



WiredWest Rebuttal of Wipro paper of December 10, 2015

Entitled

WiredWest Business Model Review and Potential Options for Unserved Towns in Western Massachusetts

Starting on page 4 under Operating Costs

Wipro – General and administrative expenses (G&A) and marketing are noticeably absent.

WW – the following is from page 48 of the business plan. You will notice that G&A and Sales expenses are present.

WW (31 Towns), With Video, Subscribed Drops, 48%

	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12
Town												
Interest Expense	\$ -	\$ -	\$ (77,011)	\$ (207,116)	\$ (228,843)	\$ (1,739,825)	\$ (1,652,936)	\$ (1,562,572)	\$ (1,468,593)	\$ (1,370,855)	\$ (1,269,207)	\$ (1,163,494)
Net Income	\$ -	\$ -	\$ (77,011)	\$ (207,116)	\$ (228,843)	\$ (1,739,825)	\$ (1,652,936)	\$ (1,562,572)	\$ (1,468,593)	\$ (1,370,855)	\$ (1,269,207)	\$ (1,163,494)
Revenue												
Residential Access	\$ -	\$ -	\$ 1,281,694	\$ 8,158,179	\$ 9,105,536	\$ 9,375,015	\$ 9,491,898	\$ 9,513,652	\$ 9,551,156	\$ 9,607,669	\$ 9,564,145	\$ 9,440,709
Residential Installation	\$ -	\$ -	\$ 408,100	\$ 361,700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equipment Rental	\$ -	\$ -	\$ 103,300	\$ 657,875	\$ 722,838	\$ 722,625	\$ 676,000	\$ 595,738	\$ 515,375	\$ 435,150	\$ 354,725	\$ 274,425
Business Access	\$ -	\$ -	\$ 7,836	\$ 81,333	\$ 158,460	\$ 181,648	\$ 187,294	\$ 194,466	\$ 200,222	\$ 207,254	\$ 210,095	\$ 211,882
Business Installation	\$ -	\$ -	\$ 1,400	\$ 4,700	\$ 2,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
COGS	\$ -	\$ -	\$ 1,802,330	\$ 9,263,786	\$ 9,989,434	\$ 10,279,288	\$ 10,355,193	\$ 10,303,856	\$ 10,266,753	\$ 10,250,073	\$ 10,128,965	\$ 9,927,017
Net	\$ -	\$ -	\$ 824,500	\$ 2,083,018	\$ 1,885,844	\$ 1,887,046	\$ 1,813,932	\$ 1,695,619	\$ 1,590,615	\$ 1,493,271	\$ 1,365,637	\$ 1,237,992
Dollars	\$ -	\$ -	\$ 977,830	\$ 7,180,768	\$ 8,103,590	\$ 8,392,241	\$ 8,541,261	\$ 8,608,237	\$ 8,676,138	\$ 8,756,802	\$ 8,763,328	\$ 8,689,025
Revenues												
Margin Percent			54%	78%	81%	82%	82%	84%	85%	85%	87%	88%
SG&A												
Sales and Marketing	\$ -	\$ 470,340	\$ 821,447	\$ 837,876	\$ 230,400	\$ 235,008	\$ 119,439	\$ 121,828	\$ 124,265	\$ 126,750	\$ 129,285	\$ 131,871
G&A	\$ -	\$ 909,237	\$ 1,736,550	\$ 2,832,386	\$ 2,974,240	\$ 3,024,218	\$ 3,057,610	\$ 3,109,439	\$ 3,162,269	\$ 3,216,118	\$ 3,271,007	\$ 3,326,957
Dollars	\$ -	\$ (1,379,577)	\$ (1,580,167)	\$ 3,510,506	\$ 4,898,950	\$ 5,133,015	\$ 5,364,212	\$ 5,376,969	\$ 5,389,605	\$ 5,413,934	\$ 5,363,036	\$ 5,230,197
EBITDA												
Percent			-88%	38%	49%	50%	52%	52%	52%	53%	53%	53%
D&A	\$ -	\$ -	\$ -	\$ -	\$ (3,625,036)	\$ (3,625,036)	\$ (3,625,036)	\$ (3,625,036)	\$ (3,625,036)	\$ (3,625,036)	\$ (3,625,036)	\$ (3,625,036)
Interest Income	\$ -	\$ -	\$ 50,000	\$ 9,709	\$ 102,152	\$ 134,628	\$ 173,988	\$ 177,670	\$ 181,758	\$ 186,529	\$ 190,302	\$ 190,302
Net Income	\$ -	\$ (1,379,577)	\$ (1,530,167)	\$ 3,520,215	\$ 1,323,914	\$ 1,610,131	\$ 1,873,804	\$ 1,925,921	\$ 1,942,238	\$ 1,970,656	\$ 1,924,529	\$ 1,795,463

Wipro – Insurance and other costs are underestimated

WW – CTC review of the business model determined that the insurance and other costs were conservatively estimated.

Wipro – WiredWest also give no indication of it will fund start-up costs to pay expenses prior to generating revenue.

WW – Start-up costs were included in the construction cost estimate and will be obtained as part of each towns' borrowing.

Wipro – There are substantive revenues associated with set-top boxes every month, but no associated costs to purchase and provide that equipment.

WW – the cost of the set-top boxes is included in the construction cost and will be paid for out of the total cost of construction. The amortization of all electronics is over a 7 year period.

Wipro – There are also a variety of Sales and Marketing cost entirely left out (such as those required to acquire customers).

WW – the cost of acquiring customers is contained in the Sales and Marketing budget. It is difficult to comment on nonspecific claims of omitted costs except that CTC found no such omitted costs upon their examination of the financial model

Wipro – In each major category of costs (administration, sales and marketing, onboarding, installation, provisioning, service delivery, billing, support) the plan is missing substantive costs associated with operating the business.

WW - It is difficult to comment on nonspecific claims of omitted costs except that CTC found no such omitted costs upon their examination of the financial model

Under Administration



Wipro –Salaried Executives Salaried Executives: WiredWest’s cost expectations for staffing levels (as expressed by the financial statement) do not match its business plan. In the one identified area of potential over-estimation, there are executive overhead costs that are far in excess of what any similarly scaled operator has in the U.S. “Twelve months prior to the first town being lit, WiredWest will retain a Chief Executive Officer [sic], and six months prior begin hire a full staff, including sales and marketing professionals and general and administrative personnel.” Typically start-ups hire as demand requires, rather than starting with “a full staff” with all the resultant expenses

WW – We fully agree that start-ups hire as demand requires. We currently have over 7,000 people who have made a down payment on their first month service, we know that in two years when we start operations we better be able to handle at least 7,000 customers and all of the support people that are required in order to operate the network and provision the customers have to be hired prior to the beginning of operations in order for them to test and accept the various systems and to train. We are giving the General Manager a year to develop the operational policies and procedures, advertise, interview, and hire the department managers for these people to be involved in the final phases of construction oversight and turnover of the network and its systems. The sales and marketing personnel need to be in place at least 6 months prior to starting operations so they can draft the customer contracts and go to the towns and sign up the customers. The Customer service staff needs to be in place at the same time so they can provision the customer and get them set up in the billing system. The technical staff needs to be in place so they can be trained on the equipment that will be installed throughout the network and can assist with the install of the equipment at the customer premises. Our executive overhead costs may or may not be too high. That will be determined when these people are actually hired, but it is better to plan to spend more and have some left over, than to not have enough.

Wipro - Office Space: “WiredWest will rent office space for personnel, the network operations center, and a testing lab for new equipment, as well as warehouse space for spare equipment. WiredWest will also rent garage space for the technical support vans and their equipment.” Only \$4,200 per month is represented in the financial model to cover both space needs, which experts considered to be low, indicating appropriate space often costs more than \$15,000 per month.

WW – I doubt if Wipro or their experts have priced office space in our market area. But perhaps it is too low but it is much too early in the project to shop for office and garage space and adjustments will be made.

Wipro - Insurance: “WiredWest will maintain the following insurance policies: Pole Bond required by Verizon and the power companies, Directors’ insurance, General Liability insurance, Business Interruption insurance, Natural disaster insurance for the outside plant, Vehicle insurance, Workmen’s Compensation, Health insurance for employees, Bonding insurance for Sales personnel, Customer Service personnel, Finance and Bookkeeping personnel”. Of these costs, the Pole Bond is explicitly modeled. The other insurance plans are not explicitly modeled, though they could possibly be contained in the salary overhead line item, which would almost certainly be insufficient to cover the cost of these policies.

WW – Workmen’s Compensation and Health Insurance are included in the 35% overhead cost on employee salaries, additional \$250,000 is included in the financial model to cover the other insurance costs

Wipro - Sales and Marketing WiredWest indicates that it anticipates “having one full time commercial sales person and three full time residential sales personnel. The residential sales personnel will be employed during startup and for a short time after.” No sales support related expenses at all (personnel, marketing, etc.) are represented in the WW financial model. WiredWest also suggests that “orders



taken by direct sales personnel will be entered into their secure laptops at the customers' premises". No laptop costs are represented in the WW financial model. Experts indicated these expenses needed to be factored into cost modeling, and that start-up staff-related IT expenses could reach \$1,000 per staff member.

WW - \$30,000 is included in the financial model for Marketing Expenses. Additionally travel and entertainment is budgeted at 10% of the salary of the residential and commercial sales staff. Vehicle lease cost and vehicle operating costs are also included in the financial model. Startup costs of \$2.5 million are included in the total cost of the project and will cover the cost of the laptops and start-up IT expenses.

Wipro - Customer Onboarding No costs related to signing up customers (IT, etc.) are represented in the WW financial model, other than sales personnel.

WW – Customer service staff, Tech support staff, and office staff are included in the financial model.

Wipro - Installation "A premise that subscribes after construction will have to pay an additional fee to cover the cost of sending a crew out to install the drop for that premise." Typically carriers do not force subscribers to 'cover the [entire] cost of sending a crew out to install the drop', which could range from \$200-\$1,000 per subscriber.

WW – how much WiredWest will charge has not yet been determined

Wipro - Provisioning "All new service orders or changes in service will be entered into a provisioning system that will create a provisioning ticket for the technical staff." No costs associated with provisioning (management software, etc.) are represented in the WW financial model. "All new equipment will be tested in the lab prior to deploying it to the field". No costs associated with testing or operating a lab are represented in the WW financial model. Presuming existing staff had the capabilities to conduct such testing and space was available, the equipment costs of such a facility could be another \$10,000 at a minimum.

WW – the cost of this software and equipment is part of the total capital cost of the project

Wipro - Service Delivery WiredWest vastly underestimates the cost of actually providing services to its customers. "Retail customers are served on a best effort basis so there will be some fluctuation in the perceived bandwidth for each individual customer, usually plus or minus 20% of their state bandwidth contract." While it is true that retail customers are most often served on a best effort basis, carriers do not suggest ranges of service around their contract. If WiredWest attempted to guarantee service levels within 20% of the bandwidth levels demanded, it would require purchasing at least 10 times more backhaul than is currently modeled. Phone operating costs are likely to be at least 20-30% higher than WiredWest forecasts (\$10-\$12 minimum vs. \$8) based on current market rates.

WW – WiredWest has no intention of guaranteeing service levels within 20% of the bandwidth levels demanded. We have had initial conversations with phone service providers in the \$8 range.

Wipro - There do not seem to be any line items associated with vehicles, maintenance – outside plant. Phoenix charges \$1000/month per guaranteed bucket truck, and Ockers has a similar price. In a major discrepancy with the WiredWest forecast, other regional operators have routine maintenance (including line maintenance) expenses averaging \$3/month/subscriber. This implies \$45,000/month for 15,000 subscribers rather than the \$4,200/month represented in the WiredWest financials. As an example, Leverett assigns \$32,000 annually for line maintenance for less than 1,000 subscribers.

WW – Actually the financial model includes the cost of leasing 12 bucket trucks, 20,000 miles at \$.55 per mile, plus the personnel to operate them. So the operating costs allocated in the financial model are



higher than leasing 12 bucket trucks from Phoenix or Ockers and WiredWest fully intends to contract for this service instead of operating the service in house.

Wipro - Operating Experience / Capabilities The WiredWest plan indicates a desire to build a network operator and ISP from scratch. It lists initial potential staff members as well as board members in an effort to demonstrate operating experience and capability. Interviewees, however, were not swayed by the provided documentation. Several experts noted that WiredWest's documents did not present a compelling example of business competency. While there have clearly been huge strides in advocacy and demand aggregation, the specifics laid out demonstrate a lack of experience owning and managing a network operator and ISP. Given the nationwide evidence that operation of rural fiber-to-the-home networks are very difficult and prone to failure, it is concerning to all of the industry experts that WiredWest intends to start up and run the business on their own rather than to rely on or partner with established and experienced operators and other vendors.

WW – WiredWest does not list initial potential staff members in an effort to demonstrate operating experience and capability. WiredWest recognizes that no current member of the Executive Committee or of the Board of Directors has the experience required for successful management of an ISP. What the current Executive Committee and Board of Directors does bring to the table is a range of business, financial, legal, marketing, sales, and technical experience that will provide oversight of the executive team that WiredWest will hire. WiredWest intends to hire staff members that have the required skills and experience to properly and successfully operate an ISP. Of the 400 million people in the U.S. WiredWest is confident that the appropriate people can be found.

Wipro - WiredWest forecasts a product mix based on their initial presubscriptions – which, significantly, did not present pricing, terms, channel lineups, etc. That assumed product mix is then assigned pricing and multiplied by the number of subscribers to determine revenue. The 'product mix' assumptions used in the model – that is, the forecast for how many customers subscribe to the various products to be offered – may substantially overstate the revenue that is achievable by the enterprise. This is primarily due to assumptions in the model that a large percentage of customers will subscribe to higher speed internet products, and add-ons for cable TV service. The mix of services is different from what other rural carriers have experienced. The industry experts expressed concern that the product mix WiredWest used to model revenues is over-inflated, especially given existing television options and the socioeconomics of the region, which includes many seasonal homes.

WW – Pricing for each of the products is included in the presubscription collected data. Channel lineups were not and won't be until we get closer to going live. The socioeconomics of the region indicate a higher education level and higher income level than the state as a whole. There are many seasonal homes in the service territory, however the majority of these seasonal homes are in fact second homes that are occupied largely by people who live in nearby metro areas and spend most weekends in the area or are occupied by snow birds that are in the area for 6 months a year.

Wipro - WiredWest has publically indicated its service pricing – beginning with Internet-only packages for \$49/month. The business plan asserts that: "The average Western Massachusetts household pays about \$3,000 annually for internet, phone and television". This "average" equates to \$250 per month and entirely neglects seasonal homes and homes that currently do not have internet. The Pew Research Center states "Those who live in rural areas are less likely than those in the suburbs and urban areas to use the internet. Still, 78% of rural residents are online." (Given that 28% of homes in Western Massachusetts are not occupied all year, that implies a maximum expected penetration of 50-70%.) One rural carrier suggested that an average revenue per unit (ARPU) of \$111 is reasonable. Several others indicated that the proposed pricing for the various products to be offered is too low. It appeared to one

interviewee that although pricing for services is routinely “derived” based on the revenue requirements of the business, the operating costs and debt service that must be covered, the tolerance for risk, and the overall sustainability requirements, WiredWest and its members have not done this, but instead, they created and socialized a pricing structure that is based primarily on customer desires in the market. Consumers in unserved towns have clearly articulated a desire to obtain similar services to their neighbors at equal (or lower) prices. Market dynamics and costs, however, make such desires difficult or impossible to meet (hence the lack of existing competition in these areas). The industry experts expressed concern that the prices suggested by WW will not generate nearly enough revenue to break even and are significantly below what other monopoly operators charge. There is a tension between lower pricing and repayment of debt service (or profitability) and this business plan fails to achieve either in a sustain way.

WW – Given that over 7,000 customers have already registered and made an initial payment of \$49 for a service that they won’t receive for 3 to 4 years would indicate that the demand for service is very strong. And given that these 7,000 people have indicated the product choices that they would be willing to take at the prices indicated would suggest that the income modeled in the financial model is reasonable. The speculations of the experts or just that speculations based on experience in other areas of the country. We will know more when we get closer to actually lighting up the service and if it is determined that a higher price is required for sustainability then that decision will be made.

Wipro - Penetration To properly forecast revenues, WiredWest must first forecast subscribership. Typically carriers identify how many homes their network can reach (homes passed) and then what percentage of those homes sign up for service (penetration rate). WiredWest asserts that there will be “19,707 residential premises and 179 business not located in residences” in the footprint.³² Elsewhere, WiredWest indicates 20,840 homes, of which 1,171 are vacant and 5,702 are seasonal (averaging 5 months per year). With the 5 months / year seasonal expectation, that equates to a seasonally adjusted market size of 16,343 full time home equivalents in the footprint. However, experts indicated that seasonal premises typically take service 3 months per year, not 5. Experts also indicated that weekend-only occupied premises typically do not take services at all. Some carriers offer 6-month packages, however, penetration rates are exceedingly low – even among seasonal residents. WiredWest states that “breakeven is defined as generating sufficient revenue to cover Cost of Goods Sold, Operating Expenses, Depreciation Reserves, and reimbursement to the towns for the debt service on their borrowings. The current financial model is projecting that breakeven occurs at a 47% subscription rate for the 19 towns that have currently passed their debt authorization votes. Subscription rates above 47% will generate profits.” Another area of concern raised by experts is the proposed pace of development and construction. The modeled take rate contemplates assumptions that the network will be built much faster than it actually will be. Their revenue is thus also too optimistic for this reason. WiredWest’s financial projection indicates 15,000 subscribers. But, when applied to the seasonally adjusted market size of 16,343 homes, the implied take rate is 92%, not 47%. The National Cable & Telecommunications Associations (NCTA) notes in a recent survey that 30% of households in rural areas did not take any internet package. Indeed, WiredWest’s acknowledges this, stating that “in other similar community fiber networks, where there are no viable competitors, the percentage of residents becoming subscribers has increased to 70% or more.” WiredWest’s forecast of 15,000 subscribers is thus impossibly aggressive.

WW – nowhere in the financial model is there a hard take rate of 15,000 subscribers. The whole point of building a complex model is to be able to change the take rate to see what the effect will be on income and expenses. So that a percentage of the seasonally adjusted market size of 16,343 full time home equivalents can be selected and all revenue and expense projections will be based on that percentage. So if a 50% penetration is to be modeled the calculation is 0.5 times 16,343 premises or



8,171 premises or a 70% take rate is 0.7 times 16,343 or 11,440. WiredWest fully agrees that a 92% take rate would be an extraordinarily high take rate and we don't expect that, however there have been a few rural networks that have achieved 90% plus take rates. WiredWest's expectation is that the take rate will be similar to what the Town of Leverett experienced and will be in the 75% to 85% range. One of the advantages that WiredWest has that the experts don't is that members of WiredWest actually live in these towns and talk to these potential customers both full time and seasonal.