Request for Information

For

Partnership for Deployment of a Citywide Fiber-to-the-Premises (FTTP) Network

City of Baton Rouge and Parish of East Baton Rouge, Louisiana

Issued: June 19, 2017

Submission deadline: August 4, 2017
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Contents

I.   Introduction

The City of Baton Rouge and the Parish of East Baton Rouge, Louisiana ("City-Parish") issues this Request for Information (RFI) to convey its interest in partnering with a motivated, high-caliber partner or partners to make affordable and scalable Gigabit-class broadband available to homes and businesses over privately or publicly constructed infrastructure.

The City and Parish of Baton Rouge is a beautiful and exciting place to live, work, and visit. Home to numerous higher education institutions, a flourishing industrial sector, and a thriving business economy, Baton Rouge is a center for innovation and growth in Louisiana. With robust education, healthcare, hospitality, legal, and tourism sectors, Baton Rouge has something for everyone.

City-Parish leadership is committed to ensuring that Baton Rouge continues to prosper and evolve as the global economy shifts—and the need for ultra-high-speed broadband access for all residents and businesses becomes increasingly evident.

The City-Parish envisions a parish-wide fiber-to-the-premises (FTTP) deployment with Gigabit-class broadband access to all residences and businesses. The City-Parish seeks proposed approaches from potential partners, either for-profit or nonprofit, that envision a long-term relationship with the City-Parish.

Responses to this RFI should state how the respondent's approach will result in a financially sustainable business model that furthers the City-Parish's goals of:

- Ensuring that all residents and businesses have access to affordable, market-leading broadband services

- Deploying a network that can easily and inexpensively scale to provide higher-speed services as demand for bandwidth increases

- Expanding to the more rural areas of the Parish as resources allow

The City-Parish seeks input from potential partners regarding the terms and conditions under which they would participate in such a project. It seeks partners that will consider a variety of business models that share technological and operational responsibilities and financial risk between the partners and the City-Parish in innovative ways. That said, the City-Parish strongly prefers a partnership model in which it designs, constructs, and owns dark fiber network infrastructure throughout the entirety of the community up to a demarcation point in the customer's home or business, and leases the dark fiber backbone, distribution fiber, and fiber drops to a private partner.

The City-Parish encourages respondents to share their expertise, which may be used to shape the direction and form of the network. Respondents may work together to respond to this RFI. The City-Parish is open to creative solutions that will maximize investment while providing reliable and high-quality services to meet its citizens' needs.

The City-Parish welcomes the responses of all prospective partners, including incumbent service providers, as well as competitive providers, nonprofit organizations, public cooperatives, and entities that are not traditional internet service providers (ISP) but are interested in acting as a partner in offering service under innovative business models. Nontraditional providers may respond as part of a partnership with an ISP, or may provide separate responses outlining their approaches.

The City-Parish will review responses based on the respondents' experience, how well the responses address the City-Parish's objectives, how the proposed business model balances and shares risks and rewards, and other factors.

All respondents must follow the instructions and provide all requested material. Failure to follow instructions is grounds for rejection of the response. All respondents must complete the attached responsibility matrix (Appendix A) and financial responsibilities questions (Appendix B), and submit a paper and electronic copy of both in the format (structure, page limitations, and file type) specified in the RFI Response Requirements in Section X (pages 18-20). Appendix C illustrates the requested response structure, and does not need to be submitted.

II.   The City-Parish's Vision

The City-Parish envisions world-class communications infrastructure for its residents and businesses—for the 21st century and beyond. The City-Parish believes that broadband is critical infrastructure—just like roads, water, sewer, and electricity—and that every home, business, nonprofit organization, government entity, and educational institution in the City-Parish should have the opportunity to connect. Providing equal and affordable access to communications infrastructure and service is essential to promoting equal opportunity in business, education, employment, healthcare, and all other aspects of day-to-day life.

The City of Baton Rouge is a regional hub of growth and activity, with a strong industrial sector and flourishing economy. The City-Parish is dedicated to collaborating with its talented residents, businesses, institutions, and organizations to advance Baton Rouge's standing in the regional and global economy through a commitment to developing robust connectivity in the region.

Currently, access to reliable broadband connectivity in portions of the City and Parish is sporadic, and many consumers must settle for minimal speeds. For an important portion of the community, even basic service is expensive—potentially creating large opportunity gaps for some of the most vulnerable members of our community.

Indeed, despite its strong industrial sector and economic base, the City-Parish's unemployment rate is about 20 percent higher than the national average.[1] At $23,990 (2014 dollars), per capita income in Baton Rouge is significantly lower than the per capita Parish income ($27,558) and the national average ($28,555), as noted in Table 1. The City-Parish's median household income ($38,790) is likewise substantially lower than both the median income throughout the Parish ($48,535) and the national average ($53,482). Similarly, 25.5 percent of the City-Parish's population lives in poverty, compared to 18.4 percent in the Parish, and 14.8 percent nationwide.[2]

Table 1: Poverty Indicators in City-Parish

	City	Parish
Median Household Income (2014 $)	38,790	48,535
Per Capita Income (2014 $)	23,990	27,558
Persons in Poverty (%)	25.5	18.4

In light of these socioeconomic data, the City-Parish aims to take decisive steps toward ensuring its residents and businesses can keep pace with a changing economy. The City-Parish will initiate efforts in the most densely populated, impoverished areas of the City. In time, the City-Parish hopes to be able to extend the network to residents throughout the Parish.

City-Parish-wide broadband is an important driver of lowering business costs, attracting and retaining highly skilled residents, and creating sustainable new jobs in an entrepreneurial economy based on innovation and creativity. Robust residential and institutional connectivity will also expand opportunities for local students in K–12 and beyond, and enable more open government and civic engagement.

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[1] *Compare* United States Department of Labor, Bureau of Labor Statistics, Economy at a Glance: Baton Rouge, LA, http://www.bls.gov/eag/eag.la_batonrouge_msa.htm *with* United States Department of Labor, Bureau of Labor Statistics, Economy at a Glance: United States, http://www.bls.gov/eag/eag.us.htm (reporting 5.9% unemployment in the City of Baton Rouge in July 2016, compared to 4.9% nationwide).
[2] *Compare* U.S. Census, Quick Facts, Baton Rouge, Louisiana, http://www.census.gov/quickfacts/table/PST045215/2205000,22 *with* U.S. Census, Quick Facts, United States, https://www.census.gov/quickfacts/table/PST045215/00

The City-Parish intends to empower its citizens and local businesses to be network economy producers—not just consumers of network information and data services. Further, it intends to provide its stakeholders with the broadband capacity they need to compete successfully in the global marketplace.

Baton Rouge's community values will shape the broadband initiative. The City-Parish seeks a partner(s) ("Partner") to operate fast, affordable broadband internet and data services over publicly or privately constructed fiber optics to meet the City-Parish's broadband goals. City-Parish officials have prioritized pursuing the deployment of:

1. An eventual **community-wide** FTTP network that will provide complete community coverage in Baton Rouge's urban core—connecting every home and business throughout the City with Gigabit-class bandwidth and leaving no part of the City behind. The City-Parish recognizes that this aspect of its vision is lofty, and a gradual build out may be necessary to realize this goal.

2. An **open access** network that ensures that the ability of local residents and businesses to affordably connect to very robust and reliable broadband networks is not subject solely to the commercial priorities of one or more private ISPs; the business model should accept, accelerate, and encourage competition among service providers.

3. A **financially sustainable network** that does not impose an undue economic burden on the City-Parish and that can adapt to changing circumstances. As with other types of critical infrastructure (streets, for example), the network does not necessarily need to generate net revenue, but it must be based on a sustainable long-term operating model.

4. An **affordable base-level service** that enables all citizens in the urban core to access broadband connectivity. The City-Parish is prepared to develop mechanisms to offset costs associated with providing such service (described below), and also expects that the Partner(s) will factor into its response the need to serve customers who may not be able to purchase high-end service.

One of the City-Parish's key priorities is that all members of the community eventually have access to robust, affordable broadband service. The FTTP network should be built everywhere possible, with a continual goal of further expansion. The City-Parish is especially interested in solutions for low-income areas, where citizens are particularly vulnerable. As the world becomes increasingly connected, broadband is a key to education, job training, and even access to one's own medical records. Providing Gigabit-class broadband to these areas will level the playing field for these citizens in a manner previously unrealized.

The City-Parish intends to offset service costs for its most vulnerable residents through a subsidy program that will allow certain portions of the population to purchase service at a discounted rate. We expect respondents to this RFI to be prepared to build to and support those customers—many of who may never previously have had a broadband connection. This initiative may also entail the Partner(s) sharing cost and risk associated with providing low-cost or no-charge service to some customers.

The City-Parish recognizes the unique economic challenges of ubiquitous network deployment for the sizeable Baton Rouge and greater East Baton Rouge Parish area, and understands that a communitywide FTTP network may seem implausible for some or even all providers. It is prepared to work with the Partner(s) to make this an attainable goal.

While immediate ubiquity is ideal, the City-Parish understands the potential need to begin network deployment on a smaller scale, and welcomes proposed models that include early investment in specific areas—provided that eventual ubiquitous Gigabit-class build out is a shared goal. Respondents that believe this goal is a barrier to their ability to successfully partner with the City-Parish should clearly articulate their reasoning, and describe how they may provide a "good-enough" contingency plan for community-wide FTTP access.

The City-Parish stresses that community-wide access is an important component of its vision, but the City-Parish is willing to consider creative alternatives to community-wide FTTP. The City-Parish seeks Partner(s) interested in a long-term, creative, and mutually beneficial relationship with the City-Parish.

The City-Parish will consider a range of construction, operation, and ownership models for the FTTP network. The City-Parish and selected Partner(s) will collaboratively determine the most mutually beneficial partnership structure, which may include cost sharing, infrastructure leasing, and profit-sharing arrangements. The City-Parish is prepared to consider various business models, which could include, but are not limited to, the following scenarios:

- Private provisioning of services over infrastructure that is constructed and owned by the public sector but operated and maintained by the private partner;

- Private provisioning of services over infrastructure that is constructed, owned, operated, and maintained by the public sector;

- Public provisioning of services over public infrastructure;

- Publicly or privately constructed open-access infrastructure that allows other qualified providers to offer service over the network; or

- Private provisioning of services over infrastructure that is constructed, owned, operated, and maintained by the private sector.[3]

The City-Parish will also consider any combination of these models as well as alternative suggestions proposed by respondents.

III.   Background: Baton Rouge City and Parish

East Baton Rouge Parish ("Parish") is the most populous parish in Louisiana and the seat of the state capital, Baton Rouge ("City"). The Parish and City are run by a consolidated government, which connects the City government to the more rural areas of the Parish. [4] The combined Parish and City are served by the Metropolitan Council and a City Mayor who also serves as Parish President.

Baton Rouge is the second most populous city in the state, one of the largest cities on the Mississippi River, and the 70th-largest Metropolitan Statistical Area (MSA) in the United States.[5] The City is a hub for industry, tourism, and entertainment, in part due to its central location— just an hour from New Orleans and Lafayette.

Created in 1946 through a constitutional provision, the "City-Parish Charter Commission" was given the authority to develop a "Plan for Government" to be submitted to the people of the Parish for adoption. The Charter Commission was limited only by the "Constitution and laws" of the State of Louisiana with respect "to the powers and functions of local government." The work of the Commission, and of its technical advisors, resulted in the development of a Plan that consolidated, coordinated, and streamlined the functions of local government. The Plan extended the City limits from approximately five square miles to approximately 30 square miles, encompassing most of the residential areas of the Parish at that time (it has since been expanded again to roughly 76 miles, capturing the most densely populated areas of the Parish). The Plan also established the Mayor-President Council form of government; consolidated the major departments of government; and created urban, industrial and rural areas for purposes of taxation.

In 1949, the City and Parish established a Planning Commission as one of the nation's first combined governing units. The Planning Commission is a governmental agency directed by state law and the Metropolitan Charter to guide the physical growth of Baton Rouge and the Parish with comprehensive planning and land-use control. Today, the Planning Commission is

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[3] Respondents should clearly indicate how this approach achieves the City's partnership and connectivity goals.
[4] Visit Baton Rouge Government Website, http://brgov.com/aboutus.htm, for additional background about the history, composition, and responsibilities of the City-Parish government.
[5] American FactFinder, https://factfinder.census.gov/bkmk/table/1.0/en/PEP/2016/PEPANNCHG.US24PR

responsible for comprehensive and advance-planning duties, developing zoning and subdivision regulations, and processing and reviewing all applications for zoning changes and subdivisions.

The Commission and planning staff make recommendations to the Metropolitan Council for ordinances, ordinance changes and land-use requirements. The Commission includes a nine-member board that advises elected officials on growth and development issues for the Parish. The Commission decides on subdivision issues that fall within existing subdivision regulations, and serves in an advisory capacity to the Metropolitan Council on any zoning or planning ordinance changes or amendments.

Of note, the Planning Commission is responsible for initiation and establishment of the Capital Improvements Program for the Parish and City. Capital improvements include all major construction and improvements to public streets, sewers, buildings, parks, and other physical facilities. A five-year Capital Improvements Program is prepared by the City-Parish on an annual basis.

Roughly half of the Parish population resides in the City (Table 2), although the City constitutes only 16 percent of the Parish land area. As a result, the area outside of the City is significantly less densely populated than the City itself, with 2,983 residents per square mile in the City proper, compared to only 978 residents per square mile Parish-wide.[6]

Table 2: Population Indicators in Baton Rouge City-Parish[7]

	City	Parish
Population (2010)	229,542	440,178
Housing Units (2010)	100,801	187,353
Households (2010-2014)	88,576	168,534
Firms (2012)	25,952	45,760

The City-Parish is located along the banks of the Mississippi River, which offers several strategic advantages. First, it is situated atop a bluff upriver from the Mississippi River Delta, which serves as a natural barrier to seasonal flooding. (The City-Parish also built a levee system extending from the bluff southward to protect the riverfront and the City-Parish's low-lying agricultural areas.) Second, Baton Rouge is home to the farthest-inland deep-water port on the Mississippi River and the ninth-largest port in the United States in terms of tonnage shipped.

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[6] United States Census, Quick Facts, http://www.census.gov/quickfacts/table/PST045215/2205000,22033
[7] *Id.*

The Port of Greater Baton Rouge is linked to major ports between Florida and Texas through 15,000 miles of waterways.[8]

The Port of Baton Rouge contributes to the City-Parish's role as a major industrial and petrochemical center. Exxon Mobil's Baton Rouge Refinery complex is the fourth-largest oil-refinery in the country and the tenth-largest refinery in the world. Other significant industrial leaders in the region include Nan Ya Plastics Corporation (which manufactures PVC and CPVC pipes), Albemarle Corporation, and Dow Chemical Company (which has a large plant 17 miles south of Baton Rouge).

The City-Parish's economy is not limited to heavy industry. State tax credits have attracted technology and digital media firms and the City-Parish is home to an expanding engineering and construction field. These incentives prompted CNN to rank Baton Rouge as the ninth-best place in the country to start a new business in 2009.[9] By 2012, the City-Parish supported 25,952 businesses,[10] attracting enough commuters to contribute to a substantial (34.7 percent) increase in its workday population.[11]

The City-Parish's top employers are listed in Table 1.

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[8] Shannon Jones, April 9, 2015, Newsmax, "5 Fact's About Louisiana's Capital: How Well Do You Know Baton Rouge?" http://www.newsmax.com/FastFeatures/facts-louisiana-capital-baton-rouge/2015/04/09/id/637394/#ixzz4K8FuIvuF

[9] CNN Money, 2009, "Best Places to Launch," http://money.cnn.com/smallbusiness/best_places_launch/2009/snapshot/28.html

[10] United States Census, Quick Facts: Baton Rouge, Louisiana, http://www.census.gov/quickfacts/table/PST045215/2205000,22

[11] City-Data.com, Baton Rouge, Louisiana, http://www.city-data.com/city/Baton-Rouge-Louisiana.html#b#ixzz4K5xx2LcU

Table 3: Top 10 Employers, 2014 Comprehensive Annual Financial Report[12]

Employer	Employees
Louisiana State Government	21,860
Turner Industries	9,671
Louisiana State University	6,150
ExxonMobil Corporation	5,938
East Baton Rouge Parish School System	5,768
Performance Contractors	5,500
City-Parish Government	4,433
CB&I Inc.	4,243
Our Lady of the Lake Regional Medical Center	4,099
Baton Rouge General Medical Center	3,000

The City-Parish enjoys a strong economy and has been repeatedly applauded for its high quality of life and healthy business environment. In fact, Baton Rouge has been recognized as:

- One of the top 10 metro areas with highest level of manufacturing productivity (2016);[13]

- The third-best city in the nation for women entrepreneurs to start a business (2015);[14]

- Second in the nation for economic development in the chemical and plastics industry (2015);[15]

- One of the top "payroll to population cities" (2015);[16]

- One of the top five emerging entrepreneurial hubs (2013);[17]

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[12] The Consolidated Government of the City of Baton Rouge and Parish of East Baton Rouge, Louisiana, 2014, "Comprehensive Annual Financial Report," at 239, http://app.lla.state.la.us/PublicReports.nsf/0/5654B90B80694DFD86257E9D00603018/$FILE/000096C7.pdf
[13] Garner Economics, March/ April 2016, "Manufacturing Productivity in U.S. Metros," http://files.ctctcdn.com/341e6cbb001/2e2f5265-2bdd-4f1c-ab14-dd3545dc47c8.pdf (ranking Baton Rouge 6 nationwide for manufacturing productivity) (visited May 23, 2017).
[14] Cities Journal, Aug. 2015, "Top 10 U.S. Cities for Women Entrepreneurs," http://www.citiesjournal.com/top-10-u-s-cities-for-women-entrepreneurs/ (visited May 23, 2017).
[15] Greater Baton Rouge Business Report, Nov. 2015, "Baton Rouge named second most competitive city in North America for chemical and plastics industry," https://www.businessreport.com/article/baton-rouge-named-second-competitive-city-north-america-chemical-plastics-industry (citing "World's Most Competitive Cities Report" (visited May 23, 2017).
[16] Greater Baton Rouge Business Report, Feb. 23, 2015, "BR ranked No. 9 in nation for payroll-to-population ratio," https://www.businessreport.com/article/br-ranked-no-9-nation-payroll-population-ratio(visited May 23, 2017).

- The seventh best city in America for information jobs (2013);[18] and

- One of the top 10 metro areas (population between 200,000 and 1 million) for new and expanded corporate facilities (2011, 2012 and 2014).[19]

The City also supports a thriving medical services industry, with a number of notable research hospitals that support an emerging medical corridor. Both Louisiana State University (LSU) and Tulane University have constructed satellite medical campuses in the City. The City also hosts several nursing schools and a biomedical research center, which conducts clinical and biological research.

The East Baton Rouge Parish School System is the fifth-largest employer in the City and the second-largest school district in the state. It comprises approximately 90 individual schools, including 56 elementary schools, 16 middle schools, and 18 high schools enrolling 42,618 students and employing more than 6,000 teachers and faculty.[20] There are also 15 charter schools supporting an additional 3,800 students in the City.

Baton Rouge is home to LSU, Southern University (SU), and Baton Rouge Community College. LSU is the flagship campus of the Louisiana State University System, enrolling over 31,000 students and employing 1,300 full-time faculty members.[21] The university offers undergraduate degrees in more than 100 fields, and advanced degrees in many disciplines, including law and medicine. LSU's enrollment is growing, with the 2015 freshman class the fourth-largest in the university's history.

SU is part of the only historically black land grant university system in the United States. With 10,000 students, it is the largest African American university system in the nation. SU offers degrees through 13 different colleges, including programs in science and engineering.

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[17] Louisiana Economic Development, Choose Baton Rouge, "The Baton Rouge economy boasts impressive numbers and opportunity," https://choosebr.com/Baton-Rouge-economy (visited May 23, 2017) (citing Entrepreneur Magazine 2013).

[18] Joel Kotkin and Michael Shires, June 19, 2015, NewGeography.com, "The Cities Winning the Battle for Information Jobs 2015," http://www.newgeography.com/content/004963-the-cities-winning-the-battle-for-information-jobs-2015 (visited May 23, 2017).

[19] Renita Young, March 3, 2014, The Times Picayune, "Capital Region named top 10 metro area for new projects by Site Selection magazine," http://www.nola.com/business/baton-rouge/index.ssf/2014/03/capital_region_named_top_10_me.html (visited May 23, 2017) (noting that Baton Rouge was in the top ranking for four consecutive years).

[20] Diana Samuels, Jan. 29, 2015, The Times Picayune, "East Baton Rouge student population checks in at 42,618: 5 things to consider," http://www.nola.com/education/baton-rouge/index.ssf/2015/01/east_baton_rouge_student_popul.html

[21] LSU Media Center, Sept. 18, 2015, "LSU Enrollment Figures Announced, Total Enrollment Increases by Nearly 1,000 Students Across LSU," http://www.lsu.edu/mediacenter/news/2015/09/18enrollment.eb.php (visited Sept. 13, 2016)

Baton Rouge Community College enrolls more than 8,000 students. Other college campuses in the City include Virginia College, Our Lady of the Lake College, and the Southeastern Louisiana University School of Nursing. Industrial training programs are also available at 14 vocational and technical schools across the City.[22] Combined, the students at these universities and colleges comprise 20 percent of the City's population. Many additional universities and colleges are within a one-hour drive of Baton Rouge.

The City-Parish hosts a vibrant art, cultural, and entertainment scene. The Baton Rouge Symphony Orchestra performs more than 60 concerts annually. A variety of theatres provide regular entertainment. LSU's Tiger Stadium, with a capacity of more than 100,000, is the nation's fifth-largest on-campus stadium, repeatedly heralded as "one of the greatest sites anywhere for a football game—college or professional."[23]

Annual events in the City-Parish include Mardi Gras parades, a biannual restaurant week, the Greater Baton Rouge State Fair, FestforAll, Louisiana Earth Day, Bayou Country Superfest, and the Red Stick International Animation Festival. These events draw many tourists to the region, and the City-Parish is also known for its popular Casino Riverboats, docked along the riverbanks.

Both the Parish and the City have a large minority population. Over 45.3 percent of the Parish and 54.5 percent of the City was African-American in 2010, compared to only 12.6 percent nationwide.[24] Significantly, internet use among African-Americans nationwide continues to lag behind the national average. Indeed, only 80 percent of African-American adults report regular internet use, compared with 87 percent of white adults. The disparity is even greater when considering home internet use, with only 62 percent of African-Americans reporting a broadband connection at home compared with 74 percent of white Americans.[25] For this reason, providing affordable broadband to the large minority population in the City is particularly important.

The City has a number of communications service providers, including Eatel, AT&T, Charter Communications, and Cox Communications. Indications are, however, that the local appetite and need for greater and more uniformly available broadband services both now and in the future cannot be met with current service levels.

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[22] City-Data.com, Baton Rouge, Louisiana: Education and Research, http://www.city-data.com/us-cities/The-South/Baton-Rouge-Education-and-Research.html#ixzz4K5z0GKIZ (visited June 2017).

[23] LSUsports.Net, LSU's Tiger Stadium, June 19, 2015, http://www.lsusports.net/ViewArticle.dbml?ATCLID=177159

[24] U.S. Census Quick Facts, http://www.census.gov/quickfacts/table/PST045215/00,2205000,22033

[25] Ryan W. Neal, Jan. 6, 2014, International Business Ties, "'Digital Divide': Pew Study Finds Black Adults Have Less Internet Access Than Whites," http://www.ibtimes.com/digital-divide-pew-study-finds-black-adults-have-less-internet-access-whites-1528638

IV.   Results of Market Research

In 2017, the City-Parish contracted CTC Technology & Energy (CTC) to conduct market research on behalf of the City-Parish to determine broadband availability, reliability, and affordability from the perspective of consumers in the City-Parish. The market research indicates that most residents have access to broadband, but service is not ubiquitous.

The City-Parish conducted a mail survey of randomly selected residents in January 2017. The survey captured information about residents' current communications services, satisfaction with those services, desire for improved services, willingness to pay for faster internet speeds, and opinions regarding the role of the City-Parish regarding internet access and service.[26]

Key findings of this statistically valid survey include the following:

- Parish residents are highly connected, with 94 percent of respondents having some form of internet connection; specifically, 85 percent of residents have home internet service and 83 percent have a cell/mobile telephone with internet service

- Broadband service is not available everywhere in the City-Parish, and older, low-income, and less-educated respondents are less likely than their counterparts to have some form of internet access at their home

- About 45 percent of respondents said that the City-Parish should install a state-of-the-art communications network and either offer services or allow private companies to offer services to the public

V.   The Evaluation Process

The City-Parish asks that all respondents follow the response format outlined in Section X (pages 18-20). We ask respondents to include heading numbers to enable a side-by-side comparison of responses. The City-Parish will use a variety of mechanisms to evaluate responses, and will review submissions based on:

- Respondents' experience, as detailed per the instructions in Section X (pages 18-20);
- How well the responses address the City's goals, as detailed in Sections VI;
- How the proposed business model balances and shares risks and rewards;
- Which response brings the most value to the City-Parish and members of the community;

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[26] Unless otherwise indicated, the percentages reported are based on the "valid" responses from those who provided a definite answer and do not reflect individuals who said "don't know" or otherwise did not supply an answer because the question did not apply to them.

- Whether the proposed business model provides a predictable revenue stream to the City-Parish; and
- Additional factors that may be determined in the course of this RFI process.

The City-Parish may provide more detailed information on available assets to one or more respondents, and ask those respondents to refine their responses.

Following the evaluation of responses, the City-Parish may begin negotiations with preferred RFI respondent(s), issue a more detailed Request for Proposal (RFP) related to the project, issue an RFP to selected RFI respondents, cancel or delay plans to deploy an FTTP network, or choose another direction that is deemed in the community's best interest.

Responding to the RFI is not a guarantee of a contract award. Further, there is no guarantee an RFP will be developed as a result of this RFI. The City-Parish reserves the right to withdraw the RFI or any subsequent RFP, or to decline to award a contract.

All respondents must follow the instructions and provide all requested material. Failure to follow instructions is grounds for rejection of the response. All respondents must complete the attached responsibility matrix (Appendix A) and financial responsibilities questions (Appendix B), and submit a paper and electronic copy of both in the format (structure, page limitations, and file type) specified in the RFI Response Requirements in Section X (pages 18-20). Appendix C illustrates the requested response structure, and does not need to be submitted.

VI. Project Goals

Respondents to this RFI should indicate whether and how their proposals serve the City-Parish's goals:

1. Provide the infrastructure to Baton Rouge homes, businesses, public facilities, and private institutions to enable residents, workers, and visitors the opportunity to access affordable, high-speed broadband connections to the Internet and other networks;

2. Offer non-discriminatory, open access to all users, service providers, content providers, and application providers connected to the City-Parish-wide fiber network. Serving only limited areas of the City-Parish or specific types of customers is less desirable. Further, the network should be usable via all standard commercial devices;

3. Deliver an unfettered data offering that does not impose caps or usage limits on one use of data over another (i.e., does not limit streaming). All application providers (data, voice, video, cloud services) will be equally able to provide their services, and the consumer's access to advanced data will open the marketplace;

4. Consider innovative models that will leverage the City-Parish's proposed dark FTTP network to deliver Gbps and beyond services;

5. Consider ways for the City-Parish and prospective partners to share financial and operational risks;

6. Provide cost-effective services for price-sensitive customers and flexible pricing plans to help narrow the digital divide and ensure access to all City-Parish residents.

For the network to have the intended economic and quality-of-life impacts, the City-Parish considers both cost and availability of service to be important. The City-Parish encourages responses that address both cost and availability, and that seek to maximize adoption of service.

All respondents must fully complete Appendices A and B and fully comply with the instructions in Section X (pages 18-20) and Section XI (pages 21-22).

VII.   Preferred Business Model

The City-Parish strongly prefers a partnership model in which it designs, constructs, and owns dark fiber network infrastructure throughout the entirety of the community up to a demarcation point in the customer's home or business, and leases the dark fiber backbone, distribution fiber, and fiber drops to a private partner. In this model, the Partner would be responsible for all network electronics and CPEs, as well as network sales, marketing, and operations for wholesale and resale services.

The City anticipates negotiating both a "per-passing" and "per-subscriber" fee for the lease of its infrastructure, similar to the lease model used in the agreement executed with the city of Westminster, Maryland, in that city's partnership with Ting Internet. Additional details on the Westminster-Ting relationship are provided in Appendix D.

The City-Parish may also consider a model in which it designs, constructs, and owns dark fiber network infrastructure throughout the entirety of the community up to a demarcation point in public rights-of-way (PROW)—from which the private Partner would construct, own, and maintain fiber drop cables into customer premises. The Partner would be responsible for all network electronics and CPEs, as well as network sales, marketing, and operations for wholesale and resale services. Lease of this network would be negotiated using a "per-passing" fee, similar to the lease model used in the agreement between Huntsville Utilities and Google Fiber in the city of Huntsville, Alabama. *Note, however, that this model is less preferred by the City-Parish*.

Though the models discussed above are strongly preferred, the City-Parish may also consider other business models proposed by respondents, provided they accomplish the goals discussed in Section VI. The City-Parish welcomes creative responses that may accomplish its objectives. Example models include:

- Private construction, operation, and maintenance of privately owned fiber optic infrastructure;

- Publicly or privately constructed open-access infrastructure that allows other qualified providers to offer service over the network; or

- Private provisioning of services over infrastructure that is constructed, owned, operated, and maintained by the Partner.

Respondents should clearly indicate how these approaches can achieve the City-Parish's partnership and connectivity goals.

VIII. Network Design and Construction Parameters

For dark FTTP, the City-Parish requires the following baseline technical attributes in the design:

- Fully fiber-based connectivity to residential and business customers alike;

- Fiber strand capacity capable of providing direct homerun connections to businesses and residential "power" users;

- Fiber strand capacity and physical architecture (e.g., handhole placement, backbone routes, etc.) anticipating full deployment to all homes and businesses;

- Low latency;

- Backbone topology capable of supporting connections over diverse paths from one or more central hub locations to fiber distribution cabinets located throughout the City to facilitate high-availability service offerings;

- Fiber distribution plant placed in underground conduit (as opposed to direct burial cable) to more readily facilitate repairs and capacity upgrades;

- Aerial fiber distribution plant constructed on utility poles where beneficial;

- Active components placed in environmentally hardened shelters and/or cabinets equipped with backup power generation and/or batteries, as appropriate, capable of sustaining services in the event of extended power outages;

- Fiber path diversity to public facilities to maintain continuous service even if one path is broken;

- Underground communications conduit pathways that can be used by the City-Parish for future scalability;

- Fiber routes that are aligned with existing City-Parish conduit and coincide with planned City-Parish utility, roadway, and related capital improvement projects to reduce cost and minimize disruption where possible; and

- Minimal use of micro-trenching and rock sawing, which are not preferred construction methodologies.

IX.   Operational Capabilities

The Partner should be able to clearly explain its long-term operational plans for the network. The Partner should provide:

1. A description of where and when the Partner has successfully maintained retail, wholesale, and dark fiber operations in other markets. In the absence of a demonstrated track record, the Partner should provide a detailed outline of why it believes it can be successful, and its contingency plans in the event it cannot achieve the partnership's goals.

2. Examples of market share the company has obtained in other markets, and how long it has operated in those markets to achieve that share.

3. A description of the marketing plans and tools the Partner intends to use for the initial deployment, when customer acquisition is especially important.

4. A description of the ongoing marketing tools and platforms the Partner will use to continue to reach the community (e.g., local radio and television outlets, social media platforms, targeted online advertisements, print advertisements) over the duration of the partnership.

5. A description of educational and other outreach efforts the Partner will use to demonstrate the power of a gigabit-capable network.

6. The names and capabilities of any outside firm(s) the Partner will engage for marketing, advertising, and operations.

7. The size of the Partner's long-term technical team and a description of the team members' experience, including the experience of network engineers that will be dedicated to monitoring the network's health.

8. A description of existing, newly established, or planned relationships the Partner may have within the community, and how it will cultivate and maintain those (e.g., will the Partner become a member of the Chamber of Commerce or other community organizations?). The Partner should demonstrate that it will invest in the community and that it plans to maintain a long-term presence.

9. The location and capability of the customer call center for all customers.

10. A demonstration that it can meet all customers' needs in a timely, complete, and satisfactory manner.

11. A demonstration of its ability to coordinate necessary network maintenance in a timely manner without undue burden on either the City-Parish or network customers, communicating effectively and transparently with both the City-Parish and customers before, during, and after installation and maintenance processes.

12. An account of the Partner's intention to hire permanent local marketing, sales, billing support, customer support, technical support, and other staff—or justification for choosing not to do so.

13. A hierarchical flowchart of all operations staff, both remote and local.

14. Sales objectives in the first, second, and third years (as the project ramps up) and sales objectives in years 5, 7, and 10. While it is difficult to project many years into the future, the Partner should be able to show that it has intentions of maintaining a strong presence in Baton Rouge over the coming years, and that it is planning for the partnership beyond the initial deployment.

15. The Partner's expectations of the City-Parish to assist in marketing and advertising. The Partner should demonstrate how it intends to achieve the take rates necessary for the partnership to be successful, and whether and to what degree this plan will rely on the City-Parish or City-Parish staff and resources.

Respondents should make a significant effort to provide a response for all items in this section, and should clearly describe any exception it takes or areas where it does not feel equipped to provide a response. Preference may be given to respondents that provide complete, clear responses to each of the items in this section.

X.   RFI Response Requirements

The City-Parish requests the following information—in as much detail as is practicable—from respondents. **All responses must adhere to the following response requirements and page requirements.** All responses must follow the exact order below and use the appropriate response headers. Please start a new page for each response header. Failure to follow these instructions may result in rejection of the response.

1. **Cover Letter:** Please include company name, address of corporate headquarters, address of nearest local office, contact name for response, and that person's contact information (address, phone, cell, email). Keep response to one (1) page.

2. **Business Model Summary:** Summarize the business model you intend to use for the partnership. This should be a concise explanation of the key components of your business model, including but not limited to the construction of drop cables, division of network and operations responsibility, and ownership. Keep response to two (2) pages.

3. **Affirmation:** Affirm that you are interested in this partnership and address the core project goals and network design parameters listed above (Sections VI and VIII). List each goal and requirement with a brief statement of how you will comply. If you cannot meet any of those requirements, indicate the requirements to which you take exception, and provide an explanation of the exceptions. Keep response to three (3) pages.

4. **Experience:** Provide a statement of experience discussing past performance, capabilities, and qualifications. Identify other networks your firm has designed, built, maintained, or operated; include the levels of broadband speed, availability, and adoption among different categories of end users and unique capabilities or attributes. Discuss partnerships with other service providers, government, or nonprofit entities you have undertaken, particularly any involving dark fiber leasing. Describe the nature of the projects and your firm's role. For entities currently providing communication services in or near Baton Rouge, describe your current service footprint in the City-Parish, including a description of the type of infrastructure and services you currently offer and the technology platform(s) used. Explain how your firm is a suitable partner for this project. Keep response to two (2) pages.

5. **Technical and Operations:** At a high level, summarize the technological and operational approach you would use for this project.

   a. How would you use technology to meet the City-Parish's goals? Keep response to one-half (½) page.

b. What approach would you use to interconnect with the internet and other public networks? Keep response to one-half (½) page.

c. How would you perform network management? Keep response to one-half (½) page.

d. Under what scenarios would you require route diversity or other special features in the City-Parish fiber? At what sort of facility (or facilities) would you place network electronics? Keep response to one-half (½) page.

e. Provide a proposed network diagram. Keep response to one (1) page.

6. **Business Structure:** Summarize the business approach you would use for the project. How would your business plan help to meet the City-Parish's goals? What are the key assumptions? What are your main areas of risk, and how can the City-Parish help reduce the risks? What are the City-Parish's main areas of risk, and how will you reduce the risk to the City-Parish? Keep response to three (3) pages. Also complete Appendices A and B to clarify areas of responsibility.

7. **Open Access:** If you currently operate communications facilities, indicate whether they are operated on an open-access basis. Describe whether and, if so, how you would support open access to infrastructure in the City-Parish. Keep response to one (1) page.

8. **Schedule:** Describe your proposed schedule for implementing service. Offer a timeline with key milestones. Would you be able to begin service before the entire network is constructed? Are there areas of the City-Parish you would recommend be constructed first? Keep response to two (2) pages (one for response, one for schedule).

9. **Maintenance:** If you are proposing to perform fiber network maintenance, describe your ability to perform maintenance on an ongoing and as-needed basis. Provide estimates of the operating cost of maintaining the fiber optic outside plant for a citywide fiber network and include your main assumptions. If you are not performing maintenance, who is? Keep response to one (1) page.

10. **Privacy:** Describe your ability to provide secure network service or infrastructure that complies with public safety and other security and privacy regulations and requirements. Keep response to one (1) page.

11. **Financing and Funding:** List any requirements the City-Parish must meet for you to partner with the City-Parish on this project by completing Appendix B – Financial Responsibilities Questions.

Please also provide a one-page flow chart that shows the flow of funds between all parties in your response. Include all sources and uses of funds.

If you do not address this question, it will be assumed that you are interested in the partnership but have no financial requirements whatsoever of the City-Parish.

Appendix B *must* be submitted both in print and electronically in its native Microsoft Word format. Please keep response to the guidelines of the separately attached Appendix, plus the one-page flowchart, referenced above.

12. **Services:** Describe the service options you plan to offer over this network (for example, data only; voice and data; a triple play of voice, data, and cable television; etc.). What download/upload or symmetrical speeds would you offer and guarantee to end users? How will your residential and business offerings differ? What types of service level agreements (for lit services: availability and packet delivery; for dark fiber: repair time) would you be prepared to offer? Keep response to two (2) pages.

13. **Pricing:** Provide your approach to pricing the proposed services. For managed services, please describe factors impacting non-recurring costs (estimated fiber path distances, equipment redundancy, etc.); recurring costs for varying capacity levels; and any key technical assumptions upon which prices are based. For dark fiber offerings, please describe desired pricing models. Keep response to two (2) pages.

14. **Local Participation and Economic Development:** Provide a statement of how your proposed participation would help the City-Parish's economic development goals. Describe your interests and plans to hire local contractors and providers in the City and Parish of Baton Rouge, and how your participation would help local job creation. Describe your relationships with local businesses in the City and Parish, if any, as well as your interest and plans to engage them in this project. Keep response to three (3) pages.

15. **References:** Provide a minimum of three (3) references, including contact information, from previous contracts or partnerships. Keep response to two (2) pages.

Following the response above, please include your completed Appendices A and B in both print and electronic format. When submitting your electronic response, please keep Appendix A in its native Microsoft Excel format and keep Appendix B in its native Microsoft Word format.

XI. Response Process

All correspondence regarding this RFI should be directed to:

City of Baton Rouge/Parish of East Baton Rouge
Attention: Patti J. Wallace, CPPB
Purchasing Division
222 St. Louis Street, 8ᵗʰ Floor, Room 826   or   P.O. Box 1471
Baton Rouge, LA 70801   Baton Rouge, LA 70821

EMAIL: purchasinginfo@brgov.com   **Phone: (225) 389-3259 / Fax: (225) 389-4841**

The City-Parish cannot guarantee that correspondence directed to other City-Parish staff or departments will be received or considered.

*Note: The City-Parish has elected to use LaPAC, the state's online electronic bid posting and notification system that is resident on State Procurement's website https://wwwcfprd.doa.louisiana.gov/osp/lapac/dspBid.cfm?search=department&term=102 and is available for vendor self-enrollment. In that LaPAC provides an immediate e-mail notification to subscribing bidders that a solicitation and any subsequent addenda have been let and posted, notice and receipt thereof is considered formally given as of their respective dates of posting dates.

Letter of Intent

All interested respondents are asked to submit a non-binding letter of intent via email by **June 30, 2017** to **purchasinginfo@brgov.com**.

Questions

Questions related to this RFI should be emailed to **purchasinginfo@brgov.com** no later than **2:00 PM CST on July 7, 2017**.

Response Deadline

Final RFI submissions must be delivered in person or received by mail, as well as submitted via email no later than 2:00 PM CST on August 4, 2017.

Please deliver or mail the final RFI response, including the completed required Appendices in a sealed envelope, to the following address:

City of Baton Rouge/Parish of East Baton Rouge
Attention: Patti J. Wallace, CPPB
Purchasing Division
222 St. Louis Street, 8th Floor, Room 826   or   P.O. Box 1471
Baton Rouge, LA 70801   Baton Rouge, LA 70821

Please also submit final RFI electronic responses, including completed required Appendices in their native format, to **purchasinginfo@brgov.com.**

Late responses will not be considered.

Please identify any proprietary and/or confidential information as such.

Summary of RFI Process Deadlines

The following is the schedule for responding to this RFI. The schedule is subject to change:

June 19, 2017 – Notice of RFI posted by City-Parish and RFI issued

June 30, 2017 – Deadline for submitting non-binding letter of intent to respond to RFI

July 7, 2017 – Deadline for submitting questions

July 21, 2017 – Responses to questions due (from City-Parish)

August 4, 2017 – RFI responses due

The City of Baton Rouge and Parish of East Baton Rouge thank you in advance for your thoughtful response.

XII.   Personal Presentations

At its discretion, the City-Parish may request that vendors and other parties that provide a timely response to this RFI make an individual and personal presentation to better explain information or solutions identified in the response. These presentations, if requested by the City-Parish, shall be held at a time and place of mutual convenience.

Appendix A: Responsibility Matrix

Appendix A is included as a separate file.

Note that Appendix A *must* be submitted in its native Microsoft Excel format. Failure to follow submission instructions may result in rejection of the response.

Appendix B: Financial Responsibilities Questions

Appendix B is included as a separate file.

Note that Appendix B *must* be submitted in its Microsoft Word format. Failure to follow submission instructions may result in rejection of the response.

Appendix C: Response Form Outline

Appendix C is included as a separate file.

All responses should follow the instructions and outline in Section X (pages 18-20) and Appendix C. If any discrepancy exists, instructions in Section X (pages 18-20) should supersede all other directions.

Note that Appendix C *must* be submitted in its Microsoft Word format. Failure to follow submission instructions may result in rejection of the response.

Appendix D: Case Study: Westminster, Maryland

The city of Westminster, Maryland, is a bedroom community of both Baltimore and Washington, D.C., where 60 percent of the working population leaves in the morning to work elsewhere.[27] The area has no major highways and thus, from an economic development perspective, has limited options for creating new jobs. Incumbents have also traditionally underserved the area with broadband.

The city began an initiative 12 years ago to bring better fiber connectivity to community anchor institutions through a middle-mile fiber network. In 2010, the State of Maryland received a large award from the federal government to deploy a regional fiber network called the Inter-County Broadband Network (ICBN) that included infrastructure in Westminster.[28]

Westminster saw an opportunity to expand the last mile of the network to serve residents. At the time, though, it did not have any clear paths to accomplish this goal. City leaders looked

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[27] Case study is based in part on a presentation by Dr. Robert Wack, President, Westminster (Maryland) City Council, during a webinar hosted by the Fiber to the Home Council and facilitated by CTC Technology & Energy. *See*: http://goo.gl/x82Ro7 (password required). See also: Robert Wack, "The Westminster P3 Model," *Broadband Communities Magazine* (Nov./Dec. 2015), http://goo.gl/op1XpH.

[28] "The Project," Inter-County Broadband Network, http://icbn-md.com/

around at other communities and quickly realized that they were going to have to do something unique. Unlike FTTP success stories such as Chattanooga, Tennessee, they did not have a municipal electric utility to tackle the challenge. They also did not have the resources, expertise, or political will to develop from scratch a municipal fiber service provider to compete with the incumbents. As a result, they needed to find a hybrid model.

As the community evaluated its options, it became clear that the fiber infrastructure itself was the city's most significant asset. All local governments spend money on durable assets with long lifespans, such as roads, water and sewer lines, and other infrastructure that is used for the public good. The leaders asked, "Why not think of fiber in the same way?" The challenge then was to determine what part of the network implementation and operations the private sector partner would handle and what part could be the city's responsibility.

The hybrid model that made the most sense required the city to build, own, and maintain dark fiber, and to look to partners that would light the fiber, deliver service, and handle the customer relationships with residents and businesses. The model would keep the city out of network operations, where a considerable amount of the risk lies in terms of managing technological and customer service aspects of the network.

The city solicited responses from potential private partners through a request for proposals (RFP). Its goal was to determine which potential partners were both interested in the project and shared the city's vision.

The city eventually selected Ting Internet, then an upstart ISP with a strong track record of customer service as a mobile operator. Ting shared Westminster's vision of a true public–private partnership and of maintaining an open access network. Ting has committed that within two years it will open its operations up to competitors and make available wholesale services that other ISPs can then resell to consumers.

Under the terms of the partnership, the city is building and financing all of the fiber (including drops to customers' premises) through a bond offering. Ting is leasing fiber with a two-tiered lease payment. One monthly fee is based on the number of premises the fiber passes; the second fee is based on the number of subscribers Ting enrolls.

Based on very preliminary information, given that this is a market in development as we write, we believe this is a highly replicable model.

What is so innovative about the Westminster model is how the risk profile is shared between the city and Ting. The city will bond and take on the risk around the OSP infrastructure, but the payment mechanism negotiated is such that Ting is truly invested in the network's success.

Because Ting will pay Westminster a small monthly fee for every home and business passed, Ting is financially obligated to the city from day one, even if it has no customers. This structure gives the city confidence that Ting will not be a passive partner, because Ting is highly incented to sell services to cover its costs.

Ting will also pay the city based on how many customers it serves. Initially, this payment will be a flat fee—but in later years, when Ting's revenue hits certain thresholds, Ting will pay the city a small fraction of its revenue per user. That mechanism is designed to allow the city to share in some of the upside of the network's success. In other words, the city will receive a bit of entrepreneurial reward based on the entrepreneurial risk the city is taking.

Perhaps most significantly, there is also a mechanism built into the contract that ensures that the two parties are truly sharing risk around the financing of the OSP infrastructure. In any quarter in which Ting's financial obligations to the city are insufficient to meet the city's debt service, Ting will pay the city 50 percent of the shortfall. In subsequent quarters, if Ting's fees to the city exceed the debt service requirements, Ting will be reimbursed an equivalent amount. This element of the financial relationship made the deal much more attractive to the city because it is a clear demonstration of the fact that its private partner is invested with it.