UC2B Policy Board Agenda

Regular Meeting
April 18, 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. *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) IP Address Pricing Recommendations (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
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, May 9, 2012 – 12:00 noon
Council Chambers, 102 N. Neil Street, Champaign, Illinois

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.)

UC2B - Proposed Public IP Address Charges - for use with the approved bandwidth tiers 4/16/12

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

April 16, 2012

To: **The UC2B Policy Board**

From: **Mike Smeltzer**

Re: **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.

April 16, 2012

To: The UC2B Policy Board

From: Mike Smeltzer

Re: UPDATED - UC2B Fiber Swaps and Leases

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.

A. The Illinois Century Network will have dark fiber to trade that could get us to the south side of Chicago (95th Street and the Dan Ryan), but not necessarily all the way to the major Internet peering points in downtown Chicago. They are working on a deal that would get them their own conduit and fiber all the way downtown, but the fate of that deal is uncertain at this time. If they are successful, UC2B could have access to that fiber as well.

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, controlling connections to multiple upstream Internet providers in diverse major cities could 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 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.

Request # 1:
So, the first thing I am asking for is official endorsement of the Policy Board to continue to have these fiber swapping and purchasing 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.

Request # 2:
The second thing I am asking for is guidance on how the Policy Board wants to prioritize those two different possible 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 easily connect UC2B to Mahomet, Mansfield, Bondville, White Heath, Monticello, Tolono, Pesotum, Tuscola, Arcola, Thomasboro, Rantoul, Ludow, Paxton, St. Joseph, Ogden, Fithian and Oakwood?

B. Metro Communications is primarily in the business of connecting cellular towers with fiber, but they are also now working to connect several small rural school districts to the ICN POP in Node 2 on campus.

Metro has 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.

While we initially thought that Metro would control the fiber that is being built for ICN between Danville and Champaign that is not the case. Should we want to, we will be able to acquire 2 or more strands of fiber going in that direction from ICN.

Metro is building their fiber now, and has asked for a quick decision on how UC2B would like to proceed. Because we are providing dark fiber to some entities, NTIA has stated that we must make it available to others as well. We do not necessarily have to sell IRU's however. A more traditional monthly lease would fulfill our obligation to provide dark fiber on an open-access basis. I am working on a proposal for the Policy Board to consider for rates for dark fiber leases. It will not be complete in time for this week's packet.

REQUEST # 3:
The main question is how would we like to structure this deal. Should it be a 20-year IRU like we are planning to execute for the original UC2B "investors"? If yes, should it be at the same rates that were proposed for the original UC2B "investors"? The one-time revenue from such an IRU at the original IRU rates would be in the $90,000 ballpark while the recurring maintenance revenue would be roughly $5,000 per year.

If not an IRU, then what rates should we charge for a dark fiber lease, which incorporates both the fiber costs as well as the maintenance costs into a monthly payment? Once the dark fiber lease rate proposal is complete, you will be able to compare lease and IRU dark fiber rates with our proposed retail and wholesale service rates.

C. 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 may have access to some of the ICN fiber between Bloomington and C-U on I-74, and 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 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. It is not clear that CIRBN has any credits with ICN with which to trade however.

The alterative for CIRBN would be to just pay UC2B cash for a 20-year IRU. If we did an IRU, the one-time IRU charge would be in the neighborhood of $90,000 and the annual maintenance would be roughly $5,000 per year at the "investors" IRU rates. If we opted to only provide a lease, the Policy Board would need to approve rates for dark fiber leases.

REQUEST # 4:
Is fairly similar to Request # 3. Will we sell CIRBN an IRU? If we will, at what rates? Would we prefer to lease them fiber? If we would, at what rates?

D. 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 as well as some leased fiber from

Windstream/Paetec/McLeodUSA. 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 controls some regional fiber in northern Illinois. They may be able to connect ICN's fiber at 95th Street and the Dan Ryan in Chicago to the major peering points in downtown Chicago if ICN is not able to do so. So if we choose to go north on ICN fiber, IRHN could possibly be part of that solution.

E. Decisions Needed: 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, but 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 ICN or IRHN if either of them 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 ICN can reach.
4. How do we want to structure the deal with Metro Communications? IRU or lease?
5. Would we prefer to handle CIRBN with ICN credits if that is possible, or would we just want their cash as well? If we go for cash, would it be for an IRU or a lease?
6. If IRHN does not help get us to downtown Chicago, how do we want to structure a cash dark fiber deal with them? IRU or lease?
7. To fund a Clearwave IRU to get into St. Louis, would we just want cash from Metro, CIRBN, and IRHN? Every $90,000 IRU deal could also allow us to connect an additional 90 more homes in our FTTP areas, or to connect 6-12 additional Anchor Institutions outside of the FTTP areas. If we complete any IRU deals before the end of the grant (which all three of these organizations would want), NTIA's rules say that the money can only be spent on grant-eligible expenses.

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** RMS

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) l403-8800
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)

RESOLUTION NO. 2012- 09

A RESOLUTION
APPROVING THE RETENTION OF ATTORNEYS

BE IT RESOLVED BY THE UC2B POLICY BOARD AS FOLLOWS:

That the retention of the following law firms is hereby approved.

1. Baller Herbst Law Group, a Professional Corporation, 2014 P Street, N.W., Suite 200, Washington, D.C. 20036.

2. Holland and Knight, 131 S. Dearborn Street, 30th Floor, Chicago, IL 60603.

RESOLUTION NO. 2012- 09

PASSED:

APPROVED:______________________________
Policy Board Chair

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City of
CHAMPAIGN

REPORT TO UC2B POLICY BOARD

FROM: **Frederick C. Stavins, City Attorney**

DATE: **April 13, 2012**

SUBJECT: **UC2B - RETENTION OF OUTSIDE ATTORNEYS**

A. Introduction: This Resolution would approve the retention of two law firms, Baller Herbst Law Group and Holland and Knight, to perform legal work for UC2B.

B. Action Requested: The Administration/Staff requests that the Policy Board approve this Resolution.

C. Background:

1. Currently. Since its inception, legal work for UC2B has been performed by a group of attorneys representing the City of Champaign, City of Urbana and the University of Illinois. Gradually, the City Attorney of Champaign has, in conjunction with Champaign's role as lead agency, performed the legal work on behalf of the UC2B. The City Attorney relies on the assistance from attorneys for Urbana and the University as well.

Through the bulk of the construction period, legal work has been in a quantity that has been manageable. With the need for the development of IRU's as well as other documents related to the business aspects of UC2B, there is a need to retain outside legal assistance, both to provide other expertise as well as additional resources to complete the work in a timely fashion.

2. The Process. The Request for Proposals (attached hereto) was released on March 19, 2012 and responses were due on March 30, 2012. The proposals were sent to seven selected firms, based upon the participation of those firms in significant broadband projects throughout the country. The names of the firms were as follows:

1. Best, Best & Krieger, LLP
2. Baller Herbst Law Group
3. Moss & Barnett
4. Holland & Knight
5. Davis, Wright, Tremaine, LLP
6. Kirton McConkie, P.C.
7. Arnstein & Lehr, LLP

All these firms are exceptionally well qualified to perform work that is required by UC2B, though several of the firms were more sensitive to the requirements of the proposal in certain respects.

A review group consisting of the City Attorney of Urbana, a representative of the Legal Counsel's Office at the University, the City Attorney of Champaign and the UC2B Coordinator met to review the proposals. After the review of the proposals, two firms were selected for further inquiry, these being the two firms that are recommended to be retained. Both firms have extensive broadband project experience. The Baller Herbst Law Group from Washington, D.C. has an outstanding and nationwide reputation as being leaders in broadband legal work. They are a smaller law firm consisting of four lawyers. Their references included One Community in the Cleveland area, the Lafayette Broadband Project, as well as the Inter-County Broadband Network in counties surrounding Washington, D.C.

The Holland and Knight law firm is a very large law firm consisting of more than a thousand lawyers in seventeen U.S. offices, including Chicago. Holland and Knight brings excellent experience because they have represented Illinois Fiber Resources Group, a BTOP grant recipient that was in collaboration with representatives from Northern Illinois University and other entities in the Northern Illinois area. They have also represented the Illinois Rural Health Net which is providing a fiber backbone for rural Illinois hospitals and clinics. They have also represented Mass Broadband 123, a BTOP project in Western Massachusetts. They bring a wide range of additional expertise beyond broadband aspects.

3. References. All references were checked and the references were very positive in reports concerning both law firms.

4. Diversity. Baller Herbst is a small law firm and presents a history of diverse employment, however none of the current principals is from the minority community. Holland and Knight presents a strong statement with respect to diversity. Their firm has a strong commitment in diversity both in terms of diversity structure, educational programs, mentoring, training and communication. They were ranked number two recently by the Minority Law Journal for the number of Hispanic attorneys, and they were ranked in the top 100 law firms for diversity by the Multi-Cultural Law Magazine.

5. Pricing. Both law firms have hourly fees, depending on the person involved in the project, of between \$300 and \$500 per hour. Holland and Knight's rates tend to be higher than the overall rates for Baller Herbst, however, these rates are consistent with the industry standards and other proposers that were not selected. The rates are only part of the equation in attorney fees. A large aspect of attorneys fees is the efficiency with which an attorney works and experience in the areas that are assigned. Both firms bring a wealth of experience to the project and received favorable reviews with respect to billing from the references that were checked.

6. Next Steps. Once the Policy Board approves the attorneys, the City Attorney will task one of the firms with developing IRU's for partners in the process. These include those people who have made an initial financial commitment to the project. This may be able to be commenced within the next several weeks and either prior to or simultaneous with the City Council consideration of the retention of these attorneys, which must occur as well. The amount devoted to the development of these IRU's will be within the City Manager's purchasing authority, i.e. under $17,500.

7. Use of Two Firms. The City Attorney will still coordinate the legal work for UC2B, and will utilize the strengths of both firms as needed. The Baller Herbst firm is very strong in legal areas surrounding technology and regulatory aspects, while Holland and Knight, though also strong in the technology aspects, also brings a rich depth of consulting in the legal aspects of business organization and issues involving local government law.

D. Alternatives:

1. Approve the Resolution.

2. Do not approve the Resolution.

E. Discussion of Alternatives:

Alternative 1 would approve the Resolution.

a. Advantages

- The legal services can commence as soon as contracts are executed with the attorneys.
- The IRU development can proceed. This will take several weeks and there may be iterations that are necessary before there is a complete IRU ready for consumption by the other parties to the IRU.

b. Disadvantages

- The Policy Board may wish to explore other alternatives with respect to the legal services.

Alternative 2 would not approve the Resolution.

a. Advantages

- The Policy Board would be able to pursue other options with respect to additional legal services.

b. Disadvantages

- The pursuit of other options would take a considerable amount of time and delay aspects of the project or project partners.

F. Budget Impact: There is a sufficient amount of money budgeted for this year ($112,000) and next year ($112,000) concerning legal services to meet the demands of the contract.

G. Staffing Impact: The assistance of outside legal services will be helpful in completing some of the aspects of the project in a timely fashion which would otherwise be delayed due to other calls on internal legal resources.

Prepared by:

Frederick C. Stavins
City Attorney

Attachments: Request for Proposal

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City of CHAMPAIGN

REQUEST FOR PROPOSALS

Proposals for the following item(s) or service are sought: Legal Services - City of Champaign, Lead Agency, on behalf of Urbana-Champaign Big Broadband (UC2B) Consortium
Requesting Department: City Attorney - Legal Department Attention: Frederick C. Stavins, City Attorney 102 N. Neil Street Champaign, IL 61820 (217) 403-8765
Date of Request: March 19, 2012 (Monday)
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: March 30, 2012 (Friday)** **PROPOSAL DUE TIME: 12:00 P.M. (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. INTRODUCTION

1.1 Standard Terminology

The term "City" refers to the City of Champaign and it shall mean "City of Champaign on behalf of the Urbana Champaign Big Broadband Consortium (UC2B)". A prospective Contracting firm will be referred to as the "Vendor" or "Contractor". "Proposal" shall refer to all proposals, quotes, and/or qualifications submitted in response to this Request.

1.2 Proposal Deadlines

Proposals may be submitted so they are received on or before Noon, March 30, 2012. Proposals may be submitted electronically to LegalDepartment@ci.champaign.il.us. It is highly recommended that proposers confirm receipt by calling the City Attorney's office on or before the deadline at (217) 403-8765.

1.3 Vendor Questions

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

Frederick C. Stavins
City Attorney
City of Champaign
102 N. Neil St.
Champaign, IL 61820
Facsimile: (217) 403-8755
Email: frederick.stavins@ci.champaign.il.us

AND

Teri Legner, Coordinator – UC2B
Economic Development Manager
City of Champaign
102 N. Neil St.
Champaign, IL 61820
Facsimile: (217) 403-8725
Email: teri.legner@ci.champaign.il.us

Vendors are prohibited from contacting staff of the City of Champaign or board members of UC2B regarding this Request except as specifically set forth herein. Failure to comply with this provision may result in rejection of any or all proposals. Responses shall be delivered by e-mail or fax.

1.4 General Information

A. **Purpose:** City of Champaign as Lead Agency for Urbana-Champaign Big Broadband (UC2B) Consortium seeks an individual/firm to provide legal services

B. Background:

What is UC2B?

UC2B is an intergovernmental consortium of the University of Illinois and the cities of Urbana and Champaign dedicated to building and operating an open-access fiber-optic broadband network throughout the Champaign-Urbana area. The project is made possible by a $22.5 million grant from the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA). The State of Illinois provided a $3.5 million grant and local matching funds added an additional $3.4 million to fund the project.

The foundation of the UC2B network will be the fiber-optic "backbone" infrastructure that will be constructed with the grant money. The grant also will provide "fiber-to-the-premises" (FTTP) connectivity directly to well over 150 Community Anchor Institutions throughout Champaign, Urbana, and Savoy and to households in several underserved neighborhoods in Champaign and Urbana.

This direct connectivity will enable improved access/support to health care, educational and recreational institutions, public safety and government agencies, and social service and religious organizations, as well as increased access to public computing efforts

A Collaborative Effort

The UC2B consortium is governed by a Policy Committee consisting of representatives from the three consortium member agencies: the University of Illinois, the City of Champaign and the City of Urbana. Community members also sit on the UC2B Policy Committee. The Policy Committee is governed by the rules as set forth in bylaws as adopted by the Policy Committee on June 3, 2010. Regular meetings of the Policy Committee are held on the second Wednesday (noon) and fourth Thursday (6 p.m.) of each month in the City of Champaign Council Chambers at 102 N. Neil Street in Champaign. Meetings are open to the public.

To keep current on the activities of the UC2B Policy Committee, visit their working space. http://uc2b.net/ The Agenda packets are also available on the City of Champaign website under City Council/Boards and Commissions.

1.5 General Instructions

A. All proposals should follow the format described in this Section and in "Content and Format" Section of this Request. Vendor shall provide information requested by this Request in a direct and concise manner. Responses shall refer directly to section numbers in this Request and meet or exceed the requirements as described.

B. The requirements stated herein are mandatory unless stated otherwise. It should be understood that failure to respond to a specific requirement may be the basis for eliminating a Vendor from consideration during comparative evaluation of proposals.

C. The City of Champaign reserves the right to accept or reject any or all proposals, or portions thereof.

D. When a package proposal is made for a package price, the package price shall be taken to include all items referenced in the package.

E. The Vendor may submit multiple proposals involving various methods of meeting proposal objectives. However, each submitted proposal shall be complete in every respect and marked as Proposal No. 1, No.2, etc. on the cover page.

F. Subsequent to receipt of proposals, the City or its authorized representative may require the Vendor to make oral presentations or to respond to telephone calls or clarify its Proposal.

G. Section and subsections numbering should be in a consistent format using the numbers indicated in the "Content and Format" section of the Request and beginning each section on a new page.

H. If the Vendor intends to use Subcontractors to perform any portion of the work described in this RFP, the Proposal must clearly state so. The Vendor's response must include a description of which portion(s) of the work will be Subcontracted out, the names and addresses of potential Subcontractors and the expected amount of money or percentage each will receive under the Contract.

1.6 Content and Format

A proposal shall be submitted along with all the required documentation. Each shall show the name and address of the Vendor submitting the proposal on the front cover.

Proposals should include the following in the order listed. Each section should be labeled.

Section 1. **Vendor Information:**

(A) Name, address, phone number, email and website of the Vendor;
(B) Name of the contact person of the Vendor;
(C) A brief company profile describing the chain of command for each person assigned to the project. 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.

Section 2. **References:**

List at least three (3) references that may be contacted. Include the name, address, phone number, email address, website and a contact person for each reference. The reference response should include a brief overview of the project and the legal work contributed by the Vendor. References should be related to Broadband Projects or substantially similar projects.

Section 3. **Acknowledgements:**

Acknowledgement of any response to questions or addenda, if any, sent by the City.

Section 4. **Proposal Information:**

Address each and every requirement listed in the Scope of Services by providing:

(i) An overview of the proposal
(ii) Response to each element requested detailing qualification
(iii) Detailed cost response on the form(s) provided by the City

Section 5. **Contract Documents:**

(a) The selected Vendor will be required to execute a contract with the City in substantially the form provided. The person or persons signing on behalf of the selected Vendor must be authorized by said Vendor to sign such a contract. If the person signing for the Vendor is not a corporate officer in the case of a corporation, a partner in the case of a partnership, or a member in the case of an LLC, then the Vendor shall provide documentation of that person's authority to execute the contract on behalf of the Vendor. Acceptable documentation of said authority shall include a resolution adopted by the board of the business entity in question or bylaws of that entity granting said authority, or a cover letter signed by a corporate officer, a partner or a member as the case may be, granting said authority.

(b) The contract documents shall incorporate all requirements required in this Request and all elements of the Vendor's proposal. If the Vendor takes exception to any element of the City's form contract, it should specifically detail such exceptions in the proposal.

(c) The selected attorney will execute an agreement in substantially the same form as attached to this RFP, including all attachments within three (3) days after notification of initial selection, pending recommendation of the UC2B Policy Board, and approval by the City Council of the City of Champaign.

Section 6. **Additional Contract Documents:**

The Vendor shall submit the following additional documents with the Proposal:

(A) Disclosure Affidavit
(B) Affirmative Action Report Form or Certificate from Community Relations Office, if prior approval [(217) 403-8830]
(C) Dual Representation Affidavit

1.7 Proposal Guarantee (Reserved)

1.8 Evaluation Criteria

The City will conduct an evaluation of the proposal(s) submitted. The evaluation will be based on at least the following criteria; however, not necessarily in the order provided or with equal weight given to each criterion:

The Vendor will be evaluated based on:

A. Compliance with the Request requirements;
B. Cost of the specified items or services; and
C. Other criteria set forth below:

(1) The ability, capacity, and skill of the Vendor to perform the contract or provide the service required;

(2) The capacity of the Vendor to perform the contract or provide the service promptly or within the time specified, without delay or interference;

(3) The character, integrity, reputation, judgment, experience, and efficiency of the Vendor including but not limited to past performance record; default under previous contract, whether or not such contracts were with the City; competency; and failure to pay or satisfactorily settle all bills dues for labor and material on former contracts;

(4) The previous and existing compliance by the Vendor with laws and ordinances relating to this contract;

(5) The quality, availability and adaptability of the supplies, machinery, plant or other equipment or contractual services to the particular use required;

(6) The ability of the Vendor to provide future maintenance and service for the use of the subject contract, including guarantees

(7) The sufficiency of the financial resources and financial liability of the Vendor to enter into and perform the contract or service;

(8) Whether the Vendor is entitled to Local Preference pursuant to Section 12.5-34 of the Champaign Municipal Code, 1985 as amended;

(9) Completion and approval of the EEO/AA paperwork.

D. An important aspect of the evaluation will be the specific experience of the Vendor in the subject matter of this request: Broadband business development and contract issues, IRU drafting, all legal areas relating to BTOP grant requirements.

E. One or more vendors may be selected to participate in a phone in person interview.

1.9 Customer Service

The City expects the Vendor to deliver a high level of customer service regarding the provision of any service to the City, its employees and its customers.

1.10 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 this Request whether amended or not. Selection or rejection of any proposal does not affect this right.

1.11 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.

1.12 Affirmative Action

If this contract will be over $17,500, the Vendor shall comply with the Equal Opportunity in Purchasing Ordinance of the City of Champaign (Section 12.5-65 of the Champaign Municipal Code, 1985, as amended). Pursuant to the Ordinance, the Vendor must have on file a Certificate of Approval or an Affirmative Action Form plus an approved Affirmative Action Plan before a Vendor can be selected. Inquiries concerning this requirement may be directed to the Community Relations Office, 102 N. Neil Street, Champaign, IL 61820 or by telephone at (217) 403-8830.

1.13 Acceptance of Proposal Content

The contents of the proposal or parts thereof selected by the City will be incorporated into the final Contract Documents to the extent they comply with this Request.

1.14 Cost of the Vendor to Response to Request

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

1.15 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 of Champaign

1.16 Termination

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

1.17 Payment and Performance Bond – Not applicable to this Request

SECTION 2. SCOPE OF SERVICES

2.1 Minimum Qualifications:

Please provide information relative to (a) and (b).

(a) Extensive and specialized knowledge and experience in providing legal services to community broadband projects and specifically projects involved in the BTOP, RUS or substantially similar federal programs.

(b) Law firm and attorneys engaged in project must be authorized to perform legal services in the State of Illinois.

2.2 Nature of Activities:

(a) Drafting Transactional Documents: Various legal documents relating to broadband legal issues including, but not limited to:
- (i) retail documents including boilerplate contracts for customer services;
- (ii) contracts for professional services
- (iii) sale/use of fiber network IRU's for: anchor institutions, partners (ie initial purchasers of IRU's), potential customers, and state and federal agencies;
- (iv) fiber maintenance; and
- (v) customer services/call center from third party vendors.

It should be noted that the development of IRU's will be a priority work assignment with final products desired within two weeks after retention. Please include a statement/acknowledgement of the practicality of this requirement and set forth a separate cost item for this work.

(b) Assisting in formulation and drafting of inter-agency agreements and memoranda of understanding relative to UC2B activities.

(c) Drafting Legal Advisory Memoranda: This facet of the work will entail providing written legal guidance to the Consortium on all aspects of the undertakings of the Consortium as set forth in the Intergovernmental Agreement between the parties: See http://uc2B.net/wp-content/uploads/2011/05/UC2B-I-G-Agreement-7-29-09-Attach-D.pdf

(d) Advising/Consulting: Providing oral legal guidance to UC2B Consortium officials including the Consortium Coordinator concerning regulatory issues of local state and federal law and regulations, and such miscellaneous matters involving the development or transformational aspects of the UC2B as an ongoing organization, including possible creation of alternate not-for-profit, for profit corporations and LLC's.

(e) Attending Meetings: In person or via teleconference to provide advice relative to UC2B.

2.3 Communications Plan

The selected firm/attorney will provide services related to the UC2B project and Consortium working on an "as needed" basis, working under the general supervision and reporting to the City Attorney of the City of Champaign. Additionally, the selected attorney will work closely with the Consortium Coordinator, the Policy Committee, and other officials relative to the NTIA grant. Please provide a communication plan as to how you will keep all informed and involved in your work.

2.4 Diversity

Female and minority firms are strongly encouraged to submit proposals. The good faith efforts of all proposers, as evidenced by their Equal Opportunity in Purchasing submittal and their proposal, will be closely reviewed to ensure that they have exercised and continue to exercise efforts to employ and utilize minority employees in their legal practice and on this undertaking. All proposals shall include a statement of recent efforts to include minority and female employees in their legal practice and efforts in promoting inclusion in the profession generally.

2.5 Pricing

Provide rate schedules for all persons who may be involved in providing the requested services. Note – rates will remain at the rate (and adjustment document provided) until December 2013, provided, if there are anticipated adjustments, the Vendor should indicate such in the proposal. This (or a reasonable facsimile) should be an attachment to your proposal.

(a) Partners (List the names of the Partners and billing rates):

(b) Associates (List the names of associates and billing rates):

(c) Paralegals (List the names and billing rates):

(d) Travel Time/Billing Rate/Policy

(e) Other Expenses

Please list here any other anticipated charges relative to services. Note, the City does not pay separately for office expenses, such as duplication, electronic communication charges, or separate research fees (eg: Westlaw or Lexis).

(f) IRU Development

Specifically, for initial partners in the grant process (ie cities, University, School District, Champaign led phase company). (Fixed Fee or Hourly – with a not-to-exceed price)

2.6 Conflicts of Interest

Disclose any conflicts of interest that might be reasonably anticipated.