



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kip Harkness

**SUBJECT: DIGITAL INCLUSION AND
BROADBAND STRATEGY
REQUEST FOR PROPOSAL**

DATE: February 2, 2017

Approved

D. D. S. L.

Date

2/3/17

RECOMMENDATION

Adopt a resolution authorizing the City Manager or designee to negotiate and execute an Agreement with Price Waterhouse Coopers (PwC) to provide digital inclusion and broadband strategy consulting services from February 15, 2017 through December 31, 2017 for an amount not to exceed \$315,000.

OUTCOME

San Jose residents and businesses expect a robust digital infrastructure with a wide range of choices, a high degree of service quality, 21st century internet speeds, and competitive pricing. While not all gaps in the City's digital infrastructure are known now, evidence of the need for improvement includes:

- Slow cellular connection speeds:
 - Median mobile download connection between three and eight megabits per second based on recent San Jose-based testing and FCC EOY 2014 data;
 - Advertised speeds of gigabit internet less than promised based on recent San Jose-based testing;
- Limited competition:
 - Two companies comprise over 90% market share based on recent San Jose-based analysis;
- Minimal municipal and private sector fiber:
 - Less than 1% of San Jose residential and commercial premises had access to fiber based on FCC EOY 2014 data;
- Significant digital divide:
 - Almost 95,000 San Jose residents have no broadband internet access at home based on the 2015 American Communities Survey.

Our infrastructure is not meeting current performance expectations and is not future-oriented to handle the expected advances in wireless communications technology, data volumes, and customer quality of service expectations.

This project develops a citywide strategy to achieve the goals of:

- Improving the City's existing digital infrastructure to support San Jose's Smart City Vision and improve digital inclusion;
- Understanding options to improve residential and business broadband internet choices, quality and pricing; and
- Promoting availability of gigabit level broadband internet to support economic development and inclusion.

At the end of this consulting project the City receives support and analysis across several strategy domains including:

- Infrastructure current state assessment including the development of a master inventory map;
- Digital inclusion strategy recommendations;
- Digital infrastructure gaps, opportunities, and funding option recommendations;
- Broadband-related technology, governance, and sustainability strategy recommendations;
- High-level business and financial modeling of the broadband strategy options;
- Financial planning and analysis responsive to council feedback on strategy recommendations; and
- Estimate to complete further financial planning and analysis if required.

BACKGROUND

Broadband Market Situation

Digital Infrastructure provides the ability to store and exchange data through a networked communication system. Broadband internet has become the essential digital infrastructure of the 21st century. The City (through the Department of Transportation's infrastructure), other public agencies, and the private sector own assets that together comprise the digital infrastructure enabling internet access for residents, businesses, and government institutions.

The Telecommunications Act of 1996 intended to generate competition amongst service providers but a series of megamergers soon thereafter effectively eliminated local competition, leaving local duopolies between the cable and telecom providers. As a result, local broadband markets have evolved to typically deliver sub-optimal coverage, service, and download speeds at high prices compared to the rest of the world.

In recent years, there has been a recognition of the sub-optimal performance of the current broadband market. Recognition that broadband internet is an essential service to promote educational, workforce, economic development outcomes, and smart city benefits has led to increased pressure to find new solutions for broadband delivery. Some cities have intervened by building their own service provider neutral networks. Some cities are attempting to update their regulatory framework to stimulate competition, extract better commercial terms, and/or secure more

robust digital infrastructure in public-private partnerships. Google Fiber, despite the recent pause in programming, showed the power of new entrants when existing players in Cincinnati increased speeds and decreased prices in response to the credible threat of a third-market entrant.

Ongoing waves of communications technology innovation drive an accelerated increase in the number of users, number of connected devices, volumes of data, and internet usage. Correlated with this new wave of communications technology innovation are proportionately increasing customer expectations. Residents, businesses, and government institutions are beginning to expect and need very high speed (i.e., up to gigabit level) and high quality broadband internet. Gigabit level broadband internet is 50 times faster than the current median San Jose household internet speeds based on recent San Jose-based testing. These faster speeds are enabled by three different methods: the use of fiber optics; the use of cable coax using the DOCSIS 3.1 standard; and the use of emerging millimeter wave length Wi-Fi like Facebook's Terragraph technology. Gigabit level broadband internet is required for the existing needs of many businesses, the future of education learning opportunities for students, and the future of autonomous vehicles.

San Jose Digital Infrastructure Situation

Broadband internet is increasingly viewed as a critical issue for San José – it is a key foundation in the realization of San José's Smart City Vision as well as a key element of urban planning for the 21st century. Over the past year, critical questions around digital infrastructure policy (e.g., one dig) as well as digital inclusion policy to help our City's underserved population were on the City Council agenda. In order to effectively address these key policy issue areas, the City of San José needs to develop a fact base around (1) what digital assets are available (and at what price and quality level); (2) where are the gaps; and (3) how best to address the gaps (e.g., through the private sector and/or through municipal fiber). In parallel, understanding why low-income or marginalized populations currently are not connected is critical to digital inclusion. The City is pursuing a combination of efforts including direct contact, focus groups, and surveys to better understand the digital inclusion barriers.

Broadband management is a complex process that requires diverse skills including: infrastructure design and implementation; cross-department collaboration; and future-oriented planning to account for new technologies. Municipal fiber is expensive and often uneconomical, but managing private investment in the space is equally challenging. The City needs to assess its digital infrastructure in light of its Smart City Vision and digital inclusion goals, as well as develop a broadband strategy to understand where the current market forces are meeting the expectation of access, affordability, adoption, and service quality (across residents, businesses, nonprofits, and City and other public facilities), and where potential strategic interventions are necessary to close gaps; the nature and extent of these interventions needs to be defined. Finally, the evolution of the broadband infrastructure is necessary to guide the City's decision-making to make best use of existing and new resources.

ANALYSIS

Consultant Selection

In November 2016, Civic Innovation team worked with several internal departments - Information Technology; Economic Development; Parks, Recreation, and Neighborhood Services; Library; Public Works; and Transportation - to develop a Scope of Work for consulting services to create a broadband strategy and to provide support for existing digital inclusion strategy efforts. The City issued a Request for Proposal (RFP) on December 07, 2016, seeking consultant services for support to develop a digital inclusion and broadband strategy.

Twenty-eight vendors reviewed the RFP. The RFP was also publicized through many social media channels by the City Manager’s Office and The Mayor’s Office. The City received one responsive proposal – PwC - by the December 21, 2016 due date. A technical evaluation panel was established to review and scores the proposals, consisting of staff from the Office of Civic Innovation and Digital Strategy and the Information Technology Department.

The evaluation criteria, criteria weighting, cumulative score, and final ranking following several interviews follows:

Rank	Consultant	Experience	Expertise	Approach	Investment	Cost	LBE	SBE	Total
		25 points max	25 points max	10 points max	15 points max	15 points max	5 points max	5 points max	
		Cumulative Score							
1	Price Waterhouse Coopers	15	18	7	11	7	5	0	62

In accordance with City policy, ten points were reserved for Local Business Enterprise (LBE) and Small Business Enterprise (SBE) status. PwC qualified for the LBE status. PwC did not qualify for the SBE status.

Vendors were asked to indicate their willingness to invest in this opportunity in the form of reduced fees, pro-bono work, or other creative ways to reduce the cost of this project. PwC proposed a combination of fee reductions, pro-bono work, and synergies with the Environment Environmental Sustainability Plan project PwC is performing for the City’s Environmental Services Department. PwC’s total proposed fee reduction, pro-bono, and synergy based investment of \$295,000 results in a project which might have cost the City \$610,000 but now costs the City \$315,000.

Staff recommends awarding a master consultant agreement to PwC for an amount not to exceed \$315,000.

This type of consulting work is highly specialized. PwC has recent experience developing New York City's broadband strategy and supporting their digital inclusion efforts. Additional broadband strategy case studies included Los Angeles and Astana, Kazakhstan. A reference call was conducted with New York Mayor de Blasio's Broadband Advisor. This New York City official confirmed his office would again engage PwC for this consulting work. Each of the proposed PwC team member has experience from the New York engagement.

PwC's proposed team, relevant experiences, and project approach provided staff with a high level of confidence in selecting this team to perform the services required to develop a broadband strategy and provide digital inclusion recommendations for San José.

PUBLIC OUTREACH

Significant Public outreach on digital inclusion will be conducted as part of the digital inclusion strategy portion of this project.

Additional public outreach will be conducted after the Council has reviewed the recommendations and provided direction on broadband strategy portion of this project.

COMMISSION RECOMMENDATION/INPUT

There is no commission recommendation/input associated with this item.

COORDINATION

Information Technology, Economic Development, Parks, Recreation, and Neighborhood Services, Library, Public Works, Transportation Department of Transportation, Budgeting, and City Attorney.

FISCAL/POLICY ALIGNMENT

This project aligns with the City's policy goals including:

- Smart City Vision goals - safety, inclusion, user-friendliness, and sustainability;
- Innovation Roadmap goals – The digital inclusion strategy and broadband strategy are both Priority Innovation Roadmap projects recently approved by the City Council;
- Infrastructure Investment goals - specifically the digital infrastructure necessary to provide affordable broadband (up to gigabit level speeds) internet service;
- Asset Monetization goals – exploring creative partnerships and other funding options that provide the City revenue by leveraging new or existing digital infrastructure assets.

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COST SUMMARY/IMPLICATIONS

Existing funding is available for this contract. The budgeted amount included in the 2016-2017 Adopted Operating Budget for the project was \$250,000 and additional funding has been identified in the City Manager’s City-wide Special Project appropriation to complete funding for the contract. Future project funding will be considered as needs are identified.

EVALUATION AND FOLLOW-UP

Follow-up will be conducted at future Smart Cities and Service Improvements Committee Meetings.

BUDGET REFERENCE

The table below identifies the fund and appropriations to fund the contract recommended as part of this memo.

Fund #	Appn #	Appn. Name	Total Appn	Amt. for Contract	2016-2017 Adopted Operating Budget Page	Last Budget Action (Date, Ord. No.)
001	0112	City Manager’s Office Non-Personal/Equipment	\$1,886,961	\$250,000	VIII-46	10/18/2016 Ord. No. 29803
001	3657	City Manager Special Projects	\$191,000	\$65,000	IX -28	10/18/2016 Ord. No. 29803

CEQA

Statutorily Exempt, File No. PP10-066(d), CEQA Guidelines Section 15262 – Feasibility and Planning Studies, Feasibility and Planning Studies.

/s/
KIP HARKNESS
DEPUTY CITY MANAGER, CIVIC
INNOVATION AND DIGITAL STRATEGY

For questions, please contact Steven DiNoto, Director of Civic Innovation and Digital Strategy, at (408) 535-3567.