

REQUEST FOR INFORMATION (RFI)
LOS ANGELES COMMUNITY BROADBAND NETWORK (LACBN)

Issued by:

CITY OF LOS ANGELES, CALIFORNIA
Information and Technology Agency

The City of Los Angeles plans to issue a request for proposals (RFP) for deployment of broadband wired and wireless infrastructure as part of its efforts to ensure every residence and business in Los Angeles has access to world-class, high-speed Internet access. We refer to the resulting infrastructure as the Los Angeles Community Broadband Network (LACBN) although the LACBN could actually be a network of networks, constructed independently over time by many different network owners.

This RFI is issued as part of the RFP process, and seeks information that the City can use to develop a final RFP for deployment of broadband infrastructure. We seek information not just from entities that may ultimately bid to construct all or part of the LACBN, but also from public and private entities that may be interested in partnering with the City to contribute assets or provide support for the initiative in other ways – for example, by sponsoring deployment in neighborhoods or parks. Pages 8, 10 and 12 and Appendix 4 of the RFI may be of especial interest to potential partners.

The City is also interested in information as to areas that are underserved, or ways to remove barriers that prevent residents and businesses from taking advantage of the benefits of broadband infrastructure, including comments as reasonable approaches to ensure that Angelenos have basic levels of Internet services at low or no cost..

While the City welcomes comments from everyone on this RFI and the LACBN initiative, for purposes of its RFI/RFP procedures it distinguishes between questions and submissions by Respondents – those who wish to submit formal responses to the RFI – and questions and submissions by members of the public or those who wish to comment on the project without going through the steps required to make a formal submission. Informal comments can be submitted to LACBN@lacity.org, and this RFI and amendments to it will be posted on <http://ita.lacity.org/ForResidents/CommunityBroadband/LACBNProject/index.htm>

Respondents' submissions must be received by the Information Technology Agency at the Response Delivery Address specified in this RFI no later than June 30, 2014, by 2:30 p.m. (Pacific Daylight Savings Time).

Respondents must submit: One (1) original cover letter and 1 (one) hard copy of the submission, and 5 USB Memory Keys or CD-ROMs each containing PDF version copies of the cover letter and submission.

While the RFI responses are to be provided in hard copy to the Information Technology Agency, any amendments or addenda to the RFI will be posted on the Los Angeles Business Assistance Virtual Network (LABAVN) website at <http://ita.lacity.org/ForBusinesses/index.htm>. Respondents can be notified of any amendments or addenda to the RFI by registering as a vendor on the LABAVN and specifying NAICS code 517. Any future RFP will be posted, and responses to the RFP will be submitted via the LABAVN. Entities interested in responding to an RFP are advised to register with the LABAVN.

Because the RFI is being issued as part of the RFP process, and because the City wishes to encourage those who may later choose to respond to the RFP to submit information about existing networks, the City will treat responses to this RFI as confidential so long as the process is ongoing or as otherwise allowed by law.

However, information that is not a trade secret or otherwise protected from disclosure under the California Public Records Act may be subject to disclosure once the RFP issues, and a contract is awarded, or if the City determines that an RFP should not issue. Therefore, any entity that submits material that is protected from disclosure by law must carefully follow the procedures in Section 1(D) below. Failure to follow these procedures may result in waiver of rights to protect information from disclosure. Generically marking a response as "confidential" is not adequate.

All submissions in response to this RFI should be mailed or otherwise delivered to the attention of Laura Ito to:

Information Technology Agency
Business and Administrative Services
200 N. Main Street, Mail Stop 232 Room 1400
Los Angeles, California 90012

Responding to this RFI is not a pre-requisite for responding to any subsequent solicitations relating to the LACBN, or any other RFP the City may issue with respect to communications services or facilities. A Respondent need not address every part of this RFI, although comprehensive responses are welcome.

Table of Contents

	<u>Page</u>
I. RFI PROCESS OVERVIEW.....	1
A. Intent of RFI.....	1
B. Schedule.....	1
C. Communications with City of Los Angeles and Requests for Additional Information	2
D. Respondents' Submissions.....	2
E. Further Process.....	4
II. GENERAL OBJECTIVES OF THE LACBN.....	4
A. The Need	4
B. The Goals	6
III. APPROACH TO LACBN	7
A. Technical Characteristics of the LACBN	7
B. Ensuring the Internet is Available to All.	8
C. Encouraging Deployment of the LACBN.....	8
D. The RFP Process	9
IV. REQUEST FOR INFORMATION.....	9
A. General Invitation for RFI Response	9
B. Specific Requests for Information	10
V. GUIDANCE FOR SUBMISSIONS	13
VI. GENERAL TERMS FOR RFI.....	14
A. Disclaimer	14
B. Financial Responsibility.....	14
C. Reservations of Rights By The City	15
D. No Waiver	15
APPENDIX 1 STREAMLINED PROCESSING	16
APPENDIX 2 CITY ASSETS	17
APPENDIX 3 CITY AS ANCHOR TENANT	222
APPENDIX 4 OPPORTUNITIES FOR MAKING BROADBAND AVAILABLE TO ALL ANGELENOS – DIGITAL INCLUSION PILOT PROGRAM.	266

I. RFI PROCESS OVERVIEW

A. Intent of RFI

This RFI is issued as part of the RFP process, and seeks information that the City can use to develop a final RFP for deployment of broadband infrastructure. We seek information not just from entities that may ultimately bid to construct all or part of the LACBN, but also from public and private entities that may be interested in partnering with the City to contribute assets or provide support for the initiative in other ways – for example, by sponsoring deployment in neighborhoods or parks. We are particularly interested in information as to areas that are underserved, or ways to remove barriers that prevent residents and businesses from taking advantage of the benefits of broadband infrastructure.

In our estimation, it is unlikely that a single vendor can provide the capabilities described in this RFI. The City encourages potential vendors and other interested entities to either respond to the entire LACBN scope, or to portions that are particularly relevant to their organization's strength. As a guiding principle, the City seeks pragmatic and cost-effective solutions that minimize implementation risk and maximize value to constituents. The RFI responses will inform subsequent procurement activities.

This RFI is for planning purposes only in connection with the development of an LACBN RFP. It is neither a solicitation notice nor an RFP. Responses to the RFI are not offers and cannot be accepted by the City of Los Angeles to form a binding contract. This RFI shall not limit any rights of the City, and the City reserves all its rights including, but not limited to, its right to elect not to procure the facilities and/or services that are the subject of this RFI and its right to procure them from a vendor that has not responded to this RFI.

B. Schedule

For purposes of the RFI, the term “Respondent” means the entity providing a written submission to this RFI. The estimated schedule for the RFI process is as follows:

RFI Release	4/7/2014
Deadline for questions from potential Respondents	5/7/2014
Submissions Due	6/30/2014

City may modify the RFI or the RFI response process at any time. Responses to questions, and any changes in the process or updates to the schedule above will be posted on the LABAVN at <http://ita.lacity.org/ForBusinesses/index.htm>. If a

determination is made that a clarification or change to the RFI document is required, or if the City obtains additional information that the City deems may be useful to Respondents, a written addendum will be posted on the website noted above. Respondents are responsible for obtaining all RFI materials. An entity interested in receiving notice of changes should register as a vendor on the LABAVN specifying NAICS Code 517.

C. Communications with City of Los Angeles and Requests for Additional Information

All general communications regarding the RFI or requests for additional information from potential Respondents to the RFI shall be submitted in writing via e-mail to the RFI Manager with the Subject Heading **LACBN INITIATIVE**.

Steve Reneker
General Manager
Information Technology Agency
200 N. Main Street, 14th Floor
Los Angeles, CA 90012
(213)-978-3311
Steve.Reneker@lacity.org

Emails submitted with a different hearing, or questions submitted after the May 7, 2014 deadline for questions may not be answered. Submissions must be received no later than June 30, 2014, 2:30 PM (Pacific Daylight Savings Time).

Comments from the general public and other non-Respondents to the RFI should NOT be submitted to the email address above, but should be submitted to LACBN@lacity.org.

D. Respondents' Submissions

Each submission must be accompanied by a cover letter that references the title of this RFI, contains a general statement of the purpose for submission, and includes the following information:

- Full legal name of the Respondent;
- Identification of a lead company or organization if more than one is represented in the submission.
- Contact information for the Respondent's or group's primary contact, including name, title, address, email address and telephone number of the person or persons authorized to represent the Respondent in connection with the submission provided to the City.

The submission should include general information about the respondent, including at least background information regarding the Respondent, including the following details

for each company or organization represented in the submission: name, address, web page, description of products and services, professional strengths and abilities.

In addition, to assist the City in evaluating the information submitted, a Respondent should identify:

1. Whether it currently provides broadband services within the City; where it provides those services, and the services offered; and
2. Respondent's experience financing, designing, building, provisioning and/or operating wireless and/or wireline broadband networks or other major infrastructure initiatives.

Submissions may address all or portions of this RFI. All submissions are welcomed.

Because the RFI is being issued as part of the RFP process, and because the City wishes to permit those who may later choose to respond to the RFP to submit comprehensive responses that may be useful to their competitors, the City initially will treat responses to this RFI as confidential (except to the extent a respondent chooses to release that information itself). However, the City is subject to the California Public Records Act and must comply with its obligations thereunder. Under the Act, materials submitted may become subject to disclosure once an RFP issues and the City awards a contract, or if the City decides that it will not issue an RFP. Accordingly, each respondent who believes that information contained in an RFI is confidential and not subject to disclosure under the California Public Records Act must mark all information that is confidential. Should the respondent mark information as confidential and not subject to disclosure, it must also provide a separate copy of the submission with all identified confidential information completely redacted.

To ensure that the City is in a position to protect information from disclosure to the extent permitted by law, each submission should confirm Respondent's agreement to indemnify, defend and hold the City of Los Angeles harmless by including the following statement:

"The Respondent undertakes and agrees to defend, indemnify and hold harmless the City of Los Angeles and any of its boards, officers, agents, and employees (collectively, the "City") from and against all suits, claims, and causes of action brought against the City for the City's refusal to disclose Respondent's trade secrets or Respondent's other technical, financial or other information to any person making a request pursuant to the State of California Public Records Act (California Government Code Section 6250 et seq.). Respondent's obligations herein include, but are not limited to, all reasonable attorney's fees (both in house and outside counsel), reasonable costs of litigation incurred by the City or its attorneys (including all actual, costs incurred by the City, not merely those costs recoverable by a prevailing party, and specifically including costs of experts and consultants) as well as all damages or liability of any nature whatsoever arising out of any such suits, claims, and causes of action brought against the City, through and including any appellate proceedings. Respondent's obligations to the City under this

indemnification provision shall be due and payable on a monthly, on-going basis within thirty (30) days after each submission to Respondent of the City's invoices for all fees and costs incurred by the City, as well as all damages or liability of any nature. Respondent shall receive prompt notice from the City of any (1) communication to the City challenging the City's refusal to disclose Respondent's information, and (2) any complaint or petition to the court challenging the City's refusal to disclose Respondent's information."

Failure to include the statement above shall constitute a waiver of a Respondent's right to exemption from disclosure.

The City will exercise care in maintaining the confidentiality of submissions, but will not be held liable for any damage or injury that may result from any disclosure that may occur.

Should the City receive a request for disclosure of an RFI response, it will ask the Respondent whether it wishes to maintain its response as confidential. Through the statement above, the Respondent agrees to assume and pay for all costs incurred by the City, including attorneys' fees awarded by a court, if the City receives a request for disclosure and Respondent wishes for the City to maintain the confidentiality of the response.

E. Further Process

This RFI is not an invitation for bids or requests for proposals, therefore, no standard City terms and conditions or contractual language is contained herein, nor is it required in Respondents' submissions. No contract award will result from this solicitation.

The City anticipates that based on the information gathered through this RFI process, it will proceed to issue one or more requests for proposals. In any subsequent RFP, the City expects it will seek proposals from one or more entities for construction of advanced wireline and wireless networks in a process that will result in binding commitments between the City and one or more entities in related contracts that best support the achievement of the City's broadband goals.

II. GENERAL OBJECTIVES OF THE LACBN

A. The Need

High-speed, affordable Internet access is essential to the City's and nation's global competitiveness. It drives job creation, promotes innovation, expands markets for American businesses, and supports improved education, health care, and public safety.

Los Angeles has many competitive advantages. It is home to a burgeoning tech industry with the emergence of Silicon Beach and is ranked as one of the top start-up friendly ecosystems in the world. Los Angeles was also ranked as the city with the highest entrepreneurial activity rate in the nation with 580 entrepreneurs per 100,000 adults. The City is also the small business capital of the nation. Los Angeles has plenty of

entrepreneurial spirit, creativity, great local colleges and universities and the entertainment industry.

However, in many cities nationally and internationally, Internet access is available to residences at speeds up to 1 Gbps – speeds that allow users to transmit and receive information nearly 200 times faster than from residences in Los Angeles – at the same or at a lower price than Angelenos pay for inferior service. A recent study by the federal government General Office of Accounting showed that in communities with broadband networks, small business reported that they could operate and compete more effectively. The GAO study reports that communities that have deployed advanced networks are more attractive to businesses and to potential residents.

While some parts of Los Angeles do have access to high-speed broadband, nearly 30% of all Angelenos – and possibly more - either do not have access to broadband or cannot afford it. In 2010, research suggested that one million households in Los Angeles did not own computers. To combat this problem, the City of Los Angeles implemented the Los Angeles Computer Access Network (LA-CAN) computer centers at 188 facilities citywide. These computer centers were located at libraries and workforce training centers, youth and family centers, and parks and recreation community centers. Funding for the computer centers came from a Broadband Technology Opportunities Program (BTOP) grant through the American Recovery and Reinvestment Act provided by the United States Department of Commerce. But the City's ability to continue to maintain those centers will depend on the availability of low-cost or no-cost broadband to those locations.

Many households still use universal service telephone lines for dial-up access to the Internet to get basic e-mail and minimal internet services. While these households are connected, they are unable to enjoy the full benefits of high-speed broadband. Many people can now use mobile devices like cell phones to access the Internet, but commercial cell services available today are not typically priced or useable as a true substitute for the connectivity offered by the advanced networks being deployed in other communities.

This has significant implications for many public institutions. For example, the Los Angeles Unified School District is taking steps to modernize the education system through the deployment of electronic text books on tablet computers. However, it is projected that nearly 35% of all students do not have access to broadband at home, which will inhibit those students from being able to do their homework and studies in the safety of their home.

While there are many programs designed to encourage broadband deployment, and to allow schools and libraries to obtain less expensive access to the Internet, the United States still has not fully developed a true Broadband Universal Service that can ensure broadband Internet access is available to all citizens, as have other countries like Switzerland, Finland, Taiwan and Britain.

As the world relies more and more on Internet based systems for work, education, hiring, training, and for daily interactions with government and other community institutions, it becomes more critical to address disparities in Internet availability. In the absence of a national plan to ensure Broadband Universal Service, it is important for the City to ensure, to the extent possible, that basic levels of broadband access are available to every Angeleno regardless of income, and that high-quality, high-speed access is available everywhere at reasonable prices. In some communities, for example, basic levels of service – up to 5 Mbps – are offered for no monthly charge to residents. The higher level 1Gbps offerings to residences in Kansas City, MO and Chattanooga, TN cost about \$75 per month.

B. The Goals

In light of the increasing importance of affordable, high-speed broadband services, the LACBN initiative has the following goals:

- *Ensure that every Angeleno can access advanced communications networks that will provide high-speed, high quality broadband connections to the Internet, where Angelenos live, work and play, indoors and out of doors.*
- *Ensure that areas of the City that are currently underserved are promptly served.*
- *Ensure that the City is served by an open network, so no one is prevented or blocked from taking full advantage of the Internet's capabilities; and*
- *Ensure that every Angeleno can enjoy the benefits of broadband, regardless of income or the area in which they reside.*

More specifically:

1. *The City of Los Angeles wants to be the location of choice for businesses and residents – to attract businesses with good paying jobs, to entice graduates from our local universities to reside and work in Los Angeles, and to ensure the City remains a center for the digital economy and a global leader in technology and innovation.*

Through the LACBN initiative, the City intends to encourage, to the extent feasible, rapid deployment of a network or networks that can deliver world-class broadband Internet access – at speeds 1Gbps or higher – to all residences, multi-unit dwellings, and businesses through wireline and wireless connections.

2. *The City of Los Angeles wants to ensure that every resident has access to basic broadband and that higher levels of broadband service are available at speeds and prices comparable to other innovative communities around the world.*

In a subsequent RFP, the City may ask bidders to propose an enforceable timetable and process for build-out, that has understandable and measurable network performance standards, and that includes a strong Broadband Universal Service plan that ensures that

no underserved area in the City's 15 Councilmember districts remains underserved, and that levels of basic Internet service are available at low or no cost.

3. *The City of Los Angeles wants to ensure broadband networks support net neutrality.*

The vitality of the Internet depends on the ability of users to access sites of their choosing, and to take advantage of the content and applications that can be offered via the Internet. The LACBN initiative will encourage networks that at least support net neutrality, meaning that the City expects that the LACBN will attempt to treat all data on the Internet equally, not discriminating or charging differentially by user, content, site, platform, application, type of attached equipment, and modes of communication.

III. APPROACH TO LACBN

A. Technical Characteristics of the LACBN.

The City believes that the LACBN should include the following elements, which may be provided by one or more providers, acting in concert or individually:

To the extent possible, every residence and business in Los Angeles should be passed by a fiber network that is willing and able to provide services to those homes and residences at competitive prices. Ideally, the network should offer Internet access to residences at 1Gbps up and downstream, and similar or higher capacity services to businesses. It is the City's preference that the network bring fiber to the premises, but given developments in wireless technology, the City is also open to allowing applicants to provide services to the home through a combination of wireless and fiber technologies – provided the network performance is similar. Existing 4G systems, however, would not be considered an adequate substitute for the LACBN.

In addition, the proposed network should have a Wi-Fi component that would enable people to connect to the Internet when away from their home or business using standard consumer devices. While we recognize that standalone Wi-Fi networks have not been successfully implemented on a citywide basis in many locations in the U.S., the recent deployments of Wi-Fi gateways on fiber and coaxial strand suggests that a combination of wired and wireline networks may be more feasible.

Users should be able to attach any devices to the network, as long as they do not impair network performance.

The network should be characterized by a transport infrastructure that is physically and logically redundant and provide raw Layer 2 transport in addition to IPv4 and IPv6 Layer 3 routing. The infrastructure must be capable of providing 99.9% availability, be resilient with low latency and jitter, and ensure that packets sent and received at the network edges are identical. Finally, the network must permit the adoption of technologies such as DWDM, LTE, 802.11ac and other technologies as they become standardized or gain a significant market share.

The network should be a "neutral" network. That is, subscribers should be able to connect to content of their choosing, and the network owner should not be able to favor content or applications it may wish to provide over content or applications that may be offered by another information service provider.

In addition to the general requirements outlined above, the City prefers an open network architecture that allows for multiple service providers and equal access to fiber infrastructure at reasonable wholesale cost, providing dedicated bandwidth to all customers and service providers.

Users should be able to have secure Internet communications just as they do on many existing networks.

B. Ensuring the Internet is Available to All.

Many fiber/wireless deployments include provision for free minimum services and/or required equipment. In some cases, there may be a minimum level of wireless services available, coupled with community centers that allow residents to who cannot afford their own connections to use higher-speed connections to the Internet. The City believes that the LACBN should similarly serve to close the divide between Angelenos who currently have, and those who do not have adequate access to the Internet, both by ensuring that advanced infrastructure is deployed in all neighborhoods, but also through ensuring that minimum levels of services and equipment are available to all.

C. Encouraging Deployment of the LACBN

At this time, the City does not intend to act as a retail service provider or network operator of the LACBN. Some communities – Chattanooga, Tennessee being one example - have opted to build municipally-owned, broadband fiber networks. While that is an option the City could consider, its assumption is that in the first instance, it should attempt to achieve the goals of the LACBN by providing incentives to private industry to build an advanced broadband network.

The City does not propose to contribute funding to the LACBN. However, it does propose to incentivize construction of the LACBN by (a) streamlining processes for permitting construction of the LACBN; (b) making space on City property that may be useful for construction of wired and wireline systems pursuant to standardized contracts (this would include, for example, access to certain light poles, as well as providing space within City buildings that may be useful for siting network nodes and control systems); (c) permitting use of fiber or conduit owned by the City where feasible, and coordinating construction of the LACBN with planned City construction of roads and other facilities, if feasible; and (d) serving as an anchor tenant on the LACBN. As an anchor tenant, for example, the City might pay for fiber connections to hundreds of City buildings, or switch city cell phone contracts to entities willing to participate in the construction of the LACBN. Each of these incentives is discussed in more detail in the Appendices to this RFI.

In addition, through this RFI process, the City hopes to identify assets owned by other public and private entities that may be available to the entity or entities who enter into enforceable contracts to build the LACBN, and determine whether there is interest in sponsoring deployment in particular areas or neighborhoods. For example, the City could seek sponsorships for deployment of Wi-Fi in public parks, separate and apart from construction of the LACBN; or sponsorships supporting broadband adoption in poorer areas of the City.

D. The RFP Process

The City is currently considering two approaches to an RFP that would result in development of an enforceable contract or contracts for development of the LACBN.

First, it is considering issuing an RFP for city-wide deployment of the LACBN by one or more providers. Under this approach, the City would expect to enter into a contract under which (a) the selected applicants would agree to build out the LACBN according to an agreed upon timetable; (b) the City would agree to streamlining processes, and to provide access to assets; and (c) the City would also either provide a contracting preference or enter into a contract to lease facilities or purchase services from the applicant.

Second, it is considering issuing an RFP under which potential providers would propose to serve areas within the City once certain levels of cash flow are secured through (a) commitments from potential subscribers to purchase service at rates comparable to those charged in other Gigabit cities, and (b) anchor tenancy commitments by the City or others. The City would set up websites and call-in centers for neighborhoods, receive commitments from potential subscribers, and provide subscription information to a qualified applicant making the best service proposal. The approach is similar to that used in Kansas City, where Google Fiber sets sign-up periods for neighborhoods, and if a neighborhood meets sign-up goals, the company builds out the "fiberhood." Under this proposal, the City would be aggregating demand, and acting almost like a "buying agent" for neighborhoods. The City would work with the selected applicant to streamline entry into the marketplace.

There are many potential variations on these two approaches, and the City below invites comments on the specific approaches, as well as alternatives approaches to an RFP that would encourage deployment of advanced networks in the City. The LACBN could actually be a network of networks, independently constructed over time, by many different and independent network owners.

IV. REQUEST FOR INFORMATION

A. General Invitation for RFI Response

The City of Los Angeles issues this RFI to gather information, ideas and recommendations for developing, upgrading, and expanding broadband infrastructure in the city and improving access to wireless and wireline high-speed Internet for residents and businesses across the City of Los Angeles.

In this RFI, the City seeks comments from Respondents on:

- the best ways for achieving the goals of the LACBN discussed above;
- the availability of wireless and wireline broadband services in the City of Los Angeles including information about any underserved or unserved areas;
- ideas, proposals and recommendations on how to speed deployment of wireless and wireline broadband infrastructure so that the world-class Internet services are available ubiquitously and existing infrastructure is upgraded or replaced faster than would occur under a “business as usual” case (these comments need not be limited to commenting on the RFP model described above);
- ideas, proposals and recommendations on how and where to encourage adoption and use of broadband technologies, and in particular, ideas, proposals and recommendations for ensuring that all Angelenos can enjoy the benefits of broadband, regardless of income or the area in which they reside; and
- suggestions as to how the City can facilitate and foster wireless and wireline broadband deployment through streamlined processes, service contracts, creating partnerships with entities, making City-owned assets available to network operators or taking other steps to leverage and coordinate ongoing infrastructure improvement efforts to reduce network deployment costs.

This information gathering process will inform the development of one or more requests for proposals that will result in creation of an LACBN that will provide residents, businesses and visitors in the City of Los Angeles with advanced wireless and wireline broadband services, encourage competition and transparency, and foster economic and community development.

The City welcomes ideas and recommendations from all interested or potentially interested parties, including public, private and community organizations, entities with a commercial interest in the LACBN, and potential public and private partners who may wish to assist the City in development of the LACBN. Potential respondents are encouraged to collaborate in offering ideas and recommendations. Respondents are encouraged, but not required, to make comprehensive submissions.

B. Specific Requests for Information

1. Broadband deployment – interest.
 - a. *Is Respondent interested in building all or part of the LACBN?*
 - b. *Describe your interest.*
 - c. *What approach might the City take to an RFP that would encourage you to apply to bid to build all or part of the LACBN?*

- d. *Would it be better to separate the Wi-Fi and wireline components of the initiative? Are there any special problems associated with the wireline v. wireless deployment?*

2. Broadband deployment – timetable.

Obviously, there are several providers in Los Angeles that already have significant fiber deployments, while new entrants may require more time to deploy. *What is a reasonable way to approach deployment timetables to achieve LACBN goals? Is there any way to do so without favoring incumbent providers?*

3. Broadband deployment within the City – areas to be served.

- a. *Are there specific areas within the City that should be targeted for deployment of the LACBN? What are those areas?*
- b. *Are there areas where business or residences are already servable by networks that offer at least 300 Mbps downstream and upstream? What are those areas?*
- c. *Are there areas where it is impractical to require a new entrant to build a network because businesses or residences already are servable by multiple advanced networks? What are those areas?*
- d. *Are there areas that should not be included in the LACBN for because of environmental concerns, or other construction issues that make deployment impractical? What are those areas?*

The City knows, for example that it might be difficult to build a system that passes businesses within Los Angeles International Airport, and that the airport already has communications networks available to it, so the City does not intend to include the airport itself within the scope of any RFP.

4. Encouraging broadband deployment.

- a. *Are there ways in which the City could alter its permitting and contracting practices that would encourage deployment of advanced facilities? Are there additional steps that the City could make to its processes that the City should consider in addition to those specified in the Appendices? Respondents are encouraged to provide a description of any processes, rules or regulations at the local level that could impact the feasibility or underlying economics associated with the proposed solutions. Submissions should include an explanation of any forms of proposed regulatory relief, including streamlined permitting, which could improve the economic case for the business models or*

network solutions proposed or for other network solutions that Respondents considered but dismissed as uneconomic due to existing regulations.

- b. What changes would be most valuable?*
- c. Are there assets that would be of particular use to LACBN deployment? What are those assets, and what information or processes would help in the planning and deployment of the LACBN to use those assets? For assets like buildings, what sort of space would need to be available to make the asset useable?*
- d. Are there assets that would be of little utility to deployment of the LACBN?*
- e. Should the City install fiber or conduit as part of future construction or repair of roads, or as part replacement of communications system? If it does, can it be assured that it could recover its costs? How?*
- f. Is having the City as an anchor tenant useful or of little use in encouraging deployment?*
- g. Are there particular City service/facility needs that may be of significant value to a person seeking to deploy all or part of the LACBN?*
- h. Are there particular City service/facility needs that may be of little value to a person seeking to deploy all or part of the LACBN?*
- i. Are there City service/facility needs that the City should separate from LACBN process? For example, as described below, the City currently purchases and pays several providers for cell phones used by employees for City business. The City has an interest in reducing the number of providers to one or two. Is the City more likely to achieve the goals of the LACBN by (a) purchasing services and phones from an entity that agrees to build the LACBN; or (b) bidding for the phone service separately, subject to conditions (such as support for connections to community computer centers)?*
- 5. Availability of broadband to all.**
 - a. What specific steps could the City take to make broadband available to all Angelenos?*

- b. *What minimum requirements for services and facilities should be required to ensure that underserved populations have adequate access to the Internet?*
- 6. Opportunities for partnerships and participation by others.
 - a. *For an entity that is not interested in responding to an RFP for the LACBN, is there an interest in sponsoring deployment in particular areas (particular public parks, for example) or supporting deployment of services and equipment to underserved communities? What would be the best way for the City to approach such sponsorships?*
 - b. *Is sponsorship a feasible way to encourage deployment to particular areas within the City?*
 - c. *Does your organization have assets that may be useful for deployment of the LACBN, and that you may be willing to provide to an entity selected through the RFP process? What are those assets?*
 - d. *Is your organization involved in construction that may make it cheaper to install fiber facilities, where you would be willing to coordinate with an entity selected through the RFP process? What is the work and what is the timetable?*
 - e. *Are there particular incentives or steps the City could take to make it easier for a selected provider to obtain access to MDUs or to office buildings? Would it be useful to require building owners to identify what rights tenants will have to obtain services from broadband providers?*

V. GUIDANCE FOR SUBMISSIONS

The City recognizes that it is not simple to build out broadband infrastructure throughout the City, or to achieve the other goals outlined above. Broadly speaking, there are at least three ways that communities have pursued broadband deployment. One way is for the municipality itself to build a broadband network that competes with private enterprise. The second is by seeking to attract entry of a new competitor that is willing build a new broadband network to serve the city or parts of it – the “Google” model. The third is by seeking to encourage one or more incumbents to expand their existing networks.

At this stage, the City is seeking to achieve its goals through the second and third options by issuing a request for information to obtain information, ideas and suggestions and to gauge interest by new competitors and incumbents. There is significant private

investment in communications networks, and the City believes it is wise to first see if private enterprise is willing to work with the City to deploy advanced networks.

Submissions are encouraged to offer information and creative solutions addressing all or part of City, any technology, and any mix of assets. Respondents are not required to provide submissions pertaining to all the goals and ITA encourages interested parties to respond to any and all relevant aspects of this RFI.

Respondents should feel free to propose alternative business models and network solutions that could be used to meet the City's goals. These may include building to an area only if a certain number of persons commit to take service, or innovative uses of technology – such as fiber to the street in front of the home, coupled with “LTE Advanced 4G” and Wi-Fi technologies.

The LACBN could be a single network, or a network of networks. As implemented, it could involve several distinct build-out efforts, involving different companies; and it could involve expansion of existing networks, as opposed to construction of entirely new networks. But ideally, whether an Angeleno (or a visitor) is in a residence or a business, or is outdoors, he or she will have access to a world-class Internet connection anywhere and at any time in Los Angeles.

Respondents are encouraged to provide any material considerations or expectations that respondents have with respect to any of the following issues likely to be addressed in any future requests for proposals:

- a. Intellectual property
- b. Insurance
- c. Indemnities
- d. Warranties
- e. Dispute resolution
- f. Other contracting issues not specifically listed above

VI. GENERAL TERMS FOR RFI

A. Disclaimer

No material submitted in response to this RFI will be returned. Submissions in response to this RFI become the exclusive property of the City and may be used by the City in any way deemed appropriate. All submissions are subject to the California Public Records Act, and may be determined to be public records subject to disclosure, even if the Respondent claims confidential treatment in accordance with this RFI.

B. Financial Responsibility

Respondents are solely responsible for all expenses associated with responding to this RFI. The City accepts no financial responsibility and will not be liable in any way for any costs incurred by Respondents in replying to this RFI, including, but not limited to, costs

associated with preparing the submission or participating in any site visits, demonstrations, conferences or oral presentations.

C. Reservations of Rights By The City

This RFI is issued solely for information and planning purposes and does not constitute a solicitation. The issuance of this RFI does not constitute an agreement by the City that any subsequent RFP will be issued or any contract will actually be entered into by the City. The City expressly reserves the right at any time to procure any materials, equipment or services discussed in this RFI by any other means; or determine that no project will be pursued.

D. No Waiver

No waiver by the City of any provision of this RFI shall be implied from any failure by the City to recognize or take action on account of any failure by a Respondent to observe any provision of this RFI.

APPENDIX 1

STREAMLINED PROCESSING

The City intends to take the steps to streamline the process for obtaining necessary approvals for construction of the LACBN, consistent with applicable law, which steps may include the following.

1. Establishing a single point of contact within the City that will be responsible for addressing issues or questions regarding the City's permitting processes.
2. Making the permitting process more transparent, by providing information regarding the processes and departments involved in reviewing broadband infrastructure deployments, and streamlining the process where possible.
3. Subject to the availability of qualified personal and supervisors, permitting selected applicants to speed the process by paying for additional staff that may be required to process the applications.
4. The City has extensive GIS mapping systems, as well as systems that track all significant City construction so that construction of a broadband network can be coordinated with other City work. The ITA intends to recommend that this information be made available to assist in the planning and deployment of the broadband network, and to avoid conflict with other City work subject to appropriate confidentiality agreements for certain assets.

APPENDIX 2

CITY ASSETS

The City of Los Angeles controls a variety of public assets and infrastructure that may be used to support the development and expansion of advanced wireless and/or wireline broadband networks. The use of any of these assets may be subject to certain restrictions, regulations, and/or additional authorization by other agencies or entities. In each instance, in order to use the property, an entity would require a lease or license from the City or an agency of the City.

For purposes of this RFI, the City is seeking information as to which assets may be most valuable, and which are of limited value, so that it may focus its efforts in developing an RFP that includes those assets that are most useful. It is also seeking information as to how it may make these assets more accessible – e.g., through development of standardized contracts, or by permitting entities selected through the RFP process to obtain access under different pricing mechanisms than those described below at least during a build-out period, where permitted by law.

Maps, data sets and shape files of the assets described below are expected to be available on an Open Data web site that is expected to be launched on June 1, and will also be posted on the LABAVN at <http://ita.lacity.org/ForBusinesses/index.htm>, except where otherwise noted, and entities filing comprehensive responses are encouraged to examine this information in preparing their comments.

A. Rights-of-way, utility poles, buildings and parks controlled by City.

1. Rights-of-Way

The City of Los Angeles has a street network comprised of approximately 6,500 centerline miles of streets and 800 centerline miles of alleys. A person occupying the streets and rights of way must have a franchise from the City, or from the State of California, and its activities are subject to the City's police power regulations.

As part of this process, the City does intend to develop a standardized franchise authorizing an applicant to use and occupy public rights of way within the City (some potential applicants may already have a franchise that permits this use, but others may not, or may hold franchises that permit construction of a wireline system, but not a Wi-Fi system). City franchisees (and some entities that hold a state franchise) typically pay a fee for use of the rights of way based either upon gross revenues or based upon the facilities placed in the rights of way.

2. Streetlight Poles

The Bureau of Street Lighting (BSL) owns and maintains approximately 200,000 Street Light Poles (SLPs) throughout the City. The main function of the SLPs is to provide continuous street lighting throughout the City. SLPs have also been designed in the past to support wireless communications equipment. The styles and types of poles and fixtures vary greatly throughout the City, which is primarily a reflection of the City's history, architecture, commitment to public safety, dedication to historic preservation and efforts to reduce light pollution. Most SLPs are constructed of metal or concrete, and are separated by 75-200 feet on major streets, 140-150 feet on local streets and 50-75 feet at intersections. An estimated 156,000 SLPs are candidates for mounting wireless communication devices (meaning they have dedicated power, not switched or banked power). Those that are candidates reflect which ones are equipped with four-foot horizontal mast arms and cobra-head fixtures at a mounting height of 26-30 feet. Photoelectric cells affixed to the cobra-heads fixtures support a line voltage of 120 volts. The current cost for attachment are \$742 per SLP per year or are negotiated in volume. This fee is inclusive of power.

3. Utility Poles

There are approximately 540,000 utility poles (UPs) in the City of Los Angeles and the areas immediately surrounding the City. LADWP is the sole owner of approximately 75,000 UPs throughout the City, and is a joint owner of approximately 295,000 UPs. The City owns UPs in most areas of the City where utilities are not underground. Most areas of the City have aboveground utilities.

The City owns the jointly owned poles with members of the Southern California Joint Pole Committee (<http://www.scjpc.org/>). A person seeking to install attachments to poles may become a member of SCJPC and purchase required attachment space; lease space from the joint owner that controls the space where the attachment would be placed; or work with LADWP, which has rights to purchase space. That is, there are processes available through which entities should be able to obtain access to space on UPs. Potential lessors or purchasers of pole space may obtain information about the poles in Los Angeles by contacting

Steve R. Brown
Assistant Superintendent
Overhead Distribution Design
Power System Transmission and Distribution Division
LADWP
111 N. Hope Street, Room 865
LA CA 90012
(213) 367-2746
email: steve.r.brown@ladwp.com

LADWP can make its pole data bases available at its offices.

4. City Buildings, Facilities and Structures

DOT and the General Services Department (GSD) have management authority over a large number of building facilities in locations throughout the City which may contain rooftops or other space inside or outside the structure which could house network facilities.

DOT has management authority over 11 City-owned parking garages in the City.

GSD has management authority over more than 9,000 city-owned properties and 900 building facilities, although access to certain facilities may require the approval of other boards or commissions – the Library Commission, for example, would need to approve library installations. GSD has identified a list of more than 275 building/structures that may be particularly suitable for installing communications equipment associated with wireline or wireless facilities. Others may not be suitable because of their height, type of structure, building-use issues, location or physical access challenges.

5. Recreation and Parks Assets

The Department of Recreation and Parks maintains and operates more than 400 sites for recreational use. The Department establishes, operates and maintains parks, swimming pools, public golf courses, recreation centers, museums, youth camps, and tennis courts. It also supervises construction of new facilities and improvements to existing ones.

These facilities include 184 recreation centers, 13 municipal golf courses, 31 senior centers, 61 swimming pools, 11 lakes, 7 camps both in and out of town, and more than a dozen museums and historic sites. There are 13 municipal golf courses throughout the City. Thirty-one centers specifically for senior citizens are located in all areas of the City.

The Department administers more than 15,700 acres of parkland, including 4,282 acres in Griffith Park. Other large parks in the City of Los Angeles are Elysian Park, which is close to Downtown, MacArthur Park, Echo Park and Harbor Regional Park in Harbor City. Certain of these sites may not be useable or useful for construction of the LACBN – Griffith Observatory for example, could not be used to site wireless facilities because of its historical significance. Please note that because some Recreation and Parks Assets may be managed by the GSD, there may be an overlap between the properties discussed in this section, and the properties described in the preceding section.

6. LADWP Fiber

LADWP owns and operates approximately 525 route-miles – consisting of 70,000 fiber-miles - of single mode optical fiber cabling throughout the City. Approximately 70% of these assets are deployed along overhead utility poles and 30% are deployed underground. LADWP is engaged in an ongoing expansion of this network, with 50% of the current assets being less than 10 years old.

LADWP's fiber network serves the internal communications needs for its electrical and water systems, and also provides dark fiber, layer 2 Ethernet (50, 100 – 1000 Mbps), and

video transport, for outside commercial, enterprise, governmental and educational customers. LADWP also has the ability to support layer 3 transport services if requested.

The fiber network connects more than 100 LADWP facilities and 170 commercial locations throughout city. Points-of-presence (POPs) are established at five carrier hubs in the downtown Los Angeles area; 624 Grand Ave. (One Wilshire), 818 W. 7th St., 1200 W. 7th St., 900 N. Alameda, 600 W. 7th St., and one carrier hub in Marina del Rey; 4676 Admiralty Way. Service Access Points (SAPs) exist throughout the city.

Should an entity be interested in using this fiber, an agreement with the LADWP would be required.

B. Other Existing Assets.

In addition to the assets described above, there are other potential assets whose use may be subject to security restrictions, contractual limitations, or that may raise other issues that would require further investigation by the City, or may require negotiations with third parties.

1. Sewers.

The city has more than 6,700 miles of public sewers that can potentially be used in connection with expansion of broadband infrastructure. It is unclear to the City whether these facilities could be used or useable for deployment without creating significant issues.

2. MFS/COPSMORE Fiber

This network consists of 50 route-mile of 96-strand fiber optic cabling, which is installed North-South along Figueroa St. (commonly referred to as the Figueroa Corridor). The network was financed using US Department of Justice (DOJ) grant funds for the purpose of providing high-speed connectivity to all police station facilities. The network also consists of 24-strand fiber optic segments - which connect police station facilities to the 96-strand backbone, the LADWP fiber network, or the PPSI fiber network (see below).

Because DOJ grant funds were used to finance the MFS/Copsmore Fiber network, the City would need to conduct additional investigation to determine the extent to which these assets, if useful, may be available for commercial use.

3. PPSI Fiber

The City-portion of this network consists of 60 route-miles consisting of 96 strands of fiber optic cabling installed North-South, commencing near the intersection of the 14 Freeway and San Fernando Road, and terminating near the intersection of Anaheim St. and Alameda Ave. in Wilmington.

In the mid-1990s, Pacific Pipeline System, Inc. (PPSI) constructed a petroleum pipeline, a part of which lay within the City limits of Los Angeles. PPSI also constructed a conduit system to contain fiber optics along the pipeline route.

In 1997, the City and PPSI entered into a settlement agreement resolving disputes between the parties in which PPSI agreed to provide 72 dark fiber optic strands to the City, and to provide an option to purchase certain additional fiber, all to be located within the north-south leg noted above.

In addition, PPSI agreed to grant the City indefeasible, exclusive and non-exclusive rights to use certain portions of the conduit installed along the pipeline. The settlement agreement resulted in the execution of a Fiber System Operation and Maintenance, Property Transfer, and Granting of Indefeasible Right to Use (IRU) Agreement in January of 1999.

PPSI had a need for only 12 strands of fiber. The remaining strands are allocated to Los Angeles Metropolitan Transit Authority, Los Angeles County, and other governmental agencies as part of the settlement agreement.

The City would need to conduct additional investigation to determine the extent to which these assets, if useful, may be available for commercial use, and to what extent additional permissions might be required from PPSI Fiber.

C. Future City Construction

The City is willing to consider encouraging build-out of the LACBN either by installing fiber or conduit as part of other public improvements, or by coordinating build-out schedules with other improvements to reduce build-out costs. This might include, for example, coordination of the LACBN installation with street maintenance work, or work associated with improving the City's Automated Traffic System (ATSAC).

APPENDIX 3

CITY AS ANCHOR TENANT

The City purchases a variety of communications services and leases a variety of communications facilities from various providers. As part of the issuance of the RFP, the City may offer to become an anchor tenant for the LACBN by leasing capacity and/or purchasing transport services to create an effective wide area network connecting City offices.

In addition, if it would provide an effective means of incentivizing the deployment of a broadband network, the City might grant a preference to an entity or entities selected through the RFP process to provide a range of communications services (including, for example, cloud computing services) as it modernizes its current information technology infrastructure.

The City may be prepared to what it is paying now for current communications services and facilities. As noted above, through this RFI, the City seeks information as to whether this, or a different anchor tenant approach is worth pursuing. For example, it is not clear whether the City would obtain more value for the community by granting a preference for cloud computing as part of the RFP process, or whether the City would be better off simply bidding for that service, and devoting any savings achieved to assist in deployment of a network, or to support provision of services to the underserved. The answer may be different for different facilities/service requirements described below.

The City, through its Information Technology Agency, currently expends about \$100 million/year on communications services or services. For each service, the City would be willing to consider a 10-year commitment for services or facilities with an option for an additional ten years to an entity selected to provide the services or facilities. In addition to the services or facilities specified below, there may other opportunities for provision of services or facilities to the City.

1. Data and Voice Circuits and Fiber

The City's wide area network managed by the ITA serves approximately 778 City-owned facilities. Of those, 238 are connected to the WAN by fiber provided by LADWP. Another 540 are connected to the WAN via T-1 lines and connections provided by other entities, such as Time Warner. The City requires fiber connections to the approximately 540 buildings where the connections are not supplied by the LADWP. It also, would propose to purchase managed services (essentially secure carrier class Ethernet services) from the entity or entities selected to construct the LACBN for all City facilities, including those linked by LADWP fiber.

Most of the contracts for facilities or services to City facilities can be terminated at any time, and in any case are expected to be at end of life from private carriers within the next 4-6 years. There are 114 Fire Department facilities which are all connected through Time

Warner. The City has a two year agreement with Time Warner (effective in January 2013) for the Fire Department locations. At the expiration of the Agreement, the City would be willing to transfer to a new facilities/service provider. The expenditures for data and voice circuits for fiscal year 2012/13 were \$9,378,441. The break out by carrier for these expenditures is approximately:

AT&T - \$ 7,627,056
Verizon - \$ 1,209,209
Qwest and CenturyLink - \$62,826
Time Warner - \$ 460,388
Race Technology - \$4,571
Pacific Telemanagement - \$2,083

LADWP has first right of refusal for fiber installations to City facilities, but the City does not believe LADWP will wish to exercise this right with respect to most facilities. If the anchor tenancy for facilities or for services is of interest those rights and other issues, if any, are expected to be addressed as part of the RFP process.

2. Voice Systems Services

The Information Technology Agency provides voice services on a 24x7 basis for all of the non-proprietary departments including the Police and Fire Departments. The City has 29 dedicated staff with salaries of \$2,701,469 and an operational budget of \$13,065,195.

An entity which was interested in providing those voice services to the City may be asked to provide ongoing operational support, as well as the software and hardware to replace existing systems, which include Centrex systems.

3. Mobile Communications Services

The City of Los Angeles currently has a policy where city mobile devices that are city issued cannot be used for personal purposes and must use one of four approved third party plans. The annual total for wireless spending currently is \$4,107,887.04 per year.

The number of City issued mobility devices and expenditures by carrier are as follows:

Verizon	1,160	\$982,668.75
AT&T	880	\$513,732.58
Sprint	3,686	\$2,390,602.78
T-Mobile	867	\$220,882.93

Under consideration is a revised policy that would allow a stipend for those approved by management and for those that are not, a Bring Your Own Device (BYOD) policy for City employees to use their personal device for access to City e-mail and calendars.

However, the City does need to reduce the number of providers from whom it purchases services and devices, either directly or through a BYOD policy. The City is open to

reducing the number of approved mobile device/service providers to one or two, and is considering offering the City's current expenditure for mobile communications services to entities that propose to build all or a portion of the LACBN, (assuming the entities are capable of providing coverages and capabilities consistent with that achieved through the current arrangements).

An alternative would be for the City to bid for mobile services without regard to the outcome of the LACBN RFP process. As noted above, as part of a separate bid, it might ask wireless providers to commit to serve certain locations at low or no cost, or to provide other services or facilities that help achieve the goals of the LACBN. As noted above, the City is seeking comment on the most effective way to leverage these contracts.

4. Data Network and Security Services

The Information Technology Agency provides data and security network services on a 24x7 basis for all of the non-proprietary departments including the Police and Fire Departments. The City has 42 dedicated staff with salaries of \$4,203,366 and an operational budget of \$3,072,180.

Due to video on demand impacts on the network, a series of outage have occurred over the past 12 months which required the ITA to bring in Cisco and Nexus to do an assessment of the network and make recommended. There were 5 immediate remediation activities: firewall upgrades, Intrusion detection/prevention upgrades, replacement of a load balancer with an application control engine, upgrade proxy servers, and replace any routers which are end of life. That effort will be completed in 2014.

As an incentive in a future procurement process, the City is open to considering offering the current expenditure to a winning bidder who will take over management of the data and security network services and provide staff augmentation or managed services for the ITA data and security network.

The City anticipates it will need to make significant future expenditures on data and security network upgrades and could also offer other data and security network services to the winning bidder in a future procurement. Some of these are described below:

- Cisco has recommended a complete redesign of the ITA network to accommodate video demand and ready to the network for a converged city wide voice solution. The cost for this upgrade is estimated at between \$36M - \$42M.
- The City also has an internal facility wireless network that is built out to various floors of just a few buildings. Many other departments have requirements to expand the 802.11ac indoor wireless systems.
- A Chief Information Security Officer (CISO) is in process of being hired in the ITA to provide policy, train departments, and assist in preventing, detecting, eradicating, and collecting forensic evidence for cyber related incidents. This position collects departmental evidence for a joint Cyber Information Command

Center jointly operating by the LAPD, ITA, FBI and Secret Service. The City currently lacks the tools, monitoring capabilities and contracts for security audits and penetration tests.

5. Data Center and Disaster Recovery

The ITA Data Center is located in P4 of City Hall South and mostly serves those applications which serve more than one department. The ITA currently has 71 staff managing over 450 servers and an IBM mainframe on a 24x7 basis. The annual ongoing costs for the data center, associated software, and disaster recovery services are \$12,707,525.

The ITA data center has severe environmental issues around air conditioning, power, and backup power including uninterruptible power supplies, fire suppression and leakage from a car wash one floor above. The ability to expand the data center or host other departmental applications is not possible at this time until a complete assessment and costs are determined. The City has approved a 3 year study of these issues and will be getting a price to remediate and modernize P4. Estimated costs are over \$20M.

The Information Technology Agency has some limited disaster recovery services (DR) with Sunguard and SwitchNap. These could be consolidated and replaced by an automatic out of state redundant environment.

In addition, the City of Los Angeles has a total of 24 data centers amongst the non-proprietary departments. The non-proprietary departments have their own data centers to provide their own local support for custom developed applications or custom off-the-shelf (COTS) solutions.

The City's Strategic Advisor will be making recommendations around data center consolidation, and this may include a cloud or hosted data center.

APPENDIX 4

OPPORTUNITIES FOR MAKING BROADBAND AVAILABLE TO ALL ANGELENOS – DIGITAL INCLUSION PILOT PROGRAM.

The City encourages interested parties to propose innovative ways in which an RFP may be structured to ensure that broadband is available to every Angeleno, and is particularly interested in receiving comments as to ways in which the development of the LACBN can be coordinated with other digital inclusion efforts.

The City is currently working on a Digital Inclusion Pilot Program, which achieves the City's objective to divert computers the City no longer intends to use to non-profit organizations for refurbishment and dissemination to non-profit organizations serving disadvantaged communities, and low-moderate income families and work source centers while also providing job-training and career opportunities.

Due to the Microsoft end-of-support for its Windows XP Operating System on April 8, 2014, a mass computer replacement effort has been underway across the City. As a result, thousands of old computers will be salvaged through the City's e-waste recycling. Under the guidance of the Offices of the Mayor, Council President and Innovation Technology and General Services Committee Chair, the City is working on the design and implementation of a digital inclusion pilot program to take advantage of these salvaged computers. The focus of the program is to maximize the use of computers the City intends to discontinue, minimize the City's e-waste footprint, and provide low cost and free computers to low-income communities where people have limited computer access.

The City is designing the digital inclusion pilot program as a collaborative partnership between the City and a number of non-profits and a for-profit organization serving disadvantaged communities. The outside entities will help with the recycling and refurbishing of the computer equipment because of the City's limited staffing resources. They will also assist with the distribution of the refurbished computer equipment among the local communities by providing free computers to the disadvantaged and low income families to enable them to take advantage of the available technology and improve the overall quality of life. This will provide tremendous job training and career opportunities for disadvantaged youths as well as creating local jobs.

Over 10,000 salvage computers are projected to be included in this pilot program. It is estimated that approximately 50% of the equipment will be able to be refurbished and redeployed through a digital inclusion program. The remaining estimated 50% will be recycled through R2 certified recyclers.

The City will utilize one or more external partners who has recycling/refurbishing/e-waste experience, has an e-waste collector certificate, and can demonstrate that all hard drive destruction and refurbishment are completed prior to distribution or recycling, and that all

e-waste is recycled through an R2 certified recycler. The salvage equipment will have the hard drives completely wiped clean of data using an industry-certified data destruction software program that is both Department of Defense (DOD) and Health Insurance Portability and Accountability Act (HIPAA) certified. A certificate will be generated for each "clean" computer after all data has been totally wiped/destroyed from its hard drive. Only the computers confirmed with zero City data remaining will be distributed to the non-profit organization for software refurbishing with free OpenOffice software suite. This is a tremendous opportunity to maximize resources, limit the city's e-waste footprint, create local jobs, and bridge the digital divide in the city. In addition to partnerships with non-profits organizations, the City is also working to create partnerships with businesses who are interested in participating and donating computers and/or providing low cost or free internet services for participants of this program. The program will help develop a model for future treatment of the city's electronic waste that will benefit disadvantaged and low-income Angelinos, the environment, and the local economy.

Beyond the project scope described above, the City desires to establish an on-going public/partner partnership digital inclusion program that is sustainable and that builds on the success of the City's pilot furthering access and digital literacy for low income and disadvantaged residents of Los Angeles. Below is a listing of some of the non-profit organizations in the Los Angeles area that may be useful as possible partnering entities for further expansion of the City's digital inclusion program.

Organization	Industry	Mailing Street	City	Zip Code	Phone
Boyle Heights Technology Youth Center	Education, Technology Center	1600 E. 4th Street	Los Angeles	90033	(323) 526-5800
Central American Resource Center	Community, Technology Center	2845 W. 7th Street	Los Angeles	90005	(213) 385-7800 x128
Central City Neighborhood Partners	Community, Technology Center	501 S. Bixel Street	Los Angeles	90017	(213) 482-8618
Centro Latino For Literacy	Education, Community Technology Center	1709 W. 8th Street, Suite A	Los Angeles	90017	
CFY	Education, Technology Center	333 South Beaudry Avenue	Los Angeles	90017	(212) 563-7300
Children's Bureau- Magnolia Place Community Initiative	Community, Technology Center	1910 Magnolia Avenue	Los Angeles	90007	(213) 342-0109

Organization	Industry	Mailing Street	City	Zip Code	Phone
Chrysalis	Job Placement, Technology Center	522 S. Main Street	Los Angeles	90013	(213) 806-6300
Community Development Technologies Center	Community, Technology Center	520 W. 23rd Street	Los Angeles	90018	(213) 763-2520
Families in Schools	Education	1545 Wilshire Boulevard, Suite 700	Los Angeles	90017	(213) 201-3900
Jovenes, Inc.	Community	1208 Pleasant Avenue	Los Angeles	90033	
Kids Progress, Inc.	Community, Technology Centers	2600 Wilshire Boulevard	Los Angeles	90057	(213) 252-2500
L.A.'s Promise	Education	1035 South Grand Avenue, 2nd Floor	Los Angeles	90015	(213) 745-4928
LA Infrastructure Academy	Education	200 N. Spring Street, Room M-185	Los Angeles	90012-4801	
LA's BEST After School Enrichment	Education	200 N. Spring Street, Room M-120	Los Angeles	90012-4801	
Little Tokyo Service Center	Technology Center	231 E. Third Street, Suite G-106	Los Angeles	90013	(213) 473-3030
Los Angeles County Regional Broadband Consortium (LACRBC)	Community, Housing, Education, Technology Centers	634 South Spring Street, 10th Floor	Los Angeles	90014	
Los Angeles Housing Partnership, Inc.	Housing, Technology Center	1200 Wilshire Boulevard, Suite 307	Los Angeles	90017	
Mercy Housing	Housing, Technology Center	1500 South Grand Avenue, Suite 100	Los Angeles	90015	
New Economics for Women	Housing, Technology Center	303 S. Loma Drive	Los Angeles	90017	(213) 483-2060

Organization	Industry	Mailing Street	City	Zip Code	Phone
Partnership for Los Angeles Schools	Education	1541 Wilshire Boulevard, Suite 200	Los Angeles	90017	(213) 201-2000
PUENTE Learning Center	Education, Community Technology Center	501 South Boyle Avenue	Los Angeles	90033	(323) 780-8900
Saint Barnabas	Seniors, Mobile Technology Center	675 S Carondelet Street	Los Angeles	90057	(213) 388-4444
Salvation Army	Community Technology Center, Community	900 James M. Wood Boulevard	Los Angeles	90015	
Skid Row Housing Trust	Housing, Technology Center	1317 E. 7th Street	Los Angeles	90021	(213) 683-0522
Southeast Community Development Corporation (it covers city of LA)	Community, Technology Centers, Mobil Unit	6423 E. Florence Place, Suite 103	Bell Gardens	90201	(323) 585-4579
The ACME Network	Education	1201 West 5th Street, Suite T-530	Los Angeles	90017	(213) 240-5980
The KHEIR (Korean Health Education Information & Research) Center	Health, Education	3727 W. 6th Street, Suite 210	Los Angeles	90020	
The Salvation Army LA Red Shield Youth & Community Center	Community Technology Center, Community	1532 W. 11th Street	Los Angeles	90015	
THINK Together (it covers city of LA)	Education	2101 E. 4th Street	Santa Ana	92705	(714) 543-3807
YMCA Los Angeles	Community, Education, Technology Center	2815 Whittier Boulevard	Los Angeles	90023	(323) 780-8990

Organization	Industry	Mailing Street	City	Zip Code	Phone
YMCA South Los Angeles	Community, Education, Technology Center	9900 S. Vermont Avenue	Los Angeles	90044	(323) 754-3191
Youth Policy Institute	Community, Education, Multiple Technology Centers	634 South Spring Street, 10th Floor	Los Angeles	90014	

