Delta Communications, LLC dba Clearwave Communications is a facilities based Competitive Local Exchange Carrier located in rural southern Illinois. The project we are proposing will address the lack of affordable broadband in our area that limits economic development, quality of healthcare, education, and public safety. We will create more affordable broadband in our area by 1) increasing the availability and affordability of bandwidth by connecting to a carrier hotel in St. Louis, and 2) increasing the availability and affordability of backhaul by constructing a redundant fiber ring middle mile network. The state of Illinois recognizes the need for broadband in Southern Illinois and is supporting this proposal with a commitment of 5 million dollars of matching funds pending an award from ARRA.

Clearwave’s proposed project is a middle mile fiber optic network covering 22 counties; interconnecting 3 Local Access Transport Areas (LATA); and 38 interconnection points. This portion of Southern Illinois is generally bounded on the north by Interstate 64, on the east by the state of Indiana, on the southeast by the state of Kentucky, and on the southwest by the state of Missouri. The area is predominately rural and the interconnection points are located in 35 communities, ranging in population from less than 1000 to approximately 20,000 (with the exception of one community). The communities that our middle mile network will pass through contain approximately 121,995 households and 8,760 businesses.

Critical community organizations, including health care, education, libraries, and public safety will be some of the first to benefit from this network. Our network will be able to address the broadband needs of approximately 326 community anchor institutions, including 23 hospitals, 123 schools, 23 libraries, 8 community colleges, and Southern Illinois University. We will have an immediate impact on public safety in our service area through a collaborative effort with the CSI NG 9-1-1 (Counties of Southern Illinois Next Generation 9-1-1).

Our project includes special provisions to provide much needed connectivity to the CSI NG 9-1-1 project for our region. The National Emergency Number Association (NENA) is preparing a Next Generation National Elements Plan to address compelling public safety needs and related uses for broadband. NENA has identified the Counties of Southern Illinois Next Generation 9-1-1 Association project as the pilot program for how to establish and test NG 9-1-1 as the basis of such a network in rural America.

CSI NG 9-1-1 is a consortium of 18 Emergency Telephone System Boards which have joined together to perform a major upgrade of emergency communications throughout the region and implement enhanced and next generation 9-1-1 in unserved counties. CSI NG 9-1-1 has partnered with Clearwave as the provider (pending BTOP funding) for the network connections between 27 Public Safety Answering Points (PSAPs) and database centers.

Our service offerings will include point-to-point data as well as internet services, neither of which will have distance sensitive pricing, as long as all points of service are connected to our core network. Currently, there is limited availability for this type of connectivity in the area, especially inter-LATA connectivity. Where it is available there is insufficient competition. This lack of competition causes both the wholesale and retail cost for this type of service to be unaffordable for most carriers and end users. Clearwave will follow all of the nondiscrimination obligations of this program.
Public entity (schools, libraries, public safety, and public healthcare) pricing will be deeply discounted and we will offer these organizations access to our network at extremely affordable rates. This pricing takes into consideration that the proposed network is being funded primarily with taxpayer dollars and it is our obligation to give back to our community. The discount that we will offer public entities will be in excess of the 25% that NTIA and RUS recommends from carriers.

Wholesale point to point and internet pricing will be available for other carriers Local Exchange Carriers (LECs), Internet Service Providers (ISPs), Wireless Internet Service Providers (WISPs) and Mobile Wireless Carriers in order to connect and provide service to their end users. Our wholesale pricing will be substantially lower than current market prices in this 22 County area. Pricing is not distance sensitive or based on which NODE or Connection Point is utilized to provide the connectivity. This will promote the interconnection obligations of this program through agreements with other providers to utilize this carrier class network.

This project will place 700 miles of 96 count fiber cable throughout the project area. The network will conform to SONET and Ethernet standards, with the core network initially operating at both multiple OC48 and multiple 10Gbps capacity. The primary internet data source will originate from a carrier hotel in St. Louis, Missouri, and will be trunked to Clearwave’s proposed office in Marion, Illinois. The proposed design uses a combination of Ethernet (Gigabit-capable), GPON (Gigabit-capable passive optical network) and SONET (DS-3, OC-3, OC-12) services to provide a variety of interconnect options.

Clearwave has demonstrated its ability to implement and operate a broadband infrastructure by its own network build out in southern Illinois as well as our management team’s experience with multi-million dollar network build outs at other companies. Clearwave began building its current network in 2002 and has grown to a network that has points of presence in over 20 communities.

The overall infrastructure cost of our project is $62,771,912. We expect to have enough of the network completed to begin adding subscribers by 2011.

There have been numerous studies and methodologies for determining the impact of broadband development on employment. We have chosen to cite a report created by Columbia Business School that we feel offers a conservative estimate on the impact of employment, as it takes into account all the effects of broadband in determining the net increase in employment.
Our methodology for deriving our estimates is a simple relationship from the data collected in the Columbia School of Business report based on Stimulus Plan investment of $6.39 billion versus our proposed plan investment of $62,771,912 = 0.0098%.

Clearwave’s Estimate of Total Jobs Created or Saved as a Result of this Project.
(based on $62,771,912 investment)

2009
1,166 Total (optimistic)
764 Total (mid-estimate)
362 Total (pessimistic)

2010
1,038 Total (optimistic)
681 Total (mid-estimate)
323 Total (pessimistic)

2011
921 Total (optimistic)
607 Total (mid-estimate)
294 Total (pessimistic)

2012
803 Total (optimistic)
534 Total (mid-estimate)
264 Total (pessimistic)
Total Jobs Created or Saved
3,928 Total (optimistic)
2,585 Total (mid-estimate)
1,243 Total (pessimistic)


In summary, Clearwave’s Southern Illinois Middle Mile Project will address the lack of affordable broadband in our area that limits economic development, quality of health care, education, and public safety by constructing a 700 mile High Capacity Fiber Network connecting 35 communities in 22 counties. In their letter committing 5 million dollars to this project, the Director of the Illinois Department of Commerce and Economic Development (DCEO) states—as Illinois’ lead economic agency, DCEO recognizes the potential of the program to support economic growth for the citizens of Illinois and the state’s economy.