

Kentucky Telecom Law Needs Update

By Hance Haney and George Gilder

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Executive Summary

In 2006, the Kentucky Legislature eliminated rate regulation of local exchange telephone services provided by electing utilities after five years in recognition of the increasingly competitive nature of the telecommunications industry.

Although competition has intensified to the point where only 22% of Kentucky voice connections were served by local exchange providers subject to legacy utility regulation at the end of 2010 (the rest utilize wireless or Voice-over-Internet Protocol technologies), traditional telephone companies remain subject to monopoly-era requirements, such as the obligation to provide dialtone to anyone who requests it within a few days.

Compliance with obsolete regulation is not only unnecessary, but it is also anti-competitive since it imposes substantial costs on service providers that offer legacy telephone services that their competitors do not have to bear.

Wherever consumers can choose between alternative providers of voice services, all providers of voice services should be subject to minimum regulation which does not discriminate on the basis of technology or history, just like in any competitive market.

From a state perspective, legacy utility regulation is one of the most critical factors affecting private investment in advanced networks, which is currently about \$65 billion per year nationwide. By removing unnecessary and asymmetrical regulations that afflict telecom, Kentucky can eliminate the possibility that broadband investment will be diverted to other states that have reformed outmoded telephone laws, and thus offer a more hospitable environment for private investment.

Kentucky can open up new technological opportunities and economic efficiencies with broadband that promise to create jobs not only in telecommunications equipment and services, but also in manufacturing and service industries (especially finance, education and health care). A study by the Brookings Institution established a methodology which can be used to predict that approximately 30,000 to 40,000 private nonfarm jobs will be created throughout Kentucky's economy for every 1% increase in broadband penetration (only 59% of Kentucky households had a broadband connection in mid-2011).

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The telecommunications market began to experience profound and unanticipated changes at approximately the same time that the Kentucky legislature enacted the Emerging Technology and Consumer Choice Act or House Bill 337 in 2006. More and more consumers were beginning to rely on wireless and Voice-over-Internet Protocol (VoIP) as substitutes for traditional landline telephone service. By 2011, only 11% of Kentucky households were wireline-only.¹

Regulation of telephone utilities is premised on the fact these entities were once natural monopolies, which is no longer the case. The policy adopted by Congress in the Telecommunications Act of 1996 is to “promote competition *and reduce regulation* (emphasis added) nationwide in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.”² Regulatory reform is lagging in several states including Kentucky.

Legacy utility regulation applied to incumbent providers but not new entrants can have the unintended effect of inhibiting competition. This paper examines the following regulatory requirements as they still apply to traditional telephone service providers, but not to competing voice services:

Obligations to provide basic telephone service upon reasonable request. The legal requirement to maintain a telephone network capable of serving every residence or business in a defined service area imposes a significant cost on telephone service providers. Since competing voice service providers are under no such obligation, so-called “carrier-of-

last-resort” requirements are anticompetitive wherever consumers can choose between multiple providers. These obligations should be eliminated wherever there is competition.

Regulation of rates consumers pay for basic telephone services. Retail pricing regulation is a holdover from a bygone monopoly era that reflects cost-shifting which cannot be maintained in a competitive market. Rates for basic local exchange service provided by electing utilities are capped for 60 months or five years from the date a utility elects price cap regulation, which means that rates for most consumers are no longer subject to regulation. The local service rates of the Rate-of-Return rural telephone utilities are still regulated. Wherever consumers have a choice between voice services, rates should be market-based and not subject to state administrative regulation.

The requirement to retain tariffs on file with the Public Service Commission. All telephone utilities are still required to retain on file with the Public Service Commission tariffs for telephone services. These filing requirements give rivals competitively-sensitive information. Although appropriate during the monopoly era, these disclosure requirements have become unnecessary and anticompetitive.

The Market Is Fully Competitive

Today, incumbent telecom providers face potent competition from VoIP services, wireless providers and from other certificated wireline providers.

VoIP. Competitive local exchange carriers (CLECs) and new-entrant VoIP providers – a category dominated by cable operators providing competitive voice services, but also including other VoIP providers – were serving customers in 91% of Kentucky’s zip codes in mid 2011.³ Time Warner Cable offered digital phone service to nearly all of its homes passed by the end of 2009.⁴

Since the Legislature updated Kentucky’s telecommunications law in 2006,

- Competition pushed down the rates for bundles of Internet, phone and TV service by 20% in 2008, to as low as \$80 per month, according to Consumer Reports.⁵ More recently, the magazine reported that shopping for Internet, home phone, and TV service is increasingly a “buyer’s market.”⁶
- VoIP has become comparable, and in many cases superior, to wireline service in terms of network efficiency and sound quality. “It’s easy to take for granted the fact that Internet calls are now as clear as those on landlines,” according to a *New York Times* columnist.⁷
- Between 2008 and 2012, Kentucky consumers of VoIP services saved over \$250 million based on an estimated cost savings of \$11.70 per residential subscription per month, and small businesses saved over \$9 million over the same period (\$19.70 per customer per month), according to a 2007 projection.⁸
- This same study concluded that competition from VoIP has forced the incumbent telecom providers to cut prices. In Kentucky, the projected savings from competition in fixed-line voice services as a result of cable VoIP is in excess of \$1.6 billion over five years.⁹

Wireless. Besides VoIP, approximately 99.8% of the total U.S. population – and approximately 99.2% of the U.S. population living in rural census blocks – have one or more different operators offering mobile

telephone service in the census blocks in which they live, according to the FCC.¹⁰ In Kentucky, there were over 3.7 million mobile phone connections at the end of June 2011,¹¹ the equivalent of more than two mobile phones for every Kentucky household.¹²

Almost 34% of Kentucky households had only wireless telephones in 2011, according to a study conducted by the Centers for Disease Control of the U.S. Department of Health and Human Services.¹³ Almost 17% of Kentucky households received all or almost all calls on wireless telephones, even though they also had a landline phone.¹⁴ Adding these two categories together, more than half of Kentucky’s households either don’t have a landline phone at all, or don’t use their landline phone for most of their calls.

Only 22% of Kentucky voice connections were served by regulated telephone utilities at the end of 2010.¹⁵ We are confident that this percentage could be lower if it were possible to factor in VoIP services that originate and terminate on personal computers, not just phone-to-phone VoIP services.

The late Professor Alfred E. Kahn, a former chairman of the New York Public Service Commission and top official in the Carter administration, observed that the industry has fundamentally changed and that regulation designed for a bygone era can be harmful.

The industry is obviously no longer a natural monopoly, and wherever there is effective competition—typically and most powerfully, between competing platforms—land-line telephony, cable and wireless—regulation of the historical variety is both unnecessary and likely to be anticompetitive—in particular, to discourage the heavy investment in both the development and competitive offerings of new platforms, and to increase the capacity of the Internet to handle the likely astronomical increase in demands on it for such uses as on-line medical diagnoses and gaming.¹⁶

Regulation Is Costly and Unsustainable

As the wireless-only data suggests, significant numbers of consumers are finding it unnecessary to maintain multiple voice connections and are choosing to discontinue their switched access service. Incumbent local exchange carriers served almost half as many switched access lines in Kentucky in 2011 compared to 2001 (1.2 million in 2011 versus 2.2 million in 2001).¹⁷ AT&T estimates that across the 22 states in which it is a provider of local telephone service, “less than 30 percent of homes are actually connected to [a regulated telephone utility’s] old infrastructure.”¹⁸

The Economist recently predicted that if consumers discontinue landline telephone service at the current rate, “the last cord will be cut sometime in 2025.”¹⁹

The line losses are placing incumbent local exchange carriers in an impossible situation since legacy regulation requires them alone (and not their competitors) to furnish basic voice service to any consumer upon reasonable request within a few days.

The cost of maintaining a network capable of serving everyone upon request within days does not decrease in direct proportion to the number of consumers who choose to pay for telephone service. There are exceptionally high fixed costs in the telephone business. Incumbent local exchange carriers still have to maintain the lines that are no longer in use, as well as the expensive central office switching capacity and power supplies needed to serve them.

In 2005, BellSouth needed to recover an average of \$59.29 per switched access line in service per month to cover its wireline network operating expenses. By 2011, AT&T needed to recover \$119.29 per switched access line in service/mo.²⁰ Even though electing utilities are legally entitled to raise their rates for basic telephone service in Kentucky, as a practical matter they must set their rates low enough to remain competitive with other providers

of voice service or else risk losing customers.

With incumbent local exchange carriers required to incur significant costs maintaining capacity that is no longer in service, they cannot possibly reduce their costs to reflect the realities of the marketplace. As telephone service becomes uncompetitive, employment and investment will be jeopardized.

According to the National Broadband Plan, regulatory reform is needed to sustain billions of investment dollars and tens of thousands of jobs and ultimately lead to lower prices.

Regulations require certain carriers to maintain [Plain Old Telephone Service]—a requirement that is not sustainable—and lead to investments in assets that could be stranded. These regulations can have a number of unintended consequences, including siphoning investments away from new networks and services. (footnote omitted.)²¹

Almost half of all capital investment in the wireline networks of the major telephone companies in 2011 went to the “legacy” telephone operations, according to Robert Atkinson and Ivy Schultz.²²

Fortunately, as the number of subscribers dwindles, local phone companies can find new efficiencies and new, non-regulated sources of revenue to sustain their businesses. Modern Internet Protocol-based networks can deliver voice, data and video. Since voice requires relatively little bandwidth compared to data and video, it is conceivable that all voice services could become free applications for broadband subscribers.

The best way to ensure affordable voice service is therefore to remove barriers to broadband investment, not continue to require telephone service providers to maintain single-purpose voice networks when multifunctional broadband platforms could deliver voice service at lower cost.²³ This is why the National Broadband Plan recommends embracing rather than fighting the logic of replacing of the traditional circuit-switched

telephone network with a modern IP-enabled network.

The challenge for the country is to ensure that as IP-based services replace circuit-switched services, there is a smooth transition for Americans who use traditional phone service and for the businesses that provide it. (footnote omitted.)²⁴

The National Broadband Plan recommends discontinuing subsidies for traditional phone service in favor of ubiquitous broadband that offers high-quality voice,²⁵ and a bipartisan FCC unanimously enacted this recommendation in 2011.²⁶

Even if traditional telephone service were not rapidly becoming completely obsolete, discriminatory regulation applied to telephone utilities but not to competing providers of voice services is *harmful* to consumers. For one thing, it could discourage new entrants, as recently occurred in Kansas City. Asked whether Google would provide voice service over the fiber network it recently constructed there, a company official replied, “We looked at doing that. The cost of actually delivering telephone services is almost nothing. However, in the United States, there are all these special rules that apply.”²⁷ As a result, Google will not be offering voice service.

Another consequence of discriminatory regulation that increases the cost of doing business for Firm A but not for Firms B or C entails what economists refer to as a pricing “umbrella.” That is, the lower-cost firms can capture market share by setting prices slightly below those of Firm A, not at the lowest level at which they would otherwise be capable if the market were fully competitive. In that case, consumers are over-paying for service.

To some degree, the prices consumers pay for voice services may reflect the higher cost of maintaining a legacy telephone network, and not completely reflect the lower costs of efficient new technologies. Reforming legacy regulation will promote long-run competition and facilitate investment that will enable providers to charge lower prices. The

unregulated cable and wireless industries – both of which are far more dynamic than the telephone industry – prove that competition works better than regulation

Necessary Reforms

Reform Obligation to Serve

The legal obligation to provide timely service upon reasonable request to anyone, subject to regulated rates, terms and conditions was a *quid pro quo* for a valuable monopoly franchise. The Telecommunications Act of 1996 eliminated the monopoly franchise,²⁸ but in Kentucky regulated telephone utilities are still under an obligation to provide timely service to anyone who requests it.

An obligation to serve imposes significant costs on a single class of providers (regulated telephone utilities) that do not have to be borne by commercial rivals (VoIP and wireless service providers), therefore it is anticompetitive and should be eliminated wherever the market is competitive and consumers can choose between multiple providers.

Where consumers have a choice between voice service providers, no provider should be saddled with a monopoly-era duty to provide service. If it is necessary to require a service provider to serve as a carrier-of-last-resort in a particular locale, first, the provider should be free to choose the technology(ies) it will use to serve its customers. It might be more efficient, for example, to provide high-quality voice service to consumers utilizing wireless, VoIP or satellite. Second, the process for selecting a carrier-of-last-resort should be competitively neutral and not impose undue or discriminatory burdens on a particular provider of voice service or class of providers.

A few critics predict dire consequences, as usual, if regulation is streamlined. A story by John Cheves in *The Lexington Herald-Leader* in February 2012, for example, quoted representatives of the American

Association of Retired Persons (AARP) in Kentucky and the Kentucky Resources Council who fear rural communities, the poor and the elderly could be left behind if basic phone service disappears.²⁹

Reforming the carrier-of-last-resort obligation is about opening the door for new technologies to provide better services, not about leaving people behind. More than 15 states, including Indiana and Tennessee, have undertaken carrier-of-last-resort reforms. In Ohio, the State Senate passed SB 271. The critics have not cited any evidence, nor even alleged, that any consumers have, in fact, lost phone service or have been unable to obtain suitable voice service as a result of these reforms.

The reality is that regulatory reform cannot be postponed indefinitely. As previously noted, the National Broadband Plan confirms that legacy regulation is “not sustainable” and “can have a number of unintended consequences, including siphoning investments away from new networks and services.”³⁰ The FCC has already begun the process of phasing out subsidies that have been available to support basic phone service so that every household can have access to broadband that provides both voice and high-speed Internet access services.³¹ Federal support for broadband will not be limited to wireline networks. “[O]ur actions today help meet national goals of universal access to wired and wireless broadband,” according to FCC Chairman Julius Genachowski.³²

Incidentally, the Pew Research Center reports that the “cell phone is by far – and across all generations – the most popular technology device in America.”³³ In the 66-74 age group, 68% of seniors own cell phones and 48% own desktop computers. In the 57-65 age group, 84% own cell phones and 64% own desktop computers.³⁴ The percentage of seniors who live in households with one or more cell phones is even higher – 62% of seniors over the age of 75, 76% of seniors between the ages of 66-74 and 90% of seniors between the ages of 57-65.³⁵

Although the broadband adoption rate for seniors is below the national average, the National Broadband Plan notes that experience has shown that “older

Americans will adopt broadband at home when exposed to its immediate, practical benefits and after receiving focused, hands-on training.”³⁶

One way to increase the relevance of broadband for older Americans is to highlight how broadband can improve their access to health care information and services. Broadband enables telemedicine solutions like videoconferencing and remote monitoring, which allow for better health management, lower health care costs and effective aging-in-place programs. Numerous initiatives, led by partnerships among the medical community, the private sector and the academic and research community, are underway. (citations omitted.)³⁷

Policymakers should focus on programs and partnerships for improving broadband adoption by seniors. Promoting broadband adoption by seniors is a policy that AARP should get behind, rather than working to prolong the demise of obsolete landline telephone networks which drain needed investment from broadband.

Eliminate Price Regulation

Since 2006, rates for basic local exchange service provided by electing utilities are capped for 60 months or five years from the date a utility elects price cap regulation.³⁸ This means that most local exchange services in Kentucky are not currently subject to any rate regulation.

The textbook justification for price regulation is that in a monopoly environment, price regulation prevents a service provider from charging excessive rates, and it also creates opportunities for cross-subsidization. Telephone rates reflect substantial cost-shifting to equalize the price of service. Unfortunately, rates that are artificially high for some consumers and artificially low for others cannot be sustained in a competitive environment.

Consumers ultimately dictate prices and terms in a market with competitive alternatives by choosing

from whom they will purchase a product or service. The consumers who are forced to pay higher prices as a result of outmoded regulation will take their business elsewhere.

Price-setting is one of the ways commercial rivals seek a competitive advantage over one another. In a rivalrous market, providers either satisfy consumer expectations or risk losing sales. A regulated basic service offering is unnecessary wherever consumers can choose between two or more providers of voice services.

Price regulation, in whatever form, should be eliminated wherever there is competition, so all providers have an opportunity to compete.

Eliminate Notice Requirements

All utilities are required to retain on file with the commission tariffs for basic local exchange services for an indefinite period of time.³⁹

Requiring telephone utilities to file tariffs ensures that their competitors receive notification of telephone utility product and service improvements, availability, sales promotions and other valuable information.

The FCC concluded during the Clinton administration that it would be pro-competitive to neither require *nor allow* long-distance carriers to file tariffs, noting that an absence of any tariffs would increase incentives for innovation, make it easier to offer discounts and customized service arrangements as a way of retaining lucrative customers—who contribute to the joint and common costs of maintaining the network for the benefit of all consumers—and reduce the possibility of tacit coordination in price-setting.³⁸

Tariffs—whether mandatory or voluntary, and in whatever form—have limited consumer value and are potentially anticompetitive. Accordingly, notice requirements should be eliminated.

A free market for voice service would generate new efficiencies for taxpayers and consumers. Regulation that reduces service provider flexibility

inhibits competition which promotes investment, innovation, consumer choice and ultimately lower prices. Regulation also imposes significant oversight and compliance costs that are passed along to consumers and taxpayers.

Investment and Innovation Linked to Regulatory Reform

Broadband investment is vital to promote equal opportunity, create jobs in an uncertain economy as well as improve education and health care.

Experts foresee the need for continuing massive investment by network operators in current and next generation broadband capability. The first goal of the National Broadband Plan is for at least 100 million homes to have affordable access to download speeds of at least 100 megabits per second by 2020.⁴⁰ The overall investment needed to make broadband at the fastest speeds (100+ MB) ubiquitous would be \$350 billion, according to FCC staff.⁴¹ This estimate does not take into account the total investment that multiple facilities-based competitors would incur building alternative networks. Therefore, actual investment could be much higher.

Historically, monopoly franchises ensured that investments in telephone and cable networks could be recovered. Today, with vibrant competition and rapidly evolving technology, there is no guarantee that investments in broadband will be profitable.

The investments necessary to build broadband infrastructure are “inherently risky by their very nature,” according to Debra J. Aron and Robert W. Crandall, who caution that “[p]rojects with inherently significant risk, as these are, would be especially sensitive to regulatory risk.”⁴²

Redundant legacy regulation creates artificial competitive advantages and disadvantages, because communications providers are subject to different regulation depending on the technology they use and their history. Regulatory uncertainty – whether the prospect of unanticipated regulatory intervention in

the future, or the possibility that even well-intentioned regulation can have unintended consequences – is another obstacle to private investment in broadband. According to Robert W. Crandall, Robert E. Litan and William Lehr,

The virtuous cycle of capacity investments leading to new services and competition which in turn helps drive increased demand and traffic which in turn leads to still more investment in facilities risks being derailed if the firms investing in such infrastructure cannot reasonably expect to recover their economic costs, including earning a fair, risk-adjusted return on investment.⁴³

Larry Cohen of the Communications Workers of America has also said, “We depend on private capital to invest in next-generation wireless and wireless networks, and create and maintain jobs in the industry.”⁴⁴ Citing the \$63 billion in investments made by the top network providers in 2008, Cohen noted in reaction to proposed new regulation at the federal level that it is crucial that policymakers “support the right policy mix of incentives to sustain and enhance these investments that are so critical to America’s future.”⁴⁵

Regulatory reform is necessary for broadband providers to maintain stock valuations necessary to attract sufficient investment capital for broadband expansion.

Investors funded wireless expansion by the incumbent telecommunications providers on the strength of their landline business. Now telecommunications providers require competitive market returns from both their wireline and wireless operations so investors will back their broadband expansion. Investors will support broadband if they perceive it has the potential to make money, rather than be forced to subsidize local services.

Create and Maintain Jobs

The main reason policymakers should undertake regulatory reform is to attract new investment to the

communications sector so consumers can receive the services they want at competitive prices. New investment in telecom is necessary to deliver this result, and the states that attract it will also reap the added rewards of job creation and economic growth.

The Communications Workers of America have calculated on the basis of a Department of Commerce model that \$5 billion invested in broadband infrastructure creates 100,000 new jobs in the telecommunications and information technology industries in the year in which the spending occurs.⁴⁶

Researchers at the Information Technology & Innovation Foundation project that \$10 billion of investment in one year in broadband networks will support an estimated 498,000 new or retained jobs throughout the entire U.S. economy for a year.⁴⁷ These include direct jobs, such as technicians to deploy broadband cable and equipment; indirect jobs created to supply the materials; and induced jobs, such as jobs in restaurants and retail stores created as the newly employed or retained workers spend their paychecks.

A study by the Brookings Institution found that for every one percentage point increase in broadband penetration in a state, private non-farm employment is projected to increase by 0.2 to 0.3 percent per year.⁴⁸ The authors conclude that employment in both manufacturing and services industries (especially finance, education and health care) is positively related to broadband penetration. In Kentucky, this translates to approximately 30,000 to 40,000 new jobs for every one percentage point increase in broadband penetration.⁴⁹ Only 59% of Kentucky households had a fixed broadband connection in mid-2011, according to the Federal Communications Commission.⁵⁰

Regulatory reform is necessary for stimulating private investment and creating competitive pressure for broadband providers to upgrade their services, reduce prices or both. Conversely, the absence of regulatory reform will make it harder to achieve these benefits through other means,

such as public subsidies.

Promote Economic Development and New Efficiencies

Economists have found higher residential property values and more jobs and businesses in communities with broadband, particularly in smaller, more rural and economically distressed areas.⁵¹ Wage and salary jobs, as well as the number of proprietors, grew faster in counties with early broadband and Internet access.⁵²

Predicted savings in health care are major and mounting as an effect of broadband monitoring and other health care services.⁵³ Broadband can be used in a variety of new ways, including the monitoring of elderly, infirm or individuals with disabilities at their current residences or less expensive community health care centers, and the delivery of medical care directly through “telemedicine,” or two-way interactive video communication between patients and health care providers. These benefits are estimated to accumulate to at least \$927 billion over 25 years (measured in 2005 dollars), which is equivalent to half of what the United States currently spends annually for medical care for all its citizens (\$1.8 trillion).⁵⁴

Estimates of the net consumer benefits from home broadband are on the order of \$32 billion per year.⁵⁵

Empower Underserved Communities

A report by the U.S. Department of Commerce points out that broadband use at home varies significantly across demographic groups.

Persons with high incomes, those who are younger, Asians and Whites, the more highly-educated, married couples, and the employed tend to have higher rates of broadband use at home. Conversely,

persons with low incomes, seniors, minorities, the less-educated, non-family households, and the non-employed tend to lag behind other groups in home broadband use.⁵⁶

A recent Pew Internet survey also finds demographic variances in broadband adoption.⁵⁷ It shows that 63% of white households have broadband, compared to 52% black and 47% Hispanic (English- and Spanish-speaking) households.⁵⁸ Meanwhile, it also reveals that those who have accessed the Internet wirelessly via their laptop or handheld device were 62% Hispanic (English- and Spanish-speaking) 59% black (non- Hispanic) and 52% white (non-Hispanic).⁵⁹

The foregoing research tracks the findings of the National Center for Health Statistics concerning wireless substitution. It found that adults living in poverty (51.4%) were more likely than adults living near poverty (39.6%) and higher income adults (28.9%) to be living in households with only wireless telephones.⁶⁰ And Hispanic adults (43.3%) were more likely than non-Hispanic white adults (29.0%) or non-Hispanic black adults (36.8%) to be living in households with only wireless telephones.⁶¹

The popularity of mobile Internet access among minority groups is helping to “close a looming digital divide stemming from the high cost of in-home Internet access, which can be prohibitive for some,” according to a *New York Times* report.⁶²

Another recent Pew survey found that from 2006 to 2008, internet use among Latino adults rose by 10 percentage points, from 54% to 64%. In comparison, the rates for whites rose four percentage points, and the rates for blacks rose only two percentage points during that time period. Though Latinos continue to lag behind whites, the gap in Internet use has shrunk considerably.⁶³

Access to broadband is becoming increasingly important for employment, education, news, health care and consumer welfare purposes, as FCC Commissioner Mignon Clyburn recently noted.

In today’s fast-changing world, broadband is

not a luxury; but rather, it is a necessity, a must-have. Need a job? You'll have to go on-line for that. Want to manage your energy consumption at home? You'll have to go on-line for that. Applying for government benefits? Before long, you will have to go exclusively on-line for that too Broadband's key promise for people of color in particular is economic empowerment. For the first time, there are no immediate and overwhelming barriers to entry for upstart businessmen and women or "cyberpreneurs." Broadband has opened avenues never dreamed possible by those in challenged communities.⁶⁴

"We firmly believe that ubiquitous broadband access, adoption, and use, stand to be great equalizers in our society," notes a joint policy statement of the National Asian-Pacific American Caucus of State Legislators, National Black Caucus of State Legislators, National Caucus of Native American State Legislators and the National Hispanic Caucus of State Legislators. "As such, we must ensure that Internet adoption and use via a broadband connection becomes engrained as a social, cultural norm in our communities."⁶⁵

Every Kentucky resident should have access to broadband. Telephone service providers, cable operators, wireless providers and others are all anxious to invest in broadband if investors will provide the funding. Investors will decide whether firms can buy the necessary equipment and employ the highly-skilled people who can make it all work.

Of all the calculations that affect private investment, regulation is the most critical from a state perspective. If legacy telephone regulation is not reformed – and the possibility that other market participants could face similar regulation is not eliminated – private investment needed to make broadband a practical reality for every household is at risk.

Conclusion

Outmoded regulatory mandates prevent telecommunications providers from offering competitive services and generating revenues for broadband expansion. They serve chiefly as obstacles to investment that reduce asset values of all telecom suppliers. Wherever consumers can choose between alternative providers of voice services, the following reforms are recommended:

- Terminate obligations to serve, which impose significant costs on telephone service providers but not their competitors.
- Clarify that rates will be market-based and not subject to commission jurisdiction so all providers of voice services have an equal chance to compete.
- Eliminate filing requirements at the expiration of the rate cap period so that competitors do not receive notice of product and service improvements and sales promotions.

By embracing regulatory reform, legislators will expand customer choice, decrease prices, and ignite the broadband expansion necessary to economic growth and technological progress.

This is a golden opportunity for Kentucky to open up new technological opportunities and economic efficiencies. Ensuring that consumers reap the full benefits of competition will require further revision of telecommunications law in Kentucky to remove the legacy restraints on telephone service providers.

Authors

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The views expressed herein are those of the authors and do not necessarily reflect the views of the Discovery Institute, its directors or staff.

Notes

¹ Stephen J. Blumberg and Julian V. Luke, et al. “Wireless Substitution: State-level Estimates From the National Health Interview Survey, 2010-2011,” *U.S. Department of Health and Human Services* (Oct. 12, 2012) available at <http://www.cdc.gov/nchs/data/nhsr/nhsr061.pdf>, at Table 2.

² Pub. L. No. 104-104, 110 Stat. 56.

³ “Local Telephone Competition: Status as of Jun. 3, 2011,” *Federal Communications Commission* (Jun. 2012) available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0614/DOC-314631A1.pdf at Table 21.

⁴ Time Warner Cable 2009 Form 10-K for the fiscal year ending Dec. 31, 2009, at p. 3 available at http://ir.timewarnercable.com/files/doc_financials/Annual%20Reports/TWC_Revised_Annual_Report_4_14_2010.pdf.

⁵ “Fiber-Optic Providers Are Leading Choices for Internet, Television, and Telephone Service,” *Consumer Reports* (Jan. 5, 2009) available at <http://pressroom.consumerreports.org/pressroom/2009/01/consumer-reports-fiber-optic-providers-are-leading-choices-for-internet-television-and-telephone-service.html> (“intense competition for cable and satellite customers between AT&T U-verse and Verizon FiOS high speed fiber providers has driven down rates for Internet, phone and TV service and is likely the reason that companies allow these savings to continue past the promotional period. In the past year, bundles of the three services have dropped in price by up to 20 percent, to as low as \$80 a month.”). See also: “Price War Erupts for High-Speed Internet Service,” by Vishesh Kumar, *Wall Street Journal* (Sept. 2, 2008) available at <http://online.wsj.com/article/SB122031009737388555.html>.

⁶ “Save a bundle: How to piece together a great deal for TV, phone, and Internet service,” *Consumer Reports* (Feb. 2010) available at <http://www.consumerreports.org/cro/magazine-archive/2010/february/electronics-and-computers/bundling/overview/bundling-ov.htm>.

⁷ Bob Tedeschi, “Better Calling for Less, by Skipping the Cell Network,” *New York Times* (Feb. 10, 2010) available at <http://www.nytimes.com/2010/02/11/technology/personaltech/11smart.html>; see also “Save a bundle: How to piece together a great deal for TV, phone, and Internet service,” note 18 (“The best Voice over Internet Protocol (VoIP) services, which came from providers of all types, rivaled fiber in offering the best phone service.”).

⁸ “Consumer Benefits from Cable-Telco Competition,” by Michael D. Pelcovits, Ph.D. and Daniel E. Haar (Nov. 2007) available at http://www.micradc.com/news/publications/pdfs/Updated_MiCRA_Report_FINAL.pdf at 29.

⁹ Id.

¹⁰ Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services (Fifteenth Wireless Competition Report), *Federal Communications Commission* (rel. Jun. 27, 2011) available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-103A1.pdf, at Tables 5, 40.

¹¹ Local Telephone Competition, *supra* note 3, at Table 18.

¹² There were 1,676,708 households in Kentucky in 2006-2010, according to the U.S. Census Bureau. See: State and County QuickFacts: Kentucky, available at <http://quickfacts.census.gov/qfd/states/21000.html>.

¹³ *Wireless Substitution*, *supra* note 1.

¹⁴ Id.

¹⁵ *Local Telephone Competition*, *supra* note 3, at Tables 9, 18.

¹⁶ Remarks of Alfred E. Kahn before the Federal Trade Commission (Feb. 13, 2007) available at <http://www.ftc.gov/opp/workshops/broadband/presentations/kahn.pdf>. Kahn is the Robert Julius Thorne Professor of Political Economy (Emeritus) at Cornell University who has also served as chairman of the New York Public Service Commission, chairman of the Civil Aeronautics Board, Advisor to the President (Carter) on Inflation, and chairman of the Council on Wage and Price Stability.

¹⁷ Compare “Local Telephone Competition: Status as of Jun. 30, 2001,” *Federal Communications Commission* (Feb. 2002) available at http://transition.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/IAD/lcom0202.pdf (Table 6) with *Local Telephone Competition* (2011), supra note 3 (Table 9).

¹⁸ “Building a Network for the 21st Century,” by Bob Quinn, *AT&T Public Policy Blog* (Nov. 7, 2012) available at <http://attpublicpolicy.com/fcc/building-a-network-for-the-21st-century/>.

¹⁹ “Cutting the cord,” *The Economist* (Aug. 13, 2009) available at http://www.economist.com/opinion/displaystory.cfm?story_id=14214847.

²⁰ BellSouth provided service to 20,037,000 access lines in 13 states at a cost of \$14,257,000,000 in 2005, or \$59.29 per access line per month on average. See: BellSouth 2005 Form 10-K, available at <http://www.sec.gov/Archives/edgar/data/732713/000095014406001613/g98697e10vk.htm>. BellSouth merged with AT&T in 2006. AT&T provided service to 36,734,000 access lines in 22 states at a cost of \$52,494,000,000, or \$119.09 per access line per month on average. See: AT&T 2011 Annual Report, available at http://www.att.com/Common/about_us/files/pdf/ar2011_annual_report.pdf.

²¹ Connecting America: The National Broadband Plan, *Federal Communications Commission* (Mar. 16, 2010) available at <http://download.broadband.gov/plan/national-broadband-plan.pdf>, at 59.

²² Robert C. Atkinson and Ivy E. Schultz, “Broadband in America - Where It Is and Where It Is Going (According to Broadband Service Providers),” *Columbia Institute for Tele-Information* (Nov. 11, 2009) available at http://www.broadband.gov/docs/Broadband_in_America.pdf.

²³ *Id.*, at 138, 141 and 150.

²⁴ *Id.*, at 59.

²⁵ *Id.*, at 150-51.

²⁶ In the Matter of Connect America Fund, etc., *Report and Order and Further Notice of Proposed Rulemaking*, WC Docket No. 10-90 (released Nov. 18, 2011) (“For decades, the Commission and the states have administered a complex system of explicit and implicit subsidies to support voice connectivity to our most expensive to serve, most rural, and insular communities. Networks that provide only voice service, however, are no longer adequate for the country’s communication needs The universal service challenge of our time is to ensure that all Americans are served by networks that support high-speed Internet access—in addition to basic voice service—where they live, work, and travel ... Under these circumstances, modernizing USF and ICC from supporting just voice service to supporting voice and broadband, both fixed and mobile, through IP networks is required by statute.”) available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-161A1.pdf, at 5-9.

²⁷ “Google considers but drops plans to include voice service, too,” by Alyson Raletz, *Kansas City Business Journal* (Dec. 4, 2012) available at <http://www.bizjournals.com/kansascity/blog/2012/12/google-considers-drops-phone-service.html>.

²⁸ Pub. L. 104-104 (1996)

²⁹ “Kentucky phone companies push to end basic service,” by John Cheves, *Lexington Herald-Leader* (Feb. 17, 2012) available at <http://www.mcclatchydc.com/2012/02/17/v-print/139189/kentucky-phone-companies-push.html>.

³⁰ *National Broadband Plan*, supra note 21.

³¹ *Connect America Fund*, supra note 26.

³² In the Matter of Connect America Fund, etc., *Statement of Chairman Julius Genachowski*, WC Docket No. 10-90 (released Nov. 18, 2011) available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-161A1.pdf, at 734.

³³ “85% - Near Ubiquitous Cell Phone Ownership,” *Pew Research Center* (accessed Dec. 16, 2012) available at <http://pewresearch.org/databank/dailynumber/?NumberID=1207>.

³⁴ *Id.*

³⁵ “A closer look at generations and cell phone ownership,” *Pew Research Center* (Feb. 3, 2011) available at <http://www.pewinternet.org/Infographics/2011/Generations-and-cell-phones.aspx>.

³⁶ *National Broadband Plan*, supra note 21, at 179.

³⁷ Id., at 179-80.

³⁸ KRS 278.543(2)

³⁹ KRS 278.543(3)

⁴⁰ National Broadband Plan, *supra* note 21, at 9.

⁴¹ Commission Open Meeting Presentation on the Status of the Commission's Processes for Development of a National Broadband Plan, *Federal Communications Commission* (Sept. 29, 2009) available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293742A1.pdf.

⁴² Robert W. Crandall and Debra J. Aron, Investment in Next Generation Networks and Wholesale Telecommunications Regulation (Nov. 03, 2008) available at <http://ssrn.com/abstract=1294910> at 27.

⁴³ Robert W. Crandall, Robert E. Litan and William Lehr, "The Effects of Broadband Deployment on Output and Employment: A Cross-sectional Analysis of U.S. Data," *Brookings Institution* (Jun. 2007) available at http://www.brookings.edu/papers/2007/06labor_crandall.aspx, at 14-15

⁴⁴ Letter from Larry Cohen, President, Communications Workers of America to The Honorable Julius Genachowski, Chairman, Federal Communications Commission (Oct. 15, 2009) available at <http://fjallfoss.fcc.gov/ecfs/document/view?id=7020142161>; see also Prepared Remarks of Commissioner Mignon L. Clyburn, *note 42* ("While some government money is and will be available to help defray the cost of broadband and to support creative adoption programs, it is evident that we cannot do it all on our own.").

⁴⁵ Id.

⁴⁶ National Broadband Strategy Call to Action, *Communications Workers of America* (Dec. 1, 2008) available at http://www.cwa-union.org/news/entry/national_broadband_strategy_call_to_action.

⁴⁷ Robert D. Atkinson, Daniel Castro and Stephen J. Ezell "The Digital Road to Recovery: A Stimulus Plan to Create Jobs, Boost Productivity and Revitalize America," *Information Technology & Innovation Foundation* (Jan. 2009) available at <http://www.itif.org/files/roadtorecovery.pdf>.

⁴⁸ The Effects of Broadband Deployment on Output and Employment, *supra* note 46.

⁴⁹ According to the Census Bureau, there were 1,456,790 private nonfarm jobs in Kentucky in 2010. See State & County QuickFacts, available at <http://quickfacts.census.gov/qfd/states/21/21015.html>.

⁵⁰ Internet Access Services: Status as of Jun. 30, 2011, *Federal Communications Commission* (Jun. 2012) available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0614/DOC-314630A1.pdf, at Table 16.

⁵¹ Sharon Gillett, William H. Lehr, Carlos A. Osorio and Marvin A. Sirbu, "Measuring Broadband's Economic Impact: Final Report Prepared for the U.S. Department of Commerce, Economic Development Administration (Feb. 28, 2006) available at http://www.eda.gov/ImageCache/EDAPublic/documents/pdfdocs2006/mitcmubbimpactreport_2epdf/v1/mitcmubbimpactreport.pdf.

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⁵³ Robert E. Litan, "Great Expectations: Potential Economic Benefits to the Nation From Accelerated Broadband Deployment to Older Americans and Americans with Disabilities," *New Millennium Research Council* (Dec. 2005) available at http://www.newmillenniumresearch.org/archive/Litan_FINAL_120805.pdf.

⁵⁴ Id.

⁵⁵ Mark Dutz, Jonathan Orszag and Robert Willig, "The Substantial Consumer Benefits of Broadband Connectivity for U.S. Households," *Compass Lexecon LLC* (Jul. 2009) available at <http://internetinnovation.org/library/special-reports/the-substantial-consumer-benefits-of-broadband-connectivity-for-us-househol>.

⁵⁶ "Exploring the Digital Nation: Home Broadband Internet Adoption in the United States," *U.S. Dept. of Commerce* (Nov. 2010) available at http://www.ntia.doc.gov/reports/2010/ESA_NTIA_US_Broadband_Adoption_Report_11082010.pdf, at 5.

⁵⁷ Lee Rainie, "Internet, broadband, and cell phone statistics," *Pew Internet & American Life Project* (Jan. 5, 2010) available at http://www.pewinternet.org/~media/Files/Reports/2010/PIP_December09_update.pdf.

⁵⁸ Id., at 4.

⁵⁹ Id., at 6.

⁶⁰ “Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July–December 2011,” by Stephen J. Blumberg, Ph.D., and Julian V. Luke, *Division of Health Interview Statistics, National Center for Health Statistics* (Jun. 2012) available at <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201206.pdf>, at 3.

⁶¹ Id.

⁶² Jenna Wortham, “Mobile Internet Use Shrinks Digital Divide,” *New York Times* (Jul. 22, 2009) available at <http://bits.blogs.nytimes.com/2009/07/22/mobile-internet-use-shrinks-digital-divide>.

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⁶⁴ Prepared Remarks of Commissioner Mignon L. Clyburn, MMTC Broadband and Social Justice Summit, John H. Johnson School of Communications, Howard University (Jan. 22, 2010) available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-295888A1.pdf.

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