## **Background Information on the Financial Model**

NEO Fiber was asked by UC2B to run various financial scenarios to determine the following:

- 1. What should the UC2B pricing for business/commercial, anchor, non-profit and residential customers be for the grant-funded FTTP areas and to Anchor Institutions in the entire community?
- 2. Verify whether or not the pricing proposed is financially feasible for the grant-funded FTTP areas and to the Anchor Institutions. Verify the assumptions originally submitted by UC2B during the Due Diligence process are realistic.
- 3. Could UC2B extend the network beyond the grant-funded FTTP neighborhoods and businesses, and how? NEO was asked to provide financial models for extending the network for residential areas, business and commercial subscribers and to look into various Wholesale Models.
  - 4. What would it cost to use the network to support public sector wireless applications?

UC2B had a fairly sophisticated financial model that was created and submitted to NTIA for the Due Diligence process. Rather than recreate the proverbial "wheel," NEO Fiber took this model and stripped away future and projected installation, revenue and capital costs occurring after the grant period. This created a Base Model from which to build upon various financial scenarios on how to further expand the UC2B's grant-funded FTTP network. We also expanded each spreadsheet to include projections for ten years, as the initial model only included financial projections for the first five years.

An additional worksheet was added to the Base Model to include one page with all of the Key Assumptions. This allowed NEO to make changes to the model easily to see what outcomes would occur. All of the existing spreadsheets were linked to the Key Assumptions page.

The Base Model assumptions were also verified and updated based upon the network topology and system design, the current competitive environment for pricing, and the projected operating and capital expenses made. Most of the assumptions regarding operating and capital expenses were nailed down; however, there are still a few areas that need further investigation. There is a Request for Proposal that has been written to obtain bids and pricing information regarding outsourced customer service call center services and maintenance/repair services. NEO's team is still investigating the various costs and models for day-to-day operations of the network and for providing customer service. As the proposals from the RFP are received, we will further update the preliminary financial plans and an even clearer picture will be available.

An additional worksheet was added to the Base Model that provides metrics to assist in making the decision to further expand the network. A Financing Worksheet was created with "go/no-go" tools to assist UC2B in the decision to seek additional financing and what the return on investment would be. This essentially is the Feasibility Analysis of the various scenarios.

## Feasibility Objectives; Needing the Policy Board's Approval

The UC2B Policy Board will need to agree upon the financial objectives for defining what is "feasible." Every entity, whether it is a business, or a non-profit organization, or a government agency, will have a different set of financial objectives that will assist in its decision making. These decisions may be to seek financing, to further expand the network, to roll out new products, etc. For example, a typical business may need to see an unleveraged IRR of 30% or greater in order to obtain financing to further extend the FTTP network. Without an IRR of 30% or greater, the business may have trouble getting financing approved by a banking institution or an investor. For a business, this objective may then require an installation charge of \$2,500 per subscriber in order to make the model "feasible." Being a quasi-governmental consortium, in order to meet its goals, UC2B may not need to see an IRR of 30%; but rather a positive IRR.

As UC2B is government consortium, their set of financial objectives to meet the "feasibility test" may be vastly different than a private sector business. The purpose of this exercise is to gain buy-in from the Policy Board on the financial objectives that will meet UC2B goals. After the Policy Board makes the decision on the feasibility objectives, the Financing Worksheet on the Base Model will be modified to reflect the Policy Board's decision and the Financial Base Models will be run to determine how to further expand the network beyond the grant coverage area.

To facilitate this decision on the definition of "feasible," or to create a set of financial objectives for UC2B, NEO recommends the following feasibility objectives to be considered. These objectives are typical for an entity expanding or investing in infrastructure.

- 1. Debt Service Constant on Outstanding Debt. The Debt Service Constant calculates the factor that, multiplied by the original loan principal, yields the annual debt service payment (principal plus interest) required to amortize a loan. NEO provided a Debt Service Constant on Outstanding Debt with Net Operating Cash flows that ask the questions, "Can Net Operating Cash flows cover the payment of principal plus interest on the outstanding debt? And what percentage of Net Operating Cash flows can service the debt?" When this formula is over 200 percent, there is a likely opportunity to refinance; or use the collateral of the network and the collateral of the Net Operating Cash flows to further expand the network. As a litmus test, we want to see if the network is "financeable" with this Debt Service Constant on Outstanding Debt calculation of greater than 200 percent within the first 4-5 years.
- 2. Cumulative Cash flows of the Network over 10 years are greater than the Debt Service. This objective provides that UC2B will be able to cover its Debt Service by the operating cash flows generated from the network, if UC2B decides to expand the network beyond the grant coverage area.
- 3. Positive Income. Operating income covers interest, taxes, depreciation and amortization. This objective allows UC2B to seek debt financing, if it decides to expand the network beyond the grant coverage areas, and have operating income cover interest, taxes, and depreciation and amortization expenses. This objective meets UC2B's goal of expanding the network without public financial support.

- 4. Positive IRR. A typical business may need to see an IRR of 30% or greater in order to obtain financing from a banking institution or an investor. UC2B may not need to see an IRR of 30% or greater in order to seek debt financing to further expand the network beyond the grant-funded FTTP areas. UC2B may simply need to see a positive return on the investment.
- 5. Asset Value of \$1,815 or more per subscriber. This may be a good objective for UC2B to determine the financial feasibility of expansion because the asset value per subscriber is greater than the cost to pass all of the customers, and light 50% of the passed customers. In the worst-case scenario, if UC2B decided to sell the network, the asset value per subscriber would be greater than the cost to install the network.

(\$2200	*	70%)	+	(\$689	*	50%)	=	\$ 1,815.60
Cost to pass the customer	*	Discount factor for 30% of the subscribers being in MDU buildings		Cost for the ONT Equipment and installation	*	Take rate	=	Cost to pass all of the subscribers + Light 50% of the subscribers

In order to determine the asset value, NEO has provided a calculation for the Asset Value of the Network by calculating the Net Present Value of Cash flows from Operations divided by the number of subscribers passed.

After the Policy Board provides a set of feasibility objectives to NEO, NEO will then run the financial model and provide a list of circumstances, pricing, take rates, etc. to meet the feasibility objectives. The following scenarios will be shown and preliminary numbers have been run:

1. No further expansion of the network after the grant period, no revenue is generated from wholesale activities. Assuming UC2B does nothing to expand the network after the grant period, the Base Model shows that UC2B could break even operationally with 50% take rate with 2400 residential customers, and serving 100% of the 137 anchor institutions and 167 of businesses with the pricing recommended for residential and business/commercial customers. UC2B could implement the grant, continue to provide services to the customers, continue to maintain the network and its customers, and would not need to seek additional financial funding, provided that the 50% take rate was achieved. The entity breaks even on EBITDA, and may need additional funding to cover shortages of operating funds as needed if the take rate targets are not met. The 20 Mbps for \$20 pricing with a 50% take rate, again, allows the entity to breakeven on EBITDA.

It is requested of the Policy Board to approve the pricing recommended for residential and business/commercial subscribers for the grant coverage area only. The preliminary financial model has been submitted with these assumptions.

2. Expand the FTTP network to the Businesses and Commercial areas. This scenario creates an IRR of greater than 20%, positive EBITDA, positive income covering interest, taxes, depreciation and

amortization, asset value of greater than \$1,815 per subscriber with the recommended pricing and the assumption of 40% take rate.

3. Expand the FTTP network to the Residential areas. Most FTTP networks are offering triple play services (voice, Internet and cable TV) via a retail model. As UC2B is providing Internet services only, there is substantial revenue that is not being generated per customer under this scenario. Providing services to the Other Residential Neighborhoods with Internet services only, at the 20 Mbps for \$20 pricing with a 50% take rate is not feasible. It is feasible only in the (11) census blocks covered by the grant because the grant is paying for the capital costs of the network.

If UC2B wanted to expand the network to other residential areas, the following scenarios would be run to meet the feasibility objectives that the UC2B Policy Board approves:

A. The pricing would need to be increased to, and UC2B would need to obtain a trate within 3 years.	take
B. Customers would pay in an installation fee and monthly with a 30% tak rate within 3 years.	ке
C. Customer would pay in an installation fee and monthly with a 40% take rate within 3 years.'	
D. Customer would pay in an installation fee and monthly with a 50% take rate within 3 years.	

- 4. Expand the FTTP network under a Wholesale model.
- 5. Combination of various expansion and revenue sources.

As in every business environment, the Business Plan and Financial Plan are working documents. Changes should continue to be made to the plans to make them more accurately show the current operating and competitive environment, as well as provide options for other alternatives for UC2B as they come available. For example, once the responses to the RFP for Outsourced Operations are received, the models will be changed to reflect the information. Another example is the grant requires compliance with Davis Bacon prevailing wages for labor and services provided. After the grant period, the wages and fees for services will most likely change, and the Business Plan and Financial Plan should be updated to reflect those changes. Additionally, as UC2B continues to evolve, there may be better options available for operating and expanding the network. The word of caution is to continue to seek out ways to improve the Business and Financial Plans for UC2B, and to reflect changes in the operating environment.