Request for Information (RFI)

Los Angeles Community Broadband Network

Comments of the

Writers Guild of America, West, Inc.

Emily Sokolski
Research Analyst

July 18, 2014

Marvin Vargas
Research Analyst

Writers Guild of America, West, Inc.
7000 West Third St.
Los Angeles, CA 90048
(323) 951-4000

I. Introduction

The Writers Guild of America, West, Inc. (WGAW) is pleased to respond to the City's Request for Information (RFI) regarding the proposed Los Angeles Community Broadband Network (LACBN). Affordable, high-speed broadband should be available to all Americans. In today's society, Internet access is essential to education, employment and civic engagement. For the City of Los Angeles, high-speed broadband is necessary to maintain the City's position as the entertainment capital of the world and bridge the digital divide that has resulted in 30% of residents lacking access to broadband or being unable to afford it.[1] WGAW, therefore, strongly supports the efforts of Mayor Garcetti, Council President Herb Wesson, Councilmember Bob Blumenfield and the Information Technology Agency (ITA) to develop a community broadband network. Our comments outline the importance of affordable, high-speed broadband to the future of the entertainment industry, which is a vital segment of the regional economy.

To fulfill the goals outlined for the LACBN, which include making Los Angeles a location of choice for businesses and residents, ensuring broadband access for all residents and supporting net neutrality, WGAW urges the City to invest in a municipally-owned broadband network. While such an undertaking is significant, ownership of a broadband network is the best way to secure the City's digital future. Should the City proceed with a plan to incent private providers to offer service, however, we offer recommendations to ensure a transparent process that enhances competition, protects the open Internet and results in affordable service for all residents.

II. About the WGAW

WGAW is a labor organization, headquartered in the City of Los Angeles, which represents more than 8,000 professional writers of film, television, online video programming, local news and documentaries. Virtually all of the entertainment programming and a significant portion of news programming seen on television and in film are written by WGAW members and the members of our affiliate, Writers Guild of America, East (jointly, "WGA"). WGA members are also the creators of original online series now available on Netflix, Amazon, Hulu and Crackle.

WGAW members, as creators of the content that is the foundation of the entertainment industry, are an important part of the regional economy. Guild members, who primarily live and

[1] Los Angeles Information Technology Agency*, LA Community Broadband Network Request for Information*, April 7, 2014.

work in the Los Angeles area, reported $1 billion in earnings and another $373 million in residual compensation from reuse of written material in 2013. Writer employment and income, therefore, directly benefits the local economy. More than 3,600 WGAW members live in the City of Los Angeles and would benefit as potential subscribers to the gigabit broadband service envisioned in the RFI.[2]

While most employment of writers historically has come from traditional film and television projects, online video, made possible by high-speed broadband and the open Internet, has become an important growth area. More than two hundred professional writers have worked on original online video programs, generating almost $10 million in income. Writers have also benefited from services that offer consumers online availability of television series and feature films. Writers have earned almost $70 million in residual income from online services including Amazon, Netflix and iTunes licensing or selling television series and feature films.

WGAW has been a strong supporter of the open Internet because writers recognize the importance of this platform for free speech, creativity, competition and diversity. The open Internet has reduced market entry barriers, resulting in new competitors for writers' ideas and content choices for consumers. This is a welcome development for writers who work in a consolidated industry where six media companies own the television and film studios, the broadcast networks and most of the basic cable and pay TV networks. That's why 245 television series creators and showrunners recently signed a letter urging the Federal Communications Commission to use its authority to keep the Internet free and open, writing, "right now the Internet is opening up the media business to new competition. There are new buyers for what we as writers create. But if this new competition is unfairly pushed aside because the FCC adopts weak rules, rather than allowing consumers to decide what they prefer, neither innovation nor the best interests of society will be served."[3]

[2] The rate at which is data is sent and received over the Internet is described in bits per second (bps.) As a point of reference, one megabit equals one million bits of data. Gigabits exchange a billion bits of data per second. 1 Gbps is 1000 times faster than 1 Mbps.

[3] WGAW Showrunner and Television Series Creator Letter to FCC Chairman Tom Wheeler, May 13, 2014, http://www.wga.org/uploadedFiles/news_and_events/public_policy/Showrunner-Letter-on-Open-Internet.pdf.

III. The Importance of Broadband to the Entertainment Industry

The entertainment industry is an important segment of the regional economy, accounting for 165,000 jobs and $77.6 billion in total economic output.[4] Research by the Los Angeles County Economic Development Corporation further emphasizes the sector's importance; it reported that the average annual wage in the entertainment industry was $117,000 in 2011, more than double the average for all private sector industries.[5] Mayor Garcetti has appropriately identified runaway production of feature films and television series as a local emergency because of the threat to regional entertainment industry employment. WGAW supports efforts to keep maintain a strong local film and television production sector and we believe the development of affordable, high-speed broadband Internet access is of equal importance to maintaining the City's designation as the entertainment capital of the world.

Broadband is important to the entertainment industry because Internet video distribution has become an increasingly popular way for viewers to access content. The number of online videos viewed each month by Americans has increased from 7.2 billion in January of 2007 to 52.4 billion in December of 2013.[6,7] Meanwhile, the segment of Americans who watch or download videos has grown from 69% of adult Internet users in 2009 to 78% in 2013.[8] YouTube and Netflix now make up half of all downstream Internet traffic in North America.[9] Hulu Plus counts more than 6 million paying subscribers and Netflix has nearly 36 million customers in the U.S.[10,11] Online video spending has also grown, with the Interactive Advertising Bureau and PricewaterhouseCoopers reporting that advertisers spent almost $3 billion on online video

---

[4] Los Angeles County Economic Development Corporation, *2013 Otis Report on the Creative Economy*, (Los Angeles: Otis College of Art and Design, February 2014), p. 56, www.otis.edu/econreport.
[5] Los Angeles County Economic Development Corporation*, The Entertainment Industry and the Los Angeles County Economy*, (Los Angeles: LAEDC, November 2012), p. 2, http://laedc.org/wpcontent/uploads/2012/04/EntertainmentinLA.pdf.
[6] comScore, "Primetime' U.S. Video Streaming Activity Occurs on Weekdays Between 5-8 P.M" March 21, 2007, http://www.comscore.com/Insights/Press-Releases/2007/03/Primetime-US-Online-Video.
[7] comScore, "comScore Releases December 2013 U.S. Online Video Rankings," January 10, 2014, http://www.comscore.com/Insights/Press-Releases/2014/1/comScore-Releases-December-2013-US-Online-Video-Rankings.
[8] Kristen Purcell, "Online Video 2013," Pew Research Center, October 10, 2013, http://www.pewinternet.org/2013/10/10/online-video-2013/.
[9] Sandvine, *Global Internet Phenomena Report: 2H 2013,* https://www.sandvine.com/downloads/general/global-internet-phenomena/2013/2h-2013-global-internet-phenomena-report.pdf.
[10] Mike Hopkins, "Welcome Jenny Wall, SVP Marketing," *Hulu Blog,* May 13, 2014, http://blog.hulu.com/2014/05/13/welcome-jenny-wall-svp-marketing/.
[11] Rob Golum, "Netflix Rises to Record as Analyst Predicts Viewer Gains," *Bloomberg,* July 1, 2014, http://www.bloomberg.com/news/2014-07-01/netflix-rises-to-record-as-analyst-predicts-viewer-gains.html.

advertising.[12] Consumers spent another $5.45 billion on online video subscriptions, rentals and purchases, and spending is expected to grow to $10 billion by 2018.[13]

Online video distributors (OVDs) have responded to market growth by making significant investments in programming. Netflix and Amazon are expected to invest close to $1 billion on original content in 2014.[14] Traditional media companies are also investing in online businesses. Several examples from the first half of 2014 include Lionsgate's launch of a new gaming division, Disney's $500 million acquisition of Maker Studios, and Time Warner's $18 million investment in Machinima. Multichannel video programming distributors (MVPDs) such as Verizon and Dish have even expressed interest in offering virtual MVPD services online.

The Los Angeles regional economy has benefitted from online video's growth. Tech companies that have entered the entertainment industry have taken up residency in Southern California. Silicon Beach, the informal name given to the west side of Los Angeles where technology-focused entertainment companies are located, has become a tech hub. Silicon Beach includes established firms such as Google, which opened a 100,000 square-feet (sf) campus in Venice and YouTube, which built 41,000 sf of production and office space in Los Angeles. Yahoo Studios, Amazon Studios and Maker Studios, in addition, all have office and production space in west Los Angeles. Silicon Beach is also home to many startups, 800 of which have raised $1.3 billion in funding since 2011.[15]

In addition to business growth, many of the television-length series produced for OVDs are filmed in the Los Angeles area. Online series filmed locally include Hulu's *East Los High* and *Quick Draw,* Amazon's *Bosch, The After* and *Transparent,* Crackle's *Chosen* and the final season of *Arrested Development*, which was produced for initial distribution on Netflix. Regional growth in online video production is vital to sustaining the local entertainment industry, as tax incentives have facilitated runaway production of feature films and television series. Film LA has

[12]PricewaterhouseCoopers, "IAB Internet Advertising Revenue Report: 2013 Full Year Results," April 2014, http://www.iab.net/media/file/IAB_Internet_Advertising_Revenue_Report_FY_2013.pdf; and Marina Lopes, "Videos may make up 84 percent of internet traffic by 2018: Cisco," *Reuters*, June 10, 2014, http://www.reuters.com/article/2014/06/10/us-internet-consumers-cisco-systems-idUSKBN0EL15E20140610.

[13] Deana Myers and Wade Holden, "Online video market remains hot," *SNL,* June 30, 2014, http://www.snl.com/interactivex/article.aspx?id=28507994&KPLT=6.

[14] Samantha Bookman, "A closer look at the billions of dollars Netflix, Amazon and Hulu are spending on original content," *FierceOnlineVideo*, June 4, 2014, http://www.fierceonlinevideo.com/special-reports/closer-look-billions-dollars-netflix-amazon-and-hulu-are-spending-original.

[15] Kate Pickert, "Silicon Valley Goes to the Beach," Time, April 10, 2014, http://time.com/#57159/silicon-valley-goes-to-los-angeles/.

documented the growth of local online video productions, reporting 1800 such permitted production days in 2013, a 353% increase from only 400 days in 2008.[16]

Online video should be fostered because it allows for more independent and diverse storytelling from a wider array of viewpoints than the traditional television and film business, which is controlled by a handful of vertically-integrated media companies. *East Los High* is a prime example of online video's potential. The series was created by Latino writers and features a predominantly Latino cast. It explores the experiences of Latino teenagers, who are underrepresented on television. Programs such as *East Los High* are only possible because of Internet video distribution.

The low entry barriers enabled by Internet distribution have created a new segment of the entertainment industry, occupied by video bloggers. This segment emerged from the user-generated world of YouTube. Multi-channel networks (MCNs), which are networks of owned and independent video channels typically available on YouTube, have helped professionalize video blogging by attracting ad revenue and facilitating investment in content. Many such networks exist but AwesomenessTV, DanceOn and Tastemade are three successful MCNs, which are funding original content and have attracted investments from media companies as a result. AwesomenessTV, acquired by DreamWorks for $33.5 million in 2013, focuses on the tween audience and has 50 million subscribers across its network. DanceOn, an MCN vertical[17] dedicated to dance, has 9 million subscribers and over 2 billion network views. After launching in 2010, DanceOn CEO Amanda Taylor quickly moved her company from New York to Los Angeles to be closer to talent and the online video industry.[18] Tastemade, an MCN food vertical, reaches 18 million people each month. Tastemade has a 7,000 sf production studio in Santa Monica and just closed $25 million in funding from a group of investors including Liberty Media and Scripps.[19] These local startups have taken advantage of the open Internet to develop an entirely new segment of the entertainment industry, and the Los Angeles economy benefits from these new offerings.

---

[16] Film L.A. Inc., Filming On-Location in Los Angeles, 1993-2013, (Los Angeles: Film L.A. Inc., 2014), p. 18, http://www.filmla.com/data_reports.php.

[17] Multi-Channel Network verticals describe an aggregation of content organized around a genre or category, similar to cable networks. Specifically, DanceOn is an MCN operating in the vertical for dance, in the same way that The History Channel is a cable network dedicated to historical topics.

[18] Lori Kozlowski, "A Digital Place for the Global Dance Community," *Forbes*, September 7, 2012, http://www.forbes.com/sites/lorikozlowski/2012/09/07/a-digital-place-for-the-global-dance-community/.

[19] Tim Peterson, "With New Funds From TV Companies, YouTube Net Tastemade Adds Shows," *Ad Age*, June 26, 2014, http://adage.com/article/digital/youtube-net-tastemade-raises-25-million-debuts-shows/293898/.

Mature corporations like Amazon and Google may have the financial resources to pay for high-speed Internet service, but independent creators and emerging startups require access to affordable service. As online video continues to grow, the need for affordable, high-speed service to meet the needs of this bandwidth heavy activity becomes increasingly important. Access to such a service will be attractive to companies of all size. Cites such as Lafayette, Louisiana, Chattanooga, Tennessee, and Wilson, North Carolina already offer gigabit service that allows users to send and receive information faster than incumbent Los Angeles broadband networks. This high-speed, symmetrical Internet service has proven attractive for small businesses in the entertainment industry. For example, PixelMagic, a special effects company that worked on the feature film *Secretariat*, decided to keep an office in Lafayette after the production finished.[20] ExodusFX, a special effects company that worked on *Black Swan* and *Lost*, left Los Angeles when business growth precipitated a need for additional bandwidth. In Los Angeles a dedicated fiber connection cost between $1,500 and $3,000 a month causing ExodusFX to move to Wilson, North Carolina where a gigabit connection cost $150 a month.[21] These flights to locations with affordable broadband service are documented. Undocumented is the exodus of an unknowable number of individual video artists, who can easily relocate in pursuit of an Internet infrastructure that demonstrates awareness of their needs for collaboration and distribution. The YouTube MCNs host tens of thousands of these individual artists. In themselves they represent an important creative community to which Los Angeles has been and must remain home. Further, many of the future creative projects of much greater economic scope will grow from their self-produced work. To prevent further flight and encourage businesses to remain in Los Angeles, it is necessary for the City to develop gigabit broadband service to meet the needs of individuals and businesses that increasingly operate online. Without such action, the City may continue to lose entertainment industry businesses to cities offering better service.

---

[20] Christopher Mitchell, *Broadband at the Speed of Light: How Three Communities Built Next-Generation Networks*, (Minneapolis, MN: Institute for Local Self Reliance, April 2012), p. v, http://www.muninetworks.org/reports/how-chattanooga-bristol-and-lafayette-built-best-broadband-america.

[21] Community Broadband Networks, "Being a Gig City: It's all About the Upload," *Community Broadband Networks, Institute for Local Self-Reliance*, March 6, 2014, http://www.muninetworks.org/content/being-gig-City-its-all-about-upload; and Kate Murphy, "For the Tech-Savvy With a Need for Speed, a Limited Choice of Towns With Fiber," *New York Times*, April 2, 2014, http://www.nytimes.com/2014/04/03/technology/personaltech/for-the-tech-savvy-with-a-need-for-speed-a-limited-choice-of-towns-with-fiber.html?_r=1.

IV. Private Providers Do Not Meet Market Needs

To fulfill the goals of the LACBN, a municipally-owned broadband network would position Los Angeles as a leader in technology and economic growth while addressing many of the problems that plague the broadband Internet market. Reliable and affordable Internet access has quickly become a vital necessity for all Angelenos, from creative professionals to job hunters to small business owners. But the broadband Internet market lacks competition; according to the Federal Communications Commission, 28% of U.S. households have only one choice for ISP service fast enough to stream videos, and another 37% have only two providers to choose from.[22] This lack of competition has slowed improvement in broadband speeds, drives up prices and ultimately threatens to choke off the innovation and economic growth the Internet has brought to Americans

The development of a City-owned broadband network offering affordable gigabit service would allow the City to meet the digital needs of businesses and residents for many years to come. WGAW urges the City to strongly consider this option because private providers have not met community needs and market forces indicate that the lack of competition will result in higher prices in the near future.

Businesses typically have two ways to increase revenue for a particular product, increase the customer base or raise the price. Internet service providers (ISPs) have grown revenue through broadband adoption. But as the market becomes saturated, growth through new customers is no longer viable. Signs of market maturation can be seen in the recent decline in the number of new subscribers to broadband service in the U.S. In 2013, the total number of new residential broadband subscribers dipped to 3.1 million from 4.0 million in 2012 and an average of 4.7 million per year from 2008 to 2011.[23] This means that ISPs will only be able to increase revenue by extracting higher prices from existing subscribers. One way, among many, to do this is to add another layer of price discrimination. ISPs already separate their service by "speed" tiers in megabits per second (Mbps), which means there are already de facto data caps on service. Now, ISPs want to add a second layer of limits on Internet service by imposing explicit data caps that further restrain subscribers' data use. For example, Comcast has been

[22] FCC, Industry Analysis and Technology Division, Wireline Competition Bureau, *Internet Access Services: Status as of December 31, 2012,* December 2013, p 9.
[23] Ian Olgeirson and Chris Young, "Slowing HSD subscriber gains a harbinger of things to come," *SNL Kagan*, April 29, 2014, http://www.snl.com/interactivex/article.aspx?id=27921841&KPLT=6.

reintroducing data caps in some cities, limiting subscribers to 300 GB per month and charging $10 for each additional 50 GB.[24]

Broadband pricing concerns could be addressed if the market was competitive, but the large capital expenditures necessary to build out broadband networks create an effective barrier to entry. Cable broadband is the most-widely available option for high-speed Internet access service. While the telephone companies' have built fiber networks in a minority of the country, their decision to continue relying on legacy copper systems indicates that Internet users looking for greater speeds will have only one choice if any: the local cable system. For example, AT&T's U-verse continues to use copper wires for last-mile delivery and is limited, in most markets, to maximum speeds of 45 Mbps. Those areas with older versions of DSL may be limited to maximum speeds of only 6 Mbps. A recent FCC report also found that DSL service generally delivers less than advertised speeds during peak hours.[25] Cable broadband, as a result, already controls a greater share of new residential broadband subscribers than telephone ISPs. In the fourth quarter of 2013, cable companies had a 59% market share of wired broadband subscribers and 87% of new subscribers.[26]

The result of such limited competition has been predictable and threatens to become worse. The American Customer Satisfaction Index (ACSI) ranks ISPs as the worst industry for customer satisfaction out of the 43 industries it tracks.[27] In addition, ACSI says customer satisfaction for ISPs dropped 3.1% from 2013 to 2014. Major ISPs also had dismal scores in a recent Consumers Union survey. Time Warner Cable and Comcast had scores of 63 and 62 out of 100, respectively, below average even among other ISPs.[28]

[24] James O'Toole, "Comcast plans data limits for all customers," *CNN Money*, May 15, 2014, http://money.cnn.com/2014/05/15/technology/comcast-data-limits/.
[25] Adrianne Jeffries, "DSL subscribers are more likely to be cheated on Internet speeds, FCC says," *The Verge*, June 18, 2014, http://www.theverge.com/2014/6/18/5822220/dsl-subscribers-are-more-likely-to-be-cheated-on-Internet-speeds-fcc.
[26] Ian Olgairson and Chris Young, "Cable takes big bite of HSD share in 2013 despite smallest gain in more than a decade," *SNL Kagan*, March 13, 2014, http://www.snl.com/interactivex/article.aspx?id=27257710&KPLT=6.
[27] Joan Engebretson, "ACSI: ISPs Rate Poorly on Customer Satisfaction," *Telecompetitor*, May 21, 2013, http://www.telecompetitor.com/acsi-isps-rate-poorly-on-customer-satisfaction/.
[28] Todd Spangler, "Comcast, Time Warner Cable Remain Among Least-Liked TV Providers: Survey," *Variety*, March 25, 2014, http://variety.com/2014/biz/news/comcast-time-warner-cable-remain-among-most-hated-tv-providers-survey-1201145921/#.

Municipal Networks Best Address Digital Divide

Private sector telecom operators are profit maximizing firms, which means they often do not build out broadband unless the area is deemed lucrative enough for investment and in the areas they do offer service, they charge higher rates than municipal networks. This has left many areas of the country without reliable high-speed broadband. Unlike profit driven corporations, municipal networks can prioritize public values like universal service and affordable prices. Low-income areas may benefit the most from home broadband technology that facilitates job searches and online education. Broadband access, however, continues to lag in low-income areas and among minority populations, due in part to high prices for service. For example, the overall broadband penetration rate in Los Angeles is about 75%, but some census tracts in South LA have penetration rates below 45%.[29] New competitors enabled by the Telecommunications Act of 1996 and municipal incentives often selectively build out service and therefore, have not fulfilled the promise of competition.

For example, Verizon's fiber-to-the-home (FTTH) service, FiOS, is largely built out in wealthier areas, with coverage in Los Angeles mostly along the coast. A report by the Communications Workers of America found a similar pattern across the country. For example, in Boston, those areas with FiOS had an 8.3% poverty rate and 22.9% minority composition compared with a 23.3% poverty rate and 52.3% minority population in the areas without FiOS.[30] In Buffalo, New York, FiOS neighborhoods had an 8.2% poverty rate and 4.9% minority population compared with a 28.8% poverty rate and 44.9% minority population in non-FiOS areas.

Similarly, Google Fiber will bypass those areas of Kansas City that do not have enough deposit-paying sign-ups for service. Even in those neighborhoods that will have Google Fiber available, the company charges a $300 construction fee for their "free" basic Internet service. Although Google has tried to address the problem, a digital divide persists, with one cause

[29] California Public Utilities Commission, June 2012 California Broadband Report: A Comparative Summary of Broadband Adoption for June 30, 2011 and June 30, 2012, (CPUC, June 2012), pp. 7-8, http://www.cpuc.ca.gov/NR/rdonlyres/0E08E45F-0DE2-447A-9BBB-A69496FF698C/0/CABroadbandReportUpdateasofJune2012FINAL.pdf.

[30] Communications Workers of America, Press Release, "Elected Officials, Community Groups in Five Cities without FiOS Ask FCC to Reject Verizon's Proposed Collaboration with Cable Companies," CWA, March 26, 2012, http://www.cwa-union.org/news/entry/dont_let_the_verizon_cable_deal_slam_the_door_on_our_high_speed_future.

being that lower-income renters move more often, making the construction fee investment an expensive risk.[31]

Both domestic and international comparisons reveal the high costs of private U.S. networks. Time Warner Cable advertises a promotional rate for its Standard 15 Mbps of $34.99 plus $5.99 per month for modem rental, however, the regular price is now reported to be $57.99.[32,33] Verizon FiOS 15 Mbps service costs $49.99 per month for the first year and $69.99 for the second.[34] Those rates are significantly higher than rates charged by public U.S. systems or international ISPs per megabyte. For example, Lafayette Utility System Fiber in Louisiana charges $33.95 per month for symmetrical 20 Mbps service while Chattanooga's EPB utility charges $57.99 for symmetrical 100 Mbps service.[35,36] Meanwhile, residents of Seoul, South Korea can purchase symmetrical 1000 Mbps Internet service for about $36.31 and Parisians can buy 100 Mbps service for $39.42.[37] The high costs to US consumers are also reflected in the industry's disproportionate profit margins. According to top Wall Street telecom analyst Craig Moffett, the gross profit margins on broadband are about 97%, a figure he described as "almost comically profitable."[38] SNL Kagan reports that even taking into account overhead, labor and marketing costs, major cable ISPs profit margins are about 60% and have been steadily increasing for the last several years.[39]

Los Angeles Can Build a Municipal Broadband Network

The concept has been proven viable. Systems like Lafayette's and Chattanooga's offer gigabit speeds that are rare even in urban and wealthy areas. According to Community

[31] Michael Brick, "Is Google Making the Digital Divide Worse?," *News Week*, February 20, 2014, http://www.newsweek.com/2014/02/21/google-making-digital-divide-worse-245546.html.
[32] "High Speed Internet Plans and Packages," Time Warner Cable, accessed July 16, 2014, http://www.timewarnercable.com/en/Internet/Internet-service-plans.html.
[33] Rick Moriarty, "Time Warner Cable raising TV, Internet rates, imposing 'broadcast TV' fee," *Syracuse.com*, February 25, 2014, http://www.syracuse.com/news/index.ssf/2014/02/time_warner_cable_price_increase_broadcast_tv_fee_Internet_cable_tv.html.
[34] "FiOS Internet Most Popular Internet Plans," Verizon, accessed July 16, 2014, http://www.verizon.com/home/fios-fastest-Internet/.
[35] "LUS Fiber Pricing Guide," LUS Fiber, accessed July 16, 2014, http://www.lusfiber.com/index.php/Internet/pricing-guide.
[36] "EPB Fiber Optics Custom Bundle Pricing for Fi-Speed Internet," EPB Fiber Optics, accessed July 16, 2014, https://epbfi.com/Internet/.
[37] Hibah Hussain et al., *The Cost of Connectivity 2013*, (Washington, DC: New America Foundation, October 2013), http://oti.newamerica.net/publications/policy/the_cost_of_connectivity_2013. International rates are in U.S. Dollars/Purchasing Power Parity.
[38] David Talbot, "When Will the Rest of Us Get Google Fiber?," *MIT Technology Review*, February 4, 2013, http://www.technologyreview.com/news/510176/when-will-the-rest-of-us-get-google-fiber/.
[39] Tony Lenoir, "Per-sub video margins fall to record low in Q1; Time Warner Cable in single-digit territory," *SNL Kagan*, May 12, 2014, http://www.snl.com/interactivex/article.aspx?id=28053232&KPLT=6.

Broadband Networks, about 40 communities in 13 states have publicly owned networks that provide gigabit speed service.[40]

A combination of smart planning and upfront investment by the City of Los Angeles can be leveraged into building a first class municipally-owned network. The cost of building a fiber network can be greatly reduced by using tools like GIS systems and dig-once policies, in addition to using existing resources like City-owned fiber and conduit. Even a limited broadband network that is available to either commercial or residential customers will generate revenue for the City that can be reinvested in expanding the network or even generate additional income for the City's general fund.

Relying on private broadband providers is not the only option for expanding broadband availability and adoption. The City of Santa Monica chose to build out its own network by taking the savings from its small institutional network, that connects City buildings, and reinvesting that money into creating a City-owned fiber network accessible to local businesses. The City also carefully coordinated network build out with already planned construction to minimize the need to dig public rights of way solely for the new network, thereby minimizing the cost of expansion. Santa Monica's experience in building a municipal network provides lessons that Los Angeles can apply and can serve as a source of local, technical expertise on network construction.

Santa Monica's City Net is a fiber optic network that was funded with only a small initial investment of $530,000. Once the initial segment connecting community anchor institutions was built, the City realized a first year savings of $400,000 from no longer having to lease expensive lines from private telecom providers.[41] In other words, the public system paid for itself within a relatively short time. The City then decided to invest the cost savings into expanding the network. Additionally, Santa Monica reduced the cost of expansion by surveying businesses about their broadband needs, requiring new developments to install access points and installing fiber or conduit during already planned construction.

The resulting build out has benefited local businesses in addition to the City. First, it allowed some businesses, including Google, to lease high capacity "dark fiber" at reasonable rates to connect different locations. The City was also able to offer Internet access to

[40] "Community Broadband Map," Community Broadband Networks, accessed July 16, 2014, http://www.muninetworks.org/communitymap.
[41] Eric Lampland and Christopher Mitchell, *Santa Monica City Net: An Incremental Approach to Building a Fiber Optic Network*, (Minneapolis, MN: Institute for Local Self-Reliance, March 2014), http://www.ilsr.org/santa-monica-City-net/.

businesses at significantly lower rates than the private market. City Net's rates for 100 Mbps service were 67.6% lower and 1 Gbps service cost 77.1% less. City Net even offered a higher 10 Gbps tier that was not available to businesses previously, causing at least one business to stay in Santa Monica after considering moving to another area.[42] The network now has about 110 customers and generates $1.6 million in revenue per year.

Los Angeles can combine Santa Monica's policies with other tools that have been used to create municipal broadband networks. For example, revenue bonds generate funds for network construction without raising taxes on residents. The bonds are then paid back using revenue from the municipal network. Another option is internal loans that temporarily direct excess or saved revenue from other City departments to network construction. As with revenue bonds, the lending departments are paid back with network revenue. None of these options preclude having private contractors actually build the network.

Santa Monica's success is just one example of the benefits of municipal broadband. The U.S. Government Accountability Office recently released a report that concluded communities with government-funded broadband systems had lower prices and higher speeds for business even though the systems were not targeted at the commercial market.[43] Although to date City Net has focused on providing commercial service, Santa Monica's network has also benefited residents and visitors. By 2013, the City had created 32 free wi-fi hotspots in addition to covering nine commercial corridors resulting in 3,800 people using the access points every day. The City has also started a pilot project to directly connect affordable housing units to the network.

IV. Essential Principles for a World-Class Broadband Network

The following principles describe a broadband network, and the process of building it, that will rank Los Angeles among the most digitally-hospitable cities in the world. These principles apply to the development of a municipally-owned network, which the WGAW believes is the best way to achieve the goals of the LACBN. These principles are, however, vital should the City proceed with a privately-contracted network. It must adopt a selection process that is transparent and require private provider commitments to conditions that will promote competition and universal service.

---

[42] *Ibid.*

[43] Grant Gross, "GAO: Government-funded broadband means better service, lower prices," *PCWorld*, March 10, 2014, http://www.pcworld.com/article/2106540/gao-govt-funded-broadband-benefits-small-businesses.html.

Transparency and Community Engagement

The City should engage the community in the development of the RFP and selection of a winning proposal. The preliminary RFP, released in December 2013, contemplated an open solicitation which didn't require bidders to incorporate the RFP's service objectives.[44] Community engagement in the LACBN is important as tax payers will indirectly fund part of the LACBN—through the City's communications contracts—and will directly fund network deployment as customers. The City should, therefore, convene a public-private commission to evaluate the bids for LACBN. This would provide necessary public input into the scope of the network and ensure equitable deployment. ITA could also convene public forums that would give citizens a sounding board to discuss the objectives of the LACBN and to evaluate progress once network deployment begins.

Network Neutrality

Strong network neutrality principles are vital to maintaining the open, competitive nature of the Internet. Private ISPs have both the incentive and ability to impede online services that threaten their other businesses. For example, ISPs have been found blocking or degrading service for Internet voice applications, BitTorrent and other independent online video distributors. The City should require bidders to guarantee their network will abide by the principles of network neutrality, which must include non-discrimination among sites and applications, no blocking of legal content and transparency of any network management practices. These principles must also extend to any interconnection points between the local network and the wider Internet.

A non-discrimination rule should prohibit the private provider from entering into anti-competitive agreements that prioritize certain content, services or applications. Data caps should also be identified as constituting unreasonable discrimination because they make substitution of online video for traditional video unaffordable or discriminate between content provided by the ISP and unaffiliated providers.

The City's Net Neutrality policy must include a rule prohibiting blocking. Subscribers must have the right to access the legal content of their choice. The rule must also cover more subtle practices that achieve the goal of blocking, such as throttling, or degrading access to legal

[44] City of Los Angeles*, Request for Proposals for a Citywide Wireless Network and High Speed Community Broadband Network*, December 1, 2013. RFP was rescinded and City issued the current RFI on April 7, 2014.

content. Any private provider must also be prohibited from blocking access to legal content at Internet connection or exchange points.

WGAW supports efforts to enhance transparency. The City can do so by requiring any private provider to include information about performance and network management practices on its website, along with pricing and maximum speeds. For example, ISP websites often list the monthly price for a certain maximum level of download and upload speeds. The City's private contractor should also provide consumers with information on actual speeds delivered, particularly in peak traffic periods. Complementary to this information would be details on what the ISP does to manage congestion and how this may affect consumer service.

Right-of-Way Fees

If the winning bidder provides 5 Mbps of free service, as contemplated in the original RFP, then we propose Right-of-Way (ROW) fees be waived during build out and for the life of the LACBN contract. The provision of free service is a significant public benefit, which fulfills the administration's goal of universal service and affordable broadband options. As such, it seems appropriate to waive any charges related to using City ROWs. However, if after the initial term, the City or the contractor decide not to renew, the City opts not to rebid, or if free Internet service is phased out at any time, then the bidder should be required to meet ROW obligations. Current Information Technology System (ITS) franchises for private line communications, generally held by public institutions, pay a franchise fee of $5 per linear foot per conduit per year for underground cable. We urge the City to adopt a standard franchise formula that is the greater of either (1) $5/per linear foot/per conduit/per year or (2) 5% gross revenue from all non-video service.

Provisions in Support of Competitive ISPs[45]

Given the presence of TWC, AT&T and Verizon in Los Angeles we are concerned that a single incumbent bidder may win the LACBN contract. If the City serves as the anchor tenant for the LACBN, then a minimum of $47 million in public funding from the City's communications contracts will be directed towards the winning bidder each year.[46] The winning bidder will enjoy

[45] These policies should be adopted in addition to the City's 10% preference for small, local businesses. See LA Charter and Administrative Code, Section 10.28, Award of Contracts.

[46] Los Angeles Information Technology Agency, LA Community Broadband Network Request for Information, *Third Set of Responses to Questions Regarding Information*, question 81, p. 4, http://ita .laCity.org/stellent/groups/departments/@ita_contributor/documents/contributor_web_content/laCityp_028 630.pdf.

additional benefits such as the ability to coordinate fiber deployment with publicly planned street upgrades, which will reduce construction costs. The winning bidder will also likely receive free publicity through earned media given the magnitude of this project. Reduced construction costs, free publicity and the opportunity to convert users of the free service to paid tiers, may give the winning bidder a significant competitive advantage in the Los Angeles market. To encourage competition, we support a set aside that would give competitive ISPs a portion of the public work. This could encourage competitive ISPs to help develop the LACBN and expand their footprint in Los Angeles. Depending on the capacity of the small business, it may be appropriate to follow goals established by the federal Small Business Administration which requires 23% of prime contracts to be set aside for small businesses.[47]

Service Requirements

We support the principle that "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."[48] The availability of gigabit service would represent significant progress towards this goal and a benchmark price of $70 a month for gigabit service would be extremely competitive.[49] We also support the City's goal of closing the digital divide in Los Angeles and encourage the City to adopt a standard of at least 5 Mbps.

Conduit & Fiber—Dig Once Initiative

We also support the City's suggestion of installing conduit in future construction or repair projects.[50] City-owned and controlled conduit could promote competition, enabling competitive ISPs to lease conduit space from a neutral party. Conduit that is privately owned may, in addition, be improperly managed, creating challenges for providers and City residents. For example, Empire City Subway, a subsidiary of Verizon, owns and controls an extensive amount of conduit underneath New York City. Portions of this privately owned conduit are clogged with cables that are not in use or collapsed. As a result, companies looking to lease conduit space may be required to bypass sections of uninhabitable conduit. Less direct routes can cause

[47] Small Business Administration, "Statutory Goals Established by Federal Executive Agencies," http://www.sba.gov/content/statutory-guidelines-0.
[48] RFI p. 7.
[49] City of Los Angeles*, Request for Proposals for a Citywide Wireless Network and High Speed Community Broadband Network*, December 1, 2013, Section 2.1, p. 15. The initial RFP was rescinded in favor of the current RFI issued in April 2014.
[50] RFI, p. 12.

significant cost increases, creating additional disincentives for potential overbuilding.[51] We encourage the City to expand conduit in conjunction with municipal construction projects, require new private developments to include conduit paths into their buildings and develop conduit management policies and rates that facilitate competitive access.

Standard Franchise

The RFI states the City's intention to develop a standard franchise as part of the LACBN process. The City currently requires Information Technology Systems, as defined by Section 22.641, to have a franchise before operating within the City limits. ITS franchises are issued by an ordinance of the City Council.[52] We encourage the City Council, using its oversight powers, to amend Division 13 of the Administrative Code to require that all franchised services are operated in a neutral and non-discriminatory manner.

V. Conclusion

Internet access is more important than ever. It is an essential access point to news, entertainment and economic opportunity. Affordable, state-of-the-art broadband service would help grow LA's tech sector, retain existing businesses and protect the valuable entertainment industry that is the hallmark of the City. As the incredible growth in the Internet industry has shown, investment in communications technology creates a virtuous cycle of innovation and further investment. Los Angeles should foster this growth through the LACBN while protecting the open and competitive nature of the Internet.

[51] Matthew Flamm, "Crossed Wires: Untangling NYC's broadband underground," *Crain's New York Business*, April 7, 2014, http://www.crainsnewyork.com/article/20140407/TECHNOLOGY/304069996/crossed-wires-untangling-nycs-broadband-underground#.

[52] See Division 13 of Los Angeles Charter and Administrative Code, 13.62, and see 22.647 Rules and Regulations Regarding Information Technology Systems Franchises.