UC2B Policy Board Agenda

Regular Meeting
April 11, 2012
12:00 noon-1:30 p.m.
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 the March 14, 2012 Policy Board Meeting and March 22, 2012 Policy Board Meeting

V. *Action/Discussion Items: (In this section, items will be presented to the Board and opened for technical questions. Then we will go to the audience for comments—audience comments are limited to five minutes per person—then we will return to the Board for general discussion and questions.)

a) Continued Discussion and Actions Requested on Recommendations Regarding Business Pricing and IP Address Pricing (Kruse/Smith/Smeltzer)
b) Resolution 2012 – 08 A Resolution Regarding Private Investment in Network Expansion (Smeltzer)
c) Authorization to Negotiate Terms of Potential Partnership Agreements with other BTOP Awardees and Providers (Smeltzer)
d) Recommendation of Wholesale Model Pricing Plan (Smeltzer/Kruse)
e) Marketing and Outreach Subcommittee Update – Outreach and Customer Acquisition Proposal (Bowersox/Kersh/Schnuer)
f) NTIA Grant Report and Project Update (Smeltzer)
g) Canvassing Update (Gant/Meadards)

VI. Tasks to complete for next meeting

VII. Items for future meeting agendas

a) Field Orders – Interim J.U.L.I.E. Locating Services and Fiber Restoration (Vandeventer, Shonkwiler)
b) UC2B Technical Committee Appointments – Voting member: Chris Hamb; Non-Voting Member: Brian Bell (Alkalimat)
c) UC2B Core Values Discussion

UC2B Policy Board Agenda

d) Gig.U (Smeltzer)
e) Policy Statement Regarding Use of Public Resources by Private Entities Furthering an Articulated Public Purpose (Schnuer)

VIII. Public Participation

IX. Adjournment

X. Next Meeting:
Wednesday, April 18, 2012 – 12:00 noon
Council Chambers, 102 N. Neil Street, Champaign, Illinois

UC2B Policy Board Minutes

Regular Meeting
March 14, 2012

Location:
City Council Chambers
102 N. Neil Street
Champaign, Illinois

Board Members Present: Abdul Alkalimat, Reverend Zernial Bogan, Brandon Bowersox, Mike DeLorenzo, Deborah Frank Feinen, Minor Jackson, Pete Resnick, Richard Schnuer, and Tracy Smith

Others Present: Teri Legner, Mike Smeltzer (Skype), Diane Kruse (Skype/telephone)

Policy Board members absent: none

I. The meeting was called to order at 12:02 p.m. by Chair Feinen.

II. Roll Call

III. Approve Agenda: Resnick moved, Bowersox seconded the motion to approve the agenda. The motion was passed by voice vote.

IV. Approve Minutes: Bowersox moved, Schnuer seconded the motion to approve the minutes of the February 15 and February 23, 2012 Policy Board meetings as written.

V. *Action/Discussion Items:

a) **Presentation of UC2B Pricing Recommendations and Market Assessment and Preliminary UC2B Financial Models and Feasibility Objectives (NEO Fiber, LLC):** Legner introduced Diane Kruse, explaining that she was present, via Skype, to put everything into context so that the Policy Board is clear on what is being proposed and requested and when decisions are necessary. Kruse will go over the Excel workbook which was distributed with the agenda packet at the meeting on March 22 in more detail if that is helpful. She continued that decisions will have to be made quickly after reviewing all of the proposals on the 22nd. Chair Feinen suggested that Ms. Kruse do her presentation before getting to technical questions from the Board members.

Kruse explained that she will be in Champaign-Urbana from March 21-23 for the Policy Board's meeting on the 22nd to go over the proposals in greater detail. She explained the decisions that need to be made on the 22nd include those relating to UC2B's financial feasibility objectives and several relating to pricing, services, and billing. She noted that UC2B has a rather sophisticated financial model, as evidenced by the Excel workbook which contains a variety of assumptions which drive the model.

Due to technical difficulties, Kruse's presentation was deferred while the Policy Board went through other approvals as included on the agenda.

b) ***Resolution 2012-07 A Resolution Approving the Annual Budget—Fiscal Year 2012-2013:** Legner briefly discussed the budget enclosed with the agenda packet. The fiscal year commences on July 1, and it was prepared under the City's normal and customary preparation process and policies. She noted that it is approximately $125,000 more than the preliminary budget for start-up operations that was included with the approval of the Letter of Understanding last summer primarily due to the inclusion of JULIE locating costs and service calls, which the City engineering staff estimates will be about $100,000 a year and the additional $25,000 included for UC2B's incentive payment on the FTTP construction, which is a bonus payment to contractors who can achieve their workforce diversity pledges.

Audience comments: Reverend Barnes stated that he finds it "deplorable" that contractors will be financially rewarded for meeting a diversity quota, stating that there should be another way to compel them to do "the right thing".

Board comments: Bogan wanted to know whether this is a reward or a credit to the bid itself. Legner replied that this is an incentive payment or "bonus" payment which is now a budgeted item in the operations budget consistent with the FTTP procurement plan that this Board recommended and the Champaign City Council approved in February. It was included in the procurement plan because we do not have many tools available to us to require contractors to demonstrate workforce diversity, especially given the tight deadlines UC2B has. This incentive payment is included as a part of the overall procurement plan to encourage contractors' follow-through on their diversity pledges for the duration of the project. Resnick confirmed that this was a compromise the Board came up with because it could not figure out another way to encourage follow-through given the project's time and legal constraints. He explained it is a bonus for meeting the pledge and not a punishment for not meeting the pledge. He recognized that it is not ideal, but that it is reasonable. Bogan voiced further objection, replying that contractors would probably still bid for the contract even if the diversity quota was

mandatory without a bonus. Chair Feinen responded that there is no way UC2B could mandate a diversity quota, so that is not the included in the procurement plan. She clarified that the Policy Board has already reviewed and recommended this "bonus" or incentive payment as part of the FTTP procurement plan which has already been approved by the Champaign City Council. If Board members had objections to this being a part of the plan, they should have voiced that prior to taking action on it in January. Timing wise, she explained that the Board is not in a position to redo a procurement plan, and agreed with Resnick that this was a compromise given that there is very little that can be done in terms of a penalty to the contractor if it is not able to meet its workforce diversity pledge. She noted that if we take a contractor off the job because they are not doing what they agreed to do, the fiber will not be in the ground come 2013. Bowersox reiterated that Council approved a twelve-point plan that a lot of work went into; now is not the time to change that part of the plan. He is happy with the solution the Board came up with. The bottom line is that contractors will not receive this payment if they do not meet their diversity pledges. Regarding the slightly bigger budget, Bowersox felt confident that these were legitimate additional costs that must be budgeted and that there is a clear explanation and justification for their inclusion. He noted that the staff report that accompanied the Resolution spelled out the details of the budget nicely.

Bogan asked whether the contractors will receive the bonus payment if they do not meet their workforce diversity pledges. The Board confirmed that no, they will not.

Schnuer asked Legner to remind the Board and the members of the audience of the public input process that was followed to develop this FTTP procurement plan. Legner responded that the process for public input was extensive. Two public meetings were scheduled and held on this topic. Direct mail invitations were sent out to contractors who are on the City's list of minority contractors. This list was supplemented with additional MAFBE companies provided by Fred Coleman that were also invited. Advertisements were placed in six newspapers in the region and members of local churches were advised of the opportunities to participate, as well. Twenty-four different companies (and approximately fifty individuals) attended one or both of the meetings and provided input on the plan development. The Board reviewed it three or four more times and the Technical Committee reviewed it a couple of times, all in open session, as well. It was also a Study Session item for City Council in February, and Council approved it a couple of weeks ago at a Special Regular meeting.

Alkalimat quickly commented that there are times when one has to hold one's nose and vote for things. He summed that this is an incentive "for doing

good." If the diversity pledges are met, then it will be a real accomplishment within the community. He agreed with Reverend Barnes that people or companies should not be rewarded for otherwise doing what should be done.

Legner noted that there are no operational revenues or costs included in this FY 12/13 budget for start-up operations and that it will have to be amended as these are determined in the future. This budget at least gets UC2B set up for expenses and member agencies' reimbursements. This budget also does not include expenses for outsourcing customer care yet which Kruse is working on for us.

Bogan asked whether this budget includes expenses associated with the community benefit fund. Chair Feinen replied that it does not because it does not include operating revenues and expenses. This budget is for start-up operations and is only funded by the member agencies and some portion of the federal grant for outreach and customer acquisition. It will be revenues generated by the operation of the system that will be utilized for the community benefit fund and not member agency contributions.

Minor Jackson asked whether contractors will receive contracts if they fail to meet their diversity pledges. Legner confirmed that contracts will be awarded based upon a variety of factors and that those contractors that are more aggressive in their workforce diversity pledges will likely be more successful in the award. She reminded the Board that it weighted the award criteria so that price and workforce diversity pledges were both important in the evaluation process and that price was weighted at 75% and the pledge was at 25%. Contractors with lower prices and higher pledges will likely be more successful. She noted that the contracts will be awarded based upon the proposed prices and pledges though before any work is begun. So, yes contracts will be awarded based upon pledges.. However, if they do not meet their pledges, they will not receive the incentive or bonus payment. Chair Feinen asked when and how the contractors will provide proof of their workforce diversity on the job. Legner noted that all contractors will be required to provide certified payrolls which will confirm workforce breakdown on a monthly basis and be compared back to their pledges.

Resnick pointed out that the reward or incentive is back-ended so that if later we discover they did not meet their pledged diversity breakdown, the bonus is not paid at the end. The total reward is $25,000, or an estimated 1% of the total estimated project budget. Schnuer repeated that there historically have not been enough contractors coming in with high workforce diversity breakdowns, so this is a "carrot" in the new procurement process to get them to achieve the objectives of having a more diverse workforce on the job. Alkalimat stated again that the fundamental issue here is time. By January

2013, the federal money runs out. If a contract gets canceled, the system will not be completed, and that will be a loss for the entire community, including those that are going to benefit very directly by having access to the internet and the world. While it is not the best scenario overall, it is the best under the circumstances.

Bowersox motioned to approve the Resolution as written. Schnuer seconded the motion. The Board approved by voice vote.

a) Presentation of UC2B Pricing Recommendations and Market Assessment and Preliminary UC2B Financial Models and Feasibility Objectives (NEO Fiber, LLC) cont'd:

Kruse resumed her presentation after the approval of Resolution 2012-07.

She explained that the purpose of today's meeting is to go over the information provided in the agenda packet so decisions can be made next week. She stated she will be attending in person for the March 22 Policy Board meeting and will make herself available between now and then to answer questions on the financial model or any of the recommendations included in the report. She stated she has been tasked with putting together pricing recommendations for customers in the grant-funded areas, as well as the anchor institutions, including those that may be located outside of these areas. In order to put together pricing, the Policy Board needs to review the financial model to make sure the assumptions upon which it is based, are correct. From there, UC2B will be able to determine pricing that will allow the entity to be financially sustainable. The workbook also includes various models for expansion. There will be decisions to be made on billing practices, working with landlords and developing bulk sales strategies, etc, in order for UC2B to begin selling services. The models are also prepared so the conditions of the grant are met.

Regarding the models, this particular one for UC2B is very sophisticated and was originally built and included as part of the Federal grant application. Rather than create a new one, Kruse took the existing model, revised and updated it where needed and expanded on it. A few things have been added, such as the worksheet that lists all the key assumptions at the front end. By adding this, the model can be adjusted in a single worksheet which will drive changes throughout the rest of the model so that the rest of the financials adjust accordingly. This will help to cut down on user errors in the future and simplifies the modeling so that UC2B can utilize it as a tool to run tests for feasibility when changes are desired and evaluated. The model is still in preliminary stages and does not include expenses associated with outsourcing call center operations and/or equipment/electronics maintenance. Kruse noted

that she is developing RFP's for both of these now so that these expenses can be better identified and included in the model. The agenda packet also includes a one-page summary of financial outcomes that may be desired in order to meet UC2B's feasibility objectives. It is important to define what UC2B wants to achieve. For example, is it going to be a profit-generating business or will it operate as a non-profit or break-even entity.

(*Mike DeLorenzo departed at 12:46pm.)*

Kruse provided a brief background on the proposed financial feasibility objectives.

Chair Feinen questioned when it is appropriate to determine the operational or governance model for UC2B and how that will affect the financial model.

Kruse noted that at this time, the financial model is based upon UC2B's current operating structure as it is sufficient, maybe not ideal and maybe not the form it will take in the future, but it will get us through the grant period and short term while time is of the essence.

Kruse continued her brief review of the feasibility objectives, adding that the question as presented here is will the cash flow be greater than the debt in ten years? The next item is related to having operating income sufficient to cover interest, taxes, depreciation and amortization or a positive "IRR". She noted that a typical for-profit business will not go forward with debt service and expansion if it does not see a 30% or greater return on investment, but, she noted that UC2B is probably not a typical business. She noted that as long as there is positive IRR, she believes network and fiber to the premise expansion is possible. The fifth proposed objective is that the asset value be greater than the amount UC2B spends on a per-subscriber basis.

Chair Feinen asked about the assets and how they may or may not be pledged toward the value of the system and the entity's ability to service its debt, noting that, from a government perspective the City does not bond or pledge its infrastructure assets to pay off debt in the event of default. Schnuer stated that in a worst case scenario, the City would not have to raise taxes or cut services but could sell these assets if need be. This is a bit different than the typical bond issues that the City does. He noted that the metrics here will help judge whether that would need to happen. Chair Feinen added that expansion of the infrastructure in the future can be partially achieved as a requirement of the City's subdivision development. Much like other utility infrastructure is constructed by developers, this can be, too.

Resnick noted that 90% of UC2B's assets are "freebies", since the grant and

matching funds are paying for the infrastructure. It is not built on the back of the subscriber. Bowersox suggested that when it comes down to what kind of borrowing UC2B does in order to expand, it does not need 30% but it does need at least a positive return. He suggested that the public will be much less interested in general obligation bonds backed by the full faith and credit of the Cities which rests directly on the back of all property owners ultimately in the name of higher taxes, even for those that may not opt for service. Therefore, it is important to find a way to expand without the general backing of the taxpayers of the Cities.

Alkalimat opined that the point of this project is to have world class connectivity in our community. He believes that it is a recipe for disaster to come up with one set of prices and tell the community something else. The plan needs to be equitable, and it needs to work. Another issue at hand is the institutional nature of the anchors, e.g. small neighborhood churches vs. large hospitals. Chair Feinen reminded the Board that the purpose here is to measure risk. Then we plug in the different assumptions and see what the model says.

Smeltzer answered that the proposed pricing model includes the University subsidizing the project by covering the cost to access the internet and provide bandwidth for the grant-funded areas and anchors for a period of five years. It did not agree to do that for the community as a whole. Also, at the end of five years, UC2B will probably have to come to a different pricing model in different parts of town (subsidized vs. non-subsidized). Schnuer wanted to be sure the Board discussed the issue of whether or not to charge the same fees throughout the community. Kruse replied that the model considers projected revenues for the grant-funded areas, as well as operating costs. At this point in time, the issue is trying to detail and nail down those costs so there will be no deficits.

Resnick asked about other services like Netflix that provide entertainment and that are not necessarily "servicing the community." Do those fit in to the model? Kruse answered that those would fall into the category of wholesale pricing, whereas right now UC2B is offering internet at a retail level. A television service, for example, could rent space on the network to roll out services. She acknowledged that it is within NEO's scope of work to develop a wholesale pricing model as well and that it will be done soon. The reason the discussion is focused on the short term and delivering internet service/access to the customers that will be connected with federal grant/match funds is so that the model can run with revenues sufficient to deliver upon the terms of the grant. When UC2B is ready and willing to consider expansion, in terms of services or customers, the models can be revised to evaluate potential changes.

Alkalimat expressed concern if different areas of town or types of customers pay different rates. Schnuer noted that there is some parallel that can be applied to UC2B with expansion policies of other City infrastructure. For example, if the City decides to upgrade streets that are not up to the urban standard such as oil and chip streets, residents living along those streets are expected to help fund, via an additional or special assessment. This way, the general public, or property owners as a whole, are not paying for it, but rather those that directly benefit are. Bogan suggested that a large hospital and a small church should not be charged the same amount for service stating that the number of users and the use of bandwidth will differ greatly.

Schnuer suggested that rates should not be established based upon the part of town served but rather how much of the service is used similar to utility billing. For example, the City bills customers for sewer use based upon how much water a customer utilizes. It is the best measure for equity and the revenues received are directly utilized to maintain the integrity of the infrastructure. Smeltzer interjected that the proposal is for non-profits and small organizations with fewer than ten employees to qualify for the residential pricing structure. Chair Feinen reminded the Board that decisions will be made the following week and not at this particular meeting.

Audience comments: Reverend Barnes wanted to make sure that in the present financial model, there is still a community benefit fund incorporated. Chair Feinen confirmed yes.

Peter Folk echoed the idea that having a flat model versus a tiered model where higher rates are charged to people based on *who* they are versus *what* they are is a model that was popular five to ten years ago. He suggested that the industry has moved away from it. He believes UC2B would be impaired by implementing it. This is a commodity based internet access that will be available to every resident in Champaign-Urbana. The goal is to make a more level playing field, not less.

Kruse reminded that Board that the pricing model that she has recommended is for the grant-funded areas and customers only at this time, and that recommendations are provided that differentiate small business vs. non-profit status, and larger businesses vs. anchor institutions. In her proposal, larger businesses do pay a different rate than residential customers. She noted though that if an entity, i.e. small business or non-profit has less than a million dollars in revenues and less than ten employees, it qualifies for the residential rate. Additionally, in the current proposal, if a customer can demonstrate that it is a non-profit, it would also qualify for residential rates. Another issue Kruse identified for the Board to consider is that many residents/potential customers

do not have a credit card or even a bank account, so there will need to be a decision made about how to proceed with service to those residents. Another issue to consider relates to service agreements with landlords for apartment buildings or structures with multiple tenants. She noted that her report makes recommendations on these issues.

Board comments: Bowersox thought all fifteen recommendations were great and reminded the Board that everything discussed today is in the agenda packet. He has some questions he will save for email and asked everyone to thoroughly read through them and ask questions as well so that they are all prepared next week to make decisions. A couple of key questions for him are: Will there be a customer contract, and is there an equipment deposit? The community knows the price but the answers to these questions are vital. It is imperative to make some decisions come next Thursday's Policy Board meeting. Schnuer agreed entirely and asked the Board to email Kruse with questions and blind copy members in order to not violate the Open Meetings Act.

Legner added to please copy Zoe Valentine on any emails sent back and forth, as well. She noted that she will be on vacation after this business day and will return the following Thursday. Richard Schnuer has volunteered to be the main UC2B contact in her absence.

Bogan reported that, at the "First Friday" meeting for the Black Chamber of Commerce , they discussed UC2B and many comments were made that there was not enough awareness about this project. He stated that we need to continue our efforts to make people aware of UC2B.

With no further comment, the presentation of UC2B Pricing Recommendations and Market Assessment/Preliminary UC2B Financial Models and Feasibility Objectives came to a close.

c) **FTTP Procurement Process Update:** Legner said Shive-Hattery has a preliminary draft of the scope for that work, so it is almost ready to be released. Several people are getting together March 15 to review it so it can be finalized.

d) **Marketing and Outreach Subcommittee Report:** Bowersox said with the warmer weather, the canvassers are heading out to resume the door-to-door campaign. The next marketing meeting will have members of the community present, particularly from faith-based organizations, so they are hoping for good attendance and participation (March 27).

e) **NTIA/Grant Report:** Chair Feinen asked if there was a motion to approve Mike Smeltzer's grant report and place it on file.

Audience comments: David Glynn, an independent contractor with Commonwealth Media and consultant for Pavlov Media, wanted to distinguish the relationship between the resident, the property, and the service providers available for the Board to consider. The infrastructure on the property is owned by the property owner. The large cable infrastructure that is in an apartment building is owned by the property owner. It can be difficult or impossible for a resident to get service over what the property owner already has in place. The idea that a renter or tenant is going to contract for UC2B service without interacting with the property owner is going to be difficult.

Board comments: Bowersox answered that the UC2B infrastructure is meant to go to every unit. It is owned by UC2B. Glynn said he meant his comments to apply to expansion, beyond the grant-covered areas. He noted it is an involved process to get onto someone else's property. The properties pay for their infrastructure. Kruse said she understood that there are a lot of issues dealing with landlords and multiple-dwelling unit structures or MDUs. There is an extensive section in the report that describes options for how to deal with these and what the issues are, along with her recommendations. Glynn asked whether ISP's will be able to compete with UC2B; Smeltzer confirmed yes, absolutely.

Chair Feinen asked for a motion to approve Mike Smeltzer's grant report. Resnick moved to approve the report as written. Alkalimat seconded. The Board approved by voice vote.

VI. Tasks to complete for next meeting

a) The Board will review the agenda packet and Kruse's Excel workbook and email questions and/or comments to her via Zoe Valentine.

VII. Items for future meeting agendas

a) Field Orders – Interim J.U.L.I.E. Locating Services and Fiber Restoration (Vandeventer, Shonkwiler)
b) UC2B Technical Committee Appointments – Voting member: Chris Hamb; Non-Voting Member: Brian Bell (Alkalimat)
c) Proposed Policy for Private Expansion of UC2B (Smeltzer)
d) UC2B Core Values Discussion
e) Gig.U (Smeltzer)
f) Policy Statement Regarding Use of Public Resources by Private Entities Furthering an Articulated Public Purpose (Schnuer)

UC2B Policy Board Minutes

VIII. Public Participation
None

VIII. Discussion of items for next meeting's agenda

IX. Adjournment: Chair Feinen adjourned the meeting at 1:46pm.

RESOLUTION NO. 2012-07

A RESOLUTION

APPROVING AND ADOPTING THE UC2B ANNUAL BUDGET FOR THE FISCAL YEAR COMMENCING JULY 1, 2012 AND ENDING JUNE 30, 2013

WHEREAS, the Annual Budget for the Fiscal Year commencing July 1, 2012 and ending June 30, 2013, (the "Annual Budget") has been prepared by the Interim UC2B Consortium Coordinator in accordance with the provisions of the City of Champaign's policies and procedures; and

WHEREAS, this Annual Budget is prepared and presented to the Policy Committee pursuant to the terms of the Intergovernmental Agreement Providing for the Creation of the Urbana-Champaign Big Broadband System Consortium and the By-Laws of the UC2B Policy Committee; and

WHEREAS, the Annual Budget is prepared and presented consistent with the Letter of Understanding approved by the City of Champaign, City of Urbana and the University of Illinois and the funding formula contained therein; and

WHEREAS, it is the desire of the Policy Committee to approve and adopt the Annual Budget which is now on file in the office of the City Clerk of Champaign, Illinois subject to its inclusion and adoption by the City of Champaign, City of Urbana and the University of Illinois in each entity's own Annual Budgets.

NOW, THEREFORE, BE IT RESOLVED BY THE UC2B POLICY COMMITTEE, as follows:

Section 1. That the Annual Budget for the Fiscal Year commencing July 1, 2012 and ending June 30, 2013 for the Urbana-Champaign Big Broadband Consortium, which is Attachment 1 hereto and which is incorporated herein by reference, is approved and adopted.

Section 2. That the Interim UC2B Consortium Coordinator is directed to present this Annual Budget to the City of Champaign, City of Urbana, and University of Illinois so that each entity may consider, include and adopt their share of expenditures in their Annual Budgets.

Section 3. That, in the event the City of Champaign, City of Urbana and University of Illinois do not approve the UC2B Annual Budget as is presented as Attachment 1 hereto, the Interim UC2B Consortium Coordinator is authorized to amend the UC2B Annual Budget to be consistent with member agencies' direction.

Section 4. That Interim UC2B Consortium Coordinator is authorized to amend the Annual Budget commencing July 1, 2012, to increase expenditures by the amount of encumbrances outstanding as of June 30, 2012.

RESOLUTION NO. 2012-07
PASSED:

APPROVED: _____
Policy Committee Chair

UC2B Operations
Fund Statement
08

	FY10/11 Actual	FY11/12 Budget	FY11/12 Estimate	FY12/13 Budget
Beginning Balance	0	0	0	0
Revenues				
Revenue Transfers	0	133,622	123,808	170,557
Revenues	0	234,526	221,567	265,531
Total Revenues	0	368,148	345,375	436,088
Expenditures				
Commodities	0	52,000	52,000	32,000
Contractual Services	0	180,983	207,650	281,500
Expenditure Transfers	0	27,225	85,725	122,588
Personnel Services	0	107,940	0	0
Total Expenditures	0	368,148	345,375	436,088
Ending Balance				
reserved	0	0	0	0
unallocated	0	0	0	0
Total Ending Balance	0	0	0	0

Comments:

BUDGET SUMMARY

Department

Fund

Activity

Account	Account Description	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Budget	2012 Amended	2012 YTD	2012 Revised	2013 Budget
Revenues										
Operating Funds										
UC2B Revenues										
352	352 - CITY EXPENSE REIMBURSEMENTS	0	0	0	0	0	184,526	65,156	171,067	235,531
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022253)						104,989		0	0
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022254)						79,537		0	0
360	360 - INTEREST & INVESTMENT INCOME	0	0	0	0	0	0	115	500	0
389	389 - ARRA GRANT FUNDS	0	0	0	0	0	50,000	0	50,000	30,000
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022252)						50,000		0	0
402	402 - TFR FROM GENERAL OPERATING FUND	0	0	0	0	0	133,622	20,854	123,808	170,557
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022255)						133,622		0	0
Total Activitiy		**0**	**0**	**0**	**0**	**0**	**368,148**	**86,126**	**345,375**	**436,088**

BUDGET SUMMARY

Department

Fund

Activity

Account	Account Description	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Budget	2012 Amended	2012 YTD	2012 Revised	2013 Budget
UC2B Operations										
Operating Funds										
UC2B Operations										
501	501 - SALARIES: SCHEDULED	0	0	0	0	0	84,626	0	0	0
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022256)						84,626		0	0
525	525 - GROUP MEDICAL & LIFE INSURANCE	0	0	0	0	0	7,235	0	0	0
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022257)						7,235		0	0
526	526 - CITY IMRF/SURS PAYMENTS	0	0	0	0	0	9,605	0	0	0
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022258)						9,605		0	0
527	527 - CITY FICA PAYMENTS	0	0	0	0	0	6,474	0	0	0
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022259)						6,474		0	0
600	600 - OFFICE SUPPLIES	0	0	0	0	0	2,000	1,150	2,000	2,000
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022260)						2,000		0	0
610	610 - ACTIVITY SPECIFIC SUPPLIES	0	0	0	0	0	50,000	4,906	50,000	30,000
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022261)						50,000		0	0
700	700 - PROFESSIONAL SERVICES	0	0	0	0	0	162,983	30,510	186,000	230,500
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022262)						162,983		0	0
712	712 - PROFESSIONAL MEMBERSHIPS	0	0	0	0	0	1,500	0	0	1,500
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022263)						1,500		0	0

Department

Fund

Activity

Account	Account Description	2008 Actual	2009 Actual	2010 Actual	2011 Actual	2012 Budget	2012 Amended	2012 YTD	2012 Revised	2013 Budget
713	713 - PROFESSIONAL DEVELOPMENT	0	0	0	0	0	3,000	1,049	1,050	3,000
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022264)						3,000		0	0
720	720 - MISC. CONTRACTUAL SERVICES	0	0	0	0	0	4,000	0	15,500	40,500
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022265)						4,000		0	0
721	721 - PRINTING & DOCUMENT PROCESSING	0	0	0	0	0	3,000	0	5,000	5,000
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022266)						3,000		0	0
725	725 - POSTAGE AND EXPRESS CHARGES	0	0	0	0	0	6,500	86	100	1,000
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022267)						6,500		0	0
902	902 - TFR TO GENERAL OPERATING FUND	0	0	0	0	0	27,225	13,613	85,725	122,588
	Adjustment: BA 2011/2012-2 OMNIBUS (27400022268)						27,225		0	0
Total Activitiy		**0**	**0**	**0**	**0**	**0**	**368,148**	**51,312**	**345,375**	**436,088**

UC2B Policy Board Minutes

Regular Meeting
March 22, 2012

Location:
City Council Chambers
102 N. Neil Street
Champaign, Illinois

Board Members Present: Abdul Alkalimat, Rev. Zernial Bogan, Brandon Bowersox (phone), Deb Feinen, Pete Resnick (phone), Richard Schnuer, Mike Smeltzer for Mike DeLorenzo, Tracy Smith

Others Present: Diane Kruse (NEO Fiber), Bill DeJarnette, Teri Legner

Policy Board members absent: Minor Jackson, Mike DeLorenzo

Action Items:

I. The meeting was called to order at 6:05pm by Chair Feinen.

II. Roll Call – Determine Quorum

III. Approve agenda: Smeltzer moved, Schnuer seconded the motion to approve the agenda. The motion was passed by voice vote.

IV. Approval of minutes: There were no minutes to approve at this meeting.

V. *Action/Discussion Items:

a) **Approval of UC2B Pricing Recommendations & Feasibility Objectives (NEO Fiber, LLC):** Kruse reminded the Policy Board that the purpose of this meeting was to make decisions related to residential pricing, business pricing/eligibility, and a variety of other operational procedures as outlined in the report.

The Board has previously approved the initial residential service tier at 20MB for $20 ($19.99). Kruse confirmed that the financial model illustrates that pricing at this level will result in a positive cash flow for UC2B, even at lower take rates, including a 20% take rate, 30%, 40%, and 50%. This is made possible by the fact that UC2B really has no debt to service since the infrastructure is all grant funded.

Alkalimat if the community benefit fund was figured in to the model. Kruse answered that it does.

Audience comments: Peter Folk of S. Maple Street, Urbana, asked whether the model includes wholesale revenues from ISP's and how that impacts pricing.

Kruse responded that the model has been stripped down at this point to run the pricing structure for the grant funded areas and anchors only. She noted that the only wholesale revenue in this model is that to be provided by Champaign Telephone because of their financial commitment made up front with the grant application. Champaign Telephone intends to provide services over the UC2B network and has signed a letter of intent to purchase stands on the rings and pay for system maintenance as priced. No other local ISP's have made such a commitment to date.

Folk asked whether the public would receive the revised financial models. Legner noted that they have been distributed to the public. She also noted that when the wholesale pricing scheme is determined by the Board, it will also be added to the workbook and re-sent.

Board comments: Smeltzer said that IRU revenue from all the local funding entities, such as the Cities and school districts, should be included in that model, along with Champaign Telephone's commitment. Kruse said she would revise it accordingly.

Schnuer reminded the Board that the purpose of this meeting is to agree on pricing that is "appropriate" for this point in time, but that there are aspects of the pricing model that might need to be changed going forward.

Bowersox asked whether anyone had come up with gigabyte pricing recommendations. Kruse recommended holding off on making a decision on that particular element at this meeting, as it is something that can be added later. However, the speed is the same upstream as it is for downstream (20mbps).

Alkalimat asked where we stand on wireless pricing. Kruse explained that this was identified as an option during her last visit to the community and appeared to be of interest but first we would need to confirm that the equipment will deliver a reliable wireless service before we price a product that is untested. She also noted that it is important to get initial subscriber base so that the entity can begin to generate revenue and be operational. Perhaps UC2B can consider adding such a lower level service tier later in the year after the goals of the grant are met.

Alkalimat moved to approve the residential pricing service tiers as presented by Kruse. Smith seconded the motion. The motion passed by voice vote.

The Board moved on to discuss business pricing. Kruse began the discussion seeking Board direction to determine whether or not there should be differential pricing for businesses vs. residential customers. She recommends that there should be different service tiers and associated pricing noting that this is standard practice on the industry. If the Board determines that yes there should be differential pricing, it might also want to consider the definition of "business" and what qualifies for this pricing structure. Kruse recognized in her recommendations that UC2B might want to establish pricing for small businesses and non-profits differently than that for larger businesses. For example, she recommended criteria for determining whether a small business or non-profit should pay the residential rate: if they have $1M or less in gross revenues, *and* have less than ten employees, *and* need no more than one IP address, *and* want to subscribe to the 20mbps product tier. Otherwise, those businesses not meeting these criteria would qualify for the business rate.

Technical questions: Bogan asked how the anchor institutions are being included—would they qualify as a non-profit? Kruse answered that if they are a business and fall outside of the criteria just presented, they will qualify as a larger business and be charged business rates as proposed. Otherwise, they would be determined to be a small business or non-profit and receive the residential rate. Bogan felt that this could be a problem, especially for churches. He expressed particular concern about the criteria relating to the number of employees a church might have.

Kruse suggested that these criteria can be changed if the Board determines that it wants to adopt business pricing. She noted the phone company defines a business as one having a white page listing or business address. The cable company says if a person has a business address, it is a business. UC2B could use IRS rules to define what makes a non-profit, tax exemption status, for example, and allow for some other pricing tier or discount for these. The feedback she has received thus far is that UC2B wants to set its own rules for defining a business and establishing business pricing.

Resnick asked whether any modeling was done for metered service. Kruse replied that she did not model based upon metered pricing. She noted that this pricing structure may work for cellular telephone companies and other utility companies, such as the water company. However, it is not a structure that has been implemented in this industry. There are higher operational costs that go along with supporting a metered service. UC2B has to be able to measure it, sell it, bill it, and explain it to customers once billed if they have questions.

The point of this internet service is to provide it at a lower price; to encourage its use; and to bridge the digital divide. If it were to become a metered service, UC2B will have customers worried about going over the minimum and that does not really encourage use or unlimited service. She strongly recommended not going with a metered pricing plan; it would increase costs and could skew public perception about UC2B. Chair Feinen agreed with Kruse noting that simplicity and customer satisfaction is going to be imperative for UC2B.

Resnick felt that it could be offered either way. His concern was that there are certain anchor institutions that are non-profits but are incredible users of bandwidth. Regardless of status, he would like the large users to pay more. Kruse reviewed the criteria set forth before the Board: if a non-profit is quite large, chances are they will have more than ten employees and they will qualify for the business rate. If s church has more than $1M in revenue—again, it would qualify for the business rate. Again, the Board may want to revise these criteria if it determines that business pricing is desired.

Resnick said he would rather estimate bandwidth usage over setting specific criteria. Chair Feinen added that she is a small business owner but has no idea what her office uses. She guessed that other small business owners may be similarly situated and not know how to estimate megabit or gigabit utilization, nor what to budget on a monthly basis for their subscription. She expressed concern that this may be too confusing or complex for small businesses. It might be difficult to sway them to take UC2B service then. Though he did not know specific numbers, Resnick replied that he would like to have a set amount of gigabits for an offered tier price, and then if a business goes over that amount, it pays an additional prorated amount at the end of the month. He suggested that UC2B should not want to do what the cell companies do, so the cost for the "extra" bandwidth should be priced in nominal amounts per month unless a business goes way over.

Schnuer recognized that businesses ought to pay a different rate than residential customers but stated that he would like to see more information about metered pricing. The residential price plan is not sustainable long-term for the entire subscriber base, which is why others (i.e., businesses) need to make up the difference. He would like to see a system that is more closely related to what our cost is to provide a service.

Smeltzer noted that there are very few businesses in the grant funded areas and most of them that are very small and would likely qualify for the residential pricing status or be defined as a "small business" as Kruse has proposed. He suggested changing Kruse's recommendations by adding the word OR in place of AND between the criteria. So, if revenue exceeds more

than $1M, that entity qualifies as a business; or more than ten full time equivalents, that entity qualifies as a business, etc. This will only weed out a dozen or so businesses. But anchor institutions such as shelters, churches and the like will qualify automatically for residential rates, which is a decision the Board can make at this meeting.

Alkalimat agreed with Schnuer's church example, as a church is not going to employ ten full-time employees, which is what the recommendation is really about. Chair Feinen pointed out that private schools are going to have more than ten FTE's but will qualify for the residential rate as an anchor institution then.

Smeltzer reiterated that the conditions/recommendations set forth by Kruse should have an "or" between them, so that if an entity meets any one of the criterion, they will be labeled as a business. He also stated he was in favor of eliminating the criteria relating to the number of employees.

Resnick stated that he was uncertain that simply being a non-profit should qualify a business for reduced or residential rates. H explained that if a church is providing internet access to its members in a large computer lab, he could see their receiving the residential rate. But if it is being used to stream services which are not aiding with bridging the digital divide, he is disinclined to want that business to benefit from the less expensive service.

Audience comments: Peter Folk stated that he runs an internet service provider that has both bandwidth and usage-based pricing. He knows how much usage is common and for a small law firm, it would be easy to estimate (referring to Chair Feinen's earlier comment). If one does not go with a cell phone company billing model, usage-based pricing is how it would be structured. Comcast has a provision that if someone uses more than 300GB in a month, s/he is considered a heavy user and can be kicked off the network. Therefore, it goes to show that the vast majority of their users do not exceed 10GB per day, which he has found to be true, as well. Most people who are not using streaming services such as Netflix are at a usage rate of less than 1GB, whereas if they do, they reach about 10GB a day. Only a handful of users exceed 30GB per day on any regular basis. He continued that metered pricing is a definite possibility, requiring software to track it. He found that what was being said at the meeting was contradictory: if a person wants to use a lot of bandwidth, they will be charged a lot. If they do not, they are encouraged to use a lot of bandwidth. He believes that most people would like bandwidth to be like any other utility, where one does not have to think about the usage. He would like to see the Board come up with appropriate pricing, account maintenance, billing method, frequency, etc. While he agreed with the residential pricing, he disagreed with the method of trying to estimate who the

heavy hitters would be regarding bandwidth and businesses. He felt there was more than enough time to develop a utility model for the long-term.

Board comments: Resnick added that there is another principle here than just getting people to use lots of bandwidth. The point is to give people a chance to use a lot for a low cost, be it for further education, to earn a profit, whatever. It is not a cut and dry principle as Mr. Folk was making it seem.

Chair Feinen asked whether this was a decision that had to be made tonight. Smeltzer replied that the canvassers have a lot of work to do just for residential alone; he estimated that it may be at least another month before the business rates need to be determined. There are only about 200 businesses total in all of the grant eligible areas, most of which will be users with lower demand, more like "small business". However, the rates for the anchor institutions need to be determined quickly. We need to know where those connections will be made as soon as possible to include in the fiber to the premise specifications if possible.

Chair Feinen asked whether an anchor institution would automatically meet the small business definition (e.g., Carle Hospital). Smeltzer replied no, they would definitely need more speed. Although, he did not believe Carle would put all of their internet business on UC2B's network, nor would they do so overnight.

Resnick still felt there were too many options. Bogan added he would like to remove the criterion related to the number of employees from the "small business" definition. Moreover, he would like to see a marketing strategy in place that would provide for a lower price for first time hook-ups to encourage people to connect.

Bowersox answered that with regard to timing, business pricing did not have to be decided at this meeting. It should be done at the next opportunity but anchor pricing did need to be decided immediately. He proposed that for starters, all 300 anchors on the list would receive residential pricing (for the first one to three years), be they hospitals, schools, or churches. All 300 places that we know can connect right away, we would offer them the same 20Mbps/30Mbps/40Mbps pricing that we offer residents (and with one IP address). Otherwise, they will be moved to the business tiered pricing.

Bogan restated that he wanted the employee criterion eliminated. Smeltzer said that none of the criteria will apply; if they are on our list, they will qualify for residential tiers if they have one IP address. Farther down the line, the Board will discuss business rates.

Schnuer wanted to ask what the "special category" is—non-profits or anchor institutions? He was concerned about setting a precedent. How will we charge businesses down the line something different than those who got in at the residential pricing level?

Ms. Kruse replied that she needed more specific direction and a set of guidelines from the Board by the end of the meeting on business pricing so that she can revise the financial models to test economic viability. She understands that the small businesses need to be taken care of in terms of favorable pricing. While business pricing would not be decided at this meeting, she would need some guidelines for next time. For example, does the Board want to offer a price break for non-profits? What about small business products? This direction is necessary so that she can prepare reasonable and viable options for Board discussion.

Audience comments: Jon Gant went over the time pressure for signing up the anchor institutions, stating that we have until August. While the canvassers have been focusing on households because there are a greater number of them and more is outreach necessary, the plan is to have a focused approach when it comes to businesses/anchors. Alkalimat's team has cleaned up the list of anchors and contacts considerably. It will take more phone calls and identifying the right contact person. He estimated it would take twice as long to get the community anchors done. It will take longer to build outreach and make people aware; time is definitely of the essence.

Schnuer asked how much training is involved for the canvassers regarding the anchors. If the decision is pushed another three weeks, will that affect their timeline considerably?

Mr. Gant said as soon as they have the pricing, they will start marketing. They already have their computer systems in place and it is only a matter of finalizing the scripts. It will not take a lot of time.

Smeltzer mentioned that if an anchor institution does not want to be a customer, they need to know as soon as possible. Windsor of Savoy will take about a mile of fiber to connect, so it would be good to know sooner rather than later if it is not necessary to incur this expense and build this lateral. Seventy percent of the rings are in, and the laterals are being built out now.

Mike Vrem of Champaign Telephone asked whether an anchor institution is a "forever" term—what is the timeline for being an anchor institution? Will anchors be able to qualify for residential pricing forever? Will there be new anchors added in the future and will they be eligible for this pricing?

Resnick agreed with Mr. Vrem's point of view, saying he would hate to settle on a core set of criteria and then have new people/businesses committing to a different pricing structure. He would like the Board to thoroughly discuss what the core principles/goals are, per Kruse's instruction. He did not support a motion to approve business pricing at this time.

Smeltzer agreed to extend the offer of residential pricing to any grant-funded institution where the installation is being paid through the grant. Once the grant period is over, we will not be able to offer that pricing. Anyone who qualifies at this moment in time will receive it. If there is money leftover come August, more anchor institutions can be decided upon (grant funding goes through January 31, 2013).

Schnuer said he was still uncomfortable with telling people they will have certain pricing "forever." He went on that if the Board wanted to vote on the time frame, he would consider two years acceptable.

Smeltzer reiterated that we are asking for a two-year commitment to pay the bill and they get the pricing for two years—he felt that was fair.

David Glynn commented that he felt the Policy Board was getting ahead of itself and that we should not try to take care of everything on a retail level. Competition will be encouraged and people will still get their service. He asked that the Board not dismiss the advantages of having other people solve part of the problem.

Board comments: Smeltzer motioned that the Board extend the same three tiers of residential pricing to all anchor institutions built during the grant-funded building project. Bowersox seconded the motion. With Resnick's opposition, the motion passed by voice vote.

Ms. Kruse then revisited the financial model and the remaining thirteen issues that came out of the report and packet from the previous week.

Bogan expressed that contract language can be confusing to people and encouraged staff to make sure that the terms are clear and concise.

Alkalimat agreed with Mr. Folk's stance on establishing the values at hand. Those who have the capacity to pay more should be expected to do so. The issue at hand is to ensure that vulnerable people (children in low-income households) have internet access. He also wanted there to be a way for people to apply for special conditions. The bottom line, as he saw it, is that if the number of children connecting is not impacted in a couple of years, then we are falling short of the goal.

Schnuer commented that, currently, there is no way to measure workload when it comes to collecting payments. Though the Finance Department takes cash, for example, he wanted it noted that the City may have to charge UC2B if there is a significant impact on workload at the City due to collection of payment as suggested in the report.

Bill DeJarnette said that it is not the purpose of UC2B to solve every problem in the community. The point now is to establish fair and reasonable pricing and outreach programs that will then sprout up.

Resnick asked about IP addresses and the proposed pricing. Is UC2B charging for additional IP addresses by individual cost or by some other metric? Smeltzer answered that there are probably three factors. They will cost us money. They are also becoming scarce, which will then drive the cost up. He wants to discourage public IP addresses due to the scarcity. Finally, those who want multiple IP addresses will probably be running multiple servers, which means using up more bandwidth. He added that UC2B is applying to get our own portable IP space, which may not be possible but nothing is determined yet. Regardless, there will be an extra cost involved.

Resnick asked whether a customer will be charged for two months of service up front if s/he does not pay with a credit card. Kruse said she revised that and there is now a flow chart in the report showing how one would pay for services if a credit card is not an option.

Bogan said he asked Zoe Valentine to make up a packet of resolutions, as he wants to verify which one discusses the stipulations regarding low-income individuals qualifying for the service. He wanted to ensure that any senior citizen who cannot afford to pay $20 per month will still be able to receive the service at a lower price.

Regarding working with cash, Smeltzer addressed Schnuer's concern, saying whatever organization is hired to do billing and call service may, in fact, have a physical location in town to deal with the billing/paying cash issue. Chair Feinen redirected the Policy Board to sticking with Kruse's fifteen recommendations before them. She turned to the audience for their comments.

Audience comments: Peter Folk responded to the IP address discussion. There are 75 million IP addresses available in North America to a population of about 500 million. The scarcity is global, and it is real but it is not right now. They are about fifty cents a year. To charge someone $20 a month for that seems a little high. It is also not the case that the majority of bandwidth is used only by multiple IP customers—it is peer to peer services like Livewire

and Bit Torrent. There are two models which have succeeded in getting services out to the bottom tier of our society: one is the utility model that has succeeded with water, power, and phone; the other is the pre-paid model which allows someone to buy a phone and get pre-paid service and neither of these options are being discussed (except for the utility model which is receiving pushback).

LaEisha Meadards spoke to item number seven on the recommendations list, that being the unreturned equipment fee being $389. Kruse responded that they will write up some contact language saying that there is no deposit fee but unreturned equipment needs to be returned within a period of time or the customer is fined. If the equipment is subsequently returned, the customer is issued a refund. Chair Feinen worried that this would mean creating a collection agency component.

Bowersox agreed with Kruse's reply regarding the unreturned equipment fee. The customer will be charged but s/he has X number of days to return it to receive a full refund. He would support a motion to approve all thirteen remaining recommendations.

Regarding number six (two-year contract), Kruse said she had put her response in writing, which Zoe Valentine had sent out as a blind copy response to the Policy Committee.

Bowersox said he would be happy to make a motion to approve the pricing in items one and five. Resnick added he would like to defer the point on IP addresses and discuss it with the Technical Committee first. Bowersox agreed (number four was thus deferred).

Bowersox motioned to approve all of the items other than those two related to business pricing and pricing for IP addresses. Resnick seconded.

Smith asked about how the discussion at the Technical Committee will impact timing. Legner added that it could potentially cause a delay. Chair Feinen replied that the motion did not include the stipulation about discussing anything with the Tech Committee but we can include it in the agenda for the next meeting.

Resnick said to separate the two items if we have not heard back about the IP address issue from ARIN (the agency that issues IP addresses). Smeltzer wanted to be sure forgiveness language is put in with the stipulation about returning equipment.

Jon Gant added that there is a concern over who the target is. He would like alignment between the contracts so that everything is explained very clearly for the target audience. One of the biggest barriers to broadband programs is the complexity of the contracts. In St. Louis, for example, they are trying to sign up 3,000 residents and the barrier was the complexity of the contracts before signing up for service. Bogan echoed Mr. Gant's sentiment, stating that the simplicity of the language is paramount.

The motion was approved by voice vote.

Chair Feinen redirected the conversation back to Kruse to discuss some questions on business pricing.

Board discussion: Kruse went back over the direction she was receiving from the Policy Board. The core values she heard were: offering better service than what is available now, offering better pricing (not gouging the customers), figuring out a way of capturing use (perhaps through metered service), making sure the "little guy" is taken care of, and having a clear path forward.

DeJarnette felt that metered use would take care of the little guy; if someone uses a large amount, then that entity is not a small user, and would therefore have to pay more.

Alkalimat said that we can anticipate low-income households will make a lot of use of streaming services like Netflix, so they will use more bandwidth. He felt that the intention of UC2B would become lost if everything is based on usage. DeJarnette qualified that he was referring to the business customers, as residential pricing had already been established.

Bogan asked what would happen to pricing for anchor institutions (businesses) after two years, e.g., Francis Nelson. Smeltzer answered that that entity will probably have most of its traffic within the community. The issue at hand was merely talking about metering and monitoring internet and not intranet. If Francis Nelson suddenly began offering services for people in Canada, that would be an entirely different issue. Metering will only be done for internet service and not intranet service.

Chair Feinen went back to the issue of charging for services at rates that are fair but competitive. There is no community benefit fund if there is no profit. It is imperative to figure out who will be charged, as it cannot be free to everybody, and there are a lot of goals. Additionally, without a vote from the member entities, we do not have approval to subsidize this service going forward. At some point there has to be positive cash flow. Should the service be built out to the rest of the city (and then how would we pay for that)? Do

we want to have an active and robust community benefit fund? As a small business owner, she felt the business pricing was a great deal; if metering helps, she would be in favor. It simply cannot be free to everyone, though. Resnick agreed with Chair Feinen. He would like to see Kruse redo the model to show something "much fairer" that will earn a reasonable profit.

Schnuer echoed DeJarnette's comment. He agreed with the goal of getting better business pricing. Distance learning requires internet. He wants other service providers on the network to give people options. He wants to ensure there will be competition.

Bogan agreed with Schnuer's sentiments, saying he felt clients will want options.

Smeltzer added that at the core, there will be Cisco switches, a company that is bringing in something from Scandinavia and Israel called an "open services exchange network," which will separate out the things Schnuer mentioned. It is relatively new, however.

Chair Feinen asked if Kruse had enough direction to go on (yes). She then polled the Policy Committee, asking if everyone believed that different pricing should exist for businesses versus residential. Alkalimat: yes. DeJarnette: yes. Schnuer: no, but if it means being sustainable, yes. Bogan: yes. Smith: yes. Smeltzer: yes. Bowersox: yes (but try to find a utility model first). Resnick: no answer (got disconnected). Chair Feinen: yes.

Schnuer and Smeltzer asked for Kruse to provide two or three models to address the questions at hand, fleshing out flat rates vs. utility rates.

VI. Tasks to complete for next meeting

Bogan asked for Ms. Kruse to send out her recommendations via email (through Zoe Valentine); if the Policy Committee has comments, they must also be sent through Ms. Valentine.

VII. Items for future meeting agendas

a) Field Orders – Interim J.U.L.I.E. Locating Services and Fiber Restoration (Vandeventer, Shonkwiler)
b) UC2B Technical Committee Appointments – Voting member: Chris Hamb; Non-Voting Member: Brian Bell (Alkalimat)
c) Proposed Policy for Private Expansion of UC2B (Smeltzer)
d) UC2B Core Values Discussion
e) Gig.U (Smeltzer)

f) Policy Statement Regarding Use of Public Resources by Private Entities Furthering an Articulated Public Purpose (Schnuer)

VIII. Public Participation

Peter Folk added that one item that we might want to include in our utility model is bandwidth to the City being unlimited. There are scenarios where it can be maxed out so he advised the Policy Committee to think about that.

IX. Adjournment: Alkalimat motioned to adjourn the meeting. Schnuer seconded. Chair Feinen adjourned the meeting at 8:26pm.

UC2B Urbana-Champaign Big Broadband

UC2B Business Service Rates

In the discussion about UC2B's business pricing, there are currently two main schools of thought. There are advantages and disadvantages to both UC2B's potential customers and to UC2B with each approach.

The Policy Board asked for some models for metered business pricing and four are attached. The Policy Board asked the Technical Committee to look at this issue as it affects business customers in the FTTP areas, and they came up with a hybrid model that I will attempt to summarize here as well.

Tiers of bandwidth with flat-rate pricing

The first approach is to have flat-rate tiers of bandwidth available, and the thinking is that heavy users will purchase the more expensive faster tiers, while small companies with more modest Internet bandwidth needs will purchase the slower and less expensive tiers.

This service and pricing model is what the Policy Board approved for residential customers in the grant-subsidized FTTP areas and for Community Anchor Institutions throughout the community.

This approach is good for business customers in that they know exactly what their bill will be each month. If experience shows that a business customer has purchased too much bandwidth, they can always elect to go with a less-expensive, slower tier in the future. UC2B loses a little future revenue, but we will allow the customer to purchase the correct package to meet its needs.

If experience shows that a customer has not purchased enough bandwidth, they will have two options. First they can simply elect to move to a faster and more expensive tier for the future.

However, if purchasing a more expensive service package is questionable financially, they can always elect to stay with their current tier and monthly rate and just accept the fact that for some percentage of the day, they will be constrained by their bandwidth limit. If that congestion is only 10 minutes a day, it may be totally acceptable to the customer. If that congestion is 10 hours a day, they may decide to find funds to pay for more bandwidth.

As long as UC2B remains flexible about allowing business customers to change their bandwidth packages for future months, this is absolutely the simplest, customer friendly and understandable way that UC2B can sell Internet services to businesses.

From UC2B's perspective, there is minimal overhead involved in operating a tiered bandwidth system. It is simple rate limiting which can be done in the core routers on a subnet-by-subnet basis.

It is certainly possible that a business customer paying for the least amount of bandwidth could actually transfer more Internet data on the network over a given period of time than a customer paying for more bandwidth. While that may seem unfair, it is actually OK for UC2B. There is randomness to Internet usage that averages out over lots of users and time. If we see recurring patterns of congestion on the UC2B exit, we will have the ability to increment the Internet bandwidth we have available, and stay ahead of the demand.

The key is that UC2B must be willing to increase the upstream bandwidth it purchases if and when it sees that its Internet link(s) are consistently congested for more time than is acceptable.

Metered bandwidth services

The second school of thought is that we should sell bandwidth like it was water, and meter every last drop.

Start with a fixed monthly fee that covers a little bit of Internet data transfer and also UC2B's typical fixed overhead: JULIE locate costs, fiber maintenance, network operations, equipment depreciation, debt service, customer service and billing. Then either sell all bandwidth by the Gigabyte of data transferred to or from the Internet, or create packages that look like cell phone minutes packages and have tiers of service that each get you different levels of Internet data transfer every month. Past the quotas, these packages also have defined "per Gigabyte of data transferred" overage charges for business customers that exceed their monthly quota.

From the customers' perspective, there would be uncertainty in understanding the math behind such a billing system, and even more uncertainty in understanding how many gigabytes their business might send and receive from the Internet each month.

While we all have some idea of how much time we spend on our cell phones each month, and have a fixed upper limit of how many waking minutes there are in a month to talk on the phone, very few business owners have any clue as to how much data their employees or their servers send and receive to and from the Internet each month. It will be extremely hard to sell metered services without doing a lot of customer education, as UC2B would be the only provider selling broadband services this way.

As a general rule, 5% of an Internet Service Provider's customers consume the majority of the bandwidth used. There are several ways to constrain the 5%, but they all involve counting bytes and subjecting the 95% who are "average" users to the same constraints that are designed for the heavy users. Any bandwidth metering system increases the network's operational complexity and costs, as well as increases calls to customer service about overage billing.

It is possible to create some simpler metered plans that have a single base rate and then almost all data transfer is metered. While they are simpler to understand, they share the same uncertainty of the cell-phone minutes styled plans.

If you were a business owner and had a choice between tiers of bandwidth that had fixed prices or a metered system that could give you some real billing surprises from time to time, which would you choose? There is no question that fixed tiers of bandwidth would be the choice of most rational business owners.

UC2B business customers will have choices for Internet providers. If UC2B were to adopt only a metered bandwidth plan for businesses, that would be good news for every competitor, as they would come to market with tiered-based plans with flat rates. UC2B is not a monopoly and cannot dictate a rate plan that is best for squeezing every last penny from those customers who are using our resources the most. Others will come to market with far more consumer-friendly flat-rate bandwidth plans.

As you can see from the four attached metered models, pricing metered bandwidth requires some assumptions about usage that will be hard to make. Should UC2B sell bandwidth at a cost per Gigabyte of Internet data transferred that reflect UC2B's costs if the network were to be 100% utilized 24x7? Should we assume 50% utilization 24x7, should we assume 25% utilization 50% of the time and 10% the remaining 50% of the time? Small changes in those assumptions greatly change the resulting rates.

There are no correct answers to those questions, but it will always by more customer-friendly to have fixed bandwidth rates that are based on simple statistical multiplexing than to have to have a metered pricing plan that produces unpredictable monthly bills and requires a degree in accounting to understand.

Data transfer quotas and caps are tools of Internet providers whose networks are massively oversubscribed and who lack the ability (or the desire) to increase the bandwidth available to their customers. Every day you can see the advertising field day that Sprint is having with AT&T since AT&T imposed data caps on its cellular plans – even the ones they describe as "unlimited". Does UC2B aspire to be more like AT&T, or do we aspire to be more like Sprint?

Four Metered Rate Plans

Attached are four approaches to metering UC2B business customers. They are all based on the same basic sets of assumptions on how many gigabytes we can actually

move on a 1 Gigabit link in a month (combined inbound and outbound), and what percentage of that capacity we should base our rates on. If we based rates on full capacity, we will lose our shirts, because we know that by design we will rarely run at full capacity.

Someone on the Policy Board suggested that we also look at metering **Intranet** usage. These four models make some suggestions on what those Intranet quotas and overage rates might be, but I did not attempt to factor additional assumptions in the sample rate calculations. They are reasonably complex as it is. Should we end up adopting any of these four models or something similar, we would need to also factor in Intranet quotas and overage rates if that is what the Policy Board decides.

I have based the rates on a 25% capacity goal for the Internet link for the base packages, keeping in mind that customers will be able to go way over those quotas. In terms of making rates cheaper per gigabyte transferred the more you buy, I have introduced a multiplier that gets applied to each bandwidth rate in the first three models. That multiplier starts at 2.0 for the smaller tiers and gets down to 1.1 at the very largest tier.

The first model is package pricing - based on the cell phone minutes concept. The customer commits to paying $X a month for “Y” Gigabytes of Internet data transfer each month. If they go over “Y” they pay extra per Gigabyte of Internet data transfer of overage. If they go under there is no price break. The more Gigabytes the customer commits to, the cheaper each one is within the base rate and the cheaper the overage Gigabytes are.

While anyone who has an AT&T or Verizon cell phone plan will recognize this model, it will be a challenge to implement, for users will not know what level to start with. We would have to suggest that they start with the smallest package and work up to the correct package over time. Even then there will be bad feelings from customers who end up with too small of a plan for a while as they grow and pay a little more than they would otherwise if they had selected a more appropriate plan.

The second model uses "Progressive" metering. Pricing starts with just a small, 1 Gigabyte-per-day package, and then all overage is charged extra, but somewhat like an inverse of our federal income tax system. The overage gigabytes are charged at progressively cheaper rates in defined tiers. You pay the maximum overage rate for the first 250 Gigabytes you use, then a slightly lower rate for the next 250 Gigabytes and then a slightly lower rate for the next 500 Gigabytes and so on.

The third model is similar the to the second, but uses "Flat Rate" metered pricing for all the overage charges. It has the same 1 Gigabyte-per-day base rate, but simply charges all of the overage Gigabytes at the same variable rate per Gigabyte. That rate is based on the total data transferred for the month. This is the simplest plan that still provides significant quantity discounts. It also raises the least amount of money for UC2B at the higher bandwidth usages. At the lower usage rates, all these plans

produce about the same amount of revenue for the same usage. It is at the higher usages that they vary.

The fourth plan is also similar to #2 and #3 in that is starts with 1 Gigabyte per day of Internet data transfer, and then bills per Gigabyte of Internet data transfer for any overages. The difference is that the overage rate is fixed, and does not change regardless how much a customer goes over the quota. This is perhaps the simplest plan of them all and it does raise significantly more revenue for UC2B at higher usages, as there are no quantity discounts built in. The average rate per gigabyte does slowly decrease, as the $30 base fee is averaged over ever increasing amounts of overage.

The one positive thing I can say about these plans is that they do allow the business customers to run at a full 1 Gbps speed all the time. There may be marketing value in that, but I am not sure that it trumps all of the other negatives that accompany metered pricing.

The Technical Committee's Solution:
As I mentioned earlier it was a hybrid. Businesses in the grant subsidized area that do not need more than one IP address or more than 40 Mbps of bandwidth can use the same three service tiers that have already been approved by the Policy Board at the same rates. Businesses that need more than one public IP address, or desire more than 40 Mbps of bandwidth move to a metered service package. That metered service package could be any of the four I have described here or something different.

There are some positives to this approach. First, most of the small businesses in the grant-subsidized areas will simply purchase one of the three flat-rate tiers and be done with it. So regardless of what we do with metering, it will affect very few customers in the grant-subsidized areas. Metering allows us to take a little of the sting of buying additional public IP addresses, for we no longer care about the potential for extra usage, as these customers will be metered and billed for that.

There are two IP address proposals in this packet, and I suggest that once you deal with the metering issue, your decision on pricing IP addresses will be easier.

On the negative side, we would be creating a metering solution for probably less than a dozen customers. Whatever time and effort we put into metering could be better spent addressing a host of potential customer service issues. Carle, Covenant and Human Kinetics are not going to make UC2B their primary Internet provider any time soon. UC2B is an unknown, and they will stick with what they know until we have established a level of trust with them for reliability and customer service.

As a potential business customer, I would be wary of the uncertainty that all of these metered plans cause, but the last three are at least almost explainable. I might like these plans if I was a small 1-2 Gigabyte per day customer and knew I would always

be a small user. However, I would hate these plans if I was a big user or aspired to be one.

UC2B will not always be the only Internet provider on this network, and we will have a hard time selling services against other providers who offer X amount of bandwidth for a set rate as opposed to Z Gigabytes of Internet data transfer for a metered rate.

In a business environment where you may not be able to, or may not want to tightly control what your employees do on the Internet, signing up for a metered service is essentially handing your ISP a blank check every month.

As a network operator, all of these metered plans create extra overhead and costs for operations. While metering is certainly doable, we have made no plans to engage developers to create custom metering software. The staffing plan does not include someone to manage the metering system on an ongoing basis.

There would be additional one-time and recurring costs to deploy a metered platform. Bandwidth metering also creates extra friction each month with customers who can't believe they have used as much bandwidth as the meters say they did.

Tiers of fixed bandwidth on the other hand let UC2B's customers benefit from statistical multiplexing and do not punish them financially if one month their usage goes up significantly, or if it simply continues to rise over time.

With simple automated bandwidth graphing, a customer can see how much of their purchased bandwidth they are using every day, every week or every month. If their graph flat-lines at their maximum bandwidth often, that is good indication that they need to buy more bandwidth. But it is always their choice. With metered service, a business owner is somewhat at the mercy of the decisions that his or her employees make about how they use or abuse the metered Internet connection.

My recommendation is to start with the Technical Committees recommendation for business customers in the grant-subsidized areas, but instead of moving customers who need more than one IP address or more than 40 Mbps of bandwidth to metered plans, move them to more expensive flat-rate tiers as Neo Fiber has suggested.

We are only talking about a very small number of potential businesses whose bandwidth needs would not be satisfied by our three basic flat rate tiers. When we are in a position to offer services to businesses located outside of the grant-subsidized areas, we will want to develop pricing that reflects the lack of subsidy, but that is months off. If there is a significant demand from the marketplace for metered pricing, we can always introduce that as an option once we have our basic business processes in place and customers up and running.

UC2B Metered Pricing Plans

Assumption, Goals & Calculations

Average Cost to UC2B of Bandwidth per Gbps per Month	$6,400.00
Cost per Gigabyte of Total Data Transfer Capacity (two way)	$0.0099
Average Internet Link Capacity Goal - includes both inbound and outbound traffic	25%
Cost per Gigabyte of Internet Data Transfer Capacity Goal	$0.0395
Percentage of Intranet/Internet Use	10%
Cost per Gigabyte of Intranet Data Transfer	$0.0040
Base Monthly Overhead per Business Customer (call center, billing, customer field support, network operations, depreciation, debt service, JULIE locates)	$30.00

Tier A

Tier A Gbytes of Internet Data Transfer / Month	250
Tier A Gbytes of Intranet Data Transfer / Month	500
Tier A Base Internet Cost Multiplier	200%
Additional Internet Gbyte Charge	$0.0790
Additional Intranet Gbyte Charge	$0.01

Tier B

Tier B Gbytes of Internet Data Transfer / Month	500
Tier B Gbytes of Intranet Data Transfer / Month	1,000
Tier B Base Internet Cost Multiplier	180%
Additional Internet Gbyte Charge	$0.0711
Additional Intranet Gbyte Charge	$0.007

Maximum Data Transfer on a 1 Gbps Internet connection (one way)

Internet connection	1,000	Mbps	1.00	Gbps
Data Transfer per Second	125	Megabytes	0.13	Gigabytes
Per Minute	7,500	Megabytes	7.50	Gigabytes
Per Hour	450,000	Megabytes	450	Gigabytes
Per Day	10,800,000	Megabytes	10,800	Gigabytes
Per Month	324,000,000	Megabytes	324,000	Gigabytes
Per Month	324,000	Gigabytes		

Tier C

Tier C Gbytes of Internet Data Transfer / Month	1,000
Tier C Gbytes of Intranet Data Transfer / Month	2,000
Tier C Base Internet Cost Multiplier	160%
Additional Gbyte Charge	$0.0632
Additional Intranet Gbyte Charge	$0.006

Tier D

Tier D Gbytes of Internet Data Transfer / Month	2,500
Tier D Gbytes of Intranet Data Transfer / Month	5,000
Tier D Base Internet Cost Multiplier	140%
Additional Internet Gbyte Charge	$0.06
Additional Intranet Gbyte Charge	$0.006

Tier E

Tier E Gbytes of Internet Data Transfer / Month	5,000
Tier E Gbytes of Intranet Data Transfer / Month	10,000
Tier E Base Internet Cost Multiplier	120%
Additional Internet Gbyte Charge	$0.0474
Additional Intranet Gbyte Charge	$0.005

Tier F

Tier E Gbytes of Internet Data Transfer / Month	5,000
Tier E Gbytes of Intranet Data Transfer / Month	10,000
Tier E Base Internet Cost Multiplier	110%
Additional Internet Gbyte Charge	$0.0435
Additional Intranet Gbyte Charge	$0.087

Tiered Metered Rates for UC2B Customers

Tier A-1 - 1 Gigabyte per day

Monthly Base Rate	**$32.37**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**30**
Internet Data Transfer Overage Charge per Gigabyte	**$0.0790**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**60**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.0079**

Examples with Tier A-1 Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	28.125	$32.37	$1.151
Total Use of Internet data in a month in Gigabytes	56.25	$34.44	$0.612
Total Use of Internet data in a month in Gigabytes	112.5	$38.89	$0.346
Total Use of Internet data in a month in Gigabytes	225	$47.78	$0.212
Total Use of Internet data in a month in Gigabytes	450	$65.56	$0.146
Total Use of Internet data in a month in Gigabytes	900	$101.11	$0.112
Total Use of Internet data in a month in Gigabytes	1800	$172.22	$0.096
Total Use of Internet data in a month in Gigabytes	3600	$314.44	$0.087
Total Use of Internet data in a month in Gigabytes	7200	$598.89	$0.083

Tier A-2 - 2 Gigabytes per day

Monthly Base Rate	**$34.74**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**60**
Internet Data Transfer Overage Charge per Gigabyte	**$0.0790**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**120**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.0079**

Examples with Tier A-2 Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	28.125	$34.74	$1.235
Total Use of Internet data in a month in Gigabytes	56.25	$34.74	$0.618
Total Use of Internet data in a month in Gigabytes	112.5	$38.89	$0.346
Total Use of Internet data in a month in Gigabytes	225	$47.78	$0.212
Total Use of Internet data in a month in Gigabytes	450	$65.56	$0.146
Total Use of Internet data in a month in Gigabytes	900	$101.11	$0.112
Total Use of Internet data in a month in Gigabytes	1800	$172.22	$0.096
Total Use of Internet data in a month in Gigabytes	3600	$314.44	$0.087
Total Use of Internet data in a month in Gigabytes	7200	$598.89	$0.083

Tier A-3 - 4 Gigabytes Per day

Monthly Base Rate	**$39.48**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**120**
Internet Data Transfer Overage Charge per Gigabyte	**$0.0790**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**240**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.0079**

Examples with Tier A-3 Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	28.125	$39.48	$1.404

Total Use of Internet data in a month in Gigabytes	56.25	$39.48	$0.702
Total Use of Internet data in a month in Gigabytes	112.5	$39.48	$0.351
Total Use of Internet data in a month in Gigabytes	225	$47.78	$0.212
Total Use of Internet data in a month in Gigabytes	450	$65.56	$0.146
Total Use of Internet data in a month in Gigabytes	900	$101.11	$0.112
Total Use of Internet data in a month in Gigabytes	1800	$172.22	$0.096
Total Use of Internet data in a month in Gigabytes	3600	$314.44	$0.087
Total Use of Internet data in a month in Gigabytes	7200	$598.89	$0.083

Tier A-4 - 8.3 Gigabtyes per day

Monthly Base Rate	**$49.75**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**250**
Internet Data Transfer Overage Charge per Gigabyte	**$0.08**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**500**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.008**

Examples with Tier A-4 Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	225	$49.75	$0.221
Total Use of Internet data in a month in Gigabytes	450	$65.56	$0.146
Total Use of Internet data in a month in Gigabytes	900	$101.11	$0.112
Total Use of Internet data in a month in Gigabytes	1800	$172.22	$0.096
Total Use of Internet data in a month in Gigabytes	3600	$314.44	$0.087
Total Use of Internet data in a month in Gigabytes	7200	$598.89	$0.083

Tier B - 16.7 Gigabytes per day

Monthly Base Rate	**$65.56**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**500**
Internet Data Transfer Overage Charge per Gigabyte	**$0.07**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**1,000**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.007**

Examples with Tier B Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	225	$65.56	$0.291
Total Use of Internet data in a month in Gigabytes	450	$65.56	$0.146
Total Use of Internet data in a month in Gigabytes	900	$94.00	$0.104
Total Use of Internet data in a month in Gigabytes	1800	$158.00	$0.088
Total Use of Internet data in a month in Gigabytes	3600	$286.00	$0.079
Total Use of Internet data in a month in Gigabytes	7200	$542.00	$0.075

Tier C - 33.3 Gigabytes per Day

Monthly Base Rate	**$93.21**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**1,000**
Internet Data Transfer Overage Charge per Gigabyte	**$0.06**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**2,000**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.006**

Examples with Tier C Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**

Total Use of Internet data in a month in Gigabytes	225	$93.21	$0.414
Total Use of Internet data in a month in Gigabytes	450	$93.21	$0.207
Total Use of Internet data in a month in Gigabytes	900	$93.21	$0.104
Total Use of Internet data in a month in Gigabytes	1800	$143.78	$0.080
Total Use of Internet data in a month in Gigabytes	3600	$257.56	$0.072
Total Use of Internet data in a month in Gigabytes	7200	$485.11	$0.067

Tier D - 83.3 Gigabytes per day

Monthly Base Rate	**$168.27**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**2,500**
Internet Data Transfer Overage Charge per Gigabyte	**$0.06**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**5,000**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.006**

Examples with Tier D Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	225	$168.27	$0.748
Total Use of Internet data in a month in Gigabytes	450	$168.27	$0.374
Total Use of Internet data in a month in Gigabytes	900	$168.27	$0.187
Total Use of Internet data in a month in Gigabytes	1800	$168.27	$0.093
Total Use of Internet data in a month in Gigabytes	3600	$229.11	$0.064
Total Use of Internet data in a month in Gigabytes	7200	$428.22	$0.059

Tier E - 166.7 Gigabytes per day

Monthly Base Rate	**$267.04**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**5,000**
Internet Data Transfer Overage Charge per Gigabyte	**$0.05**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**10,000**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.005**

Examples with Tier E Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	225	$267.04	$1.187
Total Use of Internet data in a month in Gigabytes	450	$267.04	$0.593
Total Use of Internet data in a month in Gigabytes	900	$267.04	$0.297
Total Use of Internet data in a month in Gigabytes	1800	$267.04	$0.148
Total Use of Internet data in a month in Gigabytes	3600	$267.04	$0.074
Total Use of Internet data in a month in Gigabytes	7200	$371.33	$0.052

Progressive Metered Rates for UC2B Customers

	Bandwidth Used		Rate per Gbyte
	Low	High	
Bandwidth Tier A	30	250	$0.0790
Bandwidth Tier B	250	500	$0.0711
Bandwidth Tier C	500	1,000	$0.0632
Bandwidth Tier D	1,000	2,500	$0.0553
Bandwidth Tier E	2,500	5,000	$0.0474
Bandwidth Tier F	5,000	1,000,000,000	$0.0435

Progressive Single Rate - 1 Gbyte per day in base rate

Monthly Base Rate	**$32.37**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**30**
Bandwidth Charge: 31 - 250 Gbytes	**$0.0790**
Bandwidth Charge: 251 - 500 Gbytes	**$0.0711**
Bandwidth Charge: 501 - 1,0000 Gbytes	**$0.0632**
Bandwidth Charge: 1,001 - 2,500 Gbytes	**$0.0553**
Bandwidth Charge: 2501 - 5,000 Gbytes	**$0.0474**
Bandwidth Charge: more than 5,000 Gbytes	**$0.0435**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**500**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.0079**

Examples with Progressive Metered Rates Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	28.125	$32.37	$1.15
Total Use of Internet data in a month in Gigabytes	56.25	$34.44	$0.61
Total Use of Internet data in a month in Gigabytes	112.5	$38.89	$0.35
Total Use of Internet data in a month in Gigabytes	225	$47.78	$0.21
Total Use of Internet data in a month in Gigabytes	450	$63.98	$0.14
Total Use of Internet data in a month in Gigabytes	900	$92.81	$0.10
Total Use of Internet data in a month in Gigabytes	1800	$143.38	$0.08
Total Use of Internet data in a month in Gigabytes	3600	$234.25	$0.07
Total Use of Internet data in a month in Gigabytes	7200	$396.22	$0.06

Graduated Flat Metered Rates for UC2B Customers

	Bandwidth Used		Rate per Gbyte
	Low	High	
Bandwidth Tier A	0	250	$0.0790
Bandwidth Tier B	250	500	$0.0711
Bandwidth Tier C	500	1,000	$0.0632
Bandwidth Tier D	1,000	2,500	$0.0553
Bandwidth Tier E	2,500	5,000	$0.0474
Bandwidth Tier F	5,000	1,000,000,000	$0.0435

Graduated Flat Metered Rates - 1 Gbyte per day in base rate

Monthly Base Rate	**$32.37**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**30**
Monthy Internet Bandwidth Charge per Gbps	**$0.0790**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**500**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.0079**

Examples with Non Progressive Rates Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	28.125	$32.37	$1.15
Total Use of Internet data in a month in Gigabytes	56.25	$34.44	$0.61
Total Use of Internet data in a month in Gigabytes	112.5	$38.89	$0.35
Total Use of Internet data in a month in Gigabytes	225	$47.78	$0.21
Total Use of Internet data in a month in Gigabytes	450	$62.24	$0.14
Total Use of Internet data in a month in Gigabytes	900	$87.36	$0.10
Total Use of Internet data in a month in Gigabytes	1,800	$130.27	$0.07
Total Use of Internet data in a month in Gigabytes	3,600	$201.61	$0.06
Total Use of Internet data in a month in Gigabytes	7,200	$343.96	$0.05

Totally Flat Metered Rates for UC2B Customers

	Bandwidth Used		Rate per Gbyte
	Low	High	
Bandwidth Tier A	0	250	$0.0790
Bandwidth Tier B	250	500	$0.0790
Bandwidth Tier C	500	1,000	$0.0790
Bandwidth Tier D	1,000	2,500	$0.0790
Bandwidth Tier E	2,500	5,000	$0.0790
Bandwidth Tier F	5,000	1,000,000,000	$0.0790

Totally Flat Metered Rates - 1 Gbyte per day in base rate

Monthly Base Rate	**$32.37**
Monthly Internet Gigabytes of Data Transfer Included in Base Rate	**30**
Monthy Internet Bandwidth Charge per Gbps	**$0.0790**
Monthly Intranet Gigabytes of Data Transfer Included in Base Rate	**500**
Intranet Data Transfer Overage Charge per Gigabyte	**$0.0079**

Examples with Non Progressive Rates Billing	**Gigabytes**	**Monthly Bill**	**$ per Gbyte**
Total Use of Internet data in a month in Gigabytes	28.125	$32.37	$1.15
Total Use of Internet data in a month in Gigabytes	56.25	$34.44	$0.61
Total Use of Internet data in a month in Gigabytes	112.5	$38.89	$0.35
Total Use of Internet data in a month in Gigabytes	225	$47.78	$0.21
Total Use of Internet data in a month in Gigabytes	450	$65.56	$0.15
Total Use of Internet data in a month in Gigabytes	900	$101.11	$0.11
Total Use of Internet data in a month in Gigabytes	1,800	$172.22	$0.10
Total Use of Internet data in a month in Gigabytes	3,600	$314.44	$0.09
Total Use of Internet data in a month in Gigabytes	7,200	$598.89	$0.08

UC2B - Public IP Address Charges - for use by Metered Rate Customers

4/8/12

IP subnets are available in the following fixed sizes:
8, 16, 32, 64, 128 and 256

In each subnet, 3 of the addresses are utilized by the network.
That actually leaves customer useable subnets of:
5, 13, 29, 61, 125 and 253 hosts.

Customers who use blocks of Public IP addresses generate one-time costs to set up the subnets and routing, as well as recurring costs by adding extra complexity to the network and Doman Name Service (DNS) operations.

Public IP addresses are becoming increasing scarce and UC2B should discourage their use except when absolutely needed.

As long as UC2B customers are being charged via a metered plan, we no longer care if their use of multiple public IP addresses generates above average traffic on the network, for those customers will be paying for that extra traffic.

Proposed Rates for Subnets of Public IP addresses

Subnet Description	Total IP Addresses in Subnet	Customer Usable Hosts	One-Time Set-Up Charge	Recurring Monthly Charge	Average cost per Host per Month	Average cost per Host per Year
/29	8	5	$20	$2.49	$0.50	$5.98
/28	16	13	$25	$6.49	$0.50	$5.99
/27	32	29	$30	$14.49	$0.50	$6.00
/26	64	61	$35	$30.49	$0.50	$6.00
/25	128	125	$40	$62.49	$0.50	$6.00
/24	256	253	$45	$126.49	$0.50	$6.00

Changes to DNS after initial configuration - one-time charge of $20 per request
(A "request" may be a series of individual change request submitted at one time.)

UC2B - Public IP Address Charges - for use with tiered business rates

4/8/12

IP subnets are available in the following fixed sizes:
8, 16, 32, 64, 128 and 256

In each subnet, 3 of the addresses are utilized by the network.
That actually leaves customer useable subnets of:
5, 13, 29, 61, 125 and 253 hosts.

Customers who use blocks of Public IP addresses generate one-time costs to set up the subnets and routing, as well as recurring costs by adding extra complexity to the network and Doman Name Service (DNS) operations.

Public IPv4 IP addresses are becoming increasing scarce and UC2B should discourage their use except when absolutely needed.

It is reasonable to expect that tiered service business customers with multiple public IP addresses will use more Internet bandwidth than average tiered service business customers, so some component of the charge for IP addresses is to help pay for the additional bandwidth they consume.

Proposed Rates for Subnets of Public IP addresses

Subnet Description	Total IP Addresses in Subnet	Customer Usable Hosts	One-Time Set-Up Charge	Recurring Monthly Charge	Average cost per Host per Month	Average cost per Host per Year
/29	8	5	$20	$4.99	$1.00	$11.98
/28	16	13	$25	$12.99	$1.00	$11.99
/27	32	29	$30	$28.99	$1.00	$12.00
/26	64	61	$35	$60.99	$1.00	$12.00
/25	128	125	$40	$124.99	$1.00	$12.00
/24	256	253	$45	$252.99	$1.00	$12.00

Changes to DNS after initial configuration - one-time charge of $20 per request
(A "request" may be a series of individual change requests submitted at one time.)

RESOLUTION NO. 2012-08

A RESOLUTION

APPROVING AND ADOPTING POLICIES REGARDING PRIVATE INVESTMENT IN NETWORK EXPANSION

WHEREAS, private service providers have expressed interest in connecting new and existing fiber infrastructure to the UC2B backbone rings in order to leverage those to rings to provide fiber-based services to business customers; and

WHEREAS, UC2B does not yet have a plan for expansion of the fiber network infrastructure to businesses located outside of the grant-funded areas; and

WHEREAS, the Policy Committee has previously discussed and approved a "Report on Use of Existing Infrastructure" (Report) on May 18, 2011 that recommends that policies be adopted so that inclusion and acquisition of such infrastructure be considered in a way that is simple and fair to all parties; and

WHEREAS, staff has prepared a policy and set of core principles for Policy Committee consideration which is attached hereto.

NOW, THEREFORE, BE IT RESOLVED BY THE UC2B POLICY COMMITTEE, as follows:

Section 1. That the "Proposed Policy for Private Expansion of UC2B for Business Services", which is attached hereto and incorporated herein, is approved and adopted.

RESOLUTION NO. 2012-08
PASSED:

APPROVED: _____
Policy Committee Chair

Proposed Policy for Private Expansion of UC2B for Business Services

Several private service providers have expressed interest in connecting new or existing fiber infrastructure to UC2B backbone rings in order leverage those rings to provide fiber-based services to businesses. As UC2B does not currently have a plan or funding for the expansion of fiber to businesses located outside the grant-funded FTTP areas, the Policy Board should consider adopting policies that encourage private entities to invest their capital to extend the UC2B network and serve more businesses. This expansion should always be under certain conditions that promote an open-access network as well as minimize the operational overhead for UC2B and for the local municipalities in managing additional infrastructure in their rights-of-way.

There are a series of core principles that the suggested policy promotes:

A. All fiber infrastructure connecting to the UC2B Network in pubic rights-of-way shall be operated as an open-access network.

B. The City of Urbana and the City of Champaign through their Public Works Departments and the University of Illinois through its Utilities department have expressed a strong preference for having all additional fiber infrastructure that connects to UC2B fiber in their rights-of-way to be owned, managed and maintained by UC2B.

   The fewer organizations that each city and the University have to track and coordinate with concerning infrastructure in their rights-of way, the less burden it will be on the cities and University. While the cites ultimately cannot limit who can build infrastructure in their rights-of-way (assuming that all paperwork and fees are in order), UC2B can set consistent conditions that must be met before anyone can connect to UC2B fiber cables.

C. UC2B should have total ownership and maintenance responsibility for all local fiber infrastructure that connects to its network in the local rights-of-way.

D. Assuming ownership and maintenance responsibility for fiber infrastructure that is "donated" by private parties, should not put a financial strain on UC2B, but rather support UC2B's sustainability.

E. UC2B will only accept donated fiber infrastructure that is located within the city limits of the City of Urbana or the City of Champaign or on the property of the University of Illinois.

The elements of a policy for "donated" fiber infrastructure in commercial areas:

1. Before an entity can connect its lateral fiber infrastructure to a UC2B backbone ring, that entity must first:

   A.) Execute an IRU or lease agreement with UC2B for the UC2B backbone fiber ring to which the "donated" lateral fiber infrastructure will connect. Each UC2B backbone ring leased must be leased in its entirety.

   B.) Execute a donation agreement for the lateral fiber infrastructure being donated that details the original cost of installing the donated lateral fiber infrastructure on a per lateral basis (with the associated drop cables.) Depending on the organizational structure of UC2B, that donation may be tax deductible.

   C.) Execute a fiber maintenance agreement for the UC2B ring fiber that is being leased, as well as for the fiber infrastructure being donated.

2. The fiber maintenance contract for the ring and donated fiber cables shall be at the then-current UC2B fiber maintenance rates. UC2B will incur all expenses for J.U.L.I.E. locates and fiber infrastructure repairs and routine maintenance for the donated fiber infrastructure. The maintenance agreement will spell out conditions under which the lessee may need to make additional maintenance payments to UC2B –such as in the event that infrastructure needs to be relocated.

3. Any fiber infrastructure that is donated to UC2B must be documented in full, be in excellent operational condition, be built to UC2B standards, and be clear of any ownership encumbrances. Manholes or conduits that are shared with multiple entities are not good candidates for UC2B ownership and maintenance. A fiber cable that already has multiple owners is not a good candidate for UC2B ownership and maintenance. A fiber cable that has more than 10% of its strands fail OTDR testing is not a good candidate for UC2B ownership and maintenance. All donated fiber cables must be accompanied by individual end-to-end OTDR reports for each strand, which will be verified by UC2B before acceptance.

4. An entity donating lateral fiber infrastructure to UC2B will have exclusive rights to use half of the fiber strands donated via a $1 dollar 20-year IRU. That IRU may be renewable for multiple similar terms. The remaining strands of fiber in that infrastructure will be available for other entities - including UC2B - to "buy into".

5. Lateral cables and the associated drop cables attached to each lateral cable will define each donated fiber segment. Entities wishing to lease dark fiber to a location served by a donated lateral and drop cable, must lease the entire lateral and all of the drop cables associated with that lateral.

6. The donated lateral fiber infrastructure must always provide at least 12 strands of fiber for the drop cable into a commercial building. If there are more than 3 potential tenants in a commercial building the drop cable must have at least 4 strands of fiber per potential tenant. Lateral cables must provide 6 strands for each potential commercial customer served by that lateral cable. Fiber cables that lack the desired number of strands are not good candidates for UC2B ownership and maintenance.

7. The first additional entity that elects to "buy into" the "donated lateral infrastructure" will pay to UC2B a one-time lease fee equal to 55% of the original installation cost of that infrastructure as documented by the original entity at the time of donation and agreed to by UC2B in the donation agreement. UC2B shall then provide 50% of the original installation cost to the original entity that donated the fiber infrastructure (retaining 5% for UC2B overhead.)

8. That first additional entity (second user) of the "donated lateral infrastructure" will be entitled to 2 strands on each fiber drop cable and to 2 strands on the lateral fiber cable for each fiber drop cable connected to that lateral cable.

9. That second user will enter into an IRU or lease agreement for UC2B ring fiber that connects to that lateral (entire rings at a time) at then-current rates, and will be provided with an IRU or lease agreement (for 55% of the original cost) for the lateral and drop cable fiber. Both agreements may be renewable for multiple similar terms.

10. That second user will enter into a fiber infrastructure maintenance agreement for the UC2B backbone ring being leased as well as for the donated lateral and drop cable fiber being leased at the then-current UC2B annual fiber maintenance rates. The original entity that donated the fiber infrastructure will not receive any reduction in the rate of their fiber maintenance agreement should additional entities lease strands in the donated cables.

11. A second "additional" (third total) entity that desires to lease the donated lateral fiber infrastructure, will pay UC2B a one-time lease fee equal to 40% of the original installation cost of that infrastructure as documented by the original entity at the time of donation and agreed to by UC2B in the donation agreement. UC2B shall then provide 15% of the original installation cost to

the original entity that donated the fiber infrastructure and 15% of the original installation cost to the second entity that bought into that fiber infrastructure (retaining 10% for UC2B overhead.)

At that point, the original entity that donated the fiber infrastructure to UC2B and the first entity that bought into the infrastructure will both be considered to have been "made whole" and will receive no additional compensation from any additional users of that fiber infrastructure. The second additional entity that invested will also not receive any compensation from any additional users of the fiber.

12. That third user of the "donated lateral infrastructure" will be entitled to 2 strands on each fiber drop cable and to 2 strands on the lateral fiber cable for each fiber drop cable connected to that lateral cable.

13. That third user will enter into an IRU or lease agreement for UC2B ring fiber at then-current rates, and will be provided with an IRU or lease agreement for 40% of the original installation cost for the donated lateral fiber and the drop cable fiber. Those agreements may be renewable for multiple similar terms.

14. That third user will enter into a fiber infrastructure maintenance agreement for the UC2B backbone ring being leased as well as for the donated lateral and drop cable fiber being leased at the then-current annual maintenance rates. The original entity that donated the fiber, and the second entity that "bought into" the fiber will not receive any reduction in the rate of their fiber maintenance agreements as a result of this third entity "buying into" the donated lateral fiber infrastructure.

15. Once two additional entities have "bought into" a donated lateral fiber cable and its associated drop cables, UC2B shall be free to lease or to use the remaining fiber strands on the lateral cable and all of the associated drop cables to provide retail or wholesale services, which could include lambda-based services to accommodate additional entities that wish dedicated access to the locations served by the donated lateral fiber infrastructure.

    Any additional fiber leases would be for two strands on the drop cables and two strands on the lateral cable for each associated drop cable and would require a one-time lease payment of 40% of the original installation cost. All other terms and conditions would be the same as for the previous lessees. So that it is always in a position to provide open-access lit services, UC2B will never lease the last two strands on a lateral cable or drop cable.

16. Should UC2B have funds and the need to do so, UC2B could be the first or second entity to "buy into" donated lateral and/or drop cables. Unless there have been two other entities buy into donated lateral and/or drop cable,

UC2B can only use the additional strands on those cables for it own purposes by "buying into" them like any other service provider.

17. All splicing at all times to the UC2B fiber backbone rings or to existing UC2B lateral cables will be performed by UC2B staff or contractors working for UC2B.

18. Before fiber infrastructure is donated to UC2B, any splicing other than to the UC2B backbone ring or to an existing lateral cable will be performed by the entity donating the lateral fiber infrastructure. Once the lateral fiber infrastructure has been donated and accepted, UC2B staff or contractors working for UC2B will perform all splicing.

19. This policy applies only to lateral infrastructure connecting to commercial locations. If desired, a policy covering private expansion to residential locations may be created later.

UC2B Private Expansion to Businesses - Example 1

Existing Private Lateral Fiber and Two Private Companies - to a multi-tenant building

Champaign Telephone Company (CTC) paid $15,000 for a lateral fiber cable and a drop cable into Lincoln Square - a multi-tenant building.
That lateral cable is fed from a larger lateral cable serving several anchor Institutions, but it is easily defined.
That lateral is connected to **UC2B Ring #7**, on which **CTC** owns 4 strands of fiber through its IRU.

$15,000 Initial investment by **CTC** in a 48-strand lateral cable and a 48-strand drop cable.

CTC donates that Infrastructure to **UC2B**, and purchases a $1 20-year IRU for half of the fiber strands.
CTC already has a fiber maintenance agreement for **UC2B Ring #7**, as well as for the lateral and drop cables.
There are now 24 strands of fiber on the lateral cable and 24 strands of fiber on the drop cable available for lease to anyone.

Company X also wants to use that drop cable to serve businesses in Lincoln Square via dark fiber.

Company X agrees to lease fiber on **UC2B Ring #7** at the current lease rates.
$8,250.00 **Company X** pays UC2B 55% of the $15,000 initial installation cost of the lateral and drop cables.
Company X pays the one-time lease fee of $8,250 for 2 strands on the lateral cable and 2 strands on each connected drop cable.
Company X signs a fiber maintenance agreement for **UC2B Ring #7** as well as for the donated lateral and drop cables.

$7,500 **UC2B** pays **CTC** 50% of its initial cost for the lateral and drop cables.
CTC's cost of the lateral and drop cable is now $7,500 (not counting the time value of money) - 50% of its original investment.
$750 **UC2B** keeps 5% of the initial cost for overhead.
There are now 22 strands of fiber on the lateral cable and 22 strands of fiber on the drop cable available for lease to anyone.

Company Z also wants to use that drop cable to serve businesses in Lincoln Square via dark fiber.

Company Z agrees to lease fiber on **UC2B Ring #7** at the current lease rates.
$6,000.00 **Company Z** pays **UC2B** 40% of the $15,000 initial installation cost of the lateral and drop cables.
Company Z pays the one-time lease fee of $6,000 for 2 strands on the lateral cable and 2 strands on each connected drop cable.
Company Z signs a fiber maintenance agreement for **UC2B Ring #7** as well as for the donated lateral and drop cables.

$2,250 **UC2B** pays **CTC** 15% of its initial cost for the lateral and drop cables.
CTC's cost of the lateral and drop cable is now $5,250 (not counting the time value of money) - 35% of its original investment.
$2,250 **UC2B** pays **Company X** 15% of the initial cost of the lateral and drop cables.
Company X's cost of the lateral and drop cable is now $6,000 (not counting the time value of money) - 40% of the original investment.
$1,500 **UC2B** keeps 10% of the initial cost for overhead.
There are now 20 strands of fiber on the lateral cable and 20 strands of fiber on the drop cable available for lease to anyone or for use by **UC2B**.
Neither **CTC**, **Company X**, nor **Company Z** benefit from any further sales or use of the remaining donated strands of this fiber.

UC2B Private Expansion to Businesses - Example 2

Three Private Companies - new fiber to a single business

Company A spends $18,000 to build a lateral connection and a fiber drop cable to Prairie Gardens' main facility - a single tenant building.
That lateral cable connects directly to **UC2B Ring #2**

Company A agrees to lease fiber on **UC2B Ring #2** at the current lease rates.

$18,000 Initial investment by **Company A** in a 24-strand lateral cable and a 12-strand drop cable

Company A donates that Infrastructure to **UC2B**, and purchases a $1 20-year IRU for half of the fiber strands.
Company A signs a fiber maintenance agreement for **UC2B Ring #2**, as well as for the donated lateral and drop cables.
There are now 12 strands of fiber on the donated lateral cable and 12 strands on the donated drop cable available for lease to anyone.

Company B also wants to use that drop cable to serve Prairie Gardens via dark fiber

Company B agrees to lease fiber on **UC2B Ring #2** at the current lease rates.

$9,900.00 **Company B** pays **UC2B** 55% of the $18,000 initial installation cost of the lateral and drop cables.
Company B pays the one-time lease fee of $9,900 for 2 strands on the lateral cable and 2 strands on each connected drop cable.
Company B signs a fiber maintenance agreement for **UC2B Ring #2** as well as for the donated lateral and drop cables.

$9,000 **UC2B** pays **Company A** 50% of its initial cost for the lateral and drop cables.
Company A's cost of the lateral and drop cables is now $9000 (not counting the time value of money) - 50% of its original investment.

$900 **UC2B** keeps 5% of the initial cost for overhead.
There are now 10 strands of fiber on the donated lateral cable and 4 strands on the donated drop cable available for lease to anyone.

Company C also wants to use that drop cable to serve Prairie Gardens via dark fiber

Company C agrees to lease fiber on **UC2B Ring #2** at the current lease rates.

$7,200 **Company C** pays **UC2B** 40% of the $18,000 initial installation cost of the lateral and drop cables.
Company C pays the one-time lease fee of $7,200 for 2 strands on the lateral cable and 2 strands on each connected drop cable.
Company C signs a fiber maintenance agreement for **UC2B Ring #2** as well as for the donated lateral and drop cables.

$2,700 **UC2B** pays **Company A** 15% of its initial cost for the lateral and drop cables.
Company A's cost of the lateral and drop cable is now $6,300 (not counting the time value of money) - 35% of its original investment.

$2,700 **UC2B** pays **Company B** 15% of the initial cost of the lateral and drop cables.
Company B's cost of the lateral and drop cable is now $7,200 (not counting the time value of money) - 40% of the original investment.

$1,800 **UC2B** keeps 10% of the initial cost for overhead.
There are now 8 strands of fiber on the lateral cable and 2 strands of fiber available on the drop cable available for lease to anyone or use by **UC2B**.
UC2B will never lease the last two strands on a lateral cable or drop cable, so that it is always in a position to provide open-access lit services.
Neither **Company A**, **Company B**, nor **Company C** benefit from any further leases or use of the remaining donated strands of this fiber.

UC2B Private Expansion to Businesses - Example 3

Two Private Companies and UC2B - new fiber to a single business

Company D spends $18,000 to build a lateral connection and a fiber drop cable to Solo Cup's main facility - a single tenant building.
That lateral cable connects directly to **UC2B Ring #6**.

Company D agrees to lease fiber on **UC2B Ring #6** at the current lease rates.

$18,000 Initial investment by **Company D** in a 24-strand lateral cable and a 12-strand drop cable

Company D donates that Infrastructure to **UC2B**, and purchases a $1 20-year IRU for half of the fiber strands.
Company D signs a fiber maintenance agreement for **UC2B Ring #6**, as well as for the donated lateral and drop cables.
There are now 12 strands of fiber on the donated lateral cable and 6 strands on the donated drop cable available for lease to anyone.

UC2B also wants to use that drop cable to serve Solo Cup with lit services.

$9,000.00 **UC2B** pays **Company D** 50% of the $18,000 initial installation cost of the lateral and drop cables.
UC2B uses 2 strands on the lateral cable and 2 strands on each connected drop cable.

Company D's cost of the lateral and drop cable is now $9000 (not counting the time value of money) - 50% of its original investment.
There are now 10 strands of fiber on the donated lateral cable and 4 strands on the donated drop cable available for lease to anyone.

Company E also wants to use that drop cable to serve Solo Cup via dark fiber.

Company E agrees to lease fiber on **UC2B Ring #6** at the current lease rates.

$7,200.00 **Company E** pays UC2B 40% of the $18,000 initial installation cost of the lateral and drop cables.
Company E pays the one-time lease fee of $7,200 for 2 strands on the lateral cable and 2 strands on each connected drop cable.
Company E signs a fiber maintenance agreement for **UC2B Ring #6** as well as for the donated lateral and drop cables.

$2,700 **UC2B** pays **Company D** 15% of its initial cost for the lateral and drop cables.
Company D's cost of the lateral and drop cable is now $6,300 (not counting the time value of money) - 35% of its original investment.

$4,500 **UC2B** keeps 25% of the initial cost for overhead.
There are now 8 strands of fiber on the lateral cable and 2 strands of fiber on the drop cable available for lease to anyone or for use by **UC2B**.
Neither **Company D** nor **Company E** benefit from any further leases or use of the remaining donated strands of this fiber.

UC2B Fiber Swaps

Background: During the Due Diligence process with NTIA, we agreed to provide the Illinois Century Network (ICN) with UC2B dark fiber from their proposed routes along the Interstates into their Point of Presence (POP) site in U of I Node 2 – Scott Hall. In our discussions with ICN we also agreed to make some fiber strands on the 7 UC2B backbone rings available to ICN to facilitate them connecting to their customers and state agencies that are located in our community.

Shortly after we were awarded, NTIA asked all of its recipients to verify that there was absolutely no overlap between what various BTOP projects were building. We each had to create some additional documentation, but at the end of it, UC2B and ICN were poster children for cooperation and non-duplication.

Since then we have had several discussions with ICN staff about how to value various assets in our fiber horse-trading. We had already established our IRU rates for our "micro-urban / suburban" fiber in our grant applications, and recently ICN has published its IRU rates for its fiber, which is mostly rural. Those are important distinctions, as suburban and urban fiber costs more to install and maintain and therefore has a higher IRU value than rural fiber along the sides of Interstate highways.

While it is clear the value that ICN will get from using UC2B fiber, there is more uncertainty about what fiber UC2B may want from ICN in exchange. That is the first discussion topic of this narrative.

The Illinois Century Network will have dark fiber to trade that could get us to the south side of Chicago (127th Street and the Dan Ryan), but not all the way to the major Internet peering points in downtown Chicago. Getting from where ICN's fiber ends to where we would like to go in Chicago could be problematic and expensive.

ICN will have dark fiber to trade that could get us all the way to Collinsville, but not to the two major peering points in St. Louis. Fellow BTOP awardee Clearwave, based in Harrisburg, will have dark fiber available from Collinsville into those peering points in St. Louis, and we have talked to them about using some of their fiber. We have no fiber to trade Clearwave that they would want, so that would be a cash deal.

Why would UC2B want its own dark fiber into major Internet peering points in Chicago and/or St. Louis? The first reason would be so that UC2B could have redundant Internet connections that are totally under its control. Assuming that UC2B grows, having multiple upstream Internet providers in diverse major cities

will be important for minimizing outages and getting the best pricing on upstream bandwidth.

The second reason would be so that UC2B could act as an Internet wholesaler or a transport provider to Internet providers in our community. That is one of the goals of many BTOP projects. While we did not propose doing that in our grant applications, there would be value to local ISP's and some large companies if they could buy Internet bandwidth in Champaign-Urbana at close to Chicago or St. Louis rates.

ICN will also have its own fiber along Interstate 74 going to Bloomington, Interstate 72 going to Decatur & Springfield, Interstate 57 going to Kankakee (and eventually to the south side of Chicago), and Interstate 57 going to Effingham (and eventually to Collinsville.) Why would UC2B want dark fiber along any of those sections of Interstate?

While it may seem odd to discuss Phase 3 of UC2B, when we are still knee-deep in Phase 1, if all goes well and we find a way to build out FTTP to all of Champaign-Urbana in Phase 2, the next logical expansion would be to the rural communities that surround C-U, where the employees of many of our local businesses live.

Our local employers have an interest in having better connectivity to their employees on nights and weekends so doing this strengthens them. Also, the larger UC2B's customer base is, the more UC2B can spread its fixed operational costs over more customers, which will help keep service rates down.

So, the first thing I am asking for is official endorsement of the Policy Board to continue to have these fiber swapping discussions with ICN (and others to be described in what follows) and ultimately bring the fruits of those negotiations back to the Policy Board for approval.

The second thing I am asking for is guidance on how the Policy Board wants to prioritize those two different usages of ICN fiber. Does it make more sense for UC2B to pursue owning its own dark fiber that can connect UC2B to major Internet peering points in Chicago and/or St. Louis; or does it make more sense to pursue dark fiber that can connect UC2B to Mahomet, Mansfield, Bondville, White Heath, Monticello, Tolono, Pesotum, Tuscola, Arcola, Thomasboro, Rantoul, Ludow and Paxton?

Metro Communications: You may have noticed that St. Joseph, Ogden, Fithian and Oakwood are not on the above list. That is because ICN elected to not build its own fiber east on I-74. Instead they are leasing fiber on that route from a company called Metro Communications. Metro is primarily in the business of connecting cellular towers with fiber, but they are also now connecting several small rural school districts to the closest ICN fiber.

Metro has also inquired about using UC2B fiber to connect to the ICN POP in Node 2. They will have a fiber cable coming from the west on Route 10 where it intersects

with UC2B Ring #2. They would like to connect 4 strands from that cable to the ICN POP in Node 2. They will also have a fiber cable coming from the east that will run in parallel to UC2B fiber on Wright Street. They would like to connect 4 strands from that cable to the ICN POP in Node 2. We can actually do this by only using 4 strands of fiber on Ring #2 and going both ways around the ring.

Metro will be building fiber to St. Joe–Ogden High School for ICN, which gets them into the heart of St. Joe. If we are interested in being able to some day easily serve St. Joe, swapping 4 strands on Ring #2 for 4 Metro strands through St. Joe, through Ogden, through Fithian and into Oakwood would be pretty close to an even swap. If the Policy Board has no interest in positioning UC2B to be able to easily serve St. Joe and other communities to our east, then we would ask for cash for the IRU. Using the IRU rates we submitted to NTIA that would be one-time revenue of $96,103 for the 20-year IRU, and an annual fiber maintenance charge of $4,805.

If we were to build our own fiber from University and High Cross Road just to St. Joe–Ogden High School, that is roughly 6.5 miles. At a ballpark cost of $10 per foot for fiber construction, we would need to spend close to $343,200 just to get to St. Joe. Getting all the way to Oakwood would be roughly three times as much - $1 million.

If UC2B has any aspirations of providing service to those communities to the east of C-U at some point in the future, a swap with Metro Communications is a very cost-effective way of enabling that. If we would rather have the cash at this time, $96,103 could connect 96 more homes in our FTTP areas, or could connect 6-12 additional Anchor Institutions outside of the FTTP areas. If we complete an IRU deal before the end of the grant (which is what Metro would want), NTIA's rules say that the money can only be spent on grant-eligible expenses.

Metro is building their fiber now, and has asked for a quick decision on how UC2B would like to proceed. How would you like me to respond to their request?

The Central Illinois Regional Broadband Network (CIRBN) run by Illinois State University is a sub-recipient of the Central Management Services/ICN BTOP grant to build out a regional project in Bloomington-Normal and surrounding rural communities. They were a round 2 BTOP applicant and they modeled some of what they proposed on UC2B, but also added a lot of their own nuances as well.

CIRBN has access to some of the ICN fiber between Bloomington and C-U on I-74, but would like to use UC2B fiber to get from Interstate 74 to the ICN POP in Node 2. While ISU also has an ICN POP on their campus, they want to have a secondary connection to ICN here.

CIRBN does not really have any fiber that UC2B would be interested in swapping for. However there is a small possibility that we could work a three-way deal with ICN and CIRBN in which UC2B gets credit with ICN for fiber we provide to CIRBN. The alterative for CIRBN would be to just pay UC2B cash for a 20-year IRU. The one-time IRU and annual maintenance dollar amounts would be fairly similar to what I indicated above for Metro.

Tracy Smith and I have a tentative meeting set up with ICN on the 13th to talk about ICN's request with UC2B as well as the possibility of ICN being the broker for three-way fiber deals. It would be good thing to know going into that meeting how the Policy Board feels about potential 3-way trades for additional dark fiber from ICN as opposed to cash deals.

Finally, **Northern Illinois University** has a grant from the Federal Communications Commission to improve connectivity to some 100 Critical Access hospitals in "rural" Illinois. One of those hospitals is Carle, and the Illinois Rural Health Network (IRHN) will be using ICN's fiber along the Interstates coming into C-U. IRHN would like to use UC2B fiber to connect all of those fiber routes to Carle, which we can do.

On the surface of it, it might not appear that IRHN has any fiber assets that UC2B would be interested in, but that is not necessarily the case. The 4-person dedicated broadband team at NIU has also secured two regional BTOP grants and already owned some regional fiber in northern Illinois. They may be able to connect ICN's fiber at 127th Street and the Dan Ryan in Chicago to the major peering points in downtown Chicago that UC2B would like to get to. So if we choose to go north on ICN fiber, IRHN could possibly get us downtown.

Let's Make a Deal? If all of this is starting to feel to you like a game of three-dimensional "Let's Make a Deal", it does to me as well. To put some organization to the decision-making, I am going to suggest some questions for the Policy Board to answer, and an order in which to consider them.

1. Would we like to use our "dark fiber credits" with ICN to secure fiber that will connect UC2B to major Internet peering points, or would we prefer to secure fiber into many of the small communities that surround Champaign-Urbana? We can probably only do one or the other, not both.
2. If we want to go for the peering points, do we want to head south and partner with Clearwave, which could require some cash at some point, or do we want to head north and partner with IRHN if they can get us downtown? If we end up with enough "ICN credits", would we want to go both directions? My personal preference would be to head south, as we already have a Chicago connection secured for the next 5 years through the University.
3. If we want to go for the small communities, we probably have enough credits with ICN to get to all that they can reach. Would we also want to do a swap with Metro to get to Oakwood and the communities between C-U and Oakwood? If we do not care about getting to St, Joe, Ogden, Fithian and Oakwood, that pretty much dictates a cash transaction with Metro.
4. Would we prefer to handle CIRBN with ICN credits if that is possible, or would we just want their cash as well?
5. To fund a Clearwave IRU to get into St. Louis and/or a mystery IRU to get into downtown Chicago, would we just want cash from CIRBN and Metro? (and possibly IRHN?)

Wholesale Pricing

4/9/2012

NEO has reviewed what was submitted to NTIA concerning wholesale rates and generally agrees with the pricing and the plan submitted. Each major topic is addressed in more detail below; NEO has suggested two modifications to the pricing submitted. The first modification is to include an installation charge for Core Connections under item #2. The second modification is regarding adding a revenue share component to end-to-end customer pricing for Service Providers, under item #3.

1. Core Connections by Service Providers
The plan submitted to NTIA required all service providers to connect to UC2B's core redundantly. That allows UC2B to do maintenance when needed and not take down their services. UC2B will provide ring fiber to facilitate these dual connections as part of the connection fee. The provider just needs to meet UC2B at one of its hundreds of splice points, or in one of its nodes.

NEO: We agree with this policy.

2. Pricing for Service Providers Core Connections
The plan submitted to NTIA has rates for dual 1 Gig connections, dual 2 Gig connections (two 1 Gig ports with LAG) and dual 10 Gig connections. NTIA has ruled on other BTOP projects that they cannot give away the provider connections to their cores. UC2B must charge market rates or at least be close to market rates.

NEO: The pricing that was submitted to NTIA for the dual 1 Gig connections, dual 2 Gig connection and dual 10 gig connections is recommended. There is a cost to UC2B to serve the wholesale customer; and therefore, market rates should be charged for the connections to the core. In addition to the monthly recurring charges, we suggest also including a one-time installation charge of $1,800 for installation, test and turn-up.

3. End-to-end customers for Service Providers
In the plan submitted to NTIA, if a provider wanted to "own the customer" (have that customer on the provider's IP space in the provider's VLAN) UC2B would have a per customer charge for that. That per customer charge would be very close to our $19.99 for 20 Mbps charge, as need to charge close to $20 per site in the grant subsidized areas to be sustainable.

NEO: We would like to suggest having the following as a pricing strategy for service providers who would like to “own the customer” and have that customer on the provider’s IP space in the provider’s VLAN. Under this scenario, UC2B would install the drop fiber and the ONT, and UC2B would still “own” this connection to the customer and the ONT installed at the customer site. If the customer would like to use a different provider, the connection can simply be “pointed” to a different provider, no equipment would need to be replaced.

The service provider could be responsible for billing the customer, providing customer service and trouble resolution and would “own” the relationship with the customer. UC2B may decide to provide billing services for the service provider; this is a negotiable point. Trouble resolution and adds, moves, changes, and upgrade processes would need to be solidly created and agreed upon with the service

providers. UC2B could co-market services with the provider and could include marketing information about the relationship with the service provider, the service provider's products and services and how to order services. UC2B would bill the service provider the wholesale rates and the service provider would mark-up these rates to the end user.

UC2B submitted the following rates to NTIA for wholesale pricing for the customer connections:

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

We would like to suggest offering the pricing above with the caveat of adding in a revenue share to be paid to UC2B of 30-45% of the service provider's gross revenue to the customer, whichever is greater. In other words, the service provider either pays $19.99 for the 100 Mbps connection or 30% of gross revenues to UC2B. For example, the service provider would be charged a minimum of $19.99 for the 100 Mbps customer connection. If the service provider used the 100 Mbps connection to the customer for triple play services (voice over IP, data and IPTV) for $100 in gross revenues; UC2B would receive $30 for that customer. This pricing strategy allows UC2B to capture greater revenues for additional services provided and it provides additional revenues for serving the business customer.

The range of 30-45% revenue share is negotiable with the service provider and much depends upon who provides what services. For example, if UC2B provides billing services to the customers, UC2B would receive a greater revenue share percentage. Also, if more services such as Voice over IP, and IPTV services are provided, the revenue share may be greater.

Although intuitively it may seem that the costs for customer service would be reduced with providing wholesale services, regardless of who provides the first line of customer service and trouble resolution, the customer service costs to UC2B are still the same as providing retail services; the customer – whether the customer is the end user or the service provider – still needs to be maintained, and UC2B needs to anticipate these costs.

UC2B's Policy Board agreed to offer retail residential pricing for the grant-subsidized areas starting at $19.99 for 20 Mbps. The non-grant subsidized retail residential rates will need to be at a different rate in order to allow UC2B to effectively expand the network if UC2B chooses. In order to build out to other areas in the Urbana Champaign area, UC2B would most likely need to offer a retail residential rate of $35 - $45 for 20 Mbps. While we want to incent service providers to use the network and provide services, we also want UC2B to be able to compete effectively with the service providers if UC2B decides to expand the network. Having a wholesale pricing strategy of $19.99 or 30-45% revenue share, whichever is greater, also protects UC2B if UC2B decides to expand the network, and offer a higher retail price for the non-grant-subsided areas.

4. Over-the-Top (OTT) Service Providers
UC2B will have no control over OTT providers, and any provider may choose to simply access their customers through UC2B's Internet pipes and be subject to whatever rate limiting UC2B may have in place for that customer. OTT providers would not benefit from quality of service (QOS) as would providers connected to UC2B's core. As UC2B would earn no revenue from OTT providers, UC2B would not participate in the marketing of OTT services.

NEO: We agree.

5. IRU Rates
In the plan submitted to NTIA UC2B proposed dark fiber rates of $1,500 per strand mile and required purchasers of dark fiber to always purchase at least two fibers on a backbone ring and to purchase a ring in its entirety. UC2B proposed annual fiber maintenance rates of $300 per route mile and $600 per lateral connection.

NEO: The IRU rates submitted to NTIA are within national averages for up-front fees and annual maintenance fees. Here is the background information on IRUs and Dark Fiber Leases that was provided by NEO to UC2B.

Indefeasible Rights of Use (IRUs) and Dark Fiber Leases

Dark fiber is optical fiber infrastructure that is currently in place but is not being used. Optical fiber conveys information in the form of light pulses so the "dark" means no light pulses are being sent. To the extent that these installations are unused, they are described as dark.

An Indefeasible Right of Use (IRU) is the effective long-term lease (or often thought of as temporary ownership) of a portion of the capacity of fiber optic cable. IRUs are specified in terms of a certain number of fiber counts for a given segment of a fiber optic network. In most cases, the IRU is a 20- to 25-year agreement to use the fiber count for a segment. Payment for the IRU is typically an upfront fee based upon the fiber count miles. The fiber count miles are the number of miles of the segment times the number of fibers used.

Typically, the per route mile fee can range anywhere between $1,500 to $3,500 per fiber count. These numbers are based upon national statistics. In the State of Illinois, the per route mile fee has ranged anywhere between $500 to $6,500 per fiber count for long-haul fiber routes. For very shorter routes, the per route mile fee can be up to $25,000 per route mile. This large range in pricing is due to a number of factors. Before we discuss these factors, an example of how the pricing for the IRU is shown below.

For example, ABC Company wants a 20-year IRU agreement for a (6) count fiber cable from Location 1 to Location 2. The distance on the network between Location 1 and Location 2 is 100 miles. ABC Company will pay $2,200 per mile. The upfront payment would be:

(6) counts of fiber * $2,200 per mile * 100 route miles = $1.32 Million

Additionally, there is typically an annual maintenance fee in addition to the up-front payment. Annual maintenance fees are typically anywhere from $200 to $350 per mile. In some cases, the annual fee is included in the up-front payment as it is treated as a capital expense from the buyer. In other cases, the

maintenance fee is paid monthly or annually for the term of the agreement. Also, in some cases, the maintenance fee is a simple monthly or annual fee per customer and the number of fiber counts is not taken into consideration.

Assuming the annual maintenance fee is $200; the annual maintenance payment would be:

$200 per route mile * 100 route miles = $20,000 annually or valued at $400,000 for (20) years.

Pricing for rural-based and long-haul IRU's are thought to be lower than metropolitan IRU's because a metropolitan lease may bring more customers and more revenue potential. Based upon national pricing, the up-front fee for a rural, long-haul IRU may be $1,500 - $2,500; the pricing for a metropolitan IRU may be $2,500 - $3,500. However, pricing is also dependent upon supply and demand factors. For instance, if there is little fiber available for lease, the pricing will be higher. Many of the incumbent phone and cable companies will not provide IRU agreements, which create a greater demand for IRU's. Pricing for IRUs is also not regulated, and unpublished; and therefore, there is often a large fluctuation of pricing offered to various customers from providers.

In addition to the up-front payment and maintenance fees, additional revenue can be gained through leasing rack-space at UC2B's hub or equipment locations. Collocation is another term used for leasing space for placement of equipment in hub locations along UC2B's fiber network. Collocation fees are typically charged monthly by the rack, by space on the rack, or by chassis or cabinet. Additional fees are typically charged for use of power at the facility. In some cases, additional up-front fees can be charged for make ready use.

UC2B has proposed IRU rates of $1,500 per fiber-strand-mile for a 20-year IRU and has required early IRU customers to purchase entire backbone rings at a time. The rate is well within national averages for similar communities. Requiring full ring purchases increases revenue for UC2B, reduces stranded fiber strands, and encourages best practices in networking with ring-based topologies.

UC2B has proposed an annual maintenance fee of $300 per route mile, which again is within national averages.

NEO has provided sample IRU agreements and language that is often included in IRU agreements to UC2B. NEO also provided feedback for UC2B on its initial agreement with the Illinois Department of Transportation (IDOT).

Proposed UC2B Wholesale & ISP Service Offerings

12/31/11

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)
Note # 1 - All core elements of the network are non-blocking and are interconnected at 10 Gbps.				
Note # 2 - All ring fiber necessary to connect Provider is included in the Backbine Connection rates.				
Note # 3 - Customer-end electronics are provided by UC2B.				

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 of
CHAMPAIGN

Finance Department • 102 N Neil St • Champaign IL 61820 • (217) 403-8940 • fax (217) 403-8995 • www.ci.champaign.il.us

MEMORANDUM

TO: **UC2B Policy Board**

CC: **UC2B Marketing and Outreach Subcommittee**

FROM: **Richard Schnuer** RNS

DATE: **April 8, 2012**

SUBJECT: **Expanded Outreach and Customer Acquisition Program**

A. Introduction: This memo recommends an expanded outreach and customer acquisition program for retail customers. This program would complement and expand current activities rather than replace them. The proposal has the following two components:

1. Public communications media
2. Direct cooperation with faith-based organizations and other anchor institutions in the designated census areas

These recommendations come from preliminary discussions with several people including Policy Board Member Bowersox, UC2B Principal Investigator Mike Smeltzer, and a meeting of members of the UC2B Marketing and Outreach Subcommittee. (It was not an official meeting due to lack of a quorum.) Additionally, the Marketing and Outreach Subcommittee will discuss this recommendation at its April 10 meeting, and I can share any input to the Policy Board at its meeting on Wednesday April 11.

B. Recommended Action: I recommend that the Policy Board 1) approve the expanded Outreach and Customer Acquisition Program (as may be amended by the Board at its meeting) and 2) authorize staff to implement the program.

C. Proposal:

1. Outline of the recommended expanded outreach program:

    a. Communicate with residents and businesses in the designated census areas via commercial communications media. This includes:
        - Development of a comprehensive Communications Plan by a firm that specializes in such work and would be subject to approval by UC2B. The cities of Champaign and

Urbana have used the services of such firms to communicate with the public on several issues including the recent referendum on electric aggregation. I have attached a Request for Proposals (RFP) for that effort. Page 3 outlines the services requested for that outreach effort, and I believe that UC2B would want similar services.

- Direct communications to potential UC2B customers using commercial communication media such as radio and TV advertisements, ads on and in MTD buses, and direct mailings.
- The communications plan would encompass current activities to ensure that 1) the activities complement one another, 2) there are no gaps in communications, and 3) there is no unnecessary duplication of activities, and 4) the look and feel of outreach media is consistent among all activities.
- GSLIS would be involved in all critical aspects of development and implementation of the plan.

b. Direct cooperation with faith-based organizations and other organizations in the UC2B service area. Policy Board members may be aware that over a year ago approximately 15 pastors of churches in the UC2B service area sent a letter to UC2B stating their interest in the UC2B project and their willingness to support it. This component of outreach would establish a direct, ongoing relationship between UC2B, these churches, and other interested anchor institutions in the designated census areas. Each organization would designate someone to serve as a point of contact (POC) with UC2B. The POC's would:

- Receive training similar to canvassers and respond to questions regarding UC2B services
- Distribute UC2B customer acquisition information
- Promote UC2B within their organizations in other ways
- Sign up UC2B customers
- If desired, arrange for presentations by UC2B representatives at the organizations

In regard to this recommendation, a member of the Marketing and Outreach Subcommittee also suggested that UC2B provide an incentive for these organizations to maintain a continuing relationship with UC2B, for example, discounted UC2B services.

2. How the expanded outreach plan would be carried out:

a. The Lead Agency would issue an RFP to develop an outreach plan and would convene a group of people (e.g., Marketing and Outreach Subcommittee Members) to evaluate the RFPs and select a firm. As noted above, the attached RFP would be used as the model for the UC2B RFP.

b. The Lead Agency for Operations would hire a part-time staff member to:

- Serve as liaison between the UC2B Coordinator, the Marketing and Outreach Subcommittee, and the firm developing the Outreach Plan
- Perform various tasks to implement the plan such as procuring services from communications media
- Establish and support the direct outreach relationship between the faith-base and other anchor institutions in the designated census organizations, although, once the

relationship has been established, GSLIS might assume day-to-day interaction with these organizations.

D. Timeline. If the program is approved it should be implemented as soon as possible. An RFP for a firm to develop an Outreach and Customer Acquisition Plan could be issued by the end of next week and a firm selected by the end of April. I believe that the selected firm can deliver its recommendations by mid-May. Similarly, cooperative outreach efforts with anchor institutions could be established within weeks; however, I recommend starting with just a few organizations to iron out any wrinkles.

E. Funding. The UC2B budget includes $80,000 for outreach and customer acquisition that has not yet been allocated. I believe that this amount would cover the costs of the program described above. However, I cannot speak confidently until we get further into the planning process. Given the anticipated cost to retain a qualified firm, UC2B staff has the authority to contract with the selected firm without action by the Champaign City Council.

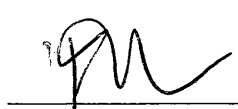
F. Staffing. As discussed above, this memorandum recommends that UC2B establish a part-time, temporary staff position to coordinate aspects of the recommended program and to serve as liaison to faith-based and other anchor institutions that desire to support UC2B's customer acquisition efforts. UC2B staff is authorized to employ someone for up to six months without action by the Champaign City Council.

G. Public Input. When this program was discussed with members of the Marketing and Outreach Subcommittee, a member of the Subcommittee suggested the following:

- That UC2B get the operations plan defined and in place soon so that it can be part of the customer acquisition process.
- Outreach to businesses that may wish to sell services over the UC2B network. At least one company, Consolidated, has already expressed interest in this. We have not discussed the method of accomplishing this. Perhaps we should retain a broker who would be familiar with firms that might wish to contract with UC2B. The broker could both identify and negotiate with the firms based on guidelines set by UC2B.

I believe these are good points. The first is clearly a priority of the Policy Committee and must be coordinated closely with the Outreach and Customer Acquisition Plan. The second is also important but is outside the scope of this memorandum because it focuses on acquisition of customers in the designated census areas.

Reviewed by:



Teri Legner, UC2B Coordinator for Operations

Attachment: Municipal Aggregation Marketing RFP

Fin/shared/misc/UC2B/Outreach/Outreach Proposal 12.04.08

City of CHAMPAIGN

REQUEST FOR PROPOSALS

Proposals for the following item(s) or service are sought:

Brand and Website Development for Electric Aggregation Referendum Campaign

Requesting Department:

Planning Department
Attention: Bruce Knight
102 N. Neil Street
Champaign, IL 61820
(217) I403-8800

Date of Request:

January 3, 2012

The original plus one (1) copy of your proposal(s) MUST be submitted to the Requesting Department at or before the date and time specified below to receive full consideration:

PROPOSAL DUE DATE: 1/13/12

PROPOSAL DUE TIME: Noon PREVAILING TIME

All proposals submitted in response to this Request shall be irrevocable for a period of One Hundred Twenty (120) days after the proposal due date and may not be withdrawn by the Vendor during this period. After such time has elapsed, the Vendor may withdraw the proposal if it has not been selected prior to the request to withdraw. Such withdrawal shall be requested in writing.

The City reserves the right to waive technicalities or to accept or reject any proposal or combination of proposals based upon the City's determination of its best interest.

SECTION 1. GENERAL PROVISIONS

1.1 Vendor Questions

ALL questions pertaining to this Request (RFP or RFQ) must be submitted in writing at least five (5) business days prior to the deadline for submission to:

Bruce Knight
Planning Director
City of Champaign
102 N. Neil Street
Champaign, IL 61820
Facsimile: 217-403-8810
Email: bruce.knight@ci.champaign.il.us

Vendors are prohibited from contacting staff of the City of Champaign regarding this Request except as specifically set forth herein. Failure to comply with this provision may result in rejection of any or all proposals.

1.2 Proposal Content and Format

Your proposal(s) must include the following information:

Section 1 **Vendor Information**:

(A) Name, address, phone number and website of the Vendor;
(B) Name of the contact person for the Vendor;
(C) Document the availability of all persons assigned to the project and whether the Vendor has sufficient resources to complete the project within the City's time constraints.
(D) A Statement of Qualifications, including a narrative or other statement by the firm of its qualifications for the proposed project.

Section 2 **Acknowledgments:**

Acknowledgment of any response to questions or addenda sent by the City.

Section 3 **Proposal Information:**

The proposal shall contain at a minimum the following:

(a) General information about the items or services proposed;
(b) Detailed technical response to each and every requirement listed in the Specifications;
(c) Detailed costs and charges;
(d) If a proposal form is provided, any additional information required by the City in the Proposal Form.

Section 4 **Attachments:**

(a) A copy of all standard Vendor or manufacturer warranties must be included or will NOT be considered part of this contract.
(b) The Vendor must submit completed contract documents along with the proposal to receive full consideration unless otherwise stated in the Specifications.
(c) Any other documents required by the Specifications.

Section 5 **References:**

List of two (2) references that may be contacted. Include the name, address, phone number, website and a contact person for each reference.

1.3 Evaluation Criteria

The City will conduct an evaluation of the proposal(s) submitted. The evaluation will be based on criteria set forth in Champaign Municipal Code Section 12.5-38 and the Specifications.

1.4 Rights to Submitted Materials

All proposals, responses, inquiries, or correspondence relating to or in reference to this Request, and all reports, charts, displays, and other documentation submitted by the Vendor shall become the property of the City when received and shall not be returned to the Vendor. The City reserves the right to use the material or any ideas submitted in this proposal in response to the Request whether amended or not. Selection or rejection of any proposal does not affect this right.

1.5 Proprietary Information

Any restrictions on the use of information contained within a proposal shall be clearly stated as such within the proposal. The City will only be able to comply with a request for confidentiality to the extent allowed by law.

1.6 Cost of the Vendor to Respond

The City is not responsible for any cost incurred by a Vendor in the process of responding to this Request or for any pre-contract costs incurred by any Vendor participating in the selection process.

1.7 Public Advertising

The Vendor is specifically denied the right to use the name of the City of Champaign for public advertising or reference in any form or medium without the express written permission of the City.

1.8 Termination

The City reserves the right to terminate the selection process at any time, to reject any or all proposals and to award a contract in the best interest of the City of Champaign.

City of Champaign Electric Aggregation Project: Municipal Electric Aggregation (MEA) is an opt out program that allows local governments the option to bundle together, or aggregate, residential and small commercial retail electric accounts and seek bids for a cheaper, and possibly cleaner, source of power. Right now, these Ameren customers obtain power at a fixed rate, regulated and set annually by the Illinois Commerce Commission. In contrast, large industrial and commercial customers can utilize the open market to obtain a lower rate and save money on their electric bills. By bundling residential and small commercial accounts, municipalities can achieve the same type of savings. The Champaign City Council has passed a resolution to initiate a referendum vote to allow the City to establish a MEA program. Under State law, the City is not allowed to advocate for the referendum question, but can act to inform and educate the voters about the question. The purpose of this RFP is to select a company to develop an easy to understand brand identity for this project, and design a website that will serve as the primary tool in the educational program.

Developing a brand identity – The selected firm will develop a brand identity for the electric aggregation referendum project that will include a color scheme and motifs to be repeated on educational materials, the web site, social media and PowerPoint presentations, which will create a recognizable identity for the program. Several alternatives will be provided for review and modified based on input from the City.

Design of a web site– The firm will design a web site that will contain all of the educational materials for this question in a user friendly and engaging format. This site may be shared by multiple area municipalities that are all working on similar projects in their communities.

Ownership – The City will own all products of this work, including, but not limited to, the logo and program identity. The marketing firm will provide electronic copies of all work that may be used by the City in developing additional materials in-house. Electronic files must be compatible with Adobe InDesign.

Schedule – The schedule for the selection process is as follows:

DATE	ACTIVITY
December 21, 2011	1. Request for Proposals issued.
January 4, 2012	2. Responses due.
January 5, 2012	3. Follow up questions via telephone.
January 6, 2012	5. Notification of selection.
January 11, 2012	6. Scope of work and fee negotiated.
January 13, 2012	7. Contract delivered for signature and notice to proceed.
February 10, 2012	8. Project Completion

Note: Dates are subject to revision

Selection Criteria – The following selection criteria will be used to evaluate the responses:

1. General professional experience of the firm including experience of the principals (particularly with similar projects) and references. (20 points)

2. Qualifications of personnel assigned to this project including review of samples of work, experience with similar projects, and review of resumes. (30 points)

3. Ability to achieve project goals including adequacy of staff and resources – history of company, number of years in business, number of employees, number of employees able to take on this project in the event any of the assigned personnel are no longer available. (30 points)

4. Location of the firm – preferably a firm in the Champaign-Urbana area, so that staff are readily available to meet as the project progresses. (20 points)