MUNICIPAL BROADBAND IN KANSAS: THE FIGHT FOR COMMUNITY MANIFEST DESTINY

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I. INTRODUCTION

Our country has gone through numerous infrastructure battles since its inception. Traditional infrastructure, such as roads, waterways, and ports, have long been considered the providence of the government rather than the fruit of private industry.[1] For modern innovations, however, society has begun to rely on private companies to build necessary infrastructure.[2] Technologies like home electricity and the telephone were born and built from private investment, but both became necessary for public growth. Thus these technologies required government intervention acting for public interest to avoid destructive monopolies or natural anti-competitive forces. This infrastructure intervention, while at times sloppy or poorly executed, helped facilitate nearly a century and a half of explosive growth from the 19th century to today.

We are now faced with the same battle surrounding the advancement of broadband, and specifically gigabit, Internet service.[3] Private Internet infrastructure investment has stalled, resulting in monopolistic tendencies, anti-consumer practices, and slowed economic growth.[4] Municipal governments are uniquely positioned to take control over their futures and develop necessary Internet infrastructure.[5] However, over twenty states have taken steps to make such participation illegal or legally difficult.[6] In Kansas, the state legislature

1. Michael Hiltzik, *When Public Infrastructure Goes Private*, L.A. TIMES (Apr. 12, 2013), http://articles.latimes.com/2013/apr/12/business/la-fi-hiltzik-20130412.

2. *See id.*

3. *Id.*

4. John Aziz, *Why is American Internet So Slow?*, THE WEEK (Mar. 5, 2014), http://theweek.com/article/index/257404/why-is-american-internet-so-slow.

5. *See* EXEC. OFFICE OF THE PRESIDENT, COMMUNITY-BASED BROADBAND SOLUTIONS: THE BENEFITS OF COMPETITION AND CHOICE FOR COMMUNITY DEVELOPMENT AND HIGHSPEED INTERNET ACCESS (Jan. 2015), *available at* https://www.whitehouse.gov/sites/default/files/docs/community-based_broadband_report_by_executive_office_of_the_president.pdf.

6. Jason Koebler, *32 Cities Want to Challenge Big Telecom, Build Their Own Gigabit*

recently considered following the herd, proposing legislation to prevent municipal participation in the broadband market.[7] Future, similar legislative actions must be resisted to allow municipal governments autonomy over their economic future through infrastructure development.

Part II of this paper discusses the impact of gigabit infrastructure, the stagnant status quo, and provides a brief explanation of the proposed municipal broadband prohibition that was before the Kansas Senate. Part III offers three successful examples of municipal participation in the broadband market, highlighting the positive experiences of these municipalities when they made the move to gigabit Internet service. This part also presents examples of municipal broadband pitfalls from unsuccessful attempts at network creation. Finally, Part IV examines two municipalities in Kansas that are developing or growing their participation in the broadband market. Part IV also warns of the negative impacts associated with enacting the proposed legislation described in Part I.

II.   A PROBLEMATIC AND ANTI-COMPETITIVE STATUS QUO

A.   *The Importance of Being the Fastest*

Gigabit Internet infrastructure is the next milestone advancement for economic development in the United States.[8] The phrase "Gigabit Internet" refers to an Internet connection that can achieve transfer speeds of 1 billion bits per second. This means the computer is able to communicate 1 billion different messages to other computers every second. By comparison, most in the U.S. have access to Internet service at speeds of 100 million bits per second[9]; however, most Americans access the Internet at much slower speeds.[10] Gigabit offers the ability to communicate eighty-four times faster than a typical connection.[11] Yet, most people have no clear understanding of the impact of a gigabit network in their daily lives.[12] For many, the Internet, now in its 25th

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Networks, VICE (Oct. 20, 2014), http://motherboard.vice.com/read/32-cities-want-to-challenge-big-telecom-build-their-own-gigabit-networks.

7. Dion Lefler, *Proposed Bill to Outlaw Community Broadband Service in Kansas Met With Opposition*, WICHITA EAGLE (Feb. 01, 2014), http://www.kansas.com/news/politics-government /article1133255.html.

8. *See* Julius Genachowski, *Faster, Sooner: Why the U.S. Needs 'Gigabit Communities'*, FORBES (Jan. 18, 2013), http://www.forbes.com/sites/ciocentral/2013/01/18/faster-sooner-why-the-u-s-needs-gigabit-communities/ (Mr. Genachowski was the chairman of the FCC at the time of this article's publication).

9. Adrian Diaconescu, *Most Americans Have Access to 100Mbps Internet, but from Just One Source*, DIGITAL TRENDS (Dec. 18, 2014), http://www.digitaltrends.com/computing/100mbps-internet-widely-available-in-us-isp-choice-limited/.

10. Jon Gold, *U.S. Internet Connection Speeds Still Lag Behind Other Developed Nations*, NETWORK WORLD (Aug. 6, 2015), http://www.networkworld.com/article/2959544/lan-wan/u-s-internet-connection-speeds-still-lag-behind-other-developed-nations.html (reporting the average U.S. speed is 11.9Mbps or ~1/90th of Gigabit speeds).

11. This calculation is based on an average connection speed of 11.9Mbps compared to a Gigabit speed of 1000Mbps.

12. Carol Wilson, *Consumers are Gigabit Ignorant*, LIGHT READING (Oct. 6, 2014),

year of life, is seen as an essential tool and a powerful force for social good.[13] The average consumer sees the Internet as a tool for checking status updates, occasional online shopping, and maybe watching a movie or funny cat video.[14] The question is, while gigabit would make many of these activities marginally faster, are these seemingly small consumer level improvements really important?

To better illustrate the impact of gigabit Internet, think of the average commute to work for a person living in a busy city. It can take an hour or more driving on an old, over-crowded highway that is constantly under repair. This is how our modern Internet service works. The American Internet network, once fast, is surpassed by better network designs and infrastructure. Now consider if this fictional driver could get to work eighty-four times faster. Instead of an hour-long commute, it takes just forty-three seconds. This worker has more time available for productivity at work and leisure at home. If he can do his work eighty-four times faster, eight hours of productivity takes less than six minutes. The company can get more done as employees are able to work faster, which means more profit for the company and a stronger economy. With a more efficient workforce, the company's five-year project now takes just twenty-two days, allowing the company to innovate in ways it never considered. The entire world leaps forward with new technology, the economy grows with new business, and the employee is able to spend more time where it matters. All of this is possible because they were able to work faster. This is the power of gigabit.

While there may only be small improvements for how the consumer uses the current Internet, the impacts on the national economy will be profound.[15] We will be able to develop new and innovative approaches to network connectivity, which are currently an impossibility with today's infrastructure.[16] Although it is unlikely we will have perfect increases in efficiency, like in the above illustration, gigabit allows us to do everything faster and have the ability to do so much more.

B. Inadequate or Incomplete Service for Kansas Internet Subscribers

America has fallen behind in private development of Internet infrastructure.[17] According to a top Internet speed-test company, America recently ranked 16th in the world for average download speeds.[18] American

http://www.lightreading.com/broadband/gigabit-cities/consumers-are-gig-ignorant-andndash-study/d/d-id/711257.

13. Susannah Fox & Lee Raine, *The Web at 25 in the U.S.*, PEW RESEARCH CENTER (Feb. 27, 2014), http://www.pewinternet.org/2014/02/27/the-web-at-25-in-the-u-s/.

14. *See Most Popular Internet Activities*, INFOPLEASE (July 22, 2008), http://www.infoplease.com/ipa/A0921862.html (citing to Pew Internet & American Life Project tracking surveys).

15. *See* Genachowski, *supra* note 9.

16. *See id.*

17. See Aziz, *supra* note 4.

18. *See* AKAMAI, STATE OF THE INTERNET: Q2 2015 REPORT 51 (2015), *available at* https://www.stateoftheinternet.com/resources-connectivity-2015-q2-state-of-the-internet-

Internet infrastructure is so bad that we are falling behind nations such as Romania[19], the Czech Republic[20], and at one point Estonia.[21] This is largely due to the naturally forming macro-monopolies made possible by the Telecommunications Act of 1996 ("The Act").[22] The Act was intended to "let any communications business compete in any market against any other."[23] Instead of fostering competition, it allowed the large, corporate Internet Service Providers (ISPs) to "divide up markets and put themselves in a position where they are subject to no competition."[24] Many markets tend to only have one or two service providers.[25] They are able to set their prices through monopoly or duopoly practices.[26] This leads to price explosions, without the need to improve the service quality or invest in infrastructure development.[27] In some dense East Asian populations, residents are able to receive gigabit Internet access for around $35 a month.[28] By comparison, the average speed for an American connection is 1/100th of the low cost speeds in Asia at 9.8 Megabits per second (Mbps).[29] Further, if you were to spend approximately $50 per month on Internet access, in much of the country you still only get speeds between 25 Mbps to 45 Mbps (around 1/25th of the lower cost speeds in Asia).[30] Poor quality and under-competitive Internet service is hindering the American economy, and it poses a significant threat to our ability to compete in global markets.[31]

In Kansas, this issue has manifested in both large municipalities and small townships. Municipalities like Kansas City faced aging Internet infrastructure and large, underserved populations. The network left many without cost-efficient means of Internet access and forced residents to use expensive, poor-

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report.html.

19. *Id.*

20. *Id.*

21. Aziz, *supra* note 4.

22. *Id.*

23. Telecommunications Act of 1996, FCC.GOV (May 31, 2011), http://transition.fcc.gov /telecom.html.

24. Aziz, *supra* note 4.

25. Clair Cain Miller, *Why the U.S. Has Fallen Behind in Internet Speed and Affordability*, N.Y. TIMES (Oct. 30, 2014), http://www.nytimes.com/2014/10/31/upshot/why-the-us-has-fallen-behind-in-internet-speed-and-affordability.html?abt=0002&abg=1.

26. *Id.*

27. Derek Mead, *Why Internet Access in the U.S. is Slow and Expensive: There's No Competition*, VICE (Feb. 11, 2013), http://motherboard.vice.com/blog/why-internet-access-in-the-us-is-a-ripoff.

28. James O'Toole, *Americans Pay More For Slower Internet*, CNN (Oct. 31, 2014), http://money.cnn.com/2014/10/31/technology/internet-speeds/index.html?hpt=hp_t2.

29. *Id.*

30. NICK RUSSO ET AL., THE COST OF CONNECTIVITY 2014, at 18 (2014) (San Francisco is an outlier, offering a 60Mbps connection for $50. This likely can be explained by the high concentration of technology companies in and around the city), *available at* http://www.newamerica.org/downloads/OTI_The_Cost_of_Connectivity_2014.pdf.

31. David Sobotta, *Why is Internet Still So Slow and Expensive in the U.S.?*, READWRITE (July 22, 2014), http://readwrite.com/2014/07/22/internet-slow-expensive-us.

quality options.[32] Many smaller towns are severely underserved.[33] Slow Internet speeds affect the Kansas economy and social environment in a number of ways—improved health care outcomes, better telecommuting opportunities for employers and employees, a shrinking economic divide between affluent citizens and underprivileged citizens, and increased civic participation and public safety.[34] Municipalities are in a prime position to address some of these issues caused in part by slow Internet speeds.[35]

C.   SB 304: The Municipal Communications Network and Private Telecommunications Investment Safeguards Act

On January 27, 2014, SB 304, the "Municipal Communications Network and Private Telecommunications Investment Safeguards Act", was introduced in the Kansas State Senate by the Senate Committee on Commerce.[36] The Kansas Cable Telecommunications Association (KCTA), a lobbyist organization for the cable TV industry, wrote the bill.[37] The bill prevented municipalities from "offer[ing] or provid[ing] to one or more subscribers, video, telecommunications or broadband service."[38] KCTA believed it was unfair to force private industry to compete with companies favored by public benefits or government-operated providers.[39] Some believed, however, this bill was in retaliation to existing participation in the ISP market by a few Kansas municipalities.[40] Two distinct approaches to municipal Internet have been implicated in Kansas: Chanute's public utility approach and Kansas City, Kansas's (KCK) public investment with Google Fiber.[41] SB 304 was eventually defeated after an aggressive campaign against the bill by various members of the public, including a small ISP owner.[42] It is unclear whether KCTA plans to reintroduce this legislation in a future legislative session.

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32. *See* Sylvia Maria Gross, *Why Did Google Choose KCK?*, KCUR (Apr. 4, 2011), http://kcur.org/post/why-did-google-choose-kck.

33. Bobby Burch, *'Draconian' Kansas Bill would Ban Accords like KCK-Google Fiber*, KANSAS CITY BUSINESS JOURNAL (Jan. 31, 2014), http://www.bizjournals.com/kansascity/news/2014/01/31/kansas-bill-broadband-fiber-google-ban.html.

34. *See Benefits*, SPEEDMATTERS.COM, http://www.speedmatters.org/benefits/ (last visited Oct. 10, 2014).

35. See The Need for Speed; Municipal Broadband, ECONOMIST, Aug. 11, 2012, available at http://www.economist.com/node/21560288.

36. *SB 304*, KANSAS STATE LEGISLATURE, http://www.kslegislature.org/li/b2013_14/measures/sb304/ (last visited Oct. 09, 2015).

37. Matt Stewart, *Cable Bill Proposal in Kansas Causes Controversy in Kansas City*, FOX 4 KC (Feb. 17, 2014), http://fox4kc.com/2014/02/17/cable-bill-proposal-in-kansas-causes-controversy-in-kansas-city/.

38. S.B. 305, 2014 Leg. Sess. (Kan. 2014), *available at* http://www.kslegislature.org/li_2014/b2013_14/measures/documents/sb304_00_0000.pdf.

39. Stewart, *supra* note 37.

40. Lefler, *supra* note 7.

41. *Id.*

42. See Jon Brodkin, *"It's Dead": Kansas Municipal Internet Ban was "Stabbed, Shot, and Hanged"*, ARS TECHNICA (Feb. 20, 2014, 11:00 AM), http://arstechnica.com/business/2014/02/its-dead-kansas-municipal-internet-ban-was-stabbed-shot-and-hanged.

III.   DEMONSTRABLE SUCCESS FROM MUNICIPAL PARTICIPATION IN THE ISP MARKET

To highlight the significance of municipal participation in the ISP market, three successful gigabit services and two failed attempts at municipal service will be discussed. These services were each created in markedly different situations, and each service demonstrates a different method of providing gigabit service. These particular markets, while not the only municipal Internet markets, were selected to represent a range of communities in size and situation. For the successful cities, Chattanooga is a medium-sized city with a population of around 170,000 citizens.[43] The city experienced rapid change after the national economy shifted away from its traditional sectors.[44] Second, the Kansas City area represents a large metropolitan area. The city has a large customer base and aging infrastructure, which makes it an ideal representation of many American cities and their respective surrounding communities. Finally, Bristol, Virginia is a smaller, mining community, which has taken control of its destiny through municipal Internet, finding business growth through infrastructure development. These examples demonstrate two important factors: municipalities can successfully participate in the ISP market, and municipal participation does not destroy innovation or competition. In recognition of the difficult realities municipalities face when creating broadband networks, the successful cities are contrasted with two failed attempts in Philadelphia, Pennsylvania and St. Cloud, Florida.

A.   Chattanooga Gig (Chattanooga, Tennessee)

Chattanooga Gig is one of the most successful municipal Internet ventures in America.[45] At the time of its announcement, Chattanooga Gig was the only gigabit broadband provider of both residential and corporate services.[46] Chattanooga partnered with Alcatel-Lucent to construct a gigabit network for all citizens in the city through the publically owned electric utility company.[47] The construction of the network ("build-out") cost the city $330 million, with only $111.5 million coming from federal sources.[48] Despite this high build-out cost,

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43. *Chattanooga (city), Tennessee QuickFacts*, UNITED STATES CENSUS BUREAU (last updated Aug. 6, 2015), http://quickfacts.census.gov/qfd/states/47/4714000.html.

44. Robin Micheli, *Rebooting Chattanooga's Fortunes*, CNBC (Nov. 18, 2013, 8:15 AM), http://www.cnbc.com/id/101144128.

45. *Id.*; *see also* Dominic Rushe, *Chattanooga's Gig: How One City's Super-Fast Internet is Driving a Tech Boom*, THE GUARDIAN (Aug. 30, 2014), http://www.theguardian.com/world/2014/aug/30/chattanooga-gig-high-speed-internet-tech-boom.

46. *Municipal Broadband: The Need for Speed*, ECONOMIST (Aug. 11, 2012), *available at* http://www.economist.com/node/21560288.

47. *EPB Fiber Optics in Chattanooga Deploys Alcatel-Lucent's 1 Gigabit Broadband Service*, HEALTH & BEAUTY CLOSE – UP (Sept. 22, 2010), *available at* http://www.highbeam.com/doc/1G1-238303111.html.

48. Brian Fung, *How Chattanooga Beat Google Fiber by Half a Decade*, WASH. POST (Sept. 17, 2013), http://www.washingtonpost.com/blogs/the-switch/wp/2013/09/17/how-chattanooga-beat-google-fiber-by-half-a-decade/.

the city is able to provide gigabit Internet speeds for only $70 per month per connection.[49] As a point of comparison, in the Kansas City area, high-speed residential Internet service costs about the same from a major ISP. But the Kansas City service operates at a third of the speed of the Chattanooga service.[50] To better illustrate this point, imagine you wanted to download a high-definition movie. In Chattanooga, the movie would finish downloading before you could reach the end of this paragraph.[51] In Kansas City, you could reach the end of the next page and you would still be waiting to watch your movie.

Chattanooga Gig began as a solution to a growing problem. The power company, Electric Power Board (EPB), wanted a more efficient way to monitor and manage its power grid.[52] Simultaneously, the city acknowledged the painful reality that private-sector companies had no immediate plans to invest in broadband development for Chattanooga.[53] The city decided on the obvious solution: morph the power company, which is already connected to citizens' homes, into a public ISP.[54]

For its efforts, Chattanooga faced significant regulatory and legislative resistance.[55] A week before the Chattanooga city council vote on Chattanooga Gig, the Tennessee Cable Telecommunications Association (TCTA), a cable trade group and lobby, took legal action to block the attempted implementation.[56] Soon after, Comcast, a major national ISP, joined the fight, and used the legal system to stall and disrupt the project.[57] Despite the lawsuits, the utility continued developing plans for the service and decided on plans that would cost approximately $200 million. Comcast and TCTA thereafter began a media blitz, attempting to create negative public sentiment for the plan, likely as a backup plan in case the lawsuits failed to bear fruit.[58]

The media strategy failed, however, generating only 38 calls to the city, with roughly half being in support of the gigabit plan.[59] Furthermore, the lawsuits failed, with one judge saying, "[i]t would be inconsequential for this

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49. *Id.*

50. *High Speed Internet Plans and Packages*, TIME WARNER CABLE, http://www.timewarnercable.com/en/internet/internet-service-plans.html (basing this analysis on speeds available in Overland Park, Kansas 66204) (last accessed Sept. 17, 2015).

51. See *How Fast is Fiber Optic Internet*, FASTMETRICS.COM, https://www.fastmetrics.com /how-fast-is-fiber-optic-internet.php (last visited Feb. 12, 2015), for examples of speeds on fiber optic networks. A high-definition, two-hour movie on gigabit Internet, like the Chattanooga service, takes approximately 25 seconds to download. The same movie takes approximately 4.5 minutes to download on 100 megabit service, similar to the comparably priced service in Kansas City.

52. CHRISTOPHER MITCHELL, BROADBAND AT THE SPEED OF LIGHT 32 (Apr. 2012), *available at* http://ilsr.org/wp-content/uploads/2012/04/muni-bb-speed-light.pdf.

53. *Id.*

54. *Id.* at 33.

55. *Id.* at 36.

56. *Id.*

57. Mitchell, *supra* note 52, at 36.

58. *Id.* at 38.

59. *Id.*

court to order EPB to follow the law. EPB is already under a duty to follow the law."[60] In a last ditch effort, Comcast prioritized the Chattanooga market over Atlanta for the launch of a new cable service.[61] Comcast even suggested the company could sufficiently meet all of Chattanooga's telecommunication needs, but the city and its citizens respectfully disagreed.[62]

The service launched in September 2009 with an initial offering of service to only 17,000 households. Availability grew quickly and by the middle of 2010, a majority of the households in Chattanooga could connect to the service.[63] The customer base, however, grew slowly, reaching its 35,000 household target in February 2012, nearly three years after the service launched.[64] Internet rates initially were far more expensive than local competitors, even for the cheapest product.[65] However, the quality of the cheapest product far outpaced the best quality product of competitors.[66] Now, the price has substantially fallen, making the service cost-competitive, even though the Chattanooga Gig products are superior.[67]

The impact of a gigabit offering for the city has been substantial. EPB was able to cut costs of operating an electric utility due to more accurate monitoring of the electric grid, saving upwards of $1 million in a single year in overtime costs.[68] The city is taking advantage of the faster Internet in operations, advancing new and sometimes innovative services and projects.[69] Chattanooga is establishing a Wi-Fi network using EPB's gigabit network as a backend and they are beginning a new lighting project with LED smart bulbs, which will tap into EPB's network.[70] EPB estimates the gigabit investments will generate $300 million in economic activity over 10 years simply from the new smart grid capabilities.[71]

Chattanooga is seeing a technological renaissance. The city has picked up "Gig City" as a nickname, and it is drawing in new business.[72] The EPB service has attracted $4 billion in foreign investment in the city, and the city has made a complete come-back from rock-bottom in 1969 when it was labeled, "the dirtiest city in America."[73] While Chattanooga suffered greatly during the Great Recession, and still has not fully recovered, the outlook in the city is rapidly

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60. *Id.* at 37.

61. *Id.*

62. Mitchell, *supra* note 52 at 38.

63. *Id.*

64. *Id.* At 39.

65. *Id.*

66. Mitchell, *supra* note 52 at 39.

67. *Id.*

68. Fung, *supra* note 46.

69. Mitchell, *supra* note 50 at 40.

70. *Id.*

71. *Id.* at 44.

72. Edward Wyatt, *Fast Internet is Chattanooga's New Locomotive,* N. Y. TIMES (Feb. 3, 2014), http://www.nytimes.com/2014/02/04/technology/fast-internet-service-speeds-business-development-in-chattanooga.html?_r=0.

73. Micheli, *supra* note 44.

improving, and it is now in the top third of large cities for growth pace.[74] The "Gig" is helping to make Chattanooga a lucrative location for employers and employees.

B. Google Fiber (Kansas City Greater Metropolitan Area)

Kansas City's fiber network is an alternative approach to the Chattanooga story, and one with less clear results. Google began Google Fiber as an experiment, hypothesizing Internet service could be improved if the major ISPs were challenged in the open market.[75] Google recognized that the ISP market had stagnated. The company believed it was in a position to motivate some competition in the ISP market while improving Internet access and lowering cost. It hoped such activity would lead to greater usage of Google products such as YouTube and GMail.[76] Google did not begin Google Fiber, ironically, to become an ISP.[77]

Google began the Fiber program around 2006 by purchasing large amounts of "dark fiber," unused fiber-optic cable left from incomplete infrastructure projects started during the dot-com bubble.[78] Google's purpose for this fiber was the source of much speculation and in February 2010, Google announced it was getting into the ISP market.[79] One year later, Kansas City was announced as the home for Google Fiber.[80] Kansas City was chosen because of the substantial existing infrastructure and the willingness of local government to address Google's needs during the build-out.[81] Kansas City offered "on-the-spot" exceptions to regulations, should Google require them, to facilitate a faster build-out.[82] Additionally, Google had a desire to impact the community through economic development, and by governmental and organizational relationship

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74. *Id.*

75. *Think Big With A Gig: Our Experimental Fiber Network*, GOOGLE (Feb. 10, 2010), http://googleblog.blogspot.com/2010/02/think-big-with-gig-our-experimental.html.

76. Marguerite Reardon, *Google Exec Sees Google Fiber as a "Moneymaker"*, CNET (May 30, 2013, 11:39 AM), http://www.cnet.com/news/google-exec-sees-google-fiber-as-a-moneymaker/.

77. Stacey Higginbotham, *Google Doesn't Want to be an ISP — It Wants to be a Rabble-rouser*, GIGAOM (Feb. 10, 2010), https://gigaom.com/2010/02/10/google-doesnt-want-to-be-an-isp-it-wants-to-be-a-rabble-rouser/.

78. Sam Gustin, *Google Fiber Issues Public Challenge: Get Up To Speed!*, TIME (Sept. 14, 2012), http://business.time.com/2012/09/14/with-google-fiber-search-giant-issues-public-challenge-get-up-to-speed/.

79. *Id.*

80. Matt Peckham, *Google Taps Kansas City for Crazy-Speed Internet*, TIME (Mar. 30, 2011), http://techland.time.com/2011/03/30/google-taps-kansas-city-for-crazy-speed-internet/.

81. Elise Ackerman, *How Kansas Won the Google Fiber Jackpot and Why California Never Will*, FORBES (Aug. 8, 2012), http://www.forbes.com/sites/eliseackerman/2012/08/04/how-kansas-won-the-google-fiber-jackpot-and-why-california-never-will/.

82. Nancy Scola, *Gig City, U.S.A.: Bringing Google Fiber to Kansas City*, NAT'L LEAGUE OF CITIES, http://www.nlc.org/find-city-solutions/city-solutions-and-applied-research/infrastructure/gig-city-usa-bringing-google-fiber-to-kansas-city (last visited Sept. 17, 2015).

development.[83] Kansas City hoped to improve its power grid by creating a "smart grid" similar to that of Chattanooga.[84]

Google faced some early difficulties dealing with the various bodies of KCK's Unified Government (UG) and Board of Public Utilities (BPU).[85] In the original agreement between Google and the UG, the UG allowed Google to place its fiber-optic lines on the utility poles near existing power lines.[86] This angered local competitors, as there are no fees associated with placing cable near the power lines.[87] This appeared to be favoritism,[88] and the competitors demanded similar treatment.[89] However, there were delays associated with this arrangement as the BPU had to override safety regulations, which is within its power, to allow Google to proceed in hanging its lines in the fee-free space.[90] Similar delays were faced in Kansas City, Missouri (KCMO), though nothing was officially announced.[91]

Google also faced some difficulty in negotiating with each of the smaller cities in the metro area, specifically Overland Park.[92] Overland Park delayed acceptance of Google's standard agreement over concerns about the language in the agreement.[93] While Overland Park eventually resolved its concerns, Google walked away from the city, and did not return with a new offer for nearly a year.[94] The city of Leawood (also within the Kansas City metropolitan area) also lost favor with Google Fiber.[95] Google has not directly stated why they pulled out of negotiations with Leawood, but the company claimed network build-out in the city would take longer and cost more than initially anticipated.[96] In response, AT&T, a national ISP, announced plans to build-out a gigabit network to service the Leawood community.[97] This rapid escalation of competition is

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83. Ackerman, *supra* note 81.

84. GOOGLE, GOOGLE FIBER DEVELOPMENT AGREEMENT app. 3/30/11 Executive Summary at 2 (Mar. 30, 2011), *available at* http://www.tellusventure.com/downloads/bank/google_fiber_project_development_agreement_2014.pdf.

85. Ackerman, *supra* note 81.

86. GOOGLE, *supra* note 84, at 1–2.

87. Elyse Betters, *Google Fiber Delayed in KCK Over Wire Dispute, Cable Competitors Say BPU Favors Google*, 9TO5GOOGLE (Jan. 20, 2012), http://9to5google.com/2012/01/20/google-fiber-delayed-in-kck-over-wire-dispute-cable-competitors-say-bpu-favors-google.

88. *Id.*

89. Shalini Ramachandran, *Web Rivals Want What Google Got*, WALL STREET J. (Oct 2, 2012), http://www.wsj.com/articles/SB10000872396390443862604578030671101065746.

90. Betters, *supra* note 87.

91. Ackerman, *supra* note 81.

92. Scott Canon & Jennifer Bhargava, *Momentary Stall in Overland Park Puts Google Fiber on Long Hold*, KAN. CITY STAR (Oct. 25, 2012), http://www.kansascity.com/news/local/community/joco-913/overland-park-leawood/article330296/Momentary-stall-in-Overland-Park-puts-Google-Fiber-on-long-hold.html.

93. *Id.*

94. Elle Moxley, *Overland Park Expected to Green-Light Google Fiber*, KCUR (July 7, 2014), http://kcur.org/post/overland-park-expected-green-light-google-fiber.

95. Scot Canon, *AT&T Promises Gigabit Speeds in Leawood After Google Fiber Backs Out*, KC STAR (Nov. 3, 2014), http://www.kansascity.com/news/local/article3540109.html.

96. *Id.*

97. *Id.*

similar to what happened in Austin, Texas, which had been identified as a potential Google Fiber market.[98] However, only a week after AT&T penned the deal with Leawood, it threatened to kill all gigabit development programs over a tangentially related dispute with the Federal Communications Commission (FCC).[99] This example of the unreliability of the private ISP market further demonstrates the need for municipal participation in development of broadband networks.

Google Fiber officially launched in July 2012 with the introduction of the "fiberhood" pre-registration.[100] Google decided to focus build-out into neighborhoods that demonstrated a significant interest in the service.[101] Google did this to ensure the costs for building-out a neighborhood would be recouped through revenue from the neighborhood.[102] By September, over 180 of the 202 "fiberhoods" reached the targets Google set for them, so those "fiberhoods" would be the first in Kansas City to receive service.[103] After two years of building, Google will not say how many customers currently subscribe to the service in Kansas City, but recent polling suggests Google serves a significant amount of the market.[104]

Kansas City has yet to see the same kind of growth as Chattanooga; however, the service has sparked a small, vibrant, start-up scene.[105] Businesses and employees are being attracted to the metro area, drawn to the possibilities the service offers.[106] The biggest impact for Kansas City, however, is from Google's competitors. Both Comcast and Time Warner Cable have announced improvements in Internet service for metro area customers, free of charge.[107] This was Google's primary objective for entering into the ISP market, and it has

98. *Id.*

99. Shaun Nichols, *FCC: You, AT&T. Get Over Here and Explain This 'No More Gigabit Fiber' Threat*, THE REGISTER (Nov. 15, 2014), http://www.theregister.co.uk/2014/11/15/fcc_wants _a_word_with_att_about_that_no_more_fiber_stuff.

100. Dieter Bohn, *Google Fiber Launches in Kansas City, Promises 1000 Mbps Up and Down*, THE VERGE (July 26, 2012, 12:20 PM), http://www.theverge.com/2012/7/26/3187990 /google-fiber-kansas-city.

101. Frederic Lardinois, *180 Out of 202 Kansas City "Fiberhoods" Reach Their Google Fiber Pre-Registration Goals*, TECHCRUNCH (Sept. 9, 2012), http://techcrunch.com/2012/09/09/ google-fiber-kansas-city-goals-reached.

102. Scott Canon, *Within Its Fiberhoods, Google Rules the Roost, Survey Finds*, KAN. CITY STAR (May 6, 2014), http://www.kansascity.com/news/business/technology/article351210/Within-its-fiberhoods-Google-rules-the-roost-survey-finds.html.

103. Lardinois, *supra* note 101.

104. Canon, *supra* note 102.

105. *See* Maria Sudekum, *Google Fiber is Igniting Kansas City's Startup Scene*, HUFFINGTON POST (last modified Mar. 16, 2013, 5:12 AM), http://www.huffingtonpost.com/2013 /01/14/google-fiber-kansas-city_n_2467960.html.

106. Rick Usher, *Lessons from the Kansas City Google Fiber Deployment*, GOV'T TECH. (Mar. 26, 2014), http://www.govtech.com/local/Lessons-from-the-Kansas-City-Google-Fiber-Deployment.html.

107. *Comcast is Boosting Internet Speeds for Olathe, Independence and other KC Suburbs*, KAN. CITY STAR (Aug. 1, 2014), http://www.kansascity.com/news/business/technology /article845967.html.

been partially achieved. The speeds that Comcast and Time Warner are providing, however, still pale in comparison to the gigabit offering of Google Fiber.[108] Google's other goal of bridging the "digital divide", the growing difference in access to technology between those in poverty and more affluent parts of a community, has not been achieved.[109] The downward pressure of Google on service prices has been ineffective in some of the poorer regions of the city, and only 10% of people in the poorest neighborhoods have subscribed.[110] This is in part due to high installation fees and the renter community of many of these regions.[111] Worse yet, Google would likely have a difficult time reaching many of these citizens, as 34% don't find the Internet relevant to their lives.[112]

Google's experiment is still quite young, and it is difficult to make any strong statements on Google Fiber's success or failure in Kansas City. The network is making obvious impacts on the city. Kansas City's infrastructure is attractive to business leaders and entrepreneurs alike. While the ISP market is more competitive and more consumer-friendly for some, the service and the city have a long way to go before it can cross the digital divide. [113]

C.   BVU Authority/OptiNet (Bristol, Virginia)

OptiNet is hailed as one of the earliest municipal fiber-optic Internet services for residential customers.[114] Similar to Chattanooga, Bristol's utility company (BVU) wanted a more reliable electric grid and decided to pursue a gigabit fiber-optic network to achieve this goal.[115] Shortly after construction of the network, BVU added municipal buildings and schools into the network.[116] BVU attempted to build-out a fiber-optic network for a private ISP to use, but no private organization was interested in running the ISP.[117] BVU decided to run the network itself, but to do so required overturning a Virginia law that was nearly identical in effect to SB 304.[118] BVU was able to defeat the Virginia law, but had to work with regulators before it could begin offering service in the Bristol area.[119] BVU was challenged by Sprint for attempting to undercut

108. Brad Reed, *You Won't Believe What Happens When Comcast and TWC Face Actual Competition*, BGR (Aug. 5, 2014), http://bgr.com/2014/08/05/comcast-twc-vs-google-fiber.

109. Nancy Scola, *In Kansas City, Few Poor People, Renters Sign Up for Google Fiber*, WASH. POST (Oct. 6, 2014), http://www.washingtonpost.com/blogs/the-switch/wp/2014/10/06/in-kansas-city-few-poor-people-renters-sign-up-for-google-fiber.

110. *Id.*

111. *Id.*

112. *Id.*

113. *See id.*

114. MITCHELL, *supra* note, 52 at iv.

115. *Id.* at 3.

116. *Id.*

117. *Id.*

118. *Id.*

119. MITCHELL, *supra* note, 52 at 4.

Sprint's rates, but Sprint eventually lost its action before regulators.[120] BVU began offering service in 2003.[121]

Once the Internet service launched, it's popularity allowed it to reach approximately half of the service area by the end of the first year.[122] One of BVU's primary goals was to offer a low-cost service with a stable rate.[123] It was able to achieve this goal, demonstrated by a six-year period with no cable TV rate increases.[124] Fearing interference from private entities, BVU rushed to build-out its network as fast as possible, and by 2008 BVU had 9,000 residential and 1,200 business customers.[125] Unlike Chattanooga, in 2009, BVU was severed from the municipality and turned into an independent authority in the state's possession.[126] This gave BVU the ability to continue its expansion efforts to hopefully cover all of southwestern Virginia.[127] In 2012, BVU introduced gigabit Internet service and today has almost 12,000 subscribers.[128]

Bristol, like much of the rural parts of Virginia, has suffered economic deterioration for decades.[129] BVU, recognizing this, used its network to connect industry and commercial locations in an attempt to spur new job growth.[130] BVU is seeing the rewards of its investments in the form of job growth and increased competition.[131] New employers, like Northrop Grumman and DirecTV, have created 1,220 jobs in the service area since 2007.[132] Alpha Natural Resources, a major employer in the region stayed in the region, due in large part to the Internet infrastructure.[133] By BVU's estimations, the Internet service has brought $50 million in new private investment and $37 million in annual payrolls.[134]

Bristol is a competitor in this market, not just a marginal provider or an overbearing government monopoly.[135] It is able to compete with other regional

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120. *Id.*
121. *Id.* at iv.
122. *Id.* at 5.
123. *See id.*
124. MITCHELL, *supra* note, 52 at 4–6.
125. *Id.* at 6–8.
126. *Id.* at 8.
127. *Id.*
128. *Id.* at 9–10.
129. *See* SHERYL BAILEY, VIRGINIA RESOURCES AUTHORITY, FTTU BROADBAND NETWORK CURRENTLY OFFERED IN BRISTOL VIRGINIA AND NEIGHBORING SOUTHWEST VIRGINIA COUNTIES THROUGH BVU OPTINET 2 (2008), *available at* http://www.wired.virginia.gov/wp-content/uploads/Toolkit/4-Get-Partners/Initiate%20Negotiations/Case%20Studies/BVU-OptiNet_VRA-Governor-Report.doc.
130. *Id.*
131. MITCHELL, *supra* note, 52 at 15.
132. *Id.*
133. *Id*; *but see* Margaret Newkirk, *Coal's Decline is Choking Appalachia Towns*, BLOOMBERG BUSINESS (Sept. 9, 2015, 11:01 PM), http://www.bloomberg.com/news/articles/2015-09-10/coal-s-decline-is-choking-appalachia-towns (indicating Alpha Natural Resources entered bankruptcy protection).
134. MITCHELL, *supra* note, 52 at 15.
135. *See* NICHOLAS MILLER AND GAIL KARISH, TAKING CONTROL OF YOUR COMMUNICATIONS INFRASTRUCTURE, PUB. MGMT., July 2008, at 30.

and national providers like Embarq, Charter, and DirecTV.[136] This is largely due to BVU's strong connection with the community.[137] BVU is invested in Bristol and the surrounding areas and has a vested interest in securing Bristol's future.[138] BVU employees are active members of their community, and BVU as an entity ensures the community is connected with offerings such as the local channel "Heritage TV" or providing free Wi-Fi service at major cultural events.[139]

To assuage competitors concerns, BVU, as an authority, is bound by strict regulations that counteract monopolistic tendencies.[140] BVU is handicapped in investment strategies by laws forbidding cross-subsidizing, a form of funding where an entity takes revenues from one department to subsidize another.[141] These laws limit BVU's ability to generate capital or absorb losses, and serves as an opening for competitors to gain advantages over BVU.[142] The utility's continued success in the face of powerful competition and strict regulatory constraints is a testament to its product and its commitment to the Bristol community at large.

D.   Failed Municipal Broadband Projects in Philadelphia, PA and St. Cloud, FL.

Municipal broadband is not a panacea for all municipal ills. Networks are costly, competitive, and often difficult to monetize into a profit. In 2004, Philadelphia attempted to bridge the digital divide in its community with a new, municipal broadband project called Wireless Philadelphia.[143] The city tasked a committee with developing a plan for a wireless network.[144] During its search, the city faced opposition from large ISPs Verizon and Comcast, as well as legislative trouble from the state.[145] Despite overcoming those challenges, the city leadership ignored recommendations from the committee to form a public-private partnership to operate the network.[146] Instead, the city decided to entrust the development, maintenance, and ownership of the network to a small, private company.[147] The city then believed it could afford a series of educational and advancement initiatives including distribution of computers and software to disadvantaged families.[148]

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136. *Id.*
137. MITCHELL, *supra* note 52, at 13.
138. *Id.* at 14.
139. *Id.*
140. *See Id.* at 9–10.
141. *Id.* at 9.
142. MITCHELL, *supra* note 52, at 10 (2012).
143. Eric Null, *Municipal Broadband: History's Guide*, 91 I/S: J.L. & POL'Y 21, 40–44 (2013), *available at* http://moritzlaw.osu.edu/students/groups/is/files/2013/08/6-Null.pdf.
144. *Id.* at 40.
145. Tony Abraham, *What Other Cities Should Learn From Philly's Failed Municipal Broadband Effort*, TECHNICAL.LY PHILLY (Mar. 4, 2015, 12:49 PM), http://technical.ly/philly/2015/03/04/cities-learn-phillys-failed-municipal-broadband-effort.
146. Null, *supra* note 143, at 41.
147. *Id.* at 40–41.
148. *Id.* at 41.

Unfortunately for the private company and the City of Philadelphia, this plan encountered multiple crippling problems. The contract was unduly restrictive and the private company was actually incapable of delivering on its promises.[149] The company withdrew from the project long before the network was completed, and the city was forced to terminate its technology initiatives.[150] The city, however, was able to salvage the network, purchasing it for $2 million, along with a commitment to invest another $17 million into the network.[151] Now the network is relegated to governmental usage, with hope to expand it to the public once more.[152]

St. Cloud, Florida, a town of approximately 35,000 people[153], also attempted to build a wireless network for their population. In 2006, St. Cloud expanded an existing free wireless program to cover most of the city.[154] The network was expanded quickly with minimal costs.[155] Early opinion of the network, however, was mixed, with some residents not fully understanding the purpose of the network and some customers expecting far more than was feasible from the network.[156] Despite ardent support to maintain the network from elements of the community, the city closed the network near the end of 2009.[157]

These failures point to the pitfalls of municipal broadband. As Philadelphia demonstrates, when the city doesn't properly research private partner's capabilities and designs a plan larger than the capabilities of the network, municipal broadband is doomed to fail. St. Cloud demonstrates the need to properly educate the community about the service, as so many believed it was meant to replace (rather than supplement) private ISPs in the area.[158] However, there was still some good to come from these stories. In St. Cloud, the digital divide was closing.[159] In Philadelphia, the city is able to use the network for emergency services and cost-savings.[160] These networks, though failures in their initial mission, serve as guideposts for future cities exploring municipal broadband initiatives. Failure is possible in all endeavors, but all five of the cases above show municipal broadband, while not easy, is possible.

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149. *Id.* at 41–42.

150. *Id.* at 41–42.

151. Null, *supra* note 143, at 42–43.

152. *Id.* at 42.

153. *Community Facts for St. Cloud city [sic], Florida*, AMERICAN FACTFINDER, http://factfinder.census.gov/bkmk/cf/1.0/en/place/St.%20Cloud%20city%2c%20Florida/POPUL ATION/DECENNIAL_CNT (last visited Oct. 30, 2015).

154. Null, *supra* note 147, at 44.

155. *Id.*

156. Id. at 44–46.

157. Esme Vos, *St. Cloud Shuts Down Free Citywide Wi-Fi Service*, MUNIWIRELESS (Sept. 28, 2009), http://www.muniwireless.com/2009/09/28/st-cloud-shuts-down-free-citywide-wifi-service.

158. Null, *supra* note 147, at 46.

159. Vos, *supra* note 157.

160. See Patrick Kerkstra, City to Buy What's Left of Wireless Philadelphia for $2 Million, INQUIRER: HEARD IN THE HALL (Oct. 17, 2013, 5:07 PM), http://www.philly.com/philly/blogs /heardinthehall/City_to_buy_.html.

IV. THE CASE FOR ALLOWING LAWRENCE, KANSAS AND CHANUTE, KANSAS AUTONOMY TO PURSUE GIGABIT INFRASTRUCTURE

Kansas's smaller communities are beginning to recognize the potential of municipal broadband to stimulate economic growth and connectivity to the larger communities. Lawrence, Kansas has adopted a new, pro-development broadband policy[161], while hearing proposals for city-wide gigabit networks.[162] The impact is already being felt by the larger, regional competitors in town. Chanute, Kansas was severely underserved by private-sector service providers.[163] Chanute took action, much the same way as Bristol, to help provide its community with a stable, albeit slower, Internet option. These cases are not offered as models for municipal Internet programs or participation, but rather serve as two examples of Kansas communities taking their economic and infrastructure realities into their own hands. These cities serve as representation of the many Kansas communities that stand to lose significant control of their future if legislation similar to SB 304 is passed.

A. Wicked Broadband and New Competition

In 2012, Lawrence, Kansas, home of acclaimed research institution the University of Kansas, was ranked the "second-worst-performing small metropolitan area" in economic growth and opportunity by the Milken Institute.[164] The primary factor for the abysmal ranking was the lack of high-tech, knowledge-based jobs.[165] These are the kinds of jobs flowing into Chattanooga and Kansas City since their "Gig" booms.[166] Lawrence city officials have recognized the need to expand high-tech job opportunities in the city.[167]

Wicked Broadband, a local telecommunications company, wanted to help the city meet the infrastructure demands of a growing, high-tech local

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161. Chad Lawhorn, *City Approves High-Speed Broadband Policy, but Eudora Likely to Get Service Before Lawrence*, LAWRENCE J. WORLD (Apr. 28, 2015, 10:51 PM), http://www2.ljworld .com/news/2015/apr/28/city-approves-high-speed-broadband-policy-eudora-1/.

162. *See* Chad Lawhorn, *Wicked Broadband Hoping for $500K City Grant to Bring Super-Fast Internet to Downtown, East Lawrence*, LAWRENCE J. WORLD (Nov. 4. 2013), http://www2 .ljworld.com/news/2013/nov/04/wicked-broadband-hoping-500k-city-grant-bring-supe/ [hereinafter *$500K*].

163. *See* LISA GONZALEZ & CHRISTOPHER MITCHELL, CHANUTE'S GIG at i (Oct. 2012), *available at* http://ilsr.org/wp-content/uploads/2012/10/Chanute-Muni-BB.pdf; *see also* Dion Lefler, *Chanute Aims to Provide Speedy Internet Service to All Homes, Businesses in Town*, WICHITA EAGLE (May 24, 2014), http://www.kansas.com/news/article1144149.html.

164. Chad Lawhorn, *Lawrence Ranked Second-Worst-Performing Small Metro Area, According to New National Economic Index*, LAWRENCE J. WORLD: TOWN TALK (Apr. 30, 2013), http://www2.ljworld.com/weblogs/town_talk/2013/apr/30/lawrence-ranked-second-worst-performing-/ [hereinafter *Second-Worst*].

165. *Id.*

166. Dominic Rushe, *Chattanooga's Gig: How One City's Super-Fast Internet is Driving a Tech Boom*, THE GUARDIAN (Aug. 30, 2014), http://www.theguardian.com/world/2014/aug/ 30/chattanooga-gig-high-speed-internet-tech-boom.

167. *Second-Worst, supra* note 164.

economy.[168] Wicked worked with the city in an attempt to install fiber and provide gigabit Internet to some high-density pockets of the city; however, Wicked needed to secure public funding to begin network build-out to broader parts of the city.[169] In November 2013, Wicked announced plans to build a pilot gigabit network in downtown Lawrence, but Wicked indicated they needed money from the city to make the project happen.[170] The city, thus far, has been reluctant to accept Wicked's deal,[171] having repeatedly delayed taking action on this issue.[172] City officials questioned the financial security of Wicked.[173] Further, the city recognized that Wicked, in a prior iteration of the company as Lawrence Freenet, found itself in tax trouble when the Kansas Department of Revenue filed tax liens against the company.[174] This did not deter Wicked from beginning their own pre-order program, similar to Google's "fiberhoods."[175] Wicked once proposed a $1 million secured loan to connect 1,000 households.[176] This proposal frequently changed; but, the city did not act on the issue.[177]

Wicked's efforts, however, are impacting the community. Lawrence recently adopted a new, pro-development broadband policy.[178] Regional competitors are responding to the potential competition. AT&T has suggested it would investigate gigabit development in Lawrence.[179] Wide Open West, the city's local cable and Internet provider, has recently announced plans to double the speed of its service, seemingly in response to Wicked's proposal.[180]

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168. Chad Lawhorn, *Lawrence-Based Wicked Broadband Announces Plan to Install Super-Fast 1 Gigabit Internet Service to Lawrence Neighborhood*, LAWRENCE J. WORLD: TOWN TALK (Apr. 16, 2013), http://www2.ljworld.com/news/2013/apr/16/lawrence-based-wicked-broadband-announces-plan-ins.

169. Chad Lawhorn, *Parts of Lawrence Already Have Super-Fast Internet*, LAWRENCE J. WORLD: TOWN TALK (July 27, 2012), http://www2.ljworld.com/news/2012/jul/27/parts-lawrence-already-have-super-fast-internet.

170. *$500K, supra* note 162.

171. Chad Lawhorn, *Lawrence Again Delays Decisions on Incentives Request for Wicked Broadband*, LAWRENCE J. WORLD (Oct. 7, 2014), http://www2.ljworld.com/news/2014/oct/07/city-delays-decision-again-incentives-request-wick [hereinafter *Delays*].

172. Chad Lawhorn, *Lawrence Commission Again Delays Action on Wicked Broadband*, LAWRENCE J. WORLD (Nov. 11, 2014), http://www2.ljworld.com/news/2014/nov/11/lawrence-commission-again-delays-action-wicked-bro.

173. Chad Lawhorn, *City Struggles to Interpret Wicked Broadband's Finances as it Considers $300K Loan Guarantee*, LAWRENCE J. WORLD (Nov. 08, 2014), http://www2.ljworld.com/news/2014/nov/08/city-struggles-interpret-wicked-broadbands-finance.

174. *Id.*

175. Chad Lawhorn, *Lawrence-Based Wicked Broadband Announces Plan to Install Super-Fast 1 Gigabit Internet Service to Lawrence Neighborhood*, LAWRENCE J. WORLD: TOWN TALK (Apr. 16, 2013), http://www2.ljworld.com/news/2013/apr/16/lawrence-based-wicked-broadband-announces-plan-ins/.

176. *Id.*

177. *Delay, supra* note 168.

178. Chad Lawhorn, *City Approves High-Speed Broadband Policy, But Eudora Likely to Get Service Before Lawrence*, LAWRENCE J. WORLD (Apr. 7, 2014), http://www2.ljworld.com/news/2015/apr/28/city-approves-high-speed-broadband-policy-eudora-l/.

179. Response from AT&T to the City of Lawrence, KS (Mar. 12, 2014), *available at* https://www.lawrenceks.org/assets/documents/pdf/fiber-rfi/ATT-RFI-Response.pdf.

180. Chad Lawhorn, *WOW to Double Internet Speeds in Lawrence by January*, LAWRENCE

Additional gigabit providers also want to enter the market.[181] Competition is heating up and Lawrence appears poised to join the ranks of Chattanooga, Kansas City, Bristol, and other cities that have taken their economic destiny into their own hands through municipal broadband.

B.   Chanute, Small Town and a Big Internet Pipe

Chanute, much like Chattanooga and Bristol, has a publically owned utility.[182] In 1984, the City Utility Department (CUD) built a fiber optic network to improve electricity network management.[183] Simultaneously, CUD worked with a large, local business to monitor the business's electric consumption, as the business was the top power consumer in the city.[184] Various members of the community were interested in using a similar network to meet the Internet needs of the community, which was underserved by private providers.[185] After 9/11, new federal laws required the city to take more active steps in monitoring the utility facilities.[186] To meet these statutory requirements, the city pursued an extension of the existing network and began connecting the network to municipal buildings and local schools.[187] This was achieved through an expansion of the fiber optic network and construction of a wireless network.[188] The wireless network required public-private partnerships with local and national companies.[189] Through incremental development, the city has connected all municipal entities, including fire and police, and provides service to most businesses in the city.[190] Chanute has saturated the city in free Wi-Fi and provided strong Internet services to local educational institutions.[191] This was all achieved without incurring any debt to the city, through smart money management and some outside development funds.[192]

Chanute has experienced economic growth and attention from start-ups around the country.[193] Chanute has lower costs of living, while maintaining high

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J. WORLD (Sep. 24, 2014), http://www2.ljworld.com/news/2014/sep/24/wow-double-internet-speeds-lawrence-january/.

181. *See* Chad Lawhorn, *Broadband Competition Heats Up as Plan Shrinks*, LAWRENCE J. WORLD (Oct. 6, 2014), http://www2.ljworld.com/news/2014/oct/06/broadband-competition-heats-plan-shrinks/; *see also* Chad Lawhorn, *New Internet Provider Seeking To Come To Lawrence; Residents Want New Requirements For Ninth Street Arts Corridor; Urban Farm Battle Brewing*, LAWRENCE J. WORLD (June 23, 2015), http://www2.ljworld.com/weblogs/town_talk/2015/jun/23/new-internet-provider-seeking-to-come-to_/.

182. GONZALEZ, *supra* note 163 at 1.

183. *Id.* at i.

184. *Id.*

185. Id. at 1–2.

186. *Id.* at 2.

187. GONZALEZ, *supra* note 163, at 2.

188. *Id.* at 3–4.

189. *Id.* at 3.

190. *Id.* at 4.

191. *Id.* at 5.

192. GONZALEZ, *supra* note 163, at 6.

193. Colin Neagle, *Inside the Tiny Kansas Town Battling Cable Lobbyists Over Municipal Broadband*, NETWORK WORLD (Feb. 26, 2014, 6:00 AM), http://www.networkworld.com/article

quality infrastructure, which is drawing some businesses from the more costly, nearby Kansas City.[194] Without such infrastructure development, Chanute had inconsistent and low-quality Internet service, and would never be considered a competitor for Kansas City technology companies.[195] Furthermore, Chanute's population growth is unique to a city of its size in Kansas.[196] The Internet infrastructure is helping a city of approximately 9,300 survive and thrive during a time of small town contraction.[197]

For Chanute, legislation like SB 304 is an existential challenge, threatening one of the only means of growth left in a town with limited resources. With Chanute's high-quality gigabit network, the local hospital is able to practice medicine with high-tech methods.[198] Neosho County Community College, which is in the Chanute community, is one of the fastest-growing community colleges in the entire nation, due in large part to the possibilities provided by the gigabit network.[199] Chanute serves as an example to other struggling communities. Where infrastructure is driving people away, municipal Internet can be leveraged to save and support towns.

C. The FCC Power to Preempt State-Level Bans of Municipal Broadband

The FCC recently preempted two state-level statutory bans on municipal broadband.[200] These bans are similar to SB 304 in language and function. Chattanooga, Tennessee (discussed above) and Wilson, North Carolina petitioned the FCC to preempt state laws which ban the construction and operation of a municipally-owned broadband network in their respective states.[201] The FCC, in a draft decision circulated by Chairman Tom Wheeler, believes the agency has the authority to preempt the state laws under Section 706 of the Telecommunications Act of 1996.[202] Section 706 directs the FCC to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing . . . measures

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/2174702/lan-wan/inside-the-tiny-kansas-town-battling-cable-lobbyists-over-municipal-broadband.html.

194. *Id.*

195. *Id.*

196. Dion Lefler, *Proposed Bill to Outlaw Community Broadband Service in Kansas Met With Opposition*, WICHITA EAGLE (Feb. 01, 2014), http://www.kansas.com/news/politics-government/article1133255.html#/tabPane=tabs-3beda3df-1.

197. *Population in the Chanute Kansas*, GOOGLE PUBLIC DATA, https://www.google.com /publicdata/explore?ds=kf7tgg1uo9ude_&met_y=population&idim=place:2012500&hl=en&dl=e n (last updated July 24, 2015); *see id.*

198. Lefler, *supra* note 196.

199. *Id.*

200. FEDERAL COMMUNICATIONS COMMISSION, FCC 15-25, CHAIRMAN AND COMMISSIONERS, IN THE MATTER OF CITY OF WILSON, NORTH CAROLINA PETITION FOR PREEMPTION AND THE ELECTRIC POWER BOARD OF CHATTANOOGA, TENNESSEE PETITION FOR PREEMPTION at 2–3 (Mar. 12, 2015), *available at* https://apps.fcc.gov/edocs_public/attachmatch /FCC-15-25A1.pdf.

201. *Id.*

202. *Id.*

that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment."[203] In function, the FCC is affirming the right of the two petitioning cities to operate their municipal broadband networks, effectively overriding the state law.[204]

While the FCC said this decision is specific to these two cities, the decision sets precedent for future cities to successfully petition the FCC to preempt their own state municipal broadband bans.[205] In Kansas, the impact of this decision is unclear. Kansas could continue to pursue SB 304 without change and run the risk of preemption. Kansas could also create a new bill, but the outcome would likely be the same. The authority asserted by the FCC reaches beyond an outright ban on municipal broadband. The FCC believes they have the authority to "remove barriers to infrastructure investment."[206] No matter what action Kansas takes, this issue is far from resolved at the federal level. Even if the FCC approves the decision, each city affected by a state municipal broadband law would have to individually petition the FCC.[207] Further, the FCC decision may not survive an appeal to federal court.[208] Finally, Congressional Republicans are pursing legislation to limit the FCC's Section 706 authority.[209] For Kansas, the issue of municipal broadband legislation is still very much alive.

D.   The Devastating Impact of SB 304 and an Alternative Future for Local Internet Service

It is not within the scope of this paper to comment on the propriety of any given approach to municipal Internet or to suggest that municipal Internet is superior to private Internet in all situations. The purpose of this paper is to show the real impact municipalities have on their communities through participation in the ISP market. Municipal governments and local public entities can change the economic landscape, sustainably, and generate new cost savings and new revenues for cash-strapped local governments. SB 304 disregards every positive

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203. Telecommunications Act of 1996, 47 U.S.C. § 1302(a) (2008), *available at* http://www.gpo.gov/fdsys/pkg/USCODE-2011-title47/pdf/USCODE-2011-title47-chap12-sec1302.pdf.

204. FEDERAL COMMUNICATIONS COMMISSION, *supra* note 200.

205. Brian Fung, *The FCC is Moving to Preempt State Broadband Limits*, WASH. POST: THE SWITCH (Feb. 2, 2015), http://www.washingtonpost.com/blogs/the-switch/wp/2015/02/02/the-fcc-is-moving-to-preempt-state-broadband-limits.

206. Steve Lohr, *F.C.C. Chief Wants to Override State Laws Curbing Community Net Services*, N.Y. TIMES: BITS BLOG (Feb. 2, 2015 5:40 PM), http://bits.blogs.nytimes.com/2015/02/02/f-c-c-chief-wants-to-override-state-laws-curbing-community-net-services.

207. Chris Welch, *FCC Will Hold Crucial Municipal Broadband Vote on February 26th*, THE VERGE (Feb. 2, 2015 10:50 AM), http://www.theverge.com/2015/2/2/7962775/fcc-municipal-broadband-vote-february-26.

208. Lisa Song, *Google Fiber and an FCC Decision Could Give More People Cheaper Access to the Internet*, INDY WEEK (Feb. 04, 2015), http://www.indyweek.com/indyweek/google-fiber-and-an-fcc-decision-could-give-more-people-cheaper-access-to-the-internet/.

209. Adi Robertson, *Republicans Want a Net Neutrality Law, but Only If It Stops the FCC From Handling It*, THE VERGE (Jan. 16, 2015 4:06 PM), http://www.theverge.com/2015/1/16/7558715/net-neutrality-new-republican-bill-limit-fcc.

impact for municipalities in favor of a demonstrably stagnated private-only system. Legislation similar to SB 304 is anti-competitive and anti-innovative. It is the nature of ISPs to form regional monopolies, which easily become complacent and anti-consumer. [210] SB 304 would cripple a local government's ability to address the economic and social needs of its community, and submit the municipality to the will of the ISP. The Institute for Local Self Reliance said it best in its report on Chanute Gig, "[w]hen a community is stuck with slow, unreliable, or high priced service from one or two monopolistic firms, both public and private suffer. When everyone has access to fast affordable, and reliable broadband, the whole community thrives."[211]

Further, cities across the nation are banding together to fight for the right to implement broadband.[212] FCC chairman Tom Wheeler recently said, "[it is in the] best interests of consumers and competition that the FCC exercises its power to preempt state laws that ban or restrict competition from community broadband."[213] President Barack Obama, when speaking on the issue of equitable Internet access, said, "lowering the cost of launching a new idea, igniting new political movements, and bringing communities closer together, it has been one of the most significant democratizing influences the world has ever known."[214] The path forward is not through overly restrictive legislative actions. The principles of a free market suggest competition, and not legislative protection, will build success in our cities and townships.

In future Kansas legislative sessions, representatives and senators may be urged by ISPs to protect them against the unfair competition of the city. There is a legitimate concern that cities can become domineering and drive out competition, due to the ability to compete at a lower cost point. This situation, however, is not a necessary outcome, as demonstrated by Chattanooga, Kansas City, and Bristol. The evidence suggests when a municipal government gets involved in the ISP market and takes precautions to avoid anti-competitive behavior, the result is better quality service for all citizens and increased competition and innovation. This is the fundamental promise of the Telecommunications Act of 1996, which has been so misaligned due to the consolidating forces of the purely private market.[215]

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210. Hannibal Travis, *Wi-Fi Everywhere: Universal Broadband Access as Antitrust and Telecommunications Policy*, 55 AM. U. L. REV. 1697, 1715–20 (2006).

211. Gonzalez, *supra* note 157 at 11.

212. Jason Koebler, *32 Cities Want to Challenge Big Telecom, Build Their Own Gigabit Networks*, MOTHERBOARD, (Oct. 20, 2014, 11:20 AM) http://motherboard.vice.com/read/32-cities-want-to-challenge-big-telecom-build-their-own-gigabit-networks.

213. Tom Wheeler, FCC Chairman, *Removing Barriers to Competitive Community Broadband*, OFFICIAL FCC BLOG (June 10, 2014, updated 6:01 PM), http://www.fcc.gov/blog /removing-barriers-competitive-community-broadband.

214. *President Obama Calls for Net Neutrality*, INFORMITV (Nov. 12, 2014), http://informitv.com/2014/11/12/president-obama-calls-for-net-neutrality/.

215. David Carr, *Telecom's Big Players Hold Back the* Future, N.Y. TIMES (May 19, 2013), http://www.nytimes.com/2013/05/20/business/media/telecoms-big-players-hold-back-the-future.html

Kansas is primed for a technological renaissance. Infrastructure is the key investment activity a municipality can take to improve the city's economic outlook. The need for high speed Internet will continue to grow, and gigabit networks provide a platform for new, previously unconsidered Internet applications. Just as the dawn of the Internet brought in new forms of communication, and the expansion of broadband allowed us to understand our world more completely through the sharing of big data, the adoption of gigabit networks will open the doors to new and exciting industries, and expansive economic opportunity. Kansas must not slam shut the door of economic development with the myopia of corporate protectionism. Competition breeds innovation. Innovation breeds growth. Kansas is in dire need of some new and powerful growth.[216] SB 304 and similar legislation may not sign the death warrant for Kansas technological growth, but it guarantees an arduous process, submitting our already vulnerable communities to the transient whim of uncommitted regional and national ISPs. SB 304 ensures Lawrence will flounder for years to come as one of the worst cities for technology related jobs. SB 304 guarantees success stories like Kansas City or Chanute will become faded memories or idyllic dreams for neighboring communities. SB 304-style legislation puts profits over people, but protects neither in the State.

V.   CONCLUSION

Just as our fictional employee, trying to get to work on a busy, old highway, has a compelling interest in a faster road, municipalities have a compelling interest to ensure their citizens are serviced by high-quality Internet access. By participating in the ISP market, municipalities can bring new, high-paying jobs to the local economy. Municipal investment helps address a number of key socioeconomic concerns by bridging the digital divide and connecting underserved members of the municipality to the community and world at large. Private industry has not sufficiently served these municipal communities, but empirical evidence suggests that once a municipal entity begins to offer quality Internet service, the local competitor or competitors will respond with more consumer-friendly and economic speeds or pricing. These important benefits would not be possible if SB 304 style legislation is adopted in Kansas. Therefore, the legislature should resist adopting such model legislation and instead vote in favor of municipal autonomy and demonstrable economic growth.

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216. *See* Liz Montano, *Kansas Lagging Behind Six Regional States in Economic Growth*, WIBW NEWS (May 5, 2015, 5:54 AM), http://www.wibwnewsnow.com/kansas-lagging-behind-six-regional-states-in-economic-growth/.