UC2B Policy Board Agenda

Regular Meeting

October 19, 2011 – 12:00 noon Council Chambers, 102 N. Neil Street, Champaign, Illinois

- I. Call to Order
- II. Roll Call (By Roster) Determine Quorum
- III. Approve Agenda
- IV. Approval of Minutes from September 28, 2011
- V. ACTION*/DISCUSSION ITEMS (note in this section we will go to audience for comment prior to discussion by Board of each item, comments are limited to 5 minutes in length per person)
 - a) *A Resolution Recommending a Business Planning Consultant NEOFiber w/Gigabit Squared Teri Legner
 - b) FTTC Construction Update Beth Reinke, Tony Vandeventer
 - c) Canvassing Update Dr. Jon Gant
 - d) Marketing Committee Update Brandon Bowersox/John Kersh
 - e) NTIA/Grant Update Mike Smeltzer
- VII. Tasks to complete for next meeting
- VIII. Items for next meeting's agenda
- IX. Public Participation
- X. Adjournment
- XI. **Next Meeting**:

November 2, 2011- 12:00 p.m. to 1:30 p.m. Council Chambers, 102 N. Neil Street, Champaign, Illinois

- XII. Items for future Action/Discussion:
 - a) Grant Required Approvals Mike Smeltzer
 - b) Technical Committee Report and Request for approvals of items forwarded from Technical Committee and its sub-committees Tracy Smith
 - c) FTTP RFP Decisions should construction and management be included together as one RFP or not
 - d) Discussion of pursuing a change order for ring design in order to include a production class facility Rough Cost Estimates
 - e) Update on FTTP Construction Process



UC2B Policy Board Minutes

Joint Policy Board and Technical Committee Meeting September 28, 2011

Location:

City of Champaign Council Chambers 102 N. Neil Street Champaign, IL 61820

Board Members Present: Abdul Alkalimat, Brandon Bowersox, Mike DeLorenzo, Deborah Frank Feinen, Richard Schnuer, Tracy Smith.

Board Members absent: Rev. Zernial Bogan, Minor Jackson, Pete Resnick

Technical Committee Members Present: Bill DeJarnette, Connie Dillard-Myers, Fred Halenar, Tracy Smith, Mark Toalson for Tony Vandeventer, Ross Veach, Mike Vrem

Technical Committee Members absent: William Gray, Craig Shonkwiler, John Brighton, Chris Hamb, Omar Sobh, David Young

- I. The meeting was called to order at 12:04 p.m. by Chair Feinen.
- II. Roll Call
- III. Bowersox moved and Alkalimat seconded to approve the Agenda as written. The Board approved by voice vote.
- IV. Schnuer moved and DeLorenzo seconded to approve the Minutes of the September 7, 2011 UC2B Policy Board meeting as written. The Board approved by voice vote.
- V. Halenar moved and Toalson seconded to approve the minutes of the September 6, 2011 UC2B Technical Committee as written. The Committee approved by voice vote.
- VI. Action Items:

Marketing Committee Update: Bowersox updated the Board on the UC2B Marketing and Outreach Committee's recent efforts, including the Groundbreaking ceremony and the two UC2B Technology Showcase events. All the events were well attended. Bowersox stated the word is getting out in a positive fashion and cited a recent advertisement for an apartment on Craigslist that listed fiber optic broadband availability as one of the distinguishing features for the apartment. Kersh stated that interest in the

community is definitely picking up as he is receiving numerous calls/emails for more information. Halenar mentioned that he, Legner and Gant attended a recent neighborhood association meeting at Garden Hills school to give an update on the project. He noted that it was well attended and resulted in numerous people leaving their contact information with him so that they could get put on a follow-up list for subscribers. Kersh said he is keeping a database with potential customer's information for ease of contact in the future. Alkalimat stressed involving the anchor institutions in the marketing, specifically churches, noting that, if the churches see the value in the product and promote it, then the customers will follow.

VII. NTIA Update: Bowersox stated he was very excited about the One Maryland project described in Smeltzer's report and the FTTP project update report. He also mentioned that he thought the NATOA information listed might be helpful for UC2B and wanted to learn more about that at an upcoming meeting. Tanya Parker from"Unity in Action Magazine" addressed the Board and stated she would be interested in connecting with UC2B to promote this project in the community. She indicated that social and economic development is very important to her and her organization. Alkalimat had met with Parker to discuss possibly having the magazine release a special issue to promote UC2B.

Craig Walker asked the committee about the hiring process for canvassers and the requirement of the U of I to complete background checks on them. He stated that this practice might limit the candidate pool and could eliminate those in particular with felonies in their past. Walker questioned how the process might be made more open to everyone. DeLorenzo confirmed the background check is a requirement from the University of Illinois, however, he stated that just because a felony (or misdemeanor) conviction appears on the background check report, that does not necessarily disqualify the individual from being hired. Each case is evaluated separately and is directly related to the job requirements/responsibilities by U of I Human Relations department.

VIII. General Description of Work for Phase 2 FTTP Construction:

Smeltzer explained that the Fiber to the Premise project should be bid soon and that there are basically 5 divisions of work to be done. The possibility of breaking down the overall project into multiple pieces on this basis or some alternative exists which might allow smaller companies to bid on portions of the work. UC2B would like to involve more minority-owned businesses in the project, so breaking the job down into smaller portions may allow more businesses to bid. Alkalimat raised the point that a lot of smaller, locally-owned businesses are turned off by the lengthy bid process and asked if we could require in the contract a statement about hiring locally. Fred Stavins, City Attorney, Champaign stated that the federal grant prohibits the use of local preference as a selection criterium, additionally noting that such is considered a violation of the Constitution. Legner reviewed a possible process (that still needs to be developed) that might encourage more minority/female business participation in this phase of construction. Generally, the process would have the City taking "applications" from minority/femaleowned businesses and facilitating the introduction with the larger, prime contractors. The primes would then have the contact information of these companies along with references

that they could utilize to sub-contract portions of the work. The "application" process would allow companies to identify the work for which they have the skills necessary and are qualified to conduct. Having a diverse workforce is as important as business ownership. The City's EOPO and Affirmative Action requirements will also apply.

Audience Comments:

Peter Folk stated that whenever you are trying to do things with multiple outcomes, there are two approaches: 1. incorporate rules and mandates or 2. use incentives that encourage behavior instead of imposing requirements. Consider what you are trying to accomplish.

Craig Walker suggested we could create goals and percentages based on guidelines and goals, specifically as it relates to minority and business owner firms to receive points. A scale or perhaps a matrix can be developed to facilitate local participation. Other cities and counties do this.

Ross Veach stated he would like to have the work portioned out so that the inside wiring portion might be separate from the larger contract.

Fred Stavins noted that the process will be developed in a legal way that encourages minority/female-owned business participation and workforce diversity. There are a variety of regulations involved. We know what the direction is and will do everything we can to develop something within that framework.

Henry Bell, Owner of Southern Belle Electrical stated his company is capable of completing all parts of the project and could bid on it as a whole, however he would be willing to bid on the pieces as well.

Alkalimat asked Mr. Bell his thoughts on how the committee can increase minority participation in the bidding process. Mr. Bell suggested a group meeting with all minority contractors, a forum for getting the word out and seeing what each contractor is capable of doing. Kersh agreed that a group meeting was a good idea. Alkalimat noted that Revered Lewis from Bethel Church was in attendance and suggested that his church might be a good location for an outreach meeting for minority contractors.

Troy Deen, IEG Magnum stated he thought it would be a good idea to terminate the fiber to the premise on the outside of the premise and get a separate contractor to do the inside of the homes as suggested by Veach. A private contractor can more readily deal with each section of the project that they are most qualified for.

DeJarnette stated that splitting the project up is great, but there will still need to be an "over seer" or "general" to ensure that all aspects of the project are getting done correctly. Committee discussed pros and cons of splitting project into "inside" and "outside" projects. Legner thanked the committee for their input and good discussion. She committed to scheduling a meeting with minority contractors to gather more input about the process.

Next agenda: Smeltzer noted that canvassing begins on November 7th and the canvassers are going to need certain pieces of information to conduct their work, including service rates and capacities. We will be asking the business consultant to review the current proposed service packages/tiers and to provide recommendations about those, but it would be helpful if the Policy Board, at the October 19th meeting, could establish or endorse at least the introductory or basic tier. He noted that we are probably set with the \$19.99 rate but could add bandwith for the price. It is proposed at 5 Mbps but could easily be increased to 10 or 20. Legner noted that there will likely be a recommendation to hire a business consultant at October 19th meeting.

Public Participation:

Craig Walker stated that the business consultant will have a wide range of responsibilities to deliver based upon what the Committee has discussed at prior meetings. UC2B has to change into a self-sustaining business. Capital is available and investment criteria are changing. There are minority and female owned financial firms who could work with business consultant firms. Investment banking firms could be very helpful to this Committee.

Feinen adjourned meeting at 1:37 p.m.

Next Meeting: Wednesday, October 19, 2011, 12:00 noon to 1:30 p.m., Council Chambers, City of Champaign, City Building, 102 N. Neil Street, Champaign, Illinois

A RESOLUTION

RECOMMENDING THE CITY OF CHAMPAIGN EXECUTE
A PROFESSIONALSERVICES AGREEMENT WITH NEO FIBER, IN CONJUNCTION
WITH GIGABIT SQUARED, TO PROVIDE BUSINESS CONSULTING AND PLANNING
SERVICES FOR UC2B

BE IT RESOLVED BY THE UC2B POLICY BOARD, as follows:

Section 1. That it is recommended that a Professional Services Agreement between the City of Champaign, as lead agency for operations and on behalf of UC2B, and NEO Fiber, in conjunction with Gigabit Squared, be negotiated in an amount not to exceed \$60,000.

Section 2. That the Agreement provide for the services identified in the general description of work attached hereto.

RESOLUTION NO. 2011- 06		
PASSED:	APPROVED:	
		Policy Board Chair



Section A

General Description of Work Based Upon the Following Assumptions:

- **A1.** Via a Letter of Understanding (LOU) approved by the Consortium partners in August, 2011, the City of Champaign is the Lead Agency for UC2B Operations. The University will administer the NTIA and DCEO grants and manage the UC2B construction and related activities funded by those grants.
- **A2.** The LOU specifies that University personnel will manage the UC2B core electronics in the UIUC nodes and in the 12 neighborhood equipment cabinets for a period of two years starting with the commencement of UC2B retail services. It further specifies that University personnel will not support the fiber infrastructure, the UC2B equipment in customer locations or those UC2B customers.
- A3. The UC2B Consortium will contract with third parties to do utility locates.
- **A4.** The UC2B Consortium will contract with third parties to do fiber maintenance and repair once the UC2B fiber has been accepted. The fiber will be accepted from the contractors in sections as they are completed, tested and approved, rather than all at once at the end of the project.
- **A5.** From now until the end of the first phase of grant-funded construction (the 7 backbones rings, Community Anchor Institution laterals to the curb and the fiber-to-the-curb in the designated Census Block Groups) UC2B will not construct any additional lateral connections or fiber-to-the-curb areas (other than possibly the list of "additional" Anchor Institutions.) While the entities encourage and will facilitate discussions and planning on how to expand UC2B services beyond the grant-funded locations and areas, any additional construction will only be after the grant-funded first construction phase is complete.
- A6. The University will issue an RFP for a fiber management system for UC2B.
- **A7.** The City of Champaign as Lead Agency for Operations for UC2B will issue an RFP for the construction of fiber from the curbs into the buildings, inside wiring and UC2B FTTP equipment installation and configuration for 247 identified "original" Anchor and IRU locations and approximately 2,450 other households and businesses to be determined by the door-to-door canvas and other customer acquisition activities. The City of Champaign will issue this bid request as per its procurement policies. The Davis-Bacon Act will apply to this work.
- **A8.** The University will facilitate and fund the purchase of up to 1 Gbps of tier one Internet connectivity through its existing competitively bid contracts and deliver it to UC2B core routers in UIUC Nodes 8 and 9 for a period of five years starting with the commencement of UC2B retail services. The purchase of any equipment specifically required to deliver this bandwidth will be funded by the BTOP grant. All public IP addresses associated with UC2B services will be registered to UC2B, not the University of Illinois.
- **A9.** The University will purchase routers, switches and core network servers for UC2B through existing competitively bid contracts that the University either holds or has access to. As with **A8** (above) this will allow UC2B to benefit from the discounts that the

University has already secured based on purchasing relatively much larger quantities of these items than UC2B will need.

- **A10.** UC2B will initially be in the retail Internet service business, and only that retail business. To avoid making the necessary capital investments and to avoid the associated regulatory oversight, UC2B will not directly offer television or telephone services. UC2B will also not provision or host email, web sites or on-line storage. For all retail services other than Internet connectivity, UC2B will depend on others, to provide those retail services. It is expected that others will offer competing Internet connectivity services as well, both as a component of a bundle of services and also as a stand-alone service.
- **A11.** All customer connections to the UC2B network will be at least 1 Gbps symmetrical at the physical layer. Rate limiting at data and network layers will be used to control access to Internet bandwidth and layer two services, but UC2B retail customer locations will almost always have at least 1 Gbps of connectivity at the physical layer to each other. (See the one limitation to this in **A15** below.)
- **A12.** As promised in our initial grant application and in subsequent Due Diligence discussions with NTIA, through the end of the period during which the University will provide funding for up to 1 Gbps of Internet access (5 years from the commencement of retail UC2B services), UC2B will deliver an Internet service priced at \$19.99 per month that will provide at least 5 Mbps of symmetric Internet connectivity and 1 Gbps of symmetric UC2B Intranet connectivity. Tiers of Internet connectivity with more Internet bandwidth will also be offered at higher yet to be determined monthly rates.
- **A13.** The City of Champaign, on behalf of UC2B, will enter into Indefeasible Rights of Use (IRU) contracts with the entities identified in the BTOP grant application that committed to purchasing IRU's via signed letters of intent. NTIA rules require UC2B to make dark fiber available to other entities, but UC2B is not required to offer those other entities IRU agreements.
- **A14.** UC2B will require all providers of services on the UC2B network to locally peer to UC2B and to each other using BGP-4 or successor protocols. UC2B will not peer with service providers that seek to avoid UC2B service provider connection fees through local peering.
- A15. Service providers that wish to offer services over the UC2B network must redundantly connect to the UC2B network core and pay the proposed rates for those service provider connections. UC2B ring fiber strands will be made available to facilitate those redundant service provider connections. The costs for using that UC2B ring fiber are included in the proposed service provider connection charges. Other than hosting subscription web sites, service providers will not be allowed to offer services to UC2B customers from a non-redundant UC2B Fiber-to-the-Premise connection.
- **A16.** Whether through the facilities of the City of Champaign or through the facilities of a service provider that may be hired to run the day-to-day operations of UC2B, there will be at least one physical location in Champaign-Urbana where UC2B retail customers can go in person during regular business hours and pay their UC2B monthly charges in cash, by check or with a credit card.
- A17. The Urbana-Champaign Big Broadband Consortium will retain that name and continue to use the "UC2B" acronym as it moves forward. The existing UC2B logo and

color scheme will also be used. The final scope of services will not include a review or evaluation of these items.

A18. UC2B was awarded funding to build fiber connections free of charge in 11 census tract block groups that were determined to be underserved. There are approximately 5,000 premises in these areas that are eligible for UC2B service, including residences, businesses and Community Anchor Institutions. The grant documents approved by NTIA assume that approximately 2,700 of the 5,000 sites will take UC2B service.

The successful firm will provide professional services to address the following questions:

Regarding Organizational Structure:

OSQ1. Is UC2B as it is currently constituted via an intergovernmental agreement, the optimal business structure for operations and delivering services? Is it optimal for expansion once the grant-funded construction is complete? Is it optimal for legal liability? What are the viable options for consideration among the member agencies? What are the advantages and disadvantages of each?

OSQ2. What are UC2B's business model options? Should UC2B have employees or should it outsource the day-to-day operational and support activities? If outsourced, what is the optimal process for finding a vendor to perform the day-to-day operational tasks necessary to provide fiber-based services?

OSQ3. What business model best provides for short-term, i.e. 2-3 years, viability and long-term sustainability? Are there business model options that are sustainable with the subscriber base from the eligible areas described in **A18** and in conjunction with the Community Anchor Institutions? If so, what are they? If not, what are the options for expansion?

Regarding Operational, Services and Financial Issues:

OSFQ1. The grant approved by NTIA provides a list of proposed retail service tiers and pricing scheme. The lowest level is a \$19.99 base tier service for 5 Mbps of symmetric Internet connectivity and 1 Gbps of symmetric UC2B Intranet connectivity. Prices and bandwidth increase after this base level. Are the proposed tiers and pricing optimal and properly structured to gain the initial customer base necessary to maintain short-term viability? Should there be pricing differentials for business v. residential subscribers for example? Please provide a review and analysis of pricing models that UC2B should consider for the entity's long-term sustainability with consideration given to the transient nature of this community?

OSFQ2. What should the pricing be for layer-two (private VLAN/Metro-Ethernet) services? Are the connectivity levels and the pricing currently approved by NTIA appropriate to start with?

OSFQ3. As an open access network, should UC2B charge service providers who wish to deliver their services over the UC2B network? What are the options and recommendations for business operations addressing service providers, including duration of contract, delinquency, etc? Are the service levels and pricing currently approved by NTIA appropriate to start with?

OSFQ4. Provide options and recommendations for business operations addressing customer contracts or service agreements terms and conditions including, deposits for equipment and service; duration of required subscription; delinquency; penalties; payment options; etc. Please factor in the low-income nature of most of the households in our grant-funded FTTP areas.

OSFQ5. For multi-family dwelling or mixed-use structures, what are the options for precabling in the eligible areas to provide for the customer base necessary for short-term and long-term viability? Are there subscription rates that are different and applicable for these? What are they?

OSFQ6. Assuming that the owners of 2 mobile home parks are agreeable, should UC2B pre-cable fiber-to-the curb within those private developments? Does our NTIA grant require this?

OSFQ7. If a soon-to-be-released ADTRAN combined ONT/gateway will support it, do we want to require UC2B customers to provide a second (community-wide) Wi-Fi SSID from every UC2B gateway? Does it make sense for UC2B to provide a \$10.00 permonth, \$5.00 per-week, \$1.00 per-day UC2Bnet community-wide Wi-Fi service (or some similarly priced service) that has highly automated sign-up and provisioning? **OSFQ8.** Should UC2B pursue the Internet Archive's offer of free design, equipment and installation for a community-wide wireless-to-the-building solution? Or should UC2B concentrate on fiber-based "last-mile" solutions and the proposed low-cost community Wi-Fi service?

OSFQ9. Define all payment options for subscribers and service providers.

OSFQ10. Local jurisdictions require other internet service providers to obtain a license agreement and pay fees for use of the right-of-way or to obtain franchise agreements and pay franchise fees. As a publicly funded project that may have public ownership longer term, is it appropriate for UC2B to also be treated similarly? If so, what will such fees be based on for each entity? How should such a fee be presented on UC2B bills? Should it be listed as an extra "tax" or "fee" on top of the UC2B Internet service charge or incorporated into UC2B monthly service charge?

OSFQ11. Should these jurisdictions charge the entities with UC2B fiber IRU's an ongoing fee for the use of their respective rights-of-way? If there is a ROW fee, what would it be based on for each entity? Should the UC2B IRU and fiber maintenance agreements specify that those ROW fees will be paid by UC2B?

OSFQ12. Is it possible for these jurisdictions to require a franchise agreement and charge UC2B, any of the service providers on the UC2B network, or IRU customers franchise fees that would be based upon local sales volumes? If so, what are the advantages and disadvantages of this?

OSFQ13. What are the 2 or 3 most promising models for UC2B to explore to finance the expansion of FTTP services throughout the community after the grant-funded areas have been built? What are the advantages and disadvantages of each model?

OSFQ14. Should UC2B enter into any additional IRU agreements? If UC2B were to enter into any IRU agreements beyond what have already been discussed, should the rates per-strand-mile and for fiber maintenance be the same as in the original IRU agreements. More? Less?

OSFQ15. Should UC2B offer dark fiber rental? If so, at what rate?

OSFQ16. Please provide alternative demark policies for UC2B consideration.

OSFQ17. As an open access network, should UC2B retain ownership of all portions of the network in order to assure customer choice and competition? Or are there alternatives for allowing internet service providers to connect to the network outside of our eligible areas and retain ownership of their infrastructure? How do these issues

impact UC2B's ability to expand and be sustainable long term? What are the impacts on the integrity of the network?

OSFQ18. What should UC2B's strategy be to gain customers in the eligible areas? What should our strategy be to gain customers among the Community Anchor Institutions? If UC2B decides to expand service outside of the eligible areas, what is your suggested marketing strategy to gain new customers and provide for a sustainable operating model?



REPORT TO UC2B POLICY BOARD

FROM: Teri Legner, Interim UC2B Consortium Coordinator

DATE: October 17, 2011

SUBJECT: RECOMMENDATION TO HIRE BUSINESS PLANNING CONSULTANT

A. Introduction: This Resolution recommends that the City of Champaign, as lead agency for operations, negotiate and enter into a professional services agreement with NEO Fiber, in conjunction with Gigabit Squared, to provide business consulting and planning services for UC2B in an amount not to exceed \$60,000.

B. Recommended Action: Representatives from the Cities of Champaign and Urbana, along with the UI recommend approval of this Resolution.

C. Summary:

- The 2009 UC2B grant application and due diligence filings to NTIA included a 5-year financial forecast based upon preliminary assumptions with regard to service offerings, pricing, and operations.
- The Cities and the UI have an interest in evaluating this forecast and its assumptions and in understanding and developing an operational or business model for UC2B as an entity in the future
- In May, staff issued a preliminary Request for Interest to 9 firms to assist UC2B with this work. 5 submitted a response.
- Representatives from each of the member agencies evaluated the responses and determined that 4 of the 5 were qualified to do the work.
- When the construction bids came in over budget in June, staff put this business planning work on hold until it was certain that the project was going to proceed.
- With the approvals of the Letter of Understanding and the Subaward agreements in August, this work was re-initiated.
- On September 7, 2011, the Policy Board reviewed a general description of work that included base level assumptions; questions regarding organizational structure; and operational, services and financial questions.
- Staff issued a letter to the 4 consulting firms requesting their responses to several specific questions and included this revised general description of work as background for the services to be provided and a starting point for a more specific scope of work.

- Staff conducted telephone interviews with the 4 firms September 27 and 29.
- Staff recommends that a contract be negotiated with NEO Fiber, in conjunction with Gigabit Squared for a refined scope of services to assist UC2B in developing its business model and operational plan for the future.

D. Background:

1. Preliminary UC2B Business Plan Included in Grant Application in 2009

The original BTOP grant application prepared in 2009 contained a business plan that included a 5 year financial forecast. That forecast was prepared by University staff, with City staff review, and in conjunction with industry consultants. It was further reviewed and ultimately approved by NTIA as a core part of the grant application. Below are some of the assumptions contained in the plan and are the basis for the financial forecast:

- UC2B will be both a wholesale and a retail service provider.
- Service definitions and pricing for both wholesale and retail services exist and are Attachment 1.
- UC2B will not be directly providing retail television or telephone services.
- UC2B will expand into other areas of the community after the grant-funded connections are provided.
- There is money in the UC2B grant budget to pay for customer service and billing. It does not presume who or what entity will provide these services.
- UC2B will outsource fiber repair activity.
- The UI will provide backbone network support for two years from the commencement of retail operations.
- The UI will provide internet connectivity for 5 years from the commencement of retail operations.

The UC2B Policy Board, and its member agencies individually, have expressed an interest in reviewing these assumptions and the financials to gain a better understanding of the commitments that have been made. Together, these agencies have reviewed and approved a start-up operational budget that includes funding for consulting services to conduct this review and to assist UC2B in further developing its business plan and organizational model.

2. Business Planning Consultant Request for Interest. In May, staff distributed a letter to 9 firms/individuals to seeking their assistance in conducting this work. Five of them provided a response. A staff team of representatives from each of the member agencies reviewed the responses and determined that 4 of them were qualified to do the work. Those four firms were CCG Consulting, LLC; Columbia Telecommunications Corporation; Design Nine, Inc.; and NEO Fiber.

At the same time this recruitment was underway, the construction bids were due back and coming in over budget. It was determined by the member agencies that the scope of the construction projects had to be redefined and renegotiated in order to reduce costs so that the overall project could

proceed. As a result, the business planning work was delayed until it was certain that UC2B would have a big broadband project. After negotiations with the contractors were successfully completed, the member agencies also successfully negotiated subaward agreements for construction related work funded by the grant and a Letter of Understanding for start-up operations funded by the entities through June, 2013.

- **3.** Policy Board Review of General Description of Work for Business Planning Consultant. At its meeting on September 7, 2011, the Policy Board reviewed a preliminary general description of work that identified a set of assumptions; organizational structure questions; and operational, services and financial questions. Staff issued a second letter to the four firms seeking additional information about their experience and included the revised description of work to provide the basis for UC2B's request. See Attachment 2.
- **4. Evaluation of Responses.** All 4 firms provided responses to this second inquiry. Staff reviewed the responses for the companies' ability to provide the requested services. The evaluation criteria included:
 - Qualifications, experience and ability to complete the Description of Work within the established deadline
 - Completeness of response and explanation of the technical approach
 - Character, integrity, reputation, judgment, experience and efficiency of the proposer to provide business consulting services
 - Comparable client base
 - Familiarity with the Federal BTOP/ARRA requirements
 - Fees
- **5. Interviews.** Following review of the proposals, staff invited all 4 firms for interviews. All firms had good qualifications and generally demonstrated an understanding of the Scope of Work. Staff conducted telephone interviews with each of these firms on September 27 and September 29. Those included on the interview team were Mike Monson, Bill DeJarnette from Urbana; Mike Smeltzer, Tracy Smith and John Kersh from the UI; and Fred Stavins, Fred Halenar, Richard Schnuer and Teri Legner from Champaign.

The firms were asked to expand upon their relevant experience and to respond to the following additional questions:

- What level of effort will you be able to devote to our project in the next month?
- Explain how you would fit our work into your schedule; specifically with respect to any other major clients.
- There may be portions of the work described in our Description of Work that could be completed earlier than the final product, such as an evaluation of service tiers and pricing. If possible, please describe the order of the work and a suggestion for delivering certain portions early.

- Given the public interest in UC2B, the successful firm will likely be required to attend at least 1 UC2B Policy Board meeting, an Urbana City Council meeting and a Champaign City Council meeting. There may be an additional need to visit our community to gain a clear understanding of the work in order to deliver a high quality product. How many in-person visits to our community do you envision as you undertake this scope of work?
- What additional data or information will you need from us to conduct your work and how much time do you estimate that will take? How and when will progress reports be made and what level of involvement will be needed by City and/or UI staff?
- What can UC2B do to attract an optimal set of service providers to its network?
- How is your firm prepared to assist UC2B in determining an optimal strategy for expanding FTTP services beyond the grant-funded areas and achieving long-term growth?
- How does our BTOP project differ from your other clients, in terms of size and/or complexity?
- Based upon what you know about UC2B and what you've experienced or learned with other clients, have we missed anything that would be beneficial or necessary to know to make reasoned decisions about the future sustainability of this project? If so, what are your suggestions?
- **6. Reference Checks.** The interview team agreed to conduct reference checks on Design Nine, Inc. and NEO Fiber to receive feedback about their ability to conduct the work. A smaller team of Mike Monson, Mike Smeltzer and Teri Legner were tasked with checking the references. Staff asked the references to discuss the firms' methods, thoroughness and timeliness of work, and general feelings as to how well they provided relevant services. Staff received very favorable comments on both firms and determined that either could adequately deliver the services necessary for UC2B to move forward.
- **7. Recommendation.** Staff reviewed the proposals, interview responses, and information gained from references and determined that NEO Fiber, in conjunction with Gigbit Squared, were best suited to deliver services for UC2B. NEO Fiber's experience was relevant and comprehensive and its ability to deliver services in a shorter timeframe were preferred.

E. Alternatives:

- 1. Approve the Resolution recommending that the City of Champaign execute a professional services agreement with NEO Fiber, in conjunction with Gigabit Squared, to provide business consulting and planning services for UC2B.
- 2. Do not approve the Resolution and provide alternative direction.

F. Discussion of Alternatives:

Alternative 1 will approve the Resolution.

a. Advantages

- Firm is a well-qualified vendor with direct experience in BTOP/ARRA projects and with other municipal, public clients.
- NEO Fiber is well qualified and is a MBE/FBE firm.

• Can complete the work in 10-13 weeks.

b. Disadvantages

• Estimated costs to perform the work exceed the amount of funding budgeted in the Letter of Understanding.

Alternative 2 does not approve the Resolution and seeks further direction from the Policy Board.

a. Advantages

• Dependent upon Policy Board direction.

b. Disadvantages

- If delayed, may not allow for the work to be completed within a timely manner.
- **G.** Community Input: Staff has not sought community input on this matter, but the public will have the opportunity to provide comment at the Policy Board meeting on October 19, 2011.
- **H. Budget Impact:** All of the work conducted under this contract will be funded by the member agencies as per the terms of the Letter of Understanding. The City of Champaign will cover 42%, Urbana will cover 25% and the UI will cover 33% of the total contract costs. These are estimated to be \$25,200, \$15,000 and \$19,800 respectively. The start-up operational budget estimated this work to be approximately \$40,000. The proposal is in an amount not to exceed \$60,000. However, it is anticipated that a portion of the costs budgeted for outside legal expenses, specifically development of IRU's, may be grant-eligible and therefore will be less than expected and sufficient to cover this difference.

Prepared by:

Teri Legner Interim UC2B Consortium Coordinator

UC2B Retail Service Offerings

3/30/11



Retail Services will be the same in all UC2B Service Areas

1 Gbps Community Network Service (CNS) for Residential, Businesses and Community Anchor Institutions

	Service		
Name of Tier	Downstream Mbps	Upstream Mbps	Pricing Plan \$ Per Month
UC2B 5 / 1,000 Internet/CNS	5 / 1,000	5 / 1,000	\$19.99
UC2B 10 / 1,000 Internet/CNS	10 / 1,000	10 / 1,000	\$29.99
UC2B 20 / 1,000 Internet/CNS	20 / 1,000	20 / 1,000	\$39.99
UC2B 30 / 1,000 Internet/CNS	30 / 1,000	30 / 1,000	\$49.99
UC2B 40 / 1,000 Internet/CNS	40 / 1,000	40 / 1,000	\$59.99

Note #1 - All CNS subscribers have the full 1 Gbps speed of their CPE's connection to the UC2B Community Network Service.

Note # 2 - Service speeds are indicated by Internet bandwidth in symmetric Mbps / UC2B Community Network Service (CNS) bandwidth in symetric Mbps.

Business and Anchor Institutions - Private VLAN - Layer Two Service			
	Service Speeds		
Name of Tier	Downstream Mbps	Upstream Mbps	Pricing Plan \$ Per Month
Private VLAN 10 Mbps Location	10	10	\$100.00
Private VLAN 100 Mbps Location	100	100	\$400.00
Private VLAN 1 Gbps Location	1,000	1,000	\$1,200.00

Note #3 - Private VLANs are used for connecting multiple locations of an organization to each other. This is sometmes referred to as "Metro Ethernet". There is no Internet connectivity or Community Network Service connectivity included in the Private VLAN Service. In this model, organizations would typically centralize Internet connectivity, and then use the Private VLAN to distribute Internet and organizational data to all remote locations.



Wholesale Service Offerings will be the same throughout the entire UC2B service area

ISP and Service Provider Layer Two Transport Service Offering				
Customer Connections	Locations Where Available	Symmetric Ethernet Port Speed (Mbps)	Monthly Pricing	Comments
Last Mile Internet Service Provider (ISP) Customer 100 Mbps Port	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	100 Mbps	\$19.99	ISP/Service Provider must connect to UC2B core in one of the 3 ways below
Last Mile Internet Service Provider (ISP) Customer 1 Gbps Port	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	1,000 Mbps (1 Gbps)	\$99.99	ISP/Service Provider must connect to UC2B core in one of the 3 ways below
Core Backbone Connections				
Last Mile Internet Service Provider (ISP) Redundant Core Connections Dual 1 Gbps Ports	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	1,000 x 2 (1 Gbps x 2)	\$1,200	No CIR/VLAN charge. (Includes any UC2B ring fiber needed to connect to ISP)
Last Mile Internet Service Provider (ISP) Redundant Core Connections Dual 2 Gbps Ports (2 bridged 1 Gbps Ports)	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	2,000 x 2 (2 Gbps x 2)	\$1,600	No CIR/VLAN charge. (Includes any UC2B ring fiber needed to connect to ISP)
Last Mile Internet Service Provider (ISP) Redundant Core Connections Dual 10 Gbps Ports	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	10,000 x 2 (10 Gbps x 2)	\$3,600	No CIR/VLAN charge. (Includes any UC2B ring fiber needed to connect to ISP)
All core elements of the network are non-blocking and are interconnected at 10 Gbps.				

Dark Fiber - Indefeasible Rights of Use Agreements (IRUs)			
IRU Element	One-Time Charge for 20-Year IRU	Recurring Annual Charge for Maintenance	Comments
IRU - Per Strand Mile - Sold in complete rings	\$1,500 per strand mile	N/A	Sold only in pairs of fiber and for the entire length of a UC2B ring
IRU - Per Lateral Connection	Actual construction costs, or pro-rated costs if shared	N/A	Sold only in pairs of fiber
Fiber and Facilities Maintenance - Charged in complete rings	N/A	\$300 per year per route mile	Not dependent on the number of strands
Maintenance - Per Lateral Connection	N/A	\$600 per year per lateral	No pro-rating if shared

City Manager's Office • 102 N Neil St • Champaign IL 61820 • (217) 403-8710 • fax (217) 403-8980 • www.ci.champaign.il.us

September 19, 2011

Diane Kruse, CEO NEO Fiber P.O. Box 2664 Glenwood Springs, CO 81602

Dear Ms. Kruse:

Thank you for your interest in assisting the Cities of Champaign and Urbana and the University of Illinois, together as UC2B, in identifying and evaluating business model options and developing a business plan for our open access fiber optic network. So that the interview time may be used efficiently, the team has prepared this document for you. Please provide your concise written response to the 11 questions contained in this letter to me via email no later than 10:00 am, CST on Monday, September 26. The team will review your submittal prior to the scheduled interview so that the time may be used for follow-up questions and seeking clarifications where needed.

QUESTIONS:

(Answers should be concise, but informative)

- 1. Please describe your client base.
- 2. Please describe your experience with BTOP and knowledge of NTIA's policies and rules for BTOP.
- Please describe a recent consulting engagement in which you assisted a BTOP project with developing its business plan. Please provide a brief description of that business plan.
- 4. Have you ever recommended a data-only, open architecture, fiber to the home business model? If so, please describe.
- 5. If selected, who will be the project manager for this contract? If others are to be involved, please provide their names, experience and expertise.
- 6. Do you have experience drafting and negotiating IRU's? If so, please describe. Is this a service your firm could provide if requested? If so, who would provide this service? Please include their experience and expertise.
- 7. How is your firm prepared to guide UC2B in determining an optimal business structure for our organization?
- 8. Please describe any ongoing involvement you may have with past consulting clients after the consulting engagement has ended. Do you sell equipment or provide ongoing management services to former consulting clients?
- 9. Please discuss your experience analyzing multiple business models and approaches to community-owned broadband.
- 10. Describe your experience with the broader political environment regarding BTOP and the ARRA, including in Illinois and in Washington DC.
- 11. Please provide a draft schedule for completing the work described in the enclosed General Description of Work, your hourly fees, and a cost estimate to complete the work.

In addition to the responses you will provide to the questions above, please be prepared to address the following questions during your interview:

- A. What level of effort will you be able to devote to our project in the next month?
- B. There may be portions of the work described in the enclosed Description that could be completed earlier than the final product, such as an evaluation of service tiers and pricing. If possible, please describe the order of the work and a suggestion for delivering certain portions early. Given the public interest in UC2B, the successful firm will likely be required to attend at least 1 UC2B Policy Board meeting, an Urbana City Council meeting and a Champaign City Council meeting. There may be an additional need to visit our community to gain a clear understanding of the work in order to deliver a high quality product. How many in-person visits to our community do you envision as you undertake this scope of work? Please be prepared to discuss a draft schedule of work and an estimate of what this may cost if in addition to your hourly fees.
- C. How would you advise UC2B to react to such matters as the recent controversies over WiscNET? How can the business plan address this?
- D. How is your firm prepared to assist UC2B in determining an optimal strategy for expanding FTTP services beyond the grant-funded areas and achieving long-term growth?
- E. What can UC2B do to attract an optimal set of service providers to its network?

As noted above, also included with this letter is a list of Assumptions and Questions providing the General Description of Work to be provided by the firm successful in this award. This is provided for your information now so that you have the opportunity to understand the scope of services that will be requested. Additional reference documents may be found by copying and pasting the following address into your browser:

https://netfiles.uiuc.edu/xythoswfs/webview/fileManager.action?stk=356D9FA223DDA73&entry Name=%2Fsmeltzer%2FUC2B+Consultant+Files&msgStatus=

Thank you for your time and effort spent in preparation of the interview next week. Any questions or comments you may have while preparing your response may be directed to me in writing at teri.legner@ci.champaign.il.us prior to 5:00 pm, CST on Thursday, September 22.

Sincerely,

Teri Legher

Economic Development Manager/Interim UC2B Consortium Coordinator

Enclosure



Section A General Description of Work Based Upon the Following Assumptions:

- **A1.** Via a Letter of Understanding (LOU) approved by the Consortium partners in August, 2011, the City of Champaign is the Lead Agency for UC2B Operations. The University will administer the NTIA and DCEO grants and manage the UC2B construction and related activities funded by those grants.
- **A2.** The LOU specifies that University personnel will manage the UC2B core electronics in the UIUC nodes and in the 12 neighborhood equipment cabinets for a period of two years starting with the commencement of UC2B retail services. It further specifies that University personnel will not support the fiber infrastructure, the UC2B equipment in customer locations or those UC2B customers.
- A3. The UC2B Consortium will contract with third parties to do utility locates.
- **A4.** The UC2B Consortium will contract with third parties to do fiber maintenance and repair once the UC2B fiber has been accepted. The fiber will be accepted from the contractors in sections as they are completed, tested and approved, rather than all at once at the end of the project.
- **A5.** From now until the end of the first phase of grant-funded construction (the 7 backbones rings, Community Anchor Institution laterals to the curb and the fiber-to-the-curb in the designated Census Block Groups) UC2B will not construct any additional lateral connections or fiber-to-the-curb areas (other than possibly the list of "additional" Anchor Institutions.) While the entities encourage and will facilitate discussions and planning on how to expand UC2B services beyond the grant-funded locations and areas, any additional construction will only be after the grant-funded first construction phase is complete.
- A6. The University will issue an RFP for a fiber management system for UC2B.
- A7. The City of Champaign as Lead Agency for Operations for UC2B will issue an RFP for the construction of fiber from the curbs into the buildings, inside wiring and UC2B FTTP equipment installation and configuration for 247 identified "original" Anchor and IRU locations and approximately 2,450 other households and businesses to be determined by the door-to-door canvas and other customer acquisition activities. The City of Champaign will issue this bid request as per its procurement policies. The Davis-Bacon Act will apply to this work.
- **A8.** The University will facilitate and fund the purchase of up to 1 Gbps of tier one Internet connectivity through its existing competitively bid contracts and deliver it to UC2B core routers in UIUC Nodes 8 and 9 for a period of five years starting with the commencement of UC2B retail services. The purchase of any equipment specifically required to deliver this bandwidth will be funded by the BTOP grant.

All public IP addresses associated with UC2B services will be registered to UC2B, not the University of Illinois.

- **A9.** The University will purchase routers, switches and core network servers for UC2B through existing competitively bid contracts that the University either holds or has access to. As with **A8** (above) this will allow UC2B to benefit from the discounts that the University has already secured based on purchasing relatively much larger quantities of these items than UC2B will need.
- **A10.** UC2B will initially be in the retail Internet service business, and only that retail business. To avoid making the necessary capital investments and to avoid the associated regulatory oversight, UC2B will not directly offer television or telephone services. UC2B will also not provision or host email, web sites or online storage. For all retail services other than Internet connectivity, UC2B will depend on others, to provide those retail services. It is expected that others will offer competing Internet connectivity services as well, both as a component of a bundle of services and also as a stand-alone service.
- A11. All customer connections to the UC2B network will be at least 1 Gbps symmetrical at the physical layer. Rate limiting at data and network layers will be used to control access to Internet bandwidth and layer two services, but UC2B retail customer locations will almost always have at least 1 Gbps of connectivity at the physical layer to each other. (See the one limitation to this in A15 below.)
- **A12.** As promised in our initial grant application and in subsequent Due Diligence discussions with NTIA, through the end of the period during which the University will provide funding for up to 1 Gbps of Internet access (5 years from the commencement of retail UC2B services), UC2B will deliver an Internet service priced at \$19.99 per month that will provide at least 5 Mbps of symmetric Internet connectivity and 1 Gbps of symmetric UC2B Intranet connectivity. Tiers of Internet connectivity with more Internet bandwidth will also be offered at higher yet to be determined monthly rates.
- A13. The City of Champaign, on behalf of UC2B, will enter into Indefeasible Rights of Use (IRU) contracts with the entities identified in the BTOP grant application that committed to purchasing IRU's via signed letters of intent. NTIA rules require UC2B to make dark fiber available to other entities, but UC2B is not required to offer those other entities IRU agreements.
- **A14.** UC2B will require all providers of services on the UC2B network to locally peer to UC2B and to each other using BGP-4 or successor protocols. UC2B will not peer with service providers that seek to avoid UC2B service provider connection fees through local peering.
- A15. Service providers that wish to offer services over the UC2B network must redundantly connect to the UC2B network core and pay the proposed rates for those service provider connections. UC2B ring fiber strands will be made available to facilitate those redundant service provider connections. The costs for using that UC2B ring fiber are included in the proposed service provider connection charges. Other than hosting subscription web sites, service providers will not be allowed to offer services to UC2B customers from a non-redundant UC2B Fiber-to-the-Premise connection.

A16. Whether through the facilities of the City of Champaign or through the facilities of a service provider that may be hired to run the day-to-day operations of UC2B, there will be at least one physical location in Champaign-Urbana where UC2B retail customers can go in person during regular business hours and pay their UC2B monthly charges in cash, by check or with a credit card.

A17. The Urbana-Champaign Big Broadband Consortium will retain that name and continue to use the "UC2B" acronym as it moves forward. The existing UC2B logo and color scheme will also be used. The final scope of services will not include a review or evaluation of these items.

A18. UC2B was awarded funding to build fiber connections free of charge in 11 census tract block groups that were determined to be underserved. There are approximately 5,000 premises in these areas that are eligible for UC2B service, including residences, businesses and Community Anchor Institutions. The grant documents approved by NTIA assume that approximately 2,700 of the 5,000 sites will take UC2B service.

Section B

The successful firm will provide professional services to address the following questions:

Regarding Organizational Structure:

OSQ1. Is UC2B as it is currently constituted via an intergovernmental agreement, the optimal business structure for operations and delivering services? Is it optimal for expansion once the grant-funded construction is complete? Is it optimal for legal liability? What are the viable options for consideration among the member agencies? What are the advantages and disadvantages of each?

OSQ2. What are UC2B's business model options? Should UC2B have employees or should it outsource the day-to-day operational and support activities? If outsourced, what is the optimal process for finding a vendor to perform the day-to-day operational tasks necessary to provide fiber-based services?

OSQ3. What business model best provides for short-term, i.e. 2-3 years, viability and long-term sustainability? Are there business model options that are sustainable with the subscriber base from the eligible areas described in **A18** and in conjunction with the Community Anchor Institutions? If so, what are they? If not, what are the options for expansion?

Regarding Operational, Services and Financial Issues:

OSFQ1. The grant approved by NTIA provides a list of proposed retail service tiers and pricing scheme. The lowest level is a \$19.99 base tier service for 5 Mbps of symmetric Internet connectivity and 1 Gbps of symmetric UC2B Intranet connectivity. Prices and bandwidth increase after this base level. Are the proposed tiers and pricing optimal and properly structured to gain the initial customer base necessary to maintain short-term viability? Should there be pricing differentials for business v. residential subscribers for example? Please provide a review and analysis of pricing models that UC2B should consider for the entity's long-term sustainability with consideration given to the transient nature of this community?

OSFQ2. What should the pricing be for layer-two (private VLAN/Metro-Ethernet) services? Are the connectivity levels and the pricing currently approved by NTIA appropriate to start with?

OSFQ3. As an open access network, should UC2B charge service providers who wish to deliver their services over the UC2B network? What are the options and recommendations for business operations addressing service providers, including duration of contract, delinquency, etc? Are the service levels and pricing currently approved by NTIA appropriate to start with?

OSFQ4. Provide options and recommendations for business operations addressing customer contracts or service agreements terms and conditions including, deposits for equipment and service; duration of required subscription;

delinquency; penalties; payment options; etc. Please factor in the low-income nature of most of the households in our grant-funded FTTP areas.

OSFQ5. For multi-family dwelling or mixed-use structures, what are the options for pre-cabling in the eligible areas to provide for the customer base necessary for short-term and long-term viability? Are there subscription rates that are different and applicable for these? What are they?

OSFQ6. Assuming that the owners of 2 mobile home parks are agreeable, should UC2B pre-cable fiber-to-the curb within those private developments? Does our NTIA grant require this?

OSFQ7. If a soon-to-be-released ADTRAN combined ONT/gateway will support it, do we want to require UC2B customers to provide a second (community-wide) Wi-Fi SSID from every UC2B gateway? Does it make sense for UC2B to provide a \$10.00 per-month, \$5.00 per-week, \$1.00 per-day UC2Bnet community-wide Wi-Fi service (or some similarly priced service) that has highly automated sign-up and provisioning?

OSFQ8. Should UC2B pursue the Internet Archive's offer of free design, equipment and installation for a community-wide wireless-to-the-building solution? Or should UC2B concentrate on fiber-based "last-mile" solutions and the proposed low-cost community Wi-Fi service?

OSFQ9. Define all payment options for subscribers and service providers.

OSFQ10. Local jurisdictions require other internet service providers to obtain a license agreement and pay fees for use of the right-of-way or to obtain franchise agreements and pay franchise fees. As a publicly funded project that may have public ownership longer term, is it appropriate for UC2B to also be treated similarly? If so, what will such fees be based on for each entity? How should such a fee be presented on UC2B bills? Should it be listed as an extra "tax" or "fee" on top of the UC2B Internet service charge or incorporated into UC2B monthly service charge?

OSFQ11. Should these jurisdictions charge the entities with UC2B fiber IRU's an ongoing fee for the use of their respective rights-of-way? If there is a ROW fee, what would it be based on for each entity? Should the UC2B IRU and fiber maintenance agreements specify that those ROW fees will be paid by UC2B?

OSFQ12. Is it possible for these jurisdictions to require a franchise agreement and charge UC2B, any of the service providers on the UC2B network, or IRU customers franchise fees that would be based upon local sales volumes? If so, what are the advantages and disadvantages of this?

OSFQ13. What are the 2 or 3 most promising models for UC2B to explore to finance the expansion of FTTP services throughout the community after the grantfunded areas have been built? What are the advantages and disadvantages of each model?

OSFQ14. Should UC2B enter into any additional IRU agreements? If UC2B were to enter into any IRU agreements beyond what have already been discussed,

should the rates per-strand-mile and for fiber maintenance be the same as in the original IRU agreements. More? Less?

OSFQ15. Should UC2B offer dark fiber rental? If so, at what rate?

OSFQ16. Please provide alternative demark policies for UC2B consideration.

OSFQ17. As an open access network, should UC2B retain ownership of all portions of the network in order to assure customer choice and competition? Or are there alternatives for allowing internet service providers to connect to the network outside of our eligible areas and retain ownership of their infrastructure? How do these issues impact UC2B's ability to expand and be sustainable long term? What are the impacts on the integrity of the network?

OSFQ18. What should UC2B's strategy be to gain customers in the eligible areas? What should our strategy be to gain customers among the Community Anchor Institutions? If UC2B decides to expand service outside of the eligible areas, what is your suggested marketing strategy to gain new customers and provide for a sustainable operating model?

About NEO's Team:

The core business and planning team for this engagement is comprised of seasoned executives with broad and deep experience leading public, private and non-profit provider networks, including deep expertise in federal grant compliance and business planning activities. The team possesses deep subject matter and technical depth, including significant intellectual capital in best practices, programs, innovations, project management, lessons learned and success stories.

We have assisted numerous grant recipients in business planning, IRU negotiations, modeling, pricing and consulting services. In addition to our consulting experience, our team has REAL world experience in owning and operating FTTP and fiber optic networks. This real world experience will assist UC2B in not only evaluating business models and opportunities, but also in implementing the models for true sustainability and success.

Diane Kruse - Lead Consultant / Subject Matter Expert



Diane Kruse is the founder and CEO of NEO Fiber, and the Lead Consultant that will be assigned to the UC2B project. Kruse has (25) years of telecommunications industry experience, the last (15) years as an entrepreneur starting and managing successful telecommunication companies. Prior to NEO, she was the CEO of Zoomy Communications, a leading firm in the FTTH industry for greenfield real estate development projects and FTTH design, engineering and construction for municipalities and rural telecommunications companies.

Zoomy designed and built fiber optic and FTTH networks for municipalities and real estate developments and owned and operated several FTTH networks throughout the country. During the economic

downturn, Kruse sold all of Zoomy's fiber optic network assets, as the housing market showed little improvement likely to happen in the next few coming years. Much of Zoomy's team came with Kruse to NEO Fiber.

Starting and running a telecommunications company has many facets and disciplines and Kruse has extensive experience in all of these areas, including: sales, marketing, financing, operations, managing design and construction activities, appraisals and negotiations, writing RFPs and vendor management, and finally selling fiber optic network assets.

Kruse was peer-elected and has served as Chairman of the Board of the Fiber to the Home Council, a world-wide non-profit organization whose mission is to promote, educate and accelerate fiber optic broadband and Fiber to the Home deployments, especially in rural parts of the country. She is a frequent speaker at national telecommunications conferences on community broadband networks and FTTH networks and was the Master of Ceremonies for the Broadband Properties National Summit in April of 2010. Kruse has been a leader in rural broadband initiatives such as the Stimulus Program (ARRA) for broadband, the country's National Broadband Plan, and has been a spokesman for Broadband Properties.

Prior to Zoomy and NEO, Kruse provided consulting services for AT&T, Verizon, Qwest, 360 Networks and Level 3 Communications, where she wrote business and financial feasibility plans,

negotiated interconnection, collocation, and IRU agreements, provided network valuations and appraisals, wrote RFPs and negotiated their vendor contracts. Kruse has excellent financial acumen and analytical, project management, communication, and negotiation skills.

Additionally, Kruse has held numerous management positions with Sprint Communications, primarily in sales and sales management with national and government accounts. Kruse will be the Lead Consultant for this project and will be UC2B' primary point of contact for the Program Management activities.





Mark Ansboury is a veteran telecommunications professional with a distinguished career encompassing senior leadership roles in business development, sales and marketing, strategy, information systems, broadband development, capitalization, mergers and acquisitions. He has served in a variety of leading roles for technology consultancies and broadband service provider organizations, managing technical, operational, business development and finance processes. He has been personally responsible for developing business and capitalization strategies that brought over \$800 million in new capital to his businesses. He has also facilitated the acquisitions and mergers of more than 20 companies over the last 20 years.

Mark specializes in developing and implementing Open Source Digital Economic Development and Open Network strategies for communities and broadband providers. He has developed Open Network Architectures based on multi-stakeholder and trans-sector strategies, Open Network Exchanges and Open Network Provider business models.

Before co-founding and leading Gigabit Squared - GBPS², Mark served as senior vice president and chief technology officer of OneCommunity, where he was responsible for the overall planning, financing, 'go-to-market,' partner/coalition management and vertical/customer capture for the OneCommunity network. Key accomplishments include crafting and executing on a business strategy that brought \$100 million in outside funding and strategic partnerships that grew the net asset base to more than 2,500 miles of fiber, as well as international recognition as a leader in community and open network development, and public/private partnerships.

Prior to OneCommunity, Mark served as founding partner and director for ClearData Communications, Information Technology Partners (ITECH Partners) and NGT Partners, LLC, where he was responsible for the deployment of national and international IP/ATM/Ethernet/DWDN networks. In these roles, Mark developed national fiber and wireless service strategies for AT&T, Intermedia Communications, Bell South and Optus Communications, and managed network deployment for OPTUS Communications/Advanced Radio Telecom and Winstar.

Mark also served as director for telecommunications at the State of Texas Department of Information Resources, where he was responsible for the Texas Statewide IP and Telemedicine network. He also served as co-chair on the state's Telemedicine Strategic Plans and led the

development of the State's Telecommunications Plans. During this period he also served as a legislative consultant on the Texas Telecommunications Reform Act of 1996.

Robert Jennings - Subject Matter Expert



Bob provides senior leadership for both the private and public sector, providing the bridge to see that projects are completed, new business opportunities developed and programs for growth created—as well as implemented. Currently focused on new business development for national, state and local governments in the US, military communities, alternative energy initiatives, community broadband and public-private partnership projects, Bob collaborates with other leading organizations to provide innovative solutions to the challenges and opportunities

presented by current markets.

Working earlier in his career as an attorney, his career has focused on providing public and private entities with advice and counsel on public as well as public-private partnership initiatives. He typically has primary responsibility for the implementation of those programs and projects. He has worked on highly sophisticated debt financing and infrastructure transactions in the United States and has worked on significant international transactions as an attorney as well.

In addition to joining Gigabit Squared, Bob was the founding member of the Captar Group. He was previously the Senior Vice President of Scannell Properties an international real estate development company and spent over fourteen years as an attorney with Peck, Shaffer & Williams and with Griffin & Fletcher. He also worked over seven years with Tamkin Development Corporation and its sister companies, Tamkin Fiber and Public Facilities Investment Corporation, as a Senior Vice President-in charge of marketing and business development.

Bob is a regular speaker and participant in forums on economic development, public/private partnerships, leadership and functional impact. Bob currently is active in the National Council for Public-Private Partnerships as a member of its International Institute and as a corporate officer. He acts as a representative for the Captar Group on the U.S. Air Force Research Laboratory Sensors Task Force as well as the Human Sciences Task Force at Wright-Patterson Air Force Base. Bob is a member of the International Economic Development Council and Southern Economic Development Council as well as a past member of the American Railway Development and Association of Defense Communities.

1. Please describe your Client Base

NEO Response:

NEO Fiber/Gigabit Squared have a diverse client base of projects that cross digital economic development assessments, strategic and technology business planning, deployment and operations of fiber/wireless broadband, Health Information Technology (HIT), energy/micro-grid technology and alternative/renewable energy programs. Some of our current clients in similar service areas include:

- Current Clients ARRA/FCC/Utility Broadband Projects
 - BTOP/CCI/PCC and SBA Programs
 - Virgin Islands Next Generation Network (PCC and SBA)
 - Florida Rural Broadband Alliance, Florida (CCI)
 - Internet 2 US UCAN, Washington DC (CCI)
 - Sho-Me Technologies, Missouri (CCI)
 - Bluebird Networks, Missouri (CCI)
 - Broadband/HIE
 - Coalition for Health Services, Amarillo Texas
 - o Fiber-to-the-Home
 - Holland BPW, Michigan
- 2. Please describe your experience with BTOP and knowledge of NTIA's policies and rules

NEO Response:

Our team has significant and seasoned experience dealing with federal grant/loan programs from CDC, FCC, HHS, HUD, NSF, NTIA, and RUS including work with the grants office special programs for unspecified federal and state agencies. Our team has specifically been engaged in the NTIA CCI/SBA/PCC grants and has experience in developing new initiatives with NTIA and one of the only organizations that has developed a successful New Market Tax Credit (NMTC) grant/loan program with the Department of Commerce for fiber infrastructure.

Our team has been involved in the BTOP program before it began with our involvement in the Fiber to the Home Council and actively engaging in recommendations to the FCC as Council members. We have participated in the BTOP application process and are now assisting grant recipients in execution and delivery of their grant projects.

Our team has been involved with:

- Discovery, Ex-Parte and program discussions
 - Whitehouse, NTIA, Department of Agriculture, FCC Rural Health Care Pilot Program
 - Knight Foundation community development and BTOP application preparation

- Cleveland OH, Detroit MI, Lexington KY, Miami FL
- Tribal Lands Telecom
- Mississippi Governor's Office Application for the State of Mississippi
- Applications & Project Support
 - Ohio Middle Mile Consortia (OMMC)
 - Developed statewide strategy
 - Developed MOU/Partnership
 - OneCommunity
 - ComNet
 - Horizon Telecommunications
 - OARnet
 - o OneCommunity
 - CCI Application/Due Diligence
 - SBA Application/Due Diligence
 - o Florida Rural Broadband Alliance
 - Due Diligence, Program Administration, and Project Management
 - Financial Planning and Budgeting
 - Network Equipment Procurement, Requests for Bids/Proposals
 - Compliance and Reporting
 - Business and Financial Model
 - Pricing Strategies
 - Sub-recipient Agreements/Engagements with Vendors
 - o Virgin Island Next Generation Network, PCC and SBA Program Management
 - Program Administration, and Project Management
 - Financial Planning and Budgeting
 - Computer Equipment Procurement, Requests for Bids/Proposals
 - Memo of Understanding with all (51) PCC Sites
 - Contract Negotiation with Computer Literacy Companies
 - Design and Implementation of Training Materials
 - Compliance and Reporting
 - Pricing Strategies
 - Engagements with Vendors
 - o Bluebird Networks
 - IRU Pricing Strategy and Recommendations
 - Existing IRU Pricing Analysis and Recommendations
 - o Sho-Me Technologies
 - IRU Pricing Strategy and Recommendations
 - In-Kind Appraisal of Existing Fiber Optic Network Infrastructure
- Please describe a recent consulting engagement in which you assisted a BTOP project with developing its business plan. Please provide a brief description of that business plan.

NEO Response:

We have recently developed business plans for the following BTOP projects:

Holland BPW

Our team completed the strategic planning and business modeling for this Fiber to the Home network deployment and has presented the plan to the Board of BPW and the Holland City Council. The next steps are to conduct a detailed design and go-to-market strategy.

Florida Rural Broadband Alliance

The Florida Rural Broadband Alliance, LLC (FRBA) is a limited liability company formed in March 2010 by two non-profit economic development corporations — Florida's Heartland REDI (Regional Economic Development Initiative) in south central Florida, and Opportunity Florida in northwest Florida. This coalition of rural and economically disadvantaged communities encompasses 15 counties and has been designated by the Governor as two Rural Areas of Critical Economic Concern (RACEC). Our team is helping to restructure FRBA to meet the NTIA CCI requirements and is engaging with FRBA in developing their business and financial models.

Medina County, Ohio, United States

Open Access, Vendor Neutral Broadband Network Engineering, Strategic Planning, Capitalization, Construction Management: Gigabit Squared worked with the Medina County Government and Port Authority over a four-year period to plan, capitalize, build and commercialize a county-wide fiber-optic backbone in a rapidly growing county with limited access to high speed broadband due to an aging infrastructure and a lack of Tier 1 providers. Our team worked closely with the County and Port Authority to work through the regulatory and political issues, capitalized the project through U.S. Treasury Bonds and a Department of Commerce grant, designed and oversaw construction on the network. Of key interest was the ability to commercialize the network through a public-private partnership, extending direct services to community anchors and businesses within the County, and turning a County cost center into a revenue-generating profit center.

North East Ohio Regional Health Information Organization, Cleveland, Ohio, United States

Broadband Network Engineering, Capitalization, Build: Gigabit Squared designed, capitalized and built a 500 mile fiber optic network interconnecting all major hospital facilities in a 16 county footprint of NE Ohio. Built a consortium of 26 major urban and rural hospitals and capitalized the program through winning a grant from the FCC Rural Health Care Pilot Program and securing additional funding through the Department of Commerce's New Market Tax Credit Program. Gigabit Squared managed all aspects of planning, engineering, construction and operations for the network, which now services 65% of the health care providers in NE Ohio.

OneCommunity, Cleveland, Ohio, United States

Open Access, Vendor Neutral Broadband Network Engineering, Build Management, Construction Management, Operations, Business Planning: The Gigabit Squared leadership team built this award winning regional non-profit broadband network from the ground up, including strategic planning, business modeling, capitalization, engineering, network build-out and on-going operations. The internationally-acclaimed network provides high speed (up to 100 Gbps) synchronous fiber connectivity to a 27-county area in NE Ohio, interconnecting community anchor institutions (government, hospitals, K-12, higher education) to each other, the National LambdaRail, Internet2, and multiple upstream providers. Routes designed, engineered and deployed include nearly 2000 miles of fiber optic cable.

Zoomy Communications, FTTH Networks across the Country

NEO's Diane Kruse was the founder and CEO of Zoomy Communications, a company that designed, built, owned and operated over (45) various FTTH networks. Many of the FTTH networks that Zoomy owned, were OPEN ACCESS networks, offering customers a choice for phone, Internet and cable TV/video services. Additionally, Zoomy provided business planning, modeling and consulting services in addition to design, engineering and construction management of FTTH networks for municipalities throughout the US.

State of Ohio, United States

Open Access, Vendor Neutral Broadband Engineering, Business Modeling, Strategic Planning, Public-Private Partnership Formation, Capitalization: The Gigabit Squared leadership team was the founding partner of the Ohio Middle Mile Consortium to design, capitalize and build a statewide fiber optic backbone for the State of Ohio, middle mile transport for commercial carriers, and direct synchronous fiber-optic interconnectivity for thousands of community anchor institutions. Participants (State of Ohio, OneCommunity, Horizon Telecom, Zayo, Consolidated Electric Cooperative, ComNET) shared existing fiber assets for interconnection and coordinated build activities for a \$250 million build-out spanning 88 counties in Ohio. Interconnect and IRU agreements govern the relationships between the public and private parties, guaranteeing seamless voice, video and data transport across the six networks.

In addition to large-scale network deployments, key members of the team have been involved on the leadership teams of a number of health information technology initiatives including:

- Health Information Security and Privacy Collaboration (HISPC)
- NEO Regional Health Information Organization (NEO RHIO)
- Case Western Reserve University Regional Extension Center (REC) Northeast
- Comprehensive Critical Data Sharing Network (CCDSN) FHHC EMR Design/Deployment
- Cuyahoga Community College Health IT Certification Program Development

- Better Health Greater Cleveland (Health Quality Program)
- Amarillo Coalition of Health Services Health Information Exchange Business
 Plan
- 4. Have you ever recommended a data-only, open architecture, FTTH/B business model? If so, please explain.

NEO Response:

The leadership team at NEO Fiber/Gigabit Squared is one of the few network design teams in the country with direct experience designing, scaling and operating secure, open access, vendor neutral networks.

Kruse was a pioneer on the concept of open access and has written several articles and has given speeches at industry conferences regarding open access. A sample article written in 2007 is attached.

Our team has designed and built carrier, state, regional and municipal networks including the internationally-acclaimed OneCommunity non-profit carrier neutral fiber-optic network covering a 27 county footprint in Northeast Ohio with over 2900 fiber route miles and a population of 4.5 million. The advanced fiber network provides DWDM, Ethernet and IP transport services to the health care community, community anchor institutions and government agencies, while providing back-haul transport for a number of local, regional and national telecommunications and cable providers. This network was engineered to serve the needs of the local health, education and government sector anchors (including the Cleveland Clinic and University Hospitals) as well as all voice/data/e-911 traffic for the Cuyahoga County (the largest and most populous county in the State of Ohio). As noted above, portions of this network were designed, built and deployed under the FCC RHCPP under accelerated timelines, and have captured a 70% market share in the health care vertical in the operating footprint through the provisioning of robust, reliable and resilient services at speeds up to 100 GBPS.

We bring this expertise, experience and our intimate knowledge of the FCC RHCPP, the BTOP CCI/SBA programs, FCC policies and regulations, HIPAA, HHS, HITECH Act, and NTIA processes and procedures to the design process. The core of our design and engineering methodology is specifically tailored for the needs of specialty and public networks providing direct connectivity for health care, government agencies, and community anchor institutions, middle mile transport solutions for providers and developing wholesale/resale strategies for the shared use of common telecommunications infrastructure.

It's a formal approach built around three (3) design principles:

- Open Network Architecture (ONA): Scalable carrier-grade solutions based on scalable fiber, wireless and Ethernet technologies;
- Open Network Exchange (ONE): Providing seamless interconnectivity and network-to-network exchange of services between providers and peer networks;

• Open Network Provider (ONP): Framework for providers to leverage digital infrastructure and services without compromising transport speed or security.

Our team evaluates the available infrastructure and provider requirements to model and develop community strategies that maximize the use your network.

- a. Evaluate and Modeling for infrastructure provider options
 - i. Facilities
 - ii. Network Service/Operations
 - iii. Retail Service Provider Options
- b. Horizontal/Vertical Segmentation
 - i. Wholesale versus retail options
- c. Open Architectures
 - i. Infrastructure
 - ii. Network Services
 - iii. Applications
- 5. If selected, who will be the project manager for this contract? If others are to be involved, please provide their names, experience and expertise.

NEO Response:

Diane Kruse will be the Lead Consultant/Project Manager assigned to the UC2B project. Additionally, Mark Ansboury and Robert Jennings will be involved in this project and will be assigned to the UC2B project. Bios for all three team members are provided in the introduction.

NEO Fiber/Gigabit Squared's project management methodology is grounded in the approaches and processes formalized by the Project Management Institute (PMI). Upon this firm foundation we've taken practical lessons learned from complex, large-scale, multi-stakeholder planning and infrastructure projects to enhance effectiveness and efficiency in delivery. Each project plan breaks down the project into phases, work streams and tasks, documenting interdependencies and creating and actionable timeline for executing the project deliverables. We start with the creation of a baseline plan as a result of initial project planning sessions, and then work from this 'living' document to track progress and make resource/tactical adjustments as required over the project lifecycle.

By breaking a project into phases, work streams and tasks, our team is able to capture and document all activities planned and executed during the course of any large-scale engagement. Project phases are typically pre-set during the planning phase as key points of deliverables due and client sign-off. In most projects these represent a linear progression over time, but for large, multi-year, multi-stakeholder projects there is occasionally overlap with phases of work occurring in parallel. Work streams may span phases and cross deliverables: these are typically determined either by resource type or category of work. In almost every project our team executes, there are multiple work streams occurring in parallel.

Although the task level might appear to be self explanatory, our method of managing tasks and, by extension, the overall project, is through a predictive management approach based on effort driven tasks and work effort profiles. This differs from the standard duration-based approach, which fails in large scale planning and infrastructure projects to address resource utilization in a predicative fashion, nor can it produce earned value analysis, robust work breakdown structures or work contouring to return projects to on-time, on-budget delivery. The Gigabit Squared approach address each of these issues, and allows for accurate predictions of what will occur over the duration of the project based on current work efficiencies and budget allocation analysis.

Our core project management philosophy reflects this complexity, and is based around four (4) governing principles:

- 1. Leader: Execution and quality control for engaged project team;
- **2. Communicator:** Internal (within UC2B) and external (stakeholder) liaison for project;
- **3. Guide:** Chief navigator for the UC2B Leadership Team's expectation setting and creation of the support conditions/activities required of the Leadership Team for project success.
- **4. Seasoned Practitioner:** Subject-matter-expert and practitioner in the field of the project being led, with both theoretical knowledge and practical experience delivering results.
- 6. Do you have experience drafting and negotiating IRUs? If so, please describe. Is this a service your firm could provide if requested? If so, who would provide this service? Please provide their experience and expertise.

NEO Response:

Yes. Our team has significant experience developing IRU agreements for national, regional and municipal fiber providers as well as for institutional use of network IRUs. Our team recently evaluated the cost/pricing model for IRUs for the Minneapolis/Ramsey County Network, the Sho-Me Technologies Network, and the Bluebird Network. Additionally, our team has developed strategies and contracts for major regional and national providers including AT&T, Williams Communications and Level 3. Our experience includes:

- a. National/regional/local dark fiber, wave and service IRUs
 - i. Capital and Operational Leases
 - 1. Financial Terms and Considerations
 - 2. Operational versus Capital Considerations
 - 3. ROI/IRR Evaluation
 - 4. Asset Valuation
 - 5. Maintenance and Service Level Agreement Terms
 - ii. Types of Entities
 - Level3, Williams Communications, AT&T, Time Warner, COX, Comcast

- 2. Government/NGO/Private Network Asset
 - a. State, County, Municipal
 - b. Education/Health Care Private Network
- 7. How is your firm prepared to guide UC2B in determining the Optimal Business Structure for our organization?

NEO Response:

The NEO Fiber/Gigabit Squared team has been collecting and evaluating local, regional, national and international broadband plans, best practices and program progress for over fifteen years. We have consulted with many of the leading broadband innovators around the globe, and our team members serve on various national and international organizations dedicated to socio-economic development through broadband and IT-enabled infrastructure solutions.

For example, our participation with the Intelligent Community Forum during this time period has allowed us to interface, share case studies, visit, and share strategies and 'lessons learned' from many of the most impactful broadband networks from across the globe, such as Eindhoven in the Netherlands, Issy-les-Moulineaux in France, Seoul in the Republic of Korea, the National Broadband Network in Australia, and the National Network in Japan.

One of our team members serves as an international juror for the ICF, providing our firm with a wealth of statistical information, strategies, and interface with the founders and operators of these networks.

Our team has participated in a broad range of regional, state and national efforts to develop broadband plans and strategies and has compiled a list of plans and contacts globally. Four years ago the Knight Foundation commissioned the founding members of Gigabit Squared to develop the Knight Center of Digital Excellence. The objective was to create an open source best practices center for capturing effective broadband strategies and tactical implementation methodologies.

The Gigabit Squared Project team also participated in the US Broadband Coalition that was comprised of leading experts from across the industry to provide the FCC with a framework and recommendations for the National Broadband Strategy. As part of this effort the coalition collected plans from around the world. In addition, Gigabit Squared will be engaged with an international team developing a best practice broadband outreach, adoption and use program for the development of an International Center of Applied Digital Purpose.

The NEO Project team has developed business plans for the State of Colorado's Telecommunications Plan, over (25) municipalities, and over (45) master planned communities. Additionally, our team has owned and operated several FTTH networks across the country.

This experience has provided the team with a number of broad international perspectives and one of the largest collections of best practices. Our team will:

- Evaluate strategic considerations for UC2B governing body
 - Economic Development & Community Objectives
 - o Business & Service Objectives
 - Engineering & Deployment Objectives
 - Operations & Service Objectives
 - Finance and Capitalization Objectives
- 8. Please describe any on-going involvement you may have with past consulting clients after consulting engagement has ended. Do you sell equipment or provide on-going management services to clients

NEO Response:

We do not sell equipment; however, we do and have provided on-going management services to our clients.

NEO Fiber/Gigabit Squared is perhaps the best suited potential vendor for an award under this release, as we possess extensive and direct experience in the business modeling, design, build and operation of open, vendor-neutral networks compliant with all FCC and NTIA policies, regulations, procedures and by-laws.

Our designs comply with both the letter and spirit of the FCC and NTIA positions regarding open networks, middle mile transport and vendor neutrality, and we are seasoned experts in not only compliance, but turning these architectures and operating structures into sustainable, profitable and scalable enterprises.

From an innovation standpoint, as regards bid and engagement structure, NEO Fiber/Gigabit Squared has a host of options that impact design, scalability, on-going operations, capital structure, and capitalization. We have the capacity from a technical, financial and operational level to engage UC2B in a variety of ways for the construction and operation of the proposed network:

- As a traditional vendor providing design and construction management services under a traditional master contract and service level agreement (SLA);
- As an outsourced operator, providing full-service network operations and backoffice systems support for the network once deployed. This may be structured
 under a Build-Operate-Transfer agreement, where Neo Fiber/Gigabit Squared
 takes the operation to steady state and then transfers operational
 responsibilities back to UC2B, or under a Build-Operate-Operate agreement,
 where Neo Fiber/Gigabit Squared takes full responsibility of network operations
 for a period of five to ten years;
- As an investment partner and operator, providing a full-gamut of operational and marketing support for the health care community while operating a

separate and segregated commercial network for community economic development purposes (especially in rural areas) over the joint infrastructure. This option provides not only additional direct capital and revenue to UC2B, but also diversifies the capital pool available for statewide network expansion and the depth of penetration within the health care provider space in any urban or rural marketplace.

Our in-depth experience with the FCC RHCPP and BTOP/BIP grant programs, and the early demonstration of an open community network through the development of OneCommunity provides significant current experience in developing sustainable business and technology service programs. Our partnership with the Healthcare community through the creation of a Regional Health Information Exchange, work with free clinics and Federally Qualified Health Care Providers, Regional Extension Centers and telemedicine pilot programs made our network services some of the most innovative in the country. As a result we helped our clients received over \$100 million in grants for continued development and expansion of the network and helped to create the Ohio Middle Mile Consortia to extend services across the State of Ohio.

Our carrier neutral strategy enabled us to develop cooperative master service agreements with the local incumbents, ILECS, CLECs and MSOs. These agreements created an open exchange of services between carriers and our network and enabled us to select the most cost effective last mile solutions and value added service options.

Our proposal and collaborative partnership approach enable us to consider a variety of on-going service efforts including:

- Multiple on-going efforts
 - Strategic/Business planning
 - Financial Modeling/Capital Development
 - Design/Build/Operate
 - o Public-Private Partnership
 - o Invest/Acquire
- 9. Please discuss your experience analyzing multiple business models and approaches for community owned broadband.

NEO Response:

NEO Fiber/Gigabit Squared agrees that the most important part of developing, launching and sustaining a broadband network like the one envisioned by UC2B is the appropriate business model. There is no greater barrier to capitalization than a poor business plan. Operators, investors, stakeholders and customers require clarity on the market, benefits, competitive advantages, products and services, operations, return, and long-term financial viability before funding and deciding to participate or turn-over mission critical network operations to a newly formed entity.

We help providers and communities build innovative business models for long-term sustainable growth. We approach business modeling from a holistic vantage point, leveraging two key concepts to accelerate the realization of capacity, capability, application, affordability and economic sustainability: Open Interconnect and Trans-Sector participation.

Open Interconnect, unlike net neutrality, is focused on interconnecting and maximizing public and private infrastructure assets. Through Open Interconnect, the opportunity emerges for network participants and community stakeholders to leverage all of the available broadband and facility assets in a given region for patient/customer engagement and economic and competitive advantage is made real.

Trans-Sector (commercial, governmental, non-profit) strategies generate increased value-added services, utilization and infrastructure affordability. This lowers overall total cost of ownership (TCO) while increasing the economic and social value and applications of infrastructure investments. This is of particular importance to UC2B as it explores the value proposition its infrastructure assets (e.g. fiber, switching, middle mile transport) and local access may have to targets for IRUs, peering arrangements, asset swaps, and upstream/sub-network negotiations during the design phase and subsequent network expansion across UC2B service areas.

The leadership team at NEO Fiber/Gigabit Squared is intimately familiar with all existing business and service models for organizations like UC2B, and will provide a plethora of legal, structural, operational and service delivery options for consideration. We not only have direct experience in creating, scaling and operating one of the most renown and celebrated sustainable non-profit networks in the country (OneCommunity), but are personally familiar and connected with the strengths and weaknesses of models deployed around the globe. Our network of subject-matter-experts that have succeeded (and failed) in similar initiatives around the globe will provide UC2B with the insight it needs to successfully move through the stages of initial asset and customer acquisition, to long-term sustainability and financial viability.

- Typically evaluate organizational objectives and model approaches that would likely be considered
 - Market Evaluation and Demand Drivers
 - Optimal Organization Structure
 - Financial/Capital Ownership Requirements
 - Public-Private Collaborations
 - Horizontal-Vertical Segmentation
 - Wholesale-Retail Service Options
- 10. Describe your experience in broader political environment regarding BTOP and the ARRA, including in Illinois and Washington, DC.

NEO Response:

Regulatory/Policy Support: Our Team Members Diane Kruse and Mark Ansboury have provided testimony, written white papers and ex-parte position papers, helped create

policy language for lawmakers and government officials, and negotiated with both the private sector and legislative leaders to gain consensus on major policy decisions. These individuals will work with the UC2B to identify and craft the messaging necessary to help shift the local, State's and Federal policy and regulatory framework as appropriate.

We will work with the UC2B to assist local and state officials to create and implement policies that enable broadband and digital services to both improve the quality of life for the citizens of Champaign/Urbana and provide opportunities that attract investment and retain and grow the jobs.

11. Please provide a draft schedule for completing the work described in the enclosed General Description of Work, your hourly fees, and a cost estimate for completing work.

NEO Response:

We realize the scope of work needs to be defined in order to deliver the plan, and we know from experience that the scope of work will be re-defined in order to deliver best results for the plan. Our hourly fee is \$150 per hour. We anticipate the scope of work to be completed within 10-20 weeks. The estimate will vary greatly on the format of the deliverable; however, based upon the general areas to be included in the deliverable, we anticipate a budget of \$45,000 - \$60,000. Travel expenses would be in addition to our hourly fees and would be submitted for reimbursement.

We have based this estimate on the following areas to be addressed:

Estimate of	Scope of Work			
NEO Estimate of Cons	ulting Services	for UC2B		
	# of hours		Hourly	
	budgeted	# of People	rate	Total
Activities				
Discovery, Goals, "At the end of the day"				
Discussions	20	2	\$150.00	\$ 6,000.00
Organizational Structure	20	1	\$150.00	\$ 3,000.00
Operational, Services and Financial				
Risk Assessment, Competitive Analysis, Demand,				
Market Analysis	40	1	\$150.00	\$ 6,000.00
Project revenues, fees, take rates	40	1	\$150.00	\$ 6,000.00
Project Costs, Areas for Expansion of Service	80	1	\$150.00	\$ 12,000.00
Operational Considerations	40	1	\$150.00	\$ 6,000.00
Assumptions, Methods and procedures	40	1	\$150.00	\$ 6,000.00
Financial model, funding options	40	1	\$150.00	\$ 6,000.00
	320	1	Total	\$ 45,000.00
Number of Weeks Budgeted	10.66666667			
Number of Weeks to Complete	10 - 13 weeks			
Other Options				
	# of hours		Hourly	
	budgeted	# of People	rate	Total
Activities	3	1		
Economic feasibility analysis	80	1	\$150.00	\$ 12,000.00

MEMORANDUM



UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

TO: UC2B Policy Committee

CC: UC2B Marketing & Outreach Committee

FROM: Jon Gant, Director of UC2B Canvassing Operations

LaEisha Meaderds, Project Coordinator of UC2B Canvassing Operations



DATE: October 14, 2011

RE: [Information Sharing] Community Outreach Effort — Job Application Assistance

UC2B representatives from GSLIS (Graduate School of Library and Information Science) held several information sessions throughout the Urbana-Champaign community in an outreach effort to attract and inform community members of the job opportunity with UC2B as a Community Ambassador. With the assistance of community leaders Pastor Nash (New Hope Church), Brian Bell (Illinois workNet Center), Reverend Lewis (Bethel AME Church), Todd Rent (City of Urbana) and UC2B staff, laptops were set-up in community spaces and computing centers were utilized to help answer questions related to the position and to walk potential candidates through the University of Illinois' Civil Service Application process. Interested candidates were able to learn more about the positions; details on the overall UC2B project; in addition to the opportunity to complete their application on-site. A total of approximately 40 interested candidates attended the sessions. Interviews are currently being held to choose the 16 candidates that will serve as Community Ambassadors.

Information Sessions were held at the following locations, in thanks to:

- Siebel Center (UC2B Public Showcase)
- Digital Computer Lab (UC2B Public Showcase)
- New Hope Church (Pastor Nash)
- Illinois workNet Center (Brian Bell)
- Bethel AME Church (Reverend Lewis)
- Urbana Civic Center (City of Urbana)

Graduate School of Library and Information Science

Library and Information Science Building 501 East Daniel Street Champaign, IL 61820-6211



Memo

To: UC2B Policy Board

From: Dr. Jon Gant

CC: Teri Legner, Mike Smeltzer

Date: October 14, 2011

Re: UC2B Canvassing Update

I would like to update the UC2B Policy Board on the recent accomplishments of the UC2B Canvassing Team to support customer acquisition and construction through October 14, 2011.

- Completed interviews for Community Ambassadors. We received 46 applications for the
 position. We completed our interviews of 32 candidates on Friday October 14, 2011. The
 majority of the candidates reside in the target neighborhoods. We have identified 16 that
 we would like to hire and submitted their applications to U of I Human Resources for
 background and criminal checks. The interview questions and evaluation forms are
 attached.
 - The interview panel included representatives from the City of Champaign, City of Urbana, GSLIS, and the community at large. We would like to thank the interview team including: John Ruffin, Todd Rent, Chris Hamb, Garth Minor, LaEisha Meaderds and Jon Gant.
 - The job was publicized on the Champaign News Gazette, U of I Human Resources, GSLIS web page, UC2B web page, City of Champaign web page, City of Urbana web page and sent via community based listserves for both cities. Additionally, we recruited through six job fairs and two public speaking events. Please see the attached memo for the details.
- Completed hiring for the support team
 - We hired the LaEisha Meaderds to serve as the UC2B Canvassing Project Coordinator. We received 8 applications. We interviewed two candidates.
 - The job was publicized on the Champaign News Gazette, U of I Human Resources, GSLIS web page, and UC2B web page.
 - The search committee included representatives from the City of Champaign, City of Urbana, CITES and GSLIS. We would like to thank the committee:
 (Chairperson Maeve Reilly), Sharon Irish, Safiya Noble Teri Legner, John Kersh, Brandon Bowersox and Jon Gant.
- Developed a training program for the canvassing
 - o The training is schedule for Saturday October 29, 2011. The program for this event is attached.

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- Developed the mail and door-to-door survey. Completed pilot test on Saturday October 1, 2011.
- Developed service model for subscriptions including a web site and information system to collect UC2B subscriptions and to provide information for the public. See attached
- Continuing outreach activities
 - O Developing the marketing and outreach plan to support the canvassing. Includes traditional media and social media.
 - Developing outreach meetings with key community groups for public events to be held in October and November including landlords, public school, private and parochial schools, human and social service and private-sector providers of services for seniors and youth, and churches.

MEMORANDUM



UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

TO: UC2B Policy Committee

CC: UC2B Marketing & Outreach Committee

FROM: Jon Gant, Director of UC2B Canvassing Operations

LaEisha Meaderds, Project Coordinator of UC2B Canvassing Operations



DATE: October 14, 2011

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October 14, 2011

Dear UC2B Colleagues,

Attached is an updated version of the 2011 UC2B training schedule for our newly hired Community Ambassadors w/ individual lesson plans for each segment of the workshop.

This 8.5 hour training will take place on Saturday, October 29th 2011 and the Graduate School of Library and Information Science (GSLIS), at the University of Illinois at Urbana Champaign is the recommended training facility.

Please note that the training schedule attached is a draft version. It is open for review and suggestions about how to improve it. We welcome your input and recommendations, as this will ensure the delivery of an outstanding training program that aims to prepare UC2B Community Ambassadors on how to best serve the residents of our Champaign-Urbana communities.

Feedback can be forwarded to Dr. Jon Gant (jongant@illinois.edu), LaEisha Meaderds (meaderds@illinois.edu), and Jacqueline Oquendo (oquendo2@illinois.edu).

Thank You,

Jacqueline Oquendo

UC2B Research Assistant | Training and Knowledge Management University of Illinois at Urbana Champaign - GSLIS 501 East Daniel Street | Champaign, IL 61820 Oquendo2@illinois.edu

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Time/Duration	Session	Facilitator
120 minutes (9:00am – 11:00am)	Lesson #1: UC2B Overview General Knowledge of UC2B What is UC2B? Who is UC2B? How can UC2B impact the community? Video Showing Why is UC2B's mission important? How can residents benefit from subscribing to UC2B services? Fiber-Optic Education What is Broadband? How does broadband differ from other internet services? What does it take to bring broadband to our community?* When will construction begin and where will the conduit be installed? Examples of other (demographically similar) areas who have successfully implemented broadband services (e.g.: Case Western) Elevator Pitch Activity	Mike Smeltzer Jon Gant Brandon Bowersox
15 minutes (11:00am – 11:15am)	Session Break	Open
60 minutes (11:15am – 12:15pm)	Lesson #2: General Canvassing Etiquette General Expectations Professional Image Cultural Awareness & Tolerance What Would You Do?" Activity Code of Conduct Safety Safety Safety Protocol w/ Emergency Contacts	Teri Legner Jacqui Oquendo LaEisha Meaderds

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Champaign, IL 61820-6211	T	
60 minutes (12:15pm – 1:15pm)	Lunch Break ID Badges	Open
120 minutes (1:15pm – 3:15pm)	Lesson #3: Using iPads for Subscriptions & Data Collection General Functions	ATLAS Team (Mary Alice, Kit, and Dawn)
15 minutes (3:15pm – 3:30pm)	Session Break	Open
60 minutes (3:30pm – 4:30pm)	Lesson #4: Electronic Walking Maps/Routes Identifying your path Staying on course Dealing with inconsistent addresses Map Activity	John Kersh Shavion Scott
60 minutes (4:30pm – 5:30pm)	Final Q&A ■ Open Forum ■ "Today I learned" Activity	ALL

MEMORANDUM



UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

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CC: UC2B Marketing & Outreach Committee

FROM: Jon Gant, Director of UC2B Canvassing Operations

LaEisha Meaderds, Project Coordinator of UC2B Canvassing Operations



DATE: October 14, 2011

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Information Sessions were held at the following locations, in thanks to:

- Siebel Center (UC2B Public Showcase) Thursday, September 15th 2011 6pm–8pm
- Digital Computer Lab (UC2B Public Showcase) Saturday, September 17th 2011 11am–2pm
- New Hope Church (Pastor Nash) Wednesday, September 21st 2011 1pm–3pm
- Illinois workNet Center (Brian Bell) Thursday, September 22nd 2011 3pm–6pm
- Bethel AME Church (Reverend Lewis) Sunday, September 27th 2011 10am–Noon
- Urbana Civic Center (City of Urbana) Monday, September 26th 2001
 6pm–9pm



UC2B JOB ANNOUNCEMENT:

COMMUNITY AMBASSADOR

What is UC2B?

UC2B is the short name for Urbana-Champaign Big Broadband, which is collaboration between the cities of Urbana and Champaign, the University of Illinois and several other public and private partners. Together they received grant funding to build a fiber-optic Internet network that offers fast, high-speed internet access to neighborhoods, businesses, and Community Anchor Institutions across Urbana-Champaign.

UC2B seeks energetic, team-oriented individuals that are familiar with the Urbana-Champaign community and are passionate about helping others to overcome the digital divide to serve as UC2B Community Ambassadors. Community Ambassadors will collect data for research and operational development; increase the awareness of UC2B; and help households, institutions and businesses adopt UC2B Internet Service.









COMMUNITY AMBASSADOR JOB RESPONSIBILITIES:

- Conduct face-to-face interviews with residents in assigned areas
- Record the results of surveys through data entry
- Encourage increased knowledge of computerized technology and its relation to the UC2B project
- Attend neighborhood meetings and community events to represent UC2B and/or conduct surveys
- Other duties as applicable

These jobs are part-time, extra help positions. Pay rate is \$12-18/hour, commensurate with work experience. Hours vary by project needs and will largely be conducted outdoors during various weather conditions. Frequent walking, standing, and verbal communication required. Bilingual (Spanish-speaking) candidates desired. Interested candidates should apply by September 27, 2011.

The University of Illinois is an Affirmative Action/Equal Opportunity Employer and welcomes individuals with diverse backgrounds, experience, and ideas who embrace and value diversity and inclusivity.

UC2B Representatives will be available to provide job application assistance for interested candidates on the following dates:

- September 15 6PM-8PM Siebel Center, Room 1404 201 N Goodwin
- September 17 10AM-12PM Digital Computer Lab, Room 1320 1304 W Springfield
- September 21 1PM-3PM New Hope Church 911 W Bradley
- September 22 3PM-6PM Illinois workNet Center, Room 202 1307 N Mattis
- September 27 10AM-12PM Bethel AME Church 401 E Park

UC2B Community Ambassador Interview Questions

1. 2.	Introduce Facilitators. Describe UC2B and the role of Community Ambassadors.
3.	What interests you about this job?
4.	What type of experience do you have with customer service or interactions with the public that you believe are relevant to the needs of this project?
	 Do you have work or volunteer experience in Urbana - Champaign neighborhoods or community anchor institutions?
5.	How would you respond to or redirect negative responses while out in the field?
6.	Working in a team—what does that mean to you? (Examples of how you've worked in a teambased environment)
7.	In the past, how have you inspired or energized an unmotivated individual or group? How did you do it and what was the result?
8.	Which forms of technology are you familiar with? How do you feel about learning new technology?
9.	What do you see as the challenges of people adopting the Internet and computers?
10.	Any questions for the committee?

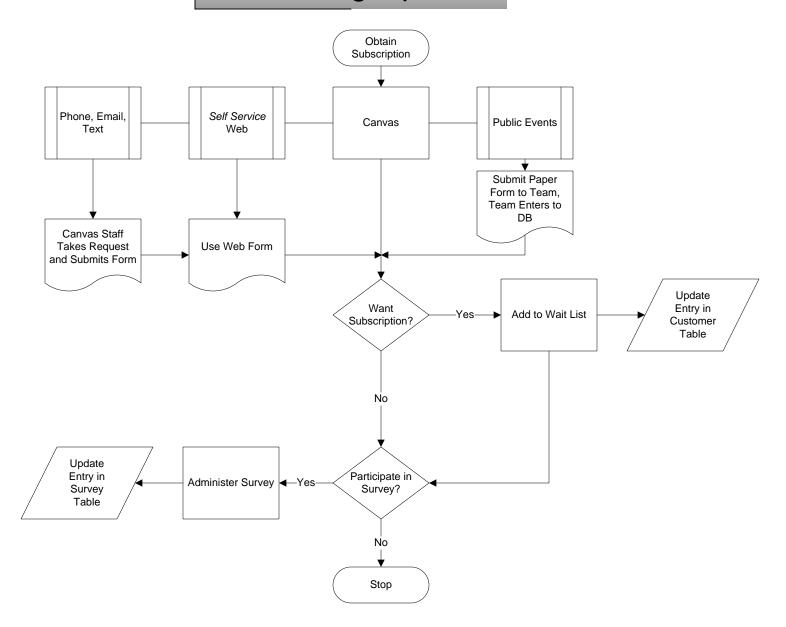


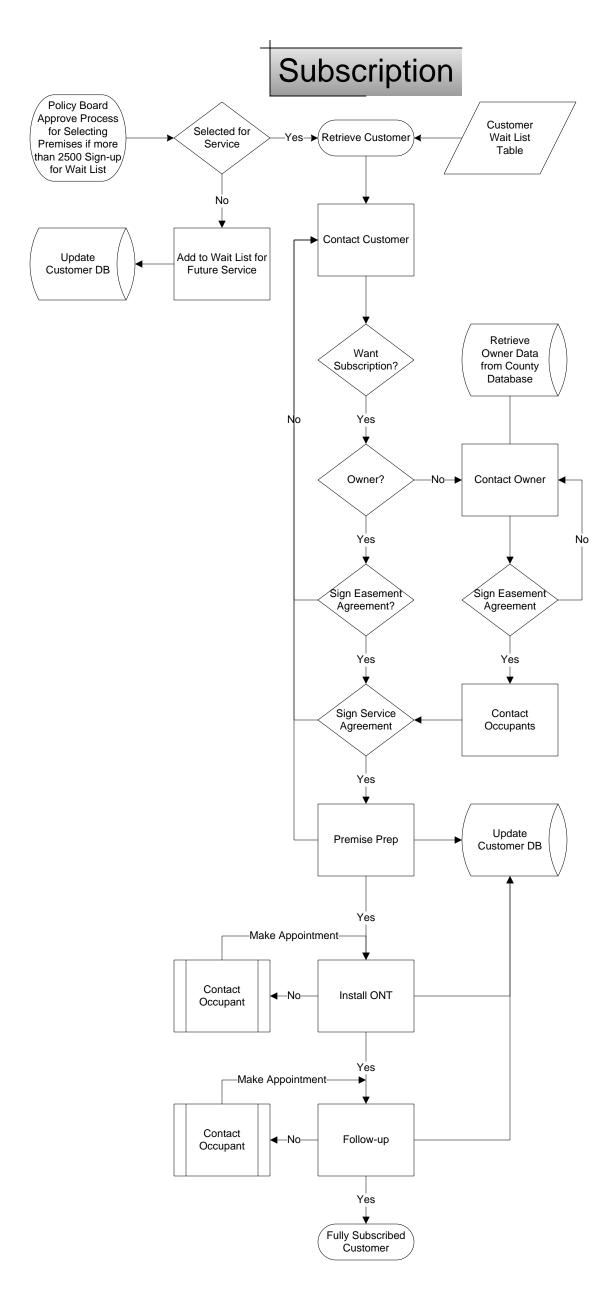
UC2B Community Ambassador—Interview Evaluation Form

This evaluation is to standardize the recording of information collected during the interview and assist in evaluating and comparing different candidates when interviews are complete. Interviewers are encouraged to use the "comments" section to support each candidate's ratings. This form is to be completed during and/or immediately following the interview. Candidate profiles are to be kept confidential.

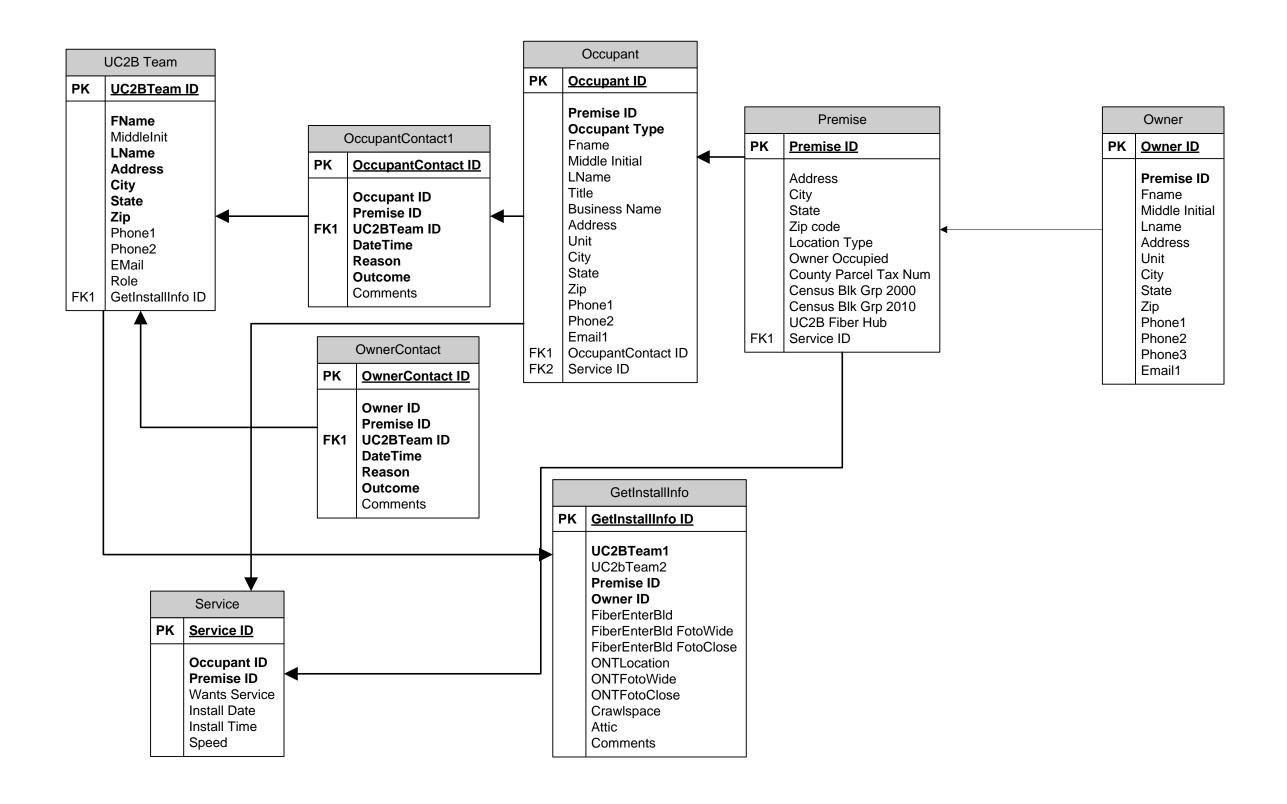
APPLICANT INFORMATION						
Candidate: Name			Scheduled	Interview: 10,	/13/11, 8:00AM	
Interviewer:						
RECOMMENDED ACTION FOR POSIT	ΓΙΟΝ					
Hire Not Hire Refer :						
APPLICANT EVALUATION PLEASE MARK THE APPROPRIATE RATING USING THE SCALE:						
AFFLICAIVI EVALUATION	Poor	Fair	Satisfactory	Good	Excellent	
Knowledge of C-U Community						
Related Customer Service Experience						
Familiarity with Technology						
Verbal Communication Skills						
Interpersonal Skills						
Leadership Quality						
Interest in UC2B/CA Position						
Overall Impression						
STRENGTHS						
WEAKNESSES						
OTHER COMMENTS						

Canvassing Option A

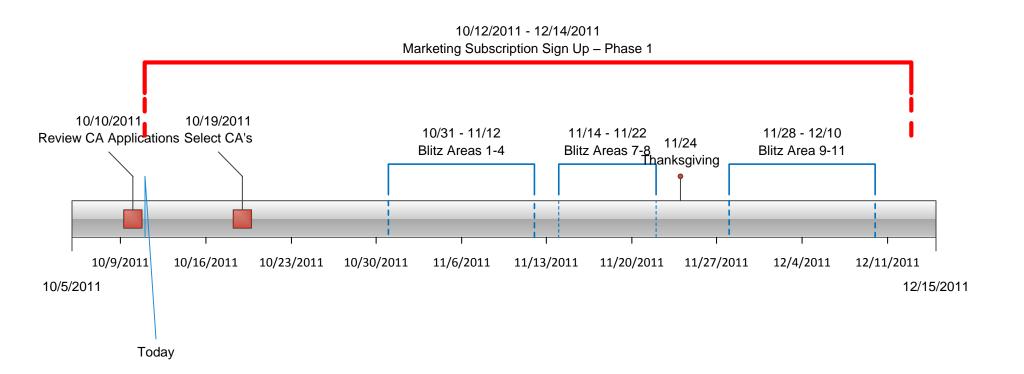


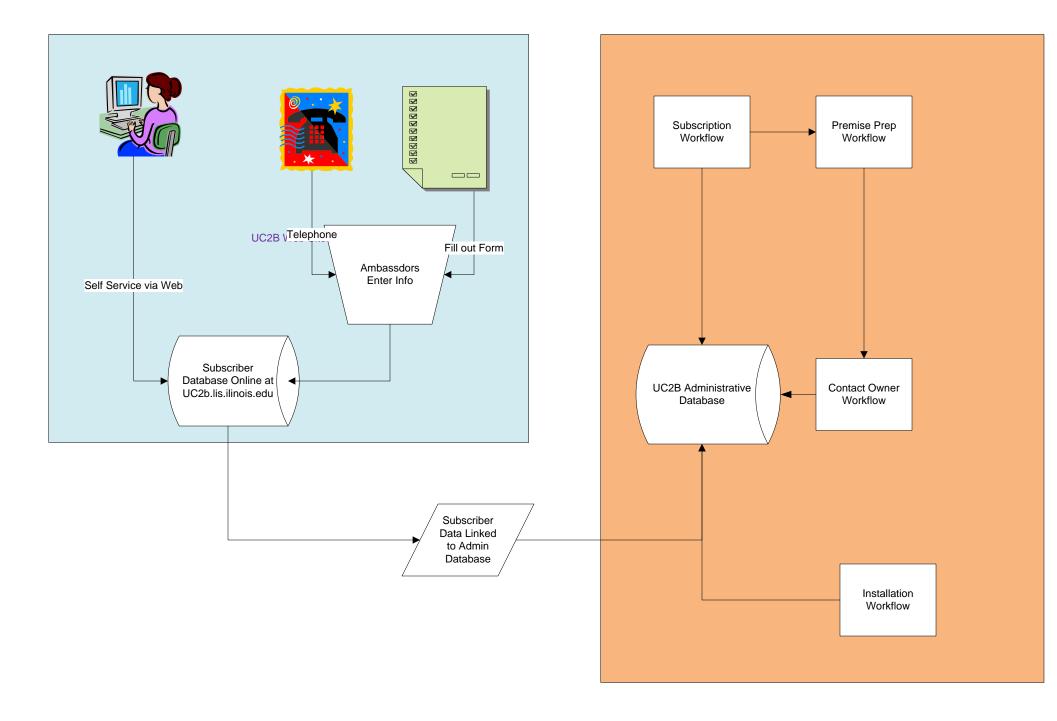


Database Design



Marketing and Subscription Blitz Schedule – Fall 2011







NTIA and Grant Update - 10/14/11

This may be as close to you get to me next Wednesday. We will be visiting my wife's sister in Bermuda. I am told that Bermuda could use both better broadband and better phones. I may be able to remotely join you. I may not be able to.

NTIA Workshop - Teri, John Kersh and I attended a "mid-course" workshop sponsored by NTIA last week in Cleveland. The sessions were good, and we picked up some ideas for future discussion and implementation. There were often multiple concurrent sessions and we split up to cover all the bases. Our NTIA grant officer was there, but we did not meet formally with him. It was his first opportunity to meet most of his other projects, so he was fairly booked up. There was not a lot of downtime built into the schedule to meet with him anyway.

PCI Summit – Broadband practitioners and enthusiasts from around the state converged on Urbana this week for the Partnership for a Connected Illinois Regional Broadband Summit. Jon Gant participated in a morning workshop on Broadband Research, and I gave a presentation on UC2B in the afternoon. We also heard from Lori Sorenson from the Illinois Century Network and a group of private providers that featured Tech Committee member Mike Vrem.

On Wednesday night, U of I Board of Trustees Chairman Chris Kennedy hosted a dinner at Biaggi's for the PCI Board, UC2B Policy Board, the speakers from the Wednesday sessions, and a few assorted other people including U of I President Michael Hogan. Chairman Kennedy gave a 331 slide presentation in about 20 minutes that detailed how better broadband had benefitted the Mercantile Exchange and other facilities in Chicago that he formerly managed and then extended that analogy to how better broadband would help the State of Illinois. He made his point very well.

Business Consultant Selection – Teri will have a recommendation for the Board on Wednesday. I believe we had three strong candidates and I support the recommendation.

Construction – The two contractors have not quite fallen into a weekly pattern, but they are close. They have discovered a host of mis-located water and gas lines, but thus far no serious problems on that front. Everyone is now learning the flow of paper that has to happen for everyone to get paid.

Canvass – I am told that the interviews with potential Ambassadors are off to a good start. I believe that Jon Gant will have an update on Wednesday.

Mike