



## CITY COUNCIL AGENDA REPORT

DATE: 06/23/16

AGENDA OF: 06/28/16

DEPARTMENT: Economic Development

SUBJECT: Santa Cruz Fiber Public-Private Partnership Model (ED)

---

**RECOMMENDATION:** Consideration of 1) the key terms for a draft franchise agreement with Cruzio Internet, Inc. for the development, use, and operation of the Santa Cruz Fiber Network; and 2) direction to complete negotiations by July 15, 2016 with specified parameters; and 3) direction to extend the Exclusive Negotiation Agreement through August in order to finalize agreement if negotiated parameters have been met; and 4) direction to form a Council ad-hoc subcommittee on the Santa Cruz Fiber Network; and 5) direction to return to Council in August for consideration of approval of final franchise agreement; or, alternatively, 6) direction to pursue phased Santa Cruz Fiber Network development options.

---

**BACKGROUND:** Since 2011, City Council has pursued broadband policies and opportunities to increase private and public investment in fiber-optic networks, recognizing fiber optic networks as a fundamental utility for the City of Santa Cruz. Throughout 2014 and 2015, City Council unanimously approved policy directions working toward a Broadband Master Plan in order to encourage significant fiber optic infrastructure investment to realize long-term economic growth.

After Cruzio Internet, Inc. (Cruzio) approached the City of Santa Cruz last year, on June 23, 2015, the City Council unanimously directed staff to enter into an Exclusive Negotiation Agreement (ENA) with Cruzio in order to analyze and negotiate a possible public-private model to develop a municipally-owned, but privately operated fiber optic network to provide affordable, accessible, world-class gigabit-speed (1,000 megabits-per-second download speed) internet service to City of Santa Cruz residents and businesses.

On December 8, 2015, City Council further authorized staff to negotiate terms with Cruzio to create a public-private partnership to finance, build, and operate a ubiquitous fiber optic network to be established as a municipal utility which is forward looking and has the potential to positively impact the local economy for decades to come by enabling robust economic growth and providing maximum public benefit by providing access to affordable internet to the entire community.

**DISCUSSION:** Since December 2015, City staff has negotiated in good faith with Cruzio to create a public-private model that is viable and mitigates financial risk both to the City and to Cruzio. The

proposed model is designed to be financially self-sustaining where the revenue generated to the City through internet service subscriptions is more than the debt service costs and maintenance for the City of Santa Cruz's investment. Through the partnership model, Cruzio is further motivated and rewarded for providing a competitive gigabit internet product and delivering excellent sales and service to customers.

In accordance with the City Charter, the agreement is now contemplated as a franchise agreement with the City as the owner of the fiber optic network, referred to as the Santa Cruz Fiber Network (Network), and Cruzio as the proposed primary tenant, operating and selling retail services on the Network. Through a combination of fees based on the number of parcels the network passes as well as the number of subscribers on the network, Cruzio pays the City for its franchise operations on the municipally-owned utility.

The basic model of the public-private partnership contemplated in the franchise agreement and agreed to by both parties is outlined below:

1. The City of Santa Cruz will be responsible for building and maintaining the dark fiber infrastructure (often referred to as the Outside Plant or Layer 1).
2. The City will finance the cost of construction of the city-wide Network, building underground fiber passing every parcel (considered the "middle-mile" or "backbone") with a minimum of 7,500 "last-mile" connections to serve residents and businesses.
3. Cruzio will be responsible for purchasing the electronics (Layer 2) as well as the internet exchange and will be the exclusive internet service provider on the network (Layer 3).
4. Cruzio will pay a combination of per passing and per subscriber fees (to be determined once final costs are established).

While the basic model is confirmed by both parties, there are a number of outstanding issues that need further clarification and direction from Council prior to expiration of the current ENA on July 15, 2016. The following areas are identified below for council consideration and direction:

Outstanding Issues/Council Clarification:

- 1) Sharing of Financial Risk: The basic model as outlined above contemplates the City financing and constructing a municipally-owned fiber optic network. Previous discussions at Council have included a proposed debt guarantee whereby Cruzio agrees to backfill, if necessary, a minimum payment each month to ensure that the majority (80%) of the City's debt service on the proposed bonds issued to finance the construction of the network is paid, whether or not the revenue exists through subscribers to finance such payments. While the goal is to reduce the City's financial risk, Cruzio's ability to fulfill the obligation absent sufficient revenue from subscribers is limited, particularly in the first few years of operation, the time when the risk is the greatest and the guarantee would be most meaningful. After the initial construction build out is completed (referred to as the Initial Deployment Phase), failure to meet the annual debt service payments results in a default under the agreement as currently contemplated. As an alternative to the originally contemplated debt guarantee, staff is requesting that the Council provide direction on

the need for an alternative financial instrument secured by Cruzio such as a letter of credit or surety bond as a performance obligation.

**Council Direction Requested:** Direction on debt service guarantee or a required letter of credit or other instrument to mitigate risk.

- 2) Ubiquitous Santa Cruz Fiber Network and Initial Deployment Phase (IDP): One of the main City goals in pursuing a ubiquitous network is to provide affordable, high speed internet to every household and business in Santa Cruz, directly investing in our City's future economic success by investing in City-owned infrastructure accessible to the entire community. Larger up front capital costs are required to build out the entire network initially; however, in the long run, a larger ubiquitous network is cheaper than phased multiple builds and the initial build may have greater success in maximizing access across the community. Building the entire network initially will also require less mobilization than is required in multiple build phases and the ability to capture a greater market share is more likely in an initial ubiquitous build out.

Under a multiple phase build out, the City and Cruzio would need to determine which areas of the City are to be built in each phase and whether the decision is made to reduce overall financial risk (thus building in areas which have the highest likelihood of sign up) or to provide equal access across the community. If the decision is made to reduce overall financial risk, then the City and Cruzio run the risk of leaving some community members behind from the advances of broadband infrastructure in what is frequently referred to as the digital divide. Staff seeks Council direction on prioritization of creating a ubiquitous network in one initial buildout or in phases over time.

The Initial Deployment Phase (IDP) is defined as building a fiber optic network in twenty-four months that passes every parcel where feasible (the "middle-mile" or "backbone"), and provides a "last-mile" connection to a minimum of 7,500 subscribers during the initial construction. 7,500 subscribers is approximately 35% of the existing market share and is the percentage based on previous analysis that the Network needs to achieve in order to cover presumed City debt service. The greater the market share captured as soon as the network is built, the greater the likelihood of overall project success for both Cruzio and the City. The current agreement incentivizes Cruzio for maximizing the greatest market share as early as possible.

**Council Direction Requested:** Direction on prioritization of a ubiquitous initial fiber build as compared to a phased approach and confirmation of the IDP as currently contemplated in the draft agreement.

- 3) Timing of Subscriber and Pass Fees: Under the proposed agreement, the combined subscriber and pass fees constitute the payment from Cruzio to the City for its franchise operations on the Network. The subscriber fees start as soon as subscribers (existing and future Cruzio customers) join the Network. It is contemplated that existing and new customers will be added as construction is completed in each neighborhood and while construction is ongoing in other parts of the City. This ensures that revenue for subscribers is shared with the City as it is available and mitigates some of the initial debt service risk during build out.

Pass fees – fees that are paid by Cruzio for every parcel in Santa Cruz that has been “passed” by the Network – are paid to the City by Cruzio whether or not individual customers have signed up to join the service. The pass fee provides the City with a regular reliable annual income (currently estimated at approximately \$1.6 million for current addresses in City). Cruzio has requested that payment of the pass fees to the City begin two years (twenty-four months) after the first subscriber has joined the Network or at the end of the IDP, whichever occurs earlier. Cruzio has requested the delay in the payment of the per pass fees as the revenue received by Cruzio from the Network will be limited in the initial years during buildout and Cruzio will have invested considerable capital in order to provide the layer 2 electronics and layer 3 internet connection to customers during construction. While staff feel this is a reasonable request, it does increase the debt service risk to the City in the initial years.

**Council Direction Requested:** Acceptability of waiting two years or until end of the IDP, whichever occurs earlier, to receive pass fees from Cruzio.

- 4) Amount of Subscriber and Pass Fees/Discussion of variability: As described above, the per pass fees are a flat fee paid per parcel by Cruzio to the City. The overall fees paid to the City over time will increase slightly with modest infill development creating new parcel addresses within the City limits. However, in the proposed model contemplated in the current franchise agreement, unlike the per pass fees, the per subscriber fee paid by Cruzio to the City fluctuates in order to incentivize and reward Cruzio for improved sales and capturing greater market share. As the subscriber take rate (or percent of market share) increases, the per subscriber fee is reduced; as the subscriber rate decreases, the per subscriber fee increases in order to generate enough revenue (combined with the per pass fees) to cover the City’s debt and operations costs. The lower the overall construction costs to build the network, the less the City needs to borrow and the overall financial risk is reduced while creating better returns for both parties. While initial estimates to fully fund and build the Network (including sustaining a modest bond reserve) are in the \$45-50 million dollar range, actual construction costs may be lower and will not be fully vetted until the Network is designed, engineered and bid.

For the purposes of establishing the fees paid to the City or a mechanism for the fees paid to the City, staff will need direction from Council regarding acceptable parameters for the revenue sharing model, and timing of the initial return on investment. Staff will present an overview of the current model contemplated for discussion during the Council meeting.

**Council Direction Requested:** Direction on acceptable parameters for franchise fees paid to City, sharing of risk and timing for repayment or return on initial investment.

- 5) Average Revenue per Unit (ARPU) Baseline Adjustments: The City and Cruzio need a mechanism to share in the market shifts of the mix of the subscriber customer base as well as inflation or other pricing shifts in the internet service provider marketplace in the coming decades. In general, the vast majority of fiber optic network customers are residential subscribers. However, higher price point customers for business class, enterprise class, and dark fiber leases are contemplated and may make a significantly larger part of the customer mix over the coming decades. Likewise, inflation and market rates may shift in the pricing based on macro-economic shifts and industry fluctuations in pricing. We are already seeing the impact of

Google Fiber across the country in creating a de facto new standard price of \$70/month for residential gigabit service. By calculating the average revenue per unit across residential, business, enterprise, and leased fiber rates, there is a financial mechanism to ensure the City shares in any revenue growth due to the shift in customer base and/or shifts in pricing. Cruzio has proposed an upward and downward adjustment for every 10% increase or decrease in ARPU above the baseline. Staff recommendation is for an adjustment for every 5% increase or subsequent decrease above the baseline, with no decreases below the baseline.

**Council Direction Requested:** Direction on acceptable levels of ARPU adjustment as described above.

- 6) Future Consumer Price Index (CPI) adjustment/Revenue Sharing: While the ARPU Baseline Adjustment can provide a means to share revenue due to market shifts, there is not a guaranteed way to ensure the City has relevant revenue increases due to inflation in the Consumer Price Index regardless of whether or not retail prices shift. Furthermore, the City cannot predict all the future ways in which services and information will be provided through the internet over the Network. In order to share in the partnership without creating complex rate tables that will be out of date in a few years, staff suggested a revenue sharing model where a modest percent of gross revenue be provided to the City in order to anticipate future growth. This mechanism is one in which the City utilizes for the majority of existing leases and a common practice for franchise agreements. Cruzio is not open to considering a gross revenue sharing model and proposed the ARPU adjustments contemplated above.

**Council Direction Requested:** Direction on current and future revenue sharing, CPI adjustment and importance of a City share of unknown future gross revenue.

- 7) Remedies and Loss of Exclusivity: One of the issues that staff has continued to work through is the remedies available to the City if Cruzio and the City are not successful in generating sufficient market share to cover the City's debt service and costs. As currently proposed, the agreement would provide for a period of time during which Cruzio is the exclusive user of the Network. One remedy that has been proposed is that if the number of subscribers is significantly less than estimated, Cruzio would no longer have exclusive use of the system, but would be allowed to continue to use the system under the agreement, however the City would be free to attempt to contract with other businesses for their use of the system, thereby generating additional revenues. This has the benefit of allowing Cruzio to continue to operate while Cruzio and the City look for additional partners on the system. Additional remedies could include the guarantee or other security described above, changes in the methodology of payment or revenue sharing to generate additional funds to pay debt service. Remedies would also include termination of the Agreement. In each case, there would be a cure period.

**City Council Direction Requested:** Direction on providing loss of exclusivity as a remedy.

If given the direction to proceed, staff will continue to work with Cruzio, the City Attorney, specialist telecommunications counsel at Best, Best, & Krieger (BBK), bond counsel, and CTC Technology & Engineering (CTC), an independent communications and IT engineering consulting firm, to finalize terms for the franchise agreement based on the parameters as directed by Council. If both parties are

able to reach consensus on the key terms and outstanding issues within the parameters by the current expiration of the Exclusive Negotiation Agreement (ENA), July 15, 2016, staff recommends extending the ENA through August to allow sufficient time to finalize the terms before returning for Council consideration in August. Staff further recommends the creation of an ad-hoc Council subcommittee to meet with staff on a regular basis until such time as an agreement is finalized for further Council consideration.

FISCAL IMPACT: Funds for ongoing professional costs for CTC, BBK and bond counsel are available in the approved FY 2016 and adopted FY 2017 Economic Development Budget and are not estimated to exceed \$100,000. If directed to proceed, future costs associated with engineering and design of the Layer 1 Outside Plant and financial planning are currently estimated in the range of \$1.5-2 million and ultimate construction of the Network is estimated between \$45-50 million. Funding is projected to be available in the Economic Development Trust Fund to fund the initial effort of bringing the project through initial engineering and design and bridge the gap for initial construction costs prior to bond issuance.

Prepared by:  
J. Guevara  
Economic Development  
Manager, and

Submitted by:  
Bonnie Lipscomb  
Director of Economic  
Development

Approved by:  
Martin Bernal  
City Manager

Bonnie Lipscomb  
Director of Economic  
Development