

Lessons from Google Fiber: Why Coordinated Cost Reductions to Infrastructure Access are Necessary to Achieve Universal Broadband Deployment

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I. OVERVIEW

Residents of Kansas City are over the rainbow. In 2011, Google announced after a competitive selection process¹ that Kansas City would become the first test site for its experimental project: Google Fiber.² Google agreed to build, operate, and maintain a fiber-to-the-home network in Kansas City, boasting speeds of up to one gigabit per second.³ The service delivered to residents in Kansas City will be provided at speeds faster than the FCC's 2015 goal for households,⁴ at a cost to consumers of only \$70 a month.⁵

Google Fiber's publicity thrusts the challenge of obtaining rights-of-way access to build out infrastructure for broadband deployment to the forefront of the public policy debate.⁶ The publicity of the Google Fiber project attracted FCC Commissioner Ajit Pai to communicate the FCC's need to "remove barriers to infrastructure investment" in order to promote "job creation and economic growth."⁷ Commissioner Pai's comments came

1. GOOGLE INC., REQUEST FOR INFORMATION: GOOGLE FIBER FOR COMMUNITIES (Feb. 10, 2010), *available at* http://www.ipaloalto.com/pdf/Google_Fiber_for_Communities_021010.pdf; *see* James Kelly, *Next Steps for Our Experimental Fiber Network*, GOOGLE BLOG (Mar. 26, 2010), <http://googleblog.blogspot.com/2010/03/next-steps-for-our-experimental-fiber.html> (noting that "1,100 community responses and more than 194,000 responses from individuals" were received in response to Google's Request for Information).

2. Milo Medin, *Ultra High-Speed Broadband is Coming to Kansas City, Kansas*, GOOGLE BLOG (Mar. 30, 2011), <http://googleblog.blogspot.com/2011/03/ultra-high-speed-broadband-is-coming-to.html>. Kansas City, Missouri, was announced just less than two months later. Milo Medin, *Everything's Up to Date in Kansas City*, GOOGLE FIBER BLOG (May 17, 2011), <http://googlefiberblog.blogspot.com/2011/05/everythings-up-to-date-in-kansas-city.html>. For the purposes of this Note, projects in both cities will be referred to as "Kansas City," irrespective of state. Note that as of March 2013, Google also entered into an agreement with bordering city Olathe. Rachel Hack, *Google Fiber is Coming to Olathe, Kansas*, GOOGLE FIBER BLOG (Mar. 19, 2013), <http://googlefiberblog.blogspot.com/2013/03/google-fiber-is-coming-to-olathe-kansas.html>.

3. DEVELOPMENT AGREEMENT, FINAL EXECUTION VERSION 5, 7 (2011), *available at* <http://www.netcompetition.org/wp-content/uploads/Google-Kansas-Agreement1.pdf>. In addition to residential service, Google promised connections to 300 city and governmental locations. *Id.* at 7.

4. FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 9 (2010) [hereinafter NATIONAL BROADBAND PLAN], *available at* <http://download.broadband.gov/plan/national-broadband-plan.pdf>.

5. This cost represents only the price for Internet, not Internet and TV service. The cost for an Internet and TV bundle is \$120 per month. GOOGLE FIBER, <https://fiber.google.com/about/> (last visited Jan. 31, 2012).

6. While rights-of-way approval is needed to access buildings, poles, and railroads, this Note primarily focuses its solutions on roads, by reference to dig once policies.

7. Ajit Pai, Commissioner, FCC, Opening Remarks of Commissioner Ajit Pai at the Telecommunications & E-Commerce Committee Roundtable of the U.S. Chamber of Commerce (Sept. 14, 2012) [hereinafter *September 14 Remarks of Comm'r Pai*], *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0914/DOC-316277A1.pdf.

just days after he visited the project's site, noting the importance for "states and local communities to adopt broadband-friendly policies when it comes to rights-of-way management."⁸ Commissioner Pai encouraged others to take the demonstrated success of the Kansas City–Google partnership and use it to inform how they could "streamline their own rights-of-way management processes," mentioning that the city's attractive policies were the reason Google chose it for its innovative project.⁹

Commissioner Pai announced that the FCC should play a role in developing "model regulations, guidelines, or best practices for rights-of-way management that facilitate fiber deployment while safeguarding legitimate government interests."¹⁰ He emphasized that streamlining rights-of-way management is necessary for "21st century challenges" like broadband deployment.¹¹ In fact, Google publicly stated that one of the reasons it chose Kansas City was because "the City's leadership and utility moved with efficiency and creativity."¹² Part of the agreement between Kansas City and Google included providing Google complete access to Kansas City's rights-of-way.¹³

One would think that with a company as large as Google, Kansas City would be able to collect fees for the unlimited access it gave to Google, but in fact, Kansas City waived all fees to its rights-of-way.¹⁴ Those following the project noted that the concessions Kansas City provided were more than just an example of the effects of deregulation on the market, but instead were an actual taxpayer subsidy, and further observed that these subsidies are necessary to incentivize deployment.¹⁵ Others claim that Google would have still paid Kansas' rights-of-way fees, but selected the city because it eliminated "*unnecessary costs and delay*," in the deployment process.¹⁶ Regardless of their characterizations of why

8. Ajit Pai, Commissioner, FCC, Statement of Commissioner Ajit Pai on His Visit to Kansas City's Google Fiber Project (Sept. 5, 2012), *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0905/DOC-316114A1.pdf.

9. *Id.*

10. *Id.*

11. *Id.*

12. *Field Hearing on Innovation and Regulation Before the H. Comm. on Oversight and Gov't Reform*, 112th Cong. 3 (2011) [hereinafter *Testimony of Milo Medin*], *available at* http://oversight.house.gov/wp-content/uploads/2012/01/TestimonyofMiloMedin_1.pdf (testimony of Milo Medin, Vice President of Access Services, Google Inc.).

13. This included access to roads, poles, and buildings. DEVELOPMENT AGREEMENT, *supra* note 3, at 4.

14. *Id.* at 1, 4.

15. Timothy B. Lee, *How Kansas City Taxpayers Support Google Fiber: Google Fiber Isn't Exactly a Free-Market Success Story*, ARS TECHNICA (Sept. 7, 2012, 8:00 AM), <http://arstechnica.com/tech-policy/2012/09/how-kansas-city-taxpayers-support-google-fiber/> ("When a city offers a private company access to those resources for free, it's forgoing an opportunity to raise revenue. The implicit subsidy is even clearer when taxpayers, rather than Google, pay to hire extra city staff to supervise the project.").

16. Fred Campbell, *Market Demand Knocks Down Regulatory Barriers in Kansas City Fiber Deployment*, ARS TECHNICA (Sept. 27, 2012, 1:25 PM), <http://arstechnica.com/>

Google chose Kansas City, observers agree that more needs to be done to encourage investment in infrastructure to deploy high-speed broadband technology.¹⁷ Certainly, rights-of-way fees make up only one part of costs that providers like Google face when engaging in deployment projects.

With the spotlight on Google Fiber, the FCC is in a perfect position to utilize the lessons learned from the Google–Kansas City partnership to evaluate what can be done to encourage Internet service providers (“ISPs”) to upgrade their existing networks or deploy new networks where access is lacking. Earlier this year, Julius Genachowski, then FCC Chairman, called for at least one city in every state to have a gigabit community,¹⁸ echoing the National Broadband Plan’s goal of “affordable access of at least [one] gigabit . . . broadband service to anchor institutions such as schools, hospitals and government buildings.”¹⁹ Additionally, if the FCC wishes to achieve its goal of universal service,²⁰ it must take heed of Commissioner Pai’s statement that rights-of-way management plays a vital role in broadband deployment projects.²¹

Before the FCC acts, however, it must consider a variety of issues. The FCC has three players at its doorstep: ISPs, consumers, and local government.²² First, ISPs have called for greater deregulation of rights-of-way access in order to increase certainty that they can access existing infrastructure swiftly.²³ Second, consumers want faster broadband speeds at

business/2012/09/market-demand-knocks-down-regulatory-barriers-in-kansas-city-fiber-deployment/ (emphasis added) (“It infers too much to conclude that in-kind subsidies are required to build competitive fiber networks merely because Google objected to unreasonable fees and regulations and accepted the support offered by Kansas City.”).

17. *Id.* (“Google Fiber indicates that we should be encouraging private firms to build competitive networks without government subsidy whenever possible and rely on explicit subsidies only when necessary.”); Lee, *supra* note 15 (“[W]e should acknowledge the possibility that it simply doesn’t make economic sense for private firms to build new fiber networks without taxpayer subsidies.”).

18. Press Release, FCC, FCC Chairman Julius Genachowski Issues Gigabit City Challenge to Providers, Local, and State Governments to Bring at Least One Ultra-Fast Gigabit Internet Community to Every State in U.S. by 2015: FCC’s Broadband Acceleration Initiative to Foster Gigabit Goal (Jan. 18, 2013) [hereinafter *FCC’s Broadband Acceleration Initiative*], available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0118/DOC-318489A1.pdf.

19. NATIONAL BROADBAND PLAN, *supra* note 4, at xiv.

20. *See id.* at 135–36.

21. Statement of Commissioner Ajit Pai on His Visit to Kansas City’s Google Fiber Project, *supra* note 8.

22. *See* Henry M. Littlefield, *The Wizard of Oz: A Parable on Populism*, 16 AM. Q. 1 (Spring 1964), available at <http://www.jstor.org/stable/2710826>.

23. *E.g.*, Reply Comments of Google Inc. at 40, A National Broadband Plan for Our Future, FCC GN Docket No. 09-51 (rel. July 21, 2009) [hereinafter *Reply Comments of Google Inc.*], available at <http://apps.fcc.gov/ecfs/document/view?id=7019917558>. Many commenters, including Google, urged the FCC to reduce barriers to wireless deployment, including reducing and/or eliminating zoning and rights-of-way barriers for municipal networks and commercial deployments, and clarifying timelines in the wireless facilities zoning approval process. *See, e.g., id.*

reasonable prices.²⁴ Lastly, states have not abandoned the fight that rights-of-way represent a property interest,²⁵ and the federal government should not impose restrictions on states' ability to impose fees beyond cost for access,²⁶ especially when states serve the interests of their residents through decisions to approve enhancements to existing networks.²⁷

If it does act, the FCC will also have to keep in mind recent initiatives by the executive branch, the current state of Congress, and future judicial scrutiny of its authority. The Obama administration has called for more efficiency in federal processes, including implementation of a "dig once" policy to coordinate broadband deployment with other road and utility projects.²⁸ While it appears unlikely that Congress will make drastic expansions to the scope of the FCC's jurisdiction to regulate broadband given the current state of political division and other more pressing initiatives,²⁹ appropriate congressional action would play a vital role in

24. Joel Gurin, *More on Speed: Just How Satisfied Are Customers*, OFFICIAL FCC BLOG (June 2, 2010), <http://www.fcc.gov/blog/more-speed-just-how-satisfied-are-customers>.

25. Frederick E. Ellrod III & Nicholas P. Miller, *Property Rights, Federalism and the Public Rights-of-Way*, 26 SEATTLE U. L. REV. 475, 483–85 (2003) [hereinafter Ellrod] (asserting that "the public rights-of-way belong to the community, and neither a private company nor the federal government can use that property without the owner's permission").

26. See e.g., *TWC of Oregon v. City of Portland*, 452 F. Supp. 2d 1084, 1099–1101 (D. Or. 2006) (finding that a 5% fee is "fair and reasonable compensation" and that "compensation" is not limited to actual cost); Ellrod, *supra* note 25, at 500 (noting that reading section 253 to prevent local communities from charging fair market value would result in an unconstitutional taking). *But see* Thomas W. Snyder & Walter Fitzsimmons, *Putting a Price on Dirt: The Need for Better Defined Limits on Government Fees for the Use of the Public Right-of-Way Under Section 253 of the Telecommunications Act of 1996*, 64 FED. COMM. L. J. 137, 160–66 (2011) (noting that section 253 should be read to prohibit revenue-generating fees on public right of ways and limit fees to management costs and any other proven economic value); Reply Comments of the Am. Cable Ass'n at 9, Acceleration of Broadband, FCC WC Docket No. 11-59 (rel. Sept. 30 2011) [hereinafter *Reply Comments of ACA*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021712335> ("Many government and private entities seem to approach requests for access to facilities or crossings as opportunities for revenue-generation rather than recovery of 'administrative and other specifically identifiable costs.'").

27. E.g., NAT'L ASS'N OF TELECOMM. OFFICERS & ADVISORS, INTRODUCTION TO NATOA'S BROADBAND PRINCIPLES 3–4 (June 2008), available at <http://www.natoa.org/Documents/BroadbandPreamble%26Principles.pdf>.

28. Exec. Order No. 13,616, 77 Fed. Reg. 36,903 (June 20, 2012) [hereinafter *Executive Order Accelerating Broadband Infrastructure Deployment*], available at <http://www.gpo.gov/fdsys/pkg/FR-2012-06-20/pdf/2012-15183.pdf>.

29. See Matthew Lasar, *Congress: It's Time to Rewrite the Telecommunications Bible*, ARS TECHNICA (May 25, 2010, 9:25 AM), <http://arstechnica.com/tech-policy/2010/05/congress-its-time-to-rewrite-the-telecommunications-bible/> (addressing the need in 2010 for Congress to revise the Telecommunications Act in light of the FCC's regulatory actions regarding broadband). For example, gun control legislation was a primary issue for Congress and the Obama administration in early spring 2013. See, e.g., Peter Baker, *Months After Massacre, Obama Seeks to Regain Momentum on Gun Laws*, N.Y. TIMES (Mar. 28,

stimulating our economy.³⁰ Although Congress was unsuccessful in passing a mandatory “dig once” policy,³¹ it still has a meaningful role to play in supporting rights-of-way reform.

As the FCC takes steps to achieve universal service, it should be mindful that although access to rights-of-way is necessary for deployment, management of rights-of-way requires a delicate balance between federal regulation and states’ rights.³² Further, as evidenced by Google Fiber, elimination of state and local rights-of-way fees is not itself sufficient to encourage universal broadband deployment.³³ This Note addresses why a coordinated approach to reducing costs related to infrastructure access for broadband deployment is necessary and will help the FCC move closer to its goal of universal service. It argues that the FCC should refrain from a one-size-fits-all regulatory approach to rights-of-way, and instead should encourage broadband deployment by improving resources available for state and local governments. This will necessarily require Congress and the states to support the FCC’s effort through related initiatives. Section II of this Note surveys the current status of broadband deployment, the importance of infrastructure access in achieving universal service, and why elimination of rights-of-way fees does not achieve that goal. Section III examines current federal policies fostering broadband deployment through rights-of-way policy. Section IV explains why coordinated action is necessary to reduce costs to access infrastructure for broadband deployment. Lastly, this Note proposes various cost-saving solutions by the FCC, Congress, and states, which can pave the way to cost reductions that

2013), <http://www.nytimes.com/2013/03/29/us/politics/obama-makes-impassioned-plea-for-gun-control.html>.

30. See generally HAL J. SINGER & JEFFREY D. WEST, FIBER-TO-THE HOME COUNCIL, ECONOMIC EFFECTS OF BROADBAND INFRASTRUCTURE INVESTMENT AND TAX INCENTIVES FOR BROADBAND DEPLOYMENT (2010), available at <http://www.ftthcouncil.org/p/cm/ld/fid=44&tid=76&sid=67> (noting the significant economic benefit of broadband investment).

31. See H.R. 1695, 112th Cong. § 2 (2011) [hereinafter H.R. 1695]; S. 1939, 112th Cong. § 2 (2011) [hereinafter S. 1939].

32. E.g., Comments of the City of Lafayette, Cal. at 1, Acceleration of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, FCC WC Docket No. 11-59 (rel. June 13, 2012) [hereinafter *Comments of the City of Lafayette*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021922511> (“It would be dangerous to the public, and harmful to communities, to attempt to develop federal rules that prevented localities from fully considering the impact of installations, or modifications to installations in the right-of-way.”); Comments of Intergovernmental Advisory Comm. at 5, Acceleration of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, FCC WC Docket No. 11-59 (rel. Mar. 16, 2012) [hereinafter *Comments of IAC*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021901497> (“The Commission must respect the fact that while we recognize the importance of broadband to the future of our communities, it is but one of multiple responsibilities and obligations we face, and our task is to balance the promotion of broadband deployment and adoption with these other responsibilities.”).

33. *Infra* Part II.C.

will assist the FCC in achieving universal high-speed broadband deployment.

II. THE ROAD TO GOOGLE FIBER

A. *Universal Broadband: A Call to Action*

The FCC called for universal broadband service for all Americans in its National Broadband Plan in 2010.³⁴ In its 2012 broadband report, the FCC estimated that nearly “[n]ineteen million Americans [still] live where fixed broadband networks do not reach; 14.5 million of those live in rural America.”³⁵ But it is not just rural Americans that are without a critical benefit³⁶: only 40% of Americans with access to broadband possess speeds deemed sufficient by the FCC.³⁷ Additionally, 142 million Americans rely on mobile connections,³⁸ which also require a “robust and reliable underlying wireline network.”³⁹ Even in metropolitan areas, wireline broadband infrastructure in the United States lags behind other countries, which affects its economic competitiveness.⁴⁰ The challenge for consumers

34. NATIONAL BROADBAND PLAN, *supra* note 4, at 135.

35. Inquiry Concerning the Deployment of Advanced Telecomm. Capability, *Eighth Broadband Progress Report*, FCC 12-90, GN Docket No. 11-121, para. 5 (2012) [hereinafter *Eighth Broadband Progress Report*], available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0827/FCC-12-90A1.pdf.

36. This Note assumes that universal high-speed broadband service is a goal worth attaining. For arguments to the contrary, see George S. Ford & Lawrence J. Spiwak, *Justifying the Ends: Section 706 and the Regulation of Broadband*, PHOENIX CTR. POLICY PERSPECTIVES No. 13-01, Feb. 25, 2013, at 3 (remarking that ubiquitous broadband may not be reasonable).

37. *Eighth Broadband Progress Report*, *supra* note 35, at Table 17. As of June 2011, the adoption rate for the United States as a whole was 64% for fixed broadband at speeds of at least 768 kbps/200 kbps. *Id.*

38. INDUS. ANALYSIS & TECH. DIV., WIRELINE COMPETITION BUREAU, FCC, INTERNET ACCESS SERVICE: STATUS AS OF DECEMBER 31, 2011 3 (Feb. 2013), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0207/DOC-318810A1.pdf.

39. W. TELECOMM. ALLIANCE, WIRELESS SERVICE DEPENDS ON ROBUST WIRELINE NETWORKS, available at <http://w-t-a.org/wp-content/uploads/2010/07/Advantages-of-Wireline-Network-011011.pdf>; see also Comments of the U.S. Telecomm. Ass’n at 6, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter *Sept. 2012 Comments of US Telecomm.*], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018033> (“Whether the consumer’s device is connected to a mobile wireless tower, a WiFi hot spot, or plugged into a fixed network, wireline expansion is required in order to accommodate wireless data traffic . . .”).

40. NATIONAL BROADBAND PLAN, *supra* note 4, at 4; *Eighth Broadband Progress Report*, *supra* note 35, at para. 5; BENJAMIN LENNETT, SARAH J. MORRIS & GRETA BYRUM, NEW AM. FOUND., UNIVERSITIES AS HUBS FOR NEXT-GENERATION NETWORKS 3 (2012), available at http://newamerica.net/sites/newamerica.net/files/policydocs/Universities%20as%20Hubs%20for%20Next-Generation%20Networks_3.pdf.

is not only obtaining access,⁴¹ but also possessing access at speeds that are affordable.⁴²

Even Google acknowledges that “[w]hile it is necessary that broadband infrastructure be available to all Americans, mere availability is not sufficient.”⁴³ As many businesses move to online platforms, robust and widespread access assists in connecting low-income residents with economic opportunities.⁴⁴ Access means more opportunities to telework for seniors and individuals with disabilities.⁴⁵ It means more jobs and increased property values, as more businesses are attracted to areas with high connectivity.⁴⁶ It also means increased educational opportunity for students, both at school and at home, training them for the future: a digital economy.⁴⁷ While many subscribers of broadband have seen improvements in speed, nothing comes close to what Google Fiber offers.⁴⁸

The call to action for universal high-speed service is not new. In 1999, FCC Chairman William Kennard stated that the FCC would “[p]romote the development and deployment of high-speed Internet

41. While some commenters, such as Verizon, rejected this assertion by claiming that people have access to *wireless* broadband, the capabilities and available uses of wireless broadband differ from that of fiber because of data caps and lower speeds. *See* Comments of Verizon at 14, Concerning the Deployment of Advanced Telecommunications Capability, FCC WC Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter *Comments of Verizon*], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018156> (“Indeed, with a population of 316.7 million in the United States with 96.65 percent of the U.S. population having access to high-speed broadband, including wireless broadband, NTIA’s most recent data reflect that fewer than four percent of residents lack access to broadband service with download speeds in excess of the Commission’s benchmark.”).

42. *Eighth Broadband Progress Report*, *supra* note 35, at para. 5.

43. *Reply Comments of Google Inc.*, *supra* note 23, at 14.

44. *See* CHARLES M. DAVIDSON & MICHAEL J. SANTORELLI, ADVANCED COMM’NS LAW & POLICY INST., BROADBAND AND THE EMPIRE STATE: TOWARD UNIVERSAL CONNECTIVITY IN NEW YORK 5 (2012), available at <http://nysbroadband.ny.gov/assets/documents/ACLPRReporteSeptember2012.pdf>.

45. *See* CAL. BROADBAND TASK FORCE, THE STATE OF CONNECTIVITY: BUILDING INNOVATION THROUGH BROADBAND 13 (2007), available at http://www.cio.ca.gov/broadband/pdf/CBTF_FINAL_Report.pdf.

46. *See* Elise Ackerman, *How Kansas Won the Google Fiber Jackpot and Why California Never Will*, FORBES (Aug. 4, 2012, 7:14 PM), <http://www.forbes.com/sites/eliseackerman/2012/08/04/how-kansas-won-the-google-fiber-jackpot-and-why-california-never-will/>.

47. Cynthia Lane, *High-Speed Fiber: A Huge Opportunity for Kansas City Students*, GOOGLE FIBER BLOG (Aug. 13, 2012), <http://googlefiberblog.blogspot.com/2012/08/high-speed-fiber-huge-opportunity-for.html>.

48. *See* OFFICE OF ENG’G & TECH., CONSUMER & GOVERNMENTAL AFFAIRS BUREAU, FCC, 2013 MEASURING BROADBAND AMERICA: A REPORT ON CONSUMER WIRELINE BROADBAND PERFORMANCE IN THE U.S. 52 (Feb. 2013), available at <http://transition.fcc.gov/cgb/measuringbroadbandreport/2013/Measuring-Broadband-America-feb-2013.pdf>. For example, Verizon Fiber offers 300 Mbps speeds in select locations, while the cable industry “intends to extend its service to rates beyond 100 Mbps.” *Id.*

connections to all Americans.”⁴⁹ To do this, he called on the FCC to “continue to streamline its operations [and] eliminate unnecessary regulatory burdens.”⁵⁰ That same year the FCC began to issue reports on the status of deployment to Americans.⁵¹ Five years later in 2004, President George W. Bush called for *all* Americans to have broadband by 2007.⁵² President Bush supported deregulation of “legacy regulations” to spur innovation and increase capital for investment in fiber-to-the-home deployment.⁵³ But by 2010, the FCC estimated that nearly 100 million Americans were still without access.⁵⁴

Fast forward to 2013, and Chairman Kennard’s wish from 1999 still has not been fulfilled. Although progress has been made,⁵⁵ the longstanding goal of universal broadband service has not been reached.⁵⁶ Despite current speeds and the 19 million without access,⁵⁷ some ISPs and industry associations are satisfied that broadband is being deployed in a “reasonable and timely manner”⁵⁸ contrary to the FCC’s determination.⁵⁹

49. FCC, CHAIRMAN KENNARD’S AGENDA FOR THE FCC FOR 1999 (Jan. 7, 1999), available at <http://transition.fcc.gov/Speeches/Kennard/Statements/stwek901.html>.

50. *Id.*

51. *See, e.g., Eighth Broadband Progress Report, supra* note 35, at para. 1.

52. Memorandum on Improving Rights-of-Way Management Across Federal Lands to Spur Greater Broadband Deployment, 40 WEEKLY COMP. PRES. DOC. 696 (Apr. 26, 2004), available at <http://www.gpo.gov/fdsys/pkg/WCPD-2004-05-03/pdf/WCPD-2004-05-03-Pg696.pdf#page=1>.

53. WHITE HOUSE, A NEW GENERATION OF AMERICAN INNOVATION 11 (Apr. 2004), available at http://www.eclac.cl/iyd/noticias/pais/6/31456/EEUU_doc_1.pdf.

54. NATIONAL BROADBAND PLAN, *supra* note 4, at 3.

55. *Eighth Broadband Progress Report, supra* note 35, at para. 136 (“Private industry is continuing to build out broadband and has invested significantly into broadband networks to date.”).

56. *Id.* at para. 135 (“The nation’s deployment gap remains significant and is particularly pronounced for Americans living in rural areas and on Tribal lands.”).

57. *Id.* at para. 5.

58. *Comments of Verizon, supra* note 41, at 3; *Comments of CTIA—The Wireless Ass’n at 4, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter Sept. 2012 Comments of CTIA], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018076>; Comments of Comcast at 3, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7022018162>; *Sept. 2012 Comments of US Telecomm., supra* note 39, at 13. *But see* *Comments of the Nat’l Ass’n of Telecomm. Officers and Advisors at 2, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter Comments of NATOA], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018052>; Comments of the Fiber-to-the-Home Council at 14, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter Comments of FTTHC], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018101>.**

59. NATIONAL BROADBAND PLAN, *supra* note 4, at 135; *see* Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 § 706 (codified at 47 U.S.C. § 1302 (2006)).

B. Why Rights-of-Way Matter if Universal Service is to Become a Reality

Before addressing the goal of universal service, ISPs must be able to obtain access to rights-of-way.⁶⁰ Gaining access to rights-of-way is necessary for ISPs to utilize poles, conduits, ducts, roads, and power lines to build out infrastructure to deploy broadband.⁶¹ For purposes of this Note, the total cost ISPs must expend to access infrastructure is comprised of two parts: fees charged by state and local governments to a service provider to allow it to use rights-of-way; and actual costs related to building out infrastructure, including navigating the rights-of-way approval process. There is much debate as to whether state and local rights-of-way fees should reflect market-based value or be limited to actual cost for use,⁶² but it would be hard to find anyone who would argue against reductions of actual cost to access infrastructure.

Deploying broadband can be cost prohibitive for ISPs in both rural and urban areas, depending on the cost to build and consumer demand.⁶³ For example, it costs a tremendous amount of money to deploy fiber, which is a one-time capital outlay.⁶⁴ The FCC estimates that “deploying a mile of fiber can easily cost more than \$100,000,” and that the largest element of cost associated with deployment is the expense of burying fiber in the ground.⁶⁵ In fact, it is estimated that approximately 70–80% of the cost of deploying fiber underground is spent on the physical labor of trenching

60. A right-of-way is a property interest owned by the state or locality, and ISPs obtain an easement to use that interest through fees paid for access. Ellrod, *supra* note 25, at 482; Jennifer Amanda Krebs, *Fair and Reasonable Compensation Means Just That: How § 253 of the Telecommunications Act Preserves Local Government Authority Over Public Rights-of-Way*, 78 WASH. L. REV. 901, 904 (2003).

61. See NATIONAL BROADBAND PLAN, *supra* note 4, at 114, 109.

62. See generally Ellrod, *supra* note 25, at 489-500; Christopher R. Day, *The Concrete Barrier at the End of the Information Superhighway: Why Lack of Local Rights-of-Way Access Is Killing Competitive Local Exchange Carriers*, 54 FED. COMM. L.J. 461, 488 (2002).

63. NATIONAL BROADBAND PLAN, *supra* note 4, at 171.

64. See *Sept. 2012 Comments of US Telecomm.*, *supra* note 39, at 5 (“The wireline portion of broadband provider capital expenditures remains the largest component of broadband investment. . . . In 2011 wireline companies still contributed the most capital at [forty-one] percent, followed closely by [forty] percent for wireless and then cable at [nineteen] percent.”).

65. NATIONAL BROADBAND PLAN, *supra* note 4, at 114. Similarly, the FCC estimates that “the collective expense of obtaining permits and leasing pole attachments and rights-of-way can amount to 20% of the cost of fiber optic deployment.” *Id.* at 109. See also Guatham Nagesh, *House Dems Want Cost Estimate for ‘Dig Once’ Broadband*, HILLICON VALLEY (July 26, 2011, 10:29 AM), <http://thehill.com/blogs/hillicon-valley/technology/173537-house-dems-want-analysis-of-laying-fiber-optic-cable-along-highways#ixzz2Ki3VSZ8Q>.

roads to lay the conduit.⁶⁶ Additionally, it can be significantly more expensive to dig up and then repair an existing road to lay fiber.”⁶⁷

The high cost of actual deployment affects the United States’ ability to achieve the goal of universal service in several ways. First, the lower the population density of a given area, the more expensive it is to deploy fiber.⁶⁸ This means that the fewer the subscribers, the fewer individuals available for the ISP to recoup its investments.⁶⁹ Specifically in rural areas, service may not be affordable if ISPs pass along the increased per capita cost to consumers.⁷⁰ Second, if the cost to access infrastructure is high in a given area, ISPs may not find it profitable to deploy, regardless of whether the area is rural.⁷¹ Lastly, if the cost to trench existing roads is too prohibitive, or the rights-of-way process too costly, existing ISPs may not initiate service upgrades in non-rural areas.⁷² Clearly, eliminating unnecessary costs surrounding the rights-of-way process or build-out of infrastructure is important to the challenge of obtaining universal service.

C. Google Fiber as a Case Study: Eliminating Rights-of-Way Fees

It is too early to measure the success of Google Fiber’s business model on a national scale,⁷³ but the FCC has already noted the project’s

66. ALCATEL-LUCENT, DEPLOYING FIBER-TO-THE-MOST-ECONOMIC POINT 6 (2007), available at http://www.alcatel.hu/wps/DocumentStreamerServlet?LMSG_CABINET=Docs_and_Resource_Ctr&LMSG_CONTENT_FILE=Other/23168_DeployFiber_wp.pdf; see also Stacey Higginbotham, *The Economics of Google Fiber and What It Means for U.S. Broadband*, GIGAOM (July 26, 2012, 3:52 PM), <http://gigaom.com/2012/07/26/the-economics-of-google-fiber-and-what-it-means-for-u-s-broadband/> (“It’s accepted that one of the most costly elements of building out a fiber network is the physical labor associated [with it]. . . . Google has already strung cable on power lines throughout Kansas City and lowered those costs by working with the local utility and AT&T to get access to the utility poles without having to pay high fees.”).

67. See U.S. DEP’T OF TRANSP., TELECOMMUNICATIONS HANDBOOK FOR TRANSPORTATION PROFESSIONALS 41 (2004), available at http://ops.fhwa.dot.gov/publications/telecomm_handbook/telecomm_handbook.pdf.

68. See David Talbot, *When Will the Rest of Us Get Google Fiber?*, MIT TECH. REV. (Feb. 4, 2013), <http://www.technologyreview.com/news/510176/when-will-the-rest-of-us-get-google-fiber/>.

69. See *id.*

70. COLUMBIA TELECOMM. CORP., BROADBAND IN GARRETT COUNTY: A STRATEGY FOR EXPANSION AND ADOPTION 13, 16 (May 1, 2012), available at <http://www.garrettcountry.org/dotcom/files/GarrettCountyBroadbandReport.pdf> (“[A]bsent extremely costly public subsidy . . . it is almost impossible for the public sector to dramatically change that economic calculus.”).

71. See *id.* at 13, 16.

72. *Id.* at 9–10, 12.

73. See Scott Canon, *Google Fiber’s Gigabit Gamble Has Implications Far Beyond KC*, KAN. CITY STAR (Sept. 24, 2012), <http://www.kansascity.com/2012/09/24/3832330/google-fibers-gigabit-gamble-has.html> (noting in an interview with Fiber-to-the-Home Council’s Matthew Render that the Google Fiber project may not be profitable); Haydn Shaughnessy, *Google Fiber and Google Glass Could Also Come to Nothing*, FORBES (Apr. 26, 2013 12:26 PM), <http://www.forbes.com/sites/haydnshaughnessy/2013/04/26/google->

impact on Kansas City.⁷⁴ As it stands now, Google Fiber has had new businesses clicking their heels to get into Kansas City.⁷⁵ Not only are Google and Kansas City confident that the new network will attract economic development,⁷⁶ they are hopeful that the project will bring enhanced educational opportunities to students⁷⁷ and help to bridge the “digital divide” by increasing digital literacy in the community.⁷⁸

Despite Google’s belief that ubiquitous access is a goal worth striving for,⁷⁹ Google has not yet been able to deploy to all residential homes in Kansas City.⁸⁰ Google made a decision not to deploy service to “fiberhoods”⁸¹ in which sufficient consumer demand for the service was not present.⁸² Google predetermined the percentage of homes within each “fiberhood” necessary for preregistration—in some instances only 5%, and

fiber-and-google-glass-could-also-come-to-nothing/2/ (indicating that Google’s investment in three cities may not be a sound business strategy).

74. *FCC’s Broadband Acceleration Initiative*, *supra* note 18, at 2.

75. See Cyrus Farivar, *Google Fiber is Live in Kansas City, Real World Speeds at 700Mbps*, ARS TECHNICA (Nov. 13, 2012, 8:35 PM), <http://arstechnica.com/business/2012/11/google-fiber-is-live-in-kansas-city-real-world-speeds-at-700-mbps/> (noting that a group of entrepreneurs arrived in Kansas City seeking fiber eligible homes); Ben Palosaari, *With Google Putting Fiber in Austin, Kansas City Startup Village Confronts an Uncertain Future*, PITCH (Apr. 30, 2013), <http://www.pitch.com/kansascity/kansas-city-startup-village-google-fiber/Content?oid=3214898&showFullText=true> (discussing the expansion of the “Kansas City Startup Village”).

76. Matt Dunne, *Answers to Your Town Hall Questions – Part II*, GOOGLE FIBER BLOG (June 15, 2011), http://googlefiberblog.blogspot.com/2011/06/answers-to-your-town-hall-questions_15.html.

77. Lane, *supra* note 47.

78. Kenneth Carter, *The State of Broadband Internet Access in Kansas City*, GOOGLE FIBER BLOG (June 22, 2012), <http://googlefiberblog.blogspot.com/2012/06/state-of-broadband-Internet-access-in.html>. *But see* Mary Sanchez, *Google Spreads, But Issue of Digital Divide Remains*, KAN. CITY STAR (Mar. 20, 2013), <http://www.kansascity.com/2013/03/20/4133131/as-google-spreads-issue-of-digital.html>. This does not mean, however, that low-income residents would not have access to Internet at public institutions such as libraries, schools, or other community hubs. *Id.* See also Karl Bode, *Low Income Kansas City Residents Left in Google Fiber Dust*, DSL REPORTS (Aug. 29, 2012), <http://www.dslreports.com/shownews/Low-Income-Kansas-City-Residents-Left-in-Google-Fiber-Dust-120967> (noting that subscriber rates for low income neighborhoods were low).

79. See Comments of Google at 1, 5, A National Broadband Plan for Our Future, FCC GN Docket No. 09-51 (rel. June 8, 2009) [hereinafter *June 8 Comments of Google*], available at <http://apps.fcc.gov/ecfs/document/view?id=6520220241>.

80. See *Frequently Asked Questions – Fiberhoods*, GOOGLE FIBER, <https://fiber.google.com/help/> (last visited July 11, 2013) (“We will be able to include you in a future rally, but for now we can’t commit to building in your fiberhood. If you pre-registered for service you’ll receive a refund of your \$10 pre-registration fee within ten days of when we publish the final list of qualified fiberhoods.”).

81. *Frequently Asked Questions – Fiberhoods*, *supra* note 80 (“A fiberhood is a portion of [Kansas City] that includes about 250-1,500 households.”).

82. Interview with Derek Slater, Policy Analyst, Google Inc. (Sep. 4, 2013), see *Bryant Community*, GOOGLE FIBER, <https://fiber.google.com/cities/kck/#header=check&fiberhood=knsskskenf04> (last visited July 11, 2013) (“During the summer 2012 rally, this fiberhood did not get enough pre-registrations to qualify for Google Fiber.”).

in others 25%⁸³—and decided whether it would deploy.⁸⁴ By requiring preregistration, Google avoided building out infrastructure until it was assured that a large enough consumer base wanted the product.⁸⁵ It does not take a calculator to understand the basic mathematics behind a company's decision to deploy, regardless of whether demand or profitability are driving factors of its motivation. In order to recoup an investment, there must be enough subscribers who are willing to pay the stated service fees for an investment to be considered worthwhile.⁸⁶ For fiberhoods that initially failed to meet preregistration targets, Google has not yet committed to come back any time soon.⁸⁷

The Google Fiber case suggests that even if a city eliminates all of its rights-of-way fees, the cost of deploying fiber, coupled with the uncertainty of a large enough base of willing and able consumers to pay for the service, creates a financial disincentive for even large and prominent companies to deploy service to all residents.⁸⁸ Additionally, if a company as large and with as much capital as Google failed to deploy fiber to those fiberhoods despite *some* residents having a desire for it,⁸⁹ what does that mean for smaller start-ups who may wish to bring fiber to smaller and more rural communities?⁹⁰ More importantly, what does Google Fiber mean for the

83. *Frequently Asked Questions – Fiberhoods*, *supra* note 80 (“A fiberhood is a portion of [Kansas City] that includes about 250-1,500 households.”).

84. *See* Anna-Maria Kovacs, *Rational Broadband Investment: Why the FCC's New Task Force is a Good Step Forward*, FIERCE TELECOM (Dec. 11, 2012), <http://www.fierce-telecom.com/story/rational-broadband-investment-why-fccs-new-task-force-good-step-forward/2012-12-11#ixzz2GJ7qarzu>; ANUPAM BANERJEE & MARVIN SIRBU, TOWARDS TECHNOLOGICALLY AND COMPETITIVELY NEUTRAL FIBER TO THE HOME (FTTH) INFRASTRUCTURE 9–10, *available at* http://www.andrew.cmu.edu/user/sirbu/pubs/Banerjee_Sirbu.pdf (“[T]he cost of trenching or making poles ready to deploy fiber is prohibitively high for one to go back and retrofit fiber as more homes subscribe to the service.”).

85. *See Frequently Asked Questions – Basics*, GOOGLE FIBER, <https://fiber.google.com/help/> (last visited Jan. 21, 2013) (“So, in those fiberhoods that are more complicated to build, we wanted to make sure that enough residents want Fiber service.”); Kovacs, *supra* note 84.

86. *See* DAVIDSON & SANTORELLI, *supra* note 44, at 25 (“[P]ockets of unserved areas persist because no business case exists for service providers to extend their networks to these areas.”).

87. *Frequently Asked Questions – Fiberhoods*, *supra* note 80 (“[F]or now we can't commit to building in your fiberhood.”). *But see* Fred Bauters, *Brad Feld, Startup Village Get Second Chance at Google Fiber*, SILICON PRAIRIE NEWS (Mar. 15, 2013), <http://www.siliconprairienews.com/2013/03/brad-feld-startup-village-get-second-chance-at-google-fiber> (extending the application date two weeks for at least one fiberhood).

88. *See* BANERJEE & SIRBU, *supra* note 84, at 9–11.

89. Carter, *supra* note 78 (noting that roughly 25% of Kansas City's population was not using the Internet; of those not using the internet, 28% said it was because they were without a computer or it was too expensive).

90. *See Testimony of Milo Medin*, *supra* note 12 (“If regulations create disincentives for a large, well-established companies [sic] like Google, just imagine the impact on small and medium-sized enterprises, including the next generation of entrepreneurs who are just getting started.”).

FCC's goal of universal service? Because uncompensated access to rights-of-way does not necessarily lead to universal broadband deployment, the policy focus should be on realizing cost reductions in the deployment process. Cutting costs in the deployment process can serve to offset government subsidies to ISPs or consumers that will be necessary for the FCC to achieve universal broadband service.⁹¹

III. FEDERAL ACTION TO REDUCE INFRASTRUCTURE ACCESS COSTS

Efforts have been made or are currently underway to reduce infrastructure access costs. Outlining these efforts provides helpful background to understand the solutions detailed in Section IV. They include stalled federal legislation, the creation of committees by way of Executive Order, and FCC Notice of Inquiry and recent announcements. The impetus for most of these efforts stemmed from the FCC's goals outlined in its National Broadband Plan.

In the plan, the FCC acknowledged that rights-of-way fees among localities lead to inconsistencies for providers, but focused mostly on solutions in other areas to reduce the cost of deployment.⁹² Proposed initiatives included the following: detailing a timeline and process for initial access and subsequent disputes, improvement of data on location and availability of rights-of-way, coordination of processes at the state and federal level, and creating a joint task force to craft best practices.⁹³ In fact, Google launched Google Fiber to meet some of the plan's goals through use of "creative ways," such as implementing fiber deployment test beds, incorporating broadband conduit in public works projects, focusing on community hub broadband deployment, and reducing barriers to wireless deployment.⁹⁴ One recommendation in the FCC's plan that Google

91. See *Reply Comments of Google Inc.*, *supra* note 23, at 10 ("While supply may be the primary focus . . . the analysis also must include demand-side issues."); Connect America Fund, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 11-161, para. 20 (2011) [hereinafter *Connect America Fund Order*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-161A1.pdf (discussing the FCC's establishment of the Connect America Fund, which will provide funding for broadband). This Note does not attempt to address the effect the CAF might have on universal service in the long-term or who may be the appropriate party or parties for the FCC to subsidize.

92. NATIONAL BROADBAND PLAN, *supra* note 4, at 113.

93. *Id.*

94. *Reply Comments of Google Inc.*, *supra* note 23, at 38–40, 743; Richard Whitt, *Experimenting with New Ways to Make Broadband Better, Faster, and More Available*, GOOGLE FIBER BLOG (Feb. 10, 2010), <http://googlefiberblog.blogspot.com/2010/02/experimenting-with-new-ways-to-make.html>; Richard Whitt, *Google Submits Initial Comments Supporting a National Broadband Plan*, GOOGLE PUBLIC POLICY BLOG (June 8, 2009, 4:06 PM), <http://googlepublicpolicy.blogspot.com/2009/06/google-submits-initial-comments.html>.

supported was a “dig once” policy.⁹⁵ The plan called for Congress to enact “dig once” legislation, requiring that the U.S. Department of Transportation (“DOT”) make federal financing of road projects contingent on joint trenching to lay broadband conduit.⁹⁶

A. *Dig Once: Congressional and Executive Action*

In May of 2009, before the FCC released its plan, Representative Anna G. Eshoo (D–CA) introduced the Broadband Conduit Deployment Act (“the Act”).⁹⁷ Referred to as “dig once” legislation, the Act would have satisfied one of the plan’s recommendations.⁹⁸ Reintroduced in 2011,⁹⁹ the proposed bill would have amended the general highways provision of the United States Code¹⁰⁰ and included a mandate whereby DOT would require states to install broadband conduit as part of an included highway construction project.¹⁰¹ The Act would have given DOT discretion to determine the “appropriate number of broadband conduits” to ensure that multiple providers could be accommodated, taking into account existing conduits and potential demand of the nearby locations.¹⁰² It would have allowed DOT to engage in rulemaking to establish standards to carry out such a feat, as well as provide states with a waiver.¹⁰³ In establishing standards, the Act would have required DOT to coordinate with the FCC to determine demand and existing broadband access.¹⁰⁴

Rep. Eshoo urged former Secretary of Transportation Ray LaHood, who supported her efforts, to formally adopt a “dig once” policy for federal highway efforts.¹⁰⁵ In alignment with her desire for more robust

95. NATIONAL BROADBAND PLAN, *supra* note 4, at 114.

96. *Id.*

97. Broadband Conduit Deployment Act, H.R. 2428, 111th Cong. (2009) [hereinafter H.R. 2428], *available at* <http://www.gpo.gov/fdsys/pkg/BILLS-111hr2428ih/pdf/BILLS-111hr2428ih.pdf>. The next month, Sen. Amy Klobuchar (D–MN) sponsored and presented the same bill in the Senate. Broadband Conduit Deployment Act, S. 1266, 111th Cong. (2009) [hereinafter S. 1266], *available at* <http://www.gpo.gov/fdsys/pkg/BILLS-111s1266is/pdf/BILLS-111s1266is.pdf>.

98. NATIONAL BROADBAND PLAN, *supra* note 4, at 114.

99. H.R. 1695, *supra* note 31; S. 1939, *supra* note 31. The Acts were largely the same as the 2009 versions, and the House and Senate bills were almost identical. *See* H.R. 2428, *supra* note 97; S. 1266, *supra* note 97. The only addition in the 2011 Act was an added “access” provision that read as follows: “[t]he Secretary shall ensure that any requesting broadband provider has access to each broadband conduit installed pursuant to this section, on a competitively neutral and nondiscriminatory basis, for a charge not to exceed a cost-based rate.” H.R. 1695, *supra* note 31.

100. 23 U.S.C. §§ 301–329 (2006).

101. H.R. 2428, *supra* note 97; S. 1266, *supra* note 97.

102. H.R. 2428, *supra* note 97, at § 330(b).

103. *Id.*

104. *Id.*

105. *Rep. Eshoo Urges Department of Transportation to Implement Cost-Saving Measures to Expand Broadband*, CONGRESSWOMAN ANNA G. ESHOO (Dec. 1, 2011), http://eshoo.house.gov/index.php?option=com_content&task=view&id=1111&Itemid=100067.

infrastructure, Eshoo touted the bill as one that would provide taxpayers “with the best value,” because no longer would there be a need to tear up roads solely for the purpose of laying conduit.¹⁰⁶ In addition, she advocated for the bill on the basis that it would “reduce barriers to deployment [and] increase investment and competition for broadband.”¹⁰⁷ After the legislation was referred to committee, Eshoo asked the U.S. Government Accountability Office (“GAO”) to conduct an internal study of the effects of dig once legislation.¹⁰⁸

Before GAO could release its findings, and before the bills died in committee,¹⁰⁹ President Obama issued two Executive Orders. President Obama’s first Executive Order (the “Federal Permitting Order”) called for more efficient and effective federal permitting and review processes.¹¹⁰ The President detailed a need for “timelines and schedules for completion of reviews,” and “early and active consultation” with stakeholders “to avoid conflicts or duplication of effort” among federal agencies.¹¹¹ The purpose of the Federal Permitting Order was to reduce the time necessary for providers to complete the federal permitting and review process to access rights-of-way, through disclosure of information on the process and expectations of various federal agencies.¹¹² The Federal Permitting Order also established a steering committee comprised of members of the FCC and various other agencies (including DOT).¹¹³ The committee was tasked with developing a permitting and review performance plan, and by May 31, 2013, implementing best practices for federal, state, local, and tribal government coordination.¹¹⁴

President Obama’s second Executive Order (the “Broadband Infrastructure Order”) directed DOT “to work with state and local governments to help them develop and implement best practices on matters such as establishing dig once requirements.”¹¹⁵ The Broadband Infrastructure Order defined dig once requirements as those “designed to

106. *The Jobs Deficit*, CONGRESSWOMAN ANNA G. ESHOO (Aug. 24, 2011), http://eshoo.house.gov/index.php?option=com_content&view=article&id=1048:the-jobs-deficit&catid=6:e-newsletters&Itemid=100219.

107. *Id.*

108. U.S. GOV’T ACCOUNTABILITY OFFICE, BROADBAND CONDUIT REPORT: GAO 12-687R 1 (2012) [hereinafter BROADBAND CONDUIT REPORT], available at <http://www.gao.gov/assets/600/591928.pdf>.

109. *S. 1939*, GOVTRACK.US, <http://www.govtrack.us/congress/bills/112/s1939> (last visited Sept. 28, 2013); *H.R. 1695*, GOVTRACK.US, <http://www.govtrack.us/congress/bills/112/hr1695> (last visited Sept. 28, 2013).

110. Exec. Order No. 13,604, 77 Fed. Reg. 18,887 (Mar. 22, 2012) [hereinafter *Executive Order Improving Performance of Federal Permitting and Review*], available at <http://www.gpo.gov/fdsys/pkg/FR-2012-03-28/pdf/2012-7636.pdf>.

111. *Id.*

112. *Id.*

113. *Id.* at 18,888.

114. *Id.* at 18,889–90.

115. *Executive Order Accelerating Broadband Infrastructure Deployment*, *supra* note 28, at 36,905.

reduce the number and scale of repeated excavations for the installation and maintenance of broadband facilities in rights-of-way.”¹¹⁶

B. *The Impact of a Dig Once Policy*

Days after President Obama issued the Federal Permitting Order, GAO released its report on the impact of a mandatory federal dig once policy.¹¹⁷ Based on its findings, GAO noted that a mandatory dig once policy could result in unused conduit, reduced funding available for highway projects, increased administrative costs for state DOTs and local governments due to maintenance and leasing programs, and conflict with state and local deployment policies.¹¹⁸ However, the noted benefits included a decrease in the frequency of highway construction, lower installation costs, an increase in access and reliability of networks, and reduced time needed to deploy fiber.¹¹⁹

The largest benefit of a dig once policy, regardless of whether it is implemented at the federal or local level, is the potential cost savings.¹²⁰ If the overall cost of digging up roads can be shared among all the project’s parties, installation costs for areas that require long stretches of fiber needed for middle mile architecture could be significantly reduced.¹²¹ This would be especially important for rural, sparsely populated areas.¹²² If ISPs could repay local governments who have invested in conduit for the road project, local government costs to deploy broadband would decrease.¹²³

C. *Responses to the FCC’s Rights-of-Way Inquiry*

As the idea of a dig once policy was being floated through Congress, the FCC, through a Notice of Inquiry, sought to determine what actions it could take to reduce deployment costs and increase access to rights-of-way by asking what barriers existed to infrastructure investment.¹²⁴ Not

116. *Id.*

117. *See* BROADBAND CONDUIT REPORT, *supra* note 108.

118. *Id.* at 7.

119. *Id.* at 4.

120. *Testimony of Milo Medin, supra* note 12, at 3 (“By installing conduit any time construction is going on, the cost of that construction is amortized over all projects that later utilize the conduit, reducing costs dramatically.”).

121. BROADBAND CONDUIT REPORT, *supra* note 108, at 4.

122. DAVIDSON & SANTORELLI, *supra* note 44, at 25.

123. *See* BROADBAND CONDUIT REPORT, *supra* note 108, at 5.

124. Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, *Notice of Inquiry*, FCC 11-51, paras. 2, 7 (2011) [hereinafter FCC 2011 NOI], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-51A1.pdf; Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, *Ninth Broadband Progress Notice of Inquiry*,

surprisingly, most of the responses from ISPs focused largely on removing regulatory barriers that hindered their access to rights-of-way.¹²⁵ The bulk of the opposition was aimed at regulations that slowed the deployment process.¹²⁶ For ISPs, each day spent waiting to acquire access to rights-of-way to begin deployment means another day of costs and no revenue.

Most ISPs asserted that the deployment process was unpredictable and lengthy due to compliance with various federal and state or local regulations.¹²⁷ Examples of regulations or processes that slowed deployment included unreasonable fees on rights-of-way¹²⁸ and lack of standardized application forms.¹²⁹ Moreover, even if ISPs were able to receive access to rights-of-way and initiate a deployment project, there was no formal mechanism to resolve a dispute if one arose, often leading to additional delays.¹³⁰ The industry largely viewed existing regulations as unnecessary “hoops” to jump through, calling on the FCC to exercise its authority to eliminate any unnecessary barriers to deployment.¹³¹

The ISPs proposed a variety of solutions, including master agreements, a standard process for rights-of-way approval with a point of contact and clear responsibilities for respective agencies, a consolidated

FCC 12-91, paras. 2, 19–20, 22 (2012) [hereinafter Ninth Broadband Progress NOI], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-12-91A1.pdf.

125. E.g., Written Ex Parte Presentation of Wireless Internet Service Providers Ass’n at 2, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. Aug. 6 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7021996892> [hereinafter *Ex Parte Comments of WISPA*]; Ex Parte Communication of CTIA The Wireless Ass’n at 6, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. July 25, 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7021993700> [hereinafter *July 2012 Ex Parte Comments of CTIA*]; *Reply Comments of ACA*, supra note 26, at 3.

126. E.g., *Comments of Verizon*, supra note 41, at 27.

127. *Ex Parte Comments of WISPA*, supra note 125, at 2, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. Aug. 6 2012); *July 2012 Ex Parte Comments of CTIA*, supra note 125, at 2, 4–5; Ex Parte Communication of NextG Networks, Inc. at 2, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. Feb. 3, 2012) [hereinafter *Comments of NextG*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021858363>; Written Ex Parte Communication of PCIA—The Wireless Infrastructure Ass’n at 2, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. July 18, 2012) [hereinafter *July 2012 Comments of PCIA*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021990194>; *Reply Comments of ACA*, supra note 26, at 7.

128. *Comments of FTTHC*, supra note 58, at 15; *Reply Comments of ACA*, supra note 26, at 9, 18–19.

129. *Comments of Verizon*, supra note 41, at 29.

130. *Reply Comments of ACA*, supra note 26, at 7.

131. See *Comments of Verizon*, supra note 41, at 26–27; Comments of PCIA—The Wireless Infrastructure Ass’n and the DAS Forum at 3–4, Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7022018270>; *Comments of FTTHC*, supra note 58, at 16 (“We are in the midst of rewiring America with fiber, and the Commission has an important role to play in removing barriers that thwart progress.”).

database of all available rights-of-way, and a voluntary mediation process.¹³² Several ISPs urged the FCC to engage in rulemaking to clarify when fees for rights-of-way are fair and reasonable within section 253(c),¹³³ the statute governing the FCC's role in state and local authority of rights-of-way, and to utilize its preemption authority to resolve disputes in favor of providers.¹³⁴

However, states were most concerned about ISPs' interference with rights-of-way via new construction and without consideration of local interests when increasing existing broadband speeds to consumers.¹³⁵ States argued that in many instances, the approval of rights-of-way is a uniquely local decision based on a myriad of community interests.¹³⁶ They rejected the notion that existing regulations served as a complete impediment, and suggested that engaging in more collaborative relationships between local governments and ISPs could help increase access to broadband Internet.¹³⁷ This is precisely the approach Google took in working with Kansas City.¹³⁸

IV. A COORDINATED APPROACH TO COST REDUCTIONS

With past federal efforts and the Google Fiber project in mind, it is essential that the FCC, Congress, and the states work together to create a coordinated policy on broadband infrastructure access. To a certain extent, the task force and committees created by President Obama's Executive

132. *Ex Parte Comments of WISPA*, *supra* note 127, at 3 (noting the need for master agreements, standardized processes, and known point person); *July 2012 Ex Parte Comments of CTIA*, *supra* note 127, at 3, 5 (noting the need for master agreements, standardized processes, and known point person); *Comments of IAC*, *supra* note 32, at 6 (suggesting voluntary mediation).

133. 47 U.S.C. § 253(c) (2006) ("Nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.").

134. *Reply Comments of ACA*, *supra* note 26, at 18; *Comments of NextG*, *supra* note 127, at 2.

135. *See generally Comments of NATOA*, *supra* note 58, at 10 (noting that efforts by industry to limit local government deployment of municipal broadband networks disadvantages underserved communities given that many Americans live in areas where municipal networks provide faster speeds of service at a lower cost than private operators are willing to provide); *Comments of FTTHC*, *supra* note 58.

136. *See Comments of the City of Lafayette*, *supra* note 32, at 1 ("While the FCC can serve an important role as a clearinghouse for information, it should avoid seeking to regulate what is necessarily a local review process that must be based upon the facts specific to particular installations."); *Comments of NATOA*, *supra* note 58, at 8 (noting the importance of planning around anchor institutions and hot spots).

137. *See Comments of IAC*, *supra* note 32, at 4 ("Together, they agreed on a process to create a 'one stop shop' operation whereby the network owner could, through one simplified application, obtain a permit to site facilities in any of the ten cities.").

138. Medin, *Ultra-High Speed Broadband is Coming to Kansas City, Kansas*, *supra* note 2.

Orders are a step in the right direction in achieving cost reductions. However, their recommendations will not change the status quo unless Congress, the FCC, and states take active steps to implement them. Cost reductions to broadband deployment benefit everyone. If states can improve the efficiency of their processes and provide certainty to the process of deployment, they can reduce up-front costs associated with time and labor in commencing a deployment project. If ISPs can realize savings at the deployment phase, they are in a better position to pass those savings along to consumers, potentially making service more affordable. Additionally, the FCC and Congress can help states and ISPs achieve these savings without aggressive regulatory mandates that interfere with a states' ability to collect fees for rights-of-way. The FCC can make forward progress while preserving the proper balance between federal and state objectives. Lowering deployment costs for ISPs should not be done at the expense of eroding localized management of rights-of-way.¹³⁹

A. *What the FCC Can Do to Incentivize Deployment*

Although sections 253 and 706 of the Telecommunications Act are plausible bases of authority for the FCC to rely on to preempt state and local broadband rights-of-way matters,¹⁴⁰ the FCC should refrain from doing so and instead engage in voluntary and educational initiatives that lead to efficiency and increased cost savings for government, ISPs, and potentially consumers. Moreover, these initiatives should incentivize the behavior the FCC seeks (speedy deployment) without sacrificing the consideration of legitimate and substantial community interests.¹⁴¹ The FCC should not ignore the state and local property interest inherent in rights-of-way management and should not take broad regulatory action to come up with a one-size-fits-all approach.¹⁴² Because of the sensitive local issues in dealing with rights-of-way, policies should respect states' ability to protect community interests.¹⁴³ By and large, the FCC has maintained a

139. Insofar as this has any effect on a state providing competitively neutral access to other service providers, this Note does not attempt to explore the consequences of a second market entrant who attempts to replicate what Google Fiber did in Kansas City.

140. 47 U.S.C. § 253 (2006); 47 U.S.C. § 1302 (2006).

141. See WILLIAM H. LEHR ET. AL, MEASURING BROADBAND'S ECONOMIC IMPACT 12, 13 (Dec. 2005) ("They can, for instance, help predict potential benefits obtainable from government investments that directly or indirectly subsidize broadband deployment or use.").

142. For the opposing opinion, taken by service providers, see *Comments of Verizon*, *supra* note 41, at 25 ("In contrast, a piecemeal, localized approach of state or local regulation would eliminate those efficiencies and increase costs and would undermine widespread deployment and adoption of broadband.").

143. See Edward Feser, *Encouraging Broadband Deployment from the Bottom Up*, 37(1) J. OF REGIONAL ANALYSIS & POL'Y 69, 69 (2007) (discussing how a "bottom-up" and narrowly tailored approach to fill broadband deployment gaps at the local level is more

deregulatory position on broadband,¹⁴⁴ and should continue to refrain from engaging in regulatory measures unless and until Congress speaks.

1. The FCC Does Not Have Authority Under Section 253(a) to Preempt Rights-of-Way Matters Relating to Broadband Deployment Unless It Includes Broadband in the Definition of “Telecommunications Services”

Section 253(a) governs the FCC’s role in state and local authority of rights-of-way. It states that “no State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate *telecommunications service*.”¹⁴⁵ However, a service categorized by the FCC as “information service”¹⁴⁶ is not a “telecommunications service”¹⁴⁷ under the Act’s Title II common carrier regulations, to which section 253 belongs.¹⁴⁸ The FCC has classified broadband Internet access as an information service, and thereby exempt from these regulations, cable broadband, wireless broadband, and facilities-based wireline broadband.¹⁴⁹

favorable than a large-scale regulatory strategy that “seeks to address all broadband concerns in a comprehensive fashion.”).

144. Jeremy D. Lemon, *Reclassifying Broadband Internet Access: Who Cares What Congress Wants Anyway?*, 6 LIBERTY U.L. REV. 137, 147-48 (2011) (internal citations omitted) (“In sum, no part of broadband Internet access has ever been regulated as a telecommunications service even though Internet access has a telecommunications component. Rather, the FCC has interpreted the Communications Act and the Telecommunications Act to mean that broadband Internet access should be regulated as an information service, subject only to the FCC’s ancillary jurisdiction under Title I.”).

145. 47 U.S.C. § 253(a) (2006) (emphasis added).

146. 47 U.S.C. § 153(20) (2006) (“The term “information service” means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.”).

147. 47 U.S.C. § 153(43) (2006) (“The term “telecommunications” means the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.”); 47 U.S.C. § 153(46) (“The term “telecommunications service” means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.”).

148. Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, *Declaratory Ruling*, FCC 07-30, paras. 3–4 (2007) [hereinafter *Wireless Declaratory Ruling*], available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-30A1.pdf (citing Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs., 545 U.S. 967 (2005)).

149. *Wireless Declaratory Ruling*, *supra* note 148, at para. 5; Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, *Report and Order and Notice*

Additionally, section 253(a) is qualified by two “safe harbor” provisions,¹⁵⁰ which state that

nothing in this section shall affect the ability of a State to impose, on a competitively neutral basis . . . requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of *telecommunications services*, and safeguard the rights of consumers;¹⁵¹ [and]

nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from *telecommunications providers*, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.¹⁵²

If the FCC determines that a state or local government has “permitted or imposed any statute, regulation, or legal requirement” in violation of section 253(a), it possesses preemptive authority “to correct such violation or inconsistency,”¹⁵³ unless the action falls under sections 253(b) or (c). Notably, these safe harbor provisions explicitly reference applicability to telecommunications service providers.¹⁵⁴

In its Notice of Inquiry to Accelerate Broadband Deployment, the FCC proposed a number of rulemaking and adjudicatory options to remove barriers to broadband deployment.¹⁵⁵ Of relevance here, the FCC argued that it retained authority under section 253 to interpret both: what “has the effect of prohibiting” an entity from providing *telecommunications service*, and what is “fair and reasonable compensation” with respect to rights-of-

of Proposed Rulemaking, FCC 05-150, paras. 5–6 (2005), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-150A1.pdf; see generally Brief for Appellee at 5–10, *Verizon v. FCC*, No. 11-1355 (D.C. Cir. Jan. 16, 2013) [hereinafter Brief for Appellee], available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0207/DOC-318819A1.pdf (describing the FCC’s classification decisions).

150. Ellrod, *supra* note 25, at 478; *BellSouth Telecomm., Inc. v. Town of Palm Beach*, 252 F.3d 1169, 1187–88 (11th Cir. 2001) (“The first and most basic reason for interpreting (b) and (c) as safe harbor provisions is that, reading (a), (b), and (c) together, it is the only interpretation supported by the plain language of the statute [I]t is not possible to read these subsections as pronouncing separate limitations that a state or local government could ‘violate.’”).

151. 47 U.S.C. § 253(b) (2006) (emphasis added).

152. 47 U.S.C. § 253(c) (2006) (emphasis added); see also Ellrod, *supra* note 25, at 478.

153. 47 U.S.C. § 253(d) (2006).

154. 47 U.S.C. § 253(b), (c) (2006).

155. See FCC 2011 NOI, *supra* note 124, at 18.

way fees.¹⁵⁶ The practical impact of such a proposal would be similar to the FCC's recent "shot clock" ruling.¹⁵⁷ The "shot clock" ruling was predicated upon CTIA's petition,¹⁵⁸ which asked the FCC to clarify the relevant portion of the statute governing local zoning approval of wireless siting facilities.¹⁵⁹ Section 332 states that a state or local government must "act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request."¹⁶⁰ The FCC defined a "reasonable period of time" to process siting applications under the statute as 90 days or less.¹⁶¹ A state that exceeds the 90-day limit is deemed to have failed to act, and triggers the statute of limitations period for an ISP to seek judicial review.¹⁶² In its petition, CTIA also asked for the FCC to preempt, under section 253(a), any local ordinances and state laws that automatically require an ISP to obtain a variance before siting facilities.¹⁶³ However, the FCC denied considering CTIA's request under section 253 based on insufficient evidence of a particular controversy.¹⁶⁴

If the FCC were to attempt to regulate rights-of-way for the purposes of deploying broadband under section 253, it should think twice.¹⁶⁵ In order for section 253 to apply to rights-of-way matters involving broadband deployment, it would require the FCC to redefine "telecommunications services" to include broadband.¹⁶⁶ Under a plain reading of section 253, and in accordance with the FCC's exclusion of broadband from the category of telecommunications services, the FCC does not have authority to preempt state and local laws prohibiting the provision of *information services* under section 253(a). Section 253 only extends to rights-of-way matters concerning telecommunications services and does *not* include those affecting broadband. Corroborating this view, the First Circuit has rejected

156. See FCC 2011 NOI, *supra* note 124, at 17 ("Thus, we believe the Commission has broad general rulemaking authority that would allow it to issue rules interpreting sections 253 and 332."); 47 U.S.C. § 253(a), (c) (2006); *Chevron v. NRDC*, 467 U.S. 837, 844 (1984); *City of Arlington v. FCC*, 133 S. Ct. 1863 (2013).

157. To Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review, *Declaratory Ruling*, FCC 09-99, para. 37 (2009) [hereinafter *Shot Clock Ruling*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-09-99A1.pdf.

158. CTIA Petition for Declaratory Ruling at 1 (July 11, 2008) [hereinafter *Shot Clock Petition*], available at http://files.ctia.org/pdf/080711_Shot_Clock_Petition.pdf; see 47 U.S.C. § 332(c)(7)(B)(ii) (2006).

159. 47 U.S.C. § 332(c)(7) (2006).

160. 47 U.S.C. § 332(c)(7)(B)(ii) (emphasis added).

161. *Shot Clock Ruling*, *supra* note 157, at paras. 45, 49.

162. *Id.* at paras. 37, 49.

163. *Shot Clock Petition*, *supra* note 158, at 35.

164. *Shot Clock Ruling*, *supra* note 157, at para. 67.

165. See FCC 2011 NOI, *supra* note 124, at 17.

166. See *id.* at 18 (citing *Brand X*, 545 U.S. 967 (holding that telecommunications services did not include information services based on the FCC's interpretation)).

an argument that used section 253 to try to impose liability on an information service provider.¹⁶⁷

2. While Section 706(b) Arguably Allows the FCC to Preempt Rights-of-Way Matters Related to Broadband, It Should Not Act Beyond Its Authority Under Section 253

In addition to section 253,¹⁶⁸ the FCC retains authority under section 706(b) to “remove barriers to infrastructure investment” when it determines that “advanced telecommunications capabilities” are not “being deployed to *all* Americans in a reasonable and timely manner.”¹⁶⁹ Unlike the Title II common carrier provisions, the term “advanced telecommunications capability” is statutorily defined “without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”¹⁷⁰

The FCC has determined that under section 706(b), advanced telecommunications capabilities are being deployed in a reasonable and timely manner when universal broadband service at four megabits per second download speed and one megabit per second upload speed is realized.¹⁷¹ If this threshold were met, the FCC’s obligations and authority to act would theoretically end under section 706(b), unless it redefined “advanced telecommunications capability.”¹⁷² But so long as the FCC continues to find that universal service of broadband is not being deployed, it possesses rulemaking and adjudicatory authority to remove barriers to infrastructure investment.¹⁷³ The concern here is not how the FCC defines

167. *Liberty Cablevision of Puerto Rico, Inc. v. Caguas*, 417 F.3d 216, 224 (1st Cir. 2005) (“[W]e reject the municipalities’ argument that Liberty’s provision of cable modem service renders it liable for fees as a “telecommunications provider” under the Telecommunications Act.”). This Note does not argue that action by the FCC if it chose to include broadband in the definition of “telecommunications services” under section 253 would be improper. Any such action would be subject to a test of reasonableness under principles of *Chevron. Arlington*, 133 S.Ct. at 1869–71.

168. See *Connect America Fund Order*, *supra* note 91, at para. 70, n.95 (stating that section 706 is an independent source of authority).

169. 47 U.S.C. § 1302 (2006); *Eighth Broadband Progress Rpt.*, *supra* note 35, para. 137 n.356 (emphasis added) (noting that “the language of the statute requires the Commission to make its determination regarding all Americans”).

170. 47 U.S.C. § 1302(d)(1) (2006).

171. NATIONAL BROADBAND PLAN, *supra* note 4, at 135; FCC 2011 NOI, *supra* note 124, at 32; *Eighth Broadband Progress Report*, *supra* note 35, at 62 (“[T]he standard against which we measure our progress is universal broadband deployment.”).

172. See 47 U.S.C. § 1302(b) (2006).

173. *Eighth Broadband Progress Report*, *supra* note 35, at 55–58; Ninth Broadband Progress NOI, *supra* note 124, at 3–4. *But see* Ninth Broadband Progress NOI, *supra* note 124, at 6 (recommending that the FCC “review and reset” the benchmark every few years).

“advanced telecommunications” under section 706, but whether it uses its obligation to remove barriers as a basis to preempt local rights-of-way authority.¹⁷⁴ In its Ninth Broadband Progress Notice of Inquiry, the FCC sought comment on how it could utilize its authority under section 706 to accelerate broadband deployment.¹⁷⁵ Specifically, it asked what the “relevant limitations on the Commission’s authority” under section 706 were.¹⁷⁶ Because section 706(b) appears to confer broad authority,¹⁷⁷ the FCC could arguably regulate broadband related rights-of-way matters under this section, rather than relying on section 253. By relying on section 706(b) authority, the FCC could achieve the same outcome it intended under section 253.¹⁷⁸

However, the FCC should not use its authority under 706(b) to act beyond the bounds of section 253. Although the decision as to which section it claims its authority under matters to the FCC,¹⁷⁹ as far as states are concerned, rights-of-way are rights-of-way regardless of whether they are accessed for the purpose of providing information services or

174. If Google Fiber stands for the proposition that high-speed fiber is financially plausible to deploy, presumably the FCC could define advanced telecommunications as one-gigabit fiber networks. At that point, deployment would not be “reasonable and timely,” and the FCC could continue to act to remove barriers. See 47 U.S.C. § 1302(b) (2006); Zach Walton, *Time Warner Cable Increases Speeds Near Kansas City, Could Be in Response to Google Fiber*, WEBPRONNEWS (Jan. 31, 2013), <http://www.webpronews.com/time-warner-cable-increases-speeds-near-kansas-city-could-be-in-response-to-google-fiber-2013-01> (“It won’t be long before we start to see ISPs either competing for the first time in their existence or being left behind because they refused to innovate and compete with new technologies.”).

175. Ninth Broadband Progress NOI, *supra* note 124, at 22.

176. *Id.*

177. *Cf. Preserving the Open Internet, Report and Order*, FCC 10-201, para. 121 (2010) [hereinafter *Open Internet Order*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf (citing *Ad Hoc Telecomms. Users Comm. v. FCC*, 572 F.3d 903 (D.C. Cir. 2009) (discussing the FCC’s statutory authority granted by section 706(a) as “broad,” but “not unfettered”); Brief for Appellee, *supra* note 149, at 29 (internal citations omitted) (“Verizon argues that Section 706(a) should be read to allow the FCC to use only authority already granted in other statutory provisions. That claim has no basis in – and is certainly not mandated by – the statutory text Instead, Section 706(a) delegates to the Commission the authority to use ‘other regulating methods that remove barriers to infrastructure investment.’ By its terms, that command is not tied to other ‘specifically-enumerated’ regulatory mechanisms.”).

178. *Cf. Open Internet Order, supra* note 177, at para. 123 (discussing section 1302(b)’s grant of additional authority for the FCC to take actions such as enforcing open Internet principles); Amanda Leese, *Net Transparency: Post-Comcast FCC Authority to Enforce Disclosure Requirements Critical to “Preserving the Open Internet”*, 11 NW. J. TECH. & INTELL. PROP. 81, 98 (2013) (“Under this Comcast standard, it seems that FCC authority available through the *Brand X* interpretation of Section 706 may not, in isolation, provide sufficient authority to implement the Rules. However, in light of the *Brand X* standard of review, it also seems that the negative treatment in Comcast of authority granted through Section 706 should not vitiate ancillary authority that Section 706 may lend to FCC enforcement of the transparency requirement in the Rules.”).

179. *See id.*

telecommunications services.¹⁸⁰ The FCC's Open Internet Order, which is currently being challenged by Verizon in the D.C. Circuit, is relevant insofar as it provides guidance on the FCC's understanding of its authority under section 706(b). There, the FCC relied on section 706(a) as a basis for promulgating regulations geared towards net neutrality.¹⁸¹

In the Open Internet Order, the FCC stated that “[s]ection 706(a) authorizes the Commission . . . to take actions, within their subject matter jurisdiction and *not inconsistent with other provisions of law*, that encourage the deployment of advanced telecommunications capability by any of the means listed in the provision.”¹⁸² While the D.C. Circuit has not determined whether the FCC acted properly under section 706(a), the FCC suggests that its power under section 706(b) is limited *at least* to the extent that any regulatory actions it takes conflicts with other provisions of the Telecommunications Act.¹⁸³

If the FCC were to use section 706(b) to “remove barriers to infrastructure investment” by defining what “has the effect of prohibiting” an entity to provide information services for rights-of-way or what is “fair and reasonable compensation” with respect to rights-of-way fees, it could make a plausible argument that any interpretation would not be inconsistent with section 253 because that section does not regulate information services.¹⁸⁴ However, the underlying premise of section 253 is based on Congress' recognition that the FCC has a limited role over localized decisions about property rights.¹⁸⁵ To the extent the FCC wishes to engage in rulemaking under 706(b), it should not act beyond what is presently proscribed by the text of section 253, unless and until Congress and the FCC determine the appropriate framework for regulation of broadband.¹⁸⁶ This would include refraining from intervening in local rights-of-way fee

180. Ellrod, *supra* note 25, at 533.

181. *Open Internet Order*, *supra* note 177, at para. 120.

182. *Id.* at para. 119.

183. *Id.*

184. *Id.* at para. 120; Telecommunications Act of 1996, 47 U.S.C. § 253(a), (c) (2006); *Chevron*, 467 U.S. at 844; *Arlington*, 133 S. Ct. 1863.

185. Ellrod, *supra* note 25, at 533 (“The lengthy debate regarding the preservation of local rights, and [Congress’] ultimate inclusion in the 1996 Act, demonstrates that the 1996 Act embodies a deliberate policy decision by Congress to protect local communities’ property rights and the central democratic value of federalism.”); William Malone, *Access to Local Rights-of-Way: A Rebuttal*, 55 FED. COMM. L.J. 251, 255 (2003) (“It is apparent from the course of the legislative bill that the purpose dominating the enactment of Section 253(c) was largely the preservation of existing local rights and responsibilities with respect to local rights-of-way.”); *but see* Day, *supra* note 62, at 467 (“The legislative history underpinning Section 253 suggests that Congress intended for local governments to have a limited role in controlling rights-of-way usage by telecommunications providers.”).

186. See TILLMAN L. LAY, TAKING ANOTHER LOOK AT FEDERAL/STATE JURISDICTIONAL RELATIONSHIPS IN THE NEW BROADBAND WORLD 36–37 (2011), *available at* http://www.nrri.org/pubs/telecommunications/NRRI_Broadband_Relations_Sept11-15.pdf.

decisions, which as some commenters have addressed, implicates both a taking under the Fifth Amendment¹⁸⁷ and concerns of federalism.¹⁸⁸

With respect to eliminating barriers to infrastructure access, there are other measures that can be utilized to facilitate interactions like those between Google and Kansas City without exercising regulatory force. The FCC is arguably not the best party to make specialized and local decisions regarding the use of the rights-of-way. States are. Despite the need to give deference to states, however, the FCC can still play an important role in reducing costs in the deployment process.

3. The FCC Should Provide Resources for ISPs and Local Governments

If ISPs and local governments have equal access to information about rights-of-way and infrastructure access, policymakers can better determine the appropriate long-term solution to close the gap between those who have high-speed connections, and those who have no connection at all. Generally, states should have little problem accepting the FCC's role as a resource center for best practices on the deployment process,¹⁸⁹ so long as the advice the FCC provides represents a balance of interests.

The need for online resources appears evident, at least at first blush. For example, the FCC and the National Telecommunications and Information Administration ("NTIA") currently host a number of highly technical resources.¹⁹⁰ But if a community were interested in building out a gigabit broadband infrastructure, where would it start? Unfortunately, many resources have fallen into neglect and have not been updated for years. Certainly there are association resources such as the National Association of Telecommunications Officers and Advisors ("NATOA"), but its guide on rights-of-way principles has not been updated since 1998.¹⁹¹ The National Conference of State Legislators lists brief synopses of information on cities that have developed broadband task forces, but

187. Ellrod, *supra* note 25, at 500; Krebs, *supra* note 60, at 912–15; Malone, *supra* note 185, at 258–59.

188. Ellrod, *supra* note 25, at 502–03.

189. See *Comments of the City of Lafayette*, *supra* note 32, at 1 (“[T]he FCC can serve an important role as a clearinghouse for information.”); *Comments of IAC*, *supra* note 32, at 1 (“We urge the Commission to work with us to better understand the local, state and tribal role in promoting broadband within our communities, and to support us in our efforts to make these goals attainable.”); *Sept. 2012 Comments of CTIA*, *supra* note 58, at 24 (“By advising local agencies on their roles and responsibilities, and on best practices in tower siting, the FCC will help ensure that the timing of local approvals is regular, predictable, and minimized.”).

190. *E.g.*, FCC TOOLS, <http://www.fcc.gov/tools> (last visited Mar. 4, 2013); NTIA, NATIONAL BROADBAND MAP, <http://www.broadbandmap.gov> (last visited Mar. 4, 2013).

191. See NATOA, LOCAL GOVERNMENT PRINCIPLES RELATING TO RIGHTS-OF-WAY MANAGEMENT AND COMPENSATION (2007), available at http://www.natoa.org/documents/Local_Government_Principles_Relating_to_Rights-of-Way.pdf.

does not contain a resource that would tell a state or locality how to go about creating a task force, and what should be considered in its formation.¹⁹² The National Association of Regulatory Utility Commissioners (“NARUC”) prepared a report on promoting broadband through access to rights-of-way in 2002, over ten years ago.¹⁹³ The Council of State Governments (“CSG”) has not published anything about broadband since 2011.¹⁹⁴ Lastly, the National Association of Counties lists its policy statements on the state of broadband deployment, but lacks any resources on model county programs as it relates to broadband adoption, with the exception of one case study regarding Maryland’s use of BTOP and ARRA funds.¹⁹⁵ None of the resources contain information on gigabit communities, fiber to the home technology, or more advanced capabilities like those that Google provided to Kansas City. Although the Fiber to the Home Council recently issued an instructive paper on “Becoming a Fiber-Friendly Community,”¹⁹⁶ it is not nearly as comprehensive as it could be.¹⁹⁷

In light of Google Fiber’s success, would ISPs take a different stance on what an ISP deems to be a “best practice”? Would state and local governments be prone to giving providers more certainty in fees and timelines? And would providers be more flexible if they were able to increase the number of residents who were willing to pay for access? As far back as 2010, the FCC’s Technical Advisory Council (“TAC”), of which Google is a member, recommended to the FCC that an “online deployment coordination system” be created to “provide advance notification of planned infrastructure projects.”¹⁹⁸ The use of such a system would be to

192. State Broadband Task Forces, Commissions, or Authorities and Other Broadband Resources, NAT’L CONFERENCE OF STATE LEGISLATURES (June 21, 2012), <http://www.ncsl.org/issues-research/telecom/state-broadband-task-forces-commissions.aspx>.

193. NAT’L ASS’N OF REGULATORY UTIL. COMM’RS, PROMOTING BROADBAND ACCESS THROUGH PUBLIC RIGHTS OF WAY AND PUBLIC LANDS (2002), *available at* http://www.naruc.org/Publications/row_summer02.pdf.

194. Knowledge Center: Broadband, COUNCIL OF STATE GOVERNMENTS (Mar. 4, 2013), <http://knowledgecenter.csg.org/kc/view-policy-areas/825>.

195. Achievement Award Search, NAT’L ASS’N OF COUNTIES, <http://www.naco.org/programs/recognition/Pages/AchievementAwardSearch.aspx> (accessed by searching for Information Technology) (last visited Mar. 4, 2013).

196. David St. John, BECOMING A FIBER-FRIENDLY COMMUNITY (May 2013), *available at* <http://www.ftthcouncil.org/p/bl/et/blogaid=214&source=1>.

197. FTTH states “[local governments or their affiliates] should adopt clear, predictable rules for providers to attach their wires and equipment across to these poles on a fair [sic], reasonable, and competitively neutral basis.” *Id.* at 4. However, FTTH provides no clarity as to what makes a policy clear, predictable, and competitively neutral, to provide a starting point for a community to begin to develop those policies. Nor does it list the personnel resources necessary to accomplish each of the goals set forth in the paper to becoming a “Broadband Friendly” community.

198. Memorandum from Tom Wheeler, Chair, Tech. Advisory Council, to FCC Comm’rs 2 (Apr. 22, 2011), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-306065A1.pdf.

partner providers with localities who had existing rights-of-way projects, thus resulting in partnership for increased cost savings.¹⁹⁹

Recently, former Chairman Genachowski announced the “Gigabit City Challenge,” in which the FCC called for at least one city in every state to deploy a one-gigabit network.²⁰⁰ To assist communities in this endeavor, he proposed “a new online clearinghouse of best practices to collect and disseminate information about how to lower the costs and increase the speed of broadband deployment nationwide.”²⁰¹ This proposal is a logical solution in the short-term to accelerate deployment and increase collaborative relationships between local governments and ISPs, at least until Congress and the FCC determine the best long-term policy solutions via legislation or rulemaking.

But before the FCC establishes an online clearinghouse like the one former Chairman Genachowski proposed, it should issue a Notice of Inquiry and determine what specific toolkits would be useful for both public and private parties. It should also be mindful of the competing interests of consumers, ISPs, and local governments in determining what a “best practice” will represent, and to whom. In providing information on best practices, the FCC should attempt to be as neutral as possible, highlighting areas of competing interest where local governments and ISPs may need to work hardest in negotiations to achieve a mutually beneficial result. If the FCC can establish a reputation through its online clearinghouse as being willing to promote true partnerships between the public and private sectors, perhaps parties would be more likely to work together in the broadband deployment process rather than resorting to legal action or adjudication through the FCC in the event of a dispute. And perhaps cost savings could be achieved.

B. Congress Should Expand the FCC’s Jurisdiction to Collect Meaningful Data to Assist with Deployment

As mentioned, the FCC’s authority depends at least in part on its characterization of reasonable and timely deployment.²⁰² Before it can do so, Congress must expand the FCC’s ability to collect information on the deployment of broadband, which can, at least in the short-term, bridge the gap to deployment.

Google was able to make a meaningful decision on where it would deploy because of access to information.²⁰³ It gathered useful data about the community, terrain, current programs in existence related to broadband adoption, and important figures regarding rights-of-way fees on a city-by-

199. *Id.*

200. *FCC’s Broadband Acceleration Initiative*, *supra* note 18.

201. *Id.*

202. *See* 47 U.S.C. § 1302(b) (2006).

203. *See* GOOGLE INC., REQUEST FOR INFORMATION, *supra* note 1.

city basis.²⁰⁴ The receipt of valuable information was the first step for Google to evaluate the feasibility of deployment in each community it was interested in approaching for its pilot project.

At present, the FCC has the authority to conduct surveys on the availability of broadband.²⁰⁵ While the statute calls for data collection on international comparison of broadband service capability, consumer usage, and census data,²⁰⁶ its usefulness after almost five years may have reached its limit. The rough percentages of broadband adoption and deployment nationwide are known, and now the challenge to overcome is connecting ISPs with communities that desire high-speed broadband. What is needed is more readily accessible and practical, localized data similar to that in which Google relied on to evaluate where to begin negotiations for its gigabit project—voluntary data provided by communities.²⁰⁷ This included information about facilities and resources, number of conduits, methods of calculating rights-of-way fees, and demographic data.²⁰⁸

In theory, every service provider could issue a request for information like Google's and obtain data from localities that are willing to provide it. Instead, Congress should expand the FCC's jurisdiction as it relates to collecting data of this kind. Since the data would be provided by states, not providers, it would not be confidential.²⁰⁹ This would assist ISPs in making deployment decisions, as well as provide states with a resource to compare their regulations and practices with other jurisdictions. This expansion would allow the FCC to play a vital role in serving as an information hub for ISPs, states, and even Congress, as it determines its long-term broadband policy. It would also be in line with the Obama Administration's push for more "open government."²¹⁰ To that end, it would also fulfill one of the goals outlined in Obama's Federal Permitting Order, which recommends utilizing technology to aid in the permitting process²¹¹ and supplementing the efforts of the Working Group by publishing online "comprehensive and current information" on access to

204. *Id.* at 10–11, 15–16.

205. Broadband Data Improvement Act of 2008, Pub. L. No. 110–385, 122 Stat 4096 § 103 (codified at 47 U.S.C. § 1303 (2012)).

206. *Id.*

207. See GOOGLE INC., REQUEST FOR INFORMATION, *supra* note 1.

208. *Id.*

209. See *Ctr. for Pub. Integrity v. FCC*, 505 F. Supp. 2d 105 (D.C. Cir. 2007) (holding that some FCC broadband data is a trade secret subject to an exemption from Freedom of Information Act disclosures); see also Benjamin W. Cramer, *The Nation's Broadband Success Story: The Secrecy of FCC Broadband Infrastructure Statistics*, 31 HASTINGS COMM. & ENT. L.J. 339, 357–364 (2009).

210. See WHITE HOUSE OPEN GOVERNMENT INITIATIVE, <http://www.whitehouse.gov/open> (last visited Mar. 27, 2013).

211. See *Executive Order Improving Performance of Federal Permitting and Review*, *supra* note 110, at 18,889.

infrastructure for broadband deployment.²¹² In fact, there have been efforts in Congress to amend and consolidate the reporting obligations of the FCC,²¹³ implying that at least some legislators are interested in streamlining the FCC's reporting requirements. This suggests that Congress might be amenable to revisiting the FCC's scope of authority as it relates to data collection.

To support the FCC's reporting requirements, Congress could require states to provide supplemental information in addition to what is already currently required under their responsibilities to DOT. A state already must prepare a rights-of-way operations manual describing its policies and procedures.²¹⁴ The FCC could partner with DOT to obtain and publish this information in a way that would assist service providers in deployment decisions and coordinate state efforts on reporting. A measure such as this may put a burden on states to find additional staff or resources to handle the reporting. However, the requirement would hopefully encourage centralization and streamlining of rights-of-way information on behalf of states and eventually become part of routine practices. Moreover, it could encourage states to utilize technology to disseminate information at a local level. The FCC may also be able to engage in more pointed policy decisions that would hopefully benefit states in the long run.

C. States Should Consider Revising Rights-of-Way Policies to Provide Certainty to Providers, Including "Dig Once" Policies

Commissioner Pai was correct when he suggested that states should streamline their own right-of-way management processes.²¹⁵ It is in a state's best interest to review and evaluate its own rights-of-way policies. After review, changes can be made that would attract more ISPs to deploy broadband the way Kansas City did with Google. Deployment is a two-way street. The onus should be shared by ISPs and states to change their respective policies. If we respect a provider's right to conduct business and earn revenue, we must respect a state's right to protect community interests. However, in making its policies more attractive, a state does not

212. *Executive Order Accelerating Broadband Infrastructure Deployment*, *supra* note 28, at 36,904.

213. FCC Consolidated Reporting Act of 2012, H.R. 3310, 112th Cong. (2012), available at <http://www.gpo.gov/fdsys/pkg/BILLS-112hr3310rfs/pdf/BILLS-112hr3310rfs.pdf>; FCC Consolidated Reporting Act of 2011, S. 1780, 112th Cong. (2011), available at <http://www.gpo.gov/fdsys/pkg/BILLS-112s1780is/pdf/BILLS-112s1780is.pdf>.

214. 23 C.F.R. § 710.201 (2013) (requiring state DOTs to provide a "manual describing its right-of-way organization, policies, and procedures" that is to be certified every five years). For an example of these manuals, see VA. DEP'T OF TRANSP., RIGHT OF WAY MANUAL OF INSTRUCTIONS (3d ed. Aug. 25, 2011), available at http://www.virginiadot.org/business/resources/Right_of_way/RW_Manual02132012_TechRev.pdf, and UTAH DEP'T OF TRANSP. RIGHT OF WAY DIV., OPERATIONS MANUAL (Jan. 2011), available at <http://www.udot.utah.gov/main/uconowner.gf?n=200601261554381>.

215. *See September 14 Remarks of Comm'r Pai*, *supra* note 7.

have to completely overhaul its regulations or give up autonomy to manage its rights-of-way. There are simple things that can be accomplished to achieve cost savings without sacrificing a state's role of protecting the public welfare. And by doing so, states may be able to create something similar to the interaction between Google Fiber and Kansas City—a solid foundation that a private company and public entity can build upon.

First, states should consider voluntarily implementing permit decision deadline provisions regarding approval of its rights-of-way. As it exists currently, only six states have a decision deadline provision formally enacted.²¹⁶ One of them happens to be Kansas.²¹⁷ Voluntary deadline provisions provide ISPs with certainty as to whether or not they can proceed with their project, and when.²¹⁸ Deadlines also help in planning to anticipate overall deployment timeframes, and thus total cost associated with the project.²¹⁹ In order for states to commit to their self-imposed deadlines, however, they must have the staff and resources to be able to process permit applications and make decisions in a timely manner. Additionally, states must develop an understanding of their broadband needs and deployment plans before providers submit applications to access the rights-of-way, so that states can approve or deny these applications within the context of the community broadband needs. To address this, states should form task forces at both the state and local level to determine what their communities needs are.²²⁰

Second, states can inform ISPs of formal dispute mechanism processes. Michigan, for example, resolves disputes between providers and municipalities by appointing a mediator to make a recommendation.²²¹ The entire dispute process, if contested and taken through each appeal, can take up to roughly six months to resolve.²²² Despite this length, the process provides both parties with predictability in knowing exactly who will be

216. N.H. REV. STAT. ANN. § 231:164 (2002) (six months); VA. CODE ANN. § 56-458(D) (2002) (forty-five days), IND. CODE ANN. § 8-1-2-101(a)(4) (West 2002) (thirty days); MICH. COMP. LAWS ANN. § 484.3115 (West 2002) (forty-five days); WASH. REV. CODE § 35.99.030 (2002) (thirty days); WASH. REV. CODE § 35.99.030 (2002) (120 days for master permits); KAN. STAT. ANN. § 17-1902(i) (West 2006) (thirty days).

217. KAN. STAT. ANN. § 17-1902(i) (West 2006) (thirty days).

218. See *Ex Parte Comments of WISPA*, *supra* note 127, at 2; *July 2012 Ex Parte Comments of CTIA*, *supra* note 127, at 6; *Comments of NextG*, *supra* note 127, at 2; *July 2012 Comments of PCIA*, *supra* note 127, at 2.

219. See *Ex Parte Comments of WISPA*, *supra* note 127, at 2; *July 2012 Ex Parte Comments of CTIA*, *supra* note 127, at 6; *Comments of NextG*, *supra* note 127, at 2; *July 2012 Comments of PCIA*, *supra* note 127, at 2.

220. For an example of a broadband task force, see STATE OF TENN., TENNESSEE BROADBAND TASK FORCE: REPORT AND RECOMMENDATIONS (2007), *available at* <http://www.state.tn.us/tra/bbtaskforce/Tenn.%20Broadband%20Task%20Force%20Report%20and%20Recommendations.pdf>.

221. MICH. COMP. LAWS ANN. § 484.3107 (West 2002).

222. *Id.*

involved and how long the process may take. The parties bear the costs to use a private mediator, so resource costs for the state are reduced.²²³

Third, in addition to improving policies in the approval process, states should evaluate the feasibility of enacting their own dig once policies. Utah, Tennessee, and Illinois have enacted policies, both formal and informal, to coordinate broadband projects with other road or utility projects. Utah's policy for the last five years, although not set forth in any specific statute, has been to lay broadband conduit during road construction projects.²²⁴ Illinois enacted an official dig once statute in 2009, requiring public notice of projects with a need for fiber-optic conduit or cable to be made available.²²⁵ In 2012, Chicago Mayor Rahm Emanuel released a Request for Information for the development of a municipal fiber ring, noting that planned street maintenance could be coordinated with the deployment to reduce costs of excavation and labor.²²⁶ The impetus for the project came as Chicago endeavored to upgrade its public utility system.²²⁷ Tennessee, home to Chattanooga's "US Ignite" project, a collaboration made possible through the White House and National Science Foundation, now boasts a city that has deployed fiber to over 170,000 homes.²²⁸ The city was able to bring about a one-gigabit broadband service to *all* of its residents in nine counties through a partnership with its municipal electric utility.²²⁹

223. Rules for the Arbitration of Interconnection Agreements and the Mediation of Complaints, *Order Formally Adopting Administrative Rules*, Mich. Pub. Serv. Comm'n Case No. U-16250 (2011), available at <http://efile.mpsc.state.mi.us/efile/docs/16250/0014.pdf> (Procedures for Telecommunications Arbitrations and Mediations included as Exhibit A).

224. STATE OF UTAH BROADBAND PROJECT, UTAH BROADBAND ADVISORY COUNCIL REPORT 15–16 (2012) [hereinafter UTAH BROADBAND ADVISORY COUNCIL REPORT], available at <http://utahbroadband.files.wordpress.com/2012/06/utah-broadband-advisory-council-report3.pdf>.

225. 605 ILL. COMP. STAT. ANN. § 5/9-131 (West 2009) (The state shall "collaborate to install fiber-optic network conduit where it does not already exist in every new State-funded construction project that opens, bores, or trenches alongside a State-owned infrastructure, including, but not limited to, roadways and bridges.").

226. CITY OF CHI., REQUEST FOR INFORMATION (RFI): BROADBAND INFRASTRUCTURE EXPANSION, section I, available at <http://www.cityofchicago.org/content/dam/city/depts/dps/ContractAdministration/Specs/2012/Spec111304.pdf>.

227. See Zachary Lutz, *Chicago Mayor Targets Affordable Gigabit Broadband, Free Wi-Fi Throughout City Parks*, ENGADGET (Sept. 25, 2012, 10:38 AM), <http://www.engadget.com/2012/09/25/chicago-broadband-challenge/> ("The idea came to Emanuel through Eric Schmidt, who suggested the upgrade be coordinated alongside the city's overhaul of its aging water/sewer system.").

228. *City Stories: Chattanooga Story*, US IGNITE, <http://us-ignite.org/chattanooga-story/> (last visited Mar. 4, 2013).

229. *Chattanooga Tennessee Announces Only 1 Gigabit Broadband Service in U.S. For Both Residential and Business Customers*, EPB (Sept. 13, 2010, 9:05 PM), <https://www.epb.net/news/news-archive/chattanooga-announces-only-1-gigabit-broadband-service-in-u-s-for-residential-and-business-customers/>.

Whether or not this legislation was enacted, it is an important acknowledgement that collaboration and partnerships between local agencies and ISPs can lead to cost savings. If a state can incorporate broadband deployment projects into its road or utility repair or construction projects, it can encourage service providers to build out their own networks in rural areas.²³⁰ This will lead to shared savings and the encouragement of broadband deployment in areas that may have previously been unattractive. These are not the only benefits that can be realized.²³¹

Dig once policies should be initiated at the local level and not dictated by Congress. As decision makers, neither Congress nor the FCC has sufficient information on local community needs to be able to assess demand, determine whether waiver is appropriate, and make those determinations based on consistent criteria.²³² Neither the FCC (nor DOT) is in the best position to know what is in the best interest of local communities.

Lastly, the rejected Broadband Conduit Deployment Act did not specify whether it would require the FCC to determine the basis for requiring deployment from *consumer* demand for broadband or *internet service providers'* demand in determining the number of conduits.²³³ In either case, the FCC, in determining whether or not either source of demand existed, would rely on state broadband plans and state evaluations of the feasibility of broadband in conjunction with its short and long term highway needs.²³⁴ With that in mind, the states are ultimately in a better position to make deployment decisions, but would greatly benefit from guidance and support from the FCC.

V. CONCLUSION

Consumers are the ultimate beneficiaries of a high capacity broadband infrastructure. Google was right when it stated that “[o]rdinary Americans suffer when we fail to have in place a national policy that honestly analyzes the strengths and weaknesses of the market, and provides

230. BROADBAND CONDUIT REPORT, *supra* note 108, at 5; NATIONAL BROADBAND PLAN, *supra* note 4, at 114–15.

231. See UTAH BROADBAND ADVISORY COUNCIL REPORT, *supra* note 224, at 15–16 (noting Utah DOT’s utilization of traffic and weather sensors through its fiber network).

232. See H.R. 2428, *supra* note 97; S. 1266, *supra* note 97; BROADBAND CONDUIT REPORT, *supra* note 108, at 7–8 (“DOT officials expressed concern that the agency would be making decisions and setting policy outside of its scope of expertise”); *Comments of City of Lafayette*, *supra* note 32, at 1 (“It would be dangerous to the public, and harmful to communities, to attempt to develop federal rules that prevented localities from fully considering the impact of installations, or modifications to installations in the right-of-way.”).

233. H.R. 1695, *supra* note 31, § 2; S. 1939, *supra* note 31 (noting that DOT and the FCC would coordinate to determine the size of each conduit is “sufficient to accommodate potential demand”).

234. See 23 U.S.C. § 135 (2012).

tailored policy responses.”²³⁵ The market has demonstrated, at least in the bubble that is Google Fiber and Kansas City, that eliminating fees for rights-of-way access does not lead to universal service. Broad preemption of local rights-of-way decisions by the FCC is not the answer and neither is a congressional directive to states. Reducing cost through streamlining processes and pushing for collaboration and partnerships among government and ISPs is the first step toward eliminating barriers to broadband deployment. It will do more harm than good if the federal government preempts local rights-of-way decisions on an ad hoc basis without a precise regulatory framework in mind. The Google Fiber experiment may not have been perfect, but its existence can inform the way Congress and the FCC support decision-making to encourage broadband deployment on a national scale.

235. *June 8 Comments of Google*, *supra* note 79, at 3.