

01 Data Center seeks funding to assist it building a hybrid network that would provide broadband access to health care facilities in the unserved area of the USA and connect them together and with first responders in these unserved areas, as well as with other advanced medical centers in the country and globally. In addition, 01 will offer disaster recovery protection for these facilities. At the same time, 01 will provide back up, archival, storage and recovery of medical data, and images of health care facilities and first responders. Additionally, rural health facilities in unserved areas operate as isolated islands from each other and have no means to connect with major medical centers across the nation and worldwide for consultation research or medication prescription. Further, medical digitization of data and images can literally be a matter of life or death. Moreover, access to advanced medical research and technology is an economic necessity to reduce national health care costs and to improve the quality of patient care.

Health care facilities in the unserved areas of the US are beginning to adopt digitization but that process is literally impossible without broadband connectivity and access to the internet backbone. Consequently, the government has allocated over \$400 million dollars in funds to finance joint data storage.

Solution to Problem: 01 proposes to address the problem of lack of connectivity to the internet backbone. As a result lack of connectivity among these facilities or with first responders in their area or outside, 01 will provide them connectivity to other health care facilities in the country and the globe including to major research medical centers in urban areas. 01's connectivity will help unserved areas access research, technology, distance learning, telemedicine, and training for this same demographic. The healthcare facilities in the unserved areas lack the funds to have a secure and legally conforming data and image storage, 01 will provide data storage, archive, retrieval and back up options for, health care facilities, public safety and first responders in the unserved areas.

Without fiber connectivity, the health care facility has no real option but to rely on satellite for connectivity and data. 01 Data center will support the United States government's efforts to adequately equip its rural health facilities with data storage and broadband access. 01 Data Center is in the process of converting an existing earth satellite station into a Tier 4 fiber, satellite and Data Center in Oxford, Connecticut. The center uses an IP hybrid network that connects end users via a terrestrial last mile with satellite middle mile. (see website of 01Data Center's affiliate [www.alphastar.com](http://www.alphastar.com)). Currently housed in a 20,000 square foot building which will be expanded to a 160,000 square foot building, 01 Data Center has already converted 1000 square feet of the facility into a medical data center. [REDACTED]

[REDACTED] The operating word for the 01 hybrid network is immediate. 01's network is immediate in employment and deployment.

Proposed services for the proposed funding areas: 01 has at least three unique advantages. First, it is immediate in deployment and employment. Second, given that there is no fiber middle mile connectivity to the unserved areas, the only means to reach these health care facilities is via a satellite middle mile. Third, the teleport of its affiliate is equipped to broadcast television and video which would make it an ideal location to receive, store and retrieve images. 01 will make it possible to electronically move clinical information among disparate health care information systems while maintaining the meaning of the information

being exchanged. The goal is to facilitate access to and retrieval of clinical data to provide safer, timely, efficient, effective and fair patient care.

01's goal is to improve health care for those communities that currently have limited access to primary, specialty and preventative care; as well as to enhance public safety by connecting health care providers, public health officials and first responders to these networks so that they can share crucial data during emergencies.

Households, businesses passed: 01 Data center will initially be deployed to hundreds of healthcare facilities, [REDACTED]

[REDACTED] Limitations of time and resources prevented 01Data Center from including more markets in this particular application, however, it intends to expand to as many rural communities in all 50 states [REDACTED] [REDACTED] Several dozen anchor institutions will also have access to the benefits of 01 Data Center's services.

Nondiscrimination and interconnection: 01 Data Center will provide access to its network to all seeking access and will not discriminate. Notwithstanding, 01 may offer managed services such as telemedicine, public safety communications, and distance learning, which use private connections or virtual private networks, rather than the public Internet. This approach will ensure that 01 Data Center does not distort the Internet's neutral environment for applications and content, and enables 01 Data Center to provide services that may require enhanced quality of service or separate connections for privacy and security reasons.

Type of broadband system: The hybrid network that is the foundation of 01 Data Center is neither pure satellite nor wireless, but a combination of both. 01 has a satellite connection which makes it unique among data centers in general and essential for reaching the unserved areas that have no fiber.

Qualifications: 01 Data Center is housed in a facility that hosts an affiliate, AlphaStar. Alphastar's network which was developed with technical assistance from Cisco Systems in 2000. (see Cisco Testimonial and Diagram in the Attachments to this Application). The facility is one of the largest of its kind and was built as part of the United State's Department of Defense's Star War program, built to military specification to withstand a military attack.

That affiliate operated the hybrid for two and a half years until its funding expired. Cisco systems has again agreed to assist 01 Data Center in refining the network of its affiliate. The management team of the company has experience totaling an average of 200 years.

Immediate Employment and Deployment The Operative word for the Hybrid model that will be the basis for 01 Data Center's model is IMMEDIATE. It is a shovel ready project without the use of a physical shovel like with traditional fiber networks. It is immediate in both employment and deployment. 01 Data Center meets the spirit and the law of the Stimulus Program because it will hire staff and personnel within weeks of funding and will continue the build out within weeks.

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Unlike legacy networks, capital is not expended before deployment or demand, beyond the initial service areas. 01 Data Center will be an economically viable solution for rural healthcare facilities' needs for adequate broadband storage and information access.

Infrastructure Cost: 01 Data Center will require lower investment costs. It estimates subscriber levels to be 5,000 over the next three years. There will be between 200 and 300 jobs created if this project is funded.