Blakely Road	Colchester	VT	05446	4.5	50
Fletcher Allen Health Care - Dialysis at Rutland Regional	160 Allen Street	Rutland	VT	05701	1.5	4.5
Fletcher Allen Health Care - FAH Campus	790 College Parkway	Colchester	VT	05446	6	1000
Fletcher Allen Health Care - Genetics	112 Colchester Avenue	Burlington	VT	05401	1.5	4.5
Fletcher Allen Health Care - Given Essex	87 Main Street	Essex Junction	VT	05452	4.5	10
Fletcher Allen Health Care - Given Williston	353 Blair Park	Williston	VT	05495	4.5	50
Fletcher Allen Health Care - Milton Family Practice	28 Centre Drive	Milton	VT	05468	4.5	50
Fletcher Allen Health Care - North Country Dialysis	189 Prouty Drive	Newport	VT	05855	1.5	50
Fletcher Allen Health Care - Northwest Medical Cardiology / ENT/ Dermatology	260 Crest Road, Cobblestone Health Commons	St Albans	VT	05478	1.5	50
Fletcher Allen Health Care - Orthopedics	192 Tilley Drive	South Burlington	VT	05403	6	50
Fletcher Allen Health Care - Radiology at Gifford Medical Center	44 South Main Street	Randolph	VT	05060	1.5	100
Fletcher Allen Health Care - Reconstructure / Plastic Surgery	354 Mountain View Drive	Colchester	VT	05446	1.5	50
Fletcher Allen Health Care - Sleep Disorders Center	870 Williston Road	South Burlington	VT	05403	1.5	4.5

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Fletcher Allen Health Care - South Burlington Family Practice	1775 Williston Road	South Burlington	VT	05403	1.5	50
Fletcher Allen Health Care - St Albans Dialysis	7 Crest Road, Suite 78	St Albans	VT	05478	1.5	4.5
Fletcher Allen Health Care - Tilley Cardiology / Pain Management	62 Tilley Drive	South Burlington	VT	05403	4.5	50
Fletcher Allen Health Care - TPK Campus	30 Community Drive	South Burlington	VT	05403	4.5	1000
Fletcher Allen Health Care - UHC Campus	1 South Prospect Street	Burlington	VT	05401	25	1000
Gifford Medical Center	44 South Main Street	Randolph	VT	05060	20	100
Harrington Family Center	50 East Main	Harrington	ME	04643	10	45
HCRS/Bellows Falls Office	1 Hospital Ct	Bellows Falls	VT	05101	1.5	10
HCRS/Brattleboro CRT	29 Elm St	Brattleboro	VT	05301	1.5	10
HCRS/Brattleboro OP & DS	51 Fairview St	Brattleboro	VT	05301	4.5	10
HCRS/Hartford Office	49 School St	Hartford	VT	05047	4.5	10
HCRS/Springfield	390 River Street	Springfield	VT	05156	10	45
HCRS/Windsor Office	14 River St	Windsor	VT	05089	1.5	10
Health FirstFamily Care Center -- Franklin	841 Central Street	Franklin	NH	03235	3	10
Health FirstFamily Care Center --Laconia	22 Strafford Street	Laconia	NH	03246	3	10
Health FirstFamily Care Center/Lamprey Health Care	207 South Main Street	Newmarket	NH	03857	3	10
HealthReach CHC/Bingham Area Health Center	237 Main Street	Bingham	ME	04920	1.5	10
HealthReach CHC/Madison Area Health Center	8 South Main Street	Madison	ME	04950	1.5	10
Houlton Regional Hospital	20 Hartford Street	Houlton	ME	04730	10	20
HowardCenter	300 Flynn Avenue	Burlington	VT	05401	6	1000
HowardCenter Act One Program	184 Pearl Street	Burlington	VT	05401	5	10
HowardCenter Administrative Offices	208 Flynn Avenue Suite 3J	Burlington	VT	05401	4.5	1000
HowardCenter Centerpoint Program	1025 Airport Drive	South Burlington	VT	05403	5	10
HowardCenter Children Youth and Family Services	1138 Pine Steet	Burlington	VT	05401	25	1000
HowardCenter Chittenden Clinic	425 Pearl Street	Burlington	VT	05401	5	10
HowardCenter CODTP Program	45 Clark Street	Burlington	VT	05401	5	10
HowardCenter Developmental Services	102 S. Winooski Avenue	Burlington	VT	05401	6	1000

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HowardCenter Jean Garvin School	90 Harvest Lane	Williston	VT	05495	5	10
Huggins Hospital/240 South Main Street	240 South Main Street	Wolfeboro	NH	03894	100	1000
Huggins Hospital/Alton Family Medicine	82 Main Street	Alton	NH	03809	10	100
Huggins Hospital/Back Bay Rehabilitation	90 Mill Street	Wolfeboro	NH	03894	10	100
Huggins Hospital/Moultonborough Family Medicine	984 Whittier Highway	Moultonborough	NH	03254	10	100
Huggins Hospital/Ossipee Family Medicine	3 Water Village Road	Ossipee	NH	03864	10	100
Huggins Hospital/Paul DeMasi, M.D.	609 South Main Street	Wolfeboro	NH	03894	10	100
Huggins Hospital/Rust Pond Family Medicine	6 Middleton Road	Wolfeboro	NH	03894	10	100
Huggins Hospital/Tamworth Family Medicine	448 White Mountain Highway	Tamworth	NH	03886	10	100
Huggins Hospital/Wakefield Family Medicine	131 Meadow Street	Sanbornville	NH	03872	10	100
Husson College	One College Circle	Bangor	ME	04401	100	1000
Husson College, Calais	203 Main Street	Calais	ME	04619	10	100
Husson College, Presque Isle	33 Edgemont Drive	Presque Isle	ME	04769	10	100
Husson College, South Portland	220 Maine Mall Road	South Portland	ME	04106	10	100
Islands Community Medical Services	15 Medical Center Loop	Vinalhaven	ME	04863	3	10
Islesboro Health Center	150 Main Road	Islesboro	ME	04848	1.5	3
Katahdin Valley Health Center - Houlton - Bangor Street	59 Bangor St	Houlton	ME	04730	39	50
Katahdin Valley Health Center - Island Falls	1300 Crystal Rd	Island Falls	ME	04747	4	8
Katahdin Valley Health Center - Millinocket Primary Care	180 Aroostook Avenue	Millinocket	ME	04462	24	50
Katahdin Valley Health Center - Patten	30 Houlton Street	Patten	ME	04765	75	100
Lamoille Community Connections	72 Harrel Street	Morrisville	VT	05661	1.5	5
Little Rivers Health Care - Administration	146 Mill Street	Bradford	VT	05033	1.5	100
Little Rivers Health Care - Bradford	437 South Main Street	Bradford	VT	05033	1.5	100
Little Rivers Health Care - East Corinth	720 Village Road	East Corinth	VT	05040	1.5	100
Little Rivers Health Care - Wells River	65 Main Street	Wells River	VT	05081	1.5	100
LRG Healthcare/Franklin Regional Hospital	15 Aiken Ave	Franklin	NH	03235	10	100
LRG Healthcare/Lakes Region General Hospital	80 Highland Street	Laconia	NH	03246	10	100

Site Name	Address	City	State	Zip	Min BW	Opt BW
Maine Coast - Eleanor Widener Dixon Memorial Clinic	37 Clinic Road, Rt 186	Gouldsboro	ME	04607	10	200
Maine Coast Memorial Hospital	50 Union St.	Ellsworth	ME	04605	100	1000
Maine Coast Memorial Hospital/Ellsworth Internal Medicine, Ellsworth Family Practice and Ellsworth Pediatrics	32 Resort Way	Ellsworth	ME	04605	10	100
Maine Coast Memorial Hospital/Southwest Harbor Medical Center	45 Herrick Road	Southwest Harbor	ME	04679	10	100
Maine Migrant Health Program - Admin Office	9 Green Street	Augusta	ME	04332	1.5	3
Maine Migrant Health Program - Mobile Clinic 1	815 visits to sites 1-10	Fryeburg	ME	04037	1.5	3
Maine Migrant Health Program - Mobile Clinic 2	1105 visits to sites 11-20	Cherryfield	ME	04622	1.5	3
Maine Migrant Health Program - Mobile Clinic 3	434 visits to sites 21-30	Oquossuc	ME	04964	1.5	3
Maine Primary Care Office	73 Winthrop Street	Augusta	ME	04330	15	20
Maine Sea Coast Mission - Mobile Clinic - Cranberry Isles	24 Visits Cranberry Isles	Cranberry Isles	ME	04625	1.5	3
Maine Sea Coast Mission - Mobile Clinic - Frenchboro	24 Visits Frenchboro	Frenchboro	ME	04635	1.5	3
Maine Sea Coast Mission - Mobile Clinic - Isle au Haut	24 Visits Isle au Haut	Isle au Haut	ME	04645	1.5	3
Maine Sea Coast Mission - Mobile Clinic - Matinicus	24 Visits Matinicus	Matinicus	ME	04851	1.5	3
Maine Sea Coast Mission - Mobile Clinic - Monhegan	24 Visits Monhegan	Monhegan	ME	04852	1.5	3
Maine Sea Coast Mission - Sunbeam Mobile Ship Clinic	200 Visits	Bar Harbor	ME	04609	1.5	3
Maine Sea Coast Mission - Swans Island	Mill Pond Health Center, 225 Minturn Road	Swans Island	ME	04685	1.5	3
Maine Sea Coast Mission/Acadia Family Center	1 Fernald Point Road	SouthWest Harbor	ME	04679	1.5	3
Maine Sea Coast Mission/Colket Data Center	127 West Street	Bar Harbor	ME	04609	1.5	3
Maine State Government/Dorothea Dix Psychiatric Center	656 State Street	Bangor	ME	04401	25	100
Maine State Government/Riverview Psychiatric Center	250 Arsenal Street, 11 State House Station	Augusta	ME	04332	25	100
MaineGeneral Health/Alan Ross, M.D.	147 Riverside Dr # 1	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Allan W. Nyman, D.P.M.	316 Main St	Waterville	ME	04901	1.5	4.5
MaineGeneral Health/Anthony Pakiam, M.D.	56 Winthrop Street	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Atlee & Gleaton Eye Care	227 EASTERN AVE.	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Augusta Foot & Ankle Center	26 Eastern Avenue	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Augusta Internal Medicine	12 Spruce St. Ste. 7	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Augusta Surgical Associates	16 Caldwell Road	Augusta	ME	04330	1.5	4.5

Site Name	Address	City	State	Zip	Min BW	Opt BW
MaineGeneral Health/Belgrade Regional Health Center	4 Clement Way	Belgrade	ME	04917	1.5	10
MaineGeneral Health/Brian J. Gillis, D.O.	8 Water Street	Oakland	ME	04963	1.5	4.5
MaineGeneral Health/Capital Family Practice	89 Hosptial Street	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Clint Delashaw, M.D.	16 Caldwell Road	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Daniel Benson, D.P.M.	12 Spruce Street	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Daniel Buck, D.P.M.	3 St. Catherine Street	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Diabetes & Nutrition Augusta	157 Capitol St	Augusta	ME	04330	100	1000
MaineGeneral Health/Douglas A. O'Heir, D.P.M.	143 Silver St	Waterville	ME	04901	1.5	4.5
MaineGeneral Health/Dudley Chiropractic	116 College Ave	Waterville	ME	04901	1.5	4.5
MaineGeneral Health/Erwin B. Seywerd, M.D.	79 Arsenal St	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Eye Center of Central Maine	40 Airport Road	Waterville	ME	04901	1.5	4.5
MaineGeneral Health/Garrison Hlth Center-Colby	4460 Mayflower Hill Drive	Waterville	ME	04901	1.5	4.5
MaineGeneral Health/Hallowell Family Practice	9 Union Street	Hallowell	ME	04347	1.5	4.5
MaineGeneral Health/Jackman Region Health Center	376 Main Street	Jackman	ME	04945	10	100
MaineGeneral Health/Kennebec County Urology, PA	9 PLEASANT STREET	Oakland	ME	04963	1.5	4.5
MaineGeneral Health/Kennebec Internal Medicine Assoc.	9 Glenridge Dr.	Augusta	ME	04330	5	10
MaineGeneral Health/Kennebec Pediatrics	263 Water Street	Augusta	ME	04330	100	1000
MaineGeneral Health/Kennebec Urology-Dr. Tooth	76 Eastern Ave	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Kennebec Valley OB/GYN	5 Caldwell Road	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Lovejoy Health Center	7 School St. Suite 1	Albion	ME	04910	1.5	10
MaineGeneral Health/MaineGeneral Behavioral Health	165 North Avenue	Skowhegan	ME	04976	1.5	10
MaineGeneral Health/MaineGeneral Medical Center - Augusta Campus	6 East Chestnut Street	Augusta	ME	04330	100	1000
MaineGeneral Health/MaineGeneral Medical Center-325 KMD Doctor's Complex	325 Kennedy Memorial Drive	Waterville	ME	04901	4.5	1000
MaineGeneral Health/MaineGeneral Medical Center-FirstPark Orthopedics and Imaging	107 First Park Drive	Oakland	ME	04963	4.5	1000
MaineGeneral Health/MaineGeneral Medical Center-Gardiner	152 Dresden Avenue	Gardiner	ME	04345	6	1000
MaineGeneral Health/MaineGeneral Medical Center-Hathaway Creative Ctr	10 Water Street, Suite 307	Waterville	ME	04901	6	1000
MaineGeneral Health/MaineGeneral Medical Center-Maine Dartmouth & Four Seasons FP	4 Sheridan Drive	Fairfield	ME	04937	4.5	1000

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MaineGeneral Health/MaineGeneral Medical Center-Musculoskeletal Institute	15 Enterprise Drive, Suite 100, 200	Augusta	ME	04330	4.5	1000
MaineGeneral Health/MaineGeneral Medical Center--Seton Campus	30 Chase Ave	Waterville	ME	04901	6	1000
MaineGeneral Health/MaineGeneral Medical Center--Thayer Campus	149 North Street	Waterville	ME	04901	100	1000
MaineGeneral Health/MaineGeneral Medical Center-Waterville Family Practice (Elmwood)	211 Main St.	Waterville	ME	04901	1.5	1000
MaineGeneral Health/MaineGeneral Medical Center-Winthrop Commerce Ctr	149 Main Street	Winthrop	ME	04364	6	1000
MaineGeneral Health/MaineGeneral-HACCC	361 Old Belgrade Road	Augusta	ME	04330	6	1000
MaineGeneral Health/Manchester Osteopathic	1053 Western Ave	Manchester	ME	04351	1.5	4.5
MaineGeneral Health/Michael Szela, M.D.	89 Hospital Street	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Middle Street Medical - Dr. Cheng	6 Middle Street	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Mid-Maine Internal Medicine - Vassalboro	905 Main Street	N. Vassalboro	ME	04962	10	15
MaineGeneral Health/Mid-Maine Internal Medicine - Winslow	3 Garland Rd.	Winslow	ME	04901	10	15
MaineGeneral Health/Oakland Family Health Care, PA	9 PLEASANT STREET, SUITE 1	Oakland	ME	04963	1.5	10
MaineGeneral Health/Richmond Area Health Center	24 Gardiner Street	Richmond	ME	04357	1.5	10
MaineGeneral Health/Roger Hall, M.D.	89 Hospital St Ste 1	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Rosalind R. Waldron, M.D.	15 Bay St	Winslow	ME	04901	1.5	4.5
MaineGeneral Health/Sheepscot Valley Health Center	47 Main	Coopers Mills	ME	04341	1.5	10
MaineGeneral Health/Three Rivers Family	180 Kennedy Memorial Drive	Waterville	ME	04901	1.5	4.5
MaineGeneral Health/Waterville Family Practice	13 Railroad Sq.	Waterville	ME	04901	1.5	4.5
MaineGeneral Health/Waterville Foot & Ankle Center, PA	25 First Park Suite C	Oakland	ME	04963	1.5	4.5
MaineGeneral Health/Waterville Pediatrics	159 Silver Street	Waterville	ME	04901	1.5	4.5
MaineGeneral Health/Waterville Womens	219 Capital Street	Augusta	ME	04330	1.5	4.5
MaineGeneral Health/Waterville Women's Care	25 First Park	Oakland	ME	04963	1.5	4.5
MaineHealth/Cancer Care Center of York County	27 Industrial Park Ave	Sanford	ME	04073	100	1000
MaineHealth/Falmouth Family Practice Center	5 Bucknam Road, Suite 2C	Falmouth	ME	04105	100	1000
MaineHealth/Gorham Village Family Physicians	94 Main Street	Gorham	ME	04038	4	10
MaineHealth/Greater Portland Medical Group - Cape Elizabeth	155 Spurwink Avenue	Cape Elizabeth	ME	04107	4	10
MaineHealth/Greater Portland Pediatric Association - Saco	4 Scamman Street, Suite 51	Saco	ME	04072	4	10

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MaineHealth/Lake Region Primary Care Services	584 Roosevelt Trail	Windham	ME	04062	1.5	10
MaineHealth/Maine Medical Center	22 Bramhall Street	Portland	ME	04102	100	1000
MaineHealth/Marshwood	33 Gorham Road	Scarborough	ME	04074	100	1000
MaineHealth/MMC - Bariatric Surgery Program	12 Andover Road	Portland	ME	04102	10	50
MaineHealth/MMC - Care Partners	241 Oxford Street	Portland	ME	04101	10	50
MaineHealth/MMC - Lyme Disease	75 John Roberts Road	South Portland	ME	04106	1.5	4.5
MaineHealth/MMC - MaineHealth Corporate	110 Free Street	Portland	ME	04101	1.5	4.5
MaineHealth/MMC - Outpatient Radiation Therapy	175 Congress Avenue	Bath	ME	04530	10	50
MaineHealth/MMC - Radi Billing & Transcr, Virology, OR Booking	48-52 Gilman Street	Portland	ME	04102	10	50
MaineHealth/MMC - Scarborough Campus	98-102 Campus Drive	Scarborough	ME	04074	6	25
MaineHealth/Stephens Memorial Hospital	181 Main Street	Norway	ME	04268	100	200
MaineHealth/Western Maine Family Practice	193 Main Street, Suite 2	Norway	ME	04268	25	50
Martin's Point Health Care/Bangor	700 Mount Hope Avenue, Suite 650	Bangor	ME	04401	1.5	10
Martin's Point Health Care/Brunswick	6 Farley Road	Brunswick	ME	04011	4.5	100
Martin's Point Health Care/Portsmouth	161 Corporate Drive	Portsmouth	NH	03801	4.5	100
Martin's Point Health Care/TW data center	340 Cumberland Avenue	Portland	ME	04101	1.5	100
Martin's Point Health Care/Veranda	331 Veranda Street	Portland	ME	04104	6	100
Martin's Point Health Care/Washington Ave	891 Washington Avenue	Portland	ME	04103	25	100
Mayo Regional Hospital - 897 West Main Street	897 West Main Street	Dover-Foxcroft	ME	04426	3	100
Mayo Regional Hospital - Corinna Family Practice	110 Dexter Road	Corinna	ME	04928	1.5	100
Mayo Regional Hospital - Counseling Program	69 High Street	Dover-Foxcroft	ME	04426	1.5	100
Mayo Regional Hospital - Dexter Family Practice	51 High Street	Dexter	ME	04930	1.5	100
Mayo Regional Hospital - Dexter Internal Medicine	41 High Street	Dexter	ME	04930	1.5	100
Mayo Regional Hospital - Guilford Medical Associates	3 Park Street	Guilford	ME	04443	1.5	100
Mayo Regional Hospital - Milo Family Practice	135 Park Street	Milo	ME	04463	1.5	100
Mayo Regional Hospital - Physician Billing	125 Summer Street	Dover-Foxcroft	ME	04426	1.5	100
Mercy Hospital/144 State Street	144 State Street	Portland	ME	04101	100	1000

Site Name	Address	City	State	Zip	Min BW	Opt BW
Mercy Hospital/Mercy Gorham Crossing	19 South Gorham Crossing	Gorham	ME	04038	4.5	10
Mercy Hospital/Mercy Medical Associates	409 Roosevelt Trail	Windham	ME	04062	10	100
Mercy Hospital/Mercy Medical Associates - Falmouth	75 Clearwater Drive, Suite 106	Falmouth	ME	04105	1.5	10
Mercy Hospital/Mercy Primary Care - Portland	117 Auburn Street	Portland	ME	04106	4.5	10
Mercy Hospital/Mercy Primary Care - Standish	111 Ossipee Trail, Unit 1B	Standish	ME	04084	1.5	10
Mercy Hospital/Mercy Westbrook	40 Park Road	Westbrook	ME	04092	4.5	100
Mid Coast Health Services/Mid Coast Hospital 123 Medical Center Drive	123 Medical Center Drive	Brunswick	ME	04011	100	1000
Mid Coast Health Services/Mid Coast Hospital Addiction Resource Center	20 Bristol Road	Damariscotta	ME	04543	100	1000
Mid Coast Health Services/Mid Coast Hospital Baribeau Drive Campus	58 Baribeau Drive	Brunswick	ME	04011	100	1000
Mid Coast Health Services/Mid Coast Hospital BMG Radiology	74 Baribeau Drive	Brunswick	ME	04011	100	1000
Mid Coast Health Services/Mid Coast Hospital Coastal Orthopedics Radiology	430 Bath Road	Brunswick	ME	04011	100	1000
Mid Coast Health Services/Mid Coast Medical Group - Bath	1356 Washington Street	Bath	ME	04530	100	1000
Mid Coast Health Services/Mid Coast Medical Group - Topsham	1 Main Street	Topsham	ME	04086	100	1000
Mid Coast Health Services/Mid Coast Medical Group Neurology	11 Medical Center Drive	Brunswick	ME	04011	100	1000
Mid Coast Health Services/Mid Coast Rehabilitation Services	310 Bath Road	Brunswick	ME	04011	100	1000
MidCoast Mental Health Belfast	15 Mid-Coast Drive	Belfast	ME	04915	100	110
MidCoast Mental Health Rockland	12 Union Street	Rockland	ME	04841	100	110
MidState Health Center/MidState Health Center - Plymouth	101 Boulder Point Drive	Plymouth	NH	03264	10	100
Millinocket Regional Hospital/200 Somerset Street	200 Somerset Street	Millinocket	ME	04462	60	100
Millinocket Regional Hospital/Millinocket Surgical Assoc./N. Pen. Orth.	165 Poplar Street, Suite 1	Millinocket	ME	04462	1.5	4.5
Millinocket Regional Hospital/White Birch Medical Center	899 Central Street	Millinocket	ME	04462	1.5	4.5
Monadnock Community Hospital/Monadnock Community Hospital	452 Old Street Road	Peterborough	NH	03458	18	25
Mount Desert Island Hospital/10 Wayman Lane	10 Wayman Lane	Bar Harbor	ME	04609	100	1000
Mount Desert Island Hospital/Bar Harbor Offices	315 Main Street	Bar Harbor	ME	04609	1.5	10
Mount Desert Island Hospital/Cadillac Mountain Medical Building	322 Main Street	Bar Harbor	ME	04609	4.5	10
Mount Desert Island Hospital/Community Health Center	9 Village Green Way	Southwest Harbor	ME	04679	10	50
Mount Desert Island Hospital/Trenton Health Center	394 Bar Harbor Road	Trenton	ME	04605	10	50

Site Name	Address	City	State	Zip	Min BW	Opt BW
Mount Desert Island Hospital/Women's Health Center	8 Wayman Lane	Bar Harbor	ME	04609	1.5	10
Mt. Ascutney Hospital & Health Center	289 County Road	Windsor	VT	05089	9	45
Mt. Ascutney Hospital & Health Center/Ottawaquechee Health Center	32 Pleasant Street	Woodstock	VT	05091	1.5	10
Mt. Ascutney Hospital & Health Center/Physician Practices/Hanover	80 South Main Street	Hanover	NH	03755	1.5	10
Mt. Ascutney Hospital & Health Center/Physician Practices/White River Junction	205 Billings Farm Road, Unit 2B	White River Junction	VT	05001	1.5	10
New England Telehealth Consortium/Data Center 1	60 Summer Street	Bangor	ME	04401	*See RFP 12.2	
New England Telehealth Consortium/Data Center 2	16 Cavendish Court	Lebanon	NH	03766	*See RFP 12.2	
New London Hospital	273 County Road	New London	NH	03257	118.26	236.51
New London Hospital/New London Family Care Center at Grantham	120 Route 10	Grantham	NH	03753	1.5	3
New London Hospital/Newport Health Center	11 John Stark Highway	Newport	NH	03773	101.5	203
NFI Vermont, Inc., Admin	30 Airport Road	South Burlington	VT	05403	3.5	6
NFI Vermont, Inc., BCAP	72 Black Mountain Road	Brattleboro	VT	05301	1.5	3.5
NFI Vermont, Inc., Cornerstone	510 Portland Street	Saint Johnsbury	VT	05819	1.5	3.5
NFI Vermont, Inc., Hospital Diversion	100 Allen Road	South Burlington	VT	05403	1.5	3.5
North Country Health Consortium Dental Program/Molar Express	176 Visits	Whitefield	NH	03598	1.5	4.5
North Country Health Consortium/Coos County Family Health Services - 133 Pleasant	133 Pleasant Street	Berlin	NH	03570	1.5	3
North Country Health Consortium/Coos County Family Health Services - 59 Page	59 Page Hill Road	Berlin	NH	03570	1.5	3
North Country Health Consortium/Coos County Family Health Services - Administration	54 Willow Street	Berlin	NH	03570	1.5	3
North Country Health Consortium/Coos County Family Health Services - Gorham	2 Broadway Street	Gorham	NH	03581	1.5	3
North Country Health Consortium/Cottage Hospital	90 Swiftwater Road	Woodsville	NH	03785	6	1000
North Country Health Consortium/Littleton Regional Hospital	600 St. Johnsbury Road	Littleton	NH	03561	10	25
North Country Health Consortium/Upper Connecticut Valley Hospital	181 Corliss Lane	Colebrook	NH	03576	10	45
North Country Health Consortium/Weeks Medical Center	173 Middle Street	Lancaster	NH	03584	25	40
North Country Health Consortium/Whitefield	7 Main Street, Suite 7	Whitefield	NH	03598	1.5	4.5
North Country Hospital	189 Prouty Drive	Newport	VT	05855	10	20
Northeast Kingdom Human Services/Newport	154 Duchess Street	Newport	VT	05855	26.5	50
Northeast Kingdom Human Services/St. Johnsbury	2225 Portland Street	Saint Johnsbury	VT	05819	21.5	40

Site Name	Address	City	State	Zip	Min BW	Opt BW
Northeastern Vermont Regional Hospital	1315 Hospital Drive	St. Johnsbury	VT	05819	25	1000
Northeastern Vermont Regional Hospital/NVRH Corner Medical	195 Industrial Parkway	Lyndonville	VT	05851	4.5	1000
Northern Berkshire Healthcare/North Adams Regional Hospital	71 Hospital Avenue	North Adams	MA	01247	45	100
Northern Berkshire Healthcare/Northern Berkshire Physician Group	820 State Road	North Adams	MA	01247	1.5	45
Northern Berkshire Healthcare/VNA & Hospice of Northern Berkshire	535 Curran Memorial Highway	North Adams	MA	01247	1.5	45
Northern Counties Health Care	165 Sherman Drive	St. Johnsbury	VT	05819	1.5	3
Northern Maine Medical Center - 194 East Main Street	194 East Main St	Fort Kent	ME	04743	25	1000
Northern Maine Medical Center - Acadia Family Health Center	460 Main Street, Suite 4	Madawaska	ME	04756	10	1000
Northern Maine Medical Center - Forest Hill	25 Bolduc Ave	Fort Kent	ME	04743	20	1000
Northern Maine Medical Center - Long Lake Regional Health Center	384 Main Street	St. Agatha	ME	04772	1.5	5
Northern Maine Medical Center - Madawaska Outpatient Center	309 St. Thomas Street	Madawaska	ME	04756	10	1000
Northern Maine Medical Center - Riverside Office Building	3 Mountainview Drive	Fort Kent	ME	04743	10	1000
Northern Maine Medical Center - Wellness Center	17 West Main St	Fort Kent	ME	04743	1.5	10
Northwestern Counseling & Support Services	107 Fisher Pond Road	Saint Albans	VT	05478	1.5	4.5
Northwestern Medical Center/Georgia	927 Ethan Allen Highway	Georgia	VT	05468	1.5	4.5
Northwestern Medical Center/St. Albans	133 Fairfield Street	St. Albans	VT	05478	25	100
Otis Health Care Center	185 Grafton Road	Townshend	VT	05353	10	100
Penobscot Bay Medical Center	6 Glen Cove Drive	Rockport	ME	04856	100	1000
Penobscot Bay Medical Center/Central Data Center	409 Old County Road	Rockland	ME	04841	500	1000
Penobscot Bay Medical Center/Kno-Wal-Lin Home Health Care Belfast	147 Waldo Avenue, Suite 106	Belfast	ME	04915	25	100
Penobscot Bay Medical Center/Kno-Wal-Lin Home Health Care Newcastle	605 Route 1, Suite 2	Newcastle	ME	04553	25	100
Penobscot Bay Medical Center/Kno-Wal-Lin Home Health Care Rockland	170 Pleasant Street	Rockland	ME	04841	100	110
Penobscot Bay Medical Center/Knox Long Term Care Center	6 White Street	Rockland	ME	04841	100	110
Penobscot Bay Medical Center/Quarry Hill	30 Community Drive	Camden	ME	04843	100	110
Penobscot Bay Medical Center/Waldoboro Family Medicine	27 Mill Street	Waldoboro	ME	04572	1.5	100
Penobscot Community Health Care - Brewer Community Clinic	451 South Main Street	Brewer	ME	04412	25	100
Penobscot Community Health Care - Community Clinics	34 Summer Street	Bangor	ME	04401	25	100

Site Name	Address	City	State	Zip	Min BW	Opt BW
Penobscot Community Health Care - Hampden Physical Therapy	177 Coldbrook Road	Hampden	ME	04444	25	100
Penobscot Community Health Care - Main Campus	1048 Union Street	Bangor	ME	04401	25	100
Penobscot Community Health Care - Old Town Family Practice	242 Brunswick Street	Old Town	ME	04468	25	100
Penobscot Community Health Care - Stillwater Fam Med	78 Ridgewood Drive	Bangor	ME	04401	25	100
Penobscot Valley Hospital - 7 Transalpine Road	7 Transalpine Road	Lincoln	ME	04457	200	1000
Penobscot Valley Hospital Wellness Center	27 Main Street	Lincoln	ME	04457	200	1000
Penquis - Rockland	170 Pleasant Street	Rockland	ME	04841	1.5	10
Penquis Health Services - Bangor	262 Harlow Street	Bangor	ME	04401	10	100
Penquis Health Services - Dexter	110 Spring Street	Dexter	ME	04930	1.5	4.5
Penquis Health Services - Dover	50 North Street	Dover-Foxcroft	ME	04426	1.5	10
Penquis Health Services - Lincoln	115 Main Street	Lincoln	ME	04457	1.5	10
Porter Hospital	115 Porter Drive	Middlebury	VT	05753	50	100
Porter Hospital/Addison Family Medicine	82 Catamount Park	Middlebury	VT	05753	4.5	6
Porter Hospital/Little City Family Medicine	10 North Street	Vergennes	VT	05491	1.5	4.5
Porter Hospital/Middlebury Pediatrics & Family Medicine	1330 Exchange Street	Middlebury	VT	05753	1.5	4.5
Porter Hospital/Neshobe Family Medicine	61 Court Drive	Brandon	VT	05733	1.5	4.5
Redington-Fairview General Hospital/46 Fairview Avenue	46 Fairview Ave	Skowhegan	ME	04976	20	40
Redington-Fairview General Hospital/Norridgewock Health Center	8 Colonial Lane	Norridgewock	ME	04957	5	10
Regional Medical Center of Lubec/Healthways - East Machias	879 Main Street	East Machias	ME	04630	10	30
Regional Medical Center of Lubec/Healthways - Lubec	43 South Lubec Road	Lubec	ME	04652	10	30
Regional Medical Center of Lubec/Healthways - Machias	11 Broadway	Machias	ME	04654	10	30
Richford Health Center (dba NOTCH)	44 Main Street, Suite 200	Richford	VT	05476	6.122	7.666
Richford Health Center (dba NOTCH)/Alburgh Health Center	8 Industrial Park Road	Alburgh	VT	05440	1.5	3
Richford Health Center (dba NOTCH)/Enosburg Health Center	44 Center Street	Enosburg Falls	VT	05450	1.5	3
Richford Health Center (dba NOTCH)/NOTCH Dental Clinic at MVU	100 Thunderbird Drive BLDG # Dental	Swanton	VT	05488	1.5	3
Richford Health Center (dba NOTCH)/St. Albans Health Center	48 Lower Newton Road	St. Albans	VT	05478	1.5	3
Richford Health Center (dba NOTCH)/Swanton Health Center	45 Church Street	Swanton	VT	05488	1.5	3

Site Name	Address	City	State	Zip	Min BW	Opt BW
Rutland Mental Health Services	78 S. Main Street	Rutland	VT	05701	6	100
Rutland Mental Health Services/Court Square Location	7 Court Square	Rutland	VT	05701	45	100
Rutland Mental Health Services/Evergreen Center	135 Granger Street	Rutland	VT	05701	30	100
Rutland Mental Health Services/Merchants Row Location	10 Merchants Row	Rutland	VT	05701	1.5	3
Rutland Mental Health Services/Pine Street Location	30 Pine Street	Rutland	VT	05701	1.5	3
Rutland Mental Health Services/Success School	1 Scale Ave, Building 18	Rutland	VT	05701	1.5	3
Rutland Regional Health System/Killington Medical Clinic	3902 Killington Road	Killington	VT	05751	1.5	20
Rutland Regional Health System/Rutland Regional Medical Center	160 Allen Street	Rutland	VT	05701	100	1000
Rutland Regional Health System/West Street	439 West Street	Rutland	VT	05701	4.5	1000
Sacopee Valley Health Center	70 Main Street	Porter	ME	04068	7	15
Sebasticook Family Doctors - Canaan	333 Main Street	Canaan	ME	04924	3	10
Sebasticook Family Doctors - Dexter	29 Church Street	Dexter	ME	04930	3	10
Sebasticook Family Doctors - Dover-Foxcroft	1008 West Main Street	Dover-Foxcroft	ME	04426	3	10
Sebasticook Family Doctors - Newport	118 Moosehead Trail, Suite 5	Newport	ME	04953	3	10
Sebasticook Family Doctors - Pittsfield	140 Chandler Street	Pittsfield	ME	04967	3	10
Southern Maine Medical Center/1 Medical Center Drive	1 Medical Center Drive	Biddeford	ME	04005	100	1000
Southern Maine Medical Center/Kennebunk Diagnostic and Therapy Center	4 Shape Drive	Kennebunk	ME	04043	1.5	4.5
Southern Maine Medical Center/Primecare Physician Practice	9 Healthcare Drive	Biddeford	ME	04005	6	25
Southern Maine Medical Center/Saco Diagnostic and Therapy Center	13 Industrial Park Road	Saco	ME	04072	1.5	4.5
Southwestern Vermont Health Care	100 Hospital Drive East	Bennington	VT	05201	30	100
Speare Memorial Hospital	16 Hospital Road	Plymouth	NH	03264	50	100
Speare Memorial Hospital/Boulder Point	103 Boulder Point Way	Plymouth	NH	03264	10	50
Springfield Hospital	25 Ridgewood Road	Springfield	VT	05156	6	10
Springfield Hospital/The Health Center at Bellows Falls	1 Hospital Court	Bellows Falls	VT	05101	3	10
Springfield Hospital/The Ludlow Health Center	1 Elm Street	Ludlow	VT	05149	3	10
St. Joseph Hospital	172 Kinsley St.	Nashua	NH	03061	100	1000
St. Croix Regional Family Health Center/East Grand Health Center	201 Houlton Road	Danforth	ME	04424	3	10

Site Name	Address	City	State	Zip	Min BW	Opt BW
St. Croix Regional Family Health Clinic - Princeton	136 Mill Street	Princeton	ME	04668	3	10
St. Joseph Healthcare/Gastroenterology Associates of Eastern Maine	700 Mount Hope Avenue, Suite 210	Bangor	ME	04401	1.5	4.5
St. Joseph Healthcare/St. Joseph Healthcare Park	900 Broadway	Bangor	ME	04401	100	1000
St. Joseph Healthcare/St. Joseph Hospital	360 Broadway	Bangor	ME	04401	100	1000
The Health Center	157 Towne Avenue	Plainfield	VT	05667	10	25
The Health Center/Cabot Health Services	25 Common Road	Cabot	VT	05647	1.5	4.5
The Memorial Hospital	3073 White Mt. Highway	North Conway	NH	03860	5	10
The Memorial Hospital/Carroll County Home and Health	23 White Mt. Highway	Conway	NH	03817	5	10
The Memorial Hospital/White Mountain Community Health	298 White Mt. Highway	Conway	NH	03818	5	10
Togus Veterans Affairs Medical Center	1 VA Center	Augusta	ME	04330	1.5	4.5
UNH College of Health and Human Services	Suite 202, Hewitt Hall, 4 Library Way	Durham	NH	03824	1.5	4.5
United Counseling Service	100 Ledge Hill Road	Bennington	VT	05201	20	25
University of New England/Biddeford Campus	11 Hills Beach Road	Biddeford	ME	04005	500	1000
University of New England/Saco Family Practice	655 Main Street	Saco	ME	04072	10	100
University of New England/University Health Care - Portland	295 Forest Ave	Portland	ME	04101	5	10
University of New England/Westbrook College Campus College of Health Professions	716 Stevens Ave	Portland	ME	04103	500	1000
University of Vermont	Southwick Hall/85. S. Prospect St.	Burlington	VT	05405	1.5	4.5
Valley Regional Hospital	243 Elm St.	Claremont	NH	03743	15	20
Vermont Agency of Human Services/Vermont State Hospital	103 South Main Street	Waterbury	VT	05671	4.5	6
Vermont Department of Corrections/Chittenden Regional Correctional Facility	7 Farrell Street	South Burlington	VT	05403	4.5	6
Vermont Department of Corrections/Dale Correctional Facility	103 South Main Street, South Entrance	Waterbury	VT	05671	1.5	4.5
Vermont Department of Corrections/Marble Valley Regional Correctional Facility	167 State Street	Rutland	VT	05701	1.5	4.5
Vermont Department of Corrections/Northeast Regional Correctional Facility	1270 U.S. Route 5	St. Johnsbury	VT	05819	4.5	6
Vermont Department of Corrections/Northern State Correctional Facility	2559 Glen Road	Newport	VT	05855	4.5	6
Vermont Department of Corrections/Northwest State Correctional Facility	3649 Lower Newton Road	Swanton	VT	05488	4.5	6
Vermont Department of Corrections/Southeast State Correctional Facility	546 State Farm Road	Windsor	VT	05089	1.5	4.5
Vermont Department of Corrections/Southern State Correctional Facility	700 Charleston Road	Springfield	VT	05156	4.5	6

Site Name	Address	City	State	Zip	Min BW	Opt BW
Vermont Information Technology Leaders	144 Main Street, Suite 1	Montpelier	VT	05602	20	100
Vermont Information Technology Leaders/VITL Backup Site	102 Kimball Avenue	Williston	VT	05401	6	25
Vermont Information Technology Leaders/VITL Data Center	40 IDX Drive	South Burlington	VT	05401	6	25
Vermont Radiologists	620 Hinesburg Road #1A	South Burlington	VT	05403	10	20
Waldo County General Hospital/Arthur Jewel Community Health Center	55 Reynolds Road	Brooks	ME	04921	10	50
Waldo County General Hospital/Belfast	118 Northport Ave	Belfast	ME	04915	200	500
Waldo County General Hospital/Donald S. Walker Health Center	43 West Main Street	Liberty	ME	04949	10	50
Waldo County General Hospital/Lincolntonville Health Center	2399 Atlantic Hwy	Lincolntonville	ME	04849	10	50
Waldo County General Hospital/Searsport Regional Health Center	37 Mortland Road	Searsport	ME	04974	10	50
Waldo County General Hospital/Stockton Springs Regional Health Center	11 Cape Jellison Road	Stockton Springs	ME	04981	10	50
Washington County Mental Health Services	174 Hospital Loop	Berlin	VT	05602	1.5	4.5
Wentworth-Douglass Hospital - Dover	789 Central Ave	Dover	NH	03820	8	14
Wentworth-Douglass Hospital - Lee	54 Calef Road, Route 125	Lee	NH	03824	8	14
White River Junction VA Medical Center	215 North Main Street	White River Junction	VT	05009	1.5	4.5
York County Community Action Corporation/York County Community Health Care	32 Patriot Lane	Sanford	ME	04073	10	25
York Hospital/15 Hospital Drive	15 Hospital Drive	York	ME	03909	10	100
York Hospital/Berwick Medical Services	4 Dana Drive	Berwick	ME	03901	5	10
York Hospital/Kittery Family Practice	22 Shapleigh Road	Kittery	ME	03904	5	10
York Hospital/Landmark Hill, Wende Pediatrics	518 US Route1	Kittery	ME	03904	3	10
York Hospital/Oncology Treatment Center	127 Long Sands Road	York	ME	03909	4.5	100
York Hospital/Services at Kittery	75 US Route1 Bypass	Kittery	ME	03904	3	10
York Hospital/South Berwick Medical Services	57 Portland Street	South Berwick	ME	03908	5	10
York Hospital/Wells Regional Medical Services	114 Sanford Road	Wells	ME	04090	6	1000

Glossary

- **3G/EVDO** – Third Generation/Evolution Data Only- this is a high speed data service provided by cellular carriers.
- **Aggregation** - joining multiple data packets for transmission as a single unit to increase network efficiency
- **Backbone** - or network backbone is a part of computer network infrastructure that interconnects various pieces of network, providing a path for the exchange of information between different LANs or sub networks.[1] A backbone can tie together diverse networks in the same building, in different buildings in a campus environment, or over wide areas. Normally, the backbone's capacity is greater than the networks connected to it. A large corporation that has many locations may have a backbone network that ties all of the locations together, for example, if a server cluster needs to be accessed by different departments of a company that are located at different geographical locations. The pieces of the network connections (for example: ethernet, wireless) that bring these departments together is often mentioned as network backbone. Network congestion is often taken into consideration while designing backbones. Backbone networks should not be confused with the Internet backbone.
- **BaseT Interfaces** - one of several physical media specified in the IEEE 802.3 standard for Ethernet local area networks (LANs), is ordinary telephone twisted pair wire. 10BASE-T supports Ethernet's 10 Mbps transmission speed. In addition to 10BASE-T, 10 megabit Ethernet can be implemented with these media types:
 - 10BASE-2 (Thinwire coaxial cable with a maximum segment length of 185 meters)
 - 10BASE-5 (Thickwire coaxial cable with a maximum segment length of 500 meters)
 - 10BASE-F (optical fiber cable)
 - 10BASE-36 (broadband coaxial cable carrying multiple baseband channels for a maximum length of 3,600 meters)

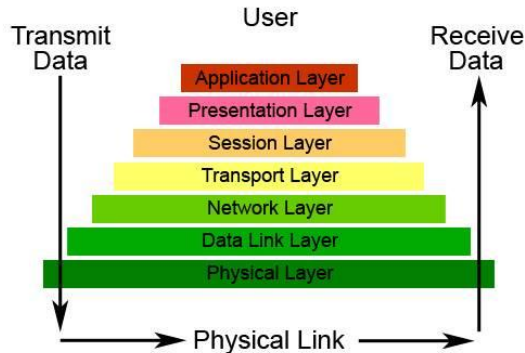
- **BGP Peering** - is the term used for connections between BGP speakers. Technically, any two routers running BGP which have different AS numbers are peering. However, in the Telecommunications and Internet provider arena, the term 'peering' has taken on a politically-loaded meaning that is unrelated to the technical process and more related to the politics of which ISP is paying whom for the connection.
- **Bridge Control Protocol** – a common method to carry Ethernet/802.3 and 802.4/802.5/FDDI frames on PPP.
- **Commercial Peering Service (CPS)** - is a separate Layer-3 IP routing service provided over the Internet2 IP Backbone. The Commercial Peering Service provides Internet2 Connectors with connectivity to commercial networks, such as Content Providers and ISPs, through the establishment of Settlement-Free Interconnects between these networks and Internet2's Commercial Peering Service.
- **Commodity Internet – (aka. The Internet)** - a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve billions of users worldwide. It is a network of networks that consists of millions of private, public, academic, business, and government networks of local to global scope that are
- **Communities of Interest** - a community or group of NETC sites that will exchange information over a private tunnel within the NETC network.
- **Core nodes** – The central switching and routing equipment that carriers connect to that is the basis of a network.
- **Differentiated Services Code Point (DSCP)** - is a field in an IP packet that enables different levels of service to be assigned to network traffic. This is achieved by marking each packet on the network with a DSCP code and appropriating to it the corresponding level of service. DSCP is the combination of IP Precedence and Type of Service fields. In order to work with legacy routers that only support IP Precedence, DSCP values are used because they are compatible with IP Precedence fields.
- **Encryption** - the process of transforming information (referred to as plaintext) using an algorithm (called cipher) to make it unreadable to anyone except those possessing special knowledge, usually referred to as a key. The result of the process is encrypted information (in cryptography, referred to as ciphertext). In many contexts, the word encryption also implicitly refers to the reverse process, decryption (e.g. “software for encryption” can typically also perform decryption), to make the encrypted information readable again (i.e. to make it unencrypted).

- **Ethernet 802.1Q VLAN** - allows a single VLAN header to be inserted into an Ethernet frame.
- **Ethernet QinQ VLAN** - The original 802.1Q specification allows a single VLAN header to be inserted into an Ethernet frame. QinQ allows multiple VLAN headers to be inserted into a single frame, an essential capability for implementing Metro Ethernet network topologies.
- **Generic Route Encapsulation (GRE)** - is a tunneling protocol that can encapsulate a wide variety of network layer protocol packet types inside IP tunnels, creating a virtual point-to-point link to various brands of routers at remote points over an Internet Protocol (IP) internetwork.
- **Interface** - is a point of interaction between two systems or work groups. In the manufacturing environment, the interaction and coordination between a number of work groups communicate plans and control production activity. This interaction can come in the forms of schedule, human interaction, computer systems, or any other medium of communication. A physical interface is the interconnection between two items of hardware.
- **Internet2 Connectivity** - is an advanced networking consortium led by the research and education community. The not-for-profit partnership includes leaders from research, academia, industry and government. In 2009, Internet2 member rolls included over 200 higher education institutions, over 40 members from industry, over 30 research and education network and connector organizations, and over 50 affiliate members.
 - Internet2.edu operates the Internet2 Network, a next-generation Internet Protocol and optical network that delivers production network services to meet the high-performance demands of research and education, and provides a secure network testing and research environment. In late 2007, Internet2 began operating its newest dynamic circuit network, the Internet2 DCN, an advanced technology that allows user-based allocation of high-capacity data circuits over the fiber-optic network.
 - The Internet2 Network, through its regional network and connector members, connects over 60,000 U.S. educational, research, government and "community anchor" institutions, from primary and secondary schools to community colleges and universities, public libraries and museums to healthcare organizations.

- The Internet2 community is actively engaged in developing and deploying emerging network technologies beyond the scope of single institutions and critical to the future of the Internet. These technologies include large-scale network performance measurement and management tools, simple and secure identity and access management tools and advanced capabilities such as the on-demand creation and scheduling of high-bandwidth, high-performance circuits.
 - Internet2 is member led and member focused, with an open governance structure and process. Members serve on several advisory councils, collaborate in a variety of working groups and special interest groups gather at spring and fall member meetings, and are encouraged to participate in the strategic planning process.
- **Interior Gateway Protocol (IGP)** - is a routing protocol that is used within an autonomous system (AS). In contrast an Exterior Gateway Protocol (EGP) is for determining network reachability between autonomous systems and makes use of IGPs to resolve routes within an AS. The interior gateway protocols can be divided into two categories: 1) Distance-vector routing protocol and 2) Link-state routing protocol.
 - **IP VPN** - encapsulates data transfers between two or more networked devices not on the same private network so as to keep the transferred data private from other devices on one or more intervening local or wide area networks. There are many different classifications, implementations, and uses for VPNs.
 - **IPv4** – or TCP/IP, the current version of the Internet Protocol, which is the fundamental protocol on which the Internet is based.
 - **IPv6** – The new Internet Protocol designed to enhance or replace IPv4 by offering a larger number of IP addresses.
 - **Layer 1 and 2** – First two layers of the OSI model. Layer 1 is physical layer and Layer 2 is the Data Link layer.

- **Layer 1 through Layer 7** – Layers of the OSI Model.

The Seven Layers of OSI



- **Metro Ethernet** - is a computer network that covers a metropolitan area and that is based on the Ethernet standard. It is commonly used as a metropolitan access network to connect subscribers and businesses to a larger service network or the Internet. Businesses can also use Metro Ethernet to connect branch offices to their Intranet.
- **MPLS** - is a highly scalable, protocol agnostic, data-carrying mechanism. In an MPLS network, data packets are assigned labels. Packet-forwarding decisions are made solely on the contents of this label, without the need to examine the packet itself. This allows one to create end-to-end circuits across any type of transport medium, using any protocol. The primary benefit is to eliminate dependence on a particular Data Link Layer technology, such as ATM, frame relay, SONET or Ethernet, and eliminate the need for multiple Layer 2 networks to satisfy different types of traffic. MPLS belongs to the family of packet-switched networks.
- **MPLS L3 VPN** - also known as L3VPN, combines enhanced BGP signaling, MPLS traffic isolation and router support for VRFs (Virtual Routing/Forwarding) to create an IP based VPN. Compared to other types of VPN such as IPSec VPN or ATM, MPLS L3VPN is more cost efficient and can provide more services to customers.
- **Multilink PPP Bonding** - creates a bonded or aggregated connection consisting of two independent DSL lines.
- **Northern Crossroads (NOX)** - is an informal affiliation of approximately two dozen institutions with a common interest in facilitating advanced networking in New England. Participants include institutions of higher education and partner organizations that support research, education, and economic development. The goals of the NoX are to:

- Foster advanced networking in support of research and education in New England;
 - Share intellectual capital and material resources to further the development and delivery of advanced network services and applications to our communities;
 - Aggregate services to benefit from economies of scale;
 - Encourage collaboration among participating institutions and our respective academic communities;
 - Consolidate regional representation of our interests to the larger national and international community, and;
 - Collaborate with other organizations pursuing advanced networking.
- **OSI (Open Systems Interconnection)** – A reference model developed by the ISO (International Organization for Standardization). The OSI Reference Model is the only internationally accepted framework of standards for communication between different systems made by different vendors. The OSI model organizes the communications process into seven different categories and places these categories in a layered sequence based on their relation to the user. (*See Layer 1-7*).
 - **Packets** - a formatted block of data carried by a packet mode computer network.
 - **PIM** - is a family of multicast routing protocols for Internet Protocol (IP) networks that provide one-to-many and many-to-many distribution of data over a LAN, WAN or the Internet. It is termed protocol-independent because PIM does not include its own topology discovery mechanism, but instead uses routing information supplied by other traditional routing protocols such as the Border Gateway Protocol (BGP).
 - **Postalize** - to structure rates or prices so that they are not distance sensitive
 - **PPP (Point to Point Protocol) Encapsulation** - A method for encapsulating multi-protocol datagrams. The PPP encapsulation provides for multiplexing of different network-layer protocols simultaneously over the same link.

- **Pseudowire/VPLS** - is an emulation of a layer 2 point-to-point connection-oriented service over a packet-switching network (PSN).
- **Public Key Infrastructure (digital certificate)** - is a set of hardware, software, people, policies, and procedures needed to create, manage, distribute, use, store, and revoke digital certificates [1]. In cryptography, a PKI is an arrangement that binds public keys with respective user identities by means of a certificate authority (CA). The user identity must be unique within each CA domain. The binding is established through the registration and issuance process, which, depending on the level of assurance the binding has, may be carried out by software at a CA, or under human supervision. The PKI role that assures this binding is called the Registration Authority (RA) . For each user, the user identity, the public key, their binding, validity conditions and other attributes are made unforgeable in public key certificates issued by the CA.
- **RADIUS** - is a networking protocol that provides centralized Authentication, Authorization, and Accounting (AAA) management for computers to connect and use a network service. RADIUS was developed by Livingston Enterprises, Inc., in 1991 as an access server authentication and accounting protocol and later brought into the IETF standards.
- **Radius or TACACS** - is a remote authentication protocol that is used to communicate with an authentication server commonly used in UNIX networks. TACACS allows a remote access server to communicate with an authentication server in order to determine if the user has access to the network.
- **Redundancy** - is the duplication of critical components of a system with the intention of increasing reliability of the system, usually in the case of a backup or fail-safe.
- **RFC 2547** - The Internet Engineering Task Force Request for Comment #2547 describes a method by which a Service Provider may use an IP backbone to provide IP VPNs (Virtual Private Networks) for its customers. The full RFC text can be found at <http://tools.ietf.org/html/draft-ietf-l3vpn-rfc2547bis-03>.
- **Secure Shell (SSH) Protocol** - is a protocol that can be used for many applications across many platforms including UNIX, Microsoft Windows, Apple Mac and Linux. Some of the applications below may require features that are only available or compatible with specific SSH clients or servers. For example, using the SSH protocol to implement a VPN is possible, but presently only with the OpenSSH server and client implementation.

- **SLA (Service Level Agreement)** – An agreement between a user and a service provider, defining the nature of the service provided and establishing a set of metrics to be used to measure the level of service provided measured against the agreed level of service.
- **T-1** – a full duplex TDM-based network service that provides 1.536 Mb of throughput.
- **TCP/IP based cloud** - is Internet-based computing, whereby shared resources, software and information are provided to computers and other devices on-demand, like the electricity grid.
- **ToS (Terms of Service)** - are rules by which one must agree to abide by in order to use a service. Usually, such terms are legally binding
- **Tunneling** – Temporarily changing the destination of a packet in order to traverse one or more routers that are incapable of routing to the real destination.
- **Upstream Internet and Internet2 providers** – providers to which a Network connects.
- **Virtual LAN (VLAN)** – essentially a private closed network within a larger network. VLANs allow for networks based on parameters beyond network address. Devices on a VLAN behave as though they are on the same wire, even though they are physically located on different network segments.
- **WAN – (Wide Area Network)** - is a computer network that covers a broad area (i.e., any network whose communications links cross metropolitan, regional, or national boundaries [1]). This is in contrast with personal area networks (PANs), local area networks (LANs), campus area networks (CANs), or metropolitan area networks (MANs) which are usually limited to a room, building, campus or specific metropolitan area (e.g., a city) respectively.
- **Weighted Random Early Discard** - also known as random early discard or random early drop is an active queue management algorithm. It is also a congestion avoidance algorithm.