The main objective of Geneseo Communication, Inc.'s ('GCI') project is the installation of two conjoining fiber optic rings to bring the highest quality emergency and community technology to rural Illinois. The solution is a middle mile project in which the route has been designed to directly connect the public service answering points ('PSAP') of 11 western Illinois counties. A PSAP is a centralized place in each county that receives all the emergency 911 calls from that county. Upon receipt of these calls, 911 coordinators evaluate the calls and dispatch response personnel accordingly. Currently, all 11 counties perform this function solely on behalf of their respective counties and are not directly connected. Emergency calls are not always 'county specific' and the quickest emergency help may not be best dispatched from a particular county's emergency location. Rather than wasting precious time 'forwarding' all the information, directly connecting all of these PSAP locations will enable dispatchers to locate the emergency, assign the closest response team, and send help more quickly, despite county boundaries. Jointly, these PSAP's are responsible for the safety of over 380,000 residents and incur duplicate costs, response delays, and other technological issues because of county boundary constraints and the lack of high speed connectivity. The proposed project will connect all PSAP locations with fiber optic cable and electronic equipment capable of transporting data at rates currently only capable over fiber. When complete, the 16 PSAP locations in these 11 counties will be able to communicate with each other as if they were 'next door.' The proposed project will install the fiber optic cable in a ring configuration, resulting in at least two ways to connect providing valuable redundant services and protected circuits for public safety communications. This will ensure a service level uptime approximating 100% which is imperative with E911 systems. Without funding, these emergency entities will continue to rely on multiple service providers, operate separately, and encounter delays in dispatching emergency assistance to needy victims. The proposed rings will service the 11 west central Illinois counties of Bureau, Fulton, Hancock, Henry, Knox, McDonough, Lee, Mercer, Stark, Warren, and Whiteside as part of the Emergency 911 County Board consortium. A 12th county, Henderson, will have the network passing inside its borders, but has not yet agreed to join the others. Therefore, the proposed funded service area will consist of 12 entire counties. The conjoined fiber rings will be approximately 590 miles in length, and in addition to connecting all the current PSAP positions in 11 counties, it will be directly or indirectly available to over 120 communities, 148,251 households and 8,196 businesses. It will also pass 1,140 anchor institutions, including 39 community colleges and institutions of higher learning locations, 374 K-12 schools, 85 libraries, 104 health care facilities, 196 other public safety entities, and 342 other government and community institutions. GCI is not proposing to directly serve the territories of Western Illinois Network Services, a small consortium of independent
telephone companies, because it is felt the needs of those areas are adequately met. To meet the goals
listed above, the Illinois Department of Commerce and Economic Opportunity ('DCEO') and Governor
Patrick Quinn have diligently worked to bring world class broadband to every Illinois community. DCEO
has committed a $4M grant, subject to certain conditions, to GCI's project to ensure that the highest
quality broadband is delivered to rural Illinois communities. GCI is partnering with Carl Sandburg College
('CSC') in this project. After talking with CSC representatives, the network configuration was redesigned
so the proposed system provided easy access from their EduNet wireless network. GCI is also partnering
with Blackhawk Hills RC&D/Northern Illinois University, the Illinois Department of Central Management
Services, and numerous other key partners in providing high speed broadband to Illinois. The type of
broadband system to be deployed will be open-access fiber optic cables, complete with the electronics
and connectivity to two major existing internet access points outside the proposed service area. These
two access points, including all the cables and facilities, are owned by GCI and are being included in the
project as in-kind assets. The access points are part of a backbone system that spans four states, with
end points located in Chicago, Illinois and Denver, Colorado. With this connectivity, GCI intends to bring
'big city' broadband access and choices of providers to rural Illinois, especially the community anchor
institutions. To ensure service quality, GCI has already configured this backbone system and will connect
the proposed network with this current one. The broadband technology will be 100% ringed fiber optics,
capable of delivering the fastest speeds that technology currently has to offer. GCI's open-access, non-
discrimination, and interconnection plans will include multiple options to potential users of the system.
GCI is completely familiar with the obligations established by the Federal Communications Commission
and the Illinois Commerce Commission ('ICC') regarding such responsibility through its traditional
landline business. GCI currently has five such agreements in place. GCI's open-access approach will
enable the availability of multiple services from the proposed network. These services will include: 1.
Dark Fiber 2. Lit Fiber 3. Lateral Builds 4. Wholesale Network Services Dark Fiber is composed of fiber
optic cables that have no electronic equipment included in the system. The network simply provides a
physical path between two points. Depending upon the customer's needs, sharing of a building to house
equipment (collocation) may be necessary and will be possible. Dark Fiber service is usually reserved for
wholesale carriers or very large businesses that have their own network and facilities. It will, however,
be offered to anyone, including the anchor institutions. Lit Fiber provides all the electronics and
necessary equipment to deliver high speed internet to its customers. This service could be used by
wholesale companies or community anchor institutions. This is the service the PSAP's will most likely
purchase. Lateral Builds are construction services to connect a point outside of the network with a point
within the network. GCI will include the cost for 30 lateral builds to its network from the funds granted.
This service could be used by wholesale carriers or large anchor institutions. Upon building the lateral
builds, the customer can choose from either Dark or Lit Fiber or interconnect with their own network.
Wholesale Network Services will be available to any interested party. This is possible since GCI's
traditional telephone network will be connected to the network. GCI plans to place equipment at
strategic points throughout the network, thus providing traditional telephone services, voice mail, e-
mail, spam and virus protection, and even security type products on a wholesale basis. GCI currently
offers all these services to over 10,000 customers, and adding new customers can easily be
accommodated. GCI operates a backbone system that extends some 195 miles throughout Illinois. From
an operational perspective, installing additional capacity to the system is simple. The combined system
would have roughly 785 miles of fiber cables. As market needs increase, the network would be easily expandable due to the 1,500 splice points already in place. GCI has maintained this type of network since the early 1980’s, and has provided broadband service since 1998 (when high speed data access to the internet was first introduced). GCI has over a 30 year relationship with the Henry County E911. It is one of only five providers and the only small independent company offering this service in Illinois. Geneseo Telephone Company, a subsidiary of GCI, and Henry County E911 Board are well known by the ICC as the 'best private/public partnership' in the state. It is this type of relationship that GCI intends to extend to the other ten counties. The cost of the project will be $41.4M with more than 30% coming from sources other than the BTOP grant. External financing is in place and ready to be committed. The expected number of direct customers impacted by this project at its mid-point, (Year Five), could be 2,800. Since many of these customers are community anchor institutions or third party providers, the indirect customer impact could be 30,000 customers or more, putting the cost at $1,380 per customer. Based upon the investment levels, the total number of job-years created or saved is expected to be 450.