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FILED/ACCEPTED
MAY - 4 2007
Federal Communications Commission
Office of the Secretary

COMMISSION'S SECRETARY
OFFICE OF THE SECRETARY
FEDERAL COMMUNICATIONS COMMISSION
236 MASSACHUSETTS AVENUE, NE
SUITE 110
WASHINGTON, DC 20002

RE: Rural Health Care Support Mechanism – Pilot Program
WC Docket No. 02-60

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**APPLICATION TO THE
FEDERAL COMMUNICATIONS
COMMISSION (FCC)**

FILED/ACCEPTED

MAY - 4 2007

Federal Communications Commission
Office of the Secretary

**RHC Pilot Program
WC Docket No. 02-60**

Establishing a Statewide Telehealth Network
Developed by the Washington Telehealth Consortium

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May 4, 2007



May 2, 2007

The Honorable Kevin Martin, Chairman
Federal Communications Commission
445 12th Street, SW
Washington, DC

RE: WC Docket No. 02-60
Rural Health Care Pilot Program Application
Washington Telehealth Consortium
State of Washington

Dear Chairman Martin:

On behalf of the **Washington** Telehealth Consortium (WTC) and the Association of **Washington Public** Hospital Districts (AWPHD), I am submitting this application for funding consideration under the FCC Pilot Program – WC Docket No. 02-60. The WTC team is committed to this proposal which will bring enhanced telehealth access to rural citizens in Washington. It will be our honor to work with the Federal Communications Commission who has the same commitment to improve the quality of life for our rural citizens and communities.

The WTC proposal and request for **\$686,382** generates the potential to serve **1,061,000 citizens** in **53 medically** underserved communities throughout the State of Washington. This application will serve one hundred and twenty-six (126) hospitals and clinics of which forty (40) are in rural/medically underserved areas (MUAs).

In the Spring of 2006, the AWPHD brought together key telehealth stakeholders to seek agreement on opportunities to improve the affordability and quality of telehealth services available to Washington's rural hospitals and clinics. Through a combination of personal interviews, surveys and stakeholder forums, several major barriers to available and affordable telehealth services in Washington surfaced as priorities:

- Lack of funding for local telehealth investment and recurring costs;
- Limited bandwidth and/or infrastructure capacity to and within rural communities;
- Poor coordination of statewide and inter-institutional leadership;
- No “business case” for sustainable statewide interconnection;
- Little incentive for inter-network and inter-institutional collaboration;
- Lack of common standards and protocols among existing networks;
- Low user adoption of telehealth services; and
- Unarticulated technical requirements.

The Honorable Kevin Martin
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May 2, 2007

With leadership and financial support from AWPHD, a statewide consortium was formed in October 2006. The Washington Telehealth Consortium (WTC) is open to rural and urban hospitals, telehealth service providers, carriers and state agencies. Founding members of this consortium include eight (8) healthcare organizations, with five (5) that collectively deliver telehealth services to thirty-three (33) rural communities in the state of Washington. Each of the WTC founding members has signed a formal Memorandum of Understanding committing to work together to develop and advance an appropriate statewide telehealth solution. Among its founders, the WTC counts all of the state's major telehealth service providers and the organization (AWPHD) that represents the majority of the state's rural hospitals.

The WTC members recognize that creating a fully functional statewide telehealth network is complex and that effective, sustainable solutions must be developed and implemented in an incremental fashion. This proposal to the FCC's RHC Pilot Program requests funding for the first phase of a broader plan as the first step toward addressing the barriers described above.

The Consortium envisions a telehealth network that will eventually connect hundreds of sites: rural hospitals, rural clinics, tribal health centers, public health departments, mental health service providers, research centers, and urban hospitals. We believe substantial progress toward this vision can be realized within three to five years. Washington's residents will experience improved healthcare quality and cost effectiveness by:

1. Connecting rural health providers to telehealth content and services delivered over Washington's telehealth networks, improving patient access to medical specialists;
2. Bringing professional education opportunities to rural healthcare providers;
3. Linking medical research centers to the "practicing" healthcare community to foster adoption of clinical best practice and facilitate comprehensive collaborative research;
4. Leveraging statewide connectivity to ensure rapid, integrated and coordinated response to a regional or national emergency; and
5. Adopting a common Electronic Medical Record standard.

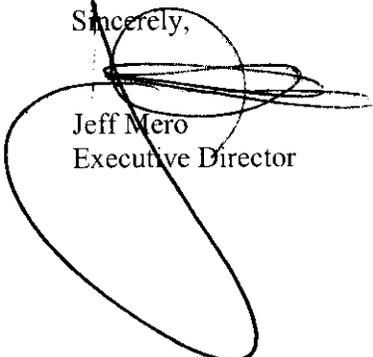
The Association of Washington Public Hospital Districts committed to the matching funds required by the FCC. The Washington Telehealth Consortium intends to request additional funding from the FCC in the second funding period of the RHC Pilot Project to build and implement additional phases of Washington Telehealth Exchange. Matching funds required for the second funding period of the Pilot Program will be sought from the Washington State Legislature, contributions from network stakeholder, and grants.

In closing, I want to commend you for establishing this pilot program and opening the door for the FCC Commission to re-examine the rural health care (RHC) universal service support program. In particular, I am pleased that the FCC Commission has significantly expanded the scope of the RHC under this pilot to encourage infrastructure investment and the deployment of dedicated networks.

The Honorable Kevin Martin
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If you have any questions or need any clarification, please feel free to contact us at
(206)216-5219 or jeffin@awphd.org. Thank you in advance for considering our proposal.
We **look** forward to hearing from you.

Sincerely,



Jeff Mero
Executive Director

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I. EXECUTIVE SUMMARY / ABSTRACT

The Association of Washington Public Hospital Districts (AWPHD) is a non-profit organization established to provide services to the state's public hospitals. In 2006, the AWPHD led an effort to create the Washington Telehealth Consortium (WTC) to work with a wide range of health care organizations to develop a statewide telehealth network. This application seeks **\$686,382** in Federal Universal Service support to conduct a comprehensive network design study and initial network deployment to determine the optimal way to enable the Washington Telehealth Exchange (WTE) to interconnect Washington's disparate telehealth networks with each other and Internet 2 and other advanced communications networks. The AWPHD proposes to commit **\$121,126** in matching funds for this project. AWPHD will be legally and financially responsible for this much needed project.

The project seeks to build on the work of the WTC to design a network that leverages existing telecommunications infrastructure; affordably connects the state's telehealth networks and facilitates access to telehealth services. The project includes the creation of an innovative web portal as a tool to affordably facilitate the network design development and study as well as to aggregate existing network information and resources. By working together to determine needs within the state, the available network resources and the alternative technologies available to interconnect existing networks and connect to Internet2, the costs of the ultimate network investments will be optimized. This project will provide tremendous benefit to rural communities which can use telecommunications technologies to access state-of-the-art health care.

Access to high quality medical care increases significantly when robust telehealth services are easily accessible to healthcare providers, especially those serving rural and medically underserved communities. Such access **also** reduces the cost and impact of illness on individuals, families and employers by bringing specialized services—especially diagnostic services and follow-up care—to remote communities.

Washington State has a number (no less than six) of well-established and experienced telehealth networks. However, each operates independently, with limited coordination, interconnection and collaboration among the networks. Though all involved recognize the potential benefits of statewide collaboration, agreement on a mutually beneficial collaborative model has been elusive. As a result, the potential benefit telehealth services might offer rural Washington's health care providers and residents has never been fully articulated, let alone realized.

In the Spring of 2006, the Association of Washington Public Hospital Districts (AWPHD) brought together key telehealth stakeholders to seek agreement on opportunities to improve the affordability and quality of telehealth services available to Washington's rural hospitals and clinics. Through a combination of personal interviews, surveys and stakeholder forums, several major barriers to available and affordable telehealth services in Washington surfaced as priorities:

- Lack of funding for local telehealth investment and recurring costs;
- Limited bandwidth and/or infrastructure capacity to and within rural communities;
- Poor coordination of statewide and inter-institutional leadership;
- No "business case" for sustainable statewide interconnection;
- Little incentive for inter-network and inter-institutional collaboration;
- Lack of common standards and protocols among existing networks;
- Low user adoption of telehealth services; and
- Unarticulated technical requirements

With leadership and financial support from AWPHD, a statewide consortium was formed in October 2006. The Washington Telehealth Consortium (WTC) is open to rural and urban hospitals, telehealth service providers, carriers and state agencies. Founding members of this consortium include eight (8) healthcare organizations, with five (5) that collectively deliver telehealth services to forty (40) rural communities in the state of Washington. Each of the WTC founding members has signed a formal Memorandum of Understanding committing to work together to develop and advance an appropriate statewide telehealth solution. Among its founders, the WTC counts all of the state's major telehealth service providers and the organization (AWPHD) that represents the majority of the state's rural hospitals.

The WTC members recognize that creating a fully functional statewide telehealth network is complex and that effective sustainable solutions must be developed and implemented in an incremental fashion. This grant application to the FCC's RHC Pilot Program requests funding for the first phase of a broader plan as the first step toward addressing the barriers described above.

The first step (Phase I) in creating a statewide network will be the interconnection of Washington's existing telehealth networks. The interconnection of Washington's telehealth networks is an essential step in creating a formal "network-of-networks" and will serve as the foundation of the statewide network. This initiative aggregates the needs of **forty (40) rural health care** facilities and offers improved utility and expanded markets to existing regional telehealth networks in the state of Washington.

Phase I includes development of a **web portal** that will support a **directory** of services and a common calendar that service providers will share; and provide access to continuing professional education content and specialty clinical telehealth applications, and enhance participants' ability to conduct collaborative activities statewide (such as videoconferencing).

The interconnection of existing regional networks provides immediate benefits to those hospitals and clinics currently connected to a telehealth network and offers existing telehealth networks increased utility and the opportunity to expand their markets. These gains can be achieved at costs that are sustainable.

However, the application makes clear that Phase I is only a step toward a broader vision.

With this broader vision in mind, the federal support sought under this application will also fund the network design study which will produce a blueprint for a scalable, robust network that provides adequate local infrastructure (e.g., last mile, last 100 feet), rationalizes recurring subscription and connection costs, and eliminates geographic location as a barrier to realizing the benefits of telehealth and telemedicine. The Washington Telehealth Consortium is committed to creating a comprehensive statewide telehealth network solution—the Washington Telehealth Exchange (WTE).

The Consortium envisions a telehealth network that connects hundreds of sites: rural hospitals, rural clinics, tribal health centers, public health departments, mental health service providers, research centers, and urban hospitals. We believe substantial progress toward this vision can be realized within three to five years. Washington's residents will experience improved healthcare quality and cost effectiveness by:

1. Connecting rural health providers to telehealth content and services delivered over Washington's telehealth networks, improving patient access to medical specialists;
2. Bringing professional education opportunities to rural healthcare providers;
3. Linking medical research centers to the "practicing" healthcare community to foster adoption of clinical best practice and facilitate comprehensive collaborative research;
4. Leveraging statewide connectivity to ensure rapid, integrated and coordinated response to a regional or national emergency; and

5. Working toward the adoption of a common Electronic Medical Record standard.

Total expected costs for Phase I development is **\$857,138** of which **\$807,508** are eligible for funding and **\$49,630** are ineligible; ineligible funds will be covered by the Association of Washington Public Hospital Districts.

Of the total eligible funds (**\$807,508**), the Washington Telehealth Consortium is requesting **\$686,382 (85%)** in Federal Universal Service support to build the Washington Telehealth Exchange, including the design and creation of a Web-Portal, and to facilitate interconnection of Washington's disparate telehealth networks. The Association of Washington Public Hospital Districts will commit **\$121.126 (15%)** in matching funds to this project. AWPHD will serve as the legal entity applying for this grant and hold the fiscal and legal responsibility for the project.

This request contains only one (1) year of funding; the Washington Telehealth Consortium intends to request additional funding from the FCC in the second funding period of the RHC Pilot Project to build and implement additional phases of Washington Telehealth Exchange. Matching funds required for the second funding period of the Pilot Program will be sought from the Washington State Legislature, contributions from network stakeholder, and grants.

Once established, the project will be sustained through revenues generated from additional health care services provided under the pilot and the support of the project partners.

II. PROJECT SUMMARY

<i>Type of Proposal:</i>	Network Design Studies / Initial Network Deployment
<i>Legal Applicant:</i>	Association of Washington Public Hospital Districts (AWPHD)
<i>FCC/RHC Request:</i>	\$686,382
<i>Matching Dollars:</i>	\$121,126
<i>Service Area:</i>	Washington State
<i>Rural Sites:</i>	40 (please see Appendix C for complete listing)
<i>Urban Sites:</i>	93 (please see Appendix C for complete listing)

A. Purpose

The Washington Telehealth Consortium (WTC) is a diverse group of medical organizations working together to improve healthcare options for all Washingtonians, with special emphasis on rural and medically underserved areas. In the WTC's proposal to the Federal Communications Commission (FCC), the WTC seeks funding for a comprehensive network design study and initial network deployment to carefully weigh the current and future telehealth needs of Washington and optimize the design of a multi-phased initiative known as the Washington Telehealth Exchange (WTE). The WTE will be designed to connect existing telehealth networks within the state and provide connections to Internet2 and other advanced communications networks as well as allow medical professionals to use the network to share resources, access medical information, facilitate remote consultation and facilitate the transmission of electronic medical records. The network design study will also consider ways to ensure that the network and its protocols facilitate expansion of the network and ensure its compatibility with networks outside the state with an eye towards being part of an eventual national high capacity telehealth network. The WTC expects to apply to the FCC for a second year for the continued development of the WTE.

Funding for the network design study will provide an opportunity for the WTC to explore the most efficient, effective means of delivering telehealth/telemedicine to rural areas. It will allow the WTE to determine an economically reasonable means to enhance access for advanced telecommunications and information services to multiple locations and will allow the exploration of various technologies to connect our rural/underserved health care facilities.

The WTE will be an open, robust, multi-purpose telehealth and information network available to all health service vendors (including independent telehealth networks), hospitals and healthcare clinics operating in Washington State. Once the multi-phased plan is implemented, the WTE will provide fee-based telehealth services and applications over a statewide network backbone by creating a "marketplace" that facilitates and aggregates the demand for, and supply of, telehealth solutions.

Funding the WTE's proposal will provide an opportunity for health care providers within the State of Washington to benefit from advanced applications for health care, education and research.

B. Background

The scope of work and project design presented in our proposal to the RHC Pilot Program reflect a long process involving the effort and expertise of approximately 45 committed professionals representing a broad array of organizations, each of whom believe the quality of healthcare for all Washingtonians can, and therefore must, be enhanced by the purposeful expansion of telehealth services and applications throughout Washington State. In this sub-section, the backgrounds of telehealth networks in Washington State and the way this group has developed a plan to improve the access and application of these networks are described.

As the costs of healthcare remain a constant challenge at national, state and local levels, there is a strong need to find solutions. Areas in which costs may be contained include clinician and administrative work flow efficiencies, patient data transfer, reduction of duplicate testing, and reduction of unnecessary office visits. In each of these areas, a robust and appropriately deployed statewide telehealth and information network has the potential to contribute strongly to Washington State's effort to contain costs.

Telehealth and information networking services are helping Washington State's hospitals and clinics in rural and underserved communities to meet specific challenges which are magnified by the reality of limited monetary and human resources, including; continued certification of specialty services, recruitment and retention of qualified physicians and technicians, continuing education for medical staff, increased efficiencies and effectiveness of administrative workflow, adequate reimbursement for services rendered, deferred medical care, and costly medical related travel.

While each of these challenges are mitigated by strategic applications of an appropriately designed and implemented telehealth and information network, many critical access hospitals and clinics are disconnected from, or underserved by, the existing networks.

A statewide telehealth network in Washington State has the potential to improve healthcare outcomes, efficiencies in delivery, and cost effectiveness. Healthcare consumers from rural and underserved communities often encounter limited local healthcare options, which results in either deferred medical care or costly travel. Deferred medical care can create potential for acute medical conditions and/or chronic health problems. Travel for medical care creates non-reimbursable individual costs as well as broader community losses. Deferred medical care and expensive medical-related travel are both inconvenient and potentially harmful to patients.

The ability of the WTC to design and implement a statewide telehealth network has far reaching implications. In fostering broad implementation of telehealth technologies within the statewide healthcare environment, the Washington Telehealth Consortium **will** help to improve healthcare quality and cost effectiveness as well as build the capacity in the state to:

1. Connect rural health providers to telehealth content and services delivered by Washington's telehealth networks, allowing patients to access critically needed medical specialists;
2. Provide high quality continuing professional education opportunities to healthcare providers;
3. Link medical research centers and facilities to the broader healthcare community to foster and facilitate comprehensive collaborative research opportunities;
4. Leverage statewide connectivity to provide rapid and coordinated response in the event of a regional or national emergency; and
5. Adopt a common Electronic Medical Record standard

The proposed network design study will work with a wide range of medical professionals and institutions to ensure that the specific needs of rural health care providers are aggregated and served, the existing infrastructure is leveraged and affordable, interoperable, scalable and adaptable technologies are used when the WTE is deployed.

C. Telehealth Networks in Washington State

The state of Washington is served by no fewer than six distinct and well-established telehealth networks. With some exception, current service areas are segmented geographically by western, eastern, and central regions. In general, a majority of the market-share in a respective region is served by one major network with other telehealth providers filling niche markets. Figure 1 depicts the existing coverage of these telehealth networks.

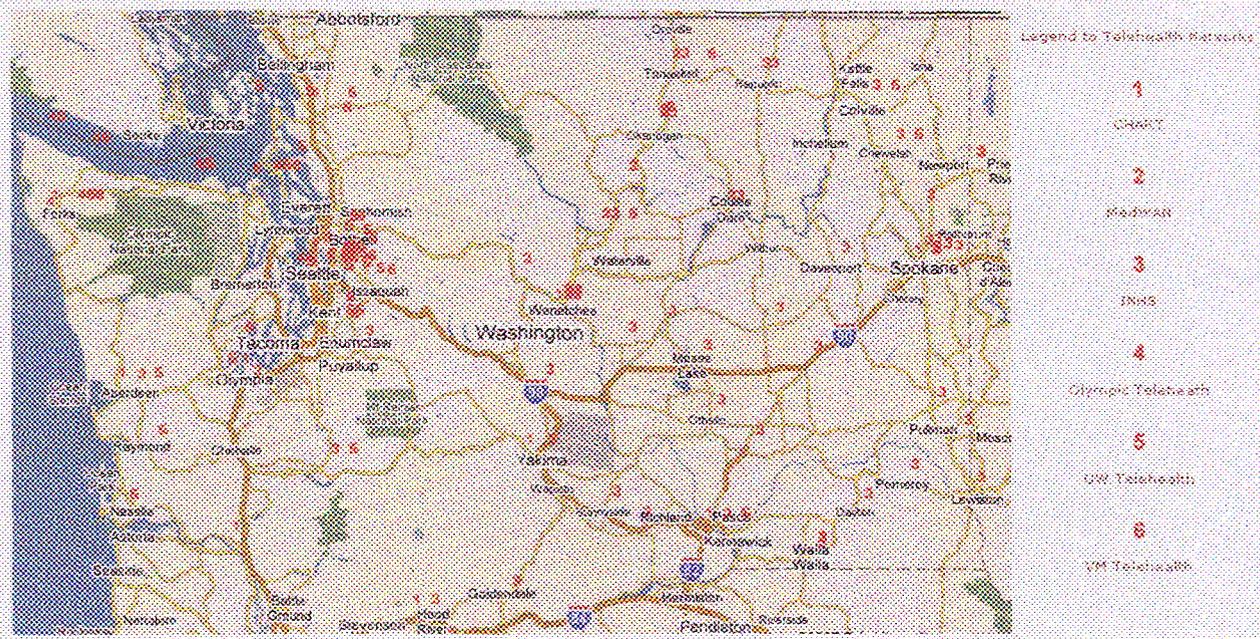


Figure 1: Coverage of Existing Telehealth Networks in Washington State.

Currently, no adequate mechanism to interconnect Washington’s robust-although-disparate telehealth networks is in place. Each network is operated independently, offering a limited level of interconnection and/or collaboration with other networks. The sharing of voice, video, and data traffic between Washington’s telehealth networks is currently possible; however, the methods used are inconvenient, costly and inefficient. Variances and incompatibilities among disparate networks’ platforms, policies, technical protocols, and business models complicate the disjointed condition of Washington’s telehealth and information networks; a condition complicated by the presence of both private, closed networks and public, open networks. For example, some networks maintain their operations with grant funds, and are therefore able to provide services at no charge to rural hospitals. Other networks must charge a subscription fee in order to support operations and programs.

Many rural hospitals and clinics are disconnected from, or underserved by, the existing telehealth networks. Barriers to accessing telehealth services in Washington’s rural and medically underserved areas include: inadequate local infrastructure, insufficient funding at a given hospital to sustain recurring subscription and connection costs, and frequently the lack of available telehealth service coverage due to geographic location.

For those hospitals and clinics able to access network provided telehealth services, the cost of connection and membership is high, and organizations face the dilemma of choosing their service. Often, hospitals and clinics in Washington State must subscribe to one telehealth network that may not adequately support their needs. In order to combat these service gaps some hospitals choose to maintain multiple subscriptions to disparate telehealth networks, but due to the prohibitive cost this is not an option open to many and this “solution” is antithetical to the overall goal of lowering healthcare costs.

Washington State, like many western states, has significant rural populations living in what the Health Resources and Services Administration (HRSA) designates as Medically Underserved Areas (MUAs). There are **53 MUAs** in Washington State; the state's total population of 5,894,121 is spread over a 84,989 square mile area, with **18% living in rural areas**. 10.6% of Washington's population lives below the poverty level. Key findings for Washington State include:

- Need for clinical specialty services in radiology, pharmacy, psychiatry, oncology, pediatric, physical therapy and other tertiary care services.
- Rural and urban telehealth sites are persistently challenged to sustain telehealth networks in such a way that the provision of these services remains affordable.

The conclusion for Washington State drawn by the WTC explicitly calls for the establishment of a statewide open network, or an open network of networks. In part, the WTE's multi-phased plan responds to the discovered needs for Washington State.

D. WTC Process Background

Utilizing a progressive succession of processes, the WTC has identified and defined a set of goals and objectives to be addressed by the creation of the WTE (please refer the WTE Plan for a full description of the goals and objectives).

Beginning March of 2006, a broad coalition of partners created a collaboration to work toward establishing a statewide network. This work has been funded by the Association of Washington Public Hospital Districts (AWPHD) and grants from the Washington State Office of Community and Rural Health (OCRH, part of the Washington State Department of Health). To date, the AWPHD has contributed \$82,275 from their general operations funds and the OCRH has contributed \$43,000 through two FLEX grants. In total, \$125,275 have been committed to the development of the WTC and spent on meeting expenses and contracts with Washington State University Center to Bridge the Digital Divide, e-Copernicus, and NCI.

Visioning Process

The visioning effort was the first step in an open-ended process designed to study the need for a statewide telehealth solution for Washington State. The visioning effort was intended to lead to, and bring about, specific and intentional change in the near-term future (3 to 5 year timeframe). The visioning effort aimed to bring forth ideas for improving the access to, and application of, telehealth and information networks **by** rural healthcare providers. Implemented in March, 2006, the visioning effort has included an interview phase, utilizing the qualitative research method Ethnographic Futures Research, and a series of stakeholder meetings.

Following the interview phase, a face-to-face meeting was conducted on June 6, 2006 at which 20 representatives of various health organizations from around Washington State participated in a role playing activity designed to elicit insight on perceived disconnects between stakeholder groups and to develop consensus on key areas which emerged during the interviews and exploratory discussions. A synthesis of findings from the Visioning Process is characterized in four ways:

- A more full description of current telehealth network conditions in Washington State.
- The need for a statewide telehealth network to ameliorate the perceived inadequacies in addressing problems faced by rural hospitals and clinics and a composite vision of proposed statewide telehealth network conditions.
- Specific set of recommendations for future actions for achieving a desirable future vision.

- An action plan for the continued development of a statewide telehealth solution, which resulted in the Planning Process (see below).

Planning Process

Based on the findings from the Visioning Process, stakeholders participated in the Planning Process to create a comprehensive plan for a statewide telehealth and information network capable of addressing the inadequate availability of a seamless data and healthcare information connection throughout the state. The network must have an emphasis on rural and medically underserved areas, and must use standardized technical and administrative protocols for data sharing and exchange. Finally, the network must be supported by a sustainable leadership and funding structure. To create the comprehensive plan, the Planning Process was organized into two parts.

Planning Process: Part I

The first part of the planning process was designed to address the main areas of inadequate services, as identified in the visioning process, that block the creation of an open statewide telehealth and information network, including:

- 1) Lack of a seamless data and healthcare information connection throughout the state
- 2) Lack of standardized protocols for data sharing and exchange.
- 3) Lack of sustainable funding and leadership structures to support a statewide telehealth and information network.

To address these barriers, the Planning Process further rephrased these problematic areas as actionable issues in the following ways:

- **Interconnection** – The physical linking of existing telehealth networks with equipment, including the connection of facilities not belonging to any telehealth network.
- **Interoperability** – The ability of multiple telehealth networks to interact with one another and exchange information in order to achieve predictable results.
- **Governance** - The use of institutions, structures of authority to allocate resources and coordinate or control activity among key stakeholders.

Based on these issues, three workgroups were formed and charged with the task to develop a “best bet” plan for their assigned issue: Interconnection, Interoperability, and Governance. The workgroups, consisting of stakeholders with expertise germane to their assigned issue, were recruited from Washington’s disparate telehealth networks and rural hospitals. Each workgroup was then charged to brainstorm and design a practical strategy to significantly advance a solution for their issue.

After the initial workgroup meetings, conducted via teleconference, the three groups came together on October 3, 2006 for a face-to-face work session to further develop their plan and to share their progress with the other workgroups.

Participants at the October 3rd meeting agreed that advancing and implementing a strategic vision for rural hospitals and clinics to have affordable and effective access to a statewide telehealth system is both a possibility and a priority. In addition, it was agreed that in order to efficiently and cost-effectively implement a responsive statewide telehealth approach, solutions should be designed to align and integrate with current telehealth networks and initiatives in Washington State. This group considered and then discarded the option to create a new, parallel telehealth network; it was at the October 3rd meeting that the decision was made to form the Washington Telehealth Consortium (WTC) that would design and implement the Washington Telehealth Exchange (WTE).

Participants suggested that future WTC efforts should concentrate on four key actions:

1. Gather all available information on current telehealth infrastructure, equipment, and services that can be leveraged to interconnect Washington's telehealth networks, hospitals, and clinics on a common Internet-based platform.
2. Identify gaps in available connectivity for rural hospitals and clinics
3. Strengthen infrastructure capacity at sites that are not able to adequately connect to the Internet using existing resources.
4. Assemble a consortium of stakeholders to pursue funding needed to interconnect existing telehealth networks and ameliorate infrastructure weaknesses at select rural hospitals.

A second face-to-face meeting was conducted on November 20th, 2006. Agreements reached include:

- The WTC will formalize the collaborative efforts of current and future partners using an MOU-styled agreement.
- The WTC members identified the RHC Pilot Program (for which this proposal is written) as a top priority for the development of the WTE.
- The Association of Washington Public Hospital Districts, acting as the convener of the WTC, was chosen as the lead applicant for the proposal to the RHC Pilot Program.

Planning Process: Part II

Part II of the Planning Process was marked by stakeholders signaling their commitment to the WTC and the WTE plan by signing a Memorandum of Understanding. As might be expected among any consortium of large organizations, the signing process of the MOU is open-ended. WTC member organizations include a varied group of stakeholders (i.e., hospitals, private non-profit organizations, associations, private sector organizations). Many members are nationally recognized for excellence in telehealth service delivery. To date, the following organizations have signed the MOU and thereby officially joining the WTC.

- The Association of Washington Public Hospital Districts
- The Washington State Hospital Association
- Inland Northwest Health Services (parent of the Northwest Telehealth Network)
- University of Washington Medicine
- Virginia Mason Medical Center
- GCI (parent of the Medical WAN)
- Forks Community Hospital
- Garfield County Memorial Hospital

WTC's MOU-signing process remains open and new member organizations are invited to join and will be actively recruited once the WTE is established. It is expected that as the WTC begins the implementation of the WTE, many organizations who have already expressed interest in joining the WTC will sign the MOU.

As defined in the MOU document, all WTC activities are overseen by a Steering Committee, chaired by Jeff Mero, the Executive Director of the AWPHD. The Steering Committee decided on a strategy to investigate and develop the essential components of the WTC grant proposal, which included the formation of three distinct task groups:

- The Network Design task group investigated and articulated several options for the WTE plan. Network Design options, inclusive of budget figures, were presented for the consideration of the Steering Committee.
- The Governance task group investigated and articulated viable options for the governance of a statewide network. Governance options, inclusive of budget figures, were presented for the consideration of the Steering Committee and the Consortium at large.
- The Funding task group was primarily responsible for aggregating the business plan and completing those sections of the WTE business plan that are not explicitly addressed by either the Governance or Network Design task groups. These sections include the provision of background information on the WTC and WTE, creating a final budget, producing a financial projection summary, etcetera.

As a complementary activity, the AWPHD conducted a Telehealth Readiness survey designed to better understand the needs and opportunities for telehealth use among the AWPHD membership, which includes 53 rural hospitals and clinics. The survey was completed by 34 of the 53 AWPHD members (a response rate of 64%). Key findings from this survey were integrated into the design of WTE's multi-phased plan (please see Appendix B for full survey results); a sample of these findings is below:

- 7 respondents (21%) belong to no telehealth network; 19 (55%) belong to 1 telehealth network; 4 (24%) belong to 2 or more telehealth networks.
- 3 respondents (9%) report that telehealth costs outweigh the value
- The top three telehealth services used by the respondents: 73% receive Continuing Medical Education services; 71% receive videoconferencing services; and 59% receive Grand Rounds services.
- 27 respondents (79%) report that lower subscription costs would either moderately or highly improve utilization of telehealth services and applications; 25 respondents (74%) report that improved access to telehealth networks would either moderately or highly improve utilization of telehealth services and applications.

Note: Minor discrepancies regarding hospital membership in telehealth networks have been observed in the survey data. Because the survey may have been completed by hospital personnel who were unaware of their network membership, the list of healthcare facilities included in Section VIII and Appendix C of this application are based on data provided by the telehealth networks and in some cases may conflict with survey results.

The recommendation of the three task groups, combined with the results from the AWPHD Telehealth Readiness and the other available telehealth surveys have been distilled and synthesized by the WTC Steering Committee and shaped as the WTE multi-phased plan. Our proposal to the RHC Pilot Program seeks funding for Phase 1.

111. LEGAL & FINANCIAL RESPONSIBILITY

The Association of Washington Public Hospital Districts (AWPHD) is the applicant for the Federal Communications Pilot Program that will examine how the rural health care (RHC) funding mechanism can be used to enhance public and non-profit health care providers' access to advanced telecommunications and information services.

The Association of Washington Public Hospital Districts has served as the trade association for Washington State's public hospital districts since 1952, first as an unincorporated association and since 1998 as a **non-profit corporation**. Each of the member public hospital districts is a governmental entity created by state law and each public hospital district **is** governed by a board of publicly elected commissioners.

The Association's activities can generally be divided into two categories: education and advocacy.

The Association's educational activities focus on the unique characteristics of being a governmental entity and improving the delivery and accessibility of healthcare in hospital district communities. The Association provides members with updates of changes in state and federal law likely to impact public hospital districts.

The Association also provides an opportunity for members to expand their capabilities as hospital district administrators and board members by providing a forum for networking with their peers. Those networking opportunities permit the administrators and board members to learn from others' experience and promote cooperative activities and affiliations among different public hospital districts.

The Association engages in advocacy in order to promote:

- 1) Increased accessibility to and affordability of healthcare services; and
- 2) Improved health status of communities throughout Washington State

The Association works to create policy and engages in advocacy on vision-driven issues and topics of special interest to public hospital districts.

IV. GOALS & OBJECTIVES OF THE WTE

Goals

The overall impact of the WTE will result in:

- 1) Increased affordable access to telehealth services by hospitals and clinics in rural and underserved communities.
- 2) Improved ability among rural and medically underserved communities to effectively access and utilize telehealth services.
- 3) Sustainable value for all WTE members by interconnecting and enhancing existing telehealth networks in Washington State with the longer-term goal of linking to regional and national telehealth networks and vendors.
- 4) Leveraging telehealth services to make healthcare more effective and less expensive for all Washingtonians, especially those in medically underserved areas.

Objectives

Objectives of the Washington Telehealth Consortium to achieve the stated goals of the WTE include:

- 1) The design and implementation of a statewide telehealth network that takes-into-account and overcomes barriers (geographical, technological, financial, etc.) faced by hospitals and clinics in rural and underserved areas of Washington State.
- 2) The creation and launch of the WTE Web Portal resulting in the increased capacity of rural and medically underserved communities to identify and access much needed telehealth services and content.
- 3) Designing a model for the equitable interconnection of public and private networks with the aim of facilitating continued collaborative efforts and enhancing the performance of these telehealth networks in service delivery across Washington State. Additionally, the WTE Web Portal will increase the ability of Washington's telehealth networks to reach members of their target market who may have been previously inaccessible due to geographic and technological boundaries.
- 4) Designing and implementing a comprehensive statewide network, creating the WTE Web-Portal, and interconnecting disparate telehealth networks in Washington State, resulting in improved health care outcomes for citizens of Washington State by creating efficiencies in the delivery and cost effectiveness of healthcare. Healthcare consumers from rural and underserved communities often encounter limited local healthcare options, which results in either deferred medical care or costly travel. Deferred medical care can create potential for acute medical conditions and/or chronic health problems. Travel for medical care creates non-reimbursable individual costs as well as broader community losses. Deferred medical care and expensive medical-related travel are both inconvenient and potentially harmful to patients.

V. WTE PHASE' 1 TOTAL COSTS

Estimated Project Costs for Phase I

Funding requested from the FCC for:

<u>Description</u>	<u>Eligible</u>	<u>Not Eligible</u>	
o Administrative		\$49,630	
o Research & Design Activities	\$288,750		
o WTE Interconnection Point	\$217,158		
o WTE Web Portal	\$141,600		
o Public / Private Network Collaborative Model	\$160,000		PROJECT TOTAL
TOTAL	\$807,508	\$49,630	\$857,138

Please note:

- AWPHD will contribute \$40,630 (5.8% of project total) to cover the ineligible funds.
- AWPHD will provide \$121,126 (15% of eligible project total) as match.
- Total Requested from FCC is \$686,382 (85% of eligible project total).

VI. FOR-PROFIT PARTICIPATION

Creating and fostering increased levels of competition in Washington's telehealth market will result in more and less expensive telehealth service and application choices for hospitals and clinics in rural and underserved communities. As well, broadening the telehealth market will give telehealth providers more financial incentive to serve the niche market needs of rural hospitals.

Access to telehealth resources on a statewide basis will assist rural hospitals and clinics in identifying, recruiting, and retaining qualified physicians, clinical specialists, and technicians that offer the delivery of their services via telehealth methods.

Although membership to the Washington Telehealth Exchange statewide network is open to all relevant and interested healthcare organizations in Washington State, only non-profit entities will receive subsidy or financial assistance in connecting to the network architecture.

For-profit network participants will be required to fund their own access to the WTE Interconnection point as part of Phase I. Depending on ultimate network design results, for-profit network participants will not be eligible to receive any subsidy in funding their connection to the proposed statewide network in Phase II. Additionally, for-profit network participants may pay higher membership fees than their non-profit counterparts.

VII. FINANCIAL SUPPORT SOURCES / ANTICIPATED REVENUE

The estimated recurring annual cost to sustain Phase 1 activities (beyond Year 1) is \$30,240, which will be covered by a nominal annual WTE Member subscription incurred by the participating telehealth networks. The WTC will seek funding on the behalf of the participating telehealth networks to reduce or complete off-set these subscription fees. The viability of the WTE will depend on the WTC's ability to provide value to its members and incentive for continued collaboration.

VIII. HEALTHCARE FACILITIES

126 healthcare facilities in Washington State will benefit from the Phase 1 of the WTE Plan. Each is listed in the following tables. The organization's name, address, city, zip code, phone, and RUCA code are included for each listed facility

	Organization	Address	City	Zip Code	Phone	RUCA
1	Caribou Trail Professional Medical Services	520 W Indian Ave.	Brewster	98812	(809) 689-4000	10
2	Caribou Trail Professional Medical Services	829 Jasmine St.	Omak	98841	(509) 826-6704	7
3	Cascade Medical Center #	817 Commercial Street	Leavenworth	98826	(509) 548-5815	10.4
4	Central Washington Hospital	1201 South Miller Street	Wenatchee	98801	(809) 662-1511	1
5	Children's Hospital & Regional Medical Center	4800 Sand Point Way NE	Seattle	98105	(206) 987-2000	1
6	Clallam Bay Medical Clinic	74 Bogachiel St	Clallam Bay	98326	(360) 374-6998	10
7	Clallam County Department of Health and Human Services	223 E 4th St	Port Angeles	98362	(360) 417-2303	4
8	Columbia Basin Hospital *	200 Nat Washington Way	Ephrata	98823	(809) 754-4631	7.4
9	Columbia Valley Community Health Clinic	600 Orondo Avenue, Ste 1	Wenatchee	98801	(509) 662-6000	1
10	Coulee Community Hospital *	411 Fortuyn Road	Grand Coulee	99133	(509) 633-1783	10
11	Coyote Ridge Corrections Center	1301 N Ephrata Ave	Connell	99326	(809) 543-8800	7.3
12	Dayton General Hospital *	1012 S. Third Street	Dayton	99328	(809) 382-2531	7.4
13	Deaconess Behavioral Medicine	800 W 8th Avenue	Spokane	99204	(809) 488-8800	1
14	Deaconess Medical Center	800 West Fifth Avenue	Spokane	99204	(809) 488-5800	1
18	Deaconess Regional Hyperberic and Comp Wound Care Center	800 W 8th Avenue	Spokane	99204	(809) 488-5800	1
16	Deer Park Hospital *	1015 E D Street	Deer Park	99006	(509) 382-2531	2
17	Enumclaw Regional Hospital *	1450 Battersby Avenue	Enumclaw	98022	(360) 825-2508	1
18	Family Medicine Spokane / Internal Medicine	104 W 5th Avenue	Spokane	99204	(509) 624-2313	1
19	Ferry County Memorial Hospital *	30 Klondike Road	Republic	99166	(809) 778-3333	10
20	Forks Community Hospital *	530 Bogachiel Way	Forks	98331	(360) 374-6271	7
21	Fred Hutchinson Cancer Research Center	1100 Fairview Ave. N	Seattle	98109	(206) 667-5000	1
22	Garfield County Public Hospital *	66 North 6th St.	Pomeroy	99347	(509) 843-1891	10.4

	Organization	Address	City	Zip Code	Phone	RUCA
23	Grays Harbor Community Hospital	915 Anderson Drive	Aberdeen	98520	(360) 537-5000	4
24	Grays Harbor County Public Health & Social Services Dept	2109 Sumner Ave	Aberdeen	98520	(360) 532-8631	4
25	Harborview Medical Center	325 Ninth Avenue	Seattle	98104	(206) 731-3000	1
26	Harrison Medical Center	2520 Cherry Avenue	Bremerton	98310	(360) 377-3911	1
27	Healthy Options Home Health	657 Okanogan Avenue	Wenatchee	98801	(509) 663-9585	1
28	Highline Medical Center/Specialty Campus	12844 Military Road South	Tukwila	98168	(206)244-0180	1
29	Holy Family Hospital	5633 North Lidgerwood St.	Spokane	99208	(509) 482-0111	1
30	Inland Imaging / Duvoisin & Associates	501 N Riverpoint	Spokane	99202	(509) 363-7300	1
31	Inland Northwest Blood Center	210 W Cataldo Ave	Spokane	99201	(509) 232-4492	1
32	Inter Island Medical Center	550 Spring St.	Friday Harbor	98250	(360) 378-2141	10
33	Island Hospital	1211 24th	Anacortes	98221	(360) 299-1300	4.2
34	Jefferson Healthcare #	834 Sheridan Avenue	Port Townsend	98368	(360) 385-2200	7
35	Jefferson Mental Health Services	884 W Park Street	Port Townsend	98368	(360) 385-2200	7
36	Kennewick General Hospital	900 South Auburn	Kennewick	99336	(509) 586-6111	1
37	Kitsap Mental Health	5455 Almira Drive NE	Bremerton	98311	(360)692-1582	1
38	Kittitas Valley Community Hospital *	603 S Chestnut	Ellensburg	98926	(509) 962-9841	4
39	Klickitat Valley Health *	310 S. Roosevelt Box 5	Goldendale	98620	(509) 773-4022	7
40	Lake Chelan Clinic, P.C. #	219 E Johnson	Chelan	98816	(509) 682-2511	7.3
41	Lake Chelan Community Hospital *	503 E. Highland	Chelan	98816	(509) 682-3300	7.3
42	Lincoln Hospital *	10 Nicholls Street	Davenport	99122	(509) 725-7101	10.4
43	Makah Tribe - Indian Health Services Clinic	PO Box 115	Neah Bay	98357	(360)645-2201	10
44	Mark Reed Hospital *	322 South Birch Street	McCleary	98557	(360) 495-3244	3
45	Mason General Hospital *	901 Mt. View Dr., Bldg. 1	Shelton	98584	(360) 426-1611	4.2
46	Medical WAN	285 Technology Center Way	Wenatchee	98801	(509) 669-1030	1
47	Mid-Valley Hospital *	810 Jasmine	Omak	98841	(509) 826-1760	7
48	Mid-Valley Medical Group Clinic #	529 Jasmine St	Omak	98841	(509) 826-1600	7
49	Morton General Hospital *	521 Adams Street	Morton	98356	(360)496-5112	10.5
50	Mount Carmel Hospital *	982 East Columbia	Colville	99114	(509) 684-2561	8
51	Newport Hospital & Health Services *	714 West Pine	Newport	99156	(509) 441-2441	2
52	North Central EMS	135 S Worthen Ave Ste 300	Wenatchee	98801	(509) 664-4032	1

	Organization	Address	City	Zip Code	Phone	RUCA
53	North Valley Hospital *	203 S Western Avenue	Tonasket	98855	(509)486-2151	10.6
54	Northwest Medstar	6315 E. Rutter	Spokane	99212	(509) 536-5462	1
55	Northwest TeleHealth	601 W 1st Ave	Spokane	99201	(509)232-8100	1
56	NW Neurological / NW Collaborative Care	507 S. Washington	Spokane	99204	(509) 458-7720	1
57	Ocean Beach Hospital *	174 First Ave. North	Ilwaco	98624	(360) 642-3181	7
58	Odessa Memorial Healthcare Center *	502 E Amende	Odessa	99159	(509) 982-2611	10.4
59	Okanogan Douglas District Hospital *	507 Hospital Way	Brewster	98812	(509)689-2517	10
60	Okanogan Regional Home Health and Hospice	800 South Jasmine	Omak	98841	(509) 422-6721	7
61	Olympic Medical Cancer Center	844 N. Fifth Ave	Sequim	98382	(360) 683-9895	7.4
62	Olympic Medical Center	939 Caroline Street	Port Angeles	98362	(360) 417-7000	4
63	Omak Clinic (Wenatchee Valley Clinic) #	916 Koala Dr.	Omak	98841	(509) 826-2109	7
64	Othello Community Hospital *	315 North 14th	Othello	99344	(509) 488-2636	7
65	Partners with Families and Children	613 S Washington St.	Spokane	99204	(509) 473-4827	1
66	Pend Oreille County Counseling Services	105 S Garden Ave	Newport	99156	(509)447-5651	2
67	Peninsula Mental Health	118 East 8th Street	Port Angeles	98362	(360) 457-0431	4
68	Prosser Memorial Hospital *	723 Memorial Street	Prosser	99350	(509) 786-2222	7.3
69	Providence Services (Administrative)	9 E 9th Avenue	Spokane	99202	(509) 474-7337	1
70	Pullman Regional Hospital *	835 SE Bishop Blvd	Pullman	99163	(509) 332-2541	4
71	Quileute Tribal Health Clinic	560 Quileute Hts	La Push	98350	(360) 374-5700	7
72	Quincy Valley Medical Center *	908-10th Ave SW	Quincy	98848	(509) 787-3531	7
73	Sacred Heart Children's Hospital	101 West Eighth Avenue	Spokane	99204	(509) 474-4841	1
74	Sacred Heart Medical Center	101 West Eighth Avenue	Spokane	99204	(509) 474-3040	1
75	Sacred Heart Providence Neuroscience Center	101 West Eighth Avenue	Spokane	99204	(509) 474-3081	1
76	Sacred Heart Women's Health Center	101 West Eighth Avenue	Spokane	99204	(509) 474-2400	1
77	Seattle Cancer Care Alliance	825 Eastlake Ave E,	Seattle	98109	(206) 288-7222	1
78	Shriners Hospital for Children	911 West Fifth Avenue	Spokane	99204	(509) 455-7844	1
79	Skagit Valley Hospital	1415 E Kincaid	Mount Vernon	98273	(360) 424-4111	1
80	Skyline Hospital *	211 Skyline Drive Box 99	White Salmon	98672	(509) 493-1101	4
81	Spokane Department of Human Services	808 W. Spokane Falls Blvd	Spokane	99201	(509) 625-6130	1