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Broadband Localism

OLIVIER SYLVAIN*

Today, local governments are supplying broadband service to residents to fill the service gap left by major providers. Municipalities are joining forces with local anchor institutions and private providers to close the digital divide and incubate novel public-minded service models. This is the new broadband localism.

Some stakeholders, however, fear that public participation in the broadband market will negatively impact competition. They have articulated this concern in state legislation across the country; nineteen states forbid or otherwise restrict municipal ownership or administration of broadband and three may enact similar restrictions this year. No matter the substantive policy merits of such laws, opponents presume that local governments are "mere creatures of the state" under traditional state and local law, and that restrictions like these are unproblematic.

This Article does two things. First, one of its chief contributions is to identify and describe the new broadband localism. In this description, the Article demystifies the current Internet by explicating its more utilitarian and local political economy.

Second, the Article fills a void in legal scholarship on the interaction of public law administration and the Internet. It argues that the state plenary authority theory on which opponents have relied to justify restrictions on municipal broadband is wrong for at least two reasons. First, the theory overlooks the extent to which the federal government has carved out a positive role for municipalities in an array of legislative fields, including telecommunications and cable, the forbearers of broadband. Second, the theory neglects the ways in which the new broadband localism furthers the constitutional principles of democratic accountability and pluralism. This Article posits that, as expressed through recent federal legislation and local efforts, we are witnessing the emergence of an administrative regime that is far more accountable and responsive to local priorities than state plenary authority theory appreciates. Congress, the Article concludes, must act to preempt state restrictions, or courts must accept that municipalities are fundamental to the administration of public law in this distinctively dynamic legislative field.

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I. INTRODUCTION

All broadband is local. The speed and bandwidth capacity of local network infrastructure determines users' media consumption habits. They affect whether users socialize through email, social networking, or video chat. They define whether users turn to cable television or their laptop to watch video programming. High-speed, high-capacity broadband offers more utilitarian advantages as well: it is the difference between educational success and drift, employment and joblessness, health and sickness.²

¹ See, e.g., Brian Stelter, New Service Will Stream Local TV Stations in New York, MEDIA DECODER (Feb. 14, 2012, 10:58 AM), http://mediadecoder.blogs.nytimes.com/2012/02/14/new-service-will-stream-local-tv-stations-in-new-york/.

² See Jyoti Choudrie & Yogesh Kumar Dwivedi, Analysing the Factors of Broadband Adoption in the Household (2004) (unpublished research paper, Brunel University), available at http://is2.lse.ac.uk/asp/aspecis/20040034.pdf.

The local nature of broadband service is at odds with a romantic view about users surfing the Internet free from the impediment of earthly location. The cloud and space metaphors in vogue today bespeak a sense of transcendental freedom. But this talk of clouds is more romance than reality. The late Senator Ted Stevens, who was ridiculed by bloggers and late-night television hosts for saying that the Internet was nothing more than a "series of tubes," was on to something. Earthbound transmission equipment, cables, and technologies combine to make the Internet run as it does. Local broadband providers' network management practices, the grounded towers that loom over neighborhoods, and the cables that run under city streets determine the quality of users' Internet experiences.³

Incumbent broadband providers like Comcast or AT&T and major Internet stakeholders like Google have recognized for some time now that the speed and bandwidth capacity of "last-mile" infrastructure affects users' media choices and consumption habits.⁴ These private companies, however, only invest in broadband in densely populated or affluent local areas from which they expect immediate returns.⁵ This strategic choice has exacerbated existing gaps in access and quality of service; users in only the most fortunate urban centers in the country can count on state-of-the-art connectivity while others can barely count on the skimpiest of service.⁶

The gap in service has created an opportunity for local governments almost everywhere to provide and administer broadband service. They have become incubators for innovative last-mile infrastructure design and transmission technology. They are bringing to bear a unique set of institutional competences addressed to the distinctive informational and communications needs of their constituencies.⁷

³ See Liz Ruskin, Internet "Tubes" Speech Turns Spotlight, Ridicule onto Sen. Stevens, Common Dreams (July 15, 2006), http://www.commondreams.org/headlines06/0715-06.htm; see also Andrew Blum, Tubes: A Journey to the Center of the Internet 8 (2012).

⁴Study: Web Users Prefer Speed over Customization, WEBSITEOPTIMIZATION.COM, http://www.websiteoptimization.com/speed/tweak/design-factors/ (last modified Apr. 13, 2010)

<sup>2010).

&</sup>lt;sup>5</sup> See Stephen B. Pociask, Small Bus. Admin. Office of Advocacy, Broadband Use By Rural Small Businesses 23 (2005), available at http://archive.sba.gov/advo/research/rs269tot.pdf.

⁶ See id. at 25.

⁷ Cf. Gerald E. Frug, City Making: Building Communities Without Building Walls 210–17 (1999); Roderick M. Hills, Jr., Romancing the Town: Why We (Still) Need a Democratic Defense of City Power, 113 Harv. L. Rev. 2009, 2027 (2000) (reviewing Frug, supra); see also Peter Katz, The New Urbanism: Toward an Architecture of Community XXXV-XXXVI (1994); Douglas S. Kelbaugh, Repairing the American Metropolis 192–95 (2002); Jane Jacobs, The Death and Life of Great American Cities 410–12 (1961).

These descriptive facts comprise *broadband localism*. But they also reflect a normative policy orientation that privileges municipal autonomy, experimentation, and entrepreneurship. From this perspective, local governments are best suited to administering public law in a wide range of fields and addressing it to the idiosyncratic needs of their constituents.

To their credit, Congress, federal agencies, some states, and hundreds of municipalities are early converts to the new broadband localism. They have removed barriers to market entry and encouraged municipal leadership. Through the American Recovery and Reinvestment Act of 2009 in particular, Congress has awarded over seven billion dollars to governments and private providers across the country for local broadband build-out and adoption. The Recovery Act explicitly relies on the initiative of local communities for project design and implementation.

Some stakeholders, however, are fighting the emergent approach tooth-and-nail. Major incumbent providers in particular have opposed municipal broadband on the premise that it distorts the operation of the price mechanism. They have lobbied state legislatures aggressively to forbid or otherwise restrict municipal ownership of infrastructure or administration of service. Private providers and other opponents presume that municipalities cannot supply broadband service if their parent states forbid it. Under traditional state and local law, these opponents argue, local governments are mere creatures of the state. Nineteen states have responded accordingly, enacting restrictions on municipal broadband, who of which are close to tightening existing restrictions. The Georgia legislature is considering a bill that would impose restrictions where none existed before. It

The conceptions of state plenary authority on which some state policymakers have relied to justify restrictions on municipal broadband, I argue, are misguided and antiquated. State restrictions are putting a wrench in the Internet's maturation from the boutique curiosity of a generation ago to the full-

⁸ Issues: Technology, WHITEHOUSE.GOV, http://www.whitehouse.gov/issues/technology (last visited Oct. 24, 2012).

⁹ Ala. Code § 11-50B-1 (2012); Ark. Code Ann. § 23-17-409(b)(1) (West 2012); Colo. Rev. Stat. § 29-27-201 (2012); Fla. Stat. § 350.81 (2012); La. Rev. Stat. Ann. § 45:844.48 (2011); Mich. Comp. Laws § 484.2252 (2012); Minn. Stat. § 237.19 (2012); Mo. Rev. Stat. § 392.410(7) (2012); Neb. Rev. Stat. §§ 86-594, 86-595 (2012); Nev. Rev. Stat. §§ 268.086, 710.147 (2011); N.C. Gen. Stat. Ann. §§ 160A-340 to -340.6 (West 2012); 66 Pa. Cons. Stat. Ann. § 3014(h) (2012); S.C. Code Ann. § 58-9-2620 (2012); Tenn. Code Ann. § 7-52-601 (West 2012); Tex. Util. Code Ann. § 54.201 (West 2011); Utah Code Ann. § 10-18-201 (West 2012); Va. Code Ann. §§ 15.2-2108.6, 56-265.4:4, 56-484.7:1 (West 2012); Wash. Rev. Code § 54.16.330 (2012); Wis. Stat. § 66.0422 (2012).

<sup>(2012).

10</sup> H.R. 2695, 2012 Leg., 87th Sess. (Minn. 2012); H.R. 3508, 119th Gen. Assemb., Reg. Sess. (S.C. 2011).

¹¹ S. 313, 151st Gen. Assemb., Reg. Sess. (Ga. 2012).

service public resource of tomorrow. They are undermining innovation and exacerbating disparities in access and quality of service.

Since the introduction of the printing press, commentators have lamented the law's inability to keep pace with changes in communication technology. Writing in this same vein, I argue here that state restrictions are obstacles to technological development. I draw from recent scholarship on "cooperative localism" in particular to argue for a more flexible approach. Congress and federal policymakers, for example, have promulgated law that is adaptive to the technology and political economy of telecommunications and cable television. Specifically with regards to the latter, they have responded to the distinctly local nature of the cable technology by ratifying a limited but pivotal role for local authorities. 14

This argument addresses the structure of public communications law administration. The lack of local physical access to the diverse applications and content that comprise the Internet, I argue, makes positive local intervention in broadband service far more essential than it was for the media technologies of the past two centuries. State restrictions on local participation would do nothing but slow the Internet's integration into public life and stifle growth. Courts and lawmakers, I argue, should take steps to preserve or enlarge local autonomy and authority in this field.

This Article is organized into four parts. Part II introduces the technology and political economy of broadband localism. It explains the importance of the last-mile to users' online experiences, elaborates the ways in which providers and municipalities supply broadband access, and outlines Congress's recent effort in the Recovery Act to encourage municipal broadband. In short, I show that local governments have been pivotal to the development of broadband service, not as regulators, but as infrastructure owners, service providers, and incubators.

Part III considers the legal status of state restrictions on municipal broadband in light of the Supreme Court's treatment of similar restrictions in the analogous but different legislative field of telecommunications. The Court has reasoned that, as creatures of the state, local governments are barred from doing anything without unequivocal authorization from their parent states. I argue here that this rigid and old creature-of-the-state view is at odds with

¹² See, e.g., LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 24 (1999); WILLIAM F. OGBURN, ON CULTURE AND SOCIAL CHANGE: SELECTED PAPERS 30–31 (Otis Dudley Duncan ed., 1964).

¹³ See Laurie Reynolds, A Role for Local Government Law in Federal-State-Local Disputes, 43 URB. LAW. 977, 983–87 (2011). See generally Nestor M. Davidson, Cooperative Localism: Federal-Local Collaboration in an Era of State Sovereignty, 93 VA. L. REV. 959 (2007); Roderick M. Hills, Jr., Dissecting the State: The Use of Federal Law to Free State and Local Officials from State Legislatures' Control, 97 MICH. L. REV. 1201 (1999); Hills, Jr., supra note 7.

¹⁴ See infra Part IV.D.

contemporary reality; it overlooks the extent to which the federal government has carved out a major positive role for local governments in the administration of public law in a wide array of legislative fields. This prevailing view, I argue, has nevertheless infected some states' perceptions about the relative authority of municipalities to participate in the broadband market and, as a result, forestalled innovation.

Part IV illustrates the ways in which Congress and the courts have relied on local authorities in the regulation of telecommunications and cable service. This history, I show, evinces a recognition that local governments ought to have a pivotal, if sometimes limited, role in the administration of communications law. In Part V, I show that the emergent broadband localism owes something to this history. The technology and political economy of broadband service, I show, has forced Congress and policymakers to carve out a major role for local intervention in the administration of broadband today. And while much remains underdeveloped at this point, I explain, a unified federal-local approach to broadband is materializing. This includes mechanisms that encourage municipal autonomy and accountability, support adoption programs for all communities, and boost competition. I conclude by asserting that Congress should further elaborate these objectives in federal law in the near future.

II. THE NEW BROADBAND LOCALISM

A. Out of the Clouds

It is nearly axiomatic today that the Internet accommodates and enlarges communicative capacities once repressed by the technological limits and political economy of twentieth century mass media. This conventional view posits that users actualize their authentic communicative capacities on the Internet more than when telegraphy or broadcasting first became commercially available. More generally, this view holds, Internet-enabled communications have helped to instigate dramatic world historical events in North Africa and Eastern Europe, as well as more subtle but no less systematic transformations in the way we communicate in our daily lives with family, friends, and

¹⁵ See Yochai Benkler, The Wealth of Networks: How Social Production Transforms Markets and Freedom 52–54 (2006).

¹⁶ See id. at 266; Philip N. Howard, et al., Opening Closed Regimes: What Was the Role of Social Media During the Arab Spring? 2 (Project on Info. Tech. & Political Islam, Working Paper No. 2011.1, 2011), available at http://dl.dropbox.com/u/12947477/publications/2011_Howard-Duffy-Freelon-Hussain-Mari-Mazaid_pITPI.pdf. But see Navid Hassanpour, Media Disruption Exacerbates Revolutionary Unrest: Evidence from Mubarak's Natural Experiment 1–3 (Am. Pol. Sci. Ass'n Annual Meeting Paper, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1903351&download=yes##.

coworkers.¹⁷ Users can, at once, organize against tyrants and fine-tune their public social media profiles. Developments in "cloud" computing and mobile communication technologies have deepened many consumers' sense of self-possession.

It is easy to think that John Perry Barlow's polemic of fifteen years ago about a sovereign Internet uncontrolled by "flesh-and-steel" giants of commerce and government has won the day. After all, many of us are now just tapping effortlessly between our applications, documents, music, and photos without compunction about the earthly impediments of storage and place. The sky seems to be the limit.

Very recent developments in the broadband and Internet consumer markets. however, belie the romance of this popular brand transcendentalism.¹⁹ The quality of users' broadband transmission service depends on where they live and which company provides their service. Courts are resolving jurisdictional disputes by attending to the tried-and-true conventions of time and place.²⁰ Internet service providers and web-based application administrators can now pinpoint each user's physical location almost anywhere around the world with remarkable precision. The proverbial cloud in which so much of our online stuff is now stored is really an archipelago of large data storage centers and server farms in places like Boardman, Oregon. and Maiden, North Carolina.²¹ They take up acres of space and emit greenhouse gases in much the same way as many of the "flesh-and-steel" businesses that Barlow decried fifteen years ago. Cloud computing centers apparently produce so much energy that some industry leaders are considering using them as furnaces.22

¹⁷ See Barry Wellman et al., The Social Affordances of the Internet for Networked Individualism, 8 J. COMPUTER-MEDIATED COMMC'N, 15–16 (Apr. 2003).

¹⁸ Email from John Perry Barlow, Co-Founder, Elec. Frontier Found., to barlow@eff.org (Feb. 9, 1996, 17:16 PM) (https://w2.eff.org/Censorship/Internet_censorship_bills/barlow_0296.declaration). *But see* JACK GOLDSMITH & TIM WU, WHO CONTROLS THE INTERNET?: ILLUSIONS OF A BORDERLESS WORLD 20–22 (2006); Joel R. Reidenberg, *Technology and Internet Jurisdiction*, 153 U. PA. L. REV. 1951, 1956 (2005).

¹⁹ The amended Communications Act defines broadband or "advanced telecommunications capability" 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." 47 U.S.C. § 1302(d)(1) (Supp. IV 2011).

²⁰ See, e.g., Chloé v. Queen Bee, 616 F.3d 158, 158, 165 (2d Cir. 2010).

²¹ See, e.g., Robert McMillan, Wired Scores Exclusive Aerial Photos of Apple's 'Area i51', WIRED.COM (Apr. 6, 2012, 6:30 AM), http://www.wired.com/wiredenterprise/2012/04/apples-secret-data-center/; Rich Miller, Amazon Building Large Data Center in Oregon, DATA CENTER KNOWLEDGE (Nov. 7, 2008, 9:19 AM), http://www.datacenterknowledge.com/archives/2008/11/07/amazon-building-large-data-center-in-oregon/.

²² See Jill Duffy, Can In-Home Data Centers Keep Us Warm?, PCMAG.COM (Aug. 2, 2011, 10:39 AM), http://www.pcmag.com/article2/0,2817,2390261,00.asp.

Cloud computing is a misnomer. Users' Internet experiences depend on the bandwidth capacity and speed of transmission cables, as well as the location of towers. The Internet, to be sure, continues to be an interconnected global network of networks. Its constituent routers, servers, and storage caches are distributed so widely that most users do not know or need to worry about the path or timeliness of the transmissions on which their online experiences depend. But the multitudes of facilities through which Internet transmissions pass at any given moment are located in some physical place in which locally contingent stakeholders have conflicting interests to negotiate. You need not look much further than Iran, Egypt, and Syria, where, for at least a short period of time, their governments blocked some or all Internet traffic into and out of their countries by command or some form of coercion. Or consider the converse. South Korea touts the fastest and most reliable broadband networks in the world; users there are capable of doing more things online than anywhere else.

B. All Broadband Is Local

Not unlike the transformation of the market for electricity in the nineteenth century,²⁸ the quality of transmission connections today is increasingly a function of the location and condition of physical facilities.²⁹ Residency,

²³ A user requires, for example, at least an Internet connection speed of four megabits per second in order to simultaneously watch a video and engage in basic web-browsing and email. Sixth Broadband Deployment Rep., 25 FCC Rcd. 9556, 9559 (2010) (indicating that 4.0 Mbps "is the minimum speed required to stream a high-quality... video while leaving sufficient bandwidth for basic web browsing and e-mail").

²⁴ See Kevin Werbach, The Centripetal Network: How the Internet Holds Itself Together, and the Forces Tearing It Apart, 42 U.C. DAVIS L. REV. 343, 347–51 (2008).

²⁵ Id. at 351–53.

²⁶ Those countries have learned the hard way that shutting down access to the Internet accelerates revolutionary upheaval rather than slowing it down. *See* Hassanpour, *supra* note 16, at 1–3.

²⁷ Press Release, Org. for Econ. Co-Operation and Dev., OECD Broadband Statistics (Dec. 2011), available at http://www.oecd.org/document/4/0,3746,en_2649_34225_42800196_1_1_1_1,00.htm.

²⁸ See Nicholas Carr, The Big Switch: Rewiring the World, From Edison to Google 9–12 (2008).

²⁹ That transmission is treated differently than content is a feature of what legal scholars and engineers have referred to as the "layered" or modular architecture of the Internet. At the bottom of this "IP stack" is the transmission layer. The separate protocols and technologies that enable communication between the different networks (i.e., the Transmission Control Protocol and Internet Protocol) operate above this "bottom layer." And running atop the IP stack are the applications and content for which most users access the Internet.

therefore, matters quite a lot to the kinds of online experiences that users have.³⁰ This broadband localism is the next phase in the Internet's maturation from the boutique technological curiosity of a generation ago to a fully integrated and contested public resource.³¹

Broadband network owners know this, as they leverage their formidable market position in local areas. Almost five years ago, for example, Comcast engaged in surreptitious content-based blocking of subscribers' Internet connections in certain local markets, effectively controlling the online resources to which subscribers in those areas could have access. Before getting rebuked by the Florida Attorney General³² and then the Federal Communications Commission (FCC) for violating the agency's "Open Internet" principles,³³ Comcast claimed that such network management practices were necessary to maintain the integrity of service for all local subscribers.³⁴ Heavy use of the network by a small and active number of file-sharers, it claimed, degraded service for most other users in the same area.³⁵

Providers, however, are not the only ones who have picked up on the promise of the new broadband localism. Google, the content and advertising behemoth, has as well. In 2010, the company launched a one billion dollar Fiber for Communities program that would build-out ultra-high-speed infrastructure in one or two cities.³⁶ There is a good case to be made that, with the program,

³⁰ Cf. James B. Speta, Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms, 17 YALE J. ON REG. 39, 40–41 (2000); see also JOHN POSTILL, LOCALIZING THE INTERNET: AN ANTHROPOLOGICAL ACCOUNT 101–10 (2011).

³¹ Cf. John Palfrey, Four Phases of Internet Regulation, 77 Soc. Res. 981, 981, 991–93 (2010); Olivier Sylvain, Internet Governance and Democratic Legitimacy, 62 Feb. COMM. L.J. 205, 235 (2010).

³² Assurance of Voluntary Compliance at 6–7, *In re* Comcast Corporation (Aug. 29, 2008) (No. L07-3-1132), http://myfloridalegal.com/webfiles.nsf/WF/MRAY-7J4RL3/\$file/ComcastAVC.pdf.

³³ See Formal Complaint of Free Press and Pub. Knowledge, 23 FCC Rcd. 13,028, 13,028 (2008).

³⁴Public outrage moved the FCC to enjoin the company from engaging in such blocking without giving subscribers notice. *Id.* Two years later, Comcast persuaded a D.C. Circuit panel that, while some of its network management techniques were unsavory, the FCC did not have the jurisdictional authority to enjoin those practices. *See* Comcast Corp. v. FCC, 579 F.3d 1, 8 (D.C. Cir. 2009).

³⁵ Today, major broadband providers have abandoned more secret content controls for usage caps. Karl Bode, *AT&T Caps Have Arrived*, DSLREPORTS.COM (May 2, 2011), http://www.dslreports.com/shownews/114012. They also are explicitly considering ways to bundle their transmission service with exclusive applications and content. *See, e.g.*, Todd Spangler, *Xbox Lights Up Epix, YouTube in Guide Overhaul*, MULTICHANNEL NEWS (Dec. 5, 2011, 12:01 AM), http://www.multichannel.com/article/477423-Xbox_Lights_Up_Epix_YouTube In Guide Overhaul.php.

³⁶ Julie Scharper, City Hopes to Boost Case to Google by Mapping Conduits, BALTIMORE SUN (Sept. 8, 2010), http://articles.baltimoresun.com/2010-09-08/news/bs-md-google-fiber-conduit-20100908_1_google-czar-tom-loveland-google-fiber.

Google is dramatically foiling claims by the major providers that the cost of ultra-high-speed infrastructure development is too high right now. After all, until this effort, the company did not have any significant presence in the residential broadband service market.

No matter their real motivations, in February 2010, Google invited local government officials across the country to submit applications on behalf of their communities to participate. The winner would collaborate with Google's engineers to provide Internet access at one gigabit per second directly to residents' homes at competitive prices. At such speeds, civic leaders and local elected officials would have at their disposal an unprecedented resource that could accommodate the next generation of interactive and immersive Internet applications and services for residents and create the Gigabit City.³⁷

One month later, Google received more than 1,100 applications from enthusiastic local communities across the country.³⁸ City officials and civic leaders could not contain their excitement, doing anything and everything to woo Google. Some even renamed themselves in honor of the Internet search and advertising giant.³⁹

Kansas City, Kansas became the first winner of the Fiber for Communities sweepstakes in March 2011. Hours after the announcement, city officials and civic leaders there were giddily musing about major transformations of government administration, entrepreneurship, education, research, healthcare, and civic life generally in the city. Community leaders and activists have voiced concerns about cost barriers for some low-income communities in the city. Others remain unsure that one gigabit-per-second speed delivers anything more than buzz for Google. But most observers are confident that ultra-high-speed broadband will yield unprecedented benefits. They just do not know what they will be yet. 42

³⁷ See generally THE BRAINZOOMING GRP. & SOC. MEDIA CLUB OF KAN. CITY, BUILDING THE GIGABIT CITY: BRAINZOOMING A GOOGLE FIBER ROADMAP (2011), available at http://brainzooming.com/files/building-the-gigabit-city-report-nov-10-2011-release-1.pdf. [hereinafter THE BRAINZOOMING GRP.].

³⁸ Scharper, *supra* note 36.

³⁹ John D. Sutter, *Topeka 'Renames' Itself 'Google, Kansas*,' CNN.COM (Mar. 2, 2010), http://articles.cnn.com/2010-03-02/tech/google.kansas.topeka_1_google-internet-capital-city? s=PM:TECH.

⁴⁰ See Alyson Raletz, Reardon Concerned Not Everyone Can Afford Google Project, KANSAS CITY BUS. J. (June 7, 2011, 2:51 PM), http://www.bizjournals.com/kansascity/blog/2011/06/reardon-google-kansas-city-deploy.html.

⁴¹ See, e.g., Craig Settles, You've Got a Gigabit Network, So Now What?, GIGAOM (Nov. 12, 2011, 9:00 AM), http://GigaOm.com/broadband/youve-got-a-gigabit-network-so-now-what/.

⁴² See THE BRAINZOOMING GRP., supra note 37, at 2.

Google has also assured other eager cities that they will continue to look for opportunities to develop fiber-optic networks across the country.⁴³ In May of the same year, for example, it expanded its Kansas project to include the larger Kansas City across the river in Missouri.

For what it is worth, the Kansas Cities are not alone to explore municipal broadband. A coalition of twenty-eight major U.S. universities has promised to build ultra-high-speed computer networks in their respective communities.⁴⁴ The project, called Gig.U, is an effort to entice technology companies involved in health care, energy, and telecommunications to headquarter near research universities across the country. Community leaders and local cooperatives are initiating similar, smaller scale projects like these across the country by enlisting the diverse and unique competencies of local anchor institutions, businesses, and residents.⁴⁵

C. Municipal Broadband

Local governments are lighting the spark for broadband infrastructure build-out. They are mobilizing an array of local anchor institutions and resources to bring service to residents. That they do this is no surprise. After all, local governments are best suited to appreciate the characteristics or "terroir" that distinguish their constituents from others.⁴⁶

These local governments are not waiting for the initiative of private incumbent providers. Today, about 133 U.S. localities of all sizes own town-or city-wide fiber or cable networks.⁴⁷ Hundreds more rely on broadband

⁴³ See Ultra High-Speed Broadband Is Coming to Kansas City, Kansas, GOOGLE FIBER BLOG (Mar. 30, 2011), http://googlefiberblog.blogspot.com/2011/03/ultra-high-speed-broadband-is-coming-to.html.

⁴⁴ John Markoff, *Colleges Join Plan for Faster Computer Networks*, N.Y. TIMES, July 27, 2011, http://www.nytimes.com/2011/07/27/science/27gig. html? r=1.

⁴⁵ See, e.g., Dave Peters, Map Shows Co-Ops Lead Charge on Rural Broadband, MPRNEWS (Dec. 30, 2011, 12:05 PM), http://minnesota.publicradio.org/collections/special/columns/ground-level/archive/2011/12/map-shows-co-ops-lead-charge-on-rural-broadband.shtml; Bruce Lincoln, Advancing Community Broadband: Solving the Digital Divide Problem with Social Enterprise (Mar. 18, 2011) (presentation at Georgetown University), http://www4.gsb.columbia.edu/ filemgr?file id=73839.1.

⁴⁶ The evocative concept of "terroir" is generally reserved for geology, viticulture, and architecture. *See generally* JAMES E. WILSON, TERROIR (Sue Jamieson et al. eds., 1999); FACULTY OF DESIGN, ARCHITECTURE & BUILDING, UNIV. OF TECH. SYDNEY, TERROIR: COSMOPOLITAN GROUND (Scott Balmforth & Gerard Reinmuth eds., 2007).

⁴⁷ Christopher Mitchell, Publicly Owned Broadband Networks: Averting the Looming Broadband Monopoly 1 (2011), http://muninetworks.org/reports/publicly-owned-broadband-networks-averting-looming-broadband-monopoly. Localities in England, Spain, the Netherlands, and Japan also have all built or supported the building of successful citywide broadband networks. See Costas Troulos & Vasilis Maglaris, Factors Determining Municipal Broadband Strategies Across Europe, 35 Telecomm. Pol'y 842, 843 (2011), available at http://campus.lostfocus.org/dikshie/TelecommunicationsPolicy/2011/

connections to administer public services, using it, for example, to manage the electrical grid or vehicular traffic. Many other local communities invest in municipal broadband infrastructure to fill the gap in service between haves and have-nots, 48 as well as to protect residents from the creeping rise in prices of incumbent providers' service. 49 Municipalities also build broadband infrastructure to make businesses there more adaptive to shifting market demands, hospitals more responsive to patients' needs, and schools superior resources for students and teachers. It is likely that local broadband development, like other public works projects, also spurs short-term economic growth no matter whether anyone uses the Internet. 50

Local governments, moreover, have adopted operational models that reflect local needs and contingencies.⁵¹ Some, for example, operate their own networks. Chattanooga, Tennessee touts the most successful of these, owning and operating the largest city-wide fiber-optic network in the country.⁵² Residents living downtown, in trailer parks, and area farms receive one-gigabit-per-second service.⁵³ This network has enabled the city's Electric Power Board (EPB) to experiment with the administration of the electrical grid. The EPB has asserted that the fiber-optic network was built to service the new smart-grid more than Internet access.⁵⁴

Most municipalities that have invested in broadband infrastructure, however, share ownership or operational control with a private provider. This public-private approach has been used in an array of localities, but has been

volume35issue9/science 006.pdf.

⁴⁸ See Brian Stelter, Newly Flush, Local TV Newscasts Are Expanding, N.Y. TIMES, Aug. 22, 2011, at B1.

⁴⁹ See Jie Jenny Zou, Faster Internet Service Fuels Growth at West Virginia Community Colleges, CHRON. HIGHER EDUC. (Sept. 25, 2011), http://chronicle.com/article/Faster-Internet-Service-Fuels/129137/.

⁵⁰ See, e.g., Joan Engebretson, Comcast Study: Broadband Boosts Real Estate Metrics, CONNECTED PLANET (Sept. 26, 2011), http://edmondsbeacon.villagesoup.com/news/story/City-owned-fiber-optics-starting-to-pay-off/210787?cid=2003080; Pat Ratliff, City Owned Fiber-Optics Starting to Pay Off, EDMONDS BEACON (Aug. 26, 2010), http://edmondsbeacon.villagesoup.com/news/story/City-owned-fiber-optics-starting-to-pay-off/210787?cid=2003080.

⁵¹ This is to say nothing of the ways in which municipalities are using high-speed broadband as a way of incubating novel, civic-minded applications.

⁵² MITCHELL, supra note 47, at 2.

⁵³ Phil Shapiro, *Chattanooga's Innovation Culture*, COMMUNITY VOICES (Jan. 5, 2012, 1:14 AM), http://www.pcworld.com/article/246298/chattanoogas_innovation_culture.html.

⁵⁴ See Smart Grid Electric Power, ELECTRIC POWER BOARD, https://www.epb.net/power/home/products/smart-grid/ (last visited Aug. 15, 2012).

particularly popular in larger cities.⁵⁵ Some finance the development of the broadband infrastructure, only to have the system administered by a private provider. The city of Decatur, Georgia, for example, built its own wireless network in 2007 and contracted out its administration to a private provider that offers both free and fee-based service to residents.⁵⁶ Similarly, Seattle recently negotiated a lease with Comcast to make high-speed Internet service available to businesses occupying a historic downtown neighborhood.⁵⁷ Comcast essentially pays rent to the city for access to the fiber-optic cables located under streets and alongside utility equipment already undergoing improvement.⁵⁸ Seattle awarded the bid to attract technology companies to the historic neighborhood.⁵⁹

Many more communities rely on an anchor-tenant model for their local broadband networks. This arrangement consists of a privately owned backbone network from which the municipality purchases a minimum level of services. The municipality, in turn, awards the private provider use of public rights-of-way and other resources. Minneapolis' anchor-tenant collaboration with USI Wireless is among the most well-regarded municipally-supported WiFi broadband networks in the United States. ⁶⁰ The city pays USI a regular annual fee. ⁶¹ USI, in turn, is to reallocate five percent of its net revenues to a "Digital

⁵⁵ See Joshua Breitbart, *The Philadelphia Story: Learning from a Municipal Wireless Pioneer*, NEW AM. FOUND. 35–41 (2007), http://www.newamerica.net/files/Nafmigration/NAF PhilWireless report.pdf.

⁵⁶ Esme Vos, *Decatur, GA Seeks ISP to Run Municipal Wireless Network*, MUNIWIRELESS (June 17, 2011), http://www.muniwireless.com/2011/06/17/ decatur-seeks - isp-to-run-municipal-wirelessnetwork/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+muniwireless+%28MuniWireless%29&utm_content=Google+Feedfetcher.

⁵⁷ David Kreuger, City Bringing Fiber-Optic Broadband to Pioneer Square, SEATTLE TIMES (May 23, 2011, 7:03 PM), http://seattletimes.nwsource.com/html/localnews/2015130291_broadband24m.html; J.B. Wogan, Comcast, Metro City Plan Pioneer Square Broadband, SEATTLE TIMES (June 15, 2011, 9:04 PM), http://seattletimes.nwsource.com/html/localnews/2015332192 cable16m.html.

⁵⁸ See Greg Lamm, Comcast Lands Pioneer Square Internet Contract; Onehub Moving in from Bellevue, TECHFLASH (June 15, 2011, 1:35 PM), http://techflash.com/seattle/2011/06/comcast-wins-pioneer-sq-fiber-optic-bid.html.

⁵⁹ Wogan, supra note 57.

⁶⁰ Douglas Gorney, *Minneapolis Unplugged*, ATLANTIC (June 4, 2010, 8:00 AM), www.theatlantic.com/special-report/ the-future-of-the-city/archive/2010/06/ minneapolis -unplugged/57676/; Andrew Lavallee, *A Second Look at Citywide WiFi*, Wall St. J. (Dec. 8, 2008), online.wsj.com/article/SB122840941903779747.html; *New Business Models Said Key to Successful Municipal Wi-Fi*, COMM. Daily (June 30, 2008); Wireless Minneapolis Municipal Broadband Initiative: Business Case, Version 3.0, (2006), *available at* http://www.minneapolismn.gov/www/groups/public/@bis/documents/webcontent/convert_2 77329.pdf.

⁶¹ Under the terms of the contract, the City of Minneapolis pays the private owner of the network (in this case, USI Wireless) a minimum of \$1.25 million annually for services

Inclusion Fund" and provide residents with free access in local parks and technology centers.⁶² Five percent of the network's nodes are public "hotspots."⁶³ The result has been near-complete coverage in metropolitan Minneapolis and a model for other cities.⁶⁴

Not all operational models have been successful, however. The franchise model for municipal broadband, for example, consists of a privately owned and operated, for-profit network owner that does not have the city as a customer. To make the enterprise sustainable, the city grants the private company use of public assets or rights-of-way for a limited period of time. The private provider compensates the city for the use. Under these terms, the risk of failure for the city is always low because the arrangement does not require public investment or involvement. On the other hand, the benefits are modest, with revenue only coming from nominal usage fees. With little buy-in, participating cities do not have much influence over network coverage, quality of service, or prices.

The largest of cities have pursued a diversity of deployment strategies. In collaboration with Comcast, for example, Chicago announced an "Internet Essentials" program aimed at providing high-speed broadband service to families of public school students in the city who qualify for free school lunches. 66 New York City, meanwhile, has initiated an ambitious plan to introduce free Wi-Fi through private sector partnerships in city parks, public spaces, and specially-targeted improvement districts. 67 The city also intends to increase broadband adoption in underserved areas. 68

The point of all of this is that municipal entrepreneurship of the sort found in Chattanooga, Decatur, Seattle, Minneapolis, Chicago, and New York show great promise because of the unique institutional competence that local

over the ten-year life of the contract. Marguerite Reardon, *New Business Models for Citywide Wi-Fi*, CNET News (Mar. 17, 2008, 4:00 AM), http://news.cnet.com/8301-10784 3-9893450-7.html.

 $^{6\}overline{2}$ Gorney, *supra* note 60.

⁶³ *Id*.

⁶⁴ See id. Oklahoma City's own broadband network, which covers 95% of the city, emulates the one in Minneapolis. See William G. Korver, Relaunched Oklahoma City Wi-Fi Network Showcases City-Services Model, BROADBANDBREAKFAST.COM (Aug. 6, 2008), http://broadbandbreakfast.com/2008/08/relaunched-oklahoma-city-wi-fi-network-showcases-cityservice-model/.

⁶⁵ See, e.g., Termination Agreement, MUNIWIRELESS, 1, http://www.muniwireless.com/wp-content/uploads/2008/07/do_23241.pdf.

⁶⁶ Fran Spielman, Low-Income Chicago Students to Get Low-Cost Broadband, CHI. SUN-TIMES (Sept. 11, 2011, 12:22 AM), http://www.suntimes.com/news/education/5693127-418/low-income-chicago-students-to-get-low-cost-broadband.html. This program is substantially like one recently launched by the FCC. See infra note 240 and accompanying text

⁶⁷ See Andrew Berg, AT&T Launches Wi-Fi in NYC Parks, WIRELESS WEEK (June 9, 2011), http://www.wirelessweek.com/News/2011/06/ATT-launches-wi-fi--NYC-Parks/.

governments bring to bear. Municipalities are familiar with local needs and contingencies and are immediately accountable to voters.⁶⁹ They do not have the pecuniary or proprietary interest to mediate subscriber access to Internet content in the way that private providers demonstrably do. Their motivations may not always be pure, but they are accountable to their local communities in ways that legitimize their interventions.⁷⁰

D. The American Recovery and Reinvestment Act

In 2009, Congress gave a major boost to these community initiated projects through the American Recovery and Reinvestment Act.⁷¹ In that statute, Congress delegated the general authority to encourage universal broadband deployment to the Rural Utilities Service (RUS) in the Agriculture Department and the National Telecommunications Information Administration (NTIA) in the Commerce Department.⁷² Through these grant-making programs, Congress committed a remarkable \$7.2 billion to local community broadband projects and "middle-mile" across the country in order to jolt local economies back to life.⁷³

Congress charged the NTIA and RUS the responsibility of administering broadband-related financing programs in direct collaboration with local governments and the FCC.⁷⁴ Through the Recovery Act, Congress gave NTIA the authority to create the Broadband Technology Opportunities Program (BTOP) through which the agency awards competitive grants to "unserved" or "underserved" areas.⁷⁵ These grants were to be made to states and municipalities, as well as nonprofit organizations, foundations, corporations, and associations, and other civic organizations.⁷⁶ Awardees, in turn, could use such grants to acquire physical equipment, technology, and software to support

⁶⁹ Cf. Richard Briffault, Home Rule for the Twenty-First Century, 36 URB. LAW. 253, 264 (2004); Paul Diller, Intrastate Preemption, 87 B.U. L. REV. 1113, 1117–18 (2007); Daniel B. Rodriguez, Localism and Lawmaking, 32 RUTGERS L.J. 627, 639–40 (2001).

⁷⁰ See, e.g., Alabama City Votes Overwhelmingly to Build Municipal Fiber Network, St. Telephone Reg. Rep. (Aug. 20, 2010); Peter Olaf Looms, Making Television Accessible (Nov. 2011), http://www.itu.int/ITU-D/sis/PwDs/Documents/Making_TV-Accessible-Final-WithAltTextInserted.pdf.

⁷¹ American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) [hereinafter Recovery Act].

⁷² See 47 U.S.C. § 1302(a) (2011).

⁷³ See Recovery Act, 123 Stat. at 128; NAT'L TELECOMMS. & INFO. ADMIN., U.S. DEP'T OF COMMERCE, EXPANDING BROADBAND ACCESS AND ADOPTION IN COMMUNITIES ACROSS AMERICA: OVERVIEW OF GRANT AWARDS 2 (2010), http://www.ntia.doc.gov/files/ntia_report_on_btop_121422010_0.pdf; UTP Broadband Initiatives Program Main, USDA RURAL DEV., http://www.rurdev.usda.gov/utp_bip.html (last visited Aug. 16, 2012).

⁷⁴ Recovery Act, 123 Stat. at 127, 128.

⁷⁵ Recovery Act, § 6001(a)(1)–(2).

⁷⁶ See id. § 6001(e)(1)(A)–(B).

public computing centers in libraries and community colleges, and generally to facilitate universal service.⁷⁷

The program administered by the RUS, the Broadband Initiatives Program (BIP), was smaller. Through it, Congress expanded the lending authority of RUS. It also gave the agency the authority to make grants and loan/grant combinations to facilitate broadband deployment in rural areas.⁷⁸

Since their creation over two years ago, these two Recovery Act programs have funded the construction of broadband network infrastructure, the development of public computer centers, and sustainable broadband adoption projects in areas in which broadband access and use are low. The NTIA, which Congress charged with spending most of this money, has invested about four billion dollars in 233 local infrastructure development projects through BTOP.⁷⁹ Through BIP, RUS has awarded three-and-a-half billion dollars in grants and loans to 320 local broadband infrastructure projects in rural communities across the country.⁸⁰

Grantees for the program came from all fifty states, the territories, and the District of Columbia. About half, if not most, of the awardees have been municipalities, counties, local nongovernmental nonprofit cooperatives and institutions, and some states. These investments already have had a remarkable effect on public life. For example, West Virginia, today, is one of the five most well-connected states in the country after the state received \$126 million in Recovery grants to expand broadband availability. Most of this funding has been directed at schools and libraries, and, since, has demonstrably encouraged providers to build local networks at lower cost, thus attracting more people to the state. 82

The West Virginia story is just one of hundreds. Similar improvements are occurring across the country.⁸³ BTOP infrastructure projects are building and

⁷⁷ See id. § 6001(g)(1)–(2); S. REP. No. 111-3, at 12 (2009).

⁷⁸ See Recovery Act, 123 Stat. at 118–19.

⁷⁹ See NAT'L TELECOMMS. & INFO. ADMIN., U.S. DEP'T OF COMMERCE, BROADBAND TECHNOLOGY OPPORTUNITIES PROGRAM (BTOP) QUARTERLY PROGRAM STATUS REPORT 1 (June 2011), http://www.ntia.doc.gov/files/ntia/publications/btop_quarterlyreport_jun_2011.pdf; see also NAT'L TELECOMMS. & INFO. ADMIN., U.S. DEP'T OF COMMERCE, BROADBAND TECHNOLOGY OPPORTUNITIES PROGRAM (BTOP) QUARTERLY PROGRAM STATUS REPORT 1 (Mar. 2012), http://Benton.org/outgoingframe/119487?utm_source=sendgrid&utm_medium=email&utm_campaign=Newsletters.

⁸⁰ See U.S. DEP'T OF AGRIC., BROADBAND INITIATIVES PROGRAM, ADVANCING BROADBAND: A FOUNDATION FOR STRONG RURAL COMMUNITIES 2 (Jan. 2011), http://www.rurev.usda.gov/supportdocuments/RBB report whole-v4ForWeb.pdf.

⁸¹ See Zou, supra note 49.

⁸² See id.

⁸³ See Tales from the Front Lines of the Broadband Technology Opportunities Program, NAT'L TELECOMM. & INFO. ADMIN. (Feb. 6, 2012), http://www.ntia.doc.gov/blog/2012/tales-front-lines-broadband-technology-opportunities-program-0.

supplying high-speed, high-capacity broadband connections to schools, hospitals, and other anchor institutions. Investment in "middle mile" facilities has also spurred private-sector investment in high-quality residential and commercial service.

E. Experimentalism, Empiricism, and Law

Local communities and Congress have at least three good reasons to be emphatic in their support of municipal broadband. First, slower Internet connections are costlier than faster ones.⁸⁴ Second, users are more productive with every incremental increase in broadband speed.⁸⁵ Third, the quality of broadband access seems to have a positive impact on businesses' and residents' willingness to stay or settle in the locality.⁸⁶

This data is relatively new, however, and some questions remain unanswered. Alone, data on adoption and access, for example, are not sufficient measures of success. Policymakers will want to know which factors most correlate with investments in adoption and access, whether returns on public investment in municipal broadband are worth it, and how far public investment can redress what is effectively a market failure.⁸⁷

These empirical questions, however, should not distract us from the normative, structural, and legal problems at issue. Of course, attention to the data as such is important but, at this "constitutive moment" in the development of broadband technology, it is premature.⁸⁸ It is unrelated to the first-order structural questions of whether local governments *can*, *may*, or *should* experiment with supplying broadband service. As I show above, local officials across the country already are bringing to bear their unique institutional competence to deliver service to resident users. They are articulating purposes and choosing operational models that ostensibly make sense for their residents.

⁸⁴ See Quentin Fottrell, *The High Costs of a Slow Internet Connection*, PAY DIRT (Oct. 12, 2011, 10:57 AM), http://blogs.smartmoney.com/paydirt/2011/10/12/the-high-costs-of-a-slow-internet-connection/?mod=rss &link=SM home blogsum.

⁸⁵ See Increasing Broadband Speed Boosts National GDPs, Ericsson Says, TECHJOURNAL (Sept. 27, 2011), http://www.techjournalsouth.com/2011/09/increasing-broadband-speed-boosts-national-gdps-ericsson-says/.

⁸⁶ See Zou, supra note 49.

⁸⁷ See T. Randolph Beard et al., The Broadband Adoption Index: Improving Measurements and Comparisons of Broadband Deployment and Adoption, 62 FED. COMM. L.J. 343, 352–53 (2010). The Organization for Economic Cooperation and Development has an abundance of information on data relating to subscription rates, usage, pricing, geographic coverage, and transmission speed. However, as of yet, they have not published information on the measurable benefits and costs of public investment in broadband infrastructure. Published empirical research from the agency on these metrics is imminent.

⁸⁸ Cf. Paul Starr, The Creation of the Media: Political Origins of Modern Communications 1–2 (2004).

They are deciding which parts of their communities require the most urgent interventions, and fitting interventions to the needs of their constituencies.

Local governments have been doing all of this independently, without prodding or guidance from states or the federal government. (Of course, since implementation of the ARRA, local efforts have become easier.) I argue here that, at a minimum, local governments ought to have the autonomous authority to be experimental and entrepreneurial. This is a normative and structural claim, not an empirical one. It is an argument that current law ought to be flexible enough to accommodate the new broadband localism. 89

Part III below takes up this point by presenting and then critiquing the prevailing but misguided conception of plenary state authority over local governments. This view, as advocated by the Supreme Court, for example, fails to appreciate the possibility for local experimentation and entrepreneurship, and the ways in which local governments are sometimes best suited to administering public law in a variety of fields. Similarly, the Court has failed to appreciate Congress's power to preempt state action under the Supremacy Clause. The example of the new broadband localism vividly illustrates the point. In Part Two below, I show that the formal commitment to state plenary authority over local governments is outdated, purely aesthetic, and ill-suited to contemporary realities.

III. STATES GETTING IN THE WAY

A. State Statutory Restrictions on Broadband

Private providers have a strong interest in keeping municipal broadband at bay. They accordingly have been lobbying state legislators with varying success to enact limits or flat-out bans.⁹⁰ They are not waiting for the empirical data about the merits of local government participation.

Some states have resisted such pressures and, to the contrary, have been quite active in deploying broadband infrastructure for their residents. Massachusetts, for example, recently launched an effort to bring low-cost high-speed Internet access to all homes, businesses, and public buildings in the

⁸⁹I assume throughout that the advantages of local public investment in and administration of broadband infrastructure ought to be encouraged as a matter of policy. That assumption will be proven right or wrong in the near future, of course, but the chance of success is enough to encourage local entrepreneurship and experimentation.

⁹⁰ See Lynne Klaft, Broadband Project to Blanket the State, WORCESTER TELEGRAM & GAZETTE (Nov. 13, 2011), http://www.telegram.com/article/20111113/NEWS/111119549/1101/local. They also have engaged in litigation to delay build-outs and buy time to develop their own competing infrastructure. See, e.g., Bridgewater Tel. Co. v. City of Monticello, 765 N.W.2d 905, 915–16 (Minn. Ct. App. 2009); Christopher Rhoads, Cities Start Own Efforts to Speed Up Broadband, WALL St. J., May 19, 2008, at A1.

state.⁹¹ The Massachusetts Broadband Institute collaborated with the state Department of Transportation to lay miles of "middle-mile" fiber-optic cable across the state.⁹² Observers expect it to provide broadband service to over 120 cities and towns in the western and northern central parts of the state that have yet to have such reliable service.⁹³

But there is also a strong trend in the opposite direction. Today, nineteen states restrict municipal broadband in some way. At least Arkansas, Nebraska, and Texas appear to have absolute bans. North Carolina, Nevada, Pennsylvania, and Virginia impose bans but leave some localities with potential authority. Eleven states impose barriers that make municipal broadband prohibitive if not difficult to develop. They require, for example, local governments to hold public hearings or local referenda resulting in supermajority support for government owned or operated service. Some also require municipalities to have large amounts of cash-on-hand or pay taxes. None of these impose similar requirements on private providers.

The North Carolina General Assembly enacted the most recent state restriction in the country. In May 2011, it passed the Level Playing Field/Local Government Competition Act, which effectively prevents local governments from building or providing the market for residential broadband.⁹⁸ The law forbids municipal operators from offering low introductory prices to consumers and requires municipalities to pay the taxes that would be applied to the same network were it owned and operated by a private provider.⁹⁹ The handful of North Carolina cities already with full-fledged broadband networks, including

⁹¹ See Klaft, supra note 90.

⁹² See id.

⁹³ See id.

 $^{^{94}}$ See, e.g., Ark. Code Ann. § 23-17-409 (West 2002); Tex. Util. Code Ann. § 54.201 (West 2012).

⁹⁵ See Level Playing Field/Local Gov't Competition Act, 2011 N.C. Sess. Laws ch. 84, available at http://www.ncga.state.nc.us/Sessions/2011/Bills/House/PDF/H129v7.pdf; VA. CODE ANN. § 15.2–1500 (West 2008).

⁹⁶ See, e.g., MINN. STAT. ANN. § 237.19 (West 2010) (requiring municipalities to obtain support from sixty-five percent of voters before providing telecommunications services); TENN. CODE ANN. §§ 7-52-601, 7-52-602 (2011) (requiring municipal provision of video programming, Internet, and other similar services satisfy public disclosure and hearing requirements to which private providers are not subject).

⁹⁷ See, e.g., Fla. Stat. Ann. §§ 125.421, 166.047 (West 2000); Fla. Stat. Ann. §§ 196.012, 199.183, 212.08 (West Supp. 2012).

⁹⁸ Level Playing Field/Local Gov't Competition Act, 2011 N.C. Sess. Laws ch. 84, available at http://www.ncga.state.nc.us/Sessions/2011/Bills/House/PDF/H129v7.pdf.

⁹⁹ Matthew Lasar, *North Carolina Enacts Pro-ISP, Anti-Municipal Broadband Law*, WIRED (May 23, 2011, 9:54 AM), http://www.wired.com/epicenter/2011/05/nc-gov-anti-muni-broadband/.

Wilson and Salisbury, are exempted from the new law.¹⁰⁰ All other cities, however, do not fare as well. Chapel Hill, for example, can only complete the installation of cables in city offices that it intended to be part of a city-wide municipal fiber-optic network.¹⁰¹ The law now makes it virtually impossible for the city to extend to residents the high-speed network now available to city workers.

City officials and activists for municipal broadband are displeased, to say the least.¹⁰² Several North Carolina cities passed non-binding resolutions opposing the new state measure.¹⁰³ Other critics blast the law as "a cable monopoly protection bill" that harms the state's global competitiveness.¹⁰⁴ After all, by one measure, North Carolina has the lowest percentage of residents with at least three megabits per second (Mbps) broadband service.¹⁰⁵

The most enthusiastic advocates of the North Carolina ban were the major incumbent providers in the state, Time Warner Cable and CenturyLink. They had a lot to gain from a law that would eliminate any further competition in the residential broadband market. The North Carolina law is the culmination of four years of their lobbying efforts. ¹⁰⁶

Several other states have or are currently considering similar restrictions. South Carolina passed one such law last summer, and, as of this writing, the state legislatures in Georgia and Arkansas are also considering restrictions on municipally owned or operated broadband infrastructure. In South Carolina,

¹⁰⁰ See Brian Heaton, Municipal Broadband Networks Slammed in North Carolina, Gov't Tech. (May 25, 2011), http://www.govtech.com/technology/Municipal-Broadband-Networks-Outlawed-North-Carolina.html.

¹⁰¹ *Id*.

¹⁰² UNIV. OF N.C., FROM COMPETITION TO COOPERATION: ENGAGING CABLE, SATELLITE, INTERNET AND MOBILE BROADBAND SERVICE PROVIDERS IN MEETING THE INFORMATION NEEDS OF COMMUNITIES 7 (2012), available at http://ncpress.com/ncpa_weekly/weeks/061412/fcc symposium report.pdf.

¹⁰³ See, e.g., Christopher Mitchell, Chapel Hill Passes Resolution Against H129 in North Carolina, COMMUNITY BROADBAND NETWORKS (Apr. 12, 2011), http://www.muninetworks.org/content/chapel-hill-passes-resolution-against-h129-north-carolina; Christopher Mitchell, Greensboro Passes Resolution Against Time Warner Cable Bill in North Carolina, COMMUNITY BROADBAND NETWORKS (Mar. 31, 2011), http://www.muninetworks.org/content/greensboro-passes-resolution-against-time-warner-cable-bill-north-carolina; Christopher Mitchell, Another North Carolina Community Passes Resolution Against Time Warner Cable Bill, COMMUNITY BROADBAND NETWORKS (Mar. 28, 2011), http://www.muninetworks.org/content/another-north-carolina-community-passes-resolution-against-time-warner-cable-bill.

¹⁰⁴ Heaton, supra note 100. See generally supra note 103.

¹⁰⁵ Broadband Facts: North Carolina Has Worst Broadband in the Country, SEATOA, http://seatoa.org/2011-0404%20SEATOA%20BBND%20FACTSHEET.pdf; see also NC Bill Restricting Municipal Broadband Efforts Goes to the Governor, TECHJOURNAL (May 9, 2011), http://www.techjournalsouth.com/2011/05/nc-bill-restricting-municipal-broadband-efforts-goes-to-the-governor/.

¹⁰⁶ See Heaton, supra note 100; Lasar, supra note 99.

AT&T has been advocating a bill that would allow counties to provide broadband in unserved rural areas, but would also require local governments across the state to abide by all of the same public laws and franchising rules as private carriers when they compete.¹⁰⁷ The bill before the Georgia General Assembly would do this as well.¹⁰⁸ The Arkansas legislature is poised to expand current bans on municipal ownership of telecommunications to broadband.¹⁰⁹

Surely, states are imposing restrictions in response to the vigorous lobbying of private carriers. But there are earnest policy reasons for them as well. Any governmental meddling, critics contend, will distort the efficient operation of the price mechanism. Municipally supported service, they explain, has an unfair competitive advantage over private provider service because, among other things, the former can pass along costs to taxpayers without paying taxes or attending to the same market pressures. If cities insist on investing in such networks, they argue, they should require these companies to be subject to the same regulations to which private providers are subject.¹¹⁰

A majority of legislators in North Carolina seemed to be persuaded, moreover, that municipal broadband in the state hinders the competitiveness of private broadband network operators. Governor Bev Perdue did not sign or veto the bill, even as she believed the bill would decrease the number of broadband options for residents.¹¹¹

What is more, critics of municipal broadband argue, if consumers have more networks from which to choose, each network owner will service fewer subscribers and, as a result, have to charge subscribers higher prices. In any event, they further claim, the duplicative costs of municipal broadband development projects are not justified because the quality of service on such networks is often not any better than what is otherwise available in the

¹⁰⁷ See H.R. 3508, 119th Gen. Assemb. (S.C. 2012), available at http://scstatehouse.gov/sess119_2011-2012/bills/3508.htm; Phil Sarata, County: Bill Turns Back Clock on Broadband, TIMES & DEMOCRAT (Mar. 23, 2011, 2:30 AM), http://thetandd.com/business/article_c438af24-5507-11e0-a9a4-001cc4c002e0.html#ixzzlch klfESB.

¹⁰⁸ S. 313, 151st Gen. Assemb. (Ga. 2012), available at http://www.legis.ga.gov/legislation/20112012/118556.pdf; see also New Round of Municipal Broadband Fight Starts at Georgia Legislature, COMM. DAILY (Feb. 3, 2012).

¹⁰⁹ See H.R. 2033, 88th Gen. Assemb., Reg. Sess. (Ark. 2011), available at http://www.arkleg.state.ar.us/assembly/2011/2011R/Acts/Act1050.pdf.

¹¹⁰ See id.

¹¹¹ Lasar, supra note 99; Marcus Trathen, Setting the Record Straight on the North Carolina Level Playing Field Bill, ARSTECHNICA (May 19, 2011, 10:36 AM), http://arstechnica.com/tech-policy/2011/05/setting-the-record-straight-on-the-north-carolina-level-playing-field-bill/.

¹¹² Government Overbuilds Said to Be Waste of Resources Supporters Disagree, 29 St. Telephone Reg. Rep., June 10, 2011.

market.¹¹³ Millions of government grants and loans have been directed at municipal build-out projects in localities where the majority of households already have access to cable broadband, DSL, or some wireless broadband provider.¹¹⁴ It would be a mistake, moreover, to allow major government interventions in Internet infrastructure when the market for service and application has demonstrably proven to be a cultural, political, and commercial success.

B. The Assumption of Local Powerlessness

The policy debate about the costs and benefits of municipal broadband is livelier than the debate about the legal status of state restrictions. The likeliest reason for the relative quiet about the latter is the rule that states have plenary authority over their resident municipalities. Local government powers, this principle provides, do not exceed the explicit and specific ones given to them by their parent states.¹¹⁵

The Supreme Court placed its imprimatur on this rule over a century ago in *Hunter v. City of Pittsburgh* when, citing Judge John Dillon's *Commentaries on the Law of Municipal Corporations*, ¹¹⁶ it approved a Pennsylvania state statute that consolidated two cities within the state over a referendum vote opposing the consolidation by the majority of residents in one of those cities. ¹¹⁷ The Court upheld the state legislature's decision to consolidate. Localities, it explained, can only act pursuant to specific grants of authority from the state. ¹¹⁸ The referendum had no legal effect on the validity of the consolidation because there was no clear and specific grant of authority from the state on the legal pertinence of such a referendum. ¹¹⁹ Local governments, the Court reasoned, are mere appendages of state government; they are incapable as a constitutional matter of promulgating law or executing policy without "home rule" authority or some other explicit legislative grant of power from the state legislature. ¹²⁰

¹¹³ Id.

¹¹⁴ Id.

¹¹⁵ See, e.g., Bowers v. City of High Point, 451 S.E.2d 284, 287 (N.C. 1994).

¹¹⁶ See John F. Dillon, Commentaries on the Law of Municipal Corporations § 99 (5th ed. 1911).

¹¹⁷ See Hunter v. City of Pittsburgh, 207 U.S. 161, 179–80 (1907); see also City of Worcester v. Worcester Consol. St. Ry. Co., 196 U.S. 539, 549 (1905) (citing cases). Courts have approvingly referred to the creature-of-the-state principle as foundational. See, e.g., Wisc. Pub. Intervenor v. Mortier, 501 U.S. 597, 607–08 (1991); Lawrence Cnty. v. Lead-Deadwood Sch. Dist. No. 40-1, 469 U.S. 256, 270 (1985) (Rehnquist, J., dissenting); see also City of Columbus v. Ours Garage & Wrecker Serv. Inc., 536 U.S. 424, 428–29 (2002).

¹¹⁸ Hunter, 207 U.S. at 178.

¹¹⁹ See id. at 178-79.

¹²⁰ *Id*.

Dillon's Rule, even as old as it is, has important implications for municipal broadband today. 121 Under one reading, it suggests that states may unqualifiedly control how and whether localities may roll out service in the absence of state authorization. The U.S. Supreme Court seven years ago found an occasion to elaborate the point in the analogous context of state restrictions on local government-owned and government-operated telecommunications infrastructure. In Nixon v. Missouri Municipal League, the Court determined that Missouri's restrictions on local telecommunications build-out and service provisions were valid despite language in the amended Communications Act that forbids states from prohibiting "the ability of any entity" to provide telecommunications service. 122 This language, the Court explained, did not preempt state restrictions on local governments. 123 The Court invoked Dillon's Rule in its analysis, but did not cite it or any related authority. It took as given that, as a practical matter, the political subdivisions of Missouri are not capable of doing anything without state authorization or support. 124 The only legal authority on which the Court explicitly relied was the clear statement rule: the Court determined that there is nothing in the Communications Act that evinces a clear intention on the part of Congress to preempt state restrictions on their resident municipalities' broadband projects. 125

C. Local Variation by Design

For many observers, *Missouri Municipal League* stands squarely in the way of the hundreds of potential municipal broadband projects in states with ostensible restrictions on them.¹²⁶ Accordingly, in 2007, a handful of Senate and House members sponsored a bill to preempt state limits on municipal

¹²¹ But see David J. Barron, Reclaiming Home Rule, 116 HARV. L. REV. 2255, 2290 (2003); Diller, supra note 69, at 1126–27.

¹²² Nixon v. Mo. Mun. League, 541 U.S. 125, 128 (2004). The statute in its entirety provides 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." 47 U.S.C. § 253(a) (2006). Plaintiff cities in *Missouri Municipal League* appealed an FCC determination that this provision preempted state restrictions. *Mo. Mun. League*, 541 U.S. at 128–30.

¹²³ Id. at 129.

¹²⁴ See id. at 133.

¹²⁵ See Mo. Mun. League, 541 U.S. at 130 (citing Gregory v. Ashcroft, 501 U.S. 452, 460 (1991)).

¹²⁶ See, e.g., Matthew Dunne, Note, Let My People Go (Online): The Power of the FCC to Preempt State Laws that Prohibit Municipal Broadband, 107 COLUM. L. REV. 1126, 1126 (2007); Anthony E. Varona, Toward a Broadband Public Interest Standard, 61 ADMIN. L. REV. 1, 98–100 (2009). But see John Blevins, Death of the Revolution: The Legal War on Competitive Broadband Technologies, 12 YALE J.L. & TECH. 85, 110 (2009) (explaining that Mo. Mun. League has not been as bad for municipal broadband as some critics have made out because only one-third of states have such restrictions).

broadband.¹²⁷ The Community Broadband Act would "preserve the ability of *local governments* to provide broadband capability and services."¹²⁸ Written in this way, the bill's drafters wanted to make it unequivocally plain that state restrictions on broadband would not stand.¹²⁹ The bill, however, never made it to a vote in either chamber.¹³⁰

For advocates and opponents of municipal broadband alike, the lack of action on the Community Broadband Act was significant. At worst, it left untouched the *Missouri Municipal League* status quo—that is, something less than a clear statement on state restrictions on municipal telecommunications, let alone broadband.

The attention the *Missouri Municipal League* opinion has received from legislators and commentators is reason alone to give that opinion more than casual consideration.¹³¹ We can start with Justice Antonin Scalia's short concurrence. There, he observed that the Court did not have to decide whether municipalities may limit or enlarge their own power to provide telecommunications service.¹³² That question, he explained, was not presented to the Court. The clear statement rule, he argued, did all of the necessary analytical work.¹³³

The Court, of course, did not heed Justice Scalia's advice. To the contrary, the question of local ability played a significant role in the opinion. At least as evinced by the structure of the opinion, the *Missouri Municipal League* Court's application of the clear statement rule was an afterthought, occupying less than one page at the very end of the sixteen page majority opinion. The clear

¹²⁷ Dunne, *supra* note 126, at 1139.

¹²⁸ S. 1853, 110th Cong. (2008) (emphasis added); see also H.R. 3281, 110th Cong. (2007).

¹²⁹ First, the bill would have explicitly "preserve[d]" a presumably preexisting "ability" in "local governments to provide broadband capability and services." S. 1853, 110th Cong. (2008). Second, in its references to "local government" and "public provider," the proposed language made it unequivocally clear that municipal broadband service may not be obstructed by state law. H.R. 3281, 110th Cong. (2007).

¹³⁰ The Subcommittee on Telecommunications and the Internet of the House Commerce Committee never reported it out. The Senate Commerce Committee reported the bill to the full Senate, but chamber leaders never put it to a vote. See S. 1853, 110th Cong. (2008). I do not take up here the clear statement rule or preemption analysis generally as they relate to municipal broadband, but think it is ripe for further scholarly treatment.

¹³¹ The opinion has attracted the attention of able commentators for the past seven or so years. These commentators have not directed their analysis so much at the Court's consideration of Section 253(a), the 1996 Telecommunications Act, or communications law generally as much as the Court's unwarranted aggrandizement of state authority over resident local governments. See, e.g., Davidson, supra note 13, at 1032; Annie Decker, Preemption Conflation: Dividing the Local from the State in Congressional Decision Making, 30 YALE L. & POL'Y REV. 321, 375–76 (2012). But see Dunne, supra note 126, at 1151.

¹³² Nixon v. Mo. Mun. League, 541 U.S. 125, 141 (2004) (Scalia, J., concurring).

¹³³ *Id*

statement rule, it explained, was only "complementary" of the structural considerations at play. 134

The effectiveness of preemption, the Court reasoned, depends entirely on each respective municipality's practical ability to provide telecommunications service. 135 It elaborated this point by hypothesizing what it viewed as the three worrisome consequences of preemption if it were to agree with the local governments that the amended Communications Act preempted the state restrictions on their authority. First, preemption would be ineffectual because municipalities do not have an organic ability to provide telecommunications service that does not flow from the state. 136 The Court notably did not refer at all to Dillon's Rule or any related authority for this point. Second, preemption would invite "uncertain adventures" from municipality to municipality since different states have different forms of municipal authorization law. 137 Under such an approach, a city in one state could provide telecommunications service while a neighboring city in a more restrictive state across the border could not. 138 Congress, the Court concluded, could not have intended to create a regulatory regime so susceptible to "strange and indeterminate results." The Court, again, cited no legal authority to support this point. Finally, preemption would levy "a one-way ratchet" as states would only be allowed to grant municipalities the authority to develop telecommunications services but could never take such power away. 140 Such a restriction would leave states without the ability to control municipalities in the way they traditionally might. 141 The Court said so without citing anti-commandeering law or anything else for that matter 142

Here, in its discussion of municipal powerlessness, the Court saw states as both disciplining agents against the uncertainty and indeterminacy consequent of nationwide municipal participation as well as bulwarks against overly intrusive federal meddling in local affairs. Consistent with the robust conception of plenary state authority popular among the majority of Justices for the past generation, the Court has perceived the ideas of devolution and decentralization at the core of federalism to be important means of protecting against the arbitrary exercise of federal power, encouraging democratic

¹³⁴ Id. at 140 (majority opinion).

¹³⁵ Id. at 138.

¹³⁶ Id. at 135.

¹³⁷ *Id.* at 134.

¹³⁸ Mo. Mun. League, 541 U.S. at 136.

¹³⁹ *Id*. at 133.

¹⁴⁰ Id. at 137.

¹⁴¹ See id. at 138.

¹⁴² See id.

¹⁴³ See id.

participation, and advancing efficiency, intergovernmental competition, and pluralism.¹⁴⁴

But this is why *Missouri Municipal League* cannot be held out as supportive of contemporary municipal broadband restrictions. First, preemption analysis is a statute—and context—specific inquiry. The 2004 decision concerned telecommunications under Title II of the amended Communications Act.¹⁴⁵ Since 2005, federal policymakers have subjected broadband to regulation under Title I, not Title II.¹⁴⁶

Second, the notion of state plenary authority over local affairs has legal pedigree and some normative heft, 147 but does not by itself supply a complete account of how public law administration operates in the United States. For the past several decades, Congress and federal agencies have employed a myriad of regulatory arrangements that "engage local governments in national policymaking and implementation" of communications law as much as states. 148 The Court's analysis flies in the face of an array of federal regulatory regimes that, consistent with Congress's authority under the Spending Clause, overtly nudge states and state officials to advance national objectives. 149 The federal-local structures for public law administration also preserve the principles and "numerous advantages" that federalism ostensibly means to vindicate: they assure that public law is "sensitive to the diverse needs of a heterogeneous society," "increases opportunity for citizen involvement in democratic processes," "allows for more innovation and experimentation in government," and "makes government more responsive" to residents. 150 It should also be said that states often compete with each other in ways that

¹⁴⁴ There are some indications, however, that the pendulum is swinging away from this hard version of federalism to one that is more accommodating of restrictions on state power. See, e.g., Nev. Dep't of Human Servs. v. Hibbs, 538 U.S. 721, 724 (2003).

¹⁴⁵ Cf. Mo. Mun. League, 541 U.S. at 128.

¹⁴⁶ Preserving the Open Internet Broadband Industry Practices, 25 FCC Rcd. 17,905 (2010), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf.

¹⁴⁷ See RICHARD BRIFFAULT & LAURIE REYNOLDS, CASES AND MATERIALS ON STATE AND LOCAL GOVERNMENT LAW 315 (7th ed. 2009) (explaining that "Dillon's Rule is the counterpart" to the federalist presumption of plenary state legislative authority).

¹⁴⁸ Davidson, *supra* note 13, at 1032; *see also* Hills, Jr., *supra* note 13, at 1208; Reynolds, *supra* note 13, at 983–87.

¹⁴⁹ See, e.g., United States v. Am. Library Ass'n Inc., 539 U.S. 194, 214 (2003); New York v. United States, 505 U.S. 144, 167–69 (1992); South Dakota v. Dole, 483 U.S. 203, 206 (1987); see also Michael C. Dorf & Charles F. Sabel, A Constitution of Democratic Experimentalism, 98 COLUM. L. REV. 267, 427 (1998).

¹⁵⁰ Gregory v. Ashcroft, 501 U.S. 452, 458 (1991); see also Edward L. Rubin & Malcolm Feeley, Federalism: Some Notes on a National Neurosis, 41 UCLA L. REv. 903, 906–07 (1994).

deliver fewer public goods to residents.¹⁵¹ As I show in Part II above and, again, in Part V below, this is precisely what the new broadband localism accomplishes.¹⁵²

The Court's wariness about variability from locality to locality is, for this reason, only half right. To be sure, courts have misgivings about regulatory regimes that create an administratively unstable patchwork of local laws. 153 It does not help, moreover, that Congress defines inconsistent and uneven roles for localities in different federal statutory regimes.¹⁵⁴ But federal legislators have been quite willing to let a thousand flowers bloom, promulgating arrangements that treat local governments as junior partners in the administration of federal public laws in a wide range of regulatory fields. 155 A cooperative role for localities works well in areas that require, for example, immediate "site-specific" regulatory responses. 156 Congress may also want to encourage innovation, experimentation, and "intergovernmental learning" that can only really effectively occur at the local level. 157 Here, by making assumptions about the uncertainty in a regime that allowed municipalities to provide telecommunications service, 158 the Court substituted its own antiquated and aesthetic view of how public law administration should work for the one chosen by Congress. 159 The Court's conclusion about variability is inapposite and inconsistent with the current state of affairs. 160

At a minimum, the *Missouri Municipal League* Court could have identified, for example, the problems that legislators sought to address through the statute

¹⁵¹ See Paul E. Peterson, The Price of Federalism 121–24 (1995); Richard B. Stewart, *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L.J. 1196, 1212 (1977).

¹⁵² See supra Parts II.C, II.D; infra Part V.B.

¹⁵³ See, e.g., City of Columbus v. Ours Garage & Wrecker Serv., Inc., 536 U.S. 424, 441–42 (2002).

¹⁵⁴ See Decker, supra note 131, at 351-65; Ashira Pelman Ostrow, Process Preemption in Federal Siting Regimes, 48 HARV. J. ON LEGIS. 289, 307 (2011).

¹⁵⁵ See generally Susan Rose-Ackerman, Cooperative Federalism and Co-optation, 92 YALE L.J. 1344 (1983); Joshua D. Sarnoff, Cooperative Federalism, the Delegation of Federal Power, and the Constitution, 39 ARIZ. L. REV. 205 (1997). Justice John Paul Stevens rejected this concern in his dissent, arguing that the "national crazy quilt" feared by the majority would only be as concerning as the diversity of general municipal authorization laws already in place across the country. Nixon v. Mo. Mun. League, 541 U.S. 125, 146 (2004) (Stevens, J., dissenting).

¹⁵⁶ See Ostrow, supra note 154, at 336.

¹⁵⁷ Decker, supra note 131, at 362-64; see also Dorf & Sabel, supra note 149, at 321.

¹⁵⁸ See Nixon v. Mo. Mun. League, 541 U.S. 125, 133-34 (2004) (discussing the "strange and indeterminate results" and "uncertain adventures" consequent of preemption).

¹⁵⁹ See Cass R. Sunstein, *Interpreting Statutes in the Regulatory State*, 103 HARV. L. REV. 405, 435 (1989) (discussing courts as "faithful agents" of legislatures).

¹⁶⁰ This is to say nothing, moreover, of the Court's inattention to the way in which federal and state law interacts with "home rule" jurisdictions.

generally.¹⁶¹ Or, alternatively, it could have relied on conference reports attached to the final bill on which both chambers in Congress voted.¹⁶² Such inquiries have been a staple of preemption analysis and statutory interpretation generally.¹⁶³ Courts, to be clearer, will allow federal laws to preempt state laws to the extent the former veer into legislative fields already cordoned off as important to congressional objectives.¹⁶⁴ Courts have found, for example, that the amended Telecommunications Act impliedly preempts state or local laws whose specific content or subject matter may not be explicitly addressed in a federal statute but that invade a subject area or "field" addressed by the "scope, structure, and purpose" of federal law in the area generally.¹⁶⁵

In the end, however, the Court engaged in a thin analysis of telecommunications law administration generally and the pertinent statutory provision in particular. ¹⁶⁶ By failing to meaningfully consider the full scope of regulatory interventions in the regulatory field (under the amended Communications Act and elsewhere) and the language and purpose of the provisions at issue (Section 253 of the Telecommunications Act), the Court failed to consider the full sweep of resources available for determining legislative intent. ¹⁶⁷

For these reasons, the *Missouri Municipal League* opinion presents very little insight into the status of contemporary state restrictions on municipal broadband. In Part IV below, I pick up where the Court left off and consider the roles that Congress already has crafted for local governments in the amended Communications Act.

¹⁶¹ See, e.g., infra Part V; cf. Lawrence Cnty. v. Lead-Deadwood Sch. Dist. No. 40-1, 469 U.S. 256, 262 (1985).

¹⁶² Lawrence Cntv., 469 U.S. at 263-66; see also, e.g., infra Part V.

¹⁶³ See, e.g., City of Columbus v. Ours Garage & Wrecker Serv., Inc., 536 U.S. 424, 440–41 (2002); Capital Cities Cable, Inc. v. Crisp, 467 U.S. 691, 699 (1984). Implied preemption doctrine in particular allows courts to invalidate state and local laws that frustrate or conflict with federal law. See PLIVA, Inc. v. Mensing, 131 S. Ct. 2567, 2579 (2011); Fidelity Fed. Sav. & Loan Ass'n v. de la Cuesta, 458 U.S. 141, 152–53 (1982).

¹⁶⁴ See Altria Grp., Inc. v. Good, 129 S. Ct. 538, 543 (2008).

¹⁶⁵ See, e.g., N.Y. SMSA Ltd. P'ship v. Town of Clarkstown, 612 F.3d 97, 104 (2d Cir. 2010); see also Sw. Bell Wireless Inc. v. Johnson Cnty. Bd. of Cnty. Comm'rs, 199 F.3d 1185, 1192–93 (10th Cir. 1999).

¹⁶⁶ See Nixon v. Mo. Mun. League, 541 U.S. 125, 133-39 (2004).

¹⁶⁷ Compare Nat'l Cable & Telecomms. Ass'n. v. Brand X Internet Servs., 545 U.S. 967, 976–80 (2005) (explaining the meaning of "offer"), with Muscarello v. United States, 524 U.S. 125, 128–29 (1998) (explaining etymological origins of "carries"). See also Altria Group, Inc. v. Good, 129 S. Ct. 538, 543 (2008) ("[T]he purpose of Congress is the ultimate touchstone in every preemption case."); Wisc. Pub. Intervenor v. Mortier, 501 U.S. 597, 605 (1991); Crisp, 467 U.S. at 699; Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947).

IV. LOCAL PARTICIPATION

Local governments are sometimes best situated to discover and resolve problems particular to their residents. He have a unique familiarity with local community characteristics and priorities, even if they often lack the technological sophistication of private providers. Municipalities generally have a superior institutional competence with which to implement law, prescribe rules particular to their residents' needs, and facilitate collaborations between anchor institutions and residents. Of course, all of this unique and independent capacity does not translate into legal authority to do so. Such ability, however, is suggestive of a competence that is unavailable to federal or state governments. Indeed, these are the very attributes that justify local "home rule" in states across the country.

Congress has appreciated the point. Federal laws and standards across legislative fields often require municipal participation and implementation. ¹⁷² In federal laws governing telecommunications and cable television services in particular, Congress has acknowledged that its objectives are sometimes best realized when local governments have a meaningful hand in implementation, particularly when they affect local rights-of-way and land use. Below, I offer an abbreviated history of Congress's reliance on local governments in the development of law in these two legislative fields. I show that it generally knows how to empower local governments, and how not to. Specifically, it has eschewed local authority in the design of telecommunications regulation and preserved limited local authority in cable regulation. Broadband regulation today owes something to these approaches, particularly to the federal-local cable service regulatory scheme. Moreover, these models offer important guidance for prospective government administration and regulation of broadband infrastructure.

A. Telecommunications

Almost since its inception at the end of the nineteenth century, telecommunications service was dominated by one company. AT&T ruled

¹⁶⁸ See William W. Buzbee, Urban Sprawl, Federalism, and the Problem of Institutional Complexity, 68 FORDHAM L. REV. 57, 92–94 (1999).

¹⁶⁹ See id.; see also Jonathan H. Adler, Judicial Federalism and the Future of Federal Environmental Regulation, 90 IOWA L. REV. 377, 384–87, 384 n.35 (2005); Ostrow, supra note 154, at 296.

¹⁷⁰ See Davidson, supra note 13, at 991, 993. This is not always true, of course. See Richard Briffault, Who Rules at Home?: One Person/One Vote and Local Governments, 60 U. Chi. L. Rev. 339, 340 (1993) (discussing reluctance to federalize election law).

¹⁷¹ See Reynolds, supra note 13, at 996–1000.

¹⁷² See, e.g., Paul Teske, Wither the States? Comments on the DACA Federal-State Framework, 4 J. ON TELECOMM. & HIGH TECH. L. 365, 372 (2006).

phone service much like a feudal lord would govern fiefdoms, providing longdistance service and, through its several regional "Baby Bells," local service. 173 The 1996 Telecommunications Act established one of Congress's more to implement a regime for the regulation telecommunications that, to this day, has the FCC and state utility commissions working more or less collaboratively on administering incumbent carriers' obligations to unbundle their network elements, 174 interconnect with new entrants in the market, 175 and price those elements fairly, 176 all without requiring any input from local governments. 177 Before, the FCC and state utility commissions operated in clearly delineated areas that had very little overlap. Through the 1996 Amendments, Congress replaced this vestigial "dual federalism" approach with one that struck a balance between a clearly defined federal structure for regulation on the one hand and, on the other hand, state discretion to implement, supplement, and experiment with that framework; this has been called "cooperative federalism." This regulatory design had federal and state governments cooperating on issues for which, until 1996, they generally were separately responsible under the 1934 Communications Act. 179 With the exception of high-profile antitrust litigation filed by the Department of Justice against AT&T's monopoly practices in 1913, 1956, and 1982, 180 federal regulation of local telecommunications had been limited to the implementation of common carrier principles, including, for example, pro-competitive rules relating to tariff publication and interconnection.

While Congress clearly meant to focus on the relative roles of federal and state governments, it did make allowances for a positive role for local

¹⁷³ See Brett M. Frischmann, Infrastructure: The Social Value of Shared Resources 211–17 (2012); Milton L. Mueller, Jr., Universal Service: Competition, Interconnection, and Monopoly in the Making of the American Telephone System 1–3 (1997); Tim Wu, The Master Switch: The Rise and Fall of Information Empires 240–48 (2010).

¹⁷⁴ See, e.g., 47 U.S.C. § 251(c) (2006).

¹⁷⁵ See, e.g., id. § 251(b)(5)–(c)(2).

¹⁷⁶ See. e.g., id. § 252(d).

¹⁷⁷ See, e.g., AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 384-85 (1999); U.S. Telecom Ass'n v. FCC, 359 F.3d 554 (D.C. Cir. 2004); see also Philip J. Weiser, Federal Common Law, Cooperative Federalism, and the Enforcement of the Telecom Act, 76 N.Y.U. L. REV. 1692, 1694 (2001).

¹⁷⁸ See Weiser, supra note 177, at 1692, 1697. "Cooperative federalism" regimes are a blend of "complete federal preemption" of state laws and "uncoordinated federal and state action." *Id.* at 1697 (comparing "preemptive federalism" with "dual federalism").

¹⁷⁹ Of course, in the event of conflict, federal law is always supreme. See Qwest Corp. v. Ariz. Corp. Comm'n, 567 F.3d 1109, 1118 (9th Cir. 2009); Verizon New England, Inc. v. Me. Pub. Utils. Comm'n, 509 F.3d 1, 9 (1st Cir. 2007).

¹⁸⁰ See generally Glen O. Robinson, The Federal Communications Act: An Essay on Origins and Regulatory Purpose, in A LEGISLATIVE HISTORY OF THE COMMUNICATIONS ACT OF 1934, at 3, 7–8 (Max D. Paglin ed., 1989).

governments. The statute does not impede local governments from, for example, maintaining streets, highways, and pedestrian walkways. Localities may do so as long as their interventions are applied in a "competitively neutral" manner. 181 Elsewhere in the Act, Congress also granted to local governments the primary authority to site network facilities like poles and pole attachments. 182 This provision has been important to the development of wireless broadband capabilities across the country, but, at the time, was meant to strike the balance between facilitating "the growth of wireless telephone service and to maintain substantial local control over siting of towers." 183

But these were relatively minor tweaks in light of the big game that federal legislators had in their sights in 1996. Congress was, above all, eager to lift nearly all unnecessary regulatory burdens on competition and entry into the local telecommunications market. It accordingly partnered with states to accomplish this ambitious objective.¹⁸⁴

The Act, however, also makes plain that states are not necessarily standing on an equal footing with Congress or federal agencies. Through Section 253(a) in particular, legislators were keen on lifting all unnecessary state and local barriers to competition and market entry. Sponsors of the bill, for example, prevailed over a tiny minority of legislators who did not want to see state regulatory authority diminished. Overwhelming majorities in both chambers evidently had little confidence in states' ability or will to encourage competition in the local telecommunications market. The bill to which members agreed, again, endowed the FCC with the power to preempt state and local laws that posed any unnecessary barriers to market entry, only making allowances for

¹⁸¹ 47 U.S.C. § 253(c) (2006); see also TCG N.Y., Inc. v. City of White Plains, 305 F.3d 67, 76–79 (2d Cir. 2002); Am. Tel. & Tel. Co. v. Vill. of Arlington Heights, 620 N.E.2d 1040, 1042 (Ill. 1993) (holding that municipalities' interests over streets are regulatory, not proprietary).

¹⁸² 47 U.S.C. § 332(c)(7) (2006).

¹⁸³ Omnipoint Commc'ns, Inc. v. City of White Plains, 430 F.3d 529, 531 (2d Cir. 2005). See generally Robert B. Foster, What the Meaning of "May" May Be: Recent Developments in Judicial Review of Land Use Regulation of Cellular Telecommunications Facilities Under the Telecommunications Act of 1996, 41 URB. LAW. 501, 503–12 (2009).

¹⁸⁴ See Charles H. Sanders, A Step Toward Competition in Local Telephone Service: AT&T Corp. v. Iowa Utilities Board, 12 HARV. J.L. & TECH. 647, 654–55 (1999).

¹⁸⁵ See 141 CONG. REC. S8306-07 (daily ed. June 14, 1995) (statement of Sen. Dirk Kempthorne). See generally Duane McLaughlin, Note, FCC Jurisdiction over Local Telephone Under the 1996 Act: Fenced Off?, 97 COLUM. L. REV. 2210, 2233-34 (1997).

¹⁸⁶ See 141 Cong. Rec. S8173 (daily ed. June 12, 1995) (statement of Sen. Larry Pressler); H.R. REP. No. 104-458, at 5-6, 9-10 (1996) (Conf. Rep.); see also Library of Congress, THOMAS, Search Bill Summary & Status for the 104th Congress, S. 652, http://thomas.loc.gov/bss/104search.html (search "S. 652") (last visited Sept. 27, 2012) (displaying vote tally).

state laws that regulate rights-of-way, impose competitively neutral requirements on providers, protect consumers, and assure universal service. 187

Legislators also seemed to consider local government agencies to be among the new market entrants that would be protected from unnecessary barriers. 188 The conference report to which managers from both chambers agreed explained that Section 253 would forbid "explicit prohibitions on entry by a utility into telecommunications." Such "utilities" were to include municipal telecommunications among other providers of electric, gas, water, or steam services who sought to enter the telecommunications market. 190 From this vantage point, it is, as Justice Stevens averred in his dissent in *Missouri Municipal League*, "implausible" that Congress did not appreciate that municipal telecommunications would be among such entities. 191

The legislative record is nevertheless not crystal clear on whether municipal telecommunications projects were among the new entrants that Congress meant to encourage. For example, the preface to the House report in particular implies that the direct beneficiaries of Section 253(a) would be private operators and not governments.¹⁹² The FCC's own history of interpreting the pertinent provisions of the Act further complicates the picture.¹⁹³

B. Cable Television

The political economy and historical trajectory of cable television regulation is meaningfully different from that of telecommunications. As I discuss below, federal and state regulators were quite reluctant to intervene in the new market for what was then quaintly called community antenna television. They ceded the regulatory ground in this early period to local community cooperatives and governments. While they generally employed a

¹⁸⁷ 47 U.S.C. § 253(a)–(c).

¹⁸⁸ See Nixon v. Mo. Mun. League, 541 U.S. 125, 143–44 (2004) (Stevens, J., dissenting).

¹⁸⁹ S. REP. No. 104-230, at 127 (1996) (Conf. Rep.).

¹⁹⁰ Id at 98

¹⁹¹ Mo. Mun. League, 541 U.S. at 143 (Stevens, J., dissenting).

¹⁹² See S. REP. No. 104-230, at 1 (1996) (Conf. Rep.). The bill, the report asserts, would establish a "national policy framework designed to accelerate rapidly *private sector* deployment of advanced telecommunications and information technologies and services to all Americans." *Id.* (emphasis added); see also H.R. REP. No. 104-204, at 75 (1996).

¹⁹³ Five years earlier, the D.C. Court of Appeals affirmed an FCC determination that Section 253(a) did not preempt a Texas state restriction on municipal telecommunications service. City of Abilene v. FCC, 164 F.3d 49, 54 (D.C. Cir. 1999) (comparing to Salinas v. United States, 522 U.S. 52, 57 (1997), in which the Court explicitly refused to impose a narrowing construction on the modifier "any"). The Missouri Municipal League Court recognized this history. Mo. Mun. League, 541 U.S. at 132. It took the case because of the circuit split occasioned by the Eighth Circuit's construction of the term "any entity." Id. at 131.

relatively light touch in the early years, local governments were, as such, the first and most active cable policymakers. Even after the FCC and then Congress began enacting regulations and laws governing the retransmission of broadcast signals, I show here that Congress enshrined the vestigial localist approach in the 1984 and 1992 amendments to the Communications Act, substantially accommodating a regulatory and operational role for local authorities. Over time, I explain, local authorities have become quite aggressive at extracting all manner of public-regarding conditions from cable operators, inviting some important pushback from federal regulators. States, however, have remained mostly outsiders, even while they have retained the control over the establishment and operation of cable franchising authorities.

Today, most consumers obtain their broadband service from a cable operator rather than a telecommunications service provider. But it was not always like this. Cable operators, too, were once the new market entrant. The first providers of cable service unwittingly developed a video distribution model on which operators basically continue to depend today.

In the late 1940s and 1950s, most Americans could count on receiving a broadcast signal, even if no station existed locally. This, however, was not true for all. Some communities could not enjoy the programs that were lighting up living rooms across the country. This was because, among other things, the cost of building and operating television stations in all but large metropolitan areas was commercially prohibitive. 194 Some communities—namely, in the valleys of Oregon, Pennsylvania, and Arkansas—lived without television. 195 Located just outside of the reach of any television signal, these communities could only receive frustratingly unintelligible snippets. Mountains and high hills shielded other communities from receiving signals. Neighboring communities that sat atop of the Allegheny Mountains, for example, received signals, while those tucked in the lower valleys nearby did not. 196

It was in these small- to medium-sized valley communities from which Community Antenna Television (CATV) sprung. Forward-looking residents in those towns generally relied on existing signal amplification and distribution technologies to develop cable television as we know it.¹⁹⁷ They used large antennae atop relatively tall structures or hilltops to receive signals from the nearest television stations. They then relayed those signals by cable and, to a lesser extent, "line-of-sight" microwave signaling directly to the first cable

¹⁹⁴MARY ALICE & MAYER PHILLIPS, CATV: A HISTORY OF COMMUNITY ANTENNA TELEVISION 42 (1972). The FCC also halted its licensing process from 1948 to 1952 as it faced a sudden increase in station applications. *See* Patrick Parsons, Blue Skies: A HISTORY OF CABLE TELEVISION 47–49 (2008).

¹⁹⁵ See MEGAN MULLEN, TELEVISION IN THE MULTICHANNEL AGE: A BRIEF HISTORY OF CABLE TELEVISION 33–41 (2008); PARSONS, supra note 194, at 50.

¹⁹⁶ PARSONS, supra note 194, at 57.

¹⁹⁷ See id. at 55.

subscribers, who, in turn, paid around \$135 for installation and a monthly charge of around \$3.75.198

State and federal officials did not know how or want to classify or regulate CATV service in these early years. Early on, the FCC determined that cable television service was related to interstate transmission and had adverse consequences for local broadcasting generally. 199 It believed, nevertheless, that this fact was insufficient to justify imposing common carrier requirements. 200 As with other observers, the Commissioners believed that CATV was a temporary technological fix. 201 They assumed that they had no choice but to accommodate local interests.

Local governments, however, were not as forbearing as federal or state governments. From the late 1940s into the early 1960s, small valley towns and local authorities across the country cooperated with cable operators without explicit support or hindrance from state or federal governments. Many at this early stage entered into extremely lenient rights-of-way arrangements, allowing, for example, CATV systems to operate without any formalized authorization. Most others adopted resolutions or entered into franchise agreements. But even these were rather lenient, often authorizing operators to construct systems in public rights-of-way within the municipal limits for little to no consideration. A minority of municipalities were not afraid to restrict cable operators' access to public rights-of-way and land. In the end, local regulation varied from community to community; some municipalities imposed toothless requirements, while others treated cable service as a public utility.

Municipalities began expecting more from cable operators in the 1960s, imposing franchise fees and renewable limited terms.²⁰⁷ By the end of the 1960s, local authorities across the country imposed, among other things, franchise fees of five percent of gross revenues and required operators to

¹⁹⁸ See, e.g., ALICE & PHILLIPS, supra note 194, at 42.

¹⁹⁹ See Inquiry into the Impact of Community Antenna Systems, TV Translators, TV "Satellite" Stations, and TV "Repeaters" on the Orderly Development of Television Broadcasting, 26 F.C.C. 403, 427–30 (1959) [hereinafter Impact of Community Antenna Systems]; see also United States v. Sw. Cable Co., 392 U.S. 157, 164 (1968).

²⁰⁰ See Impact of Community Antenna Systems, 26 F.C.C. at 431.

²⁰¹ PARSONS, supra note 194, at 72.

²⁰² ALICE & PHILLIPS, *supra* note 194, at 7–9, 12–14, 41–45.

²⁰³ See id. at 153; Don R. Le Duc, Cable Television and the FCC: A Crisis in Media Control 127 (1973).

²⁰⁴ See Martin H. Seiden, An Economic Analysis of Community Antenna Television Systems and the Television Broadcasting Industry, Report to the Federal Communications Commission 44 (1965).

²⁰⁵ PARSONS, *supra* note 194, at 91.

²⁰⁶ SEIDEN, supra note 204, at 44; PARSONS, supra note 194, at 108.

²⁰⁷ DANIEL L. BRENNER, MONROE E. PRICE & MICHAEL I. MEYERSON, CABLE TELEVISION AND OTHER NONBROADCAST VIDEO § 10.2 (Apr. 2011); LE DUC, *supra* note 203, at 127–28.

provide free educational, governmental, and informational services, as well as obligations to indemnify the city against liability arising from the use of public rights-of-way.²⁰⁸ They also secured assurances of signal quality, as well as control over the transfer of property to and from operators and cable rate changes.²⁰⁹ It was only then that the FCC became more aggressive in its regulatory posture, justifying the regulation of cable operators' importation of distant signals on the grounds that it had jurisdiction over the regulation of local broadcasters.²¹⁰

Local authorities across the country, moreover, have owned and operated cable service systems for almost as long as cable television has existed.²¹¹ They have done this to provide service to residents, but also to introduce competition in local consumer markets otherwise dominated by one or two major cable or satellite providers.²¹² A vertically integrated multichannel video programming distributor with a significant stake in content, they feared, could leverage its dominant position in a particular local area to keep out the competition.²¹³ The amended Communications Act, in fact, encourages municipal ownership in precisely such circumstances; local authorities may own and operate cable networks without a franchise as long as they do not also provide video programming.²¹⁴ A local authority may do so even when it issues nonexclusive franchises to private multichannel video programming distributors with which it vies for the same subscribers.²¹⁵ The courts enforce such local-franchise-agreement terms as though they were contracts between fully autonomous parties.²¹⁶

States began limiting or altogether banning municipal cable service and even local government cable regulation in the late 1970s, well after local authorities already had been active.²¹⁷ Through state constitutional amendment or legislative enactment, they did this with little or no resistance on the premise that local governments derive all of their legal authority from the state.²¹⁸

²⁰⁸ LE DUC, *supra* note 203, at 127–28; *see also* City of Dallas v. FCC, 165 F.3d 341, 348 (5th Cir. 1999).

²⁰⁹ SEIDEN, *supra* note 204, at 46–47.

²¹⁰ See generally United States v. Sw. Cable Co., 392 U.S. 157, 164-68 (1968).

²¹¹ See Carl R. Ramey, The Cable Act and Municipal Ownership: A Growing First Amendment Confrontation, 46 FED. COMM. L.J. 147, 156 (1993).

²¹² See id.

²¹³ See generally Susan Crawford, The Looming Cable Monopoly, 29 YALE L. & POL'Y REV. INTER ALIA 34 (2010). See also 47 U.S.C. § 548(b) (2006).

²¹⁴ 47 U.S.C. § 541(f)(2) (2006).

²¹⁵ *Id.* § 541(f)(1)–(2).

²¹⁶ See, e.g., Helix Elec., Inc. v. United States, 68 Fed. Cl. 571, 572–73 (2005) (holding that franchise agreements for military bases are contracts subject to the Federal Acquisition Regulations).

²¹⁷ See Brenner et al., supra note 207, § 3.4; James C. Goodale & Rob Frieden, All About Cable and Broadband § 4.02[1] (Law Journal Press 2011).

²¹⁸ See supra note 217.

Today, all states regulate local authority over cable franchising and cable television generally through the explicit grant of home-rule powers, general police powers, specific authority over streets and rights-of-way, or specific authority over local franchising.²¹⁹ Most states have claimed, among other things, the authority to promulgate rules, impose reporting requirements, collect fees, assist in the development of services, and develop statewide telecommunications plans.²²⁰

Congress further narrowed the regulatory role for local government intervention in cable service in the 1984 and 1992 amendments to the Communications Act. A new Title VI addressing cable television imposed limits on the obligations that local authorities could impose on cable operators, barring authorities from imposing unreasonable fees or unreasonably refusing to award additional competitive franchises.²²¹ The courts have elaborated the point, explaining that, pursuant to the 1992 Act, municipalities only have a regulatory interest in the streets and rights-of-way through which operators proprietary one.222 cable networks. not a Telecommunications Act and subsequent FCC rules have done little to alter this central but limited role for local authorities.²²³

All in all, then, the history of cable television suggests a limited but essential role for local ownership, administration, and regulation. It does not completely rebuke the plenary state authority view on which the *Missouri*

²¹⁹ See Brenner et al., supra note 207, § 3.4; see also KAOK-CATV, Inc. v. La. Cable T.V., Inc., 195 So.2d 297, 300 (La. Ct. App. 1967) (organic state statute only authorizes local authority in Louisiana to grant franchises for the transmission of heat, light and power, not for cable or other video services); Nugent v. City of East Providence, 238 A.2d 758, 760–61 (R.I. 1968) (home rule charter does not authorize municipality to grant an exclusive cable franchise because state legislature reserves all authority to regulate businesses in the state not enumerated in charter). Largely in response to the entry of telecommunications companies in the multichannel video programming distribution market in the past six to seven years, moreover, eleven states now claim exclusive cable franchising authority in several states, effectively preempting any local role whatsoever. See Brenner et al., supra note 207, § 3.11.

²²⁰ See Brenner et al., supra note 207, § 3.14.

²²¹ See 47 U.S.C. §§ 541(a)(1), 542(b)(2)(B) (2006); see also Alliance for Cmty. Media v. FCC, 529 F.3d 763, 767–68 (6th Cir. 2008); Time Warner Entm't Co. v. FCC, 93 F.3d 957, 971–73 (D.C. Cir. 1996).

²²² See City of New York v. Bee Line, 284 N.Y.S. 452, 456 (1935); see also S. REP. NO. 102–92, at 47 (1991) (1992 Cable Act). Even before 1992, the Supreme Court had held that a municipality is not exempt from antitrust liability when it regulates cable service unless the authority to regulate was clearly and explicitly given by the state, in which case the state action doctrine applies and exempts the municipality from antitrust liability. See Cmty. Commc'ns Co. v. City of Boulder, 455 U.S. 40, 55–56 (1982); see also City of Lafayette v. La. Power & Light Co., 435 U.S. 389, 412–13 (1978).

²²³ The FCC, for example, has curtailed anticompetitive and extortionate behavior by local officials. *See, e.g., Strategic Plan of the FCC*, FCC (Mar. 11, 2011), http://www.fcc.gov/encyclopedia/strategic-plan-fcc.

Municipal League opinion is based, but it suggests a far more complicated account of local ability or authority than the Court admitted.

It is this ambiguity that advocates of state plenary authority fail to acknowledge. As I explain in Part V below, the example of municipal broadband drives the point home as well as any other. To be sure, broadband, as a technology and in regulation, owes something to the historical development of telecommunications and cable service discussed here. But it is a different animal. Below, I describe the emergent regulatory regime, identify some of the advantages and limitations of the new approach and, on the basis of these, recommend a way forward.

V. THE EMERGENT DESIGN

The FCC has treated computer-enhanced communications services as a distinct category of communications service since the 1970s.²²⁴ It did so even as the Internet "backbone" was composed of telecommunications (i.e., not broadband) infrastructure. Congress ratified this regulatory approach in the 1996 amendments to the Communications Act,²²⁵ identifying "information services" as distinct from the pure transmission services addressed under other provisions of the Act. By 2005, the FCC and the Court clarified the regulatory status of these emergent "information services," explaining that they are distinct from conventional telecommunications or cable service.²²⁶ Today, many municipalities, including some in Missouri, provide broadband service on the premise that state restrictions on municipal communications services do not cover "Internet-type" services.²²⁷

This distinction is even more vivid in the emergent regulatory design. Policymakers have given local authorities wide discretion in ways that, for technological and commercial reasons, they never imagined for telecommunications or cable television. For the past decade, municipalities across the country have been strategizing about ways to bring high-speed, high-quality Internet access to their communities when private providers fail to. Here, the barriers to private investment are as demographic as they are topographic; the prohibitively high expense of building infrastructure for relatively distant and sparsely populated communities makes it difficult to provide service to everyone. It only makes sense, therefore, that local anchor institutions and municipalities are developing and providing service to

²²⁴ See Sylvain, supra note 31, at 235–38 (discussing the FCC's Computer cases).

²²⁵ See Duane McLaughlin, FCC Jurisdiction over Local Telephone Under the 1996 Act: Fenced Off?, 97 COLUM. L. REV. 2210, 2211 (1997) (quoting Sen. John Kerry).

²²⁶ See Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, 20 FCC Rcd. 14,853, para. 1 (2005) (report and order and notice of proposed rulemaking); see also Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 967–69 (2005).

²²⁷ See Mo. REV. STAT. § 392.410(7) (2011).

residents. Internet access and participation rates depend largely on these stakeholders' willingness to invest and experiment with broadband technology. As such, I argue here, policymakers should do everything possible to aggressively involve local communities in the administration of broadband law and policy.

A. Broadband Is Different

The history of the technology and political economy from which the new broadband localism is emerging is distinctive. The Internet did not sprout out of community efforts in the same way that cable did. It was a top-down venture in the beginning: the offspring of a midcentury Defense Department project to develop a redundant and geographically dispersed "internetwork" of computers whose chief purpose was to keep valuable information safe from Soviet attack.²²⁸ The emergent broadband localism represents a marked shift from this early design concept.

The respective interests of the stakeholders in the broadband industry also are significantly different. Broadcasters owned the copyrights to the programming that the first cable operators retransmitted without consent. The former accordingly fought and won statutory protections against the "siphoning-off" of the audiences on which their advertising model is based.²²⁹ Today, some broadband service providers and a handful of the largest Internet content developers have shown a keen interest in bundling content and application offerings with broadband service.²³⁰ Most of the latter, however, have not done so. Indeed, the vast majority of major content and application developers like Facebook, Zynga, and Amazon welcome build-out projects that connect them with as many users as possible without fear of having their audiences "siphoned-off."

²²⁸ See Robert E. Kahn & Vinton G. Cerf, What Is the Internet (and What Makes It Work)?, in Open Architecture as Communications Policy: Preserving Internet Freedom in the Broadband Era 17, 18–19 (Mark N. Cooper ed., 2004); Jonathan L. Zittrain, The Future of the Internet and How To Stop It 28 (2008); In-Sung Yoo, Note, The Regulatory Classification of Internet Protocol Television: How the Federal Communications Commission Should Abstain from Cable Service Regulation and Promote Broadband Deployment, 18 CommLaw Conspectus 199, 202–03 (2009).

²²⁹ See 47 U.S.C. § 325(b)(1)(A) (2006); see also 17 U.S.C. § 111 (2006).

²³⁰ See, e.g., David Kravets, ISPs to Disrupt Internet Access of Copyright Scofflaws, WIRED (July 7, 2011, 11:08 AM), http://www.wired.com/threatlevel/2011/07/disrupting-internet-access/ (discussing agreement between major content producers and broadband service providers on "mitigation measures" for reducing copyright infringement online); Verizon-Google Legislative Framework Proposal, GOOGLE, https://docs.google.com/viewer?url=http://www.google.com/googleblogs/pdfs/verizon_google_legislative_framework_proposal_081010.pdf&pli=1 (last visited Aug. 17, 2012) (arguing, inter alia, that broadband providers should be able to offer "differentiated online services, in addition to the Internet access").

Municipal broadband projects merely provide users with the transmission capacity to access the diverse array of Internet content and applications. They do not bother at all with tying application and content to infrastructure, for example. In any event, municipal service providers do not have the same proprietary or pecuniary ambitions as private providers. To be sure, there remain important competition problems to resolve when a local regulatory authority competes with private providers in the provision of service, but those are of a different sort.²³¹ Municipal broadband, as currently conceived, aims above all to provide communities the opportunity to develop and gain access to Internet-based applications and content.

B. Federal Funding, Local Initiative

To put it slightly differently, municipal intervention in broadband administration is far more important than it ever was in the telecommunications or cable settings because, today, users have the potential to interact with and learn from others in ways that were never conceivable with those older communication technologies. Congress, to its credit, has responded. For the past several years, it has enacted laws and federal programs with the clear and manifest intention of making broadband service available to everyone. It has relied on a diversity of legislative tools that focus on broadband deployment as a local phenomenon. Early on, for example, Congress delegated to the FCC the task of mapping and reporting on broadband service availability and transmission speeds in each local area.²³² This effort predictably required extensive local participation.

But Congress more recently has gone much further, delegating grant-making responsibilities to a variety of federal agencies to accomplish the national policy objectives of broadband deployment and service accessibility.²³³ Legislators presume that such investments will help to produce jobs and bring the country out of its economic doldrums.²³⁴ Under the proposed Broadband Conduit Deployment Act, moreover, grants for upgrading or repairing roads would be tied to building out conduits for broadband wiring along those roads.²³⁵ This "dig once" legislation aims to avoid the substantial transaction

²³¹ See supra Part II.C.

²³² See 47 U.S.C. § 1301 (Supp. IV 2011); Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, 23 FCC Rcd. 9691, 9692 (2008) (report and order and further notice of proposed rulemaking).

²³³ See, e.g., 47 U.S.C. § 1302(b) (Supp. IV 2011) (requiring the FCC to "take immediate action to accelerate deployment").

²³⁴ See Deborah D. McAdams, Tech Advisors Tell FCC to Launch Local Broadband Deployment Competition, TVTECHNOLOGY (Apr. 25, 2011), http://www.televisionbroadcast.com/article/119710.

²³⁵ See Broadband Conduit Deployment Act of 2011, H.R. 1965, 112th Cong. § 330(a) (2011).

costs of repeated road excavations.²³⁶ Another bill under consideration in the current session of Congress would require all newly constructed federal public buildings to be equipped for wireless service after 2014.²³⁷ Along these same lines, this past summer, the President signed an Executive Order that, among other things, makes broadband construction along Federal roadways and properties up to ninety percent cheaper.²³⁸

Very recently, moreover, the FCC launched a series of initiatives aimed at accelerating local broadband deployment and service. These include facilitating public-private partnerships in support of underserved communities, offering such things as Internet skills classes, tutoring, and online job certification programs online.²³⁹ The agency also has successfully encouraged major broadband providers to supply one-megabit-per-second service for two years for just ten-dollars-a-month voluntarily to families with school-age children enrolled in the free lunch program.²⁴⁰ Currently, the FCC has initiated rule-making proceedings for the reform of subsidy programs for public libraries, schools, and high-cost service areas, as well as the rules governing utility poles, rights-of-way, collocation, and the siting of wireless antennas and towers.²⁴¹ The Commission also has made portions of the electromagnetic spectrum available for unlicensed and flexible wireless broadband, and is exploring adding more.²⁴²

Congress articulated the largest of these public broadband infrastructure programs, however, as I explain in Part II, in the 2009 American Recovery and Reinvestment Act. Interestingly, several of these projects are also located in states with complete bans or prohibitive restrictions on municipal broadband. These include publicly supported infrastructure projects in Charlotte, North

²³⁶ See Paul Barbagallo, Calif. Rep. Eshoo Introduces 'Dig Once' Broadband Legislation Requiring Conduits, BLOOMBERG BNA (May 4, 2011), http://www.bna.com/calif-rep-eshoo-n6809/.

²³⁷ Federal Winet Act, S. 3439, 112th Cong. (2012).

²³⁸ See Exec. Order No. 13,616, 77 Fed. Reg. 36,903 (June 14, 2012), available at http://www.whitehouse.gov/the-press-office/2012/06/14/executive-order-accelerating-broadband-infrastructure-deployment. See generally About US Ignite, US IGNITE, http://usignite.org/ (last visited Aug. 16, 2012).

²³⁹ See Our Mission, CONNECT2COMPETE, http://www.connect2compete.org/about-us (last visited Aug. 16, 2012).

²⁴⁰ See Michael Powell, Cable Encourages More Families to "Connect to Compete," CABLE TECH TALK, http://www.cabletechtalk.com/tag/broadband-adoption/ (last visited October 28, 2012).

²⁴¹ See FCC, SEVENTH BROADBAND PROGRESS REPORT ORDER ON RECONSIDERATION, para. 6 (2011).

²⁴² See Innovation in the Broadcast Television Bands, 25 FCC Rcd. 16,498, 16,498 (2010) (notice of proposed rulemaking); Unlicensed Operation in the TV Broadcast Bands, 25 FCC Rcd. 18,661, 18,662 (2010) (second memorandum opinion and order).

Carolina, the Rio Grande Valley in Texas, and Cass County, Missouri.²⁴³ Some of these have seized on vague language in the pertinent state statutes that make exceptions for "Internet-type" services. As the local governments in these areas see it, legislators never meant to include broadband among the communication technologies that local political subdivisions are forbidden from providing.²⁴⁴ In any event, pursuant to the Supremacy Clause, Congress could command the NTIA or RUS to award grants to municipal governments without interference from state governments. Clearly, Congress and the agencies to which it has delegated these grant-making programs have preempted state restrictions on municipal broadband.²⁴⁵

With the Recovery Act, Congress acknowledged the vital role of local participation in broadband service and policymaking. The Act, however, lacks a fully articulated vision of how to make municipal broadband a sustainable venture. Nor does it establish a sustained role for local governments. Appropriations like those in the Recovery Act are by their very nature one-shot stimulants.²⁴⁶ They cannot be relied on for long-term structural support, as they are subject to shifting political winds.²⁴⁷

The experiences in municipal broadband from the past decade or so nevertheless have lessons to teach.²⁴⁸ In this short period, some regulatory approaches have worked and others have not.²⁴⁹ We know, for example, that, at least anecdotally, franchise agreements do not work well.²⁵⁰ Then again, much also remains unknown.²⁵¹ Policymakers, for instance, do not yet know the extent to which municipal broadband will generate the economic benefits that so many expect.²⁵² These early experiences nevertheless provide helpful preliminary data from which federal and local policymakers can learn and, presumably, replicate where appropriate.

²⁴³ See Grants Awarded, BROADBAND USA, http://www2.ntia.doc.gov/awards (last visited Aug. 17, 2012); Mo. BROADBAND NOW, CASS COUNTY, Mo, LAST MILE PROJECT, available at http://casscounty.com/Cass_Broadband_Summary_rev_9-14-10_%283%29.pdf; see also U.S. DEP'T OF AGRIC., ADVANCING BROADBAND: A FOUNDATION FOR STRONG RURAL COMMUNITIES 44–47, 54–55, 69–72 (2011).

²⁴⁴ See, e.g., Mo. REV. STAT. § 392.410(7) (2011).

²⁴⁵ A much more difficult question has emerged out of a bill circulating among South Carolina legislators that would effectively abrogate the arrangement already set in place through the Recovery Act between localities within the state and NTIA or RUS.

²⁴⁶ Cf. Tenn. Valley Auth. v. Hill, 437 U.S. 153, 190 (1978) (appropriations "have the limited and specific purpose of providing funds for authorized programs").

²⁴⁷ Cf. David Super, Rethinking Fiscal Federalism, 118 HARV. L. REV. 2544, 2591 (2005) (discussing impact of federal deficit reduction efforts in Congress).

²⁴⁸ Cf. Dorf & Sabel, supra note 149.

²⁴⁹ See generally supra note 83.

²⁵⁰ See Termination Agreement, supra note 65.

²⁵¹ See supra Part II.E.

²⁵² See Fottrell, supra note 84.

1. Municipal Autonomy

The one important and distinctive feature of the new broadband localism is the scope of municipal independence. Entrepreneurial autonomy is more or less assumed in the Recovery Act's grant-making process but does not originate with it. Indeed, Congress seems to have acceded to the idea because localities had been asserting themselves well before Congress decided to intervene.

An important ancillary point here, that I have repeated throughout this Article, is that we should not confuse municipal broadband with municipal regulation of broadband. One of the lessons of the development of telecommunications and cable television regulation is that courts, Congress, and state legislatures have not looked favorably on anticompetitive or regulatory interventions by local authorities that unfairly or unreasonably choose service winners or losers. For example, Congress has only permitted "competitively neutral" regulation of telecommunications and, in certain circumstances, permitted local governments to be subject to antitrust liability when they do regulate local service providers.²⁵³ Federal and state lawmakers have done the same in connection with cable franchise agreements, forbidding unfair and anticompetitive terms in particular. These same sorts of restrictions on municipal regulation of broadband would make sense. But, again, they would be distinct from the provision of municipal broadband.

2. Support for Underserved and Unserved

One of the chief and guiding reasons for municipal broadband is the failure of private providers to deliver adequate service to poorer and lower density areas. Today, most providers do not have an incentive to finance last-mile infrastructure if there is no prospect of recouping their investment immediately. And, indeed, their chances of seeing long-term returns on investment in certain sparsely populated or low-income areas are low.²⁵⁴

Meanwhile, about 26 million U.S. residents do not have access to any broadband service even if they wanted it.²⁵⁵ Americans with low incomes constitute the greater share of those without broadband access.²⁵⁶ This access deficit is particularly pronounced in predominately white or Tribal rural areas.²⁵⁷ Those who are less educated, unemployed, disabled, senior, black, or Latino are also less likely to subscribe to broadband service than those who are

²⁵³ See supra note 182 and accompanying text.

²⁵⁴ See FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 136 (2010); FCC, SEVENTH BROADBAND PROGRESS REPORT AND ORDER ON RECONSIDERATION, para. 66 (2011).

²⁵⁵ See FCC, SEVENTH BROADBAND PROGRESS REPORT AND ORDER ON RECONSIDERATION para. 23 (2011).

²⁵⁶ See id. at para. 43.

²⁵⁷ See id. at paras. 51, 59–60.

affluent, well-educated, and white.²⁵⁸ This is true, even if it is available. All in all, a little under one-third of Americans do not subscribe to any form of high-speed Internet service at home even though it is available in their local area.²⁵⁹ Local municipalities have a clear interest in filling this gap among their residents if, as it is suspected, connectivity will bring greater benefits to the local community at large.

3. Local Accountability

The success of any given municipal broadband project depends, of course, on the objectives set out by local authorities. If, for example, municipalities intend to use the project to develop or improve access for unserved communities, the project would be successful to the extent the access gap was smaller after its implementation. Or if municipalities intend to use the project to encourage investment in local businesses, success might be measured by the metrics set out by local business associations and chambers of commerce. In any event, for municipal broadband to work, local authorities must play a positive and integral role in aligning objectives with outcomes. If they fail, residents have a remedy in the ballot box or through some other democratically legitimated process.²⁶⁰

4. Competition

Residents sometimes do not subscribe to service because it is much more expensive than they can afford. Some of the reason for this is the lack of competition.²⁶¹ The vast majority of residents obtain Internet access from one of just two providers in their local area: an effective duopoly in communities across the country controlled by the local incumbent cable provider and the incumbent telephone operator.²⁶² Only four percent of U.S. residents live in areas serviced by three or more fixed broadband providers, where the third

²⁵⁸ See id. at paras. 4, 44.

²⁵⁹ See Econ. & Statistics Admin. & Nat'l Telecomms. & Info. Admin., Exploring the Digital Nation: Computer and Internet Use at Home ii (2011), available at http://www.ntia.doc.gov/files/ntia/publications/exploring_the_digital_nation_computer_and internet use at home 11092011.pdf.

²⁶⁰ See generally Archon Fung, Varieties of Participation in Complex Governance, PUBLIC ADMIN. REV., Dec. 2006, at 66; Archon Fung & Erik Olin Wright, Deepening Democracy: Innovations in Empowered Participatory Governance, 29 POLS. & SOC'Y 5 (2001); see also Hills, Jr., supra note 13 at 2027 (2000).

²⁶¹ Communications, Broadband and Competitiveness: How Does the U.S. Measure Up?: Hearing Before the S. Comm. on Commerce, Science & Transp., 110th Cong. (2007) (statement of Ben Scott, Policy Director, Free Press).

²⁶² See FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN § 4.1 (2010) (putting the number at 78%).

provider tends to be a second cable company.²⁶³ Approximately thirteen percent of residents live in areas with just one broadband provider, and these are likelier to be low-income than high-income.²⁶⁴ And, while both cable and telecommunication companies are investing heavily in next-generation networks and technologies, cable operators' high-speed modem service appears to be winning over more subscribers than telecommunications companies' digital subscriber line service and threatening a "looming cable monopoly" in broadband.²⁶⁵

Recent research shows that network owners invest in infrastructure when they feel the looming threat of competition.²⁶⁶ Apart from remedies in antitrust law, neither Congress nor officials at the FCC and Federal Trade Commission have promulgated competition rules for broadband markets in the way they have for, say, telecommunications and cable service providers. Federal and local officials and agencies instead have adopted an ad hoc approach, imposing pro-competitive conditions on mergers involving broadband. While it is not a panacea, municipal broadband is one solution for the dearth of competition.

VI. CONCLUSION

Much work remains to be done if policymakers are to understand how full broadband integration into public life is to be effectuated. I have argued here that the new broadband localism—that is, the perspective and approach that privileges local public investment and participation in the administration of broadband service—offers an opening. First, however, lawmakers and courts must unshackle local governments from the antiquated structural obstacles and burdens in law imposed on them by state governments in particular. In order to do that, either Congress must act to preempt such efforts, or courts must be prepared to accept that municipalities are as fundamental to the administration of public law as are states.

²⁶³ Id

²⁶⁴ See id.

²⁶⁵ See Crawford, supra note 213, at 40. To the extent users are "cord-cutting," they are cutting telecommunications off, not cable operators. Brian Stelter, Cable Is Holding Web TV at Bay, Earnings Show, N.Y. TIMES, Oct. 30, 2011, at B4.

²⁶⁶ See Rick Karr, Why Is European Broadband Faster and Cheaper? Blame the Government, Engadget (June 28, 2011, 6:00 PM), http://www.engadget.com/2011/06/28/why-is-european-broadband-faster-and-cheaper-blame-the-governme. But see FCC, Connecting America: The National Broadband Plan § 4.1 (2010) (it is too early to tell whether head-to-head competition yields qualitative improvements in service or price).