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Memorandum

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To: UC2B Policy Committee

Subject: Potential Application to Gigabit Squared

This memorandum addresses two matters:

- First, a brief assessment of the merits of presenting an application to Gigabit Squared to build fiber to the premises (FTTP) throughout Champaign, Urbana, and Savoy
- Second, recommendations regarding the list of key policy outcomes and associated requirements of Gigabit Squared that the members of this Policy Committee have previously identified

I write this memorandum in my capacity as a consultant to UC2B who was retained to assist with strategic planning for expansion of UC2B beyond the footprint covered by the federal grant.

In my view, an application to Gigabit Squared is one of the most practical and likely mechanisms by which to realize the longstanding UC2B goal of building FTTP to all residences and businesses within Champaign, Urbana, and Savoy. It is not the only means by which this can be accomplished, but it does represent the most likely of the immediate options—and one that does not require significant local risk while still delivering the benefits the Communities seek.

Private rather than public ownership involves a tradeoff of control and risk

While changing substantially the existing model of public ownership (and control), an application to Gigabit Squared has the potential also to reduce the need for local public funding and risk. Its most substantial benefit is that it brings into Champaign, Urbana, and Savoy private sector funding from outside these communities (with all the related economic development benefits of that funding) to further expand the network. Private funding obviously has the substantial virtue of placing financial risk (and financial reward) on the side of the private sector provider rather than the public.

The tradeoff is that it also puts substantial control and decision-making in the hands of the private provider, but (as is discussed further below) private control and ownership are not necessarily a problem for the Communities so long as key UC2B policy goals are met.

Absent private investment (whether from Gigabit Squared or another private company), and given that there is virtually no chance of federal funding comparable to the BTOP opportunity in the foreseeable future, the only alternative sources of funding are state and local sources. The requirement to provide this funding (and assume associated risk) would fall to local public sources. While that model has substantial operational, control, and other benefits, it is less certain from the standpoint of political or financial feasibility.

Based on my experience in public broadband, I would add, too, that public networking carries with it additional areas of risk, even beyond the likelihood of ongoing subsidy in the event that the network does not pay for itself. These risks include legal and other challenges from incumbent providers that see public broadband as unfair competition.

Private investment in infrastructure can deliver substantial benefits to the Communities

Even as private ownership involves some loss of control, it does deliver a range of other benefits that flow from next-generation network infrastructure, regardless of the ownership of that infrastructure. In addition to the connection between broadband and health care, education, and other core community development areas, broadband also delivers benefits with respect to lifestyle and quality of life. Just as importantly, broadband involves multiple forms of economic development benefits: The immediate benefits of outside investment into a community as well as the long-term economic benefits of the broadband platform itself. Fiber also has an additional, key benefit of increasing the attractiveness not only of a community but of individual properties, which frequently see modest increases in value as fiber is deployed.

Finally, new networks mean new competition. Full and vibrant broadband competition is virtually non-existent in the United States, but in those communities that have multiple providers (such as the few areas where Verizon built FiOS to compete with the cable monopoly), prices and services are arguably better than in non-competitive areas—and, at a minimum, customers do have a choice of providers. A new network will mean more competitive choices for consumers in Champaign, Urbana, and Savoy—a status that would put them among only a few lucky communities nationwide who have a broader set of choices than the standard cable/DSL duopoly.

There exists substantial competition for private broadband investment

In the event that UC2B does choose to bid on the Gigabit Squared opportunity, it will be competing with many other interested parties. Gigabit Squared is accepting bids only from Gig.U university communities, of which there are 37—and many of those have signaled their intention to submit a proposal. In addition, a range of other communities have approached Gig.U for membership and the opportunity to participate. While I cannot guess at the final number, I anticipate that the number of bidders will exceed the number of locations in which Gigabit Squared will invest.

The Gigabit Squared opportunity is in some ways analogous to the Google fiber opportunity of a few years ago that led to Google's commitment to build FTTP in Kansas City, Mo. and Kansas City, Kan. The private investment will flow to those communities where the business opportunity is best for the private provider. And a number of communities will compete to provide that opportunity.

To increase the chances of private investment, UC2B's core policy goals should be the basis for the application, but any ancillary or unnecessary requirements should be eliminated

To make the application as competitive as possible, I recommend that the Communities articulate and provide requirements that will effectuate their key policy goals—the core values of the initiative and the guiding principles behind UC2B from its inception. Any other requirements—those that are ancillary to the core policy goals—should be eliminated because they are likely to make the application less competitive for private investment while not furthering the core values of UC2B; in that sense, they would be superfluous or counterproductive.

Put another way, I recommend that the Communities require certain conditions that fulfill the vision that was originally created for UC2B and that has been so ably implemented over the past few years. Specifically, these core conditions are:

- The network must be fiber, not alternative technologies, offering high speeds
- There must be open access to enable fair and open competition
- The network must be built to all members of the community, with no redlining

Beyond those key issues, creating additional impediments to how Gigabit Squared runs its business will make the application less competitive. Each requirement should achieve for UC2B something of real meaning—otherwise the requirement serves only to reduce the chance of attracting the private investment.

To this end, the following adds some detail to the three core conditions suggested above. These further details are based on discussions with members of the Policy Committee. While I do not know whether these conditions would be palatable to Gigabit Squared, they do establish a baseline for the Communities for negotiations, and enable both sides to understand what core values the Communities seek to effectuate through this negotiation.

1. The Communities (Cities of Champaign and Urbana, Village of Savoy, and the University of Illinois) seek universal fiber infrastructure and symmetrical, high-speed services

- A. Gigabit Squared will build fiber infrastructure to the curb of every residence and business in Champaign, Urbana, and Savoy within a timeframe to be determined through negotiations
- B. In the event that the expansion effort is canceled or reduced, or if Gigabit Squared ceases to operate or is sold, the escrow contributions will be refunded to those contributors that have not had fiber built to their designated locations
- C. Gigabit Squared will manage and support the existing UC2B fiber infrastructure and customers
- D. All Gigabit Squared subscribers will have gigabit access to local UC2B/Gigabit Squared customers and to local community resources, per the original vision for UC2B

2. The Communities seek open access and competition

- A. The new fiber infrastructure will be operated on an open access basis
- B. Other service providers will be given opportunity to purchase capacity at reasonable wholesale rates over all fiber infrastructure

3. The Communities seek a partnership of mutual benefit

- A. Gigabit Squared and the Cities of Champaign and Urbana, the Village of Savoy, and the University of Illinois will enter into non-exclusive agreements
- B. The Cities, University, and UC2B will make available some existing UC2B fiber infrastructure
- C. UC2B will continue to own the assets that were obtained through Federal, State and local funding.
- D. The Cities, University, and Village will make available their rights-of-way
- E. The University will make available via rental agreements appropriate rack space and access to the two telecommunications nodes that house UC2B's core electronics
- F. Gigabit Squared will pay an annual fee to the Cities and Village, based on a percentage of its local total gross revenue from all services provided over infrastructure located in that jurisdiction
- G. Gigabit Squared will contribute to the UC2B Community Benefit Fund a percentage of its local total gross revenue from all services provided over infrastructure located in the Communities. That fund is administered by UC2B to provide training and other programs to reduce the digital divide and promote digital inclusion
- H. Gigabit Squared will maintain a local customer service presence
- I. Gigabit Squared is strongly encouraged to hire and train a local workforce, or contract with existing local providers, to build, maintain, and operate the network

4. To ensure that these goals are met, UC2B will have a right of first refusal on any purchase of the assets, including in the event of Gigabit Squared's bankruptcy

Conclusion

I am a longtime proponent of local decision-making on communications matters and I strongly believe that localities should be free to assume the risk of public broadband initiatives if they so choose—with the full understanding of the financial and other risks those initiatives carry, as well as their profound long-term community and economic development benefits. The Gigabit Squared possibility does not eliminate the possibility of public broadband, but it does present a possible alternative that may be more viable, both financially and politically, in the near future. A bid and subsequent negotiation is an effective means to determine whether the Communities' policy goals of ubiquitous, universal open access fiber can be met by Gigabit Squared while still securing for Gigabit Squared a business opportunity that would result in investment in Champaign, Urbana, and Savoy.

Motion to respond to request for participation from Gigabit Squared

This motion is in support of UC2B applying to Gigabit Squared to have the company build fiber to the premises throughout Urbana, Champaign and Savoy. Such a move would entail an estimated investment of between \$50 million and \$70 million by Gigabit Squared and would place the financial risk of expanding the UC2B network onto the private sector, reducing the need for local funding and risk.

Urbana seeks a partnership with Gigabit Square of mutual benefit. The city requests that any agreement with Gigabit Squared include the following provisions:

- 1. That the network must be fiber, not alternative technologies, offering high speeds.
- 2. There must be open access to enable fair and open competition.
- 3. The network must be built to all members of the community.
- 4. The city requests that Gigabit Squared pay an annual fee to the cities and village, contribute to a UC2B Community Benefit Fund and maintain a local customer service presence and hire and train a local workforce.
- 5. Any contract with Gigabit Square should include a provision that UC2B will have a right of first refusal on any purchase of the assets, including in the event of Gigabit Squared going bankrupt.
- 6. There should be strict fiscal, financial separation between the wholesale business and retail business so there is a level playing field for retail providers.