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Competing with City Hall: Local Government Entry Into the Telecommunications Marketplace

Ramsey F. Kawar

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I. INTRODUCTION

On February 2, 1999, the Federal Communications Commission stated that a growing number of public utilities are deploying networks to provide broadband services to the public. This phenomenon is raising important questions in light of the role that local government plays in telecommunications as well as the related federal doctrines of market-based competition in this industry. The involvement of local government in commercial ventures is not, however, an altogether novel concept; John Dillon, the father of American municipal law, once commented on the then-widespread practice of municipalities incurring indebtedness in order to finance the extension of privately-owned railway lines and canals into their towns. As he stated:

[It] has unfortunately become quite too common with us to confer upon our [municipal] corporations extraordinary powers, such as the authority to aid in the construction of railways, or like undertakings, which are better left exclusively to private capital and enterprise, and to create, in their corporate capacity, indebtedness therefor, enforceable by actions in the courts, and which must be paid by taxation.2

Although in the present case local government owns the investment, other scholars have mirrored Dillon’s concerns and questioned the notion that government should perform such economic development roles if private enterprise is capable of fulfilling these needs on its own.3 Some stakeholders in this discussion would disagree, rationalizing the current investment in telecommunications by local government as the outcome of a form of market failure, where free enterprise has been unable to fulfill expectations for important public policies.4 Others would go further, and believe that

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2 JOHN F. DILLON, COMMENTARIES ON THE LAW OF MUNICIPAL CORPORATIONS at x (3d ed. 1881).


the role of local government is changing; some commentators have stated that "[u]rban entrepreneurship entails a new breed of municipal official, transcending the traditional local government roles of delivering services and enforcing regulations. The city entrepreneurial role includes characteristics traditionally viewed as distinctive to the private sector, such as risk-taking, inventiveness, self-reliance, profit motivation, and promotion."

Many local governments appear prepared to take those risks in order to provide telecommunications services. As of the date of this comment, over 448 cities and counties reportedly have

[1] [A]lready built a publicly-owned communications network that is capable of being used to offer cable, telecommunications, information or enhanced services, or [2] [H]ad an affirmative referendum or city council vote to develop such a network, or [3] [H]ave begun a feasibility study or issued a Request for Proposal, Request for Strategic Partners, etc., concerning such a network.

Some states host more networks than others; for example, the citizens of Iowa had approved over thirty-one municipal telecommunications networks by 1998. Today, there are forty-six cities that either have a publicly-owned network or are considering one. Perhaps as a testimonial to the growing prevalence of municipal networks, in the Federal Communications Commission (FCC) August 2000 report on video services, one of the five case studies used for telecommunications development was a city-built and operated telecommunications network. There are many possible reasons to explain this phenomenon, including the need to increase the revenues of municipal power utilities, increase the number of choices for

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5 WATSON, supra note 3, at 2-3.
6 The terms ‘local government’ and ‘municipalities’ are used interchangeably in this article, although I realize that not all local governments are municipalities, some being county governments, municipal leagues or other entities derived under state law.
7 See E-mail from Miles Fidelman, President of the Center for Civic Networking (Oct. 26, 2000, 16:31:20 EDT) (on file with author).
9 Fidelman, supra note 7.
11 See Miles Fidelman, Should your City Become a Telcom Business Partner?, CIVIC.COM
consumers and provide greater access to essential telecommunications services for all citizens.12 Other rationales include the problem of diminishing federal aid to cities (and hence the need to find creative ways to raise revenues) as well as the hypothesis that cities are increasingly competing between themselves for business and investment, and seeking ways to enhance their public image.13 The question being focused on here is whether, given the role local government plays in the regulation of telecommunications, these or other rationales justify entry by local government into an industry where there is a clear national policy of encouraging market-driven competition.

In discussing this question, the following analysis will address three fundamental issues. First, whether Congress has given municipalities the right to deploy telecommunications services through the Telecommunications Act. Second, whether it is fair for local government to compete with private enterprise given its status as a regulator in the industry and whether competition is promoted by local government’s attempts to offer consumers a publicly-owned alternative for service. Although local voice telephone service has historically been monopolized, this discussion will focus on cable services because of its potential to provide for Internet and other services. Finally, this article will discuss whether entry into the telecommunications market by local government may be justifiable purely on public policy grounds in order to provide citizens with universal access to advanced telecommunications services.

II. BACKGROUND

Starting with only a single major telephone company at the end of the twentieth century, the telecommunications industry had grown explosively.14 Spurred on by consumer demand and value-added business applications, the private telecommunications industries (defined here as purely private investor-owned; not owned or controlled by state or federal government) invested billions in a race to build (or acquire) infrastructures to capture market share.15 The

12 See infra note 74.
13 WATSON, supra note 3, at 1-6.
results have been a surge of technological developments in this sector and the multiplication of services available to consumers who have poured money into the industry by buying these services.\textsuperscript{16} In view of these developments, municipally owned utilities have also turned to the telecommunications industry as an attractive source of revenue.\textsuperscript{17}

\textit{A. Development of Telecommunications at the Turn of the Millennium}

The AT&T Consent Decree was the outcome of a challenge to the monopoly of AT&T which led to the separation of AT&T's long-distance, equipment research, manufacturing branches and the Bells (Pacific Bell, Bell Atlantic, Southwestern Bell, for example) that provided local service.\textsuperscript{18} AT&T continued to offer long-distance services while the Bells controlled virtually all local telephone service. Most cross ownership schemes between cable and telephone providers were prohibited under the FCC's regulatory authority and, later, Congress' Cable Communications Policy Act of 1984.\textsuperscript{19} The ban lasted until 1993, when the United States District Court for the Eastern District of Virginia struck it down as a violation of the First Amendment.\textsuperscript{20} At this time, the Bells controlled local access, while AT&T provided most long-distance services.\textsuperscript{21} Cable operators also generally enjoyed a \textit{de facto} monopoly.\textsuperscript{22}

Unsatisfied with this level of competition within the

\textsuperscript{16} Id. at 4.
\textsuperscript{17} See Booth, infra note 73.
\textsuperscript{18} In 1974, the United States Department of Justice (DOJ) filed an antitrust complaint against AT&T. In 1982, AT&T and the DOJ settled the complaint by agreeing to the entry of a consent decree, which after some significant modifications were made, was adopted by the United States District Court for the District of Columbia as a Modification of Final Judgment (MFJ). The MFJ required AT&T to divest itself of its wholly-owned operating companies, the BOCs (Bell Operating Companies), and most of the assets held by the BOCs. FCC, CC Docket No. 85-229, FCC 86-252, IN THE MATTERS OF: AMENDMENT OF SECTIONS 64.702 OF THE COMMISSION'S RULES AND REGULATIONS (THIRD COMPUTER INQUIRY), 104 F.C.C. 2d 958, 975 (1986).
telecommunications industry, Congress enacted the Telecommunications Act of 1996 (the Telecommunications Act or the Act). Through this legislation, Congress intended to initiate a sweeping federal mandate to replace monopoly in telecommunications with market-driven competition on a national scale. In general, the Act is a package of amendments to the Communications Act of 1934 which fundamentally alters the relationships that prevailed through regulation between different communications providers. Not all aspects of the regulatory regime were dramatically altered; for instance, the Act largely left in place the ability of local government to regulate cable service rates in the absence of "effective competition."

Other consequences of restructuring regulation have included mergers between companies which formerly provided different kinds of telecommunications services, such as telephone companies, Internet service providers and cable service providers. This has contributed to a convergence of telecommunications technologies, occurring, for example, where cable is being used to deliver television, telephony and Internet access, or where Digital Subscriber Lines (DSL) are used for providing cable television services.

This convergence of technologies has been assisted by the development of digital data transmission methods such as Internet protocol (IP) data transmission, whereby data is broken up into digital packets and sent individually by multiple network pathways to the recipient device, where they are reassembled to reconstruct the

23 Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56 (1996); see also H.R. REP. No. 104-458, at 1 (1996), (noting that although many fiber optic municipal networks are used to provide cable services, these are included under the rubric ‘telecommunications’ because of their increasing use to provide Internet access and other information services).

24 The Telecommunications Act also defines ‘telecommunications’ differently from ‘cable services.’ ‘Telecommunications’ is defined as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.” 47 U.S.C. § 153(43) (Supp. III 1997). In contrast, ‘cable services’ are defined as “the one-way transmission to subscribers of (i) video programming, or (ii) other programming service . . . the term ‘cable system’ means a facility, consisting of a set of closed transmission paths and associated signal generation, reception and control equipment” Id. at § 522(6) (1994).


26 The 1999 merger of long-distance telephone service provider AT&T and cable service provider TCI was one of the more recent and celebrated examples.

27 See Scott M. Gawlicki, TV over DSL Solutions...Now Telcos Can Say “Goodbye” to the Cable Guy, TELECOM BUSINESS, Sept. 2000, at 12 (reporting on the latter emerging technology of cable over DSL).
original message.\textsuperscript{28} Other digital data transmission methods, such as frame relay, are also used for many high-speed data transfer functions.\textsuperscript{29} The development of packetized data transmission methods means that a single dedicated line is no longer necessary to send information; instead, the data packets can be sent more rapidly through a network along the least utilized pathways without committing a single wire for time periods when data is not being sent.\textsuperscript{30} Packetized data also permits the use of error control methods, the use of which allow miscommunicated packets to be resent to the target location.\textsuperscript{31} The ability to send data such as Internet information, sound and video files efficiently and accurately over networks has driven demand for high-speed access, which in turn has placed even greater volume demands on networks to provide these services.\textsuperscript{32}

The development of networks for digital data transmission which have the broad bandwidth (broadband) to manage these new applications is therefore an important element of telecommunications services. A good definition of broadband is that bandwidth is a measure of

the range of frequencies that the signal occupies . . . . Generally, bandwidth is directly proportional to the amount of data that can be transmitted or received per unit time . . . . The greater the bandwidth, the faster the transmission speed . . . . Therefore, cable and DSL connections that are capable of transmitting large amounts of data at extraordinarily rapid rates because of increased bandwidth constitute 'broadband' technologies, while regular phone line connections that are capable of transmitting less data at less rapid rates because of limited bandwidth constitute 'narrowband' technologies.\textsuperscript{33}

To satisfy this definition, the upstream and downstream communication paths do not need to be in one self-contained form of infrastructure. In other words, an upstream path may be provided by a telephone company and downstream by a satellite

\textsuperscript{28} See THOMAS M. THOMAS, THOMAS' CONCISE TELECOM & NETWORKING DICTIONARY (2000).
\textsuperscript{29} Id. at 111.
\textsuperscript{30} Id. at 217-218.
\textsuperscript{31} Id.
\textsuperscript{32} See FCC, STAFF REPORT, supra note 15, at 6.
telecommunications provider. Ultimately, the technology of broadband transmission multiplies the amount of data that can be sent over a single wire by allowing multiple high-speed signals to share the bandwidth of a single cable.

Finally, an important part of the modern broadband telecommunications infrastructure is fiber optics. This technology, consisting of glass fiber strands, has proven very effective for digital broadband communications. Through these fibers, information is sent in the form of signals consisting of on/off light pulses. Information and data are transmitted through bundles of these fibers, typically at frequencies beyond the range of human vision and at very high speeds for long distances.

Capable of transmitting at thousands of different frequencies simultaneously, this technology is ideal for digital information transport. Fiber optics are immune from interference from power cables, unlike copper wires or satellite broadcast transmissions. The use of digital technology also permits a higher degree of noise filtering because the digital amplifiers can screen out static instead of perpetuating it along the network. Fibers can be run in hazardous locations such as oil and gas pipelines; they are tough and lightweight and relatively small, requiring three-quarters of an inch diameter for 216 fibers.

Each fiber can carry telephone, closed-circuit television and data from one place to another simultaneously; a single-mode fiber can carry up to twenty-billion bits of data per second. New technologies are expanding the horizons of fiber optic capabilities to increase the data transmission rate. Optical amplification and optical switching techniques are progressing similarly.

Fiber networks are becoming the key element in the prevailing telecommunications infrastructure that demands rapid access to large volumes of information, whether in the use of cable networks, local

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34 See Fifth Annual Report, supra note 22.
35 Id.
36 Hunter Fulgham, Fiber Optics Upgrade Is a National Priority, American City and County, Mar. 1998.
37 Id.
38 Id.
39 Id.
40 Science and Technology: Fiat Lux, The Economist, Feb. 5, 2000, at 73 (U.S. ed.) (reporting that the “ultra-dense wave-division multiplexing” (UDWDM) currently under development is, in principle, capable of utilizing a single fiber to carry half a billion phone calls simultaneously).
41 Id.
and long-distance telephony, access to Internet service providers, application service providers or between users in a large network. The use of fiber optic networks to transport data and voice provides revolutionary possibilities due to the sheer volume of data transfer now possible; unsurprisingly, a costly effort is required to develop these networks and is one in which local government plays an integral part.

B. Deployment of Fiber Networks

The investment to deploy fiber optic cable in order to provide broadband services is necessary because the majority of the communications infrastructure remains the copper wire existing from the age of rotary dial telephones.\[42\] A company desiring to use fiber optics to provide services, or for resale, has several options for gaining access to fiber. For example, it can lease unused (dark) fiber from those who have already laid it.\[33\] This requires that those who have it are willing to make it available and that it is within the geographic service area (GSA) where the company desires to begin operations. The fees must also be manageable for the company.

A new entrant, or competitive local exchange carrier (CLEC) may also gain access to local fiber through an incumbent local exchange carrier (ILEC), which, generally speaking, is a local exchange carrier that was offering service as of the enactment of the Telecommunications Act in 1996.\[44\] The company can require access to the fiber of an ILEC as an Unbundled Network Element (UNE).\[45\] A UNE is one element of the overall telecommunications network that ILEC utilities are required to share with CLECs, and ILECs are required to provide dark fiber as a UNE.\[46\] The prices for UNEs are

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\[42\] See Katie C. Rangos, FCC, Infrastructure of the Local Operating Companies, (July 1999), http://www.fcc.gov/cebl/stats (Telephone Industry Infrastructure Section) (showing in Table 10.2, 'Total — All Companies' data that 'Total Sheath Kilometers' for copper is 5.2 million versus 0.5 fiber, also 'Copper Pairs Term Main Fram' (Loop Plant Only) is stated as about 219 million kilometers copper versus 2.4 million kilometers fiber.).

\[33\] See Inquiry, Second Report, supra note 10, ¶ 27.


\[45\] The duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms and conditions that are just, reasonable, and nondiscriminatory . . . . An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.


set at the state utility commission level, although the method for arriving at them has been set by the FCC.\textsuperscript{47}

A company can also lay down its own fiber, incurring the legal, administrative and financial costs of doing so. This can be an expensive affair in metropolitan areas. Analysts have estimated the cost in downtown San Francisco to be above two million dollars per mile.\textsuperscript{48} It is in this effort that telecommunications companies must work closely with local authorities.

The Telecommunications Act has preserved an arrangement where every private service provider must cooperate with the municipality in order to successfully do business within that jurisdiction. Under Section 253(c) of the Act, local government has authority to "manage" those rights-of-way as well as to require "compensation" for their use in a "nondiscriminatory manner."\textsuperscript{49} Generally, local government is reserved control over rights such as, to pass on, under or over streets, sidewalks or public lands. Management of the rights-of-way directly impacts the service providers' potential to enter a local market because private telecommunications service providers often need access to public rights-of-way in order to lay down cable and string wire on poles. Also, wireless providers must also frequently obtain zoning variances to place their towers in desired locations. Virtually every municipality has its own set of policies and procedures for applying for and using these rights-of-way.

Utility users of the rights-of-way in most states are also charged a fee by local government for their usage as "compensation for their use," as permitted under Section 253(c) of the Act, and private service providers must negotiate these terms.\textsuperscript{50} Barring state law requirements, municipalities generally have some latitude in this regard. Some courts have held that compensation should be related to the costs that the city incurs to maintain the rights-of-way.\textsuperscript{51} Other

\begin{footnotesize}
\begin{itemize}
\item[47]\textsuperscript{47} C.F.R. § 51.505(a)-(c) (1999).
\item[49] Nothing in this section affects the authority of a State or local government to manage the public rights of way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.
\item[50] See \textit{INQUIRY}, SECOND REPORT, supra note 10, ¶ 136.
\item[51] See Bell-Atl. Md, Inc. v. Prince George's County, Maryland, 49 F. Supp 2d. 805 (D. Md. 1999). This case was vacated by \textit{Bell-Atl. Md., Inc. v. Prince George's County, Md.}, 212 F.3d
\end{itemize}
\end{footnotesize}
courts have permitted cities to charge the highest amount that the
service provider is willing to pay before abandoning its attempts to
enter that local market.\textsuperscript{52} Depending on the state's law, a public
utility may or may not be required to pay a state franchise tax on its
services.\textsuperscript{53} Cities may also require users to pay utility user taxes.\textsuperscript{54}
Many municipalities further require these service providers to lay
additional dark fiber for municipal use as it sees fit.\textsuperscript{55} Of course,
these cost barriers are in addition to the actual cost of cutting the
streets and laying the fiber itself.

These provisions ensure that municipalities have considerable
leeway in their local regulatory capacity as long as the municipal
rules do not prohibit the provision of telecommunications services.\textsuperscript{56}
FCC regulations also have limited authority over municipalities that
choose to provide telecommunications services; the FCC has found,
for instance, that it lacks jurisdiction to require municipally-owned
utilities to submit to certain facilities-sharing measures of the
Telecommunications Act designed to promote market competition.\textsuperscript{57}
These facility-sharing requirements mandate incumbent providers to
open up pole attachment, right-of-way and conduit access to new,
competitive telecommunications utilities.\textsuperscript{58} Therefore, it is in the
hands of state governments to regulate these telecommunications

\textsuperscript{52} See Omnipoint Communications, Inc. v. Port Auth., 1999 U.S. Dist. LEXIS 10534 at 24 (July 12, 1999).
\textsuperscript{53} See Johnson, supra note 4, at 539.
\textsuperscript{54} Id. at 540.
\textsuperscript{56} "IN GENERAL: No State or local statute or regulation or other State or local requirement
may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or
\textsuperscript{57} See FCC, FCC File No. PA 99-003, In The Matter of Andrews Cable Board v. Murphy Electric Power Board (June 12, 2000). The FCC dismissed a complaint against
Murphy Electric, owned by the City of Murphy; there the Deputy Chief of the Cable Services
Bureau granted Murphy's motion stating that:

Pursuant to the Pole Attachment Act, the Commission does not have jurisdiction
to regulate attachments to poles owned or controlled by a utility that is owned by
a State . . . . Because Murphy Electric Power Board is owned by the City of
Murphy, a political subdivision of the State of North Carolina, we do not have
jurisdiction to resolve this complaint.

See FCC, FCC File No. PA 99-003, supra.
\textsuperscript{58} "A utility shall provide a cable television system or any telecommunications carrier with
nondiscriminatory access to any pole, duct, conduit, or right of way owned or controlled by it."
utilities, if, as discussed below, they are able.

C. Local Government Entry into the Telecommunications Market

In various forms, municipalities are planning or installing broadband fiber optic networks to supplement more conventional utility offerings.\(^5^9\) Examples of such cities are Rantoul, Illinois; Glasgow and Henderson, Kentucky; Eugene, Oregon; Holland and Coldwater, Michigan; Orangeburg, South Carolina and Seattle, Washington.\(^6^0\) In California, the cities of Anaheim and Palo Alto reportedly are upgrading existing municipally-owned utilities for residential telecommunications services.\(^6^1\) The City of San Bruno, California, already offers its residents a city-owned cable service, which includes an option for cable modem Internet access from an outside Internet service provider.\(^6^2\)

Some cities are interested in leasing lines from infrastructure providers and reselling it within their local jurisdiction.\(^6^3\) Other utilities have declared their intent to act as wholesalers, leasing access to their surplus capacity through a reseller.\(^6^4\) Some municipalities appear to have done so in order to provide superior telecommunications services, such as high quality cable television or high speed Internet access that private companies were unwilling or unable to provide so far.\(^6^5\) There is evidence that most municipalities view these services as a way to modernize inter-agency communication among government buildings and to provide incentives for businesses to migrate to their respective cities.\(^6^6\) Others apparently are entering the telecommunications market with an eye towards competing with private enterprises for revenue, not solely to offer a second choice to consumers for telecommunications providers.\(^6^7\)

\(^{60}\) Johnson, supra note 4, at 525 n.75.
\(^{61}\) Id. at 526.
\(^{62}\) See http://www.cisanbruno.ca.us/Cable/rate.html and http://www.cisanbruno.ca.us/Cable/isp.html (last visited Oct. 11, 2000), for options available to City of San Bruno residents.
\(^{63}\) Johnson, supra note 4, at 530.
\(^{64}\) Manjeet Kripalani, Three on a Pole, FORBES, Feb. 28, 1994, at 45.
\(^{67}\) See Doug Abrams, Enter the Utilities; Electric, Gas Firms Try to Merge onto the Info
Compatibility with conventional electric utility services provides an additional incentive for municipalities to develop these services. In its January 14, 2000, adoption of the *Sixth Annual Report on Competition in Video Markets (Sixth Annual Report)*, the FCC announced that "[e]lectric utilities . . . [while] not yet major competitors in the telecommunications or cable markets . . . possess characteristics that could potentially help them become competitively significant in the cable market." For the cities or counties that are building their own communications networks, offering these services has become financially attractive and feasible due to the fiber optic networks that most energy utilities have already developed or have planned—these are networks which are considered essential for regulating cost-saving energy delivery systems.

Energy deregulation is also playing a role in encouraging utility development of these systems. Some utilities view the pending energy deregulation as posing a potentially significant threat to the income of conventional electric utilities, which drives the municipal utilities' concern for discovering ways to retain customers through upgraded service offerings. For many energy utilities, the perception is that in order to survive in this atmosphere, a utility must be able to offer more than just electricity, telecommunications, wastewater and home security services are all options that are being looked at by those in the industry.

Therefore, some municipal utilities that do not have fiber optic networks have decided that if they are going to bear the cost of development, it would be advantageous to simultaneously seek to ensure their networks are telecommunications capable in order to ostensibly better serve the public as well as provide additional streams of revenue. A desire for new revenues may not be the only explanation. Some local governments across the United States apparently are increasingly eager to use their resources to make telecommunications services available as municipal utilities because

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69 See Abrams, supra note 67.

70 See id.

71 See id.


private enterprise may not have fulfilled expectations for deployment of new technologies or elimination of monopolies in some sectors.\footnote{See Greg Edwards, \textit{Virginia General Assembly Committee to Accept Bill on Fiber-Optic Cable}, \textit{Richmond Times-Dispatch}, Mar. 14, 1998 at C-1 (reporting an example of citizens concerned with whether deployment of advanced services will reach them). Delegate Jackie Stump states that “[p]eople in his rural Southwest Virginia area... are concerned they won’t get high-speed communications services unless they provide it for themselves.” Edwards, \textit{supra}.}

Regardless of the municipal utilities’ purposes, private enterprise telecommunications providers encountering municipalities building their own fiber optic networks for public use are raising questions both about the legality of this use of local government power and resources and the inherent unfairness of this kind of competition.

States that have banned municipal telecommunications networks appear to agree with those concerns. In Missouri, Representative Carol Mays, chairman of the Utilities Regulation Committee, was supportive of a newly-passed state prohibition of such networks, believing that the public would suffer if local governments were allowed to participate in “plain old business.”\footnote{Mo. May Ban Commercial Municipal Telecom Networks, \textit{Warren’s Cable Regulation Monitor}, May 19, 1997. When you buy shares of stock in a company, you know going in that you are taking a risk with your money. When a city goes broke trying to compete in a high-risk market, what happens to the low-wage earners? ... Just because they have the fiber optic in the ground doesn’t mean they can provide service ... It takes big bucks. We’re saving some impetuous cities from themselves. \textit{Id.} (quoting Ms. Mays).} Ms. Mays described concerns based on the fact that not all citizens could support the risk if the venture went badly for the city and that the amount of expertise and capital involved in making a telecommunications service viable was considerable.\footnote{\textit{See Edwards, supra} note 74.} Other states, such as Texas, have also made efforts to curb the deployment of municipal telecommunications networks. Lobbyists have argued that these laws are required to “keep government out of the free enterprise system,” and are necessary to contain the fears of cable companies who “won’t want to compete with both local phone companies and local governments.”\footnote{\textit{See Edwards, supra} note 74.}

Some concern about the viability of municipal telecommunications services has also been raised; the communications director of a private enterprise cable company in Iowa reported the often ignominious demise of seven municipal cable systems, stating that “[f]he reality is that no municipal cable system in the United States has been successful for more than five years without
the benefit of heavy government subsidies."\textsuperscript{78} The following cases and discussion will attempt to shed some light on whether these voices are correct in calling for restraint in the development of these networks.

III. THE TELECOMMUNICATIONS ACT AND THE RIGHT OF LOCAL GOVERNMENT TO OFFER TELECOMMUNICATIONS SERVICES

The extent of the right of municipalities to provide telecommunications services has itself been under dispute. Section 253 of the Telecommunications Act states that "[n]o 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."\textsuperscript{79} It is not clear, however, whether local governments have a right, under this statute, to offer service in spite of any state laws. Thus, the question remains whether local governments' right to enter the market is protected by federal law.

Several states have banned municipalities from selling telecommunications services, including Virginia, Texas and Missouri. Some local governments subsequently have challenged whether states have the right, under the Telecommunications Act, to prohibit those services. In two cases, \textit{City of Abilene, Texas v. FCC}\textsuperscript{80} and \textit{Iowa Telephone Ass'n v. City of Hawarden},\textsuperscript{81} the courts came to opposite results, the key difference between the two being that one challenger was an electric utility while another was a provider of cable services. Different provisions of the Telecommunications Act were found applicable in each case, and the Iowa Supreme Court interpreted the Telecommunications Act to give more expansive rights to cable providers to preempt state laws. The controversy is an appropriate introduction to the issue of whether local government should compete with private enterprise in this industry.

In \textit{City of Abilene}, the city challenged the Texas state law which prohibited its municipalities from providing telecommunications services. The law in question, the Texas Utility Act, renders municipalities ineligible for certificates to offer telecommunications services,\textsuperscript{78} Debora Blume, \textit{Record of Failure in City Cable Systems; One Consultant's Report Did Not Consider Cost Increases Over 12 Years}, \textit{The Des Moines Register}, Jan. 7, 1998, at 9.
\textsuperscript{79} 47 U.S.C. § 253(a) (Supp. III 1997).
\textsuperscript{80} City of Abilene, Texas v. FCC, 164 F.3d 49 (D.C. Cir. 1999).
\textsuperscript{81} Iowa Tel. Ass'n v. City of Hawarden, 589 N.W.2d 245 (Iowa, 1999).
services. The city requested a declaratory ruling from the FCC that Section 253(a) of the Telecommunications Act preempted the Texas statute; Section 253(a) disallowing any state or local requirement that prohibits the ability of any entity to provide any interstate or intrastate telecommunications service.

The City of Abilene argued that "entity" as used in the Act includes municipalities such as itself. The Commission declined to issue the ruling, on the grounds that Congress did not clarify the term "entity" as used in Section 253(a) sufficiently in order to justify FCC intervention. The City of Abilene case subsequently ensued in federal court.

The court of appeals ultimately rejected the City of Abilene's argument. Its reasoning is governed by Gregory v. Ashcroft, where the court would not infer that Congress intended to alter the state-local relationship unless "Congress had manifested its intention with unmistakable clarity . . . . Federal law, in short, may not be interpreted to reach into areas of State sovereignty unless the

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82 City of Abilene, 164 F.3d 49, 51 (D.C. Cir. 1999). The Texas statute is found at § 54.202 of the Utility code, stating:
   (a) A municipality or municipal electric system may not offer for sale to the public:
      (1) a service for which a certificate of convenience and necessity, a certificate of operating authority, or a service provider certificate of operating authority is required; or
      (2) a nonswitched telecommunications service used to connect a customer's premises with:
         (A) another customer's premises within the exchange; or
         (B) a long distance provider that serves the exchange.
   (b) Subsection (a) applies to a service offered either directly or indirectly through a telecommunications provider.


However, Texas does not completely prohibit leasing of municipal dark fiber, as provided by Section 54.2025:

Nothing in this subchapter shall prevent a municipality, or a municipal electric system that is a member of a municipal power agency formed under Chapter 163 by adoption of a concurrent resolution by the participating municipalities on or before August 1, 1975, from leasing any of the excess capacity of its fiber optic cable facilities (dark fiber), so long as the rental of the fiber facilities is done on a nondiscriminatory, nonpreferential basis.


84 City of Abilene, 164 F.3d 49, 51 (D.C. Cir. 1999).

language of the federal law compels the intrusion." The court was unwilling to permit Abilene to preempt Texas state law through the use of the Telecommunications Act, absent statutory language within the Act requiring preemption. Section 253, in the court's eyes, did not contain such language. The court's reasoning appears broadly applicable, not particular to its finding of defect in the Texas law at bar and its rationale appears to support states that prohibit local governments from developing telecommunications services.

In a case contemporary with Abilene, the Iowa Supreme Court was able to give a more expansive reading of federal regulatory power when a municipal cable operator, rather than an energy utility, sought to begin to offer telecommunications service. In Iowa Telephone Ass'n v. City of Hawarden, the Iowa Supreme Court upheld a claim by the City of Hawarden's cable utility that it had a right under federal law to provide telecommunications services despite a district court decision which held that it was prohibited to do so by Iowa state law.

The opposing party in this dispute was the Iowa Telecommunications Association (ITA), a consortium whose members provide land line local telephone service to customers in Iowa, including customers within the City of Hawarden. The district court based its decision upon Iowa Code Section 23A.2, which states that unless specifically authorized by statute, a state agency or political subdivision may not engage in the sale or offering to the public of goods or services which also are offered by private enterprise, unless such goods or services are for use or consumption exclusively by the state agency or political subdivision.

The Iowa Supreme Court agreed with the district court in its

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86 Id.
87 Iowa Tel. Ass'n v. City of Hawarden, 589 N.W.2d 245, 252 (Iowa, 1999).
88 Id. at 248.
89 The Iowa Code sections provide:

A state agency or political subdivision shall not, unless specifically authorized by statute, rule, ordinance, or regulation:

(a) Engage in the manufacturing, processing, sale, offering for sale, rental, leasing, delivery, dispensing, distributing, or advertising of goods or services to the public which are also offered by private enterprise unless such goods or services are for use or consumption exclusively by the state agency or political subdivision.

(b) Offer or provide goods or services to the public for or through another state agency or political subdivision, by intergovernmental agreement or otherwise, in violation of this chapter.

interpretation of Section 253 of the Telecommunications Act, finding that, like the U.S. Court of Appeals in City of Abilene, the federal statute did not specifically identify municipal entities as those who may not be prohibited from providing intrastate or interstate telecommunications services. However, unlike the City of Abilene case, the utility involved was a cable operator, rather than an electricity provider. On this basis, the court considered Section 541(b)(3)(B) of the Telecommunications Act to be controlling; this section specifically disallows a franchising authority from prohibiting a cable operator from operating a telecommunications service. After determining that the city utility in this instance was “a cable operator” within the meaning of the Section 541 statute, the court then reasoned that this statute was specific enough to preempt the Iowa state statutes that would otherwise prohibit the provision of telecommunications services by Hawarden’s cable utility.

If nothing else, these cases demonstrate the importance of state regulation and oversight of municipal telecommunications services. Accordingly, a solution to these disputes may be for Congress to ensure that municipal telecommunications networks are subject to state regulation without reservation. Perhaps an important element of creating appropriate regulation, however, should hinge on whether competition between local government and private enterprise is conducive to a healthy market. This is discussed next.

IV. THE TELECOMMUNICATIONS ACT AND COMPETITION BETWEEN PUBLIC AND PRIVATE ENTERPRISES

If competition is allowed between city utilities and private enterprise, whether they will do so on a level playing field is an important question for all parties who benefit from market-driven competition. Private enterprise, as will be discussed below, has taken opportunities to be vocal about a lack of fairness inherent in competing against local government and may be unwilling to accept market inequalities or loss of market share without a fight. These include both internal regulatory advantages and concerns about fair

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90 Iowa Tel. Ass'n, 589 N.W.2d 245, 253 (Iowa, 1999).
91 Id. at 248.
92 “A franchising authority may not impose any requirement under this subchapter that has the purpose or effect of prohibiting . . . the provision of telecommunications service by a cable operator . . . .” 47 U.S.C. § 541(b)(3)(B) (Supp. III 1997).
93 Mo. May Ban Commercial Municipal Telecom Networks, supra note 75 (describing how GTE, Sprint and Southwestern Bell specifically complained that “cities’ regulatory power and exemption from taxes and access fees created an unfair advantage.”).
Section 253(c) "neutral" and "nondiscriminatory" language reflects the need for pro-competition safeguards directed specifically towards local government. Again, there appears to be little guidance in applying these safeguards where the local government is one of the telecommunications providers. The first opportunity by the Federal Circuit Court to examine this application in detail occurred in **Cablevision of Boston**, in August 1999. The **Cablevision of Boston** court had to delve into the question of whether, according to Section 253(c) of the Act, a municipality deploying a telecommunications network had to be nondiscriminatory in its managing of the public rights-of-way as well as in its charging of compensation for those rights-of-way. Further, the court looked at whether some of the inherent procedural advantages enjoyed by the public utility would qualify as discriminatory under Section 253(c).

In **Cablevision of Boston**, the municipal utility Boston Edison had a fiber optic network installed for purposes of the utility's energy self-regulation. It decided to upgrade the network and considered using the resulting surplus capacity for telecommunications purposes. As a municipal utility, Boston Edison did not need, nor did it carry out, an application/approval process and was able to install the upgraded network through an already existing conduit. Other telecommunications providers seeking to enter the Boston marketplace were required to receive approval of grants of location before converting conduit from one use to another.

Boston Edison then created a subsidiary that leased Edison's extra fiber optic capacity to RCN, a telecommunications provider, under an arrangement labeled the Joint Venture. The Joint Venture also was negotiating a cable agreement with the city to give Boston residents a

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94 See supra text accompanying note 49.
95 Cablevision of Boston, Inc. v. Pub. Improvement Comm'n, 184 F.3d 88, 91 (1st Cir. 1999).
96 Id. at 92.
97 Id.
98 Id. at 91-92.
99 Id. at 93 n.5.
choice of cable providers.\textsuperscript{100} Apparently at the same time, the dominant cable provider in Boston, Cablevision, was also interested in developing a broadband fiber optic network.\textsuperscript{101} The Joint Venture was committed to making the same franchise payments to the city, five percent of gross revenues, as Cablevision was.\textsuperscript{102}

In its complaint, Cablevision challenged the fairness of Edison’s actions under the principles of competition articulated in the Telecommunications Act. The unfairness perceived by Cablevision centered on Boston Edison’s failure to provide public notice regarding its infrastructure conversion to telecommunications use, and the lack of procedural burden shared by Boston Edison in doing so.\textsuperscript{103} The complaint was grounded in the argument that Congress intended municipalities to manage their rights-of-way in a nondiscriminatory manner, a requirement of Section 253(c) of the Act which Cablevision claimed that Boston Edison violated. Cablevision, in short, argued that local governments must act to keep the playing field level, given the intrinsic advantages enjoyed by a public utility in terms of receiving approvals and favorable contractual arrangements.

The court thought otherwise, effectively determining that under Section 253, only compensation is required to be determined in a competitively neutral and nondiscriminatory manner, not the management of the public rights-of-way. Rejecting Cablevision’s request for an injunction, the court also determined it unlikely that Cablevision would be able to effectively demonstrate that the rights-of-way were being managed on a discriminatory basis.\textsuperscript{104} In its decision, the court emphasized the difference between Cablevision’s

\begin{flushleft}
\textsuperscript{100} Id.\
\textsuperscript{101} Cablevision of Boston, Inc. v. Pub. Improvement Comm’n, 184 F.3d 88, 90 (1st Cir. 1999).\
\textsuperscript{102} Id. at 93 n.5.\
\textsuperscript{103} The Cablevision opinion’s excerpt of the complaint is as follows: Cablevision complains that Boston Edison pulled telecommunications cable through its existing electrical conduit . . . without giving proper public notice of this altered use and without seeking prior approval from the City. It alleges that the City wrongfully enabled the Joint Venture to take unfair advantage of Boston Edison’s existing conduit and cable, by allowing Boston Edison to convert conduit and cable for the Joint Venture’s benefit over a two-year period without imposing on Boston Edison the obligations imposed on entities constructing new conduit. In contrast, Cablevision says, it has been required to go through a time-consuming public application process for new grants of location when it wished to construct new conduit for broadband telecommunications cable, and it has had to provide the City with shadow conduit [conduit for the City’s usage] in that construction.\
\textsuperscript{104} Id. at 105.
\end{flushleft}
need to dig up the streets to install a fiber optic network as opposed to Boston Edison's use of existing conduit; that the Joint Venture was committed to paying a franchise fee identical in terms to that of Cablevision's and that certain safeguards were in place such as a notice obligation helping guarantee equal treatment of public and private network providers.\textsuperscript{105} The court gave less weight to facts suggesting significant procedural advantages such as Boston Edison's exemption from an application, an approval scheme comparable to that required of any private telecommunications provider and retroactively amended grants of location provided to Boston Edison by the city.\textsuperscript{106} The court offered this guideline for municipal telecommunications providers:

We conclude that the term 'competitively neutral' in § 253(c) [of the Telecommunications Act of 1996] imposes—at most—a negative restriction on local authorities' choices regarding the management of their rights of way. This means that the statute would not require local authorities to purposefully seek out opportunities to level the telecommunications playing field. If, however, a local authority decides to regulate for its own reasons (e.g., to minimize disruption to traffic patterns), § 253(c) would require that it do so in a way that avoids creating unnecessary competitive inequities among telecommunications providers.\textsuperscript{107}

The court's conclusion seems to authorize local utilities to harness whatever advantages they may possess as long as they do not deliberately create inequalities in treatment between themselves and the private telecommunications industry. The lower court in Cablevision also rebuked Cablevision for its claim of loss of market share, stating that it was Cablevision's fault for being so late to enter the broadband market.\textsuperscript{108}

In Cablevision, the court clearly supports the entrance into the market by municipalities on aggressively competitive terms, regardless of their regulatory function within the same market. Unless other courts decide differently, the states again appear to be the bodies to determine whether this form of competition is consistent with their market-based goals and regulate accordingly. Other considerations, such as breaking up perceived monopolies, are discussed next.

\textsuperscript{105} Id. at 95, 103.
\textsuperscript{106} Id. at 95.
\textsuperscript{107} Cablevision of Boston, Inc. v. Pub. Improvement Comm'n, 184 F.3d 88, 105 (1st Cir. 1999).
\textsuperscript{108} Id. at 96.
V. Breaking Monopolies and Providing Competition: Municipal Networks in the Cable Broadband Markets

Tied to local government and competition is the issue of whether local government can provide a choice for consumers where private industry has been historically monopolistic. These concerns often refer to the cable (or multichannel video program distributors, MVPD) market because of both its high level of market consolidation and its usefulness as carrier of high-bandwidth telecommunications to the home. Included in the FCC’s description of considerable barriers to entry in these sectors as of 1998 is the rise of cable rates between June 1997 and June 1998. Local government utilities may be well positioned to make a difference in this area. Municipalities may rationalize that bringing competition into local cable and telephone markets to bring down rates and motivate investor owned service providers to provide better service is furthering the interests of competition, not thwarting it. If true, this may be most important in the cable industry because of the potential for cable to provide broadband services; thus, defeating monopoly in the cable market offers the added benefit of increasing the opportunities of citizens to have access to broadband Internet services at home.

A. Providing Competition in Cable and Broadband

There seems little doubt that the development of competition in the telecommunications industry, and especially in the cable markets, has been imperfect. Many consumers have not found price relief to be an outcome of these consolidations. In fact, cable prices have been reported by consumer watchdogs to have tripled since the Telecommunications Act was implemented, considerably more than the rise in the consumer price index since 1996 to this date. For many consumers, competitive options to cable have not yet penetrated to where there is significant choice for the cable services. The FCC, in its Sixth Annual Report, also found that the “seven largest cable operators . . . serve almost 90% of all U.S. cable subscribers.” The Commission also stated that:

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109 See Fifth Annual Report, supra note 22.
110 Id.
111 Id. The FCC has explained some of these price increases as the result of increases in cable labor costs, programming costs, equipment upgrades, and the introduction of digital programming. It also noted, however, an increase in earnings. See Sixth Annual Report, supra note 68; see also FCC, MM Docket NO. 92-266, Report on Cable Industry Prices (June 15, 2000) (providing more detailed pricing information).
112 See Sixth Annual Report, supra note 68.
During the period under review, cable rates rose faster than inflation, although the difference between the cable price index and the Consumer Price Index ('CPI') is not as great as in the previous year . . . . We also note that cable operators' pricing decisions may be affected where direct competition exists. Available evidence indicates that when an incumbent cable operator faces head-to-head competition, it responds in a variety of ways, including lowering prices or adding channels without changing the monthly rate, as well as improving customer services and adding new services such as interactive programming.\(^{13}\)

One case has been reported where a municipality was able to drive down prices in the cable sector by providing competition. In Glasgow, Kentucky, the local cable service lowered its basic subscription rates from fifteen dollars per month to nine dollars per month following Glasgow's implementation of its own fiber optic telecommunications system that includes cable television services.\(^{14}\) Outside of Glasgow, the same company charged $21.80.\(^{15}\) To the free market economy, poor service or high prices should be an open door for new entrants. The important question therefore, is whether private enterprise is meeting this challenge, or whether there exists a prevailing state where this is failing to occur.

There are indicators, however, that in both the MVPD and the broadband markets, private enterprise appears to increasingly find ways to provide consumers more choice and access to these services. In the MVPD market, private enterprise does not seem willing to forgo the considerable revenue opportunities possible from providing video services. While cable service is an example where competition has not developed as rapidly as in other sectors, evidence is available at this date that market pressures are coming to bear upon cable providers from the new technologies offering MVPD services. Direct broadcast satellite (DBS) services have been granted permission to carry local programming, through the Satellite Home Viewer Act in 1999, ending one of the major aspects of satellite broadcasting service that could not compete with cable providers.\(^{16}\) Satellite Master Antenna Television (SMATV) service providers are also planning to enter the market.\(^{17}\) SMATV operators are beginning to offer local

\(^{13}\) Id.

\(^{14}\) Abrams, supra note 67.

\(^{15}\) Id.

\(^{16}\) See SIXTH ANNUAL REPORT, supra note 68.

\(^{17}\) The FCC defines 'SMATV' systems as those which use some of the same technology as cable systems, but do not use public rights-of-way, and focus principally on serving subscribers
and long distance telephony in addition to Internet access. In addition, DSL providers are gaining the capability to offer cable programming as well.

A new optical wireless technology may be a promising candidate for bridging the “last mile” (the distance from the street network to the end-user) in both commercial and residential use, eliminating the need to lay cable to each end user’s workplace or home. Future users of high-altitude, long-endurance platform (HALE) companies such as Skystation also are planning to provide services comparable to DBS broadcasting.

As a demonstration of the impact of these new entrants, the competition represented by these new technologies is changing the means by which residences are receiving their mass media information. The Sixth Annual Report states that while eighty-two percent of all subscribers are to MVPD distributors, this is a decline from eighty-five percent the previous year; much of the non-cable growth in subscriptions is attributed to DBS services. This is a three percent decline in the use of cable for MVPD users. At this time, there are over ten million DBS subscribers, a gain of about thirty-nine percent since 1998. Therefore, the industry appears to be finding ways to circumvent consolidated cable ownership in order to give consumers more choice, and, theoretically, ultimately lower prices and better service.

In broadband communications, municipalities have also rationalized their entry into this market in order to make broadband services such as high speed Internet access available to residential users. By all measures, growth in the residential broadband market has been quite substantial. In 1997 the National Cable Television

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118 See Sixth Annual Report, supra note 68.

119 Gawlicki, supra note 27, at 13.


121 See Inquiry Report, supra note 1, ¶ 60.

Association reported that cable providers spent six billion on the deployment of two-way broadband high-speed modems and that sixty-three percent of all cable systems may be broadband by 2001, providing services such as @Home and Road Runner. TCI (now AT&T Cable Services) was at that time expected to have its two-way upgrades sixty percent completed by the end of 1999 and ninety percent by the end of 2000. The FCC stated in January 1999 that “in terms of actual users, deployment [of] broadband is exceeding the rollout of these other [communications-related] technologies at a similar point in their deployment.”

Although the deployment forecasts may prove to be optimistic, indicators are pointing towards substantial private investment allocated to upgrading communications systems with fiber optics to provide the bandwidth necessary to supply residential consumers with advanced telecommunications services. For example, DSL services, run from fiber networks to the home on high speed, conditioned copper lines, at a rate of one to six MB/sec depending on the type used. Data indicates that this service is becoming available on a widespread basis. Many analysts predict residential DSL subscription to grow up to thirteen million over five years; some determine that the DSL market is growing at the rate of thirty percent per year. Analysts predict that over eight billion will be invested over the next four years in DSL deployment. Wireless high-speed services are also expected to grow up to 4.4 million subscribers by the year 2004.

Users of wireless technology have also begun to provide broadband, taking away some of cable’s relative dominance in providing inexpensive broadband access. Wireless cable companies that use circa 2 GHz spectrum can and do offer broadband services to

123 See INQUIRY REPORT, supra note 1, ¶ 37.
124 See id. ¶ 54.
125 See id. ¶ 37.
126 FCC, REPORT NO. CC 99-1, FCC ISSUES REPORT ON THE DEPLOYMENT OF ADVANCED TELECOMMUNICATIONS CAPABILITY TO ALL AMERICANS (Jan. 28, 1999).
129 Id. ¶ 191.
130 Id. ¶ 192.
131 Id. ¶ 197.
residents in the cities of New York, the San Francisco Bay area, Jackson, Mississippi and Sherman, Texas, for example. One company offers a 24 GHz wireless network of speeds beyond 45 MB/sec bandwidth. Satellite broadband service has emerged as a direct competitor to conventional cable systems, providing a new option to circumvent cable monopolies in residential broadband services. Multiple satellite providers also are expected by the FCC to provide broadband service within the next few years. The FCC has granted fourteen Ka-band licenses which include thirteen geostationary systems and one low-earth orbiting system, Teledesic, which has committed to spend nine billion dollars in building ‘worldwide’ satellite networks for broadband service. Other new satellite-based providers who are planning to enter the broadband market include Loral’s Cyberstar, Hughes’ Spaceway and Lockheed Martin’s Astrolink and Skybridge. At this time, Hughes Network Systems offers DirecPC, a satellite-delivered Internet service, using satellite transmission for downloads and phone lines for sending data.

B. Pricing of Services

One way municipalities are attempting to avoid discrimination-based legal entanglements such as those manifested in Cablevision is through pricing-fairness schemes. In Georgia, the municipal utilities, through a state bill, reached an agreement with the cable television industry in February 1999 that would require municipal utilities in Georgia to: (1) give equal treatment to private cable television systems in cases where the cities operate a cable system in the same area, (2) prevent cross-subsidizing of their cable operations from other city departments and ensure cost-based rates of employee compensation and (3) if the city charges rates for cable service below the prices of private competitors, to supply data justifying the lower

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132 INQUIRY REPORT, supra note 1, ¶ 57.
133 Vartabedian, supra note 48, at 34.
134 Teleport Association Director Says Industry Surge is Aided by High-speed Evolution of the Internet-Via-Satellite, SATELLITE NEWS, Oct. 9, 2000. Robert Bell, executive director of World Teleport Association, found that three key reasons for the growth of Internet-via-satellite are: “(1) the high-speed evolution of the Internet-via-satellite marketplace; (2) the parallel evolution of teleports (ground segment into broadband nodes that distribute via the Internet as well as by satellite; and (3) the beginning movement of broadcast video into the IP protocol.” Id.
135 See INQUIRY, SECOND REPORT, supra note 10, ¶ 201.
136 See INQUIRY REPORT, supra note 1, ¶ 39.
137 See INQUIRY, SECOND REPORT, supra note 10, ¶ 201.
138 SIXTH ANNUAL REPORT, supra note 68.
cost. It is notable that this agreement includes cable services only, and not other telecommunications services. Unfortunately, in this particular case, the Georgia state legislature rejected the agreement by refusing to enact it into law.

How cities that do not enact these schemes will price their services is unclear. Because cities are not subject to the same economic pressures, their ability to set prices at levels that reflect true market costs is questionable. This is a concern if, as Milton Friedman stated, "[a]nything that prevents prices from expressing freely the conditions of demand or supply interferes with the transmission of accurate [market] information." Some scholars have hypothesized that public enterprises are capable of a greater degree of predatory pricing than private enterprise among the reasons given is the lack of obligation to pay a return on invested capital which, in turn, lowers the opportunity cost of funds that a public enterprise may use to subsidize predatory losses. Exemption from taxation and lack of regulatory oversight comparable to that of private enterprise complete this list of reasoning.

Public enterprises may also lack the incentives to price at market levels rather than below marginal costs, ultimately harming the growth of competition. If this is true, although a public enterprise may not engage in predatory pricing, it seems reasonable to suggest that they will have a questionable ability to find and set prices at true market levels. At least private enterprise cable service providers can find a silver lining from municipal competition; the market entry by municipalities has enabled some of them to escape rate regulation because the municipalities have effectually introduced competition into their markets above threshold levels.

In the end, the future commercial success of the new technologies discussed above may help answer whether competition is developing

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139 Georgia Munis Reach Accord with Cable Industry that Avoids Legal Challenges, ENERGY SERVICES & TELECOM Rep., Feb. 25, 1999, at 1.
140 Id.
142 MILTON FRIEDMAN & ROSE FRIEDMAN, FREE TO CHOOSE 16-17 (1979).
144 Id. at 286.
145 Id.
146 Id. at 290.
through the free market sufficiently to eliminate cable monopolies and provide greater consumer access to affordable choices for residential broadband, or whether municipal intervention is necessary to assure quality and choice.

VI. MUNICIPAL COMPETITION MEETING POLICIES OF UNIVERSAL ACCESS TO SERVICES

Local governments could and do seek to justify their entry into the market by setting priority upon bringing access to the full array of available telecommunications services within the grasp of all their citizens.\textsuperscript{148} Certainly, there are indicators that the increase in competition driven deployment has not manifested itself evenly throughout the telecommunications industry. Deployment of broadband to the last mile residential users has lagged behind its provision to businesses due to technical and cost difficulties.\textsuperscript{149} The practical question for state legislators and municipalities may be whether municipal telecommunications services are an appropriate means for achieving this end.

Congress and the FCC have stated that they share this goal of universal access to information services and other advanced telecommunications services. Congress explicitly expressed its interest in preventing the existence of a disparity in access to these services in Section 254(b)(2)-(3) of the Telecommunications Act, stating:

\begin{itemize}
  \item [(2)] ACCESS TO ADVANCED SERVICES

  Access to advanced telecommunications and information services should be provided in all regions of the Nation.

  \item [(3)] ACCESS IN RURAL AND HIGH COST AREAS

  Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged

\end{itemize}


\textsuperscript{149} See INQUIRY REPORT, supra note 1, ¶ 45-47.
for similar services in urban areas.\textsuperscript{150}

The FCC has defined \textit{advanced services} as suitable for the provision of interactive video and high-speed data communications.\textsuperscript{151} The Telecommunications Act defines \textit{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."\textsuperscript{152}

The Commission defined \textit{information service} as:

(i) the transmission of information as a common carrier;

(ii) the transmission of information as part of a gateway to an information service, where that transmission does not involve the generation or alteration of the content of information but may include data transmission, address translation, protocol conversion, billing management, introductory information content, and navigational systems that enable users to access information services that do not affect the presentation of such information services to users; and

(iii) electronic mail services \textit{[e-mail]}.\textsuperscript{153}

In August 2000 the FCC issued a report stating that the deployment of advanced telecommunications capability to all Americans is reasonable and timely overall.\textsuperscript{154} However, the following six groups were identified as being most in danger of not having access to advanced services: rural Americans (particularly those outside of population centers), inner city consumers, low-income consumers, minority consumers, consumers in tribal areas and consumers in U.S. territories.\textsuperscript{155} Groups other than the FCC have promoted recognition of those who are in danger of not attaining access to advanced telecommunications services.\textsuperscript{156}

\begin{footnotes}
\textsuperscript{154} See \textit{INQUIRY, SECOND REPORT, supra} note 10, at 6.
\textsuperscript{155} \textit{Id.} Interestingly, the FCC specifically stated that these groups were most vulnerable if access was left to "market forces alone." \textit{Id.}
\textsuperscript{156} For examples of the many organizations addressing this concern, see http://www.DigitalDivideNetwork.org (last visited Oct. 27, 2000); \textit{see also}
\end{footnotes}
Municipalities operate under a traditional mandate of providing primarily for the public good and not for profit. Accordingly, municipal telecommunications services initially appear to have the potential to bring high-speed Internet access and other high-bandwidth telecommunications services to every resident of a city, without regard to social or economic circumstances that could conceivably limit access to such services. Municipalities have argued that the obligation to provide these services to their residents is one driving factor for their entry into telecommunications.

There is evidence available that some cities are attempting to do just that. In Chicago, a July 13, 2000, press release announced a plan for Chicago to utilize its considerable economic influence to encourage telecommunications companies to bring broadband access to every home in the City. Cities are already offering lower rates for broadband access to lower income residents; the City of San Bruno, California, offers a cable service to its residents that can be used for Internet access through a cable modem and Internet service provider. This cable service has four tiers of rates and service: preferred, limited, low income preferred and low income limited; these are aside from several more expensive packages.

Each low income rate was offered at twenty-four percent lower rates than the regular price. These lower rates for cable service may make it more affordable for users to purchase cable modem service. For cities that buy their access from existing carriers, aggregation of cities or regions when bargaining for rates has shown that favorable terms such as postalized rates (rates not based on per-mile distance) may be obtainable, making residential access less expensive.


158 Johnson, supra note 4, at 533.

159 See CivicNet to Light up Chicago with World's Most Extensive Fiber Optic Infrastructure; Chicago Partnership Lauds Effort to Bring Broadband Access to All Neighborhoods and Businesses, PR NEWSWIRE, Jul. 13, 2000 (on file with author). One of the stated goals of this effort is "[b]ridging the digital divide by providing access to high-speed networks to all socio-economic classes so that no one misses out on the technology revolution." Id.


162 See id.

163 Johnson, supra note 4, at 534.
As yet, there are few facts available to evaluate whether these strategies are successful in bringing these services to citizens who otherwise would not have access to advanced services. For instance, one obstacle consists of evidence that many municipalities are planning to lease out their fiber optic capacity rather than operate the network themselves. This would seem to permit, at best, very little flexibility for municipalities to subsidize residents who otherwise would not pay for access to these networks.

Additionally, municipal subsidizations could effectively undermine pro-competitive principles by perceptibly skewing market forces with non-marketplace prices, and pricing parity and fairness schemes would be effectively unusable unless the cities carefully targeted only small segments of the population. Lastly, there is little evidence that universal access to advanced telecommunications services is the priority consideration of municipalities developing these services, which may be less of an indication of intention than of practicality due to the costliness of the undertaking.

One California city engaged in an ambitious fiber optic ring project provides an example of some problems involved in local government providing this kind of service to the public. Called the Universal Telecommunications System (UTS), the actual infrastructure of the network has been developed to a large extent and the city is in the midst of testing access in portions of the city. The city recently approved the issuance of a Request for Proposal in order to recruit an operator of the UTS network. This follows from the expectation that “fiber will eventually reach every home and business in [the city].” However, in the same report, the Utilities Advisory Commission recommended that the “requirement for universal access” should be changed to “universal access is strongly advised.”

The pricing alternatives discussed in the same meeting did not include any specific guidelines for ensuring universal access. On

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164 Kripalani, supra note 64, at 45-46.
167 Id. at 2.
168 Id. (emphasis added).
169 See CITY OF PALO ALTO, CITY MANAGER'S REPORT, CMR: 332:99, REQUEST FOR COUNCIL
the contrary, the pricing recommendations by the staff were articulated as governed by providing "the best balance between financial risk to the City and the ability to provide competitively priced Internet services [sic]." Local governments may find that the financial difficulties involved in operating a residential fiber optic network make offering universal access highly problematic. Some municipalities, including this city, have had difficulty in getting enough residents to subscribe to the service to ensure its financial viability at all. As discussed above, it is not the only city with this difficulty.

While some municipal networks are being developed where private telecommunications providers have been slow to implement high-bandwidth networks, evidence of developing cable modem, DSL and satellite and wireless access technologies gives rise to questions about the applicability of the universal access rationale here. Thus, it is not clear that a significantly greater quantity of under served persons would benefit in the end from these policies.

VII. CONCLUSION

In the FCC's August 2000 report, the City of Waltham, Massachusetts is used as a case study for broadband deployment. According to the report, the city recognized its need for a high-speed data provider, and resolved this problem by hiring a consultant to seek out suitable service providers. The consultant developed a telecommunications plan for the city, found a provider and handled all the aspects of licensing, rights-of-way and franchise negotiations. The FCC concluded that Waltham's methods were "welcoming to telecommunications competitors, and was proactive in its use of various means, such as use of short-term open video agreements, to speed the deployment of advanced services while it negotiated long-term telecommunications franchises. Such openness to new entrants most likely helped speed the entry of competitors to

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170 Id. at 8.


172 See Blume, supra note 78, at 9.

173 See INQUIRY, SECOND REPORT, supra note 10, ¶ 131.

174 Id. at 60.

175 Id.
As illustrated by the Waltham case, facilitating the use of the rights-of-way and licensing requirements may be one strategy for a city to increase the deployment of advanced telecommunications services while allowing private enterprise both to take the risks and reap the financial rewards. In doing so, municipalities may avoid any dilution of their roles as unbiased trustees of the considerable power they wield in this industry. For cities to be held accountable by state government for economically fair and equitable treatment of telecommunications, providers in their own marketplace should go far to ensure that the goal of competition in telecommunications is furthered despite the rapidly evolving and sometimes unpredictable forces in the telecommunications industry. If the development of market-driven telecommunications in the United States is responsible for increased economic productivity, perhaps the introduction of non-market forces in this industry should be proportionally guarded against, for the sake of the cities as much as for the private enterprises.

176 Id.