

**Rural Health Care Pilot Program**  
**Quarterly Report for the Period Ending July 30, 2009**  
**FCC-WC Docket No. 02-60**

Prepared by:

Florida Center for health Information and Policy Analysis  
Agency for Health Care Administration  
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Big Bend Regional Healthcare Information Organization  
1911 Miccosukee Road, Tallahassee, FL 32308

Submitted to:

Commission's Secretary, Office of the Secretary  
Federal Communications Commission  
9300 East Hampton Drive  
Capitol Heights, MD 20743

Courtesy Copy:

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Telecommunications Access Policy Division  
Wireline Competition Bureau  
445 12<sup>th</sup> Street, S.W., Room 5B-521  
Washington, D.C. 20554

## 1. Project Contact and Coordination Information

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The Big Bend Regional Healthcare Information Organization (BBRHIO) is legally and financially responsible for the project, and will oversee all construction of the broadband network to rural hospitals. The Agency for Health Care Administration (Agency) provides oversight and administrative support for the rural broadband pilot program and has assigned on-going responsibilities to the Florida Center for Health Information and Policy Analysis within the Agency.

The Rural Broadband Pilot Project is being coordinated by the Agency for Health Care Administration, the Big Bend RHIO and a number of public and private stakeholders who make up the governance body for the project. Taking the lead in the governance with the Agency and Big Bend Health are the Office of Trade and Economic Development in the Governor's Office, the Tallahassee Chamber of Commerce, the Tallahassee Economic Development Office, Opportunity Florida and Enterprise Florida. The governance group has regular, bi-weekly calls to discuss the status of the program.

The Agency for Health Care Administration has taken the lead in contacting and visiting the health care facilities that will be connected to the broadband network and working with the CEOs of hospitals. We have held several regular conference calls with the CEOs of the hospitals to coordinate the project with them and to explain our status. The Agency has collected Letters of Agency from all of the hospitals that we plan to connect with fiber. We also submitted and won a \$1.26 million grant in April 2009 from the Office to Trade, Tourism and Economic Development as match funding for our construction of the network. The Agency held a workshop in May 2009 with all of the rural hospitals in the pilot project to explain our timetable for building the network and to help them coordinate their connections. The workshop was well attended.

## **2. Health Care Facilities Included in the Network**

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The following public not-for-profit rural hospitals or hospital-based clinics will be connected with the gigabit optical fiber portion of the network as part of phase 1 of the project.

Calhoun-Liberty Hospital – Calhoun County  
20370 Northeast Burns Avenue  
Blountstown, FL 32424  
(850) 674-5411  
Ruca Code: 7.0  
Census Tract Code: 9903.00  
Public non-profit

George Weems Memorial Hospital – Franklin County  
135 Avenue G  
Apalachicola, FL 32320  
(850) 653-8853  
Ruca Code: 7.0  
Census Tract Code: 9703.00  
Public non-profit

Sacred Heart Hospital – Gulf County  
Port St Joe, FL 32456  
Ruca Code: 7.3  
Public non-profit

Doctor's Memorial Hospital – Holmes County  
401 East Byrd  
Bonifay, FL 32425  
(850) 547-1120  
Ruca Code: 9.0  
Census Tract Code: 9604.00  
Public non-profit

Campbellton-Graceville Hospital – Jackson County  
5429 College Drive  
Graceville, FL 32440  
(850) 263-4431  
Ruca Code: 10.6  
Census Tract Code: 9803.00  
Public non-profit

Jackson Hospital – Jackson County  
4250 Hospital Drive  
Marianna, FL 32446  
(850) 526-2200  
Ruca Code: 8.0  
Census Tract Code: 9805.00  
Public non-profit

Madison County Memorial Hospital – Madison County  
309 NE Marion Street  
Madison, FL 32340  
(850) 973-2271  
Ruca Code: 7.0  
Public non-profit

Doctor's Memorial, Inc. – Taylor County  
333 N. Byron Butler Parkway  
Perry, FL 32348  
(850) 584-0800  
Ruca Code: 7.0  
Census Tract Code: 9502.00  
Public non-profit

Northwest Florida Community Hospital – Washington County  
1360 Brickyard Road  
Chipley, FL 32428  
(850) 415-8103  
Ruca Code: 7.0  
Not-for-profit Emergency Department

Not-for-profit urban hospitals that will be offered access to the broadband network in phase one include:

Baptist Hospital – Escambia County  
1000 West Moreno St.  
Pensacola, FL 32501  
(850) 434-4011  
Not-for-profit

Sacred Heart Hospital– Escambia County  
5151 N. 9<sup>th</sup> Avenue  
Pensacola, FL 32504  
(850) 416-7000  
Not-for-profit

Tallahassee Memorial Hospital – Leon County  
1300 Miccosukee Road  
Tallahassee, FL 32308  
(850) 431-1155  
Not-for-profit

Bay Medical - Bay County  
615 North Bonita Avenue  
Panama City, FL 32401  
(850) 769-1511  
Not-for-profit

The following public and non-profit clinics will be included in the proposed wireless broadband network in phase two of the pilot project:

**Calhoun County Clinic Addresses**

**TALLAHASSEE MEMORIAL FAMILY MEDICINE**

17808 N.E. Charley Johns Street  
Blountstown, FL

**THE MEDICAL CENTER AT BLOUNTSTOWN**

20454 NE Finlay Ave  
Blountstown, FL

<b>Franklin County N. FL Medical Center and Clinic Addresses</b>	<b>Zip Code</b>	<b>RUCA Code</b>	<b>Phone Number</b>
<b>NORTH FLORIDA MEDICAL CENTERS</b>			
<b>EASTPOINT MEDICAL CENTER</b>			
35 Island Drive Suite 14 Eastpoint, FL – Not-for-profit	32328	7	(850) 670-8585
<b>BAYLINE MEDICAL CENTER</b>			
102 SE Avenue B Carrabelle, FL – Not-for-profit	32322	10.6	(850) 697-2223
<b>MAGNOLIA MEDICAL CLINIC</b>			
116 Avenue East Apalachicola, FL – Not-for-profit	32320	7	(850) 653-2935

<b>Gadsden County Clinic Addresses</b>	<b>Zip Code</b>	<b>RUCA Code</b>	<b>Phone Number</b>
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**TALLAHASSEE MEMORIAL FAMILY MEDICINE-QUINCY**

178 Lasalle Leffall Drive  
Quincy, FL – Not-for-profit

32351 4.1 (850) 875-3600

<b>Gulf County N. FL Medical Center and Clinic Address</b>	<b>Zip Code</b>	<b>RUCA Code</b>	<b>Phone Number</b>
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**NORTH FLORIDA MEDICAL CENTERS**

**WEWAHITCHKA MEDICAL CENTER**

255 West River Road  
Wewahitchka, FL – Not-for-profit

32465 10.4 (850)639-5828

**ST. JOSEPH CARE OF FLORIDA, INC.**

2475 Garrison Avenue  
Port St. Joe, FL – Not-for-profit

32456 7.3 (850) 227-1276  
x 103

**CYPRESS MEDICAL CLINIC**

118 North Highway 71

Wewahitchka, FL – Not-for-profit

32465 10.4 (850) 639-2376

**GULF PINES MEDICAL**

102 20th Street

Port Saint Joe , FL – Not-for-profit

32456 7.3 (850) 229-8979

**SHORELINE MEDICAL GROUP**

419 Baltzell Avenue

Port Saint Joe , FL – Not-for-profit

32456 7.3 (850) 670-8585

<b>Holmes County Clinic Addresses</b>	<b>Zip Code</b>	<b>RUCA Code</b>	<b>Phone Number</b>
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There are no not-for-profit Clinic currently listed.

<b>Jackson County Clinic Addresses</b>	<b>Zip Code</b>	<b>RUCA Code</b>	<b>Phone Number</b>
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There are no not-for-profit Clinic currently listed.

<b>Jefferson County Clinic Addresses</b>	<b>Zip Code</b>	<b>RUCA Code</b>	<b>Phone Number</b>
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**TALLAHASSEE MEMORIAL FAMILY MEDICINE  
MONTICELLO**

S Jefferson St

Monticello, FL 32344 – Not-for-profit

32344 10.1 (850) 997-0707

<b>Madison County N. FL Medical Center and Clinic Addresses</b>	<b>Zip Code</b>	<b>RUCA Code</b>	<b>Phone Number</b>
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**NORTH FLORIDA MEDICAL CENTERS**

**TRI-COUNTY FAMILY HEALTH CARE**

193 NW US 221

Greenville, FL – Not-for-profit

32331 10 (850)948-2840

**FOUR FREEDOMS HEALTH SERVICES**

194 NE Hancock Ave

Madison, FL – Not-for-profit

32340 7 (850) 973-8851

**MADISON MEMORIAL HEALTHCARE CENTER**

309 NE Marion St

Madison, FL – Not-for-profit

32340 7 (850) 973-1366

**PEDIATRIC AND INTERNAL MEDICINE**

104 East Dade Street  
 Madison, FL – Not-for-profit 32340 7 (850) 973-4195

**MADISON COUNTY MEMORIAL HOSPITAL**

309 NE Marion Street  
 Madison, FL - Public 32340 7 (850) 973-2271

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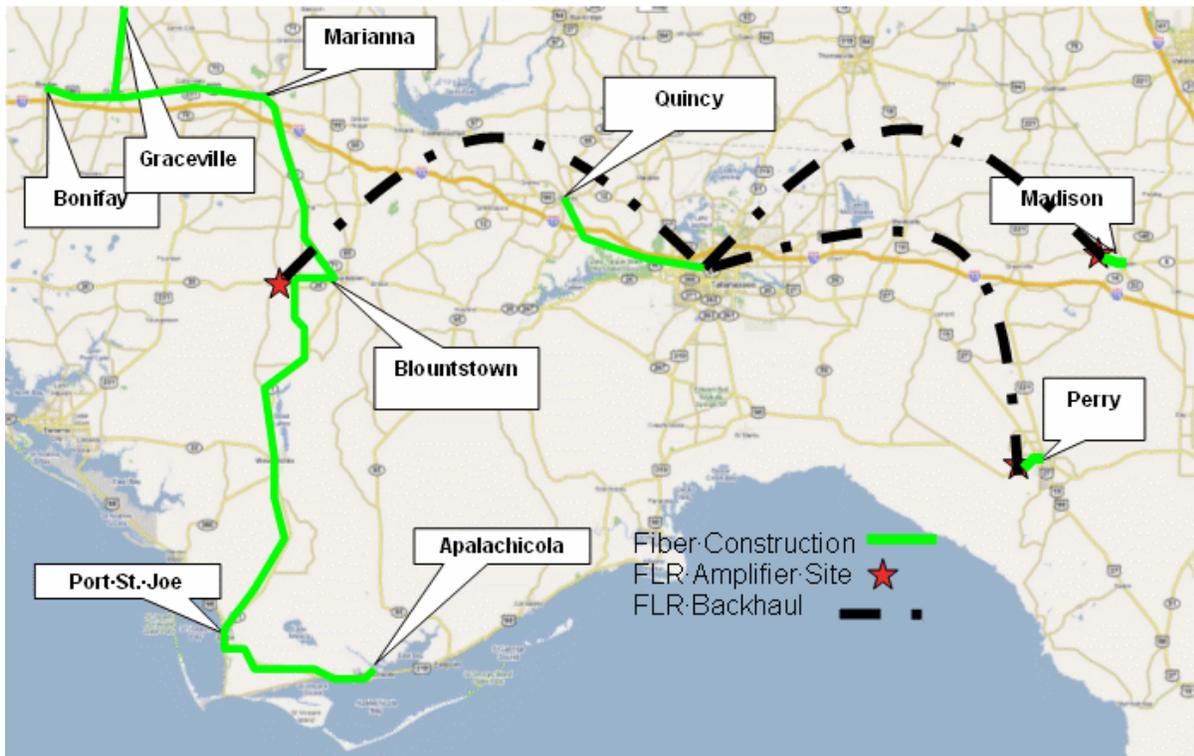
<b>Taylor County N. FL Medical Center and Clinic Addresses</b>	<b>Zip Code</b>	<b>RUCA Code</b>	<b>Phone Number</b>
<b>NORTH FLORIDA MEDICAL CENTERS</b>			
<b>TAYLOR DENTAL CENTER</b>			
409 East Ash Street Perry, FL – Not-for-profit	32347	7	(850)223-2578
<b>DOCTOR'S MEMORIAL FAMILY PRACTICE</b>			
1701 South Jefferson Street Perry, FL – Not-for-profit	32348	7	(850) 584-0885
<b>DOCTOR'S MEMORIAL HOSPITAL RHC</b>			
1706 South Jefferson Street Perry, FL - Public not-for-profit	32347	7	(850) 498-0822
<b>DOCTOR'S MEMORIAL HOSPITAL-EMERGENCY</b>			
409A East Ash Street Perry, FL – - Public not-for-profit	32347	7	(850) 584-0839
<b>DOCTOR'S MEMORIAL INTERNAL MEDICINE</b>			
402 East Ash Street Perry, FL – Not-for-profit	32347	7	(850) 584-0600
<b>STEINHATCHEE FAMILY CENTER</b>			
1209 1st Avenue South Steinhatchee, FL – Not-for-profit	32359	8	(352) 498-5888
<b>WOMENS HEALTH CTR. OF NORTH FLORIDA</b>			
1702 S. Jefferson Street Perry, FL – Not-for-profit	32348	7	(850) 223-1744

### 3. Network Narrative

This section does not apply at this time. The development of the first phase RFP to support the competitive bidding process is underway. No solicitations have been posted.

The pilot project plans to utilize an existing optical fiber network as its broadband backbone to connect the facilities to the Big Bend RHIO. Construction of the fiber network will be bid to a local Florida firm, preferably in the Panhandle region. Optical fiber will be strung along utility pole routes from the broadband backbone network to a point of presence in the local community close to the hospital. Ideally the point of presence would be located on either city or county property. The project will seek a waiver from utility pole fees for the period of the pilot project as a means of reducing the cost of providing connections.

Figure 1. Proposed Optical Fiber Network



The point of presence in each community will be a small out building containing routing and switching equipment. It will serve as the termination point for the fiber connecting LambdaRail and an access point for connecting each hospital as well as providing broadband access for other information services. The point of presence in each community will become the hub of broadband communications for the medical community and for the businesses and residents who are the consumers of health care. Using the point of presence, none of the hospitals will have to make capital investments in new equipment or maintain the connections. Each hospital will be connected directly to the point of presence with fiber optic cable, which will replace whatever telecommunication connection is currently installed, with no break in service. The only

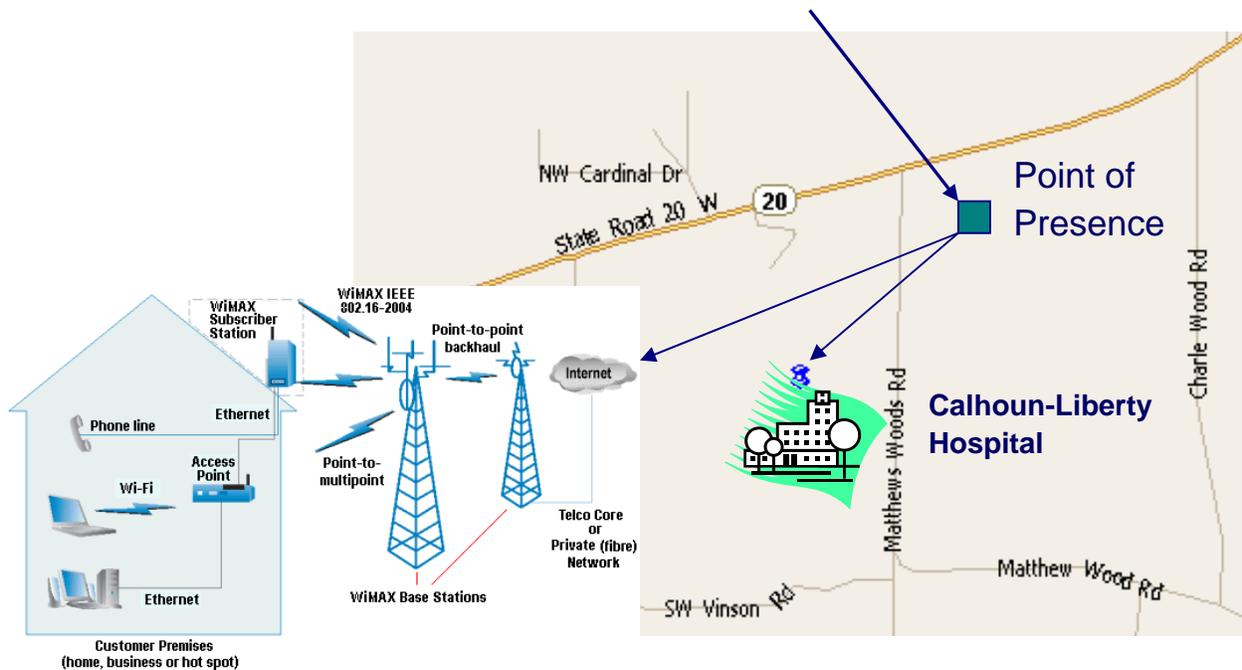
difference in service will be that the hospital will have significantly greater bandwidth available for all communication needs.

The Big Bend RHIO, will act as the Internet Service Provider, offering Voice Over IP service to replace the telephone services, providing secure messaging and secure broadband Virtual Private Network access through the Florida LambdaRail. Hospitals will be able to connect to the Tallahassee-based Private Medical Area Network (pMAN) and Tallahassee Memorial Hospital and to Baptist and Sacred Heart Hospitals in Pensacola. Access to the Florida Panhandle Health Care Network could significantly improve the turn-around time for rural hospitals in transmitting x-rays, magnetic resonance imaging (MRI), computerized axial tomography scans (CAT scans), or any other large digital image file to radiologists or other specialists in Tallahassee and Pensacola. With the improvement in turn-around time to have these images read, the rural hospitals may be able to increase the volume of tests they run, thus increasing their revenue streams for these services.

The Florida Panhandle Health Care Network project proposes to connect all nine rural hospitals, the VA clinic and hospitals in Tallahassee and Pensacola during 2009. This rural infrastructure grant will be used for this phase of the network construction, as matching funds for the \$6.4 million that the FCC will invest in the construction.

The construction plan for 2010 is to implement a broadband wireless network in each of the rural counties. This wireless network will allow health care providers and clinics to connect to the Florida Panhandle Health Care Network. In addition, access to the wireless network will be provided to businesses and homes in each community, which will contribute to the economic development of each county. The last two years of FCC Rural Health Care Pilot Project funding will go to operation and maintenance of the network, and toward building a sustainable business operation.

Figure 2. Schematic of Proposed Wireless Network



**4. List of Connected Health Care Providers: Provide information below for all eligible and non-eligible health care provider sites that, as of the close of the most recent reporting period, are connected to the network and operational**

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This section does not apply at this time. No health care providers are currently connected to the network.

**5. Identify the following non-recurring and recurring costs, where applicable, shown both as budgeted and actually incurred for the applicable quarter and funding year to-date**

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There are no non-recurring or recurring costs associated with the project to this date. We have provided our projected costs at this time, since no health care providers are currently connected to the network. However, we recognize that the design study might allocate costs differently when it is completed. The construction budget for years 2008-2012 is provided below.

The first step will be to begin the engineering phase of construction to produce the necessary plans/drawings to obtain necessary permits and direct the construction crews. Preparation and production of the plans will likely be done in phases to accelerate beginning the physical construction.

Table 1. Construction Estimates, 2009-2010

Location	Const. Miles	Field Eng.	Aerial Const.	Underground Const.	Man Hours	Crew	Work Days	Fuel	Meals	Hotel
Apalachicola	23	360	800	150	1310	5	33	655	491	123
Blountstown	8.1	200	550	250	1000	5	25	500	375	94
Bonifay	9.1	140	450	250	840	5	21	420	315	79
Chipley	18	240	1000	500	1740	5	44	870	653	163
Graceville	13.6	180	500	150	830	5	21	415	311	78
Madison	3.5	93	300	400	793	5	20	397	297	74
Marianna	29.5	295	1175	500	1970	5	49	985	739	185
Perry	8	220	533	450	1203	5	30	602	451	113
Port St. Joe	48.7	400	1250	200	1850	5	46	925	694	173
Quincy	<u>16.1</u>	<u>280</u>	<u>1075</u>	<u>350</u>	<u>1705</u>	5	<u>43</u>	<u>853</u>	<u>639</u>	160
Totals	177.6	2408	7633	3200	13241		331	6621	4965	1241

The actual phases and their specific schedules will be determined once the design study is completed. One of the early priorities of the design study will be to identify long lead time issues so they don't become construction barriers. The following information specific to each community's construction is pre-design study and will to some degree change. The information provided is based on "non-engineered" routes but provides a "preview" of the project construction.

**6. Describe how costs have been apportioned and the sources of the funds to pay them**

The Agency for Health Care Administration and the Big Bend RHIO won a Rural Infrastructure Grant to Enterprise Florida and the Governor's Office of Tourism, Trade and Economic Development in the amount of \$1.126 million. The funding will be used for the 15% match to leverage \$6.38 million in FCC funds. With the availability of this funding, we are now working on an RFP to be posted for the broadband connector to the fiber backbone connection to the National Lambda Rail, a Design Study and the construction of the network. A breakdown of funding thus far is given in Table 2.

**Table 2. Allocation of Funding for FY 2009-2010**

<b>Construction Years</b>	<b>85% FCC Funding</b>	<b>15% Matching Funds</b>	<b>Total Construction Funds</b>
Phase I – 2009-2010	\$ 6,379,165	\$1,125,735	\$7,504,900
Phase II – 2010-2012	\$3,220,835	(\$568,383)	\$3,789,218
<b>Total</b>	<b>\$9,600,000</b>	<b>\$1,694,118</b>	<b>\$11,294,000</b>

The project also qualifies for State of Florida Rural Economic Development programs including:

**Supporting Economic Development Organizations:**

We have worked with several economic development organizations to raise funds for the project. These include the Governor's Office of Tourism, Trade, and Economic Development (OTTED), the Rural Economic Development Initiative (REDI), Enterprise Florida (the state's primary economic development organization), the Tallahassee Economic Development Council, Opportunity Florida, Florida's Great Northwest, the City of Port St. Joe and several economic development organizations in participating counties.

**Community Contribution Tax Credit (CCTC):**

The Big Bend RHIO has been qualified as a CCTC recipient. Any funds donated to the Big Bend RHIO will be tax deductible for the funding organization. The funds will support the 15% matching obligation of the program. County resolutions have been obtained and executed declaring that project improvements are consistent with local plans and regulations including the Comprehensive Plan

**Rural Infrastructure Development Grant:**

We are preparing a Rural Infrastructure Development Grant application at the request of the Governor's Office of Tourism, Trade, and Economic Development (OTTED) and Enterprise Florida. The grant will provide \$1 million for construction of the network in all project counties and will support the 15% matching obligation of the program.

**Rural Economic Development Loan Program:**

The Rural Economic Development Loan Program is available to provide low interest loans to local governments participating in this project. We are looking into helping the counties develop grant proposals.

**7. Identify any technical or non-technical requirements or procedures necessary for ineligible entities to connect to the participant's network**

Given the cost constraints placed on the project for connecting non-eligible facilities, only not-for-profit hospitals are being considered for connection at this time.

**8. Provide an update on the project management plan**

The current management plan is intact as described in our original proposal. Several new stakeholder groups are under development including Rural Hospital CEO's and economic development experts.

The Rural Broadband Pilot Project leadership includes the Big Bend RHIO and the Agency for Health Care Administration. The governance of the project is carried out through a consortium of stakeholders that include the Florida Hospital Association, the Office of Trade and Economic Development in the Governor's Office, the Tallahassee Chamber of Commerce, the Tallahassee Economic Development Office, Opportunity Florida, Enterprise Florida and Florida Lambda Rail. This collaboration is coordinated by the Agency for Health Care Administration through regular, biweekly conference calls.

**9. Provide detail on whether network is or will become self sustaining. Selected participants should provide an explanation of how network is self sustaining.**

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The health care network under construction will contribute to the economic development of each of the rural counties, which should help support it. This development, in addition to revenue from health care services, should make the network sustainable.

There is little doubt that jobs will be created from this broadband construction project. The challenge is to project job creation over the life of the project. To start, the project can be broken into three phases: 1) Construction of the fiber network and connection of hospitals. 2) Installation of the broadband wireless network and connection of all other health care providers; 3) Marketing stage to provide extra bandwidth for commercial and home use.

Phase 1 should run from 2009 to 2010. In this period the need for a technical help desk is critical to assist hospitals coming online and to employing the information exchange applications available to them. The technical help desk should employ three (3) to four (4) people in the first year of construction. There is some interest in locating this service in Holmes County. Phase 1 would also require the several technical maintenance positions to maintain the technical operations of the physical network. These jobs could be created, or subcontracted from local companies. At the least, this would require two (2) or three (3) positions to cover the nine counties adequately.

Phase 2 should last from 2010 to 2012 and would entail a larger technical help desk of six (6) to eight (8) support positions as clinics are brought into the network via wireless broadband. The technical maintenance force might have to add another two (2) positions to work with the wireless equipment. In addition to help desk and maintenance services, a sales force will have to be created to expand the customer base of the broadband network to all providers, whether not-for-profit or for-profit. These efforts will of necessity be local and could entail from five (5) to ten (10) sales people. In addition, the Help Desk service might have to expand to include a number of trainers who could connect customers to the network and offer training in how to use the different services that will be available to the provider.

The level of economic development and the return in revenue from the investment in broadband telecommunications can only be calculated within a range of potential outcomes. However, studies have consistently demonstrated that there is a close correlation between economic activity and access to telecommunications. For example, the city of Leesburg, Florida, invested in a multi-million dollar fiber-optic network in 2000 that provided broadband access to residents in Lake County. The network was opened up to businesses and government offices in 2001 in order to boost economic development. In 2005, two University of Florida economists evaluated the pilot project.<sup>1</sup> They concluded that "Lake County has experienced a 100% increase – a doubling – in economic growth relative to its Florida peer counties since offering its municipally owned broadband network broadly to public and private entities. This growth rate is not a function of population growth." They attributed this economic growth to access to high speed telecommunications.

The sustainability goal of the Florida Panhandle Health Care Network is to generate revenue stream that is sufficient to cover expenses for the network at year six and for nine years following. We are approaching the development of a revenue stream to cover four areas of cost

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<sup>1</sup> George S. Ford and Thomas M. Koutsky, "Broadband and Economic Development: A Municipal Case Study from Florida." Applied Economic Studies, April 2005

in the network: 1) connectivity, 2) network maintenance and upgrading of equipment, 3) network management and 4) provision of health care services.

We anticipate that revenue will be generated from four sources: 1) connectivity charges, 2) subscription fees, 3) transaction fees and 4) health care services fees. The following high level sustainability plan lays out the areas in which we anticipate to generate revenue long-term for the network. We understand that more detail in both services and projected revenues will be required for this sustainability plan to be implemented. These will be included in the plan once the Network Design Study is complete, and the full range of health care services are assessed for their value and their cost.

### **Connectivity Fees**

Connectivity fees will be charged for the basic provision of broadband services. These services could include the broadband connection to the health care network, broadband connection to the Internet, voice over IP service and videoconferencing. A basic fee for connectivity will be charged to each hospital, and additional fees will be added as other services are requested.

Hospitals will be expected to pay 15% of the recurring costs for connectivity during the pilot project period. Following the end of the period, we will support the hospitals in their applications for the Rural Health Care Program reimbursement program.

### **Subscription Fees**

Subscription fees for connection to the Big Bend RHIO Regional Health Information Network (BB RHIO RHIN) Services will be charged to each hospital and clinic connected to the network. This fee will cover the cost of providing health information exchange services to each facility, as well as provider outreach and an EMR light for facilities. These services will include:

- *RHIN platform* – Software licensing and support for the core Regional Health Information Network technology.
- *RHIN applications* - Software licensing and support for the various RHIN applications (e-Prescribing, Document Imaging, and Patient Portal).
- *Data center hosting*-The hardware and software necessary for this project are located in a data center in Tallahassee and require monthly maintenance to maintain. This will involve the physical security of the data center, the connectivity costs to include the fiber network and internet bandwidth to support VPN connections to receive data feeds from participants.
- *Hardware* – Server hardware to expand the operational capabilities of the BBRHIO RHIN system and improved backup/recovery capabilities.
- *Financial software* – Software purchase and licensing costs plus required hardware for accounting and financial software package.
- *Provider Education software* - Software setup and licensing costs plus required hardware for a centrally hosted regional model.
- *Rural outreach* – Various anticipated software, network, and process modifications to better reach and assist rural providers; estimated at \$10,000.
- *Regional EMR light implementation & hosting* – Implementing an open source and low cost EMR solution for providers.

- *Regional physician credentialing support* – Implementing an automated physician credentialing option.

### **Transaction Fees**

In addition to the BB RHIO RHIN services, additional services will be offered on a transactional basis. For example, several rural hospitals in the Florida Panhandle have purchased and installed digital x-ray equipment, but suffer from the lack of trained radiologists who can read the x-rays. By providing connectivity to radiologists at urban hospitals or radiology labs, the broadband network will facilitate the movement of large image files between rural and urban settings. This high speed connectivity could create new revenue for the rural hospitals by letting them schedule more x-ray appointments and offering a faster turn-around in the x-ray reading for their patients. For Medicaid and Medicare patients who have a time limit on their hospital stay, this broadband connectivity could save hospitals the cost of maintaining patients until all x-ray tests are returned.

The transaction fees charged to the health care facilities could include the following value-added connectivity services:

- Transfer of large radiology image files for reading at urban radiology centers.
- Telemedicine connections for access to specialists in urban areas.
- High speed connection for continuing education videoconferencing services.
- Real-time viewing of digital imaging services such as MRIs or CAT Scans by rural physicians.

### **Service Fees**

The BBRHIO RHIN will also offer health care services that can be carried over the broadband network. These services will enable hospitals and clinics to take advantage of value-added services that could lower their operating costs. A full array of services will be developed as the project continues. The following list presents some of the health care services that the hospitals might be able to use to their advantage.

- Telehealth services that allow videoconferencing with urban specialists so that patients do not have to travel from rural to urban areas, and health care facilities can provide better health care services without hiring new doctors.
- Application Service Provider services for electronic health record (EHR) software. The broadband connection will provide an opportunity to offer health care facilities access to EHR software at a reasonable cost. Repository services will be provided for the facilities and medical records can be included in the health information exchange services provided by the BB RHIO RHIN so that referral appointments can have records exchanged in real time.
- Continuing education services for physicians in rural facilities. Continuing education credits can be offered by faculty in the Florida State University Medical School, for example, to allow physicians to remain in their clinics and complete required educational credits.
- Shared billing and scheduling services can be offered to facilities to allow them to take advantage of the latest software at a lower cost to them.

- o Integrated purchasing services could help health care facilities to make bulk purchases of equipment and supplies, and thus reduce their overhead.

### **Sustainability of the Florida Panhandle Health Care Network**

By providing a mix of health care services, broadband connectivity and health information exchange services, we hope to create a network that can not only sustain itself, but grow into a new maturity with the development of new network-based applications and services. We anticipate that at year six, the network will be sustainable on an ongoing basis, but will increase its revenues as new software and services are added. As well, we anticipate that the population growth in Florida will reach the rural Panhandle areas, and the demand for health care services will expand. If we can prepare for this growth, and provide services that expand over time, we anticipate that the Florida Panhandle Health Care Network will continue to provide connectivity for years to come.

#### Proposed Working Definition of Sustainability:

Sustainability refers to the long term operation, maintenance and improvement of an organization. It is the outcome of specific strategies employed to utilize all of the organization's resources to create operational and financial stability and to meet the challenges of change. Financial stability implies that the cost of operations is met by the revenue taken in, plus a strategic, extra amount of capital required for development or investment purposes.

#### Sustainability Template

The steps to taking strategic action toward developing a sustainable model for a project is to start with the costs across the project period, estimate the revenues needed from various sources to match the costs plus generate some extra revenue, and project revenue potentials out ten years past the project period based on increasing demand for health care services.

Table 3 shows an example of a cost breakdown, from the Florida Panhandle Health Information Network, at a general level. In it are listed the non-recurring cost of construction for the fiber and wireless pieces of the network, and the recurring costs of managing the network. In each of the cells the source of funding for each cost is indicated – 85% from USAC and 15% from match. Empty cells indicate no costs incurred.

The next step is to estimate where revenue can be generated to meet the ongoing costs of the network, as shown in Table 3. It is anticipated that revenue will be generated from four sources: 1) connectivity charges, 2) subscription fees, 3) transaction fees and 4) health care services fees. Who will pay for fees and services is indicated in each cell of the table. For example, USAC funds can pay for the connection rate, but probably can't be used for videoconferencing.

Table 3. Summary of Costs for FCC RHCPP Project Years, 2007-2012

<b>Project Years 2008-2012 - Costs to the Build and Maintain Network</b>								
<b>Network Costs</b>	<b>2008-2009</b>		<b>2009-2010</b>		<b>2010-2011</b>		<b>2011-2012</b>	
<b>Non-Recurring Construction Costs</b>	<b>85%</b>	<b>15%</b>	<b>85%</b>	<b>15%</b>	<b>85%</b>	<b>15%</b>	<b>85%</b>	<b>15%</b>
Fiber construction	USAC	Match\$\$	USAC	Match\$\$				
Fiber Network equipment	USAC	Match\$\$	USAC	Match\$\$				
Server construction	USAC	Match\$\$	USAC	Match\$\$				
Outbuildings, POP, etc.	USAC	Match\$	USAC	Match\$				
Wireless Construction			USAC	Match\$	USAC	Match\$		
Wireless Network Equipment			USAC	Match\$	USAC	Match\$		
<b>Recurring Costs</b>								
Construction Manager	USAC	Match\$	USAC	Match\$	USAC	Match\$	USAC	Match\$
Network Administrative Staff		Match\$		Match\$		Match\$		
Network Maintenance	USAC	Match\$	USAC	Match\$	USAC	Match\$	USAC	Match\$
Technical Support		Match\$		Match\$		Match\$		
Network Charges (Internet2 / LambdaRail)	USAC	Match\$	USAC	Match\$	USAC	Match\$	USAC	Match\$
Other		Match\$		Match\$		Match\$		Match\$

Connectivity fees will be charged for the basic provision of broadband services such as the broadband connection to the health care network and voice over IP service. Subscription fees for connection to the Big Bend RHIO Regional Health Information Network (BB RHIO RHIN) services will be charged to each hospital and clinic connected to the network or cover the cost of providing health information exchange services.

Additional services will be offered on a transactional basis. For example, several rural hospitals in the Florida Panhandle have purchased and installed digital x-ray equipment, but need trained radiologists who can read the x-rays. By providing connectivity to radiologists at urban radiology labs, the broadband network will facilitate the movement of large image files between rural and urban settings. The BBRHIO RHIN will also offer health care services over the broadband network that will enable hospitals and clinics to take advantage of value-added services that could lower their operating costs.

Table 4. Proposed Revenue Sources for the FCC RCHPP Network

<b>Project Years 2008-2012 – Proposed Revenue Sources to Maintain Network</b>									
<b>Network Revenues</b>	<b>2008-2009</b>		<b>2009-2010</b>		<b>2010-2011</b>		<b>2011-2012</b>		
	85%	15%	85%	15%	85%	15%	85%	15%	
<b>Connection Rate Charges</b>									
Fiber Connection			USAC	Hospital	USAC	Hospital	USAC	Hospital	
Wireless Connection					USAC	Clinic	USAC	Clinic	
<b>Big Bend RHIO Subscription Fees</b>									
RHIN platform and applications			Hospital		Hospital & Clinic		Hospital & Clinic		
Data center hosting			Hospital		Hospital & Clinic		Hospital & Clinic		
Regional physician credentialing support			Hospital		Hospital & Clinic		Hospital & Clinic		
<b>Transaction Fees</b>									
Large x-ray files to urban radiology centers			Hospital		Hospital & Clinic		Hospital & Clinic		
Real-time viewing of MRIs or CAT Scans			Hospital		Hospital & Clinic		Hospital & Clinic		
<b>Health Care Service Fees</b>									
ASP services for EHRs and e-prescribing					Hospital & Clinic		Hospital & Clinic		
Videoconferencing with urban specialists					Hospital & Clinic		Hospital & Clinic		
Continuing education services for physicians					Hospital & Clinic		Hospital & Clinic		

The transitional year is year 6, 2012-2013, which is a pivotal point of revenue transition. This is the first year of direct funding without USAC support. Network activity during the period 2009-2012 should be used to develop sustainable revenue projections of year 6, 2012-2013. It is vital to compare the costs and revenue streams in the 2008-2012, with USAC funding at 85% with year 6, and the next nine years, 2013-2022, to project sustainability funding. Projects can take the make-up revenue out of rate (as a rate increase) or take it out of increased transaction fees and health care services, as indicated in Table 3.

Table 5. Summary of Proposed Revenues to Ensure Sustainability.

<b>Project Years, 2012-2022 - Revenues Maintain Network</b>									
<b>Network Revenues</b>	<b>2012-2013 –“</b>		<b>2013-2016 –</b>		<b>2016-2019</b>		<b>2019-2021</b>		
	<b>Year 6”</b>		<b>Years 7-9</b>		<b>Years 10-13</b>		<b>Years 14-15</b>		
	<b>100%</b>		<b>100%</b>		<b>100%</b>		<b>100%</b>		
<b>Connection Rate Charges</b>									
Fiber Connection	RHC Fund	Hospital	RHC Fund	Hospital	RHC Fund	Hospital	RHC Fund	Hospital	
Wireless Connection	Clinic		Clinic		Clinic		Clinic		
<b>BB RHIO Subscription Fees</b>									
RHIN platform and applications	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
Data center hosting	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
Regional physician credentialing support	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
<b>Transaction Fees</b>									
Large x-ray files to urban radiology centers	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
Real-time viewing of MRIs or CT Scans	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
Echocardiogram, EKG, etc.	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
Home health monitoring	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
<b>Health Care Service Fees</b>									
Telemedicine connectivity to access specialists	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
ASP services for EHRs and e-prescribing	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
Videoconferencing with urban specialists	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
Continuing education services for physicians	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
Shared billing and scheduling services	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		
Other Services	Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		Hospital & Clinic		

Years 7 – 15 should focus on projecting health care demand to generate estimated increases in revenue. For example, projects can use census or inpatient statistics to project changes in health care demand based on age, accidents (age-related), emergency department usage, x-ray needs, MRIs, and so forth. Projections should predict demand and allow estimate of changes in transaction volume and health care services. With proper planning and investment in health care services, the connectivity rate could be subsidized by an increase in transaction fees (more older people who fall and break their hips) and a increase in the types of health care services that can be developed. Finally, the sustainability plan should find ways to generate more profit for hospitals by creating efficiencies in the provision of hospital-based health care services, such as radiology, MRIs, CAT Scans, echocardiogram, home health monitoring, and continuing education.

Years 7-20 should emphasize what projected revenue is based on the baby boom generation growing older and requiring more health care services, people moving into Florida and requiring health care and the expected increase in demand for hospital services. The project at this point, is close to the values espoused in the eHealth Initiative Sustainability Value Model, which allows not-for-profits and health care businesses to create pro forma estimates for fee structures within the model (<http://toolkit.ehealthinitiative.org/>).

#### **10. Provide detail on how the supported network has advanced telemedicine benefits:**

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This section does not apply at this time since the network is not build and health care providers are not connected.

#### **11. Provide detail on how the supported network has complied with HHS health IT initiatives**

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The Rural Broadband Pilot Project is still in its planning stages, but the standards and policies of the Nationwide Health Information Network are being closely adhered to in developing the network. The Agency for Health Care Administration has managed the Florida Health Information Network Grants Program for three years, leveraging the community-level development of health information exchange. The RHIOs have developed their health information exchanges along the technical standards of the NHIN, ensuring network interoperability. Thus, the Big Bend RHIO will be offering data exchange services to the hospitals that will parallel the NHIN prototypes and will promote the NHIN architecture. When the rural broadband network infrastructure is built, the Agency for Health Care Administration will work with the Department of Health to provide broadband backbone service for the implementation of the PHIN, and CDC Biosurveillance activities, but it is premature to engage these activities at this time.

**12. Explain how the supported network has used resources available through HHS's Centers for Disease Control and Prevention (CDC) Public Health Information Network (PHIN) to facilitate interoperability with public health and emergency organizations.**

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This section is not applicable at this time.