

## Macquarie Capital

# UTOPIA PPP Project

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**Date** May 15, 2014  
**To** Mayor Cutler of Centerville  
**Subject** Responses to Centerville's Questions on the Milestone One Proposal

Dear Mayor,

We appreciate your prompt feedback on the Milestone One Proposal. Our responses to Centerville's questions, submitted by email on May 12, are below in italics, along with the original questions. Please note that our responses reflect current "work in progress" thinking and are subject to change as we continue our diligence.

Best regards,

Macquarie Capital

### Legal

- 1) Will Macquarie agree to pay for the legal costs of any lawsuits challenging the Cities' ability to charge a Utility Fee?

*We are working with Utopia's and City attorney's to develop the legal structure for the transaction. In milestone one this has been a "fatal flaw" review. The detailed legal work is scheduled for Milestone Two when the majority of the commercial assumptions should already be agreed. The general principle is that legal liability would be determined on a 'our watch – your watch' basis. In other words, Utopia would remain liable for issues arising from the operation of the network prior to close of the transaction while Macquarie would be liable for issues arising after the PPP has taken over. Both parties will require legal opinions on the effectiveness of the transaction structure at financial close to minimize the risk of lawsuits challenging the Cities' ability to charge a utility fee.*

- 2) Will Macquarie agree to cover all UTOPIA related legal costs related in any manner to the PPP model after a certain point, such as Milestone Two or after financial close?

*Macquarie has agreed to cover all UTOPIA's costs related to development of the PPP project during the PDA (Milestones One to Four). This covers both the legal advice provided by Kirton McConkie during the development of the transaction structure and negotiation of the project contracts, as well as advice from Ballard Spahr on the impact of the transaction on the tax-exempt status of the outstanding revenue bonds. Macquarie will not cover any legal costs related to the Agencies' current litigation or litigation that does not relate to Macquarie's proposed transaction.*

*Macquarie will only seek reimbursement of these costs from the Cities if the PDA is terminated.*

*Macquarie has not agreed to pay for any legal costs of the Agencies or the Cities after financial close. One of the reasons for such transparency in the PDA process is to ensure that the Cities remain fully aware of the transaction's risks and Macquarie's strategies to mitigate those risks.*

**PPP**

- 3) The proposal outlines a 30 month build and a 30 year term for the PPP. Is the 30 month build included in the 30 year term, or is the total project timeframe 30 months + 30 years (32.5 years)?

*The total project term will be 32.5 years, a 30 month construction period followed by 30 years of operations, maintenance and technology refresh.*

- 4) The proposal outlines a Utility Fee of \$18-20 for single family homes, with a 50% discount for MDUs, and 100% premium for commercial properties. Please confirm that Cities should be allowed to customize or modify end user Utility Fees to customers based on total Utility Fee cost to each City, and that Cities can choose to subsidize, provide a senior discount, or waive fees for indigent circumstances according to their own policies.

*The Cities will have flexibility to set the Utility Fee above the minimum amount required by Macquarie to cover the costs of the network. There are risks to increasing the fee, including greater public opposition that may reduce the probability of the transaction achieving financial close. A higher utility fee will also limit the ISPs' ability to price competitively in the market, which will impact take rates and reduce the revenue available to share with the Cities.*

*The Cities will also have flexibility to subsidize certain groups or offer senior discounts and waivers. These policies may, however, require the Cities to allocate funds from alternate sources if they result in Utility Fee revenues that are below the minimum amount required for the availability payment to the PPP.*

- 5) The Utility Fee is indexed to increase yearly. Who will have the responsibility / authority to periodically evaluate the Basic Service level (proposed as 3x3Mbps, 20GB cap)? Does the governing board of the P3 have that responsibility?

*The PPP and the Agencies will establish a review committee to evaluate the basic service at medium-term intervals, for example each five years, to review market standards and assess if any changes to the Basic Service are required.*

*Specific details of the review committee, including the length between each periodic review, agreed benchmarks to measure the growth in average speeds during each review period, and voting rights will be developed during Milestone Two and included in the Concession Agreement.*

- 6) The Utility Fee assumes a yearly escalation tied to a mutually agreeable index, such as CPI. If the Cities prefer to negotiate a fixed flat escalation (i.e. 2% per year or 2.5% per year) rather than a floating escalation (CPI) is Macquarie amenable to that? Can you provide an estimate of how a flat escalation fee of 2%, 2.5% or even 5% would impact the initial Utility Fee?

*The Utility Fee is escalated to ensure that citizens in the future are not subsidized by today's citizens. To illustrate this, if the Utility Fee were to be flat for the entire 32.5 year term of the project, then the initial Utility Fee would need to increase to \$28.90.*

*To the extent that a fixed rate debt structure can be put in place for the life of the project, this would not require full indexation to CPI. Certain operating costs, such as technology equipment costs, can be expected to grow at less than the rate of general inflation. However, some costs, such as labor may grow at the rate of inflation or above, and thus some element of indexation is required.*

*Macquarie is therefore amenable to a fixed escalation or an adjusted escalation of the Utility Fee, subject to the availability of fixed rate financing. An example of the adjusted escalation mechanism is 'inflation minus', where the increase in the Utility Fee would be tied to inflation*

*less a specified percentage in the event inflation rises above a certain threshold. For example, if inflation in any given year was above 5%, the Utility Fee would increase by inflation less 2%.*

*Macquarie has assumed a flat 2.5% escalation profile as a proxy for CPI. Reducing this assumption to 2.0% adds approximately \$0.70 to the preliminary Utility Fee range and increasing it to 5.0% reduces it by \$3.30.*

- 7) What is the assumed return on equity or the overall rate of return (or range of rates of return) that Macquarie / First Solutions has assumed for the PPP under the current financial model?

*Macquarie's assumed return on equity of approximately 13% is consistent with the PPP market in North America. As equity only comprises approximately 20% of the financing structure, the assumed Weighted Average Cost of Capital for the project on a post-tax basis is approximately 5.4%, which is lower than UTOPIA's effective borrowing costs.*

- 8) The Basic Service proposes a 3x3Mbps connection with a 20GB cap. What happens when a user exceeds the 20GB cap? Will ISPs be allowed to charge the user a small penalty fee? Do you propose the Wholesaler or UTOPIA receive a transport or penalty fee from the ISPs for customers who exceed the cap?

*We are committed to providing the Basic Service to users at no incremental charge above the Utility Fee and as such expect the PPP to throttle the user's connection speed rather than charge a penalty fee if they breach the 20GB data cap. The throttled connection will still have enough capacity for basic functions such as VoIP or email, but higher capacity services such as video streaming (e.g. Netflix, Facetime, etc) will be impacted.*

*The ISPs have the option to market products of similar speeds with higher data caps. These products will be classified as premium services and will attract transport fees that will be shared with the Cities through the Wholesaler's revenue sharing mechanism.*

*Excess data fees for these products will be charged at the ISPs' discretion, and Macquarie will provide further detail on potential transport fees applied to excess data in Milestone Two.*

- 9) In our city the current data caps for basic service for incumbent providers are reported to be 150GB (CenturyLink & Digis) and 300GB (Comcast). The proposed 20GB cap seems very limited in comparison. Is Macquarie open to raising the cap on the Basic Service? What are the implications of this?

*Macquarie's preliminary analysis of the incumbents' entry level products suggests that the price paid by users to access these increased data caps are much higher than the Utility Fee.*

*Promotional pricing for internet only products from CenturyLink and Comcast is approximately \$30 per month plus additional charges for hardware and/or modem rental. The standard prices for these services are even higher, at \$40-50 per month. Discounted pricing below these levels often requires the user to bundle their internet package with a phone or basic cable product, which increases the total package cost to \$70-80 per month.*

*The analysis completed by CTC, Macquarie's independent market consultant, indicated that data use averages approximately 16-18GB per month. The 20GB cap provides users sufficient bandwidth to stream almost 30 standard definition movies on Netflix each month.*

*Raising the data cap could impact the number of users that upgrade to premium services on the network, which will reduce the total pool of revenue available for sharing with the Cities. Macquarie has not quantified what the expected revenue impact will be at different data caps.*

- 10) Currently UTOPIA provides a battery backup unit so that the network portal continues to operate when power is lost. The information in the proposal suggests that the PPP will supply the installer with a power over ethernet adapter to power the ONT, but battery backup will not

be part of the basic service. Is that correct? If battery backup is desired, will that be the responsibility of the ISP or the homeowner?

*Macquarie's working assumption is that the battery backup will be the responsibility of the homeowner. We are investigating a number of options to limit the costs incurred by those users that want battery backup, including rolling the cost into the PPP. We expect to develop these options through Milestone Two. ISPs may also have the option to provide battery backups as a value added service during the installation of the connection into the premises.*

*To the extent possible, we will try to limit disruptions to the service caused by power outages. This was one of the factors in our selection of Alcatel-Lucent to provide the network portals. Alcatel-Lucent's portals are designed to reboot quickly after a power outage and rarely have an issue restoring access to the network once external power is restored.*

## Wholesaler

- 11) Will the P3 or Wholesaler charge Member Cities for internal use of the network (internal site-site communications, traffic cameras), City Park WiFi, etc)? Who will set the fee schedule for internal use? Will those revenues be treated any different than other upsell transport revenue?

*This is primarily an issue of parity between the Cities. For example, a City would not be allowed to utilize large amounts of network capacity at discounted rates and then on-sell that capacity. We anticipate that the provision of City services on the network would be allowed at significantly discounted rates established by UTOPIA (i.e. not by the PPP or the Wholesaler). As any revenue streams from this would be shared substantially with the Cities to defray debt obligations, to some degree this is moving money from one pocket to another.*

- 12) Who will manage and oversee the sale / trade / exchange of fiber assets and services to other public sector entities (UEN, UTA, UDOT)? Who gets to set the fees for public sector use? Will those revenues be treated any different than other upsell transport revenue?

*The Wholesaler will be responsible for bringing public sector entities such as UEN, UTA and UDOT onto the network, whether directly or through an ISP, and for establishing transport fees for these services. These transport revenues will be shared with the Cities in the same way as other upsell transport revenue.*

- 13) Who has the responsibility / authority for transport rates? Will the Wholesaler have complete autonomy to determine various transport levels (3Mbps, 50Mbps, 100Mbps, 1Gbps) and transport fees for each level of service? Will there be any oversight of the Wholesaler?

*Certain principles will be established for the transport fees to ensure open access, which means that each user should pay the same for using the same capacity to provide substantially the same service and performance for the same volume of customers over the same time period.*

*In other words, the only basis for differences in pricing should be:*

- *Different network capacity requirements;*
- *Different usage;*
- *Different service levels or different market segments;*
- *Different commitment lengths (e.g. length of the contract); or*
- *Different volumes.*

*Within those principles, the Wholesaler will have the commercial flexibility to set the transport fees on a commercial basis. Additional feedback will be sought from the ISPs and the Agencies during Milestone Two on various pricing levels and the optimal number of speed tiers to provide. It is currently anticipated that transport fees will be set in increments of 100Mbps.*

*The Agencies will have oversight of the Wholesaler and an ISP which feels that transport fees charged discriminate against it will have recourse to complain to the Agencies. Ultimately, in certain circumstances the Agencies will have the right to amend the Wholesaler's proposed transport pricing, although the general intent is to make transport pricing a commercial rather than political decision. The Wholesaler's contractual and regulatory structure will be expanded on and detailed during Milestone Two.*

- 14) What, if any, is the base take rate (or range of rates) that has been assumed?

*Macquarie has assumed a long-term take rate of 30-50%. We are still developing our ramp-up assumptions and expect to provide further detail to the Cities on the Wholesaler's business plan and strategy to drive take rates to this long-term range during Milestone Two.*

- 15) What, if any, is the share of the revenue going to the Wholesaler, PPP and the Cities until the base take rate is met, and after the base rate is met?

*Macquarie and the Agencies have not discussed specific revenue sharing percentages. Up to a base take rate, the Wholesaler is expected to be marginally profitable. It will retain sufficient revenue to cover its agreed marketing and operations costs but the bulk of the revenue will accrue to the Cities. The Wholesaler will receive an increasing share of the revenue as take rates ramp-up, which incentivizes the Wholesaler to drive take rates to the long-term target of 30-50%.*

*The PPP will be entitled to a modest share of the revenue, to cover the higher costs of operating a network that has to service more users subscribing to higher capacity connections.*

- 16) Instead of a base take rate percentage, Cities may prefer to negotiate that the PPP and Wholesaler receive a nominal share up to a certain revenue target, such as 50% or 100% coverage of UTOPIA / UIA bond obligations, and an accelerated share after that point to align performance incentives with interests. Is Macquarie / First Solutions open to considering a transport revenue sharing model based on revenue, rather than take rate percentage? What would the implications or complications of this change be?

*Macquarie and First Solutions are open to considering sharing models based on total revenue, however it is important to set the revenue targets at an achievable level that provides the correct incentives to the Wholesaler. If the targets are set too high, the Wholesaler does not have an incentive to incur the costs necessary to market the network to new users and closely monitor the ISPs' compliance with their SLAs.*

*Note that as, under open access, transport fees are the same for each category of user, there should be little difference between a take rate and a revenue sharing model except to the extent the mix of users changes. Care should be taken not to incentivize the Wholesaler to drive higher revenue business customers, for example, at the expense of residential customers.*

- 17) The proposal suggests there will be significant revenue from upselling transport / bandwidth, but it appears that the mechanism for sharing that revenue has not been determined. Will the revenue shared with the Cities be returned to the Cities, or be held by UTOPIA collectively? Will Macquarie consider sharing revenue back to each City based on the revenue collected from customers in that City, or only share revenue based on each City's ownership share (population based)?

*The proposed approach is to share the Wholesaler's revenues with UTOPIA, which will use the revenues to meet its debt obligations without relying on the Cities sales tax pledges and would then be responsible for distributing these revenues to the Cities. The method of allocating revenues to the Cities is a UTOPIA decision.*

*Macquarie is open to considering alternative revenue sharing mechanisms, however we believe the Cities are in a much better position to propose a mechanism that addresses parity across the network.*

- 18) What is the assumed amount of the 'considerable investment' made by the Wholesaler referenced on page 83?
- 19) The risk and responsibilities of the Wholesaler are significant. Can you provide an outline or estimate of the expected / assumed staffing, operating costs and marketing costs incurred by the Wholesaler in the first 3-5 years of the project?

*(18 and 19 together)*

*Macquarie is reviewing its staffing and cost estimates as part of the detailed business plan for the Wholesaler to be presented to the Cities during Milestone Two. We anticipate that the Wholesaler will fund a substantial marketing budget, particularly over the first two years as the network is rebranded.*

*The Wholesaler, in support of the rebranding, will also be actively promoting the benefits of gigabit connectivity in the Cities to increase awareness of the network among potential users. This marketing will be coordinated with the ISPs' targeted efforts to upsell users onto premium services and ramp take rates on the network as quickly as possible.*

*Alignment of interests between the Cities and the Wholesaler through a reasonable split of the transport fee revenues will also incentivize the Wholesaler to budget a robust amount for these and other initiatives. The Wholesaler will have more clarity on the assumed staffing and operating / marketing costs as the business plan is finalized and the revenue sharing mechanism further developed.*

## **UIA**

- 20) How will existing users who have paid the connection fee completely be treated?
- 21) How will existing users who are financing the connection fee under a 20 year (\$25 / month) or 10 year (\$30 / month) plan be treated?

*(20 & 21 together)*

*Macquarie's Milestone One proposal assumed that existing UIA or SAA users that have either paid, or are currently paying the connection fee under long-term contract will not pay the Utility Fee, and the Wholesaler will not collect premium service transport fees from them to share with the Agencies. These revenues flow directly to the bondholders for the remaining term of the UIA and SAA contracts.*

*Our preference, however, is for all users to be under the same model and as such we are considering various mechanisms under which these users can be compensated for the fees they have paid and commence paying the Utility Fee. These arrangements would be subject to bondholder approval.*

*Macquarie's working assumptions for a mechanism to bring all users on the same basis would be as follows:*

<i>Fully Paid Connection Fee</i>	<i>Users that have fully paid the connection fee, either through an upfront payment or periodic instalments, would receive a credit against the Utility Fee until these payments have been fully reimbursed. After this credit has been exhausted, these users will begin paying the Utility Fee.</i>
<i>Current Contract</i>	<i>Macquarie is working with the Agencies' legal counsel, bond counsel and financial advisor to understand the impact of rolling users with current commitments into the utility fee model. We expect to propose a solution that will be negotiated with UIA bondholders through Milestones Two and Three.</i>

*Macquarie will quantify the Utility Fee impact of incorporating these users during Milestone Two.*

- 22) How will existing users who are leasing the connection fee for \$30 / month be treated?

*Macquarie understands that the initial term for the lease contracts is two years, and upon the lease contract's expiry the user has the option to continue leasing the infrastructure on a monthly basis.*

*Users that are still under contract will continue to make their lease payments and the premiums paid will be credited against future utility fees. Users that are on a monthly lease will make no further lease payments and be rolled into the utility fee model, subject to negotiation with UJA bondholders.*

### **Network Buildout**

- 23) What are the assumptions of the 30 month buildout schedule? Will existing customers be connected and assessed the Utility Fee first or will the Utility Fee be rolled out footprint by footprint?

*The details of the buildout schedule have not yet been confirmed. Black & Veatch and Corning, the two contractors selected to submit binding design-build proposals to Macquarie and First Solutions, are continuing to develop their network designs, which will drive the construction schedule and the timing of each footprint.*

*Users will be eligible to pay the Utility Fee once they are able to receive services over the network. As such the Cities will be able to immediately collect these fees from existing UTOPIA customers. As each footprint is rolled out, each user will start paying the Utility Fee at the earlier of six months from installation of the ONT at their premises and completion of the internal connection. This transitional period means that it could be possible for a user in a footprint that is being built to pay the Utility Fee before a user in a completed footprint.*

*The connection fee currently paid by legacy UTOPIA customers will be waived and replaced by the Utility Fee, which leaves them in a roughly equivalent position.*

- 24) Will those addresses / footprints which are immediately available for curb-home construction (such as Centerville) likely be connected and assessed a Utility Fee in year one before other areas are built out?

*The order in which each network footprint is constructed depends on the network design and the construction schedule. Macquarie understands that there are up to 50,000 addresses that could be connected to the Network with little engineering after financial close*

- 25) The proposal acknowledges that some property owners will resist installation of the fiber on their property. Will the PPP or buildout contractor proactively attempt to obtain written approval to access a user's property? Or will they assume they can access the property and proceed to install a portal on the outside of the unit unless notified by the owner not to do so?

*The PPP will subcontract all construction responsibilities to the Design-Build Contractor, which will be either Black & Veatch or Corning. Both of these companies have extensive experience developing fiber networks and are used to engaging with the community to minimize the disruption caused by their activities.*

*The PPP will publicize the network construction schedule and hold community meetings to notify property owners about upcoming construction activities. Our intent is to use existing public utility easements and the provision of other utility services to promote connection without objections. This will be combined with incentives to support the decision to connect, for*

*example the PPP may have discretion to charge an additional fee if the network portal is installed after connections in the neighborhood or network footprint have been completed.*

### Strategic

- 26) If the Agencies agree, will the PPP agree to operate the UTOPIA / UIA network for a reasonable per user fee or per task / unit fee for any UTOPIA Cities that do not join the PPP?

*The PPP will operate the UTOPIA / UIA network as a single, integrated network. If a City withdraws from the network buildout, we will continue to operate and maintain the infrastructure in that City to allow all users currently active on the network to remain connected.*

*The Utility Fee will reflect the integration of the network and as such the remaining Cities will have the right to charge the withdrawing City for the ongoing provision of operating services to those users. The size of these fees will be determined by UTOPIA on the basis of parity and not by Macquarie.*

- 27) If other non-UTOPIA cities contract with Macquarie for a utility fee model PPP, and choose to access the UTOPIA network, who sets the IRU fees or access fees paid to UTOPIA Cities? How will that revenue be treated?

*Macquarie recognizes the significant investment that the UTOPIA Cities have made in the network and the potential cost benefits it could provide to a new city that wants to join the network. We have previously discussed an approach with the Agencies under which the utility fee for a new city would include a premium to compensate the founder Cities participating in the PPP for their initial investment.*

*Macquarie anticipates that this premium would be paid directly to the Agencies. The size of the premium would be subject to negotiation and depend on a number of factors, including the costs of expanding the network into the new city.*

- 28) Shouldn't there be a revenue stream back to original Member Cities from new cities joining and all new customers (commercial, public entities, etc)

*Macquarie believes that all Cities that participate in the PPP should receive a revenue stream from new cities joining. Question 27 outlines our proposed approach to this revenue stream.*

*The Cities will also receive a revenue stream for new customers joining the network through the Wholesaler's revenue sharing mechanism.*

- 29) What is the estimated cost to exit after Milestone One?

*The Milestone One budget was \$480,000, which is repayable to Macquarie in the event that an insufficient number of Cities agree to proceed to create a viable transaction. If the transaction proceeds to Milestone Two and a City withdraws, that City's obligation will be to the Agencies.*

*The amount that each City will pay in these circumstances will be negotiated between the City and the Agencies and will not involve Macquarie.*

- 30) What is the estimated cost to exit after Milestone Two?

*Macquarie is considering expanding the scope of Milestone Two to bring forward key workstreams that will facilitate negotiation of commercial terms and allow us to present a more complete proposal to the Cities at the completion of Milestone Two. These scope changes will also shift a proportion of costs scheduled for Milestone Three into Milestone Two.*

*Macquarie does not expect the total budget for the transaction to change materially, rather the revised budget for Milestone Two will change the timing of those costs.*

*Similar to Question 29, the costs to exit after Milestone Two will depend on the reimbursement mechanism that the City negotiates with the Agencies. The costs will be that negotiated percentage share applied to the sum of costs budgeted for Milestones One and Two.*