

COMMUNICATIONS AND BROADBAND INFRASTRUCTURE FEASIBILITY REPORT

PORTLAND, MI



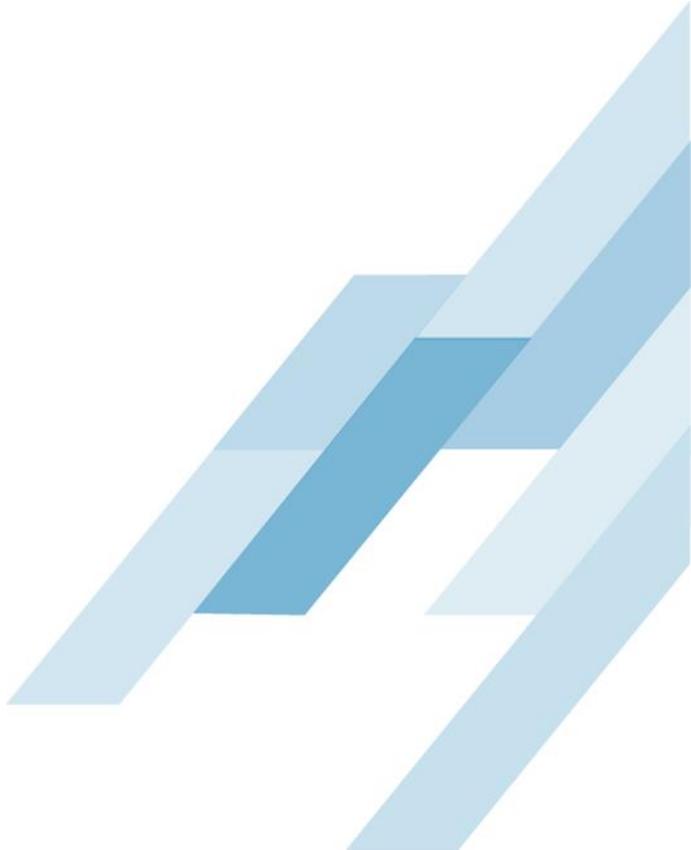
Member driven. Technology focused.





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EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

The city of Portland’s team has been investigating delivering affordable broadband to resident areas for some time now. The Portland team has options (utilizing current underground assets) finding an affordable way to deliver broadband to all members. Pulse Broadband has worked closely with the Portland team to design a communication infrastructure that will not only deliver affordable high-speed broadband to 100% of citizens, but also an infrastructure that will support the current, and future, communication needs for Portland’s electric plant. As this report will show, an all Fiber-to-the-Home network is feasible for the city of Portland. This Communication Infrastructure Project Plan is the result of our collaborative efforts. We are excited to share all the very detailed information of your plan to follow, but first we would like to take a moment to highlight some of the key areas.

FINANCIAL METRICS

| \$ (000’s) | YEAR 1 | YEAR 2 | TOTAL |
|---------------------------|----------------|--------------|----------------|
| Core Network | \$256 | \$0 | \$256 |
| Capitalized Labor | \$127 | \$27 | \$153 |
| Aerial Construction | \$183 | \$0 | \$183 |
| Underground Construction | \$1,758 | \$0 | \$1,758 |
| FTTH Drop Construction | \$567 | \$142 | \$709 |
| Ongoing Capital at Launch | \$167 | \$42 | \$209 |
| Project Capital | \$3,057 | \$210 | \$3,268 |

ASSUMPTIONS

40.0% take rate for new customers.

Rate plans:

200Mb/200Mb (\$49.95)

500Mb/500Mb (\$59.95)

1G/1G (\$89.95)

| FINANCIALS (\$ 000’S) | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 |
|-----------------------|------------------|--------------|--------|--------|--------|
| TAKE RATE | 32.0% | 40.0% | 40.0% | 40.0% | 40.0% |
| SUBSCRIBERS | 711 | 889 | 889 | 889 | 889 |
| REVENUE | \$201 | \$682 | \$749 | \$763 | \$778 |
| EBITDA | (\$26) | \$473 | \$555 | \$568 | \$581 |
| NET INCOME | (\$100) | \$318 | \$396 | \$408 | \$421 |
| PAYBACK/IRR | 6.7 YEARS | 72.4% | | | |

BUILD, OPERATE, TRAIN, AND TRANSFER

Pulse Broadband is fully committed to building and assisting in operating this network until the staff of Portland is fully trained and ready for transfer. We will manage the project and oversee all contractors while keeping the Portland team fully informed. We will also help layer in additional services over the infrastructure (i.e. Digital Voice, OTT TV, AMI, DR, etc.)

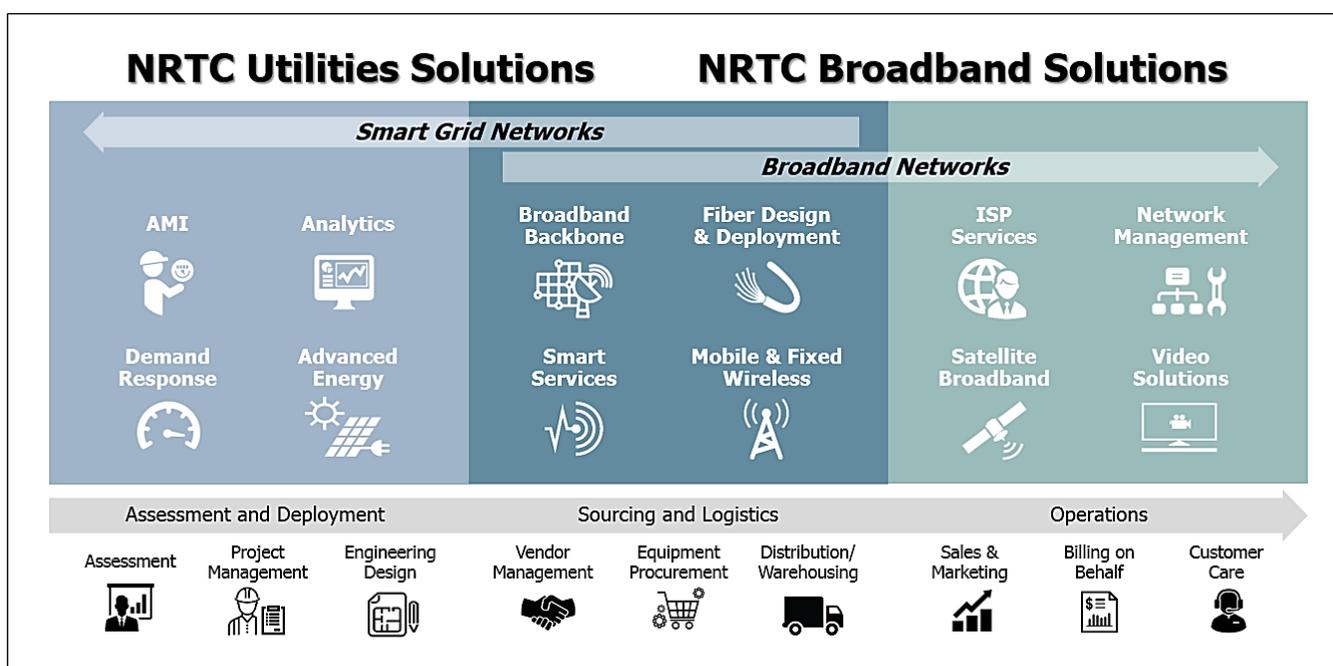


PULSE BROADBAND/NRTC AND PORTLAND – A POWERFUL COMBINATION

The city of Portland, MI has a long history of providing reliable electric service from a local source. It enjoys a positive customer satisfaction rating from its existing electric customers. As such, residents have a high confidence and direct vested interest in purchasing communication services from Portland. This positive reputation can be the foundation for providing communication services, both inside resident areas, and in adjacent towns.

Pulse Broadband/NRTC has a long and successful history of teaming with product vendors and nationwide providers to bring the benefits of technology to rural America. We have extensive experience working with electric utilities on prominent infrastructure projects, a large breadth of expertise, and a noteworthy depth in resources to support these types of project nationally.

Pulse Broadband/NRTC will provide products and dedicate the services required to meet the needs of the complete project. We feel strongly that a project like this requires a full partnership, and not simply advice from afar. We look forward to working closely with your team to light up resident areas and beyond.





THE COMMUNICATIONS NETWORK

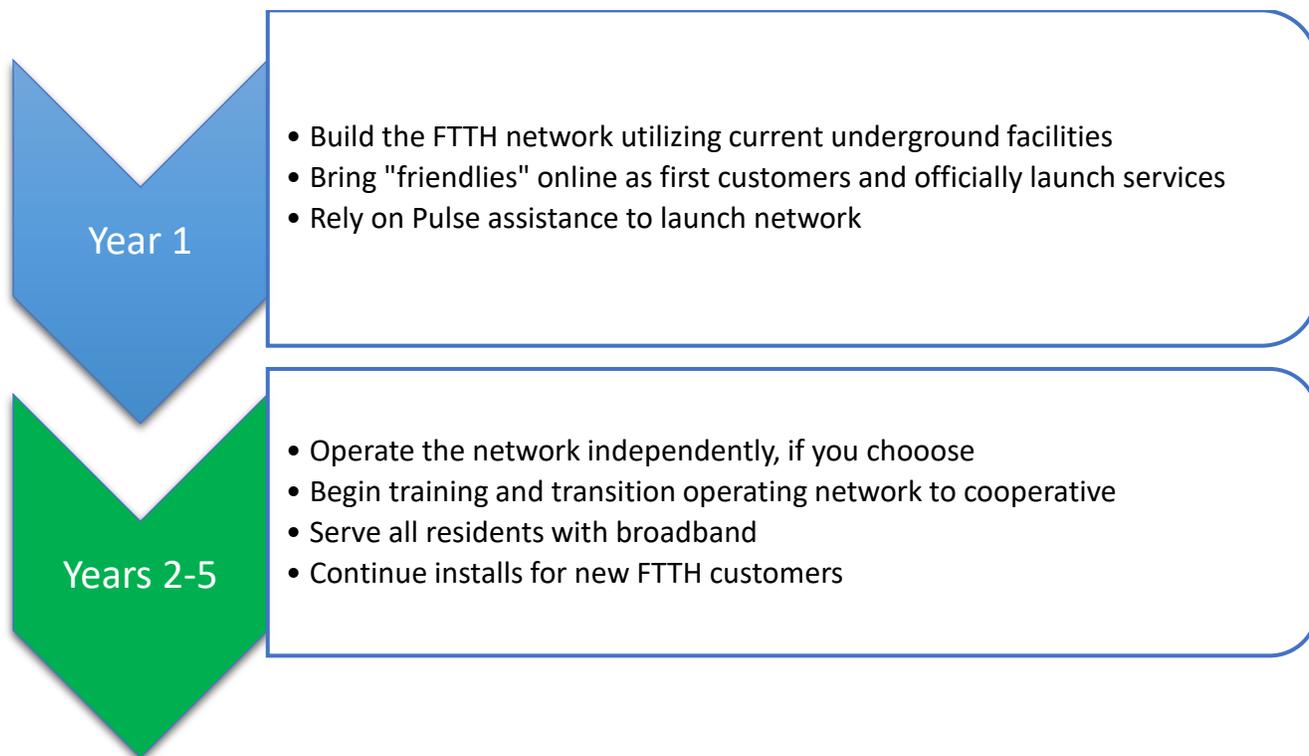




THE COMMUNICATIONS NETWORK

PHASED APPROACH

We have developed a phased approach for Portland's network to achieve the following:





FEASIBILITY INPUTS



FEASIBILITY INPUTS

Pulse Broadband worked closely with Portland to fully understand the vision for a broadband project. Specifically, utilizing current underground assets to support deployment of fiber. Through multiple onsite visits and exchanges of data, Pulse has modeled the following:

- 35 miles of plant (28.4 miles underground conduit, 6.7 miles of aerial)
- 2,222 residential homes
- 332 small businesses
- 15 large commercial/anchor institutions
- Underground construction to utilize currently installed conduit

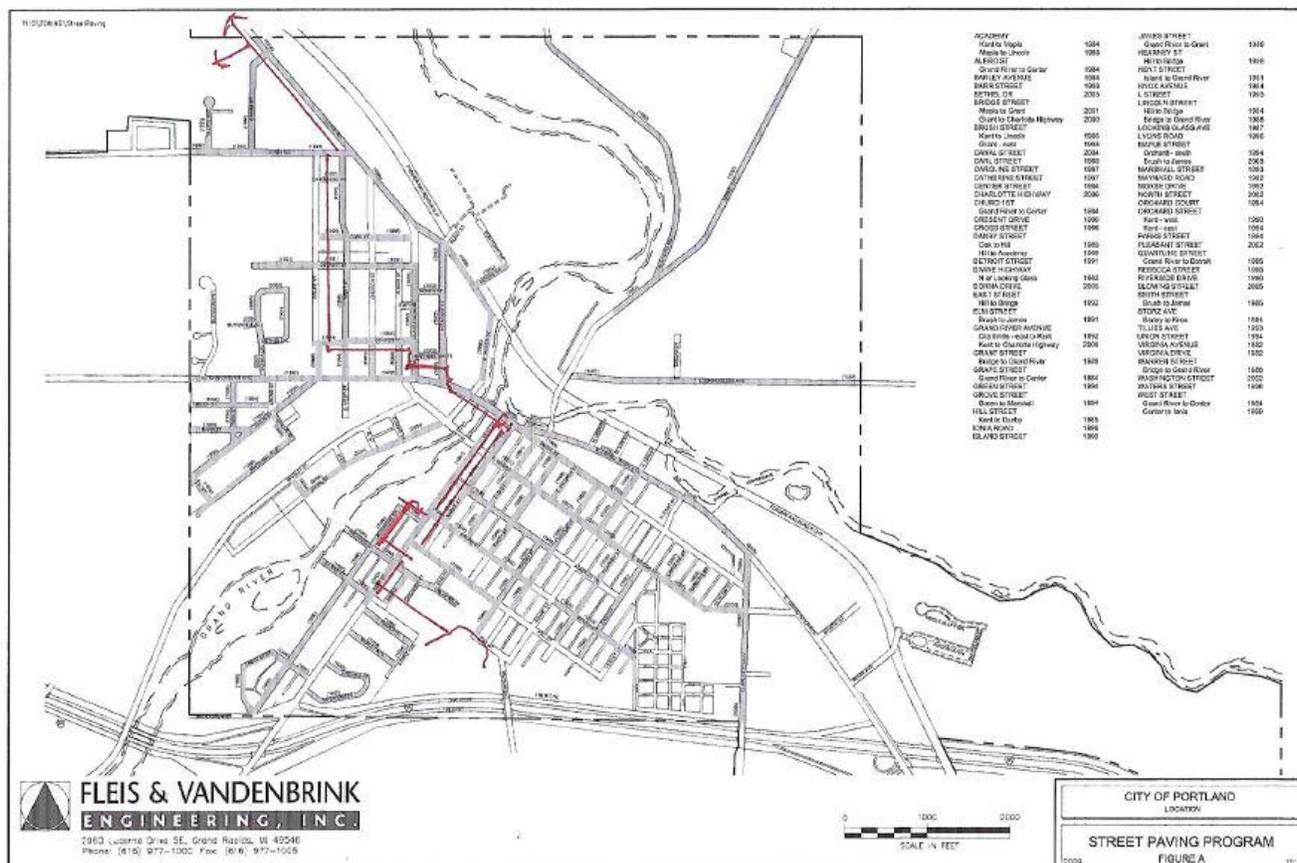


Figure 1: Portland Service Area



BANDWIDTH ANALYSIS

We conducted a thorough investigation to connect to the Internet for each office location. The first step is to utilize our fiber mapping tool. This tool will map the routes of the availability of fiber and determine the providers.

The good news is bandwidth is available using fiber connections. We were able to obtain quotes from AT&T and Everstream. The various offerings are summarized in the table below:

| Portland MI | | | | | | |
|-------------------------------|---------|---------|---------|---------|-----------|---------------------------------------|
| Summary of Provider Offerings | | | | | | |
| Provider | 1G | 5G | 10G | Install | Term | Notes |
| AT & T | \$2,255 | \$7,192 | \$9,423 | \$0 | 36 months | |
| Everstream | \$1,895 | \$5,000 | \$7,500 | \$0 | 36 months | Already lit building with Everstream. |
| CenturyLink (Level 3) | n/a | n/a | n/a | | | |

Initially, the model reflects a 1 Gb connection through Everstream. Bandwidth capacity and connections increase as the network and demand grow.

COMPETITIVE ANALYSIS

The purpose of this section is to review the general competitive situation Portland MI might face in selling advanced broadband services to its residents on a retail basis. The goal is to look at the following areas:

- 1) **Existing competitors in the proposed Broadband Network footprint.** Examine broadband availability, service offerings, and associated pricing. The idea is to determine if broadband network offerings would be superior and/or exclusive in the market and, if not, determine where competition exists and if this competition is likely to reduce potential take-rates and in turn impact the financial model.
- 2) **Determine general pricing levels in the vicinity for available broadband services.** This can help establish what area residents in this part of the state are paying for various types of broadband products and services.
- 3) **Provide a snapshot from other FTTH providers around the country for comparison.** As there are numerous electric cooperative networks up and running in various parts of the USA, pricing and success rates can be compared. One of the most critical elements of any plan will be the take-rate assumption. Understanding how others have approached pricing could be valuable information.
- 4) **Offer potential ideas related to pricing** which might be most effective under the circumstances in the situation. Pulse Broadband has had the luxury of being involved in numerous rural broadband projects and has observed differing approaches and offerings. Pulse has first-hand knowledge of offerings from projects around the country and their take-rates. We hope to provide some insights from experience that can be modeled in the financial plan. We recommend ultimately testing any pricing ideas with **statistically valid survey research** for confirmation.



EXISTING COMPETITORS IN THE SERVICE AREA

The primary providers of broadband services in Portland, MI are WOW (CATV) and AT&T (DSL). In addition to these wired providers, there is one point-to-point Fixed Wireless provider: FreedomNet Solutions. The table below summarizes these potential competitors in the marketplace and their anticipated impact for a new provider entering the Portland MI proposed service area.

Refer to Appendix 1 for a listing of these competitors.

GENERAL PRICING FOR BROADBAND SERVICES IN THE AREA

Pricing for broadband packages in the area seem to conform to the norms we see in other rural parts of the country. It is likely that whatever packages and services offers; they will be compared to other products available in the general area (even if those products are not available at a specific customer's address). There will be a general sense for what home Internet service costs and a general range of expectations for a standard level of service. The other consideration is to offer uniform pricing/packaging regardless of the last mile solution.

If we look at offerings with download speeds at or near the FCC standard of 25Mb, we can see a pricing pattern emerge for the service area. The following table summarizes these prices:

| Name of Provider | Type of Service | Service Speed | Monthly Price (on-going) |
|------------------|-----------------|-------------------|--------------------------|
| WOW | CATV | 50Mb/5Mb | \$39.99 |
| WOW | CATV | 100Mb/10Mb | \$49.99 |
| AT&T | DSL | 18Mb/1.5Mb** | \$65.00 |
| Average | | 56Mb/5.5Mb | \$51.66 |

*This provider charges based on bandwidth usage and does not publish upload speeds

**Speeds do not meet the FCC standard

***Limited availability

In general, common broadband prices appear to be in the \$40 to \$60 range, with an average for the group at \$51.66. The other interesting aspect of the pattern is that a better product does not necessarily translate into higher pricing. In most cases these providers likely have a captive audience and can set pricing without significant competition.

RURAL BROADBAND NETWORK PRICING IN OTHER COMMUNITIES

It is sometimes helpful to see what other providers are charging for similar services in various parts of the country. We have included a list of Pulse and non-Pulse clients to provide a sample of pricing plans from various locations.

| Name | Type of Provider | Type of Service | Situation/Notes |
|-------------------------------|-------------------|--|---|
| Midwest Energy Cooperative MI | Coop/Pulse Client | 25Mb/25Mb \$49.95 50Mb/50Mb \$59.95 100Mb/100Mb \$99.95 1Gb/1Gb \$199.95 Wireless Router \$5 Ph.\$39.95/\$49.95bus. (\$10) Discount bundle | Rural area, low competition, relatively low home density. |
| Ralls County Electric MO | Coop/Pulse Client | 10Mb/10Mb \$40.00 20Mb/10Mb \$50.00 Ph.\$40.00/50.00bus. (\$5) Discount Bundle | Rural, low competition. 4 homes per mile. |



| | | | |
|------------------------------------|--------------------------|---|--|
| United Electric MO | Coop/Pulse Client | 25Mb/25Mb \$39.95 100Mb/100Mb \$49.95 250Mb/250Mb \$69.95 1Gb/1Gb \$99.95 Ph.\$38.95/\$35addl lines. (\$10) Discount Bundle | Rural, low competition, low home density. |
| Kit Carson Electric NM | Coop/Pulse Client | 5Mb/5Mb \$29.95 30Mb/30Mb \$39.95 50Mb/50Mb \$49.95 100Mb/100Mb \$99.95 Ph. \$35 (\$10) Discount Bundle | Rural, low competition. Low income and Native populations need for low priced Option (\$29.95). |
| Lake Region Electric OK | Coop/Pulse Client | 20Mb/20Mb \$49.95 50Mb/50Mb \$69.95 100Mb/100Mb \$99.95 Ph.\$39.99/\$49.99bus. (\$15) Discount Bundle | Rural, low competition. |
| Co-Mo Electric MO | Coop/Pulse Client | 5Mb/5Mb \$39.95 100Mb/100Mb \$49.95 250Mb/250Mb \$59.95 1Gb/1Gb \$99.95 Wireless \$4.95 Ph.\$39.95/\$49.95bus. (\$15) Discount Bundle | Mostly rural area. Prices and speeds have evolved over time. |
| Blue Ridge Mountain Electric GA/NC | Coop | 10Mb/10Mb \$34.95 20Mb/20Mb \$39.95 30Mb/30Mb \$42.95 40Mb/40Mb \$49.95 50Mb/50Mb \$59.95 Ph. 19.95 LD extra | Established FTTH in cooperative setting. |
| Sebewaing Light + Water MI | Small Muni, Pulse Client | 30Mb/30Mb \$35.00 50Mb/50Mb \$55.00 100Mb/100Mb \$105.00 1Gb/100Mb \$160.00 Ph.\$35.00/\$25addl lines. (\$5) Bundle Discount | Overbuilt 100% by Comcast- Triple Play and ATT DSL. Competitive area. High home density, but small rural town setting. |
| Lafayette LA | Muni | 3Mb/3Mb \$19.95 60Mb/60Mb \$52.95 100Mb/100Mb \$62.95 1Gb/1Gb \$109.95 2Gb/2Gb \$299.95 | Muni in mid-size market in |
| Chattanooga TN | Muni | 100Mb/100Mb \$57.99 1Gb/1Gb \$69.99 10Gb/10Gb \$299.00 Ph. \$39.99 | Well known Muni FTTH. Comcast and others in Highly competitive urban area. |
| Google Kansas City KS | ISP | 100Mb/100Mb \$50.00 | Well known Project. |



| | | | |
|--|--|-----------------|--|
| | | 1Gb/1Gb \$70.00 | Simple pricing, 1 choice. Urban setting. |
|--|--|-----------------|--|

If we exclude outliers in urban areas and we remove any first level tiers with speeds below 10Mb we get an average cost for entry-level service that provides more than 20Mb at \$48.42 per month and a next level tier (generally more than 40Mb) at an average cost of \$62.79 (note: we generally see 70% or more of all residential HSD subscriptions at the standard level of service).

Phone service (unlimited local and long distance) is generally priced either at \$39.95 or \$35 per month among all the providers.

Again, based on this limited sample, national prices appear to be in the high \$40s (48.42 avg.) for a standard level of service, while in the area prices for a standard level of service average \$51.66.

TAKE-RATE CALCULATIONS

An important driver for the financial model and the success of a rural broadband network project is the estimated take-rate. Pulse uses our real-world experience and national averages to calculate an overall take-rate for service territory. These calculations take into consideration the previously mentioned competitors and density figures. Pulse conducts an analysis at the individual substation and town level to determine density and take-rate. The take-rate and estimated number of subscribers at each substation and town are rolled into a weighted take-rate for the whole service area. This analysis was conducted for each substation and town. The following table illustrates the estimated take-rate based upon density and the resulting weighted take-rate:

| Density | Estimated Take Rate | Weighted Average |
|-------------------------|---------------------|------------------|
| 0-10 | 48% | 0.0% |
| 10-15 | 45% | 0.0% |
| 15-20 | 42% | 0.0% |
| 20+ | 40% | 100.0% |
| Weighted Average | | 40.0% |

PRICING IDEAS

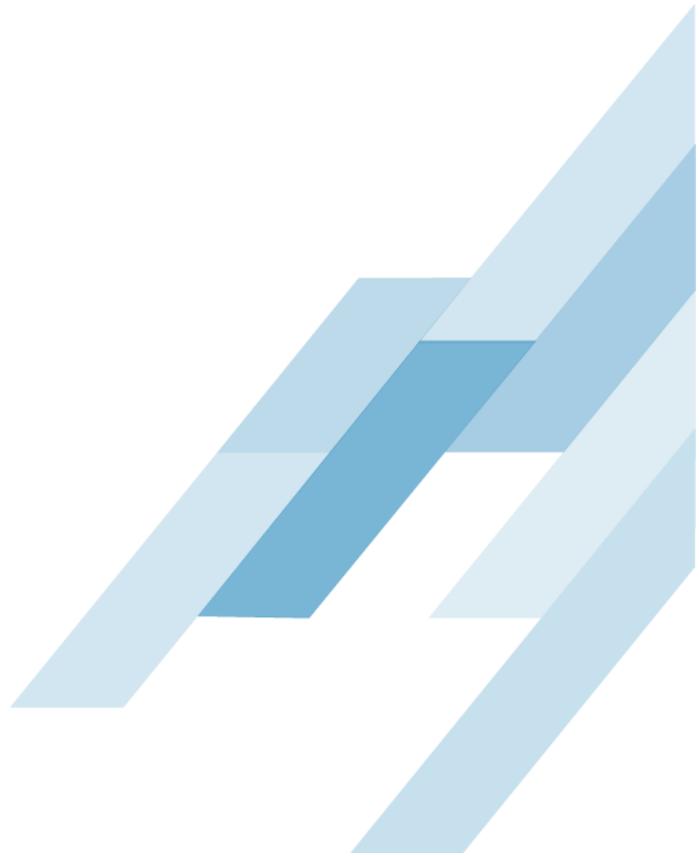
With this information in mind, we built the preliminary financial model with the following prices and entry fees:

| SERVICE LEVEL | MONTHLY RATE | INCLUDED IN PRICE |
|------------------------------|--------------|---|
| 200Mb/200Mb | \$49.95 | Free Stnd. Install 1 st 90 Days Includes Standard modem Wireless Router \$4.95 (Extra) |
| 500Mb/500Mb | \$59.95 | Free Stnd. Install 1 st 90 Days Includes Standard Modem Wireless Router \$4.95 (Extra) |
| 1Gb/1Gb | \$89.95 | Free Stnd. Install 1 st 90 Days Includes Standard Modem Wireless Router \$4.95 (Extra) |
| Small Business (500Mb/500Mb) | \$89.95 | Free Stnd. Install 1 st 90 Days Includes Standard Modem Wireless Router \$4.95 (Extra) |
| Unlimited Telephone | \$39.95 | Free Stnd. Install 1 st 90 Days. With High Speed Data package |



| | | |
|-----------------------|-----------------------|-----------------------------------|
| Data and Phone Bundle | (\$5) Bundle Discount | Buy Data and Phone in Combination |
|-----------------------|-----------------------|-----------------------------------|

FEASIBILITY OUTPUTS





FEASIBILITY OUTPUTS

SUBSCRIBER AND INVESTMENT SUMMARY

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
|--------------------------|--------|--------|--------|--------|--------|-------|
| Distribution Fiber Miles | 37 | 0 | 0 | 0 | 0.0 | 37 |
| FTTH Homes | 2,222 | 0 | 0 | 0 | 0 | 2,222 |
| Total Homes Passed | 2,222 | 0 | 0 | 0 | 0 | 2,222 |
| Initial Take Rate | 32.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% |
| Total Customers | 711 | 178 | 0 | 0 | 0 | 889 |

Core Network Construction

| | Year 1 | Year 2 | Year3 | Year 4 | Year 5 | Total Project |
|-------------------|-----------|--------|-------|--------|--------|---------------|
| Core Network | \$255,869 | \$0 | \$0 | \$0 | \$0 | \$255,869 |
| Cabinet Equipment | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

Fiber Backbone Construction

| | Year 1 | Year 2 | Year3 | Year 4 | Year 5 | Total Project |
|---------------------------|-------------|--------|-------|--------|--------|---------------|
| Aerial Construction | \$182,538 | \$0 | \$0 | \$0 | \$0 | \$182,538 |
| Under Ground Construction | \$1,758,492 | \$0 | \$0 | \$0 | \$0 | \$1,758,492 |

Radio Access Network Construction

| | Year 1 | Year 2 | Year3 | Year 4 | Year 5 | Total Project |
|--------------------|--------|--------|-------|--------|--------|---------------|
| Site Construction | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Microwave Backhaul | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

FTTH Drop Construction

| | Year 1 | Year 2 | Year3 | Year 4 | Year 5 | Total Project |
|------------------------|-----------|-----------|-------|--------|--------|---------------|
| FTTH Drop Construction | \$566,805 | \$141,701 | \$0 | \$0 | \$0 | \$708,506 |

FWA Drop Construction

| | Year 1 | Year 2 | Year3 | Year 4 | Year 5 | Total Project |
|-----------------------|--------|--------|-------|--------|--------|---------------|
| FWA Drop Construction | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |

Project Totals

| | Year 1 | Year 2 | Year3 | Year 4 | Year 5 | Total Project |
|--------------------------------|-----------|----------|-------|--------|--------|---------------|
| Ongoing Capital at Launch | \$167,094 | \$41,774 | \$0 | \$0 | \$0 | \$208,868 |
| Capitalized Labor until Launch | \$126,576 | \$26,664 | \$0 | \$0 | \$0 | \$153,240 |

| | | | | | | |
|------------------------------|--------------------|------------------|------------|------------|------------|--------------------|
| Total Project Capital | \$3,057,375 | \$210,139 | \$0 | \$0 | \$0 | \$3,267,514 |
|------------------------------|--------------------|------------------|------------|------------|------------|--------------------|



FINANCIAL HIGHLIGHTS

The highlights below come from the Management Dashboard tab from the Pulse financial model. These were chosen as important indicators for the management team to share with interested parties. A few very important notes to show financial feasibility of the project include:

| Balance Sheet Overview | | | | | | | | |
|---------------------------------------|---------|--------|--------|--------|--------|---------------------|-----------------|-----------------|
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total (\$ 000's) | Per Pass/cov | Per Customer |
| FWA Sites | 0 | 0 | 0 | 0 | 0 | | | |
| Homes passed/covered | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | | | |
| Take Rate | 32.0% | 40.0% | 40.0% | 40.0% | 40.0% | | | |
| Residential Customers | 711 | 889 | 889 | 889 | 889 | | | |
| Construction Costs (\$ 000's) | \$2,764 | \$142 | \$0 | \$0 | \$0 | \$2,905 | \$1,308 | \$3,269 |
| Other Capital Expenditures (\$ 000's) | \$294 | \$68 | \$0 | \$0 | \$0 | \$362 | \$163 | \$407 |
| Op. Exp. and Cash Cushion (\$000's) | \$658 | \$0 | \$0 | \$0 | \$0 | \$658 | \$296 | \$740 |
| Total Expenditures (\$ 000's) | \$3,715 | \$210 | \$0 | \$0 | \$0 | \$3,925 | \$1,767 | \$4,417 |
| Grants Received (\$ 000's) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Debt Incurred (\$ 000's) | \$3,715 | \$210 | \$0 | \$0 | \$0 | \$3,925 | \$1,767 | \$4,417 |

| Income Statement Overview | | | | | | |
|---|---------|---------|---------|---------|---------|---------------|
| <i>All financial drivers stated per customer at end of year</i> | | | | | | |
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | @ Full Launch |
| Revenue | \$60.72 | \$60.20 | \$61.39 | \$62.58 | \$63.77 | \$64.96 |
| Variable Costs | \$13.59 | \$12.37 | \$12.48 | \$12.58 | \$12.68 | \$12.79 |
| Customer Margin | \$47.13 | \$47.83 | \$48.92 | \$50.00 | \$51.09 | \$52.18 |
| Operating Costs | \$8.04 | \$4.01 | \$3.34 | \$3.38 | \$3.42 | \$3.46 |
| Total EBITDA | \$39.08 | \$43.82 | \$45.58 | \$46.63 | \$47.67 | \$48.72 |
| Debt Service | \$17.81 | \$15.56 | \$15.56 | \$15.56 | \$15.56 | \$15.56 |
| Monthly Cash Flow | \$21.27 | \$28.26 | \$30.02 | \$31.07 | \$32.12 | \$33.16 |

| Key Project Viability Indicators | | | | | |
|----------------------------------|------------|---------|--------------------|---------|---------|
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| EBITDA per Customer | \$39.08 | \$43.82 | \$45.58 | \$46.63 | \$47.67 |
| Equity to Assets % | -2.9% | 5.8% | 15.4% | 24.3% | 32.5% |
| Simple Payback | 6.7 years | | Project IRR | | 72.4% |
| Loan Term | 20.5 years | | Loan Interest Rate | | 0.0% |



10-YEAR FINANCIAL SCHEDULES

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Mileage and Homes Passed: | | | | | | | | | | |
| Aerial Miles | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| UG Miles | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Miles | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 |
| FTTH Network | | | | | | | | | | |
| Homes passed | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 |
| Businesses passed | 332 | 332 | 332 | 332 | 332 | 332 | 332 | 332 | 332 | 332 |
| Large businesses passed | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Take-rate Statistics: | | | | | | | | | | |
| Res customer take rate | 32.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% |
| Bus customer take rate | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% |
| Large Bus customer take rate | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |
| FTTH Customer Statistics: | | | | | | | | | | |
| Res customers | 711 | 889 | 889 | 889 | 889 | 889 | 889 | 889 | 889 | 889 |
| Bus customers | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 |
| Large bus customers | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| New Installs | 844 | 178 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customers | | | | | | | | | | |
| Res customers | 711 | 889 | 889 | 889 | 889 | 889 | 889 | 889 | 889 | 889 |
| Bus customers | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 |
| Large bus customers | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| New Installs | 844 | 178 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Projected Income Statement: | | | | | | | | | | |
| Revenue: | | | | | | | | | | |
| Data only | \$152,831 | \$522,735 | \$586,011 | \$597,473 | \$608,936 | \$620,398 | \$631,860 | \$643,323 | \$654,785 | \$666,247 |
| Double Play - Data/VoIP | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Double Play - Data/Video | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Triple Play | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Small Business | \$43,146 | \$143,902 | \$146,570 | \$149,436 | \$152,303 | \$155,170 | \$158,037 | \$160,904 | \$163,771 | \$166,638 |
| Large Commercial | \$5,360 | \$15,811 | \$16,104 | \$16,419 | \$16,734 | \$17,049 | \$17,364 | \$17,679 | \$17,994 | \$18,309 |
| Installation Fees Collected | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Cell Towers | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| FCC or Other Grants | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total revenue | \$201,336 | \$682,448 | \$748,685 | \$763,329 | \$777,973 | \$792,618 | \$807,262 | \$821,906 | \$836,550 | \$851,195 |
| Direct Costs | | | | | | | | | | |
| Bandwidth costs (including backh: | \$42,979 | \$61,929 | \$45,480 | \$45,480 | \$45,480 | \$45,480 | \$45,480 | \$45,480 | \$45,480 | \$45,480 |
| Telephone costs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Programming costs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Customer care and billing | \$16,866 | \$58,294 | \$65,433 | \$66,713 | \$67,993 | \$69,273 | \$70,553 | \$71,833 | \$73,113 | \$74,393 |
| Network management | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 |
| Pulse Integration consulting | \$25,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total direct variable costs | \$126,845 | \$162,223 | \$152,913 | \$154,193 | \$155,473 | \$156,753 | \$158,033 | \$159,313 | \$160,593 | \$161,873 |
| Total direct margin | \$74,491 | \$520,225 | \$595,772 | \$609,136 | \$622,500 | \$635,865 | \$649,229 | \$662,593 | \$675,958 | \$689,322 |
| Direct margin per customer | \$7.32 | \$42.28 | \$48.42 | \$49.51 | \$50.59 | \$51.68 | \$52.76 | \$53.85 | \$54.94 | \$56.02 |



| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Bad debt | \$1,499 | \$6,722 | \$7,475 | \$7,621 | \$7,768 | \$7,914 | \$8,060 | \$8,207 | \$8,353 | \$8,500 |
| Project Manager wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Admin/marketing wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Maintenance tech wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Installation tech wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Capitalized portion of wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Payroll taxes and benefits | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Vehicle repairs and fuel | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Facilities rent | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Utilities | \$3,000 | \$3,033 | \$3,093 | \$3,153 | \$3,213 | \$3,273 | \$3,333 | \$3,393 | \$3,453 | \$3,513 |
| Plant Maintenance Materials | \$0 | \$740 | \$740 | \$740 | \$740 | \$740 | \$740 | \$740 | \$740 | \$740 |
| FWA Maintenance | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Property tax expense | \$0 | \$14,202 | \$14,527 | \$14,527 | \$14,527 | \$14,527 | \$14,527 | \$14,527 | \$14,527 | \$14,527 |
| Pole rental | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| FWA site rental | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Marketing sales | \$42,192 | \$8,888 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other operating expense | \$54,027 | \$13,649 | \$14,974 | \$15,267 | \$15,559 | \$15,852 | \$16,145 | \$16,438 | \$16,731 | \$17,024 |
| Total operating expenses | \$100,717 | \$47,234 | \$40,808 | \$41,307 | \$41,807 | \$42,306 | \$42,805 | \$43,305 | \$43,804 | \$44,303 |
| EBITDA | (\$26,227) | \$472,991 | \$554,964 | \$567,829 | \$580,694 | \$593,559 | \$606,424 | \$619,289 | \$632,154 | \$645,019 |
| EBITDA Margin | -13.0% | 69.3% | 74.1% | 74.4% | 74.6% | 74.9% | 75.1% | 75.3% | 75.6% | 75.8% |
| Interest Expense | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Depreciation | \$73,763 | \$154,650 | \$159,347 | \$159,347 | \$159,347 | \$159,347 | \$159,347 | \$161,890 | \$168,009 | \$168,883 |
| Net income | (\$99,990) | \$318,341 | \$395,617 | \$408,482 | \$421,347 | \$434,212 | \$447,077 | \$457,399 | \$464,145 | \$476,136 |



Projected Statement of Cash Flows:

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|-------------------------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Net income | (\$99,990) | \$318,341 | \$395,617 | \$408,482 | \$421,347 | \$434,212 | \$447,077 | \$457,399 | \$464,145 | \$476,136 |
| Add: depreciation | \$73,763 | \$154,650 | \$159,347 | \$159,347 | \$159,347 | \$159,347 | \$159,347 | \$161,890 | \$168,009 | \$168,883 |
| Change in receivables | (\$51,466) | (\$10,264) | (\$1,220) | (\$1,220) | (\$1,220) | (\$1,220) | (\$1,220) | (\$1,220) | (\$1,220) | (\$1,220) |
| Change in payables | \$18,339 | (\$1,543) | (\$584) | \$148 | \$148 | \$148 | \$148 | \$148 | \$148 | \$148 |
| Cash flow to/from operations | (\$59,353) | \$461,184 | \$553,159 | \$566,757 | \$579,622 | \$592,487 | \$605,352 | \$618,217 | \$631,082 | \$643,947 |
| Capital expenditures | (\$3,057,375) | (\$210,139) | \$0 | \$0 | \$0 | \$0 | \$0 | (\$156,429) | (\$39,107) | \$0 |
| Cash flows to investing | (\$3,057,375) | (\$210,139) | \$0 | \$0 | \$0 | \$0 | \$0 | (\$156,429) | (\$39,107) | \$0 |
| Proceeds from senior debt financing | \$3,715,355 | \$210,139 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Principal payments on senior debt | (\$181,187) | (\$191,435) | (\$191,435) | (\$191,435) | (\$191,435) | (\$191,435) | (\$191,435) | (\$191,435) | (\$191,435) | (\$191,435) |
| Non-FCC Grant contributions | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Equity contributions | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Equity distributions | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Cash flows to/from financing | \$3,534,168 | \$18,704 | (\$191,435) |
| Ending cash balance | \$417,440 | \$687,189 | \$1,048,914 | \$1,424,236 | \$1,812,423 | \$2,213,475 | \$2,627,392 | \$2,897,745 | \$3,298,285 | \$3,750,797 |

Projected Balance Sheet:

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|--------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Cash | \$417,440 | \$687,189 | \$1,048,914 | \$1,424,236 | \$1,812,423 | \$2,213,475 | \$2,627,392 | \$2,897,745 | \$3,298,285 | \$3,750,797 |
| Receivables | \$51,466 | \$61,729 | \$62,950 | \$64,170 | \$65,390 | \$66,611 | \$67,831 | \$69,052 | \$70,272 | \$71,492 |
| Total current assets | \$468,905 | \$748,919 | \$1,111,863 | \$1,488,406 | \$1,877,813 | \$2,280,085 | \$2,695,223 | \$2,966,796 | \$3,368,556 | \$3,822,289 |
| Property | \$3,057,375 | \$3,267,514 | \$3,267,514 | \$3,267,514 | \$3,267,514 | \$3,267,514 | \$3,267,514 | \$3,423,943 | \$3,463,050 | \$3,463,050 |
| Depreciation (average life 20 years) | (\$73,763) | (\$228,413) | (\$387,760) | (\$547,107) | (\$706,454) | (\$865,801) | (\$1,025,148) | (\$1,187,038) | (\$1,355,046) | (\$1,523,929) |
| Total assets | \$3,452,517 | \$3,788,019 | \$3,991,617 | \$4,208,812 | \$4,438,873 | \$4,681,798 | \$4,937,589 | \$5,203,701 | \$5,476,560 | \$5,761,410 |
| Payables and deferred revenue | \$18,339 | \$16,796 | \$16,211 | \$16,360 | \$16,508 | \$16,656 | \$16,804 | \$16,953 | \$17,101 | \$17,249 |
| Bank debt | \$3,534,168 | \$3,552,872 | \$3,361,438 | \$3,170,003 | \$2,978,568 | \$2,787,134 | \$2,595,699 | \$2,404,264 | \$2,212,830 | \$2,021,395 |
| Total liabilities | \$3,552,507 | \$3,569,668 | \$3,377,649 | \$3,186,363 | \$2,995,076 | \$2,803,790 | \$2,612,504 | \$2,421,217 | \$2,229,931 | \$2,038,644 |
| Contributed equity | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Accumulated income/loss | (\$99,990) | \$218,351 | \$613,968 | \$1,022,450 | \$1,443,797 | \$1,878,008 | \$2,325,085 | \$2,782,484 | \$3,246,629 | \$3,722,765 |
| Total Equity | (\$99,990) | \$218,351 | \$613,968 | \$1,022,450 | \$1,443,797 | \$1,878,008 | \$2,325,085 | \$2,782,484 | \$3,246,629 | \$3,722,765 |
| Total Liabilities and Equity | \$3,452,517 | \$3,788,019 | \$3,991,617 | \$4,208,812 | \$4,438,873 | \$4,681,798 | \$4,937,589 | \$5,203,701 | \$5,476,560 | \$5,761,410 |



NEXT STEPS



NEXT STEPS

119+ POINT PROJECT TIMELINE

If the decision is to move forward with the broadband project, Pulse will arrive on-site with the management team and project leadership to delve into the details of the project. We've got it all covered and want to be sure you understand all the steps necessary to get the project launched.

STATISTICALLY VALID CUSTOMER SURVEY

Pulse recommends further research to verify residents' attitudes towards broadband and their likelihood to purchase new services. Pulse recommends completing a statistically valid customer survey as the next step. This survey will randomly select residents to gauge their interest in broadband products. Pulse can work with you to design the appropriate questions and select a qualified research firm. Costs are generally in the \$24-26 dollar per completed survey range and require 300 to 450 surveys to achieve a recommended 95% confidence level. After the survey, Pulse can revise the financial model based on results and continue to refine the financial model.

GRANT OPPORTUNITIES

Pulse has assisted numerous clients with their funding options. In the first round, Pulse worked with other cooperatives to prepare applications and successfully win funds through the FCC's Connect America Fund. Potentially, there will be another reverse auction in 2018 through the Connect America Fund. Pulse has also helped clients identify funding opportunities through the United States Department of Agriculture Rural Development (USDA), Universal Services Administrative Company (USAC), state governments, and private groups. Pulse has the experience helping our clients obtain grant funding and we are here to help with future opportunities.

BUSINESS MODEL

The offering of new services to your residents opens the possibility to create a new business model. Becoming an Internet Service Provider is an important decision and will have various effects on the finances and forecasting of the electric cooperative. Pulse Broadband has experience with clients who keep the Internet services under the electric cooperative umbrella, clients who form a subsidiary, and clients who create a partnership with an Internet Service Provider. Pulse is here to continue the discussion of the pros and cons of each scenario and help determine which model best suits the vision of your cooperative and meets your regulatory environment.



APPENDIX 1

EXISTING COMPETITORS

The primary providers of broadband services in Portland, MI are WOW (CATV) and AT&T (DSL). In addition to these wired providers, there is one point-to-point Fixed Wireless provider: FreedomNet Solutions.

The table below summarizes these potential competitors in the marketplace and their anticipated impact for a new provider entering the broadband marketplace in the City of Portland, MI.

Table 1.0 Potential Competitors in the Portland MI Footprint

| Name of Provider (Coverage) | Type of Service | Sample of Monthly Prices | Competitive Impact | |
|-----------------------------|-----------------|-----------------------------|--------------------|---|
| WOW! | CATV | 50Mb/5Mb | \$39.99 | <p>WOW is available in most of the City of Portland’s service area. The only exceptions are in the most northern and western areas of the City of Portland’s service area.</p> <p>Where available, WOW provides a competitive service with several different speed options.</p> <p>It appears as though WOW serves 60-70% of the homes in their service area with at least one of their services – video, voice or data.</p> |
| | | 100Mb/10Mb | \$49.99 | |
| | | 500Mb/50Mb | \$69.99 | |
| | | \$10.00 discount | 2 Year Contract | |
| | | Wireless Router | \$10.00 | |
| | | Installation | \$50.00 | |
| AT&T | DSL | 1.5Mb/256K | \$55.00 | <p>AT&T is available in all areas of the City of Portland service area EXCEPT the very northern section (north of Looking Glass Ave).</p> <p>In their service area, AT&T’s 18Mb service is widely available. There are a few minor exceptions near the edges of their service area where the distance from their central switch is the greatest.</p> <p>Despite this large service area, even AT&T’s top speed is not very competitive s. AT&T is also known to suffer from a lower than average Customer Satisfaction Rating (41 of 100% per Broadband Now).</p> |
| | | 5Mb/1Mb | \$55.00 | |
| | | 10Mb/1.5Mb | \$65.00 | |
| | | 18Mb/1.5Mb | \$65.00 | |
| | | \$15.00 Discount for Year 1 | | |
| | | Router Included | | |
| | | Self-Install | \$35.00 | |
| | | Tech Install | \$99.00 | |



| | | | | |
|-----------------------------|-------------------|---|----------|--|
| FreedomNet Solutions | Fixed Wireless | 3Mb/1Mb | \$49.95 | <p>FreedomNet's Fixed Wireless service is available in most of the City of Portland. The except is the more commercial area east of town in the triangle formed by Charlotte Highway, W. Grand River Avenue and I-96.</p> <p>It is important to note that FreedomNet requires a line of site connection to their tower so in many cases trees and buildings will limit the availability of FreedomNet's service.</p> <p>Where available, FreedomNet's service is slower and higher priced.</p> |
| | | 6Mb/1.5Mb | \$64.95 | |
| | | 10Mb/2Mb | \$79.95 | |
| | | 15Mb/3Mb | \$99.95 | |
| | | 25Mb/5Mb | \$159.95 | |
| | | Installation | \$149.99 | |
| | | CURRENT DATA CAPS | | |
| | | 3Mb Service | 350Gb | |
| | | 6Mb Service | 500Gb | |
| | | 10Mb Service | 750Gb | |
| | | 15Mb Service | 1TB | |
| | | 25Mb Service | 2TB | |
| | | Unlimited Plans are available. Price varies by Speed. | | |
| | | 2 Year Contract Required. | | |



MODEL ITERATION: 35% TAKE-RATE

A model iteration was developed to analyze the effects of decreasing the initial take-rate. The take-rate was reduced from 40% to 35%. This lowered the capital cost of the project due to a reduction in drop construction. The decrease in customers reduced the IRR and extended the Simple Payback, but overall results still produced a strong, feasible project. In summary:

| | Year 1 | Year 2 | Total |
|--------------------------|--------|--------|-------|
| Distribution Fiber Miles | 37 | 0 | 37 |
| FTTH Homes | 2,222 | 0 | 2,222 |
| Total Homes Passed | 2,222 | 0 | 2,222 |
| Initial Take Rate | 28.0% | 35.0% | 35.0% |
| Total Customers | 622 | 156 | 778 |

| Project Capital Investment | Year 1 | Year 2 | Total |
|---------------------------------|--------------------|------------------|--------------------|
| Core Network | \$251,108 | \$0 | \$251,108 |
| Cabinet Equipment | \$0 | \$0 | \$0 |
| Capitalized Labor | \$113,244 | \$23,331 | \$136,575 |
| Aerial Construction | \$179,353 | \$0 | \$179,353 |
| Underground Constructio | \$1,742,939 | \$0 | \$1,742,939 |
| FTTH Drop Construction | \$495,954 | \$123,989 | \$619,943 |
| FWA Drop Construction | \$0 | \$0 | \$0 |
| FWA Equipment | \$0 | \$0 | \$0 |
| Ongoing Capital at Launch | \$146,208 | \$36,552 | \$182,760 |
| Project Capital | \$2,928,805 | \$183,872 | \$3,112,676 |
| Op. Exp. Invested at Launch | \$25,000 | \$0 | \$25,000 |
| Operating Funds Cushion | \$628,700 | \$0 | \$628,700 |
| Total Project Investment | \$3,582,505 | \$183,872 | \$3,766,376 |



FINANCIAL HIGHLIGHTS

The highlights below come from the Management Dashboard tab from the Pulse financial model. These were chosen as important indicators for the management team to share with interested parties. A few very important notes to show financial feasibility of the project include:

| Balance Sheet Overview | | | | | | | | |
|---------------------------------------|---------|--------|--------|--------|--------|---------------------|-----------------|-----------------|
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total (\$ 000's) | Per Pass/cov | Per Customer |
| FWA Sites | 0 | 0 | 0 | 0 | 0 | | | |
| Homes passed/covered | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | | | |
| Take Rate | 28.0% | 35.0% | 35.0% | 35.0% | 35.0% | | | |
| Residential Customers | 622 | 778 | 778 | 778 | 778 | | | |
| Construction Costs (\$ 000's) | \$2,669 | \$124 | \$0 | \$0 | \$0 | \$2,793 | \$1,257 | \$3,592 |
| Other Capital Expenditures (\$ 000's) | \$259 | \$60 | \$0 | \$0 | \$0 | \$319 | \$144 | \$411 |
| Op. Exp. and Cash Cushion (\$000's) | \$654 | \$0 | \$0 | \$0 | \$0 | \$654 | \$294 | \$841 |
| Total Expenditures (\$ 000's) | \$3,583 | \$184 | \$0 | \$0 | \$0 | \$3,766 | \$1,695 | \$4,843 |
| Grants Received (\$ 000's) | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Debt Incurred (\$ 000's) | \$3,583 | \$184 | \$0 | \$0 | \$0 | \$3,766 | \$1,695 | \$4,843 |

| Income Statement Overview | | | | | | |
|---|---------|---------|---------|---------|---------|---------------|
| <i>All financial drivers stated per customer at end of year</i> | | | | | | |
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | @ Full Launch |
| Revenue | \$61.54 | \$60.91 | \$62.12 | \$63.32 | \$64.53 | \$65.73 |
| Variable Costs | \$14.49 | \$13.14 | \$13.24 | \$13.34 | \$13.44 | \$13.55 |
| Customer Margin | \$47.05 | \$47.78 | \$48.88 | \$49.98 | \$51.08 | \$52.18 |
| Operating Costs | \$7.97 | \$4.15 | \$3.49 | \$3.53 | \$3.57 | \$3.61 |
| Total EBITDA | \$39.08 | \$43.63 | \$45.39 | \$46.45 | \$47.51 | \$48.57 |
| Debt Service | \$18.87 | \$16.46 | \$16.46 | \$16.46 | \$16.46 | \$16.46 |
| Monthly Cash Flow | \$20.22 | \$27.17 | \$28.93 | \$29.99 | \$31.05 | \$32.11 |

| Key Project Viability Indicators | | | | | |
|----------------------------------|------------|---------|--------------------|---------|---------|
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| EBITDA per Customer | \$39.08 | \$43.63 | \$45.39 | \$46.45 | \$47.51 |
| Equity to Assets % | -3.2% | 4.7% | 13.6% | 22.0% | 29.9% |
| Simple Payback | 7.1 years | | Project IRR | | 66.7% |
| Loan Term | 20.9 years | | Loan Interest Rate | | 0.0% |



| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Mileage and Homes Passed: | | | | | | | | | | |
| Aerial Miles | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| UG Miles | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 |
| Miles | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 |
| Substations | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BS deployed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FTTH Network | | | | | | | | | | |
| Homes passed | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 | 2,222 |
| Businesses passed | 332 | 332 | 332 | 332 | 332 | 332 | 332 | 332 | 332 | 332 |
| Large businesses passed | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Take-rate Statistics: | | | | | | | | | | |
| Res customer take rate | 28.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% |
| Bus customer take rate | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% | 40.0% |
| Large Bus customer take rate | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |
| FTTH Customer Statistics: | | | | | | | | | | |
| Res customers | 622 | 778 | 778 | 778 | 778 | 778 | 778 | 778 | 778 | 778 |
| Bus customers | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 |
| Large bus customers | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| New Installs | 755 | 156 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Customers | | | | | | | | | | |
| Res customers | 622 | 778 | 778 | 778 | 778 | 778 | 778 | 778 | 778 | 778 |
| Bus customers | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 |
| Large bus customers | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| New Installs | 755 | 156 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Projected Income Statement: | | | | | | | | | | |
| Revenue: | | | | | | | | | | |
| Data only | \$133,727 | \$457,393 | \$512,760 | \$522,789 | \$532,819 | \$542,848 | \$552,878 | \$562,907 | \$572,937 | \$582,966 |
| Double Play - Data/VoIP | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Double Play - Data/Video | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Triple Play | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Small Business | \$42,232 | \$143,902 | \$146,570 | \$149,436 | \$152,303 | \$155,170 | \$158,037 | \$160,904 | \$163,771 | \$166,638 |
| Large Commercial | \$5,182 | \$15,811 | \$16,104 | \$16,419 | \$16,734 | \$17,049 | \$17,364 | \$17,679 | \$17,994 | \$18,309 |
| Installation Fees Collected | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Cell Towers | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| FCC or Other Grants | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total revenue | \$181,141 | \$617,106 | \$675,434 | \$688,645 | \$701,857 | \$715,068 | \$728,279 | \$741,491 | \$754,702 | \$767,914 |
| Direct Costs | | | | | | | | | | |
| Bandwidth costs (including backh: | \$41,202 | \$60,152 | \$45,480 | \$45,480 | \$45,480 | \$45,480 | \$45,480 | \$45,480 | \$45,480 | \$45,480 |
| Telephone costs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Programming costs | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Customer care and billing | \$14,758 | \$51,007 | \$57,254 | \$58,374 | \$59,494 | \$60,614 | \$61,734 | \$62,854 | \$63,974 | \$65,093 |
| Network management | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 | \$42,000 |
| Pulse Integration consulting | \$25,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total direct variable costs | \$122,959 | \$153,159 | \$144,734 | \$145,854 | \$146,974 | \$148,094 | \$149,214 | \$150,334 | \$151,454 | \$152,573 |
| Total direct margin | \$58,181 | \$463,947 | \$530,699 | \$542,791 | \$554,882 | \$566,974 | \$579,066 | \$591,157 | \$603,249 | \$615,340 |



| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---------------------------------|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Bad debt | \$1,345 | \$6,081 | \$6,743 | \$6,875 | \$7,008 | \$7,140 | \$7,272 | \$7,404 | \$7,536 | \$7,668 |
| Project Manager wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Admin/marketing wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Maintenance tech wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Installation tech wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Capitalized portion of wages | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Payroll taxes and benefits | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Vehicle repairs and fuel | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Facilities rent | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Utilities | \$3,000 | \$3,033 | \$3,093 | \$3,153 | \$3,213 | \$3,273 | \$3,333 | \$3,393 | \$3,453 | \$3,513 |
| Plant Maintenance Materials | \$0 | \$740 | \$740 | \$740 | \$740 | \$740 | \$740 | \$740 | \$740 | \$740 |
| FWA Maintenance | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Property tax expense | \$0 | \$13,683 | \$13,967 | \$13,967 | \$13,967 | \$13,967 | \$13,967 | \$13,967 | \$13,967 | \$13,967 |
| Pole rental | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| FWA site rental | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Marketing sales | \$37,748 | \$7,777 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Other operating expense | \$53,623 | \$12,342 | \$13,509 | \$13,773 | \$14,037 | \$14,301 | \$14,566 | \$14,830 | \$15,094 | \$15,358 |
| Total operating expenses | \$95,715 | \$43,655 | \$38,051 | \$38,508 | \$38,964 | \$39,420 | \$39,877 | \$40,333 | \$40,789 | \$41,246 |
| EBITDA | (\$37,534) | \$420,292 | \$492,648 | \$504,283 | \$515,919 | \$527,554 | \$539,189 | \$550,824 | \$562,459 | \$574,094 |
| EBITDA Margin | -20.7% | 68.1% | 72.9% | 73.2% | 73.5% | 73.8% | 74.0% | 74.3% | 74.5% | 74.8% |
| Interest Expense | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Depreciation | \$70,155 | \$145,193 | \$149,233 | \$149,233 | \$149,233 | \$149,233 | \$149,233 | \$151,421 | \$156,684 | \$157,436 |
| Net income | (\$107,689) | \$275,099 | \$343,415 | \$355,050 | \$366,685 | \$378,320 | \$389,956 | \$399,403 | \$405,775 | \$416,658 |



Projected Statement of Cash Flows:

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|-------------------------------------|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Net income | (\$107,689) | \$275,099 | \$343,415 | \$355,050 | \$366,685 | \$378,320 | \$389,956 | \$399,403 | \$405,775 | \$416,658 |
| Add: depreciation | \$70,155 | \$145,193 | \$149,233 | \$149,233 | \$149,233 | \$149,233 | \$149,233 | \$151,421 | \$156,684 | \$157,436 |
| Change in receivables | (\$46,690) | (\$9,000) | (\$1,101) | (\$1,101) | (\$1,101) | (\$1,101) | (\$1,101) | (\$1,101) | (\$1,101) | (\$1,101) |
| Change in payables | \$17,039 | (\$1,237) | (\$510) | \$131 | \$131 | \$131 | \$131 | \$131 | \$131 | \$131 |
| Cash flow to/from operations | (\$67,185) | \$410,055 | \$491,038 | \$503,314 | \$514,949 | \$526,584 | \$538,219 | \$549,855 | \$561,490 | \$573,125 |
| Capital expenditures | (\$2,928,805) | (\$183,872) | \$0 | \$0 | \$0 | \$0 | \$0 | (\$136,875) | (\$34,219) | \$0 |
| Cash flows to investing | (\$2,928,805) | (\$183,872) | \$0 | \$0 | \$0 | \$0 | \$0 | (\$136,875) | (\$34,219) | \$0 |
| Proceeds from senior debt financing | \$3,582,505 | \$183,872 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Principal payments on senior debt | (\$171,759) | (\$180,574) | (\$180,574) | (\$180,574) | (\$180,574) | (\$180,574) | (\$180,574) | (\$180,574) | (\$180,574) | (\$180,574) |
| Non-FCC Grant contributions | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Equity contributions | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Equity distributions | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Cash flows to/from financing | \$3,410,746 | \$3,297 | (\$180,574) |
| Ending cash balance | \$414,757 | \$644,237 | \$954,701 | \$1,277,441 | \$1,611,815 | \$1,957,826 | \$2,315,471 | \$2,547,876 | \$2,894,573 | \$3,287,124 |

Projected Balance Sheet:

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|--------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Cash | \$414,757 | \$644,237 | \$954,701 | \$1,277,441 | \$1,611,815 | \$1,957,826 | \$2,315,471 | \$2,547,876 | \$2,894,573 | \$3,287,124 |
| Receivables | \$46,690 | \$55,690 | \$56,791 | \$57,892 | \$58,993 | \$60,094 | \$61,195 | \$62,295 | \$63,396 | \$64,497 |
| Total current assets | \$461,446 | \$699,927 | \$1,011,492 | \$1,335,332 | \$1,670,808 | \$2,017,919 | \$2,376,665 | \$2,610,172 | \$2,957,969 | \$3,351,621 |
| Property | \$2,928,805 | \$3,112,676 | \$3,112,676 | \$3,112,676 | \$3,112,676 | \$3,112,676 | \$3,112,676 | \$3,249,551 | \$3,283,770 | \$3,283,770 |
| Depreciation (average life 20 years) | (\$70,155) | (\$215,348) | (\$364,581) | (\$513,815) | (\$663,048) | (\$812,281) | (\$961,515) | (\$1,112,935) | (\$1,269,619) | (\$1,427,056) |
| Total assets | \$3,320,096 | \$3,597,255 | \$3,759,587 | \$3,934,194 | \$4,120,436 | \$4,318,314 | \$4,527,827 | \$4,746,788 | \$4,972,120 | \$5,208,336 |
| Payables and deferred revenue | \$17,039 | \$15,802 | \$15,292 | \$15,424 | \$15,555 | \$15,686 | \$15,818 | \$15,949 | \$16,080 | \$16,212 |
| Bank debt | \$3,410,746 | \$3,414,044 | \$3,233,469 | \$3,052,895 | \$2,872,321 | \$2,691,747 | \$2,511,173 | \$2,330,599 | \$2,150,025 | \$1,969,451 |
| Total liabilities | \$3,427,785 | \$3,429,846 | \$3,248,762 | \$3,068,319 | \$2,887,876 | \$2,707,434 | \$2,526,991 | \$2,346,548 | \$2,166,105 | \$1,985,663 |
| Contributed equity | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Accumulated income/loss | (\$107,689) | \$167,410 | \$510,825 | \$865,875 | \$1,232,560 | \$1,610,881 | \$2,000,836 | \$2,400,240 | \$2,806,015 | \$3,222,673 |
| Total Equity | (\$107,689) | \$167,410 | \$510,825 | \$865,875 | \$1,232,560 | \$1,610,881 | \$2,000,836 | \$2,400,240 | \$2,806,015 | \$3,222,673 |
| Total Liabilities and Equity | \$3,320,096 | \$3,597,255 | \$3,759,587 | \$3,934,194 | \$4,120,436 | \$4,318,314 | \$4,527,827 | \$4,746,788 | \$4,972,120 | \$5,208,336 |