



UC2B Policy Board Agenda

Special Meeting

Wednesday, June 27, 2012

12 p.m. – 1:30 p.m.

Council Chambers, 102 N. Neil Street, Champaign, Illinois

- I. Call to Order
- II. Roll Call (By Roster) – Determine Quorum
- III. Approve Agenda
- IV. Correspondence
- 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) *Resolution 2012-18 A Resolution Establishing a Policy Regarding Infeasible Rights of Use Agreements (12:05)
 - b) *Resolution 2012-19 A Resolution Establishing a Policy Regarding Short-Term Dark Fiber Leases (12:30)
 - c) *Resolution 2012-20 A Resolution Establishing Wholesale Transport Services and Rates and Core Connection Charges (1:00)
- VI. Items for future meeting agendas
 - a) Field Orders – Interim J.U.L.I.E. Locating Services and Fiber Restoration (Vandeventer, Shonkwiler)
 - b) UC2B Core Values Discussion
 - c) Policy Statement Regarding Use of Public Resources by Private Entities Furthering an Articulated Public Purpose (Schnuer)
- VII. Public Participation
- VIII. Board Member Comments
- IX. Adjournment

UC2B is an inter-governmental body. The City of Champaign serves as its administrative agent. The City of Champaign strives to ensure that its programs, services, and activities are accessible to individuals with disabilities. If you are an individual with a disability and require assistance to observe or participate, please contact the City of Champaign at 217-403-8710 at least 72 hours prior to the scheduled meeting date.



UC2B Policy Board Agenda

X. Next Meeting:

Wednesday, July 11, 2012 at 12:00pm
Council Chambers
102 N. Neil Street, Champaign

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June 22, 2012

To: The UC2B Policy Board

From: Mike Smeltzer

Re: Dark Fiber and Wholesale Transport Service Rates

Based on your conversations last week, I am going to suggest a slightly different order for the discussions, and suggest that we break these discussions into three distinct parts.

- 1. - IRUs**
- 2. - Dark Fiber Leases**
- 3. - Wholesale Transport Rates**

IRUs: Without repeating everything I have written over the last month on IRUs, I would like to make a couple of points and then suggest a plan to move forward.

- A. IRU's are a vehicle for generating quick cash, but financially healthy telecom providers do not normally sell IRUs. Financially healthy telecom providers prefer to sell lit services, or when they do provide dark fiber, do it through short-term leases rather than through 20-year IRU's.
- B. UC2B is just getting started financially and may need some additional cash to finish connecting homes or Anchor Institutions, so we may desire to sell additional IRUs in the future to raise that cash.
- C. Any additional cash we receive from IRUs before February 1, 2013 is subject to NTIA's rules about what we can do with it. Unless we have grant-eligible expenses to immediately spend that IRU cash on, additional IRU revenue before 2/1/13 could actually decrease the dollars we get from NTIA.
- D. We have local providers who claim that they cannot afford to provide services over the UC2B network unless they are allowed to purchase IRUs.
- E. The IRU price that CTC agreed to pay in its letter of intent was \$1,500 per strand mile. We did offer all initial investors two extra strands of fiber on each of the seven rings on which they purchased any fiber as an early signing incentive. If you paid for two strands on a ring, you got two extra strands on that ring to facilitate maintenance and equipment upgrades. If you paid for six strands on a ring you got two extra strands on that ring to facilitate maintenance and equipment upgrades and so on.
- F. All initial investors were required to buy at least two strands of fiber on a ring.

Where I believe we can end up on this issue is to set the price for IRU strands at \$2,000 per-strand-mile. Allow the sale of just a single strand on a ring, but still require the purchase of an entire ring at a time. Do not sell any additional IRU's prior to February 1, 2013.

That will allow us to concentrate on executing the grant-funded construction over the next 7 months and getting UC2B services up and running. If the demand for UC2B service installations exceeds our grant funding, we can use any IRU funds paid after 2/1/13 to pay for those additional installations in the spring and summer of 2013. In the spring of 2013 we will have greater flexibility in how we spend that money than we do today.

If we set the IRU pricing and the date that they will be available now, that will give anyone interested in acquiring an IRU plenty of time to line up financing and make their own construction plans.

Dark Fiber Leases: If the Policy Committee elects to not sell any additional IRUs, we must establish short-term dark fiber lease pricing in order to live up to our agreement with NTIA. If you do elect to sell additional IRUs, UC2B does not have to offer short-term dark fiber leases.

NTIA cares about the availability of dark fiber, not the financial vehicle used to make it available. As there is no downside to establishing short-term dark fiber lease rates, it would make sense to do that now regardless of what you decide to do with any additional IRUs.

A short-term dark fiber lease rate should be based on our IRU rate, but also needs to incorporate our fiber maintenance charges as well as a factor for the "time value of money" – as IRU's are essentially paid at the beginning of the 20-year period and short-term leases are typically paid monthly throughout the term of the lease.

If you were to win \$1 million in the Illinois Lottery, you would have a choice of getting the \$1 million paid over 20 years at a rate of \$50,000 a year, or taking a highly discounted lump sum immediately. That discount represents the time value of money. When converting our 20-year IRU rate to a short-term dark fiber monthly lease rate, you are doing that math in reverse from what the Illinois Lottery does, but the principle is the same.

The main point of contention is what is an appropriate factor to assign to the "time value of money". Diane Kruse is preparing a narrative that will explore that topic. Once you have decided on the appropriate factor for the "time value of money", the short-term fiber lease rates will follow via simple math.

Wholesale Transport Services: Due to input received by certain local providers, I have proposed several changes to our wholesale transport rates from what was originally proposed to NTIA in 2009.

- A. The first change was to eliminate the 100 Mbps customer connection service. When we went to 1 Gbps client equipment, there was no reason to keep the 100 Mbps customer connection service.
- B. The monthly charge for the 1 Gbps customer connection service was reduced from \$99.99 per month to \$17.88 per month – a reduction of \$82.11 per month, which is certainly significant.
- C. To allow a service provider to be able to ramp up services affordably, we created a ramp-up program for the core connection charges that ease the provider into the

full rate over a 12-month period. The provider pays the lower of the ramped rate or a per-customer rate during those first 12 months, which is extremely provider friendly.

Under NTIA's pricing rules we are not allowed to go too far below the market rates for this type of service. These rates are significantly lower than what AT&T, Comcast or Windstream charge, so it is possible that we may get some pressure from NTIA to raise them. What we cannot do is make them any lower than what is currently proposed.

The Policy Committee has recently voted to have UC2B keep separate accounting on its wholesale and retail product offerings, and over time you will see how well each type of service does in covering its costs (including depreciation.) NTIA did not require that granular of a budget or financial projections, but from having worked with these numbers for three years, I can tell you that the great majority of our costs will be in operating and maintaining the infrastructure, and that providing Internet service will cost us very little for the first 5 years due to the subsidies UC2B is getting from the University.

As I showed on the attached spreadsheet from several meetings ago, there is little difference between our costs of providing wholesale services and retail services in the grant funded areas. Once we talk about expanding to other areas, we will have debt service to factor into our wholesale and retail pricing. Once we lose the University's support of the core network in 2014, we will have the cost of providing that support to factor into our wholesale and retail pricing. Once we lose the University's support of our Internet access and transport in 2017, we will need to factor that into our retail pricing.

The wholesale rates that you will be establishing now, will only apply to the grant-funded areas, and may only be available for the next two years. They may need to be increased, as may our retail rates as noted in the recently-approved Business and Strategic Plan, if UC2B expands to other areas and after the University's support expires.

The proposed wholesale transport rates are fair, do create a level playing field, and have been endorsed by NTIA as being non-discriminatory and reasonable. They also provide far more wholesale transport bandwidth for far fewer dollars than any other option that is available in this market.

There are potentially less expensive ways of getting bandwidth from point A to point B with wireless, but those methods do not provide the reliability of fiber. You saw firsthand a couple of weeks ago what a good rainstorm can do to wireless communications. We lost our wireless-based link with Reverend Bogan and Richard Schnuer multiple times as the storm passed through. It is also telling that the two local providers that have shown the most interest in acquiring additional IRUs both rely heavily on wireless to serve their customers today.

I encourage you to allocate your time on Wednesday in such a manner that all three of these issues are resolved. There are multiple other important issues that Teri and I must address, and the longer these issues linger, the less other work gets done.

Cost Components of 20 Mbps UC2B FTTP and Dedicated ISP Service over ADTRAN Active Ethernet Electronics

Years 1 and 2 of UC2B Operations only in Grant-Funded Areas

Costs per Retail and Wholesale Subscriber

	Retail Years 1-2 Grant-Funded UC2B Customers	Wholesale Years 1-2 ISP Customers in Grant-Funded Areas
Monthly Cost of Billing	\$0.50	\$0.25
Monthly Cost of Call Center - Tier One Phone Support	\$4.00	\$2.25
Total # of Retail and Wholesale Customers Users for Model	2,700	2,700
Monthly Rate for ISP 1 Gbps Customer Connection	N/A	\$17.88
Monthly UC2B Retail Charge for above Internet Bandwidth	\$19.99	N/A
BANDWIDTH COSTS		
Internet Cost per Customer with Over-Subscription	\$4.00	N/A
TOTAL ALL ELECTRONICS COSTS PER SITE		
Total All One-Time FTTP Equipment Costs per Site	\$559.52	\$559.52
TOTAL ELECTRONIC EQUIPMENT DEPRECIATION		
Monthly Straight-Line Equipment Depreciation	\$6.66	\$6.66
FTTP FIBER PLANT COSTS PER ACTIVE SITE		
Total all Fiber and Install Costs	\$4,200	\$4,200
TOTAL FIBER PLANT DEPRECIATION		
Monthly Straight-Line Fiber Infrastructure Depreciation	\$17.50	\$17.50
BORROWING & DEBT		
Monthly Debt Service on Fiber & Equipment Per Customer	\$0.00	\$0.00
JULIE & LOCATES		
Monthly JULIE Cost Per Customer	\$2.31	\$2.31
FIELD SUPPORT		
Monthly Field Support Cost per Customer & Tier 2 Phone support	\$1.38	\$1.38
NETWORK ENGINEERS		
Monthly Core Network and Tier 3 Phone Network Support	\$4.63	\$4.63
FIBER REPAIR		
Fiber repair costs per customer per month	\$1.73	\$1.73
ADMINISTRATION & OVERHEAD		
UC2B Administrative overhead per Customer	\$3.09	\$3.09
UTILITIES		
UC2B Utilities Cost Per Customer	\$0.75	\$0.75
COMMUNITY DEVELOPMENT FUND		
Monthly Community Development Fund per Customer	\$1.00	\$0.89
Cash Expenses per Customer per Month	\$14.77	\$12.66
Debt Service per customer per month	\$0.00	\$0.00
Reserve for Depreciation	\$5.22	\$5.22
Monthly Rates	\$19.99	\$17.88
Equipment Depreciation	\$6.66	\$6.66
Fiber Infrastructure Depreciation	\$17.50	\$17.50
All Depreciation Expenses	\$24.16	\$24.16
University Subsidized Expense	\$8.63	\$4.63



For customer sites in the grant-funded areas

ISP and Service Provider Layer Two Transport Service Offering				
Customer Connections	Locations Where Available	Symmetric Ethernet Port Speed (Mbps)	Monthly Pricing	Comments
Last Mile Internet Service Provider (ISP) Customer 1 Gbps Port	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	1,000 Mbps (1 Gbps)	\$17.88 or 30-45% of customer rate - whichever is greater	ISP/Service Provider must connect to UC2B core in one of the three ways below
Core Backbone Connections				
Last Mile Internet Service Provider (ISP) Redundant Core Connections Dual 1 Gbps Ports	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	1,000 x 2 (1 Gbps x 2)	\$1,200	No CIR/VLAN charge. (Includes any UC2B ring fiber needed to connect to ISP)
Last Mile Internet Service Provider (ISP) Redundant Core Connections Dual 2 Gbps Ports (2 bridged 1 Gbps Ports)	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	2,000 x 2 (2 Gbps x 2)	\$1,600	No CIR/VLAN charge. (Includes any UC2B ring fiber needed to connect to ISP)
Last Mile Internet Service Provider (ISP) Redundant Core Connections Dual 10 Gbps Ports	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	10,000 x 2 (10 Gbps x 2)	\$3,600	No CIR/VLAN charge. (Includes any UC2B ring fiber needed to connect to ISP)
Note # 1 - All core elements of the network are non-blocking and are interconnected at 10 Gbps.				
Note # 2 - All ring fiber necessary to connect Provider is included in the Backbone Connection rates.				
Note # 3 - Customer-end electronics are provided by UC2B.				
Note # 4 - There is an initial 12-month ramp up of the Core Connection Rates - described on additional pages.				

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

Dark Fiber - Indefeasible Rights of Use Agreements (IRUs) for New IRU Purchasers			
IRU Element	One-Time Charge for 20-Year IRU	Recurring Annual Charge for Maintenance	Comments
IRU - Per Strand Mile - Sold in complete rings	\$2,000 per strand mile	N/A	Sold only only for the entire length of a UC2B ring
IRU - Per Lateral Connection	Actual construction costs, or pro-rated costs if shared	N/A	Customer may purchase a single strand of fiber
Fiber and Facilities Maintenance - Charged in complete rings	N/A	\$300 per year per route mile	Not dependent on the number of strands
Maintenance - Per Lateral Connection	N/A	\$600 per year per lateral	No pro-rating if shared

Ramp Ups for Wholesale UC2B Core Connections

5/7/12

These charges are in addition to per end-user site charges of:

\$19.99 per month for a 100 Mbps connection

\$99.99 per month for a 1Gbps connection

Dual 1 Gbps Connections

To start, the Provider pays the lessor of the per customer rate or the tiered rate.

Full Monthly Rate	\$1,200
Per Customer Rate	\$10.00
Month 1	\$100
Month 2	\$200
Month 3	\$300
Month 4	\$400
Month 5	\$500
Month 6	\$600
Month 7	\$700
Month 8	\$800
Month 9	\$900
Month 10	\$1,000
Month 11	\$1,100
Month 12	\$1,200

After 12 months the monthly rate moves to the full rate, regardless of customer count.

Dual 2 Gbps Connections

To start, the Provider pays the lessor of the per customer rate or the tiered rate.

Full Monthly Rate	\$1,600
Per Customer Rate	\$13.33
Month 1	\$133
Month 2	\$266
Month 3	\$400
Month 4	\$533
Month 5	\$666
Month 6	\$800
Month 7	\$933
Month 8	\$1,066
Month 9	\$1,200
Month 10	\$1,333
Month 11	\$1,466
Month 12	\$1,600

After 12 months the monthly rate moves to the full rate, regardless of customer count.

Dual 10 Gbps Connections

To start, the Provider pays the lessor of the per customer rate or the tiered rate.

Full Monthly Rate	\$3,600
Per Customer Rate	\$30.00
Month 1	\$300
Month 2	\$600
Month 3	\$900
Month 4	\$1,200
Month 5	\$1,500
Month 6	\$1,800
Month 7	\$2,100
Month 8	\$2,400
Month 9	\$2,700
Month 10	\$3,000
Month 11	\$3,300
Month 12	\$3,600

After 12 months the monthly rate moves to the full rate, regardless of customer count.

Indefeasible Rights of Use (IRUs) and Dark Fiber Leases

NEO Fiber, June 22, 2012

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 strand mile. 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:

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

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:

$$(6) \text{ counts of fiber} * \$200 \text{ per mile} * 100 \text{ route miles} = \$120,000 \text{ annually or valued at } \$2.4 \text{ Million for (20) years.}$$

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.

Initial Investors, Components of their Pricing

Initial investors have been sold IRUs for the following rates:

1. \$1,500 per strand of fiber per route mile
2. \$300 annual maintenance fee per backbone ring
3. \$600 annual maintenance fee per lateral

It is a principle-based decision for UC2B on whether or not to offer this same pricing to new customers that want a long-term IRU. There was value in having investors participate in the UC2B grant application. The grant would not have been awarded without the support of the early investors.

With that said, it has been proposed to offer IRU pricing for new customers at the following rates:

1. \$2,000 per strand of fiber per route mile
2. \$300 annual maintenance fee per backbone ring
3. \$600 annual maintenance fee per lateral ring

The up-front payment for the 20-year IRU was and/or would be:

Backbone Rings	Route Miles	\$1,500	\$2,000
1	16.41	\$24,615	\$32,820
1A	7.08	\$10,620	\$14,160
2	16.82	\$25,230	\$33,640
3	19.97	\$29,955	\$39,940
3A	8.60	\$12,900	\$17,200
4	22.70	\$34,050	\$45,400
5	15.98	\$23,970	\$31,960
6	15.29	\$22,935	\$30,580
6A	15.98	\$23,970	\$31,960
7	11.57	\$17,355	\$23,140
7A	14.95	\$22,425	\$29,900
	Total for All Rings	\$248,025	\$330,700

Methodology for Calculating Monthly Dark Fiber Leases

Receiving payment upfront for 20 years has value. From Investopedia: “If today you were to invest \$100.00 at a rate of 7.2%, you would have \$401.69 at the end of 20 time periods (e.g. weeks, months, or years). In other words, a future value of \$401.69 is equal to a present value of only \$100.00.

What does this mean? If you had a choice between taking an amount higher than the \$100.00 today and taking the \$401.69 at the end of 20 time periods, you should take the money today. By doing so, you would be able to invest the higher amount at 7.2% for 20 equal time periods, which would end up giving you more than \$401.69.”

Taking the \$2,000 IRU pricing for a 20-year term; breaking this down to an annual fee, we come to the following:

	IRU Fee
	\$2,000
Base Pricing, 20 Years	\$2,000.00
Annual Fee (\$2,000/20)	\$ 100.00
Time Value of Money, Annual Fee	\$ 401.67
Time Value of Money, Monthly Fee	\$ 33.47
Annual Maintenance Fee as a Monthly Fee	\$ 25.00
Total Monthly Fee (IRU plus Maintenance)	\$ 58.47

About the Future Value Calculator:

The value of an asset or cash at a specified date in the future that is equivalent in value to a specified sum today.

? Enter Info
! Your Results

Interest Rate Per Time Period:	<input style="width: 80%;" type="text" value="7.2"/>	%
Number of Time Periods:	<input style="width: 80%;" type="text" value="20"/>	
Present Value:	<input style="width: 80%;" type="text" value="100"/>	
<input type="button" value="Calculate"/>		
Future Value:	\$401.69	

Read more: <http://www.investopedia.com/calculator/FVCal.aspx#ixzz1yUrFI3Xd>

This equals a "400% markup." This is how the pricing was set; as it was initially presented, it seemed as though we were using an unfair profit assumption mark-up, when actually we were using the time value of money calculation.

Applying the monthly base rate per fiber strand per mile, we get the following rates:

Backbone Rings	Route Miles	\$58.47
1	16.41	\$959
1A	7.08	\$414
2	16.82	\$983
3	19.97	\$1,168
3A	8.60	\$503
4	22.70	\$1,327
5	15.98	\$934
6	15.29	\$894
6A	15.98	\$934
7	11.57	\$676
7A	14.95	\$874
	Total for All Rings	\$9,668

This is a fair and equitable approach to pricing. It accounts for the time value of money and uses fair and equitable rates as the base price for IRUs.

RESOLUTION NO. 2012-18

A RESOLUTION

ESTABLISHING A POLICY REGARDING INDEFEASIBLE RIGHTS OF USE
AGREEMENTS
(IRU's)

WHEREAS, the UC2B Policy Board adopted Resolution 2012-11 on May 24, 2012 approving IRU and maintenance agreement templates for those entities that initially invested in UC2B and for the Illinois Department of Transportation (IDOT); and

WHEREAS, the UC2B Policy Board approved, in the form of a motion made by Smeltzer, seconded by Schnuer, the IRU rates from the NTIA Grant Application as contained in the Letters of Intent with the initial investors on May 24, 2012; and

WHEREAS, those IRU rates for the initial investors are as follows:

- \$1,500 per strand mile with a 20-year IRU;
- \$600 Annual flat rate per lateral connection for fiber maintenance (independent of strands used);
- \$300 Annual maintenance rate for ring fiber maintenance per route mile (independent of strands used).

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

Section 1. That UC2B will offer dark fiber IRU's to additional entities beyond the initial investors and IDOT beginning February 1, 2013.

Section 2. That UC2B will allow single strands to be "purchased" on an entire ring. No strands will be available for portions of a ring.

Section 3. That IRU rates for purchasers beyond the initial investors are as follows:

- \$2,000 per strand mile with a 20-year IRU;
- \$600 Annual flat rate per lateral connection for fiber maintenance (independent of strands used);
- \$300 Annual maintenance rate for ring fiber maintenance per route mile (independent of strands used)

Section 4. That holders of IRUs are prohibited from subleasing or "selling" their interests to third party interests.

RESOLUTION NO. 2012-18
PASSED:

APPROVED: _____
Policy Committee Chair

RESOLUTION NO. 2012-19

A RESOLUTION

ESTABLISHING A POLICY REGARDING SHORT TERM DARK FIBER LEASES

WHEREAS, the UC2B Policy Board desires to offer short term dark fiber leases at rates that are consistent with those established in Resolution 2012-18 for new purchasers of IRU's.

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

Section 1. That UC2B will offer dark fiber leases to additional entities beyond the initial investors at the following monthly base rates per fiber strand per mile:

Backbone Rings	Route Miles	\$58.47
1	16.41	\$959
1A	7.08	\$414
2	16.82	\$983
3	19.97	\$1,168
3A	8.60	\$503
4	22.70	\$1,327
5	15.98	\$934
6	15.29	\$894
6A	15.98	\$934
7	11.57	\$676
7A	14.95	\$874
	Total for All Rings	\$9,668

RESOLUTION NO. 2012-19
PASSED:

APPROVED: _____
Policy Committee Chair

RESOLUTION NO. 2012-20

A RESOLUTION

ESTABLISHING WHOLESALE TRANSPORT SERVICES AND RATES AND CORE
CONNECTION CHARGES

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

Section 1. That the Wholesale Transport Services for customer sites in the grant-funded areas at the prices identified in Attachment 1 hereto are hereby approved.

Section 2. That the wholesale core connection charges identified in Attachment 2 hereto are also approved.

RESOLUTION NO. 2012-20

PASSED:

APPROVED: _____
Policy Committee Chair



Proposed UC2B Wholesale & ISP Service Offerings

For customer sites in the grant-funded areas

ISP and Service Provider Layer Two Transport Service Offering				
Customer Connections	Locations Where Available	Symmetric Ethernet Port Speed (Mbps)	Monthly Pricing	Comments
Last Mile Internet Service Provider (ISP) Customer 1 Gbps Port	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	1,000 Mbps (1 Gbps)	\$17.88 or 30-45% of customer rate - whichever is greater	ISP/Service Provider must connect to UC2B core in one of the three ways below
Core Backbone Connections				
Last Mile Internet Service Provider (ISP) Redundant Core Connections Dual 1 Gbps Ports	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	1,000 x 2 (1 Gbps x 2)	\$1,200	No CIR/VLAN charge. (Includes any UC2B ring fiber needed to connect to ISP)
Last Mile Internet Service Provider (ISP) Redundant Core Connections Dual 2 Gbps Ports (2 bridged 1 Gbps Ports)	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	2,000 x 2 (2 Gbps x 2)	\$1,600	No CIR/VLAN charge. (Includes any UC2B ring fiber needed to connect to ISP)
Last Mile Internet Service Provider (ISP) Redundant Core Connections Dual 10 Gbps Ports	Any of 500 Points of Interconnection (POI) or customer locations on the UC2B network	10,000 x 2 (10 Gbps x 2)	\$3,600	No CIR/VLAN charge. (Includes any UC2B ring fiber needed to connect to ISP)
Note # 1 - All core elements of the network are non-blocking and are interconnected at 10 Gbps.				
Note # 2 - All ring fiber necessary to connect Provider is included in the Backbone Connection rates.				
Note # 3 - Customer-end electronics are provided by UC2B.				

Note # 4 - There is an initial 12-month ramp up of the Core Connection Rates - described on additional pages.

Ramp Ups for Wholesale UC2B Core Connections

5/7/12

These charges are in addition to per end-user site charges of:

\$19.99 per month for a 100 Mbps connection

\$99.99 per month for a 1Gbps connection

Dual 1 Gbps Connections

To start, the Provider pays the lessor of the per customer rate or the tiered rate.

Full Monthly Rate	\$1,200
Per Customer Rate	\$10.00
Month 1	\$100
Month 2	\$200
Month 3	\$300
Month 4	\$400
Month 5	\$500
Month 6	\$600
Month 7	\$700
Month 8	\$800
Month 9	\$900
Month 10	\$1,000
Month 11	\$1,100
Month 12	\$1,200

After 12 months the monthly rate moves to the full rate, regardless of customer count.

Dual 2 Gbps Connections

To start, the Provider pays the lessor of the per customer rate or the tiered rate.

Full Monthly Rate	\$1,600
Per Customer Rate	\$13.33
Month 1	\$133
Month 2	\$266
Month 3	\$400
Month 4	\$533
Month 5	\$666
Month 6	\$800
Month 7	\$933
Month 8	\$1,066
Month 9	\$1,200
Month 10	\$1,333
Month 11	\$1,466
Month 12	\$1,600

After 12 months the monthly rate moves to the full rate, regardless of customer count.

Dual 10 Gbps Connections

To start, the Provider pays the lessor of the per customer rate or the tiered rate.

Full Monthly Rate	\$3,600
Per Customer Rate	\$30.00
Month 1	\$300
Month 2	\$600
Month 3	\$900
Month 4	\$1,200
Month 5	\$1,500
Month 6	\$1,800
Month 7	\$2,100
Month 8	\$2,400
Month 9	\$2,700
Month 10	\$3,000
Month 11	\$3,300
Month 12	\$3,600

After 12 months the monthly rate moves to the full rate, regardless of customer count.