UC2B Policy Board Agenda

Regular Meeting
January 18, 2012 – 12:00 noon
Council Chambers, 102 N. Neil Street, Champaign, Illinois

I. Call to order

II. Roll Call – Determine Quorum

III. Approve agenda

IV. Approval of Minutes from January 11, 2012 Special Joint Policy Board/ Technical Committee

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

a) Presentation of NEO Fiber's "Evaluation and Recommendations for Pricing and Positioning Strategies, Best Practices for Retail Service Offerings, Residential and Business Services" report (continued discussion from 1/11/12 joint Policy Board/Technical Committee meeting) (Kruse, Ansboury)
b) *Resolution 2012-01 A Resolution Endorsing an Initial Residential Service Tier Offering of 20 Mbps for $20
c) *Resolution 2012-02 A Resolution Recommending Approval of an Alternative Procurement Process for the Fiber To The Premise Construction and Installation Project to the Champaign City Council (Smeltzer, Legner)
d) *Resolution 2012-03 A Resolution Authorizing the Purchase of Core Network Equipment (Smith)
e) *Resolution 2012-04 A Resolution Establishing the 2012 Annual Meeting Schedule for the UC2B Policy Board (Feinen)
f) NTIA/Grant Report (Smeltzer)
g) Canvassing Update (Gant, Meaderds)

VI. Tasks to complete for next meeting

VII. Items for next meeting's agenda

VIII. Public Participation

UC2B Policy Board Agenda

IX. Adjournment

X. Next Meeting:
Wednesday, February 1, 2012, 12:00 p.m. to 1:30 p.m.
Council Chambers, 102 N. Neil Street, Champaign, Illinois

UC2B Policy Board Minutes

Special Joint Meeting of the Policy Board/Technical Committee
January 11, 2012

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

Policy Board Members Present: Abdul Alkalimat, Rev. Zernial Bogan, Brandon Bowersox, Michael DeLorenzo (arrived 12:15 p.m.), Deb Feinen, Minor Jackson, Pete Resnick, Richard Schnuer, Mike Vrem for Tracy Smith.

Technical Committee Members Present: Bill DeJarnette, Bill Gray, Fred Halenar, Mike Vrem (for Tracy Smith), Tony Vandeventer, Ross Veach, David Young, Chris Hamb

I. The meeting was called to order at 12:05 p.m. by Acting Chair Bowersox.

II. Roll Call

III. Approve Agenda: Resnick moved, Alkalimat seconded the motion to approve the agenda. Bogan asked if there could be a discussion regarding a change in meeting time. This item was added to the next meeting agenda. The motion to approve the agenda as presented was passed by voice vote.

IV. Approve Minutes: Feinen moved, Alkalimat seconded the motion to approve the minutes of the December 21, 2011 Policy Board meeting as written. The motion was passed by voice vote. (only Policy Board Committee members voted)

V. *Action/Discussion Items:

a) Business and Operations Planning Consultants – Introduction: Diane Kruse from NEO Fiber outlined her experience and credentials. She introduced Mark Ansboury from Gigabit Squared. Ansboury provided his background as well. (Bio's attached)

b) Presentation of NEO Fiber's "Evaluation and Recommendations for Pricing and Positioning Strategies, Best Practices for Retail Service Offerings, Resident and Business Services": Kruse and Ansboury summarized the Report that was included in the Policy Board packet. Kruse also reviewed information that they had presented to both City Councils Monday and Tuesday. She summarized that the US is currently falling behind in broadband deployment and availability compared with other countries around the world. Others are investing as much as six times the amount of money the

United States has under its national broadband policy. Kruse explained industry trends and how bandwidth demand is increasing tremendously each year. She also discussed the community/focus group input that they have received over the last couple of days noting that everyone they have met with seem to be very supportive of the project and are looking forward to having access. She explained that the discussions have not only centered around participants' organizational needs and interests but have also encouraged them to consider and brainstorm what is possible with this technology in terms of new partnerships, programs and service delivery. Bowersox asked Kruse to discuss her thoughts on service tier pricing and bandwidth. Kruse stated that it is most important at this time for UC2B to determine an initial residential service so that the canvassers are able to communicate that during their efforts to acquire customers. While researching, Kruse and Ansboury found that the average local download speed is between 5 and 10mbps for downloads and 2mbps per upload. So, UC2B should consider offering 20mbps, both download and upload, for $20. They believe this service offering will be robust enough to lure customers of incumbent provides away and to UC2B. It can be offered in the pilot area for certain. At that same level of performance, the competition is charging $70 per month. She did not recommend establishing higher tier offerings beyond this level until they have had a chance to run the financial analysis and develop the business plan as there are many unanswered questions about complementary services and programs that may be possible that would impact pricing for a UC2B connection no matter what the bandwidth. The group discussed variations in pricing among the incumbents and bundling offers that Comcast and AT&T in particular provide to gain subscribers. Ansboury stated that while bundling options sound like a better deal at the time to many subscribers, they are typically short lived "introductory" offers (average 6 months) or dependent upon purchasing other services.

Bogan and Jackson both encouraged UC2B to consider lower price points and tiers as $20 per month may not be affordable for low income families. Kruse stated that is something they have heard from some of the focus group participants and will be working on in their analysis. She explained that it may be possible to build a wireless canopy over at least a portion of the community fairly easily and quickly. With this, it may be possible to offer a less robust service for people that cannot afford the $20/monthly fee or do not need the 20 Mbps. Kruse did caution UC2B about offering the service for free, because then it has no perceived value, and you may be negatively your ability to gain subscribers, revenue. When people are paying for the service, it has value. Board members asked questions about commercial rates. Kruse responded that they have only just begun the real data collection and information gathering process and are not yet prepared to provide a recommendation on this issue yet. The most important aspect was the 20 for $20 to be able to have something in the canvasser's hands when they are going door to door. The business plan and financial models are due to be completed by mid-February.

Delorenzo asked if they have experience working in communities where there is pushback from the other carriers, such as AT&T and Comcast. Kruse and Ansboury both stated that they have experienced some resistance from other carriers and clarified that their approach is to engage them in partnership opportunities where you can because frankly "they need you and you need them". They need the infrastructure and access to the customer base and you need additional services and revenue. The local incumbents

were one of the focus groups that met with Kruse and Ansboury this week, including Volo, Pavlov, Comcast and Champaign Telephone, and they all seem to be willing to work with UC2B. The ultimate goal is better broadband and it behooves everyone to work together.

Board members were encouraged to send any questions and comments on the Reporthave to Teri Legner and she will compile them and forward them on to the consultants for the next meeting. Kruse and Ansboury will also plan on being available by telephone on Wednesday, January 18th for the next UC2B Policy Board Meeting.

c) NTIA/Grant Update: A written report was provided in the packet. Smeltzer stated that the Technical Committee approved the core network equipment purchase recommended by the University yesterday. The Policy Board will be asked to authorize that purchase next week. Legner encouraged everyone to review the set of spreadsheets included in the packet regarding the FTTP procurement process. That item will also be on the agenda next week. Meetings have been scheduled for the contractors regarding the FTTP procurement process for, Saturday, January 14 at 10:00 a.m. in Council Chambers and Tuesday, January 17 at 5:30 p.m. in Council Chambers. Mailings were sent to several minority contractors, local churches and others. Advertisements were placed in six area newspapers.

VI. Public Participation: Champaign Council Member Will Kyles stated that he is very excited about the UC2B project. He was very happy these meetings were occurring and getting the public involved. He feels that low cost, not necessarily free, service is important. Fiber to the home is exceptionally important to him. He asked a question about what happens to the leftover grant money after people sign up. Bowersox answered that the Grant provides for 2500 homes to be connected. After those 2500 are connected, individuals would have to pay the connection fee (approximately $3000 per home). Bowersox explained that if fewer people than that are interested in signing up, then any "leftover" grant funding returns to the Federal government. The money will be spent on a first come, first served basis. So residents in the eligible areas are encouraged to get on the list as soon as possible in the event the response is overwhelming and the funding runs out. Kyles also asked about displaying signage in the census block areas announcing UC2B just to help get the word out even more. He thanked staff for all their hard work on this issue.

A. Adjournment: Meeting was adjourned at 1:30 p.m. by Bowersox.

B. Next Meeting: Wednesday, January 18, 2012, from 12:00 noon to 1:30 p.m. in the Council Chambers at the City of Champaign, 102 N. Neil Street, Champaign. Feinen encouraged Board members to respond prior to the next meeting regarding preference for meeting times (Keeping the meeting on the 1st and 3rd Wednesday's from 12:00 noon to 1:30 or moving to the 1st and 3rd Thursday evenings from 5:15 or 5:30 to 6:45 or 7:00 p.m.)

About NEO's Team

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

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

Diane Kruse – Lead Consultant / Subject Matter Expert

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

Zoomy designed and built fiber optic and FTTH networks for municipalities and real estate developments and owned and operated several FTTH networks throughout the country. During the economic downturn, Kruse sold all of Zoomy's fiber optic network assets, as the housing market showed little improvement likely to happen in the next few coming years. Much of Zoomy's team came with Kruse to NEO Fiber.

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

Kruse was peer-elected and has served as Chairman of the Board of the Fiber to the Home Council, a world-wide non-profit organization whose mission is to promote, educate and accelerate fiber optic broadband and Fiber to the Home deployments, especially in rural parts of the country. She is a frequent speaker at national telecommunications conferences on community broadband networks and FTTH networks and was the Master of Ceremonies for the

Broadband Properties National Summit in April of 2010. Kruse has been a leader in rural broadband initiatives such as the Stimulus Program (ARRA) for broadband, the country's National Broadband Plan, and has been a spokesman for Broadband Properties.

Prior to Zoomy and NEO, Kruse provided consulting services for AT&T, Verizon, Qwest, 360 Networks and Level 3 Communications, where she wrote business and financial feasibility plans, negotiated interconnection, collocation, and IRU agreements, provided network valuations and appraisals, wrote RFPs and negotiated their vendor contracts. Kruse has excellent financial acumen and analytical, project management, communication, and negotiation skills.

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

Kruse's strengths include financial and business acumen, excellent business analysis, and people and communications skills. She is an experienced, creative and energetic leader and visionary and has an excellent track record managing complex and diverse projects. She is well versed in the technical aspects of deploying FTTH networks, and combines her management and entrepreneurial capabilities to yield great results.

Mark T. Ansboury – Executive Sponsor/Subject Matter Expert

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

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

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

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

Mark also served as director for telecommunications at the State of Texas Department of Information Resources, where he was responsible for the Texas Statewide IP and Telemedicine network. He also served as co-chair on the state's Telemedicine Strategic Plans and led the development of the State's Telecommunications Plans. During this period he also served as a legislative consultant on the Texas Telecommunications Reform Act of 1996.

RESOLUTION NO. 2012-01

A RESOLUTION

ENDORSING AN INITIAL RESIDENTIAL SERVICE TIER OFFERING OF 20 MBPS FOR $20

WHEREAS, NEO Fiber, LLC has provided UC2B with its "Evaluation and Recommendations for Pricing and Positioning Strategies, Best Practices for Retail Service Offerings, Residential and Business Services" Report; and

WHEREAS, this Report is attached hereto and incorporated herein; and

WHEREAS, the Federal Broadband Technology Opportunities Program grant received by the Board of Trustees at the University of Illinois provides funding for Fiber To The Premise installations for customers located in the "unserved" and "underserved" areas of Champaign-Urbana; and

WHEREAS, this Report provides the data and analysis to support an initial residential service tier offering of 20 Mbps of bandwidth for $20.

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

Section 1. The Policy Board endorses an initial residential service tier offering for customers located in the eligible "unserved" and "underserved" areas of Champaign-Urbana of 20 Mbps for $20.

RESOLUTION NO. 2012-01
PASSED:

APPROVED:_____
Policy Board Chair

NEO Fiber
Evaluation and Recommendations for Pricing and Positioning Strategies Best Practices for Retail Service Offerings Residential and Business Services

Submitted by:

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NEO Fiber
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Website: www.NEOfiber.net

BROADBANDUSA
CONNECTING AMERICA'S COMMUNITIES

Background Information

Purpose of the Report.

The purpose of this report is to provide market information and analysis, data and insight into competitive service and pricing offerings in the marketplace, and to provide strategies and best practices for retail residential and business service offerings and pricing considerations for UC2B.

This report will address the following questions:

- Provide recommendations on current pricing proposals and associated bandwidths with particular attention paid to offerings in the FTTH areas.
- Provide an evaluation of and recommendations for UC2B's options for pricing retail services for business v. residential customers.
- Should UC2B consider non-profit pricing alternatives?
- Provide alternatives, advantages and disadvantages, and recommendations for UC2B to consider related to FTTH equipment deposits.
- Identify the terms and conditions for consideration and inclusion in retail customer service agreements for all types of customer classifications, i.e. business, residential, non-profit. Provide draft agreements for UC2B to consider.
- Identify UC2B's options, the associated advantages and disadvantages, and recommendations for addressing/providing service to multi-use or multi-family structures. Should UC2B contract with landlords or the tenants? Provide draft customer service agreements if different than above.

Methodology

NEO has access to a comprehensive, broadband Internet transactions database. This database is the result of collecting and analyzing over a half a billion Internet transactions from all over the country. We use proprietary analytical modeling, which includes demographic information, speed tests, Internet order information, the physical addresses of subscribers and the IP addresses of subscribers. These transactions come from hundreds of sources including e-subscription services, and various other sources where the consumer submits their address information and the database captures the consumer's IP address which the database tool then discriminates between residential carriers and business carriers.

For this study, NEO analyzed database data for all of the zip codes and census tracts by block in the Champaign-Urbana area from January through September 2011. The Champaign-Urbana communities represent over 48,761 households and 1,760 businesses. The sample data was

scrubbed for duplicate transactions (in other words, we eliminated the returning customer data records in information regarding churn rate) and then we analyzed 5% of the total households (1,845 discrete sample households) and 5% of the businesses (77 discrete sample businesses) to determine providers or carriers, type of services, pricing information. A slightly smaller sample (1,111 households and businesses) was analyzed to determine actual speed tests.

On the following pages, actual market data in the Champaign-Urbana area was captured. This data was used to make intelligent pricing, product, positioning and marketing recommendations.

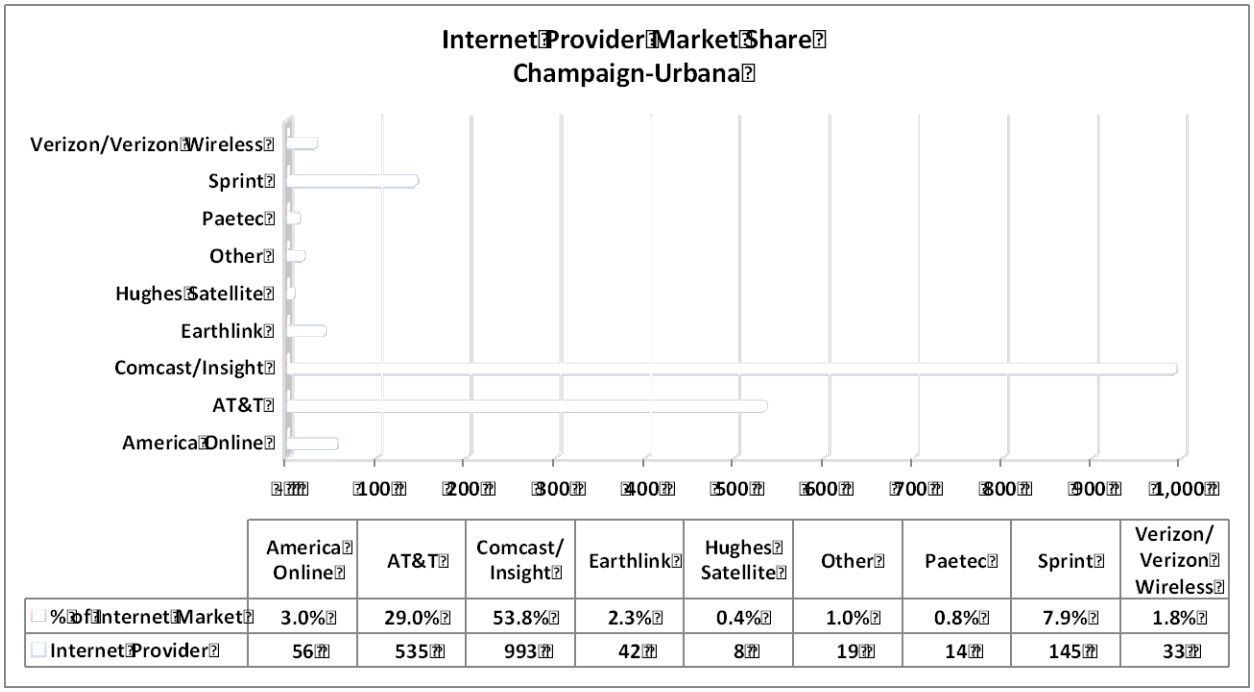
A complete business plan should be provided before UC2B finalizes its pricing and product sets in the market. This way, a sustainable approach can be established that provides a path to profitability. However, UC2B could use the information in this report to understand the market, the strategy, the positioning and initial pricing that can be offered in the marketplace, with the understanding that the pricing may need to change based upon the other findings in the business plan.

Market Analysis

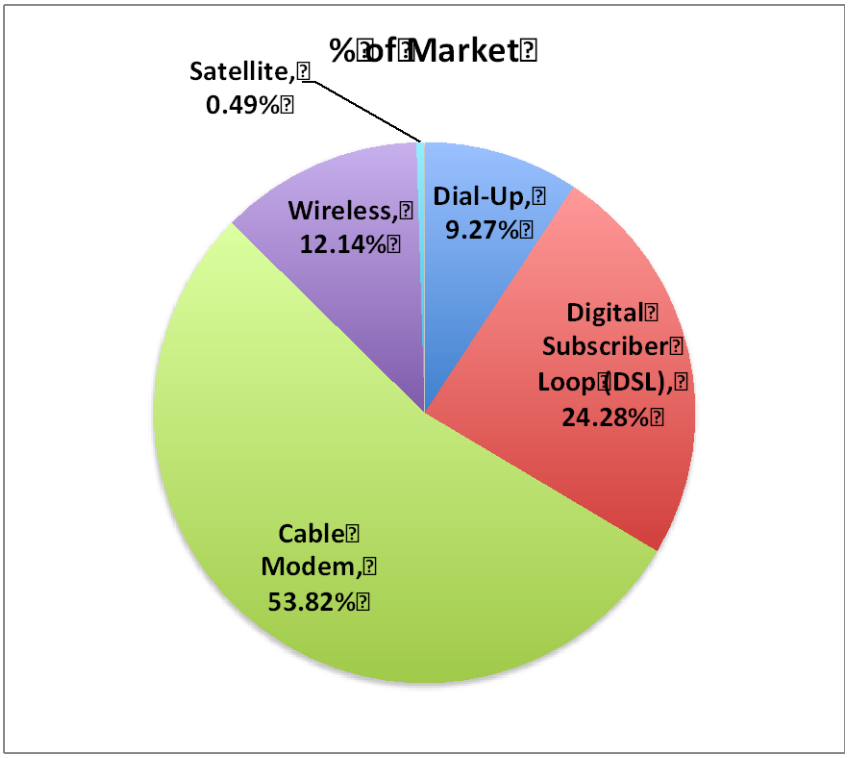
Existing Providers and Market Share

Provider	Internet Provider	% of Internet Market
America Online	56	3.0%
AT&T	535	29.0%
Comcast/Insight	993	53.8%
Earthlink	42	2.3%
Hughes Satellite	8	0.4%
Other	19	1.0%
Paetec	14	0.8%
Sprint	145	7.9%
Verizon/Verizon Wireless	33	1.8%
Total	1,845	100%

Comcast is the market leader with 53.8% of the market share. AT&T follows Comcast with 29% of the market share. Third party providers such as America Online, Volo, Juno, Earthlink and others make up over 6.4% of the market. Third party provdiers use DSL/Cable partners and fixed wireless to deliver network access. Approximately 1.8% currently relies on wireless as their sole Internet access service.



Type of Service Delivery



Service	Subscribers	% of Market
Dial-Up	171	9.27%
Digital Subscriber Loop (DSL)	448	24.28%
Cable Modem	993	53.82%
Wireless	224	12.14%
Satellite	9	0.49%
	1845	**100%**

With Comcast/Insight having 54.6% of the market share, it makes sense that a similar percentage of the service delivery is cable modem.

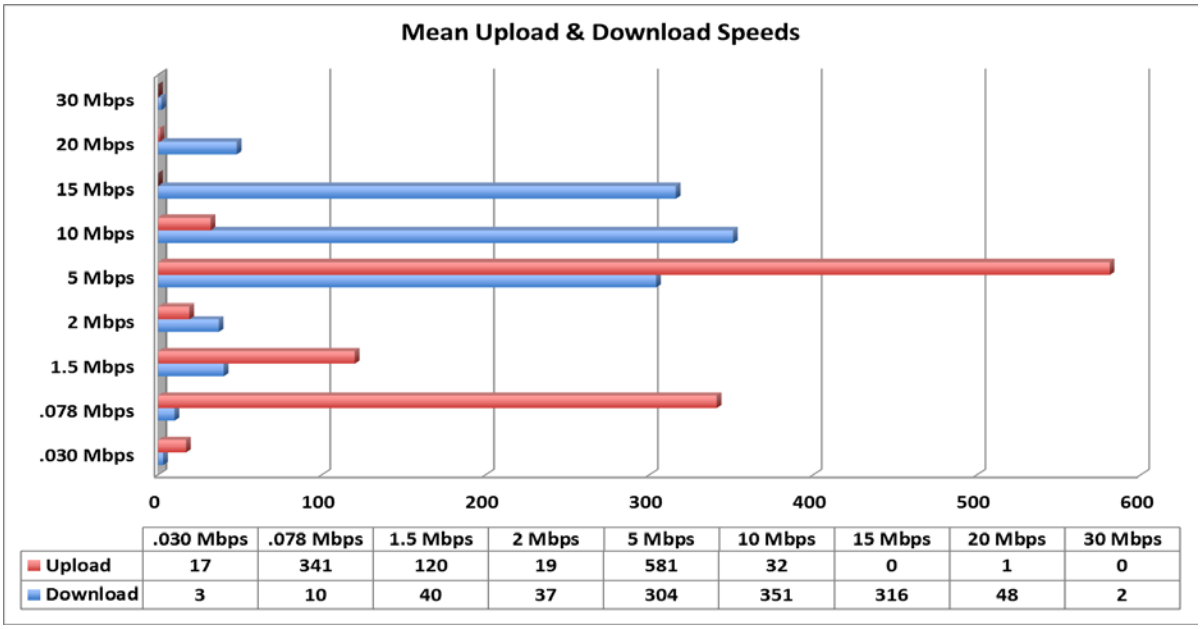
AT&T is offering their service via Digital Subscriber Loop (DSL) services. No one is currently offering services via Fiber to the Home technology. As no other company is currently offering their services using Fiber to the Home technology, UC2B should highlight this as a main selling point and advantage of its service offerings. The benefits and applications only available on Fiber to the Home are provided later in this document.

Service Offerings

Existing Bandwidth and Speeds Available

Mean Speeds	Download	Upload
.030 Mbps	3	17
.078 Mbps	10	341
1.5 Mbps	40	120
2 Mbps	37	19
5 Mbps	304	581
10 Mbps	351	32
15 Mbps	316	0
20 Mbps	48	1
30 Mbps	2	0
Subtotal Speed Samples	**1111**	**1111**

Existing service offerings are asymmetrical; meaning, the download speeds are not the same as the upload speeds. The competitors are providing service offerings where the upload speeds are much slower than the download speeds. Most of the customers are subscribing to download speeds between 5 Mbps and 15 Mbps. The upload speeds that customers are subscribing to are between less than 1 Mbps up to 5 Mbps.



The charts above show what service offerings are being ***subscribed to*** by customers.

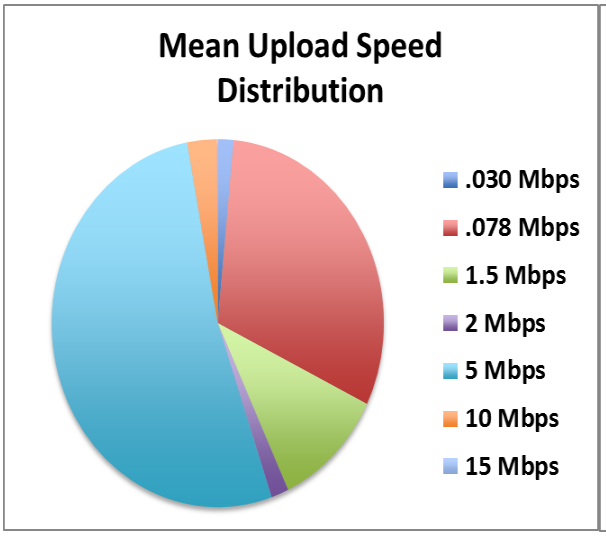
The charts on the following page show what actual speeds are ***available to*** customers.

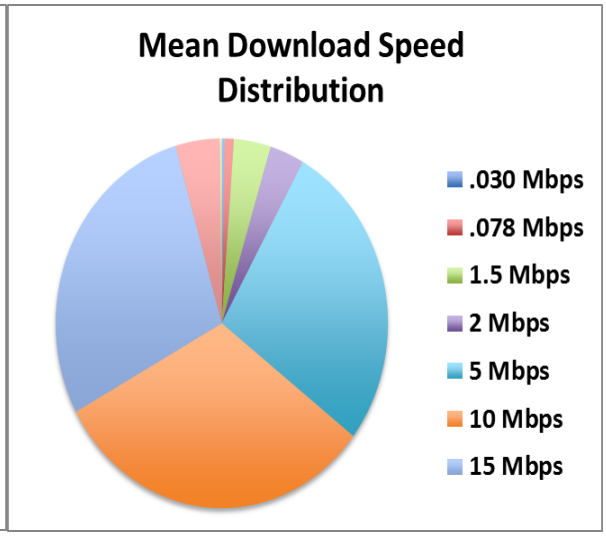
The actual speed available is less than the advertised speed of the service. Another significant point to be made is that customers are paying for bandwidth that they are not currently getting. This is another differentiator of Fiber to the Home networks; more speed is available for both

upload and download applications, and should be emphasized as another selling point of UC2B's service offering.

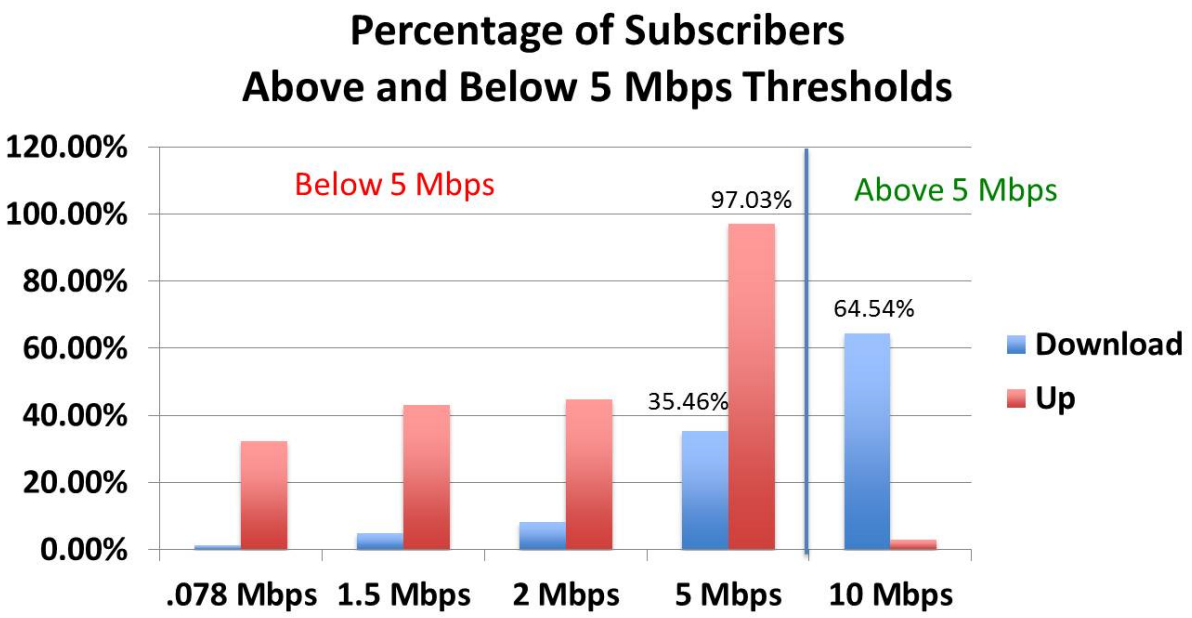
Mean Upload Speeds	Upload
.030 Mbps	1.53%
.078 Mbps	30.69%
1.5 Mbps	10.80%
2 Mbps	1.71%
5 Mbps	52.30%
10 Mbps	2.88%
15 Mbps	0.00%
20 Mbps	0.09%
30 Mbps	0.00%
Subtotal Speed Samples	**100%**

Mean Download Speeds	Download
.030 Mbps	0.27%
.078 Mbps	0.90%
1.5 Mbps	3.60%
2 Mbps	3.33%
5 Mbps	27.36%
10 Mbps	31.59%
15 Mbps	28.44%
20 Mbps	4.32%
30 Mbps	0.18%
Subtotal Speed Samples	**100%**





Actual speed test samples were taken. The actual mean upload speeds are between less than 1 Mbps and 5 Mbps, with most of the upload speeds at 5 Mbps (52.3%). The actual download speeds range between 5 Mbps (27.36%), 10 Mbps (31.59%) and 15 Mbps (28.44%).



Over 35% of the subscribers are below 5 Mbps which is the threshold established by the Rural Utilities Services as underserved. Over 97% of the subscribers are capped by download speeds lower than 5 Mbps. Due to the predominance of cable and DSL within the urban communities of Champaign and Urbana, over 64% of the broadband consumers have access to 5 Mbps or higher, 12% lower than the national norm.

Residential Pricing, Service Offerings

Note: These are mostly Asymetrical Services with a cap of around 5-6 Mbps upstream.

Residential/SMB	AT&T	Comcast/Insight DOCSIS 3 Cable	OneEleven Wireless	OneEleven DSL	Conxxus DSL	Volo DSL/Wireless	Consolidated DSL	HughesNet Satellite
1.5 Mbps								
6 Month Introductory Price								39.99
12 Month Introductory Price								
Post Introductory Price			[illegible]0.00					79.99
Bundled Price								
3-4 Mbps								
6 Month Introductory Price								
12 Month Introductory Price	[illegible]9.95							
Post Introductory Price	[illegible]8.00		[illegible]0.00	[illegible]9.95	[illegible]9.95	[illegible]2.00	[illegible]9.95	
Bundled Price								
5-8 Mbps								
6 Month Introductory Price								
12 Month Introductory Price	[illegible]4.95							
Post Introductory Price	[illegible]3.00		[illegible]5.00	[illegible]9.95				
Bundled Price								
10-12 Mbps								
6 Month Introductory Price		[illegible]9.95						
12 Month Introductory Price	[illegible]9.95							
Post Introductory Price	[illegible]8.00	[illegible]9.95		[illegible]1.95				
Bundled Price		[illegible]4.95						
18 Mbps								
6 Month Introductory Price								
12 Month Introductory Price	[illegible]9.95							
Post Introductory Price	[illegible]3.00							
Bundled Price								
20 Mbps								
6 Month Introductory Price								
12 Month Introductory Price								
Post Introductory Price		[illegible]9.95						
Bundled Price								
24 Mbps								
6 Month Introductory Price								
12 Month Introductory Price	[illegible]9.95							
Post Introductory Price	[illegible]3.00							
Bundled Price								

UC2B is proposing to offer 20 Mbps for $20 per month. UC2B's initial proposal at the time of the grant applications was to offer 5 Mbps at the $19.95 price. After a more diligent market analysis, it is clear that this offering 20 Mbps of bandwidth for the same price will encourage current subscribers to move to UC2B, especially when it is pointed out that the customer is not always receiving the level of bandwidth from the current providers that the customer is subscribing to. In other words, the customer is not getting what they are paying for from the competition.

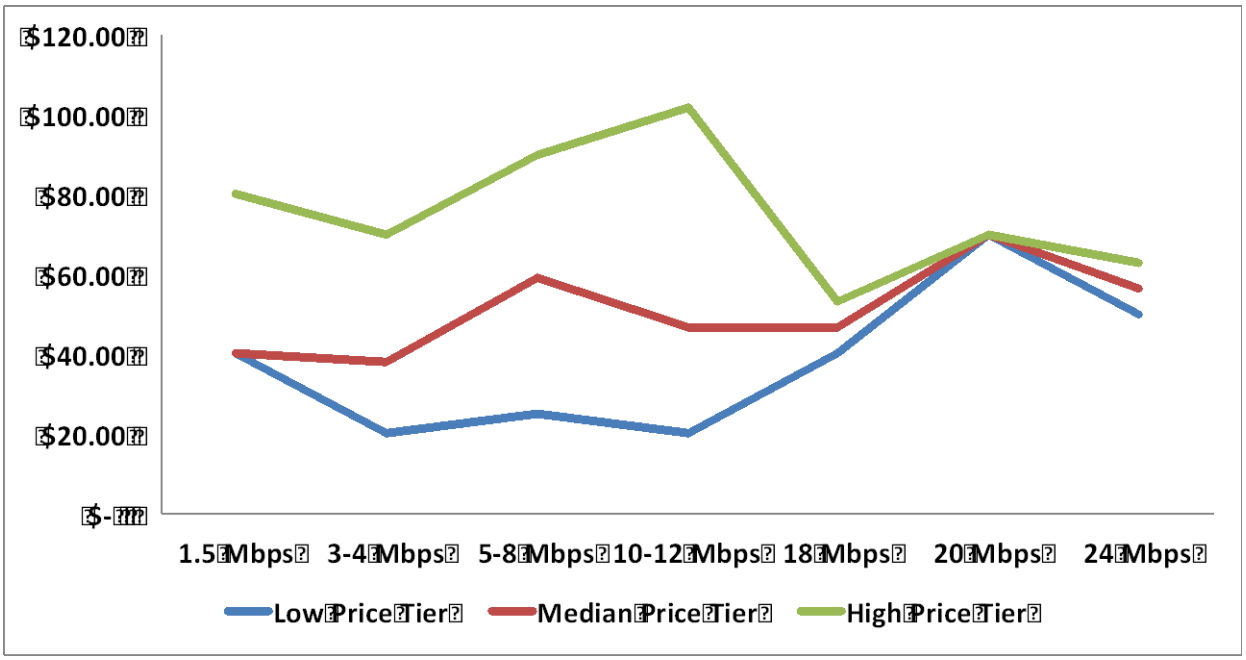
With UC2B offering 20 Mbps for $20 per month; the competition is offering the same amount of bandwidth for 2-3 times this price. AT&T is offering 18 Mbps for $39.95 initially; with the price increasing to $53 per month after 12 months. Comcast/Insight is offering 20 Mbps for $69.95. Most of Comcast's customers are on the 10-12 Mbps offering, receiving 5 Mbps of service for a price of $19.95 for six months, then jumping to $59.95 per month. Other competitors are offering 3-4 Mbps for $19.95 to $69.95.

Consumer	Basic Services Best Effort Upstream	Upgraded Upstream 1-2 Mbps Max	Upgrade Upstream 2 to 5 Mbps Max
Price/Service Tie	**Low Price Tier**	**Median Price Tie**	**High Price Tier**
1.5 Mbps	$ 39.99	$ 40.00	$ 79.99
3-4 Mbps	$ 19.95	$ 38.00	$ 69.95
5-8 Mbps	$ 24.95	$ 59.00	$ 89.95
10-12 Mbps	$ 19.95	$ 46.48	$ 101.95
18 Mbps	$ 39.95	$ 46.48	$ 53.00
20 Mbps	$ 69.95	$ 69.95	$ 69.95
24 Mbps	$ 49.95	$ 56.48	$ 63.00
Upstream	<700 Kbps	1 to 2 Mbps	2 to 5 Mbps
Low	**$ 19.95**	**$ 38.00**	**$ 53.00**
Median	**$ 39.95**	**$ 46.48**	**$ 69.95**
Max	**$ 69.95**	**$ 69.95**	**$ 101.95**

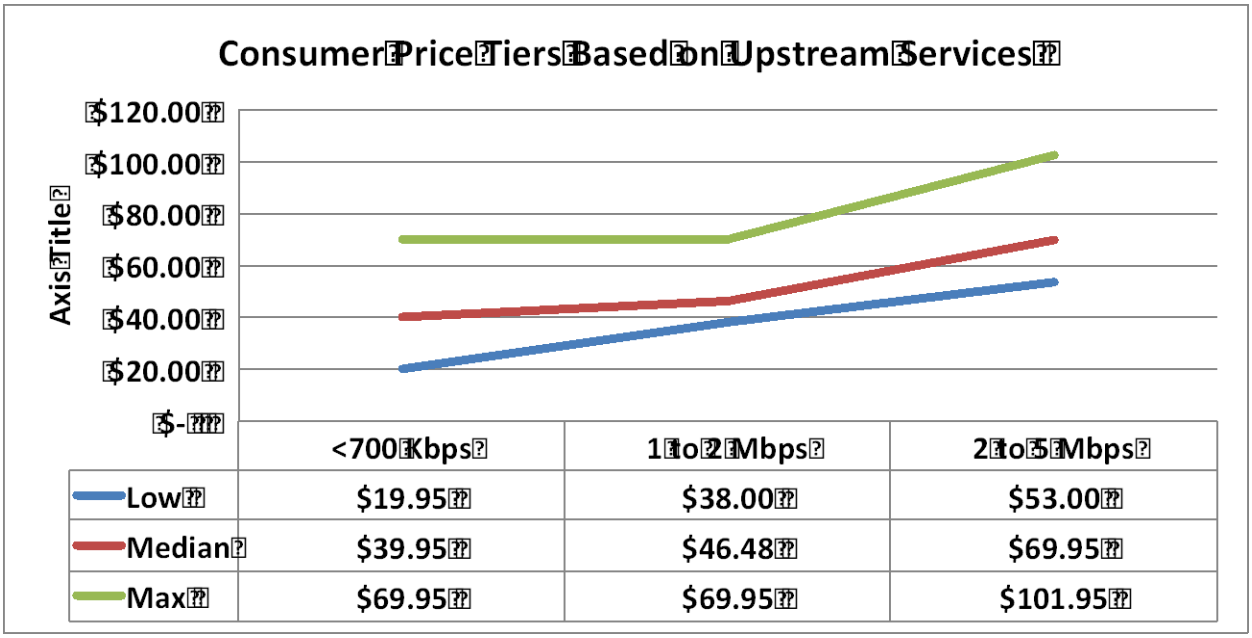
All of the service providers offer a "best effort" service; meaning, they will make their best effort, yet do not guarantee the level of service or the amount of bandwidth the customer will actually receive. To receive a higher level of service and to upgrade the available bandwidth for uploading data, the existing service providers charge the customer more. This could be a differentiating feature of UC2B's service offering. With Fiber to the Home, the minimum bandwidth received by the customer could actually be guaranteed by UC2B.

UC2B should be aware that many of the consumers of broadband are currently purchasing bundled services from cable/DSL providers. Comcast currently offers a bundled Triple play service at $99 which is the predominate bundle within the underserved community. Since UC2B is competing with bundled and unbundled services it will have to consider that the bundled offerings will be tougher to compete with unless there is a VoIP/IPTV alternative. Comcast

unbundled VOIP/TV will increase in price to as much as $112 for VoIP/TV without the data component making the UC2B and Cable package more expensive for the existing consumers of these services. Comcast has already announced that it will be lowering its price for bundled services.



What is interesting is that there are currently very few high bandwidth providers and only one above 18 Mbps. So, the convergence of low, medium and high pricing at the 20 Mbps service level around $66 per month is based on the fact that there is no competition above 18 Mbps. In addition, there is a wide variance in pricing across the Cable, DSL and Wireless providers.



	<700 Kbps	1 to 2 Mbps	2 to 5 Mbps
Low	$19.95	$38.00	$53.00
Median	$39.95	$46.48	$69.95
Max	$69.95	$69.95	$101.95

Summary of salient points:

- Comcast/Insight is the market leader with 53.8% of the market share. AT&T follows Comcast/Insight with 29% of the market share.
- With Comcast having approximately 54% of the market share, it makes sense that a similar percentage of the service delivery is cable modem. AT&T is offering their service via traditional Digital Subscriber Loop (DSL) services as well as U-Verse, which bonds DSL copper pairs for greater bandwidth. No one is currently offering services via Fiber to the Home technology. In addition, Comcast/Insight and AT&T have not upgraded their data cable network infrastructure to support the next tier of services (100 Mbps). UC2B should market the advantages of its Fiber to the Home offering, being the only service provider using this technology.
- 97% of the Upload Speeds are less than 5 Mbps. Over 35% of the download speed is less than 5 Mbps, now considered underserved. Approximately 64% within the urban setting have speeds greater that 5 Mbps, 12% lower than the national average. The actual speeds are typically 20 to 30% less than advertised and because of oversubscription, often are less than 50% of the advertised rates at peak periods. No other provider is marketing symmetrical services or any kind of service level agreement. This is an advantage for UC2B.
- Customers are paying for a service level that they are not actually receiving. All of the other service providers are offering their service as a "best effort." In order to actually receive the advertised bandwidth, especially for uploading data, the customer needs to pay higher rates. UC2B could offer a guarantee on service levels as a differentiator in the marketplace.
- Comcast has a 6-month introductory price of $19.99; after than it reverts to $59.99 or a bundled price of $44.95 for bandwidth speeds of 10 Mbps of download,

asymmetrical of 5 Mbps or less upload. AT&T has a 12-month introductory price of $29.95; after that it reverts to $48.00.

- Comcast/Insight does provide bundled services (Triple Play) that reduce the overall cost based on the uptake of the additional product offers. Both Comcast and AT&T will be able to offer bundled rates, simplifying the "triple play" decision and providing the appearance of lower rates for similar services. As UC2B does not have this capability, this is a disadvantage for UC2B. UC2B could partner with other VoIP/IPTV providers to mitigate this disadvantage. Groups like Roku, Boxee, and others are building a portfolio of Over-The-Top applications to compete with the local cable operators. UC2B will continue to negotiate with companies such as Netflix and Google as peering partners to offer movies and content on demand.

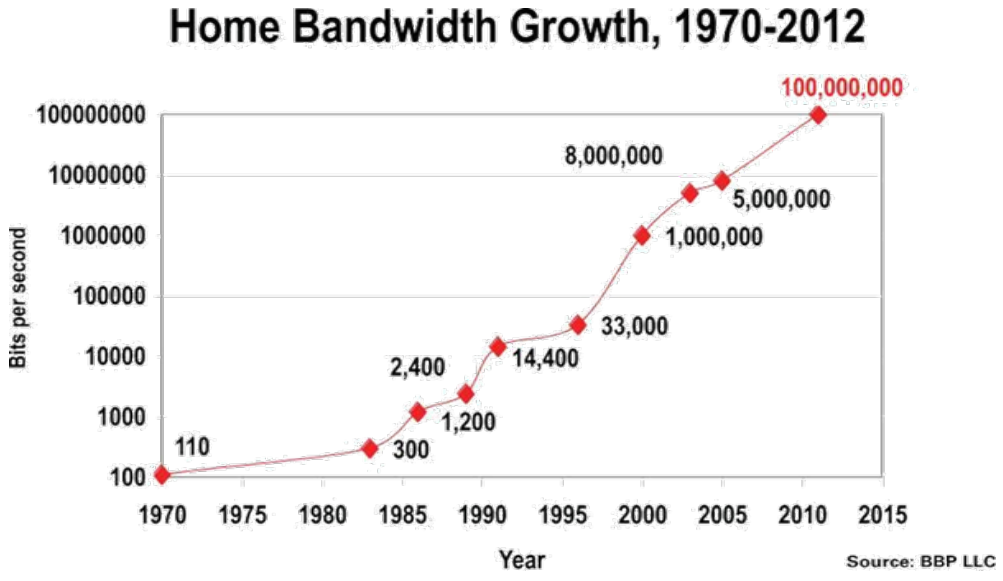
Recommended Positioning and Pricing Information to Consider including in Sales Materials

Positioning, Fiber to the Home Benefits

Advanced Fiber-To-The-Home (FTTH) Networks

There are many advantages that UC2B can provide as the only company that is offering Fiber to the Home as a network service delivery technology. These advantages include:

- The future demand for more bandwidth is expected to increase to over 1 Gbps within three years (by 2015). Fiber to the Home is the only service delivery that will be "Future Proof," offering virtually unlimited capacity for accommodating "bandwidth hungry" emerging technologies and consumers. With You Tube and Skype, cable modem and DSL are not adequately meeting the bandwidth needs of today, let alone the projected need for bandwidth in the near future.



- The current trends are already beginning to push the boundaries of existing home area networks and will continue to drive the applications bandwidth and home consumer services beyond the limits of the existing provider networks. The average in home user profile is more than one stream of video and basic applications.
- FTTH architecture eliminates all "last mile" copper limitations; bottlenecks.
- Using an all fiber network extended directly to the end-user premise will deliver higher customer satisfaction and superior performance surpassing anything in the Cable or DSL experience today. A survey conducted by the market research firm, RVA, LLC found that overall satisfaction amongst FTTH users is far greater (74% stating "very satisfied") than cable modem users (54% stating "very satisfied") and DSL users (51%).
- Greater bandwidth speeds, for both uploading and downloading data can be provided only by Fiber to the Home. Comcast/Insight and AT&T have not upgraded their network technology to accommodate the higher bandwidth applications that are being seen in the marketplace today. Fiber to the Home can accommodate 100 Mbps – 1 Gbps speeds; DSL and cable modem networks cannot support these speeds.
- This investment in technology will enable the delivery of new products and content while delivering cost savings through reduced operational and maintenance expense for UC2B. UC2B can then pass on the reduced operational and maintenance expenses to their customers. With regard to cost of service relative to download connection speed, the RVA national survey results showed FTTH subscribers paying $2.91 a month per megabit of bandwidth, compared to $3.83 for cable subscribers, $16.40 for DSL, and $49.38 per megabit for fixed wireless services. It is understood that fixed wireless services in the Champaign-Urbana area are more competitively priced; these results reflect national survey information.
- With FTTH, customers will be able to more easily telecommute, with a direct connection to the business' data applications. Many of UC2B's customers will be anchor tenants (the University, hospitals, major employers, the City and government offices) with a direct connection to the Fiber to the Home network. Having the ability to connect directly to UC2B's network over a fiber optic connection gives the appearance to the computer user that they are simply an extension or "on" the corporate or university network, given speeds and access as if they were working in the corporate or university office.

Fiber to the Home can more readily support Symmetrical Service; Why Do We Care About This?

There is a significant emergence of advanced, bandwidth-intensive applications that not only require large availability for download speeds, but also upload speeds as well. Customers are creating videos, pictures, and CAD files that need to be uploaded, requiring large bandwidth upload speeds. **In addition, over-the-top TV applications, gaming and cloud-based services are driving up the need for available capacity and the move towards expanded two-way communications. These over-the-top frameworks are also increasing the need for attaching and sharing home/business access creating the need for greater two-way service access.**

The Fiber to the Home Council, a non-profit organization whose mission is to promote and educate about the need for more Fiber to the Home connections, cites research concluding that consumer demand for symmetrical bandwidth, with the increasing use of applications such as cloud computing and a host of essential services in the areas of education and healthcare will "easily exceed 25 Mbps within just five years."

What are the applications that are available only on a Fiber to the Home network?

tal	70 to 100 Mbps		12.5 to 354 Mbps +	4 to 84 Mbps +

The average household in the Champaign-Urbana area is 2.3 persons. The average service consumer is becoming a multi-tasker and a mobile user of devices in the home. The estimated home user has multiple active devices as shown in the table above and depending on the applications is estimated to consume 70 to 100 Mbps in the near future requiring on average 4 to 84 Mbps services through a residential gateway. As technology such as 3D takes hold it is entirely possible that the Home Area Network and certainly the residential gateway will become the limiting factor to the delivery of these new services.

Fiber to the Home can also support Potential Partnering with Triple Play Services, Bundling of Services

The benefit of having one provider for voice, Internet and cable TV, and "bundling" these services into one invoice, with the added incentive of additional savings for cable TV and voice services is often an advantage for subscribers. UC2B, as the network owner, may decide to utilize the network to support triple play services, as well as a number of other applications. This may be provided through compensated access agreements and partnerships with alternative service providers to offer a bundled, triple play service.

As a neutral network owner, UC2B could also partner with the power and other utility companies to provide automated meter reading, load balancing, and remote energy management services. UC2B could also partner with the local police for security monitoring and video surveillance services. There are a number of applications that can be supported on UC2B's FTTH network and our meetings with key stakeholders can help in the discovery of potential partnership opportunities for UC2B. This ability to be a neutral provider and not a typical service provider is an excellent advantage for UC2B. UC2B has the unique ability to look at what behavior they would like to incent; i.e. what areas of influence could UC2B provide in terms of automated meter reading, energy management, healthcare initiatives, public safety, and economic development initiatives? As many of these anchor tenants will be directly connected to the UC2B network over a fiber optic connection, what other applications could be packaged with UC2B's Internet services to help solve many of the communities' problems or initiatives?

What Price/Service Offering will get Residential Customers to Change?

Typically, a 25-30% price reduction will incent a residential customer to change providers, if all other things are equal. If the price reduction is coupled with greater bandwidth speeds, enhanced services, and symmetrical bandwidth, this may provide an even greater incentive for customers to make a change to UC2B.

UC2B's initial thoughts regarding pricing and bandwidth offerings are provided on the following chart, along with a side-by-side comparison of pricing and bandwidth offerings available from the competition:

Comparison of UC2B Pricing vs. the "Market"				
Consumer	Symetrical	Basic Services Best Effort Upstream	Upgraded Upstream 1-2 Mbps Max	Upgrade Upstream 2 to 5 Mbps Max
Price/Service Tiers	UC2B's Pricing	Low Price Tier	Median Price Tier	High Price Tier
1.5 Mbps	NA	$ 39.99	$ 40.00	$ 79.99
3-4 Mbps	NA	$ 19.95	$ 38.00	$ 69.95
5-8 Mbps	$ 19.99	$ 24.95	$ 59.00	$ 89.95
10-12 Mbps	$ 29.99	$ 19.95	$ 47.95	$ 101.95
18 Mbps	NA	$ 39.95	$ 46.48	$ 53.00
20 Mbps	$ 39.99	$ 69.95	$ 69.95	$ 69.95
24 Mbps	NA	$ 49.95	$ 56.48	$ 63.00
30 Mbps	$ 49.99			
40 Mbps	$ 59.99			
Upstream		**<700 Kbps**	**1 to 2 Mbps**	**2 to 5 Mbps**
Low		**$ 19.95**	**$ 38.00**	**$ 53.00**
Median		**$ 39.95**	**$ 47.95**	**$ 69.95**
Max		**$ 69.95**	**$ 69.95**	**$ 101.95**

Conclusion and Recommendations

UC2B has an ambitious goal of gaining 50% market share in the underserved areas within six months. As an initial introductory and incentive program, offering a price/service delivery of 20 Mbps symmetrical service for $20 per month would seem to be an aggressive and impressive offering that would incent customers to change to UC2B. The service offering is 2-4 times better than the 5 Mbps – 15 Mbps "best effort" service offering for 50-75% of the price.

The initial feedback from UC2B's door-to-door canvassers is that between 50% and 60% of all the people they have talked to are interested in the service and want a follow-up "sales" visit. "20 Mbps for 20 bucks" would help close those sales. If UC2B hits a 50% penetration level, UC2B's initial financial model is sustainable and the two cities will have the ability to consider broader expansion plans of their network.

Coupled with the other benefits mentioned above, we at NEO believe this is an excellent price/ service delivery to introduce into the marketplace to meet UC2B's goal of gaining as much market share as soon as possible within a relatively short amount of time. We recommend a term agreement is needed to secure this pricing to reduce churn and to lock-in customers. Something else to consider may be to offer this service and pricing coupled with other initiatives that UC2B would like to incent, working in partnership with UC2B's anchor tenant community. This may be another way to lock in a customer in the long-term and gain market share quickly. This second option may take longer for UC2B to put in place; however, having the ability to be a neutral player and not a typical service provider, coupled with the fact that UC2B is a local provider that can focus and provide a hyper-local offering, will be an excellent competitive advantage over what other providers can offer in the marketplace.

Dealing with Landlords, MDUs, Apartments, Master Planned Communities

Key Objectives:

The principal objective in negotiating a private communications transaction is to install a high quality Fiber to the Home (FTTH) infrastructure platform capable of delivering a broad array of best-in-class high-speed internet access (HSIA) and communications related services. This FTTH platform will serve as an amenity of the property that will help market the property / community and enhance the pace and revenue associated with occupying units. A secondary objective of the transaction is to derive a mutually beneficial revenue stream from the sale of these communications products and services.

A notable aspect of the arrangement is that the Property Owner is not required to fund the full cost of the infrastructure. The arrangement also ensures that the services provided to the property are of the highest quality, and includes service and performance standards that exceed the best of what is otherwise currently available, as well as provisions for service and system upgrades in light of changing technology and end user demand for greater amounts of bandwidth.

The Product:

High-Speed Internet Access (HSIA)

Typical service tier offerings based on the competitive marketplace for MDU's:

- 5 Mbps download / 1 Mbps upload - basic service, lowest product in marketplace. Good product to bulk.
- 8 Mbps / 2 Mbps - competitive product, usually Cable lowest speed available, also good product to bulk
- 15 Mbps / 3 Mbps - generally highest tier that is typically offered in the marketplace
- 25 Mbps / 5 Mbps - only FTTH providers are able to offer this level of service
- 50 Mbps / 10 Mbps – unmatched in marketplace, super user status; again, only available with Fiber to the Home

The Sales Strategy Options: To provide services on a "Bulk" service plan or not? What are the advantages and disadvantages of a Bulk Plan?

Offering a Bulk Plan typically means contracting with the landlord of the MDU or master planned community for 100% of the tenants in the apartment or community. Usually there is one invoice that is sent to the landlord for 100% of the tenants; the landlord then bills the end users or the price for services is included in the Homeowners' Association fee or in rent. Generally, pricing is established on a bulk per unit price; however a flat monthly price for the building or for the community is also an acceptable practice. Bulk price discounting typically reflects a 20-30% reduction off of the retail marketplace pricing for like or similar service tiers. Typically as an incentive to offer a Bulk Plan, the landlord receives a percentage of the revenue (i.e. a "revenue share") or an up-front door fee based upon the number of subscribers.

Offering a Bulk Plan – Advantages to UC2B:

- 100% take rate. UC2B eliminates its competition in the building or community.
- The Property purchases the desired HSIA product tier from UC2B in bulk and provides service to individual units as a part of their rent or as a separate service.
- Marketing rights are typically included in the contract with the landlord. UC2B is able to provide marketing collateral to the end user in the community or common areas; and most likely receives move-in customer information, and has exclusive rights to market its services to tenants of the building.
- UC2B has opportunity to up-sell higher tiers of HSIA service or other services directly to end-users. Base pricing could be bulked through the landlord or HOA and customers who elect for higher tiers of HSIA service or other services would be billed directly for the upgraded service.
- Minimal UC2B cost associated with end-user "churn" (move-in/move-outs)
- Minimal UC2B debt collection issues, one primary commercial grade client, one invoice, one collection point
- Limited customer billing requirements and marketing cost
- Potential for the provisioning of other communication services that can be carried on FTTH infrastructure including voice, traditional video and over-the-top, home security, etc.
- Bundling of all products to create higher penetration/ higher margin returns.
- Opportunity to up-sell higher tiers of HSIA service, billing the tenant directly for these upgraded services
- Incremental business from other adjacent commercial clients that require higher bandwidth capacity and incorporating marketplace economies of scale.

Offering Bulk, the Disadvantages to UC2B:

- In many cases, the landlord is not technology-savvy and dealing with the landlord versus working with each individual tenant can be cumbersome. The landlord acts as a gatekeeper to the tenant.

- The Cat 5 wiring within most buildings built over five years ago or longer is often sub-par. If UC2B decides to have one demarcation point and one common Ethernet switch within the building, the existing inside wiring must be upgraded. With the early entrants of Fiber to the Home service providers (i.e. Verizon, Connexion Technologies and Zoomy Communications) the number one trouble issue could be blamed on existing sub-par inside wiring.

- The landlord often has trouble keeping power to the shared Ethernet switch.

Non-bulk or Subscription; Contracting directly with the Tenants – Advantages to UC2B

- Pricing for services is the same as dealing with any other customer. No special pricing is offered to the tenants.

- No "deal" is needed with the landlord; no door fees, or revenue share.

- Individual end-users subscribe with UC2B for the provision of HSIA service. Product is priced at retail rates competitive within the marketplace.

Non-bulk or Subscription; Contracting directly with the Tenants - Disadvantages to UC2B:

- Must compete against other providers on property (or wireless carrier) including their introductory or special offers.
- Must support all end-user churn. Apartments can churn at 40% annually, student housing 100%.
- Higher bad-debt from individual users (possible solution is to require auto-pay with use of credit card on file).
- More billable accounts to support and higher marketing cost to attract subscription.

Landlord Deal Strategies / Benefits to the Landlord

- The Fiber to the Home or to each unit becomes another property amenity, providing the best infrastructure (FTTH) and HSIA product in marketplace which will contribute directly to the Property establishing and maintaining higher occupancy levels thus more rent.

- Highly reliable network.
- Offer Service Level Agreement (SLA) superior to incumbents.
- Ability to bundle with other service providers offering better value to end-user.
- Competitive advantage as the Property can market itself with a premiere broadband service offering.

Other common offerings as part of the deal to the Landlord:

- Establish demonstration center / kiosk in community center or leasing office.
- Free service in Business Center.
- Free service to property management office.
- WiFi "hot spots" in common area locations; community centers, pool, fitness center.

Other Common Practices in Dealing with the Landlord.

A common practice in Bulk Subscription Agreements is to offer a revenue incentive where the Landlord has the opportunity to earn incremental revenue based upon the number of subscribers that participate in the program. These revenue incentives are typically structured in the following manner:

- Door Fee (Marketing Assistance Fee), one-time payment per servable unit (door) for the right and privilege to serve property, typically $200 - $300 per door. Higher door fees have been paid (up to $750) for longer deal terms in excess of 15 years. These Door Fees are not covered by the grant; NEO's comments regarding Door Fees are provided below.

- Revenue share incentive. Should be combined with an *Exclusive Marketing Agreement* and tied to service penetration on the property. EXAMPLE revenue share penetration formula (based on 100% of units):

  (Service penetration = Revenue Share)

  0 – 49% = 0%

  50 – 59% = 3%

  60 – 69% = 5%

  70 – 79% = 8%

  80%+ = 10%

NEO's Input and Recommendations

For UC2B, the vision was to run fiber into each apartment unit, and to be able to treat each tenant as if it was a single family home. This strategy will eliminate the very likely risk of needing to use sub-par inside wiring. As the grant will pay for the ONTs and the installation costs, this seems to be an excellent strategy. To UC2B's network management system, the unit at the MDU would have the same appearance as a single family home, and therefore, there would be no need to establish different operational and trouble resolution processes for MDU's.

Perhaps a strategy of providing a bulk rate to the building could be incorporated to obtain 100% take rate (the primary advantage of Bulk Rate Programs), yet the customer relationship for customer service, billing upgrades, trouble resolution would be between UC2B and the end user (mitigating the primary disadvantage of Bulk Rate Programs.) UC2B would bill the landlord or HOA directly for the base pricing for 100% of the tenants. Customers who elect to upgrade their HSIA and/or obtain additional services would be billed directly by UC2B. Additional services may be wi-fi, a community intranet, a computer concierge service or through a partnership with a VoIP/IPTV player, voice and TV services. It may be negotiated with the landlord which services are incorporated into the Bulk Rate Program in addition to the base HSIA services. Obviously bulking as many services as possible through the Bulk Rate Program is an advantage for UC2B. These negotiations are usually on an individual case basis; the same program for one apartment/MDU program may not always be replicated with a different landlord.

Although it is common practice to offer the landlord a door fee or a revenue share, the benefits to the landlord of having fiber to each unit may outweigh the need to provide compensation. As Door Fees are not grant eligible, and as UC2B is currently the only Fiber to the Home based service provider in the market, coupled with the fact that UC2B is providing fiber to each tenant (a substantial investment from UC2B; an excellent amenity for the landlord), NEO recommends that UC2B avoid the practice of revenue sharing or Door Fees. We believe the benefits of Fiber to the Home, UC2B's competitive price offer to tenants, and bringing fiber to each unit are more than sufficient reasons for the landlord to grant building/apartment access to UC2B and engage in negotiations of Bulk Pricing.

Agreements typically required to facilitate transaction:

- Construction Agreement (terms of FTTH infrastructure placement)
- Service Agreement (Bulk or Subscription) **SAMPLE AGREEMENT PROVIDED**
- Exclusive Marketing (includes Landlord incentives)
- Right-of Entry / Perpetual Easements (establishes rights to be on property)

Items to be contemplated, mitigated or negotiated:

There are a number of other considerations that need to be "thought through" in terms of implementing strategies with landlords. These items are highlighted below.

- Training for leasing agents and property managers
- Inside wiring - older existing wiring can have limitations:
    - CAT5E or better required. Buildings over 15 years old may require some re-wiring.
    - Business deal could be to offer rewiring as an alternative to door fees or revenue share
    - FTTH building and wiring specifications for distribution to Landlord

  (These issues regarding FTTH specifications and addressing older inside wiring standards are not a concern if, in fact, UC2B installs fiber directly to each unit)
- Student Housing challenges: hacking, gaming, bandwidth utilization, heavy customer transaction activity twice annually associated with beginning and ending of school term.
    - Require a student surcharge; student user application monthly base support fee
    - Put in place strong provider *"Terms & Conditions"* that allow you to shut down any end-user for reasons you deem necessary to protect the network
    - Consider not allowing the use of wireless routers in dorm rooms
- CPE (customer-owned premise equipment), i.e. switches, routers, gaming devices
    - Offer additional maintenance products to support
    - Sell common wireless router that you can support
- WiFi "hotspots"
    - Open or secure requiring authentication?
- Ongoing Client Relations / the Property Support Team
    - Free service to the Property Manager and on-site superintendent
    - Develop program to incent the Property Manager for monthly move-in lists
- Service Activation Specialist to support new activations
    - Many users will need on-site set-up support
- Managing Email and Storage requirements
    - Possible outsource to a "gmail" type solution
- End of *Service Agreement* term alternatives

        - Renew
        - Buy out of infrastructure
- Competitor use of infrastructure
- Compensated access

Business and Commercial Services

Pricing Strategies for Business and Commercial Services

Pricing is typically significantly higher for business services versus residential services, and this is certainly the case with the Champaign-Urbana market.

The following is the existing pricing and service delivery offered in the marketplace:

Commercial	Speed Tier	Bronze Low-end Internet/Voice	Silver High-End Internet/Voice	
AT&T Ethernet	100 Mbps	$ 475.00	$ 475.00	
	1 Gbps	$ 850.00	$ 850.00	
	CIR-100 Mbps	$ 700.70	$ 818.26	Have been combine servies for health and education as low as $650 for 100 MBPS PORT/CIR
	CIR - 1 Gbps	$ 1,004.25	$ 1,189.68	Have been combine servies for health and education as low as $1,100 for 1000 MBPS PORT/CIR

		Low-end Internet/Voice	High-End Internet/Voice
Paetec Ethernet	100 Mbps	$ 425.00	600
	1 Gbps	$ 1,530.00	2000

		Low-end Internet/Voice	High-End Internet/Voice
Comcast	22/5 Mbps	$ 399.00	$ 899.00
	50/10 Mbps	$ 489.00	$ 948.00
	100/10 Mbps	$ 650.00	$ 1,048.00

		Quote
High Speed Solutions	10/10 Mbps	$ 1,076.00
	20/20 Mbps	$ 1,326.00
	50/50 Mbps	$ 1,888.00
	100/100 Mbps	$ 2,735.00

Side-by-Side Comparison, Commercial Services

Mbps	Low-End AT&T	High-End AT&T	Low-End Paetec	High-End Paetec	Low-End Comcast	High-End Comcast	High Speed Solutions
10							$ 1,076.00
20					$ 399.00	$ 899.00	$ 1,326.00
50					$ 489.00	$ 948.00	$ 1,888.00
100	$ 1,175.00	$ 1,293.68	$ 425.00	$ 600.00	$ 650.00	$ 1,048.00	$ 2,735.00
1000	$ 1,854.25	$ 2,039.68	$ 1,530.00	$ 2,000.00			

UC2B's desire is to offer reliable and affordable Internet connectivity for businesses to attract businesses to Champaign-Urbana. UC2B could most certainly break from tradition in its pricing strategy by offering a similarly priced offering to small businesses as it is offering to the residential market, as its entry point in the market. Will a small 8-person office with a 20 Mbps connection use more bandwidth than a two-parent two-kid household with a 20 Mbps connection? Probably, but their demands will be at different times of the day with only overlap in the late afternoon. The demand placed on the UC2B network by business users during the day will not impact how UC2B sizes its upstream connection. It will be the residential users' evening demand that will determine that. Larger businesses that require additional IP addresses, or higher bandwidth needs would be priced competitively in the marketplace.

UC2B's vision for the UC2B network is to be one that does not slow down whenever the kids are home from school or late at night. If a customer is a customer, no matter if they are a family, a home business or a business in its own building, UC2B does not have to care about what the customer does with its Internet connection. The customer signs up for as much bandwidth as is needed (or can afford) and UC2B does not spend any time worrying about whether someone is running a business on a residential connection. There is no gaming the system, because there is no system to game.

UC2B's initial thoughts of offering 20 Mbps for $20 ($19.99) would position itself as the low cost/highest reliability and performance leader. The pricing is extremely competitive; perhaps too low, especially for a business Internet offering. However, this same pricing strategy for businesses will create a shock factor; as the price/performance is far better than what the competition is offering, and will most likely allow UC2B to gain valuable market share quickly.

If UC2B decides this pricing is too low; perhaps UC2B could offer this pricing as an introductory price, which reverts to a higher price after some time. Or perhaps offering this pricing to businesses that are in startup mode (younger than 2 years) or to non-profit organizations, or to companies with fewer than (8) employees might be a good incentive to attract new businesses to the area or to incent small businesses to form. Perhaps this rate is packaged with some other behavior that UC2B would like to incent. Again, as UC2B is in the unique position of being a neutral network provider; not a typical ISP, the question should be asked, what problems are there to be solved and what behavior could UC2B incent with their fiber-based, ultra-high speed network?

UC2B is providing one IP address included in the $19.99 price. Another suggestion may be that the definition of a business customer is one in which the customer has one IP address. If the customer only has one IP address, then the customer qualifies for the residential package of 20 Mbps for $20. With additional IP addresses, the customer receives the higher priced business

rate of $100 (see below). Many businesses will need additional IP addresses, and the pricing could be structured in tiers, something similar to the following:

Proposed Business/Commercial Pricing

IP Addresses	Monthly Price
1 IP Address	Included in the monthly price
2 to 5 IP Addresses	$14.95
6 to 13 IP Addresses	$34.95
14 to 29 IP Addresses	$59.95

NEO also suggests offering businesses the option of subscribing to more bandwidth, again with a tiered pricing approach. The tiered pricing approach would also narrow the gap between what UC2B is offering versus what the competition is offering. Tiered pricing could be the following:

Proposed Business/Commercial Pricing

Speed	Monthly Price
Introductory 20/20 Mbps	$ 19.99
20/20 Mbps	$ 100.00
40/40 Mbps	$ 300.00
60/60 Mbps	$ 500.00
80/80 Mbps	$ 700.00
100/100 Mbps	$ 900.00

The introductory rate of 20 Mbps for $20 could be offered to customer with one IP address, or for a limited time offer with a term plan. For example, the introductory price may be for one year with a three year term plan. After the first year, the rate reverts to $100 per month for the rest of the term.

This pricing would narrow the gap between what UC2B is offering and what the competition is offering, and it is still very competitively priced.

UC2B is also considering pricing for a direct connection or Private VLAN connection on the network. Anchor tenants would be charged this pricing for Ethernet connections to other customers on the network.

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

UC2B is planning to offer the following pricing:

Business and Anchor Institutions, Private VLAN, Layer Two Service			
	Downstream Mbps	Upstream Mbps	Pricing Plan per Month
Private VLAN 10 Mbps Location	10	10	$ 100
Private VLAN 100 Mbps Location	100	100	$ 400
Private VLAN 1 Gbps Location	1000	1000	$ 1,200

This pricing seems to be competitively priced as well. AT&T is offering a Private VLAN product for health and education applications of $650 for 100 Mbps (UC2B is offering this at $400 per month) and $1,100 for 1Gbps. UC2B may want to adjust their pricing to be more competitively priced with AT&T (UC2B is planning to offer this at $1,200).

Other Issues regarding Contracting, Deposits, and Best Practices

The demographics of the UC2B FTTP service areas include a large number of lower income families and students. There is significant risk of non-payment of invoices. In order to mitigate this risk, the following strategies could be put in place:

1. Deposits on Equipment. A large, one-time deposit on the equipment may be difficult for a lower income household to absorb. The deposit on the equipment could be in the form of a credit card payment that is "held" but not charged unless the customer does not return the equipment, or does not pay their bill. Or another consideration could be to spread the costs of the deposit over a 3-month or 6-month timeframe.

2. Credit Card Billing. In order to have service with UC2B, it could be required to have a credit card on file and have the credit card billed automatically monthly. This eliminates much of the collection efforts and costs associated with billing and collections. This does not eliminate the collection efforts entirely, however, much of the costs are diminished. Although this may be a good process to put in place; the reality of the market must also be addressed. Many other service providers who serve low-income areas have found as many as 50% of the low-income households to not have a checking account or credit card. The ideal may be to do auto drafts or credit card billing; however, this may not be an option for many of the households in the UC2B service area.

3. Billing One-Month in Advance. This is common practice in the telecommunications and cable TV industry. The first month billing would include a pro-rated portion of what is left of the month, plus the following month's service. The customer is essentially billed in advance for services.

4. Temporary and Permanent Shut off of Service. If payment is not received within 7-10 days after the payment due date, UC2B can shut off service temporarily. If payment is not received after 14 days, the service can then be permanently shut off. This practice often facilitates timely payment for services. Another suggestion may be that UC2B customers who pay late may lose their Internet connectivity, but not their Intranet connectivity. This allows children to still do their homework and parents to still be able to work from home; and serves as a gentle reminder that payment needs to be made in order to connect to the Internet.

Draft agreements for end users have been provided to UC2B by NEO.

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:

(6) counts of fiber * $200 per mile * 100 route miles = $120,000 annually or valued at $2.4 Million 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).

RESOLUTION NO. 2012-02

A RESOLUTION

RECOMMENDING APPROVAL OF AN ALTERNATIVE PROCUREMENT PROCESS FOR THE FIBER TO THE PREMISE CONSTRUCTION AND INSTALLATION PROJECT TO THE CHAMPAIGN CITY COUNCIL

WHEREAS, the UC2B Policy Board approved Resolution 2011-7 Adopting a General Policy on Minority Inclusion in Contracting; and

WHEREAS, Resolution 2011-7 states that UC2B will make concerted efforts to manage all procurement opportunities in a manner that offers increased opportunity for minority inclusion in contracting.

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

Section 1. The UC2B Policy Board recommends an alternative procurement process for the fiber to the premise construction and installation project consistent with the plan that is attached hereto and incorporated herein.

RESOLUTION NO. 2012-02
PASSED:

APPROVED:_____
Policy Board Chair

1/13/12

Plan for the UC2B Fiber-to-the-Premise Construction/Installation RFP

In order to achieve the various goals enumerated on the attached list, the UC2B Policy Board seeks to conduct the bidding for the next phase of UC2B construction in the following manner:

1. Split the work into the six horizontal/vertical packages as shown on the attached chart. Bidders are allowed to bid on just one package, all packages or most logical combinations of those packages that match up with their capabilities. Some of these packages may be worth less than $100,000. Some may be worth more than $1,000,000. The work is split logically, geographically as well as by type or division of work, i.e. inside work v. inside work.

2. UC2B will collect standardized information from companies that desire to work as subcontractors on this phase of UC2B construction. UC2B cannot vouch for any vendor, but will provide the information collected from potential sub-contractors to all prime contractors seeking bid information.

3. Prime contractors (bidders) will need to pre-qualify with the University of Illinois Facilities and Services office. This is not an arduous task, nor does it take months, but it should eliminate potential vendors who are not capable of doing this work.

4. A 15% MAFBE utilization goal will apply to prime contractors responding to this request. Of that MAFBE utilization, at least 10% of the total, or 2/3 of the MAFBE goal, must be applied to minority-owned MAFBE firms. If unable to secure the MAFBE utilization as described here, proposers must demonstrate a good faith effort was made to meet the goal. The MAFBE process addresses minority and female business ownership but not the diversity of the workforce.

5. Prime contractors will be required to pledge in their bid that “X” percentage of their workforce will be minority workers. Contractors can chose any value for “X” that they feel appropriate.

6. The scoring for the bids for this next phase of construction will be scored on both price and the percentage pledged for a diverse workforce. Bids with lower prices and a higher percentage of ethnic minority workers will be scored higher than bids with higher prices and a lower percentage of ethnic minority workers. The proposed split between scoring price and diversity is 75% price, 25% diversity. UC2B will award the work to the firm or firms that score the highest when factoring in both price and diversity.

7. From the UC2B start-up fund, a bonus will be awarded to the contractor or contractors that meet or exceed their pledged minority workforce participation through the length of the project. The exact mechanism for determining the level of the bonus is yet to be determined, but the Policy Board recommends 1% payment based upon the final contract amount.

8. Prime contractors will be required to provide a performance bond written for the duration of the contract in the amount of _____% of the contract price. In exchange for the reduced performance bond for the prime contractor, the prime contractor(s) also pledge to reduce the performance bonds they require of their sub-contractors to _____% of the subcontract.

9. A 10% retainage of each pay request will be required. However, after defined project milestones, e.g. percentage of contract completion such as number of completed, working connections, the applicable retainage will be released.

UC2B FTTP Construction Issues **12/16/11**

The UC2B Policy Board and its member agencies, i.e. the Cities of Urbana and Champaign and the University of Illinois, desire to increase local minority and female participation in the Fiber to the Premise (FTTP) construction project and are seeking input on ways to achieve this goal. The purpose of this document is to identify the Project, Customer, and Community Benefit Goals for the project along with the applicable Federal, State and Local requirements, regulations, limitations and barriers and to discuss ideas and opportunities to achieve these goals.

I. NTIA, DCEO and UC2B Project Goals

A. Complete 2,700 FTTP installations within the NTIA grant's budget
B. Complete 2,700 FTTP installations for the least possible cost
C. Complete 2,700 FTTP installations before February 1, 2013
D. Perform the work efficiently and correctly
E. Increase broadband adoption by households, businesses and Anchor Institutions
F. Increase broadband adoption by "vulnerable populations" as described by ARRA
G. Minimize the oversight and coordination needed by city or UC2B staff

II. UC2B Customers' Goals

A. Receive a robust low-cost, high-bandwidth Internet Service
B. Receive competing telecommunication services over a shared fiber infrastructure
C. Have the work performed efficiently and correctly
D. Have the work performed promptly – once started, complete within 48 hours – as weather permits
E. Minimize damage to property and properly restore all damage
F. Minimize the number of times UC2B installers need to be in the home or business

III. Community Benefit Goals

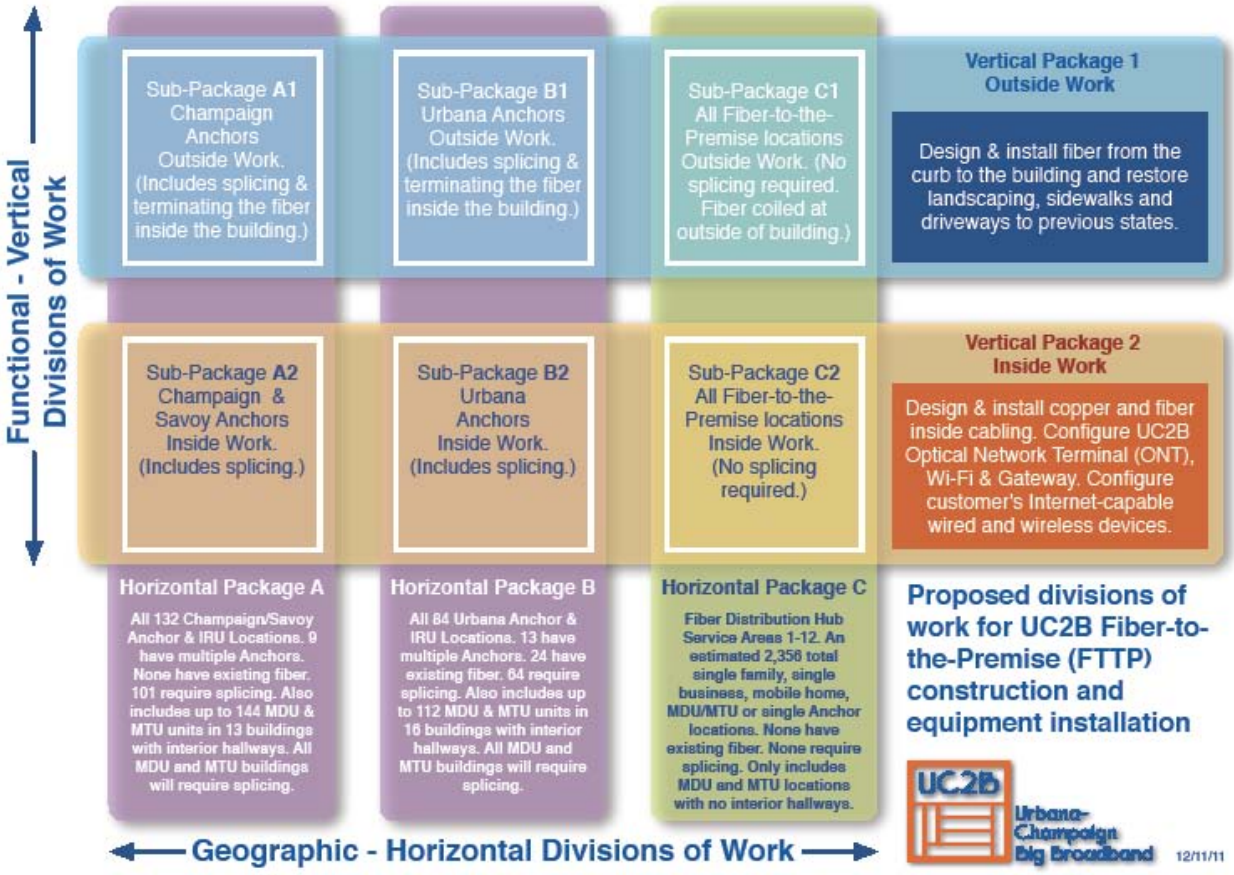
A. Receive a robust, low-cost, high-bandwidth Internet service
B. Receive competing telecommunication services over a shared fiber infrastructure
C. Increase broadband adoption by households, businesses and Anchor Institutions
D. Maximize the employment of local ethnic minority and female workers
E. Maximize the employment of local ethnic minority- and female-owned companies
F. Create long-term sustainable fiber construction and installation employment

IV. Federal/State/Local Regulations, Limitations, Barriers

A. Federal grant regulations prohibit geographically based hiring criteria
B. Davis-Bacon wage rates and reporting obligations apply, adding to project cost and administrative burden (certified payrolls required with pay requests)
C. Performance bonding requirements
D. Lack of broad local expertise in this type of work

E. Limited City/UC2B staff available to manage multiple contracts for work conducted on private property
G. No engineering design completed for this work requiring qualified and experienced installation contractors
H. Limited knowledge of the FTTP customer base (connections) at time of bidding
I. The NTIA grant requires project completion by February 1, 2013

**Not all goals described above are compatible with each other. In instances where they conflict or are in competition with each other, decisions must be made in order to proceed with implementation of the project. For example, in an effort to maximize work opportunities for employees and/or companies, the project has been broken down into 6 component parts leading to the potential of having 6 contractors working on the project. Managing multiple contracts/contractors leads to less accountability, less efficiency and more demands on limited City/UC2B staff time.


Functional - Vertical Divisions of Work
Sub-Package A1 Champaign Anchors Outside Work. (Includes splicing & terminating the fiber inside the building.)
Sub-Package B1 Urbana Anchors Outside Work. (Includes splicing & terminating the fiber inside the building.)
Sub-Package C1 All Fiber-to-the-Premise locations Outside Work. (No splicing required. Fiber coiled at outside of building.)
Vertical Package 1 Outside Work
Design & install fiber from the curb to the building and restore landscaping, sidewalks and driveways to previous states.
Sub-Package A2 Champaign & Savoy Anchors Inside Work. (Includes splicing.)
Sub-Package B2 Urbana Anchors Inside Work. (Includes splicing.)
Sub-Package C2 All Fiber-to-the-Premise locations Inside Work. (No splicing required.)
Vertical Package 2 Inside Work
Design & install copper and fiber inside cabling. Configure UC2B Optical Network Terminal (ONT), Wi-Fi & Gateway. Configure customer's Internet-capable wired and wireless devices.
Horizontal Package A
All 132 Champaign/Savoy Anchor & IRU Locations. 9 have multiple Anchors. None have existing fiber. 101 require splicing. Also includes up to 144 MDU & MTU units in 13 buildings with interior hallways. All MDU and MTU buildings will require splicing.
Horizontal Package B
All 84 Urbana Anchor & IRU Locations. 13 have multiple Anchors. 24 have existing fiber. 64 require splicing. Also includes up to 112 MDU & MTU units in 16 buildings with interior hallways. All MDU and MTU buildings will require splicing.
Horizontal Package C
Fiber Distribution Hub Service Areas 1-12. An estimated 2,356 total single family, single business, mobile home, MDU/MTU or single Anchor locations. None have existing fiber. None require splicing. Only includes MDU and MTU locations with no interior hallways.
Geographic - Horizontal Divisions of Work
Proposed divisions of work for UC2B Fiber-to-the-Premise (FTTP) construction and equipment installation
UC2B Urbana-Champaign Big Broadband
12/11/11

UC2B FTTP Bid Packages

Name of Bidder: Sample Vendor

Only bid the packages or combination of packages that you are willing to do.

Examples: If you are only willing to do Package A1, if you also can do Package A2, then enter bids in lines #1, #2 & #3 (A1 & A2) and do not bid on A1 & A2 individually.

If you are willing to do packages A1, or A2, or both of them and want to offer a better price for doing both, then bid #1, #2, #3, #4, #5, #6 & #7 accordingly.

Your must bid all of the sub-elements of any given package

Example: If you enter a bid for Line #1, you must also enter a bid for Lines #2 and #3.

Failure to bid all the sub-elements of a package will invalidate your bid on that package.

Packages	Number of Locations	Description	Your Bid	Bid Line #	Notes
Packages A1 & A2 (All Champaign Anchors, IRU & Internal Hallway MDU/MTU sites - both Outside and Inside)	132	Champaign Anchor & IRU Sites Inside and Outside		#1	All Anchor & IRU sites in Champaign both Inside and Outside. #2 and #3 must be bid with #1.
	up to 13	Champaign MDU/MTU sites **per Building** Outside work		#2	Must include to bid on #1.
	up to 144	Champaign MDU/MTU sites **per Unit** Inside work		#3	Must include to bid on #1.
Package A1 only (Champaign Anchor, internal hallway IRU & MTU/MDU sites - Outside only)	132	Champaign Anchor & IRU Sites Outside Only		#4	"Outside" Anchor & IRU work includes terminating the OSP drop fiber cable in the building. #5 must be bid with #4.
	up to 13	Champaign MDU/MTU sites **per Building** Outside work		#5	"Outside" MDU/MTU work includes terminating the OSP fiber drop cable in the building. Must include to bid on #4.
Package A2 only (Champaign Anchor, IRU & internal hallway MDU/MTU sites - Outside only)	132	Champaign Anchor & IRU Sites Inside Only		#6	OSP fiber drop cable will already be terminated in the building. #7 must be bid with #6.
	up to 144	Champaign MDU/MTUs sites **per Unit** Inside work		#7	OSP fiber drop cable will already be terminated in the building. Must include to bid on #6.
Packages B1 & B2 (All Urbana Anchor, internal hallway IRU & MDU/MTU sites - both Outside and Inside)	84	Urbana Anchor & IRU Sites Inside and Outside		#8	All Anchor & IRU sites in Urbana both inside and Outside. #9 and #10 must be bid with #8.
	up to 16	Urbana MDU/MTUs per Building Outside work		#9	"Outside" MDU/MTU work includes terminating the fiber in the building. Must include to bid on #8.
	up to 112	Urbana MDU/MTUs per Unit Inside work		#10	Must include to bid on #8.
Package B1 only (Urbana Anchors, IRU & internal hallway MTU/MDU sites - Outside only)	84	**Urbana Anchor & IRU Sites Outside Only**		#11	"Outside" anchor work includes terminating the fiber in the building. #12 must be bid with #11.
	up to 16	Urbana MDU/MTUs **per Building Outside work**		#12	"Outside" MDU/MTU work includes terminating the fiber in the building. Must include to bid on #12.
Package B2 only (Urbana Anchors, IRU & internal hallway MTU/MDU sites - Inside only)	84	**Urbana Anchor & IRU Sites Inside Only**		#13	Fiber will already be terminated in the building. #14 must be bid with #13.
	up to 112	Urbana MDU/MTUs **per Unit Inside work**		#14	Fiber will already be terminated in the building. Must include to bid on #13.
Packages A1, A2, B1 & B2 (All Anchor, IRU & MDU/MTUs sites - both Outside and Inside)	216	**All Anchor & IRU sites Inside and Outside**		#15	#16 and #17 must be bid with #15.
	up to 29	All MDU/MTU sites **per Building Outside work**		#16	Must include to bid on #15.
	up to 255	All MDU/MTU sites **per Unit Inside work**		#17	Must include to bid on #15.
Packages A1 & B1 (All Anchors & MDU/MTUs - Outside only)	216	**All Anchors Outside ony**		#18	"Outside" anchor work includes terminating the OSP fiber drop cable in the building. #19 must be bid with #18.
	up to 29	All Champaign & Urbana MDU/MTU sites **per Building** Outside work		#19	"Outside" MDU/MTU work includes terminating the OSP fiber drop cable in the building.Must include to bid on packages A1 & B1
Packages A2 and B2 (All Anchors & MDU/MTUs - Inside only)	216	**All Anchors Inside only**		#20	OSP fiber drop cable will already be terminated in the building. #21 must be bid with #20
	up to 255	All Champaign & Urbana MDU/MTU sites **per Unit** Inside work		#21	OSP fiber drop cable will already be terminated in the building. Must include to bid on #20.

Packages C1 & C2 (All FTTP sites including MDU/MTU sites with no internal hallway - both Inside & Outside work)	up to 1794	Price **per location** Inside & Outside single location installation (single residential & single business.)		#22	#23 and #24 must be bid with #22.
	up to 267	Price **per single Mobile Home** Inside & Outside installation		#23	Must include to bid on packages C1 & C2.
	up to 859	Price per MDU/MTU sites **per Unit** for Inside and Outside Installation (in buildings with no internal hallway)		#24	Must include to bid on packages C1 & C2.
Package C1 (All Outside installations in the FTTP areas except Anchor, IRU and internal hallway MDU/MTU sites.)	up to 1794	Price **per single installation location** (single residential & single business.)		#25	"Outside" FTTP work leaves the OSP fiber drop cable coiled at the outside of building. Both #26 & #27 must be bid with #25.
	Up to 300	Price **per single mobile home** Outside installation		#26	Outside FTTP work leaves the OSP fiber drop cable coiled at the outside of building. Must include to bid on #25.
	Up to 100	Price **per Outside install per MDU/MTU Unit** (in buildings with no internal hallway)		#27	"Outside" FTTP work leaves the OSP fiber Drop cable coiled at the outside of Unit. Must include to bid on #25.
Package C2 (All Inside installations in the FTTP areas except Anchor, IRU and internal hallway MDU/MTU sites.)	up to 1794	Price **per single location Inside installation** (single residentia & single business.)		#28	"Inside" work includes the building entrance. OSP fiber drop cable will be coiled outside the building. Both #29 & #30 must be bid with #28.
	up to 267	Price **per single mobile home Inside installation**		#29	Inside work includes the building entrance. OSP fiber drop cable will be coiled outside the mobile home. Must include to bid on #28.
	up to 859	Price **per MDU/MTU Unit Inside installation** (in buildings with no internal hallway)		#30	Inside work includes the building entrance. Fiber drop cable will be coiled outside. Must include to bid on #28.
Everything	2700	All Inside & Outside Installation for all FTTP, Anchor and IRU sites.		#31	Total bid for everything
Packages A1, B1 & C1 (All outside work)	216	**All Anchor & IRU sites Outside only**		#32	"Outside" Anchor and IRU work includes terminating the OSP fiber in the building. #37 - #41 must be bid together.
	up to 29	All Champaign & Urbana MDU/MTUs **per Building Outside work** in Buildings with internal hallways.		#33	"Outside" internal hallway MDU/MTU work includes terminating the OSP fiber drop cable in the building. #37 - #41 must be bid together.
	up to 1794	Price **per single location Outside installation** (single residential & single business sites.)		#34	"Outside" FTTP work leaves the OSP fiber drop cable coiled at the outside of building. #37 - #41 must be bid together.
	up to 267	Price **per single mobile home Outside installation**		#35	"Outside" FTTP work leaves the OSP fiber coiled at the outside of building. #37 - #41 must be bid together.
	up to 859	**Price per MDU/MTU Unit** Outside installation (in buildings with no internal hallway)		#36	"Outside" FTTP work leaves the OSP fiber drop cable coiled at the outside of Unit. #37 - #41 must be bid together.
Packages A2, B2 & C2 (All Inside work)	216	**All Anchor and IRU sites Inside only**		#37	Anchor & IRU OSP fiber drop cable will already be terminated in the building. #42 - #46 must be bid together.
	up to 144	All MDU/MTUs with Interior hallways **per Unit Inside work**		#38	MDU/MTU OSP fiber drop cable will already be terminated in the building. #42 - #46 must be bid together.
	up to 1794	**Price per single inside installation location** (single residential & single business.)		#39	"Inside" work includes the building entrance. OSP Fiber drop cable will be coiled outside building. #42 - #46 must be bid together.
	up to 267	Price **per single mobile home Inside installation**		#40	"Inside" work includes the building entrance. OSP fiber drop cable will be coiled outside. #42 - #46 must be bid together.
	up to 859	**Price per MDU/MTU Unit Inside installation** (in buildings with no internal hallway)		#41	Inside work includes the building entrance. OSP fiber drop cable will be coiled outside Unit. #42 - #46 must be bid together.
What percentage of diversity do you pledge to maintain in your workforce assigned to this project throught the life of the project?				#42	See defintions in RFP instructions

Scoring Demonstration Vendors Per Piece Quotes

		Diversity %	A1 & A2	A1	A2	B1 & B2	B1	B2	A1, A2, B1 & B2	A1 & B1	A2 & B2	C1 & C 2	C1	C2	Everything	A1, B1 & C1	A2, B2 & C2
A	Bids on Everything and 6 Pieces	15%	$750	$500	$250	$750	$500	$250	$740	$490	$245	$630	$400	$240	$700	$475	$242
B	Bids on Everything, no pieces	16%													$725		
C	Only Bids Outside work	10%		$490			$490			$485			$390			$450	
D	Only Bids Outside Work	20%		$510			$510			$500			$410			$485	
E	Only Bids Inside Work	12%			$240			$240			$235			$230			$232
F	Only Bids Inside Work	21%			$260			$260			$250			$245			$247
G	Only Bids Outside Anchors	15%		$485			$485			$480							
H	Only Bids Inside Anchors	19%			$235			$235			$230						
I	Only Bids Champ Anchors	17%	$720	$490	$240												
J	Only Bids Urbana Anchors	21%				$710	$480	$235									
K	Only Bids Anchors	18%	$700	$470	$230	$700	$470	$230	$690	$465	$225						
L	Only Bids A1 - Champ Anchors Outside	22%		$515													
M	Only Bids A2 - Champ Anchors Inside	17%			$265												
N	Ony Bids B1 - Urbana Anchors Outside	22%					$515										
O	Only Bids B2 - Urbana Anchors Inside	18%						$265									
P	Only Bids C1- All FTTP Outside	22%											$405				
Q	Ony Bids C2 - All FTTP Inside	19%												$250			
R	Only Bids FTTP (Both Inside and Outside)	20%										$655					

Total $

		Diversity %	A1 & A2	A1	A2	B1 & B2	B1	B2	A1, A2, B1 & B2	A1 & B1	A2 & B2	C1 & C 2	C1	C2	Everything	A1, B1 & C1	A2, B2 & C2
A	Bids on Everything and 6 Pieces	15%	$104,250	$69,500	$51,500	$69,000	$46,000	$35,000	$170,940	$113,190	$84,770	$1,484,280	$942,400	$565,440	$1,890,000	$1,228,825	$653,884
B	Bids on Everything, no pieces	16%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,957,500	$0	$0
C	Only Bids Outside work	10%	$0	$68,110	$0	$0	$45,080	$0	$0	$112,035	$0	$0	$918,840	$0	$0	$1,164,150	$0
D	Only Bids Outside Work	20%	$0	$70,890	$0	$0	$46,920	$0	$0	$115,500	$0	$0	$965,960	$0	$0	$1,254,695	$0
E	Only Bids Inside Work	12%	$0	$0	$49,440	$0	$0	$33,600	$0	$0	$81,310	$0	$0	$541,880	$0	$0	$626,864
F	Only Bids Inside Work	21%	$0	$0	$53,560	$0	$0	$36,400	$0	$0	$86,500	$0	$0	$577,220	$0	$0	$667,394
G	Only Bids Outside Anchors	15%	$0	$67,415	$0	$0	$44,620	$0	$0	$110,880	$0	$0	$0	$0	$0	$0	$0
H	Only Bids Inside Anchors	19%	$0	$0	$48,410	$0	$0	$32,900	$0	$0	$79,580	$0	$0	$0	$0	$0	$0
I	Only Bids Champ Anchors	17%	$100,080	$68,110	$49,440	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
J	Only Bids Urbana Anchors	21%	$0	$0	$0	$65,320	$44,160	$32,900	$0	$0	$0	$0	$0	$0	$0	$0	$0
K	Only Bids Anchors	18%	$97,300	$65,330	$47,380	$64,400	$43,240	$32,200	$159,390	$107,415	$77,850	$0	$0	$0	$0	$0	$0
L	Only Bids A1	22%	$0	$71,585	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
M	Only Bids A2	17%	$0	$0	$54,590	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
N	Ony Bids B1	22%	$0	$0	$0	$0	$47,380	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
O	Only Bids B2	18%	$0	$0	$0	$0	$0	$37,100	$0	$0	$0	$0	$0	$0	$0	$0	$0
P	Only Bids C1	22%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$954,180	$0	$0	$0	$0
Q	Ony Bids C2	19%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$589,000	$0	$0	$0

Demo - UC2B FTTP RFP Scoring - Raw Vendor Numbers

Vendors' Raw Responses																		
Bid Line #	**Vendor A**	**Vendor B**	**Vendor C**	**Vendor D**	**Vendor E**	**Vendor F**	**Vendor G**	**Vendor H**	**Vendor I**	**Vendor J**	**Vendor K**	**Vendor L**	**Vendor M**	**Vendor N**	**Vendor O**	**Vendor P**	**Vendor Q**	**Vendor R**
#1	$99,000.00								$95,040.00		$92,400.00							
#2	$500.00								$500.00		$470.00							
#3	$250.00								$250.00		$230.00							
#4	$66,000.00		$64,680.00	$67,320.00			$64,020.00		$64,680.00		$62,040.00	$67,980.00						
#5	$500.00		$490.00	$510.00			$485.00		$490.00		$230.00	$515.00						
#6	$33,000.00				$31,680.00	$34,320.00		$31,020.00	$31,680.00		$30,360.00		$34,980.00					
#7	$250.00				$240.00	$260.00		$235.00	$240.00		$230.00		$265.00					
#8	$63,000.00									$59,640.00	$58,800.00							
#9	$500.00									$480.00	$470.00							
#10	$250.00									$235.00	$230.00							
#11	$42,000.00		$41,160.00	$42,840.00			$40,740.00			$40,320.00	$39,480.00			$43,260.00				
#12	$500.00		$490.00	$510.00			$485.00			$480.00	$470.00			$515.00				
#13	$21,000.00				$20,160.00	$21,840.00		$19,740.00		$19,740.00	$19,320.00				$22,260.00			
#14	$250.00				$240.00	$260.00		$235.00		$235.00	$230.00				$265.00			
#15	$159,840.00										$149,040.00							
#16	$490.00										$465.00							
#17	$245.00										$225.00							
#18	$105,840.00		$104,760.00	$108,000.00			$103,680.00				$100,440.00							
#19	$490.00		$490.00	$500.00			$480.00				$465.00							
#20	$52,920.00				$50,760.00	$5,400.00		$49,680.00			$48,600.00							
#21	$245.00				$235.00	$250.00		$230.00			$225.00							
#22	$630.00																	$655.00
#23	$630.00																	$655.00
#24	$630.00																	$655.00
#25	$400.00		$390.00	$410.00												$405.00		
#26	$400.00		$390.00	$410.00												$405.00		
#27	$400.00		$390.00	$410.00												$405.00		
#28	$240.00				$230.00	$245.00											$250.00	
#29	$240.00				$230.00	$245.00											$250.00	
#30	$240.00				$230.00	$245.00											$250.00	
#31	$1,890,000.00	$1,957,500.00																
#32	$102,600.00		$97,200.00	$104,760.00														
#33	$475.00		$450.00	$486.00														
#34	$475.00		$450.00	$485.00														
#35	$475.00		$450.00	$485.00														
#36	$475.00		$450.00	$485.00														
#37	$52,272.00				$50,112.00	$53,352.00												
#38	$242.00				$232.00	$247.00												
#39	$242.00				$232.00	$247.00												
#40	$242.00				$232.00	$247.00												
#41	$242.00				$232.00	$247.00												
#42	15%	16%	10%	20%	12%	21%	15%	19%	17%	21%	18%	22%	17%	22%	18%	22%	19%	20%

Demonstration - UC2B FTTP RFP Scoring - Calculated Vendor Numbers

Pink shaded cells are the lowest Price or the highest Diversity percentage

		Vendors' Calculated Numbers																	Lowest/ Highest
Description	**Packages**	**Vendor A**	**Vendor B**	**Vendor C**	**Vendor D**	**Vendor E**	**Vendor F**	**Vendor G**	**Vendor H**	**Vendor I**	**Vendor J**	**Vendor K**	**Vendor L**	**Vendor M**	**Vendor N**	**Vendor O**	**Vendor P**	**Vendor Q**	**Vendor R**	**Bid's**
Champaign Anchors & IRU	A1 & A2	$ 120,206.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$116,246.25	N/A	$111,975.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**$ 111,975.00**
Outside Champ Anchor & IRU	A1	$ 69,262.50	N/A	$ 67,877.25	$ 70,647.75	N/A	N/A	$ 67,184.63	N/A	$ 67,877.25	N/A	$ 63,540.75	$ 71,340.38	N/A	N/A	N/A	N/A	N/A	N/A	**$ 63,540.75**
Inside Champ Anchor & IRU	A2	$ 50,943.75	N/A	N/A	N/A	$ 48,906.00	$ 52,981.50	N/A	$ 47,887.13	$ 48,906.00	N/A	$ 46,868.25	N/A	$ 54,000.38	N/A	N/A	N/A	N/A	N/A	**$ 46,868.25**
Urbana Anchors & IRU	B1 & B2	$ 80,943.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$ 76,586.88	$ 75,388.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**$ 75,388.00**
Outside Urbana Anchor & IRU	B1	$ 45,987.50	N/A	$ 45,067.75	$ 46,907.25	N/A	N/A	$ 44,607.88	N/A	N/A	$ 44,148.00	$ 43,228.25	N/A	N/A	$ 47,367.13	N/A	N/A	N/A	N/A	**$ 43,228.25**
Inside Urbana Anchor & IRU	B2	$ 34,956.25	N/A	N/A	N/A	$ 33,558.00	$ 36,354.50	N/A	$ 32,858.88	N/A	$ 32,858.88	$ 32,159.75	N/A	N/A	N/A	$ 37,053.63	N/A	N/A	N/A	**$ 32,159.75**
All Anchor & IRU - both	A1, A2, B1 & B2	$ 198,207.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$184,492.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**$ 184,492.50**
All Anchor & IRU - Outside	A1 & B1	$ 112,945.00	N/A	$111,865.00	$115,250.00	N/A	N/A	$110,640.00	N/A	N/A	N/A	$107,182.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**$ 107,182.50**
All Anchor & IRU -Inside	A2 & B2	$ 84,182.00	N/A	N/A	N/A	$ 80,746.00	$ 37,300.00	N/A	$ 79,028.00	N/A	N/A	$ 77,310.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**$ 37,300.00**
All FTTP Sites	C1 & C2	$ 1,484,532.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$ 1,543,442.00	**$ 1,484,532.00**
All FTTP Sites Outside	C1	$ 942,560.00	N/A	$918,996.00	$966,124.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$ 954,342.00	N/A	N/A	**$ 918,996.00**
All FTTP Sites Inside	C2	$ 565,536.00	N/A	N/A	N/A	$ 541,972.00	$ 577,318.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$ 589,100.00	N/A	**$ 541,972.00**
Everything Outside & Inside	Everything	$ 1,890,000.00	$ 1,957,500.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**$ 1,890,000.00**
Everything Outside	All Outside	$ 1,228,777.50	N/A	$1,164,105.00	$1,254,661.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**$ 1,164,105.00**
Everything Inside	All Inside	$ 653,400.00	N/A	N/A	N/A	$ 626,400.00	$ 666,900.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**$ 626,400.00**
Diversity Pledge	Diversity	15%	16%	10%	20%	12%	21%	15%	19%	17%	21%	18%	22%	17%	22%	18%	22%	19%	20%	**22%**

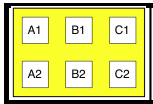
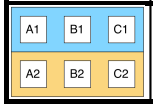
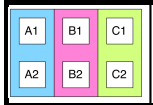
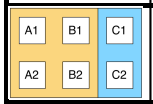
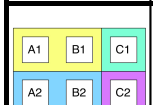
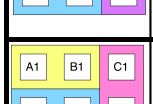
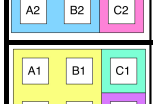
UC2B FTTP RFP Scoring - Calculated Vendor Points

Pink shaded cells are the lowest price or the highest Diversity percentage

		Vendors' Calculated Points (Includes Diversity Points for each calculated point total.)																	
Description	**Packages**	**Vendor A**	**Vendor B**	**Vendor C**	**Vendor D**	**Vendor E**	**Vendor F**	**Vendor G**	**Vendor H**	**Vendor I**	**Vendor J**	**Vendor K**	**Vendor L**	**Vendor M**	**Vendor N**	**Vendor O**	**Vendor P**	**Vendor Q**	**Vendor R**
Champaign Anchors & IRU	A1 & A2	865.3	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	914.6	#VALUE!	954.5	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Outside Champ Anchor & IRU	A1	852.9	#VALUE!	812.5	893.4	#VALUE!	#VALUE!	877.4	#VALUE!	892.0	#VALUE!	954.5	907.9	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Inside Champ Anchor & IRU	A2	855.2	#VALUE!	#VALUE!	#VALUE!	853.8	890.8	#VALUE!	949.6	910.6	#VALUE!	954.5	#VALUE!	829.1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Urbana Anchors & IRU	B1 & B2	865.2	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	976.7	954.5	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Outside Urbana Anchor & IRU	B1	872.6	#VALUE!	831.7	913.4	#VALUE!	#VALUE!	896.5	#VALUE!	#VALUE!	972.7	954.5	#VALUE!	#VALUE!	928.2	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Inside Urbana Anchor & IRU	B2	855.2	#VALUE!	#VALUE!	#VALUE!	853.8	890.8	#VALUE!	949.6	#VALUE!	972.3	954.5	#VALUE!	#VALUE!	#VALUE!	840.4	#VALUE!	#VALUE!	#VALUE!
All Anchor & IRU - both	A1, A2, B1 & B2	864.7	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	954.5	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
All Anchor & IRU - Outside	A1 & B1	880.1	#VALUE!	830.9	920.8	#VALUE!	#VALUE!	896.3	#VALUE!	#VALUE!	#VALUE!	954.5	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
All Anchor & IRU -Inside	A2 & B2	-22.2	#VALUE!	#VALUE!	#VALUE!	12.8	988.6	#VALUE!	126.9	#VALUE!	#VALUE!	150.1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
All FTTP Sites	C1 & C2	920.5	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	947.5
All FTTP Sites Outside	C1	901.2	#VALUE!	863.6	938.8	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	971.2	#VALUE!	#VALUE!
All FTTP Sites Inside	C2	887.8	#VALUE!	#VALUE!	#VALUE!	886.4	939.7	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	900.7	#VALUE!
Everything Outside & Inside	Everything	920.5	905.0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Everything Outside	All Outside	878.8	#VALUE!	863.6	918.9	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Everything Inside	All Inside	888.1	#VALUE!	#VALUE!	#VALUE!	886.4	940.1	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
Diversity Pledge	Diversity	170.5	181.8	113.6	227.3	136.4	238.6	170.5	215.9	193.2	238.6	204.5	250.0	193.2	250.0	204.5	250.0	215.9	227.3

UC2B FTTP RFP - Final Scoring of Combinations
(SAMPLE DATA)

Pink shaded cells are the lowest Price or the highest Diversity percentage

	Combo #	Winning Sub Packages	Winning Vendor	Component Price	Total Price	Component Diversity %	Average Weighted Diversity %	Price Points	Diversity Points	Total Points
	A	All of Everything	A	$ 1,890,000	$ 1,890,000	15%	15.00%	654.31	174.78	829.09
	B	All Outside - Vert-1	D	$ 1,254,661	$ 1,921,561	20%	20.33%	640.19	236.93	877.11
		All Inside - Vert-2	F	$ 666,900		21%				
	C	All Champaign Anchors - Horiz-A	K	$ 111,975	$ 1,732,004	18%	19.93%	725.00	232.24	957.25
		All Urbana Anchors - Horiz-B	J	$ 76,587		21%				
		All FTTP - Horiz-C	R	$ 1,543,442		20%				
	D	All Anchors Outside & Inside - Horiz-A & B	K	$ 184,493	$ 1,727,935	18%	19.83%	726.83	231.05	957.88
		All FTTP Outside & Inside - Horiz-C	R	$ 1,543,442		20%				
	E	All Anchors Outside - A1 & B1	K	$ 107,183	$ 1,676,143	18%	21.44%	750.00	249.81	999.81
		All Anchors Inside - A2 & B2	F	$ 37,300		21%				
		All FTTP Outside - C1	P	$ 954,342		22%				
		All FTTP Inside - C2	F	$ 577,318		21%				
	F	All Anchors Outside - A1 & B1	K	$ 107,183	$ 1,687,925	18%	19.91%	744.73	232.05	976.78
		All Anchors Inside - A2 & B2	F	$ 37,300		21%				
		All FTTP Outside & Inside - Horiz-C	R	$ 1,543,442		20%				
	G	All Anchors Outside & Inside - Horiz-A & B	K	$ 184,493	$ 1,716,153	18%	21.35%	732.10	248.81	980.91
		All FTTP Outside - C1	P	$ 954,342		22%				
		All FTTP Inside - C2	F	$ 577,318		21%				
	H	Champaign Anchors Outside - A1	K	$ 63,541	$ 1,719,076	18%	21.46%	730.79	250.00	980.79
		Champaign Anchors Inside - A2	K	$ 46,868		18%				
		Urbana Anchors Outside - B1	J	$ 44,148		21%				
		Urbana Anchors Outside - B2	J	$ 32,859		21%				
		FTTP Outside - C1	P	$ 954,342		22%				
		FTTP Inside - C2	F	$ 577,318		21%				

Least Cost:	$ 1,676,143	Largest %:	21.46%

City of CHAMPAIGN

REPORT TO UC2B POLICY BOARD

FROM: Teri Legner, Interim UC2B Consortium Coordinator

DATE: January 13, 2012

SUBJECT: A Resolution Recommending Approval of an Alternative Procurement Process for the Fiber to the Premise Construction and Installation Project to the Champaign City Council – Resolution 2012-02

A. Introduction: The purpose of this Resolution is to recommend that the Champaign City Council approve an alternative procurement process for the Fiber to the Premise (FTTP) construction and installation project. The proposed plan for procurement is made in an effort to provide for increased minority inclusion in the work.

B. Recommended Action: Staff recommends approval of the Resolution.

C. Summary:

- The attached articulates the goals of the FTTP construction project, along with the perceived barriers to achieving those goals.
- A draft procurement plan for the project is also attached.
- The plan is developed in an attempt to provide for more minority inclusion in this construction project for, both, minority- and female-owned companies and workers.
- As drafted, the plan provides for 6 component projects which may yield up to 6 separate contractors conducting this work.
- Component projects may range in size from $100,000 to $1,000,000 offering opportunity for small to large companies.
- The plan also provides for minority and female business enterprise (MAFBE) utilization and a bid evaluation process that provides preference points for bidders who pledge a diverse workforce composition.
- The plan addresses historical barriers to participation including performance bonding requirements. It establishes bid evaluation criteria that provide preference for bidders that pledge and follow through on a commitment to provide a diverse workforce composition. And it allows for an incremental release of the project retainage throughout the duration of the contract period.
- There are 2 public meetings scheduled to gather contractor feedback on the proposed plan, i.e. January 14, 2012 and January 17, 2012.

- Policy Board approval of the Resolution is requested so that the process may be forwarded on to the Champaign City Council for discussion on February 14, 2012.
- Bids are anticipated to be let in March, 2012.

D. Background:

1. Minority Inclusion in Contracting. At its meeting on November 16, 2011, the Policy Board adopted a Resolution articulating a general policy to achieve more minority inclusion in contracting. Consistent with this Resolution, the proposed plan is developed as an alternative process for procurement for the Fiber-to-the-Premise (FTTP) construction and installation project so that more minority- and female-owned companies and workers may be engaged in this work.

2. Proposed Procurement Plan. The plan has been prepared by staff from each of the UC2B member agencies as follows:

- Bill DeJarnette, Urbana IS Director
- Todd Rent, Urbana Community Relations Office
- Mike Smeltzer, UI – UC2B Project Investigator
- Fred Coleman, UI – Capital Programs/Real Estate Services
- Bob Miles, UI – UC2B Construction Manager
- John Kersh, UI – UC2B Project Coordinator
- Fred Halenar, Champaign IT Director
- Fred Stavins, Champaign City Attorney
- Garth Minor, Champaign Community Relations Office
- Teri Legner, Champaign – Interim UC2B Consortium Coordinator
- Paul Duke, Shive Hattery

The plan identifies 6 component parts of the overall FTTP project. Six component parts are recommended by staff as a compromise offering smaller component pieces of less than an estimated project cost of $100,000 up to larger pieces estimated to cost up to $1,000,000. The proposed procurement plan acknowledges that this process values utilization of minority and female owned business enterprises as well as companies that provide for diversity in their workforce composition. It provides a goal for 15% MAFBE utilization/good faith effort for prime contractors and goes a step further by articulating a goal that at least 2/3 of the 15% be with minority business enterprises. Also included in the plan is a process to identify and collect basic information from minority contractors interested in this work and to provide that information with the bid documents so that prime contractors may use them as resources to achieve the MAFBE goals and provide for diversity in the workforce.

The proposed plan acknowledges that the requirement for contractors, especially smaller and less experienced contractors, to provide a performance bond to cover 100% of the value of the contract can be costly and often prohibitive. The proposal to provide multiple contracts in varying amounts as is proposed for this project, begins to address this concern. It is less costly to obtain a performance bond from an insurance company that guarantees proper completion of work valued at

$100,000 than work valued at $1,000,000. This has the potential to provide opportunity for smaller and less experienced contractors as a result. In addition to providing the opportunity for smaller parts of the work, there is an interest in considering establishment of a lower performance bonding requirement for prime contractors and/or their subcontractors. It is not recommended that there be a complete waiver of the performance bonding requirements so that the contractor is motivated financially to follow through with completion and to gain successful experience that can be utilized to their advantage in the future. The plan as proposed does not yet establish an amount or percentage requirement. This idea will be tested at the public input meetings on January 14 and January 17. That feedback will be provided at the Policy Board meeting on the 18th. If the recommendation is for an amount less than 100%, the City and/or the members of UC2B, will be responsible financially for the completion of work in the event a contractor defaults.

The proposed plan identifies a procurement process that recognizes and rewards bidders that pledge a higher diverse workforce composition. The plan values price and workforce composition and evaluates bids based upon these factors. Staff is seeking Policy Board direction on the weight that should be placed on these 2 factors and recommends a 75%, 25% split. It also recognizes that there is a budgetary limit that may constrain UC2B's ability to fully achieve the goal of rewarding the bidder with the highest pledge toward workforce diversity as grant funds are limited.

Also included in the plan is a recommendation to provide an incentive payment to the contractors that successfully meet their workforce diversity pledge for the duration of their contract. The recommended value of the payment is for 1% of the contract amount. The Cities' Equal Opportunity in Purchasing Ordinance (EOPO) provides for an inspection process to verify that contractors have workforce diversity on site when projects are underway. In the event minority workers are underrepresented on the job site, the Cities work with the contractors to improve that representation. The proposal for this project is to provide for a process of regular inspections and monthly reporting demonstrating workforce composition. This "incentive payment" is proposed to come from the UC2B start up operations budget that is funded by the Cities and the University.

Finally, the City's normal and customary process for construction projects is to retain 10% of each pay request to encourage successful completion of the scope of work. The retainage is held in full until the City verifies successful completion and takes ownership of the work. In this plan, the proposal is to still retain 10% of the initial pay requests and eventually allow for a phased release of the retainage. This acknowledges that there are really several small projects that compose each of the 6 pieces of work and that it is reasonable to verify incremental completion. It is probably still necessary to retain some meaningful amount of the billed work through to total contract completion, again, to motivate contractors to achieve completion and gain valuable experience.

3. Process. There are public input meetings on this proposal scheduled for January 14 and January 17, 2012. Contractors have been invited to attend and provide input. Additionally, adverstisements were placed in newspapers in the region inviting participation. Because this writing is in advance of the public input meetings, the Resolution recommending the plan contains blanks where the performance bond requirements will be identified. The Policy Board will need to evaluate the input that is obtained and identify an amount for inclusion. The Resolution, when approved, will then be forwarded on to the Champaign City Council, as the purchasing entity, so that the process may be

considered and approved as an alternative procurement process for this project. The Study Session for this alternative procurement process is tentatively scheduled for February 14, 2012. It is anticipated that bids will be let in March.

Prepared by:

Teri Legner
Interim UC2B Consortium Coordinator

RESOLUTION NO. 2012-03

A RESOLUTION

AUTHORIZING THE PURCHASE OF CORE NETWORK EQUIPMENT
(University of Illinois)

WHEREAS, the University of Illinois has agreed to provide space for the UC2B core network equipment in its Telecommunications Nodes 8 and 9; and

WHEREAS, the University of Illinois has agreed to maintain the core network equipment for two years starting from the commencement of UC2B retail operations; and

WHEREAS, the University of Illinois staff has researched and obtained quotes for the necessary core network equipment and provided an associated report entitled "Overview and Recommendations for the UC2B Core Network Design" (Report); and

WHEREAS, the UC2B Technical Committee reviewed the Report at its meetings on December 27, 2011 and on January 10, 2012; and

WHEREAS, the UC2B Technical Committee voted to approve the Report and its recommendations at its meeting on January 10, 2012.

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

Section 1. The Policy Board accepts the Report and incorporates it herein.

Section 2. The Policy Board authorizes the purchase of the core network equipment as contained in the Report and in an amount not to exceed $627,988.

RESOLUTION NO. 2012-03
PASSED:

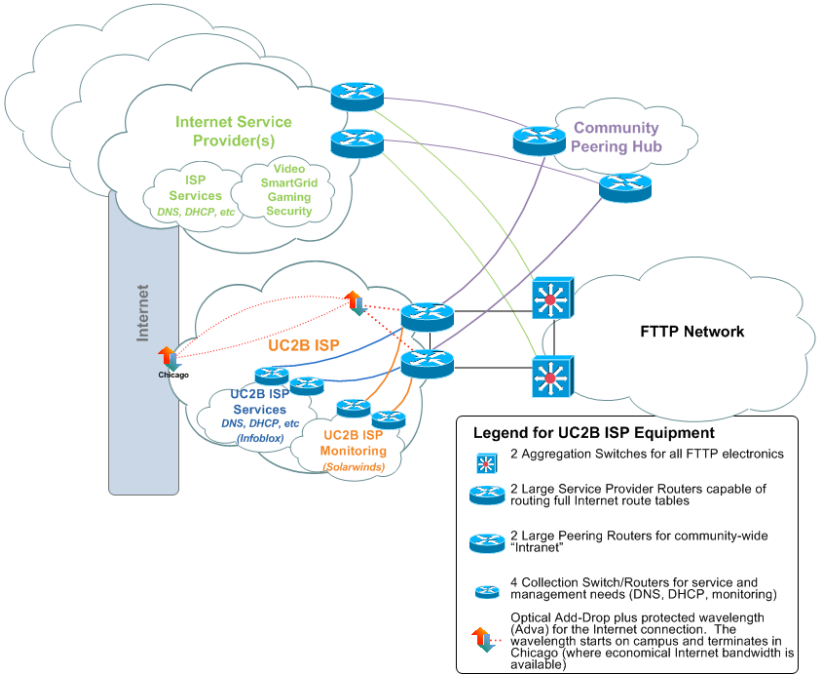
APPROVED:_____
Policy Board Chair

Overview and Recommendations for the UC2B Core Network Design

OBJECTIVE
To to build a redundant, highly available core network infrastructure from which Internet services will be offered to UC2B subscribers.

BACKGROUND
To launch the UC2B ecosystem, a baseline Internet service is required. For a minimum of 2 years, the University of Illinois has agreed to manage the core of the UC2B Internet Service Provider (ISP) service. As such, network equipment must be procured.

DESIGN DETAIL



DESIGN EXPLANATION
The FTTP "cloud" will aggregate into two switches each of which is located in the UC2B core node sites. Any provider (service, application, etc.) will deliver services to UC2B-connected locations (homes, anchors, businesses) via these FTTP aggregation switches. These are the entry point for any provider to any UC2B subscriber. To maximize availability, all providers will be required to redundantly connect to the UC2B network via these two aggregation switches.

The community-wide "Intranet", which is unique to the UC2B project, is where all UC2B providers will also connect. This community peering hub will provide unfettered access between all UC2B-connected entities. For example, students will have direct access to local schools, libraries, and the University regardless of their Internet provider on the UC2B network. The community peering hub will consist of two "service provider class" routers each of which will be located within a UC2B core node site (for redundancy).

The Internet service provided by UC2B will be leveraging the University's contracts for commodity Internet bandwidth. Again, to provide a resilient service, one "service provider class" router will be located within each of the two UC2B core node sites (for redundancy), and the connection to Chicago will be on a protected ring.

As part of the UC2B Internet service, critical supporting services like DNS and DHCP are required. Redundant servers running those services will attach to one of the two smaller routers in each core node..

Out of band management of this network is also critical. The other small router in each node will connect the servers providing network management and access management as well as supporting tools, such as network monitoring.

DESIGN GOALS

While the University has agreed to manage the core network equipment for 2 years, management afterwards has not been decided. To ensure that the appropriate class of equipment is procured and to facilitate an easy management transfer, we recommend Cisco as the vendor. Their software is considered to be "universal". Cisco equipment also excels at rate limiting and multicast, both of which will be important for the UC2B network.

The University has access to negotiated contracts with Cisco and UC2B has an existing contract for ADTRAN equipment. Each Adtran aggregation switch will have 26 10-Gbps ports and 16 1-Gbps ports. Each Cisco Service provider router will have 8 10-Gbps ports. Each Cisco Peering router will have 6 10-Gbps ports and 20 1-Gbps ports. Due to the volume of equipment procured annually, the discounts extended to the University by far surpass what would be extended for a separate UC2B bid for 8 Cisco routers and 2 switches. It is recommended that the existing University and UC2B contracts be utilized for the procurement of the following:

TYPE	MODEL	UNIQUE REQUIREMENTS
2 Aggregation Switches	Adtran	Multiple high-density 10Gbps and 1 Gbps ports; Same provisioning software for the FTTP equipment
2 Service Provider Routers	ASR-9006	Adequate memory to hold full Internet route table; initially 4 10Gbps links with 1Gbps links for connecting the service and monitoring routers. Ability to significantly expand 1Gbps and 10Gbps port density.
2 Community Peering Routers	ASR-9006	Initially 2 10Gbps uplinks and 20 1Gbps links for peering connections. Ability to significantly expand 1Gbps and 10Gbps port density. Memory to support large route table.
Service Routers	3750X	High density 1GB interfaces
Mgmt Routers	3750X	
Monitoring Software	Solarwinds	
IPAM appliance	Infoblox	DNS and DHCP management
Servers	DELL	Monitoring, etc

In addition to the unique requirements previously listed, the follow considerations were given when specifically selecting the Cisco ASR platform:

- Similarly equipped new 6500's would cost more than the ASR's.
- Purchasing used equipment on Ebay is not a desirable purchasing option, nor is it an option available to us.
- Other "peer service providers" (Illinois Century Network, WiscNet, NorthWestern University, University of Chicago, and the Ohio State University) utilize and highly recommend the ASR platform.
- Cisco (with the exception of Juniper) out-performs other vendor solutions on critical features, like multicast and rate limiting abilities.
- Unlike Juniper, Cisco has universally understood management software.

BUDGETARY EXPLANATION

The following chart describes the various components including the amount needed and the approximate costs:

TYPE	MODEL	QUANT	DESCRIPTION	TOTAL PRICE
Aggregation Switch	TA5000	2	Adtran switch; 26 x 10Gbps; 16 x 1Gbps each	$135,407
			TOTAL PRICE	$135,407
Service Provider Routers	ASR-9006	2	Chassis, DC power	$9,000
	ASR9K	2	Controller cards with 4G memory; 1 per router	$14,400
	A9K-4T-L	4	4 x 10Gbps low queue line card; 8 total 10Gbps ports per router	$66,600
	XFP-10GLR	10	Multirate XFP module	$18,000
	Smartnet	N/A	8x5xnext business day	$7,226
			TOTAL PRICE	**$115,226**
Community Peering Routers	ASR-9006	2	Chassis, DC power	$9,000
	ASR9K	2	Controller cards with 4G memory; 1 per router	$14,400
	A9K-2T20GE-L	2	2 x 10Gbps, 20 x 1Gbps low queue linecards; 2 10Gbps links to service provider routers & 20 1Gbps ports for peering connections	$33,300
	A9K-4T-L	2	4 x 10Gbps low queue line card; 4 total 10Gbps ports per router for other service provider connections	$33,300
	XFP-10LGR	4	Multirate XFP module	$7,200
	GLC-LH-SM	8	GE SFP, LC connector LX/LH transceiver	$3,584
	Smartnet	N/A	8x5xnext business day	$4,962

			TOTAL PRICE	**$105,746**
Service Routers	3750X	2	24 port GE SFP IP Base	$18,000
	C3KX-NM-1G	2	Catalyst 3K-X 1Gbps Network Module	$450
	GLC-LH-SM	2	GE SFP, LC connector LX/LH transceiver	$896
	C3KX-PWR	2	Redundant 440W DC power supply	$450
	Smartnet	N/A	8x5xnext business day	$2,280
			TOTAL PRICE	**$22,076**
Mgmt Routers	3750X	2	24 port GE SFP IP Base	$18,000
	C3KX-NM-1G	2	Catalyst 3K-X 1Gbps Network Module	$450
	GLC-LH-SM	2	GE SFP, LC connector LX/LH transceiver	$896
	C3KX-PWR	2	Redundant 440W DC power supply	$450
	Smartnet	N/A	8x5xnext business day	$2,280
			TOTAL PRICE	**$22,076**
IPAM	Infoblox	2	1852-A network service appliance (dns, dhcp, ipam)	$95,000
Monitoring Software	Solarwinds	1	Orion Network Performance Monitor	$24,975
		1	NetFlow Traffic Analyzer	$14,995
Servers		4	Servers for Solarwinds, etc	$12,000
Optical	Adva	N/A	Optical equipment for Internet transport from Chicago	$82,000
			GRAND TOTAL	**$627,988**

SUMMARY & RECOMMENDATION

A UC2B Internet service offering is essential to attract subscribers. The UC2B Internet service should be delivered via robust, redundant, "carrier class" equipment. The University and UC2B have existing contracts for the desired class of device. In addition to availability and cost, manageability is also a factor. To facilitate the potential management transition after 2 years, seeking "universal software" defines the equipment vendor to be Cisco. The recommendation is to proceed with purchasing the UC2B core equipment immediately so that such infrastructure exists to provide service to subscribers beginning as early as April.

RESOLUTION NO. 2012-04

A RESOLUTION

ESTABLISHING THE 2012 ANNUAL MEETING SCHEDULE FOR THE UC2B POLICY BOARD

WHEREAS, the UC2B Policy Board meets at Noon on the first and third Wednesdays of each month; and

WHEREAS, this meeting schedule is not convenient for all of the current members of the Policy Board; and

WHEREAS, this meeting schedule may not be convenient for members of the public to attend because of work commitments.

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

Section 1. The Policy Board establishes its 2012 meeting schedule beginning on this day forward as the first and third Thursdays of each month at 5:30 p.m. in the City of Champaign Council Chambers, 102 N. Neil Street, Champaign, IL 61820.

RESOLUTION NO. 2012-04
PASSED:

APPROVED:_____
Policy Board Chair

NTIA and Grant Update – 1/13/12

We had a call with NTIA this morning. Other than catching them up on our various activities, the main conversation of interest was about service contracts on UC2B purchased equipment. Subject to approval by the Grants and Contracts folks, we may be able to use grant funds to pay for service agreements for the period up to February 1 of 2013 - the end of the grant. NTIA considers that an investment in "their" equipment. NTIA holds a security interest in all of our assets through their useful lives, which vary. I will obviously explore this in greater detail with Grants & Contracts.

Construction – The campus conduit construction is probably less than 1,000 feet from being complete out of 40,000 planned feet of conduit construction.) The ground at the north side of DCL has a higher clay content than what our contractors have been experiencing elsewhere, so that work has gone much more slowly than planned. The "crossing of Stoughton" is now planned for Monday. As luck would have it the University is also doing major construction on Mathews and Stoughton today to install chilled water into Uni High. It looked like a winter contractor convention outside my office window yesterday.

FTTP Bidding – Yesterday we had a planning meeting for the two public sessions for the FTTP contractors and the working group continues to make progress on some thorny issues. By next Wednesday we will have the benefit of the input from those two sessions to factor into your discussions and decision-making.

Consultant Visit – We got both Diane and Mark safely out of town on Thursday. By all measures their visit was a success. Now they have to put it all together for us. After they saw you, they spent time with Social Service agencies and Economic Development folks.

Core Network Equipment Purchase – You have an agenda item to discuss and vote on the core network equipment. After examining and refining the proposal for three meetings, the Technical Committee has recommended that you approve it.

FTTP Electronics Purchase – This may sound like déjà vu, but by next Wednesday I will have filed the paperwork for the first wave of ADTRAN FTTP gear. We now plan to use two additional ADTRAN chassis for the parts of the core network. That will simplify provisioning, trouble shooting and parts sparing.

Next Meeting - I am "on-call" for grandfather duty as Amanda is expected to give birth to her second child (and first boy) any day now. While I fully hope to be with you on Wednesday, events beyond my control could intercede. If I am there, there is a chance that I will not be well rested……..

See you on Wednesday.

Mike