



Conor Baldwin
Chief Financial Officer

MEMORANDUM

TO: Eileen Donoghue, City Manager

FROM: Conor Baldwin, Chief Financial Officer 

CC: Miran Fernandez, Chief Information Officer

DATE: March 20, 2019

SUBJECT: MOTION RESPONSE: 1/29/2019 - C. Cirillo – Req. City Mgr. have proper department provide the City Council a plan to design and build Lowell's own municipal broadband network to provide our residents fast and affordable internet service.

On numerous occasions, it has been suggested that the city establish its own municipal broadband network to provide residents fast and affordable internet service. Internet access affects and facilitates nearly every aspect of modern life today and it is therefore important to understand how the city arrived at its current level of Internet Service Provider (“ISP”) offerings, and what—if any—alternatives are available.

The original video cable service infrastructure within the City of Lowell was established by Continental Cablevision (a Boston-based organization with a large infrastructure footprint throughout New England) servicing approximately fifty percent (50%) of the city. In 1996, Continental Cablevision was acquired by Media One, which expanded its coverage to sixty percent (60%) of the city along with expanding its offerings to include a heavy focus on cable modems as an ISP, as there were no broadband services within the city at the time. In 2000, AT&T Broadband acquired Media One—further expanding its coverage to seventy five percent (75%) of the city. During 2002, Comcast acquired AT&T Broadband, and has since expanded its coverage to one hundred percent (100%) of the city. Unlike many municipalities in the Commonwealth, the City of Lowell is fortunate to have had a committed partner in Comcast which covers the entire city, is constantly increasing internet speeds, invests millions in maintenance and upgrades annually, and provides around-the-clock customer service. However, many residents regularly submit complaints to the city regarding the cost and lack of competition that is inherent in a service provider model with only one company. At the request of the City Council, the Administration has developed a plan to potentially offer Lowell residents with an opportunity for competition which could result in more affordable internet access to the residents and businesses.

Several of our surrounding communities have multiple ISPs to choose from, but every request from the city to other ISP vendors to consider the delivery of ISP services within the city has been rejected. Most commonly the reason given in response to the request is that the start-up capital costs necessary construct a new broadband network far outweighs the company's return



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on investment requirements (“ROI”) – a critical factor to financing such a large endeavor. The city has always welcomed competition, and has diligently continued its efforts to meet the City Council’s requests to expand the ISP options within the city. Unfortunately, until now a suitable investor had yet to be found. One option that has been contemplated in the past is to have the city establish its own ISP option. Establishing a municipally-owned and operated ISP represents a significant initial capital outlay in the millions and ongoing operational and maintenance costs which are unique from municipality to municipality. This has often rendered previous attempts as cost prohibitive. A common thread among the few success stories is that those municipalities have an existing Municipal Light and Power (“MLP”) enterprise/utility. The cost benefit of this is that the municipality already owns their own telephone poles, has their own fleet of trucks, and likely already has existing staff (including installers, and customer service) prior to reorganizing their own operations and services to become an ISP. A municipally owned broadband service must also have a marketing component to capture and retain subscribers, set service price points, and successfully compete against the established ISP. The City of Lowell does not currently have any of these resources. Depending on the ISP services offered and the coverage area targeted, the startup costs for the city to establish its own municipally-owned and operated ISP are estimated to cost in excess of \$200 million, plus annual yearly maintenance and technology refresh/replacement costs. Some broadband grant opportunities are available within the Commonwealth, but most of those opportunities are specifically geared towards communities that don’t have any broadband services. They would not be available to Lowell, which has an existing broadband network that is 100% built-out.

This doesn’t mean other options to expand ISP services within the city are not available. The city has issued a formal request for proposal (“RFP”) seeking proposals from qualified vendors to build and operate a community-wide high speed and well-designed fiber-to-the-premises (“FTTP”) network over an open access fiber network for residents, business, government, and community anchor institutions located within the—all at no cost to the taxpayers. While there were several vendors who expressed interest in the opportunity, only one vendor submitted a formal response. The city’s Finance Department—including MIS and the economic development division of DPD scored the proposal in accordance with the comparative criteria laid forth in the RFP and unanimously agreed that the respondent could meet the desired outcome. SiFi Networks America (“SiFi”), in collaboration with their selected partners, proposed to privately “fund, design, build, operate and maintain a symmetrical Gigabit speed fiber to the Premise (“FTTx”) and Smart City fiber optic infrastructure through the city. SiFi has also proposed the installation of fiber that passes every premise and street fixture, connecting any location with fiber where the owner of such location requests service. The network will enable multiple ISPs to provide competitive services to every premise within the city, help further bridge the digital divide, drive competition, and retain and attract new economic opportunities to the city’s businesses. All of these opportunities would come at no cost to the taxpayers and would be funded entirely through private investment.



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A key and strategically compelling reason for this unique opportunity is the City Council's commitment to bringing the Markley Group's data center to the old Prince Spaghetti location. The City Council's progressive foresight to establish a high availability, high speed, top tier data center to the city, will provide SiFi with connectivity options unique to our area. These factors together will allow SiFi to bring new competition to the entire city, both from an increase in ISPs and product and price offerings. Recognizing the historical nature of the city and the geographical make-up of the city, SiFi is committed to working closely with DPW to utilize the least invasive construction techniques currently available – known as “micro-trenching”. By passing every premise and street fixture, SiFi's proposed fiber network creates a ubiquitous footprint which easily rivals that of Google Fiber and Verizon FiOS communities.

In order to move forward with this exciting opportunity, the Administration will need the City Council to authorize the City Manager to enter into an agreement with SiFi. This company has been successful in several parts of the country, and most recently has been granted an agreement in Salem, Massachusetts. The finance department and DPD have reached out to the Mayor's Office in Salem and received overwhelmingly positive remarks from those involved with the process. SiFi has also offered to give a presentation to the City Council, or to a meeting of the City Council's Technology & Utilities Subcommittee to further detail their proposal and to demonstrate their abilities. If the City Council is so inclined, a motion could be made for the Law Department to prepare the proper vote and, once ready, a presentation could be made to the Technology & Utilities Subcommittee prior to a vote by the full body.

Please let me know if there are any questions.