

The Economic Impact of Telecom Reform in Indiana: 2006

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February 14, 2006

Executive Summary

Indiana's economy represents a unique opportunity for growth when compared to surrounding states. The major findings and recommendations of this paper are:

- **Indiana is a state at risk.** Continued reliance on a production-oriented economy is dangerous for the future of Indiana's economy. Earnings per job in Indiana are lower than the national average, and that gap has slowly grown over the last thirty years. In the mid-1960's, our state ranked 17th among the fifty states in per capita income, but now we do no better than 33rd. It took years for Indiana to evolve as a production-oriented economy, utilizing a labor force with lower than average educational attainment levels. As late as 1982, Indiana was at parity with the rest of the nation, now Indiana can only command 88 cents for each dollar paid the average worker in the national economy.
- **Broadband deployment is the catalyst for growth.** Numerous national studies from highly credible academic institutions and think tanks suggest that broadband deployment is the prime ingredient that can attract growth industries that are historically underrepresented in Indiana. These include entertainment, tourism, and many categories of financial, technical, and scientific services. While Indiana has been less affected by the downturn in the automobile industry than surrounding states like Michigan and Ohio, both of these states have already enacted some form of telecom reform. Indiana is already behind the curve.
- **Impact of competition can be immediate.** In Texas, the adoption of statewide franchising resulted in an immediate 25% reduction in cable rates in affected markets, and a recent study by the FCC suggests direct competition would result in a 27% reduction in rates. For Indiana, we can expect the introduction of competition to save existing Indiana cable subscribers between \$131 million and \$262 million annually. Depending on the reduction rate, our study also suggests this would encourage between 109,000 and 438,000 new Indiana television households to subscribe to a video service provider and thereby become newly franchised members of the information age.
- **Statewide video franchising is the key.** The current cable franchise landscape, developed by the FCC to protect citizens from monopoly power, does not translate to a competitive environment where multiple participating firms battle in an open, unrestricted market to attract customers for voice, data and video broadband services. Statewide franchising provides a uniform, fair framework for all Indiana communities to be attractive for outside investment necessary for broadband deployment, not just for the largest metropolitan areas.
- **The potential of telecom reform.** While both the Indiana house and senate, and both sides of the aisle are in favor of telecom reform, the devil is in the details for final passage. Last minute attempts to derail or kill this legislation are vested in self-serving, unfounded scenarios, requests for unwarranted entitlements, or ignorance over the economic benefits of a free and open telecommunications marketplace

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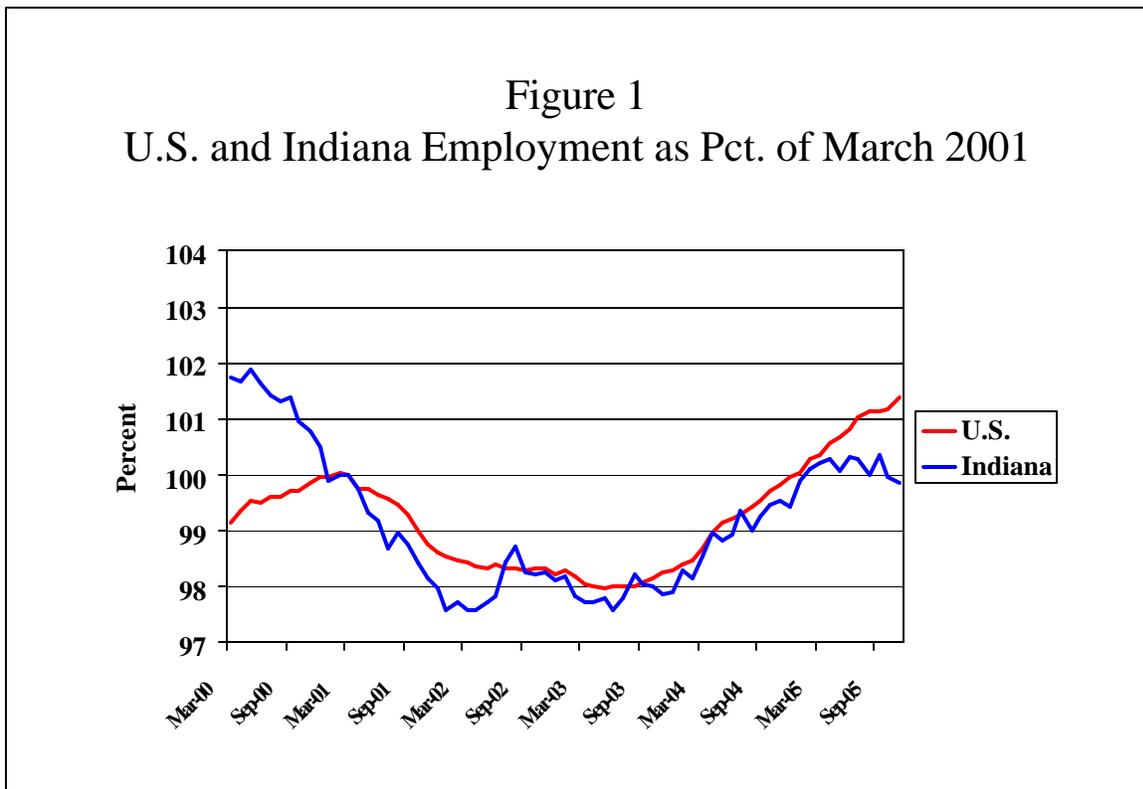
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The Challenge for Growth in Indiana

By

Patrick M Barkey, Ph.D.

There are signs of renewal and recovery in the Indiana economy. For the first time since the year 2000, employment statewide has posted meaningful growth. In some areas, notably Bloomington and Indianapolis, job totals are back to where they were before the recession began. Monthly state tax receipts have started to exceed expectations, instead of the other way around. In a broad spectrum of industries, from construction, to consulting services, to machinery and tools, there is solid evidence of a pickup in business.

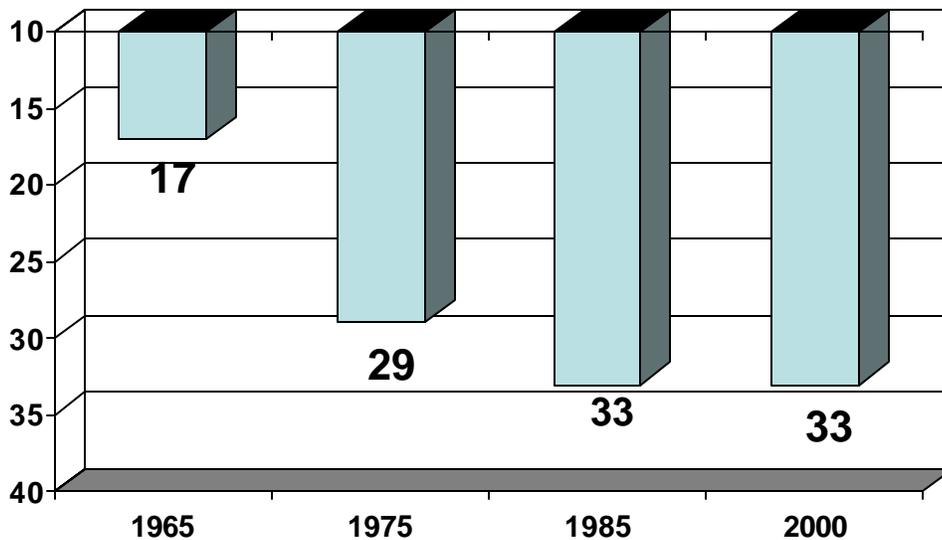


There is a challenge to growth in the Indiana economy that has very little to do with the recession. It was with us during the 1990's, when the U.S. economy added nearly 20 million net new jobs, and it was with us when the economic party ended five years ago. It is shared, to some extent, by most of our Midwest neighbors, although our state's challenge is larger than most. It is a challenge that has no quick solutions, yet cannot be safely ignored.

The problem is that Indiana is not fully participating in the national economic growth engine. We remain a production oriented state with a less skilled, less educated, and less well paid work force in an economy that continues to grow in a different direction. And for the regions outside of Indianapolis the problem is even worse.

The symptoms of this problem are familiar to many of us. Earnings per job in Indiana are lower than the national average, and the gap has slowly grown over the last thirty years. In the mid-1960's, our state ranked 17th among the fifty states in per capita income, but now we can do no better than 33rd. With the exception of manufacturing, where Indiana wages are at parity with their national counterparts, the average wage of every industry in Indiana is less than the national average.

**Figure 2: Indiana's Ranking Among States
Per Capita Income**



In some cases the differences are substantial. In 1999, the average job in the banking, insurance and real estate sector paid about \$31,800 to each worker in Indiana. Nationally, the average was \$39,900. Services industries, including everything from health services to lawn care, paid average wages of \$25,700 in Indiana, compared to \$31,500 nationally. Overall, Indiana earnings per job, which as late as 1982 were roughly at parity with the rest of the country, now amount to about 88 cents for each dollar paid the average worker in the national economy.

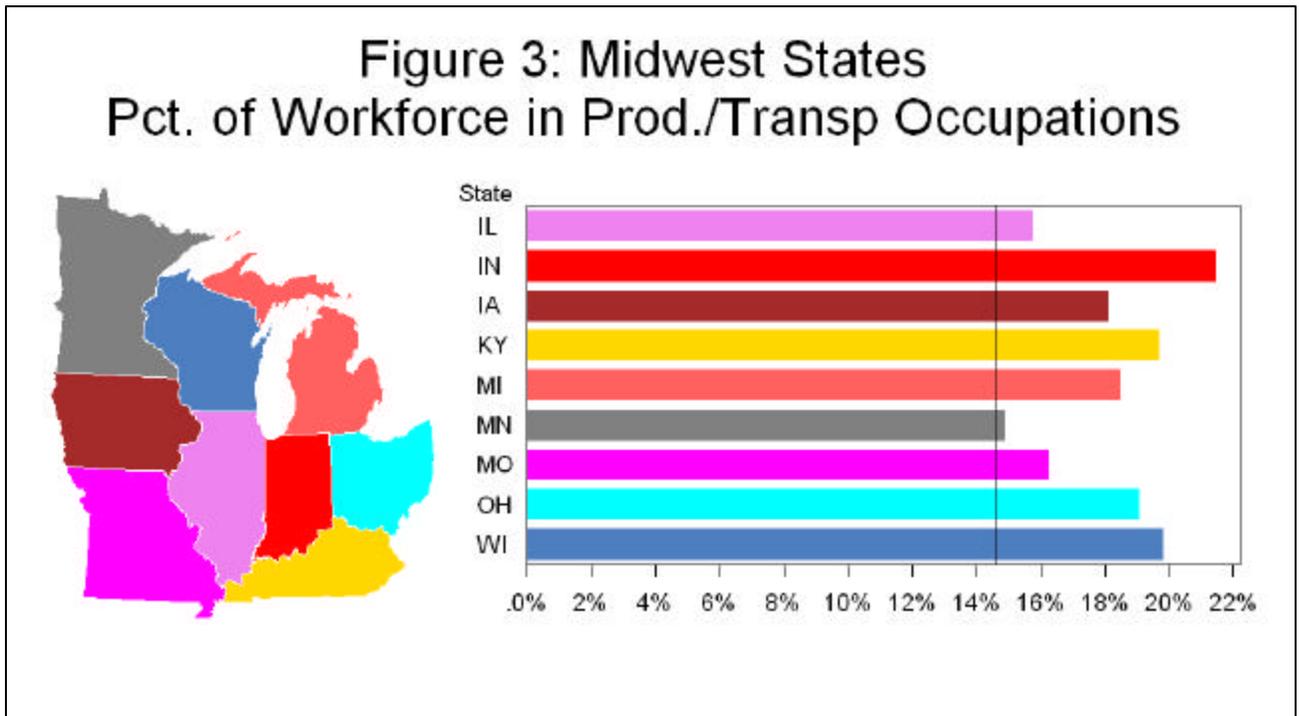
The decline in earnings per job in the Indiana economy, of course, tracks very closely with the decline in manufacturing employment over this same time period. Those changes, we know, were caused by intense global competition and rapid advances in technology. The question is, why do Indiana employers outside of manufacturing pay their workers less?

As an economist, I can offer two answers. First, there are important industries that are essentially no-shows in the Indiana economy. Entertainment, tourism, and many categories of financial, technical, and scientific services have very little presence here.

Secondly, compared to a state like Illinois, or Minnesota, Indiana has very few headquarters. We are, it is sometimes said, a branch plant state. The earnings data suggest that jobs in Indiana tend to have less scope and responsibility than similarly titled jobs in other states.

The exception to these observations is the Indianapolis economy. Indianapolis is the only part of the state that pays wages at parity with the national economy, whose workforce is as well educated as the national average, and whose earnings per job has not eroded over the years relative to the nation. But that just means that the problem for the rest of the state is even worse than the state statistics show.

Indiana's evolution as a production-oriented economy, utilizing a labor force with lower than average educational attainment levels, didn't happen overnight. Like our neighbors in the Midwest industrial heartland, we've reaped the rewards, and suffered the occasional pain, from producing steel, machinery, cars and trucks for the rest of the nation for the better part of the last century.



During the recent recession, it has been the pain that has come to the fore. Yet even before the national economy turned sour, when jobs flowed like water and unemployment rates were scraping the ground, the state economy's production focus kept us from fully sharing in the fruits of growth. The net result is that Indiana workers, who as recently as 1982 were paid wages at parity with workers nationally, now earn on average about 88 cents on the dollar of national wages.

If we were to decide now, at the start of the new century, that we wanted that focus to change, we should understand right away that it could take years, perhaps decades, to see meaningful results. That's longer than the attention span of most elected officials, as well as those of us who elect them. But still we can ask, how could we go about changing the Indiana economy so we can start climbing, instead of falling, in the rankings of economic performance and prosperity?

There are a lot of good ideas out there. Many are already being tried in communities around Indiana. Here's a few that come to mind.

One is to pursue what might be called targeted development. Since the needs are so great, and the public resources so limited, doesn't it make sense to concentrate our efforts on a smaller number of industries that have the best promise for growth? So perhaps we should hire a consultant or use our own judgment to look out into the national economy and place our bets on specific industries that first, have good prospects for creating the kind of jobs we want in the future, and secondly, mesh well with the existing economic base.

That process can come up with some ideas that sound strange to long-time residents. After all, who ever thought that a major music resort could exist in the Ozarks? Or that the sleepy tobacco backcountry of North Carolina could become a center of research and technology?

One of the problems with targeted development occurs when large numbers of communities go after a small number of targets. Life sciences initiatives, for example, are underway in more than forty states. Business people are particularly enthralled with targeting, because it closely mirrors the way they manage their own companies. But the responsibilities of the public sector are different – and starving areas like road maintenance and public administration to take gambles on specific projects may not always be wise.

A more general, but equally promising, idea is the encouragement of entrepreneurship, for both new and existing companies. The churn of new ideas, and the new products and companies they give birth to, is a powerful force for growth. Studies have shown that cities and regions with the fastest net new job growth also have high birth rates – and death rates – for companies and jobs. Areas where the workforce is dominated by safe, long-tenured jobs, on the other hand, have slower job growth.

That's quite a break with tradition in many parts of the state, where loyalty to specific companies, sometimes even extending over several generations, is cherished. But if the Indiana economic engine is to be rejuvenated, some of our traditions and ways of doing things will doubtless have to change as well.

The Economic Window of Opportunity

By

David J. McClelland, M.A., M.S.

As Indiana rolls into 2006 it finds itself with a new window of economic opportunity with the recent legislation of SB 245 and HB 1279, which seek to reform Indiana's telecommunications laws. Although both pieces of legislation seek to reform telecom laws there is a greater and more important goal than just policy change: it is the creation of a stronger more vibrant Indiana economy by generating growth in private capital investment, creation of jobs, and increases in tax revenues through innovation and new broadband infrastructure.

Studies have shown that by taking a proactive approach in telecom reform, the Indiana General Assembly has the necessary vehicle to drive Indiana's economy and reestablish itself as one of the technological leaders in the nation. Telecom reform is vital to the economic health of Indiana, and without reform companies will not invest in new broadband infrastructures, thereby leaving Indiana lagging further and further behind the proverbial bell-curve.

Reform will not only establish Indiana as a technological leader and competitor in the nation, it will also provide footing to make it competitive in the global market. Today the world is flat, and Indiana's competition is no longer only with neighboring states. Competition with other countries such as China, India, and Mexico is vital to economic success. The competition is not just about technological superiority it is about investment and jobs. Indiana is a state facing a crisis point as its economy lags, job loss increases in the manufacturing sector, and the so called "brain drain" continues as state college graduates seek employment elsewhere.

Although Indiana is not the first state to propose telecom reform, recent events may delay the efficient entry of services and Indiana may find itself as one of the last states to enable technological advances. The amendment to strip out statewide franchising from HB 1279 is shortsighted at best. The danger here is that Indiana may again be cast into a pool of states that have taken a passive approach in reform. The window of opportunity is small and if not acted upon will shut out Indiana and its citizens. As commercial business seeks to invest capital in states that have regulations that are more favorable in which to compete, Indiana and its citizens will be forced to look through this window as other states reap the rewards of telecom reform. If Indiana does not take action to provide a fair and competitive market this capital will be invested in other states, and Indiana will find that the economic window of opportunity is shut and when opened the necessary outside investment capital will be gone.

Overall Impact of Deregulation on the Nation

To understand the effects of telecom reform on Indiana's economy one must look to studies and other states that have taken an aggressive approach to reform. Why is reform necessary and what potential does reform offer, not only to individual states, but also the nation? And what does this mean for Indiana in terms of economic growth and technological innovation?

The telecommunications sector is critical to the nation's economic health. It is the 21st century's means by which people communicate and business is conducted. Telecommunications directly affects jobs, productivity, and the nation's ability to compete in the global economy. However, currently there are staggering statistics facing the telecom industry, which indicate that deregulation is necessary.

In 2004, the U.S. Chamber of Commerce commissioned a study that analyzed the economic impact of telecom reform on the nation. The study found that heavy regulation of the telecommunications industry is moving the nation away from its technological superiority. The current status of regulations is beginning to seriously hinder the growth and development of not only the telecom industry, but also the nation. Specifically, the study found that current telecom regulations have cost the nation more than 380,000 jobs and a loss in capital investment of tens of billions of dollars.¹

In addition, the U.S. Chamber study found that the regulatory environment contributed directly to decreased employment, output, and productivity. The study found that there was a 21% decrease in jobs in the telecom sector and a 39% reduction in equipment manufacturing. The reduction in jobs and equipment manufacturing can be directly attributed to telecom companies' depleting revenues.² Depleting revenues and an adverse regulatory environment have caused innovation to remain stagnant. The study blames heavy regulations for the depressed state of the telecommunications industry because it hinders and/or delays investment.

The study also stated that telecom reform would lead to capital spending, increased jobs, investment, and output in the nation. There are some estimates that if changes recommended by the study are made it could lead to \$58 billion in capital investment on network assets and add \$167 billion to the GDP over the next five years.³ However, if the regulatory landscape of today continues to exist it is very unlikely that the U.S. will see this investment.

By increasing capital spending in this sector the U.S. will begin experiencing more innovation in its communications networks while creating jobs in the information technology sector. Using the Standard Bureau of Economic Analysis, figures show that each additional \$1 of capital spending will lead to \$2.86 of output in the telecom sector

¹ Hazlett, T., Bazelon, C., Rutledge, J., Hewitt., (September 2004) Sending the Right Signals Promoting Competition Through Telecommunications Reform: A Report to the U.S. Chamber of Commerce. p. 33.

² Ibid, p.34.

³ Ibid, p.86.

and each additional \$1 million investment in telecom will lead to the creation of 18.2 jobs. The study concluded if there were an increase in the GDP by \$167 billion there would be an increase in employment of 212,000 jobs over the next five years.⁴

As American telecom companies fail to invest capital in innovation of new infrastructures, and other countries such as China and India begin improving their communications technology, the U.S. will not only find itself lagging in the competitive race of technological superiority it will also find more of its jobs overseas as companies outsource to other nations. This pattern will be reflected at the state level, too. As people seek jobs with higher wages they will travel to states that offer employment opportunities that are based on the state's ability to efficiently and effectively use technology in a manner that will allow it to compete in the global market.

So, what does this mean to Indiana? If burdensome state regulations are not reformed then the Indiana telecommunications industry will continue down a path of depressed economics, job loss, low productivity, aging infrastructure, and decreased capital spending. If this path continues then Indiana will lose out on the economic opportunity of these benefits. Indiana will also have failed to take advantage of the opportunity to create jobs through these capital investments. Therefore, it is critical that Indiana begin to provide an attractive regulatory landscape that promotes innovation and investment through fair competition. If Indiana continues its heavy regulatory policies of the past then corporations will take their capital to other states that are less regulated.

Effects of Broadband on State Economies

After analyzing the U.S. Chamber study it is important to understand the impact of broadband on a state's economy. Currently, Indiana ranks 34th in the nation in broadband infrastructure.⁵ This ranking is indicative of the amount of capital being invested into the state for technological innovation. If it continues its regulatory ways then Indiana will continue to fall further behind the bell-curve in broadband infrastructure since regulatory policies discourage investment the state will begin experiencing greater job loss and the inability to compete with other states.

Broadband holds great promise for the state's economic health. The deployment of broadband does not benefit just the companies providing the service, but it benefits the state as a whole from business to consumers regardless of geographic locations. As companies seek to invest capital in rolling out new broadband infrastructure it is critical that Indiana realize the economic advantages that broadband gives a state.

Broadband deployment and access to high-speed Internet offers consumers and business enormous economic benefits and new opportunities for citizens. If there were more broadband deployment then states would begin seeing instant economic gains and benefits to consumers and to business productivity. Sectors such as healthcare,

⁴ Ibid.

⁵ Miller, T., & Associates. (October 2005). Indiana Technology Profile, Metric 2005: Charting Indiana's Progress Toward a Technology-Rich Economy. p.4.

education, and retail sales could be completely transformed while also providing benefits to the economic situation of the states. By creating a regulatory environment that encourages investment and innovations in the telecommunications sector, consumer demand for these services will increase. As consumer demand increases so will the amount of capital spending in faster more reliable broadband deployment thus creating jobs and a competitive environment to offer better services at lower costs.⁶

Two separate studies analyzed the economic impact of full broadband deployment if there were no regulatory policies that hindered the development of new infrastructure. These two studies concluded that full broadband deployment would create about 1.2 million jobs throughout the country.⁷ If there were full broadband deployment the studies indicate that California would generate 170,000 new jobs and New York would gain 90,000 new jobs. Indiana would generate approximately 20,000 jobs while neighboring states such as Michigan and Ohio would create roughly over 70,000 jobs collectively.⁸

Broadband deployment can also be directly related to a state's Gross State Product. By pursuing widespread broadband deployment the ability to strengthen the health of the national and state economies increases. Through broadband deployment researchers have found that many jobs can be replaced from the technology bust of 2001. These increases in employment from broadband roll out can directly improve a state's output and increase and strengthen its economic conditions. As state output increase so will tax revenues from the employment opportunities that broadband deployment offers. Also, states will see increased tax revenues and increased capital spending as companies become more profitable through this technological innovation.⁹

A case study prepared by Laffer Associates analyzed California's Public Utility Commission's role in creating a competitive market place while trying to provide service to all California citizens. The study also analyzed and evaluated the infrastructure, technology, and economic gain from regulatory reform. The main purpose was to examine the role telecommunications plays in the economic health of the state in terms of jobs, tax revenues, and economic growth. The study concluded that regulatory reform dramatically affected the telecom industry's ability to attract private capital investment.¹⁰

The study states that the current regulatory environment under which the telecom industry operates is outdated and is detrimental to consumers, regulators, taxpayers, and

⁶ Brough, W. (December 2003). State Economies Can Benefit from Broadband Deployment. CSE Freedom Works Foundation. p.11.

⁷ Pociask, S., (February 2005). "Building a Nationwide Broadband Network: Speeding Job Growth." TeleNomic Research, available at <http://www.newmilleniumresearch.org/archive/>. & Crandall, R., Jackson, C., & Singer, H., (September, 2003) "The Effect of Ubiquitous Broadband Adoption on Investment, Jobs and the US Economy." Criterion Economics, L.L.C., available at <http://www.Newmilleniumresearch.org/archive/>.

⁸ Brough, W. (December 2003). State Economies Can Benefit from Broadband Deployment. CSE Freedom Works Foundation. p.11.

⁹ Ibid, p.14.

¹⁰ Laffer Associates, Supply-Side Investment Research. An Economic Analysis of the Telecommunications Industry Within the Current California Regulatory Framework. p. 1-2.

private business. Another profound statistic, using the Bureau of Economic Analysis and California employment data, is that every month that deregulation is delayed carries with it an opportunity cost of over \$100 million. This is calculated to show a loss in economic output of \$1.29 billion dollars a year for the state of California.¹¹

The overall conclusion of the study is that California has an economic opportunity through deregulation to protect consumers by promoting a competitive market that will ultimately drive down prices and improve services. The government will experience the benefits of regulatory reform in increased tax revenues due to successful businesses and the creation of new high paying jobs that deregulation offers.¹²

Other studies have found similar findings. In a 2005 study, *Measuring Broadband's Economic Impact*, broadband was shown to directly affect economic activity by allowing business to develop and create jobs in communities with broadband access. This study by MIT and Carnegie Mellon researchers found that between 1999 and 2002 communities that had access to high speed Internet experienced more rapid growth in employment and number of businesses establishments in the IT sector. Also, broadband had a direct affect on the rental housing rates by increasing the property value during the same time period compared to homes that did not have broadband access. The study's overall conclusion is that "communities with broadband access did significantly better than those without." The study concludes that broadband has a direct and important impact on the economic well-being of the states and nation. It is the most vital portion of the nation's central communications system¹³.

Based on the studies analyzed Indiana has much to gain from deregulation and even more to lose by maintaining the status quo. These studies have provided Indiana lawmakers with clear analysis of what deregulation means in terms of economic growth, technological innovation, jobs, and tax revenues. The bottom line is that every month that Indiana fails to change its policy is costing the Indiana economy and citizens millions of dollars. The current legislation allows Indiana a window to begin its economic turnaround and also begin developing a strong technology industry of big business and jobs.

Midwest States That Have Taken On Reform

It is important for Indiana's policymakers to recognize what other states and studies have found. In order for the Indiana General Assembly to make a decision regarding deregulation it is essential that they understand the benefits that reform will offer. As Indiana maintains its current regulatory provisions it should keep a careful watch on surrounding states such as Michigan and Ohio, who have taken a proactive-

¹¹ Ibid, p. 5-7.

¹² Ibid. p. 30.

¹³ Lehr, W., Osorio, C., Gilbert, S., & Sirbu. M., (December 2005). *Measuring Broadband's Economic Impact*, available at [http://www.broadbandproperties.com/2005issues/dec05issues/Measuring Broadband Eco Impact, Lehr, Gilett, Sirbu.pdf](http://www.broadbandproperties.com/2005issues/dec05issues/Measuring%20Broadband%20Eco%20Impact,%20Lehr,%20Gilett,%20Sirbu.pdf).

approach in taking advantage of this window of economic opportunity. They have accomplished this by reforming and deregulating state telecom laws.¹⁴

Michigan and Ohio's decision to reform were based on economics. First, the Ohio act explicitly states that it wants to "rely on market forces, where they are present and capable of supporting a healthy and sustainable, competitive telecommunications market, to maintain just and reasonable rates, rentals, tolls, and charges for public telecommunication service" and "encourage innovation in the telecommunications industry." It also goes on to state that it wants to supply citizens with options for services.¹⁵ These options lead to competition, which lowers prices and improves services for consumers. Second, the Michigan act wants "to allow and encourage competition to determine the availability, prices, terms and other conditions of providing telecommunications services." It also "encourages the introduction of new services, entry of new service providers, the development of new technologies, and increases investment in the telecommunications infrastructure in the state."¹⁶

However, in order to accomplish these goals Michigan and Ohio had to reform their telecom policies in order to attract investment from private business. It is very unlikely that private business would invest in these states were they forced to sell their services at prices set by the government. This type of regulatory environment is counter-productive in encouraging investment because private business will go to other states in which they are going to receive the best return on investment. This creates a number of economic problems for states.

The first problem of a heavily regulated telecom environment is a lack of capital investment, which means a delay or hindrance of new emerging technologies and new broadband infrastructures. Second, the lack of broadband infrastructure will also mean that other private business will fail to come into states because there are not adequate high-speed Internet services that enable business to function at a competitive level. Broadband is the path that enables business to communicate in a real-time efficient manner in order to provide the best services to its customers. The third consequence of not receiving private capital investment for the innovation to new broadband infrastructure is the missed opportunity to create jobs. For instance, Midwestern states such as Illinois, Ohio, Michigan, Kentucky, and Indiana have been plagued by a declining manufacturing sector and must find a way to gain these jobs back. The answer is in the information service sector through broadband deployment. The research findings are clear. Indiana must find a way to expedite the deployment of broadband services and provide a level playing field for all competitors offering voice, data or video services.

¹⁴ General Assembly of Ohio. House Bill 218. 126th General Assembly. (2005).

General Assembly of Michigan. House Bill 5237, "Michigan Telecommunication Act." 93rd Legislation. (2005).

¹⁵ General Assembly of Ohio. House Bill 218. 126th General Assembly. (2005)

¹⁶ General Assembly of Michigan. House Bill 5237, "Michigan Telecommunication Act." 93rd Legislation. (2005).

The Impact of Lower Cable Rates on Indiana Consumers

By

Cecil E. Bohanon, Ph.D., and Zoran Grabovac, B.A.

Introduction

It goes without saying that lower cable-TV rates would be a boon to consumers of cable services. Many observers believe that if appropriate regulatory reforms are put into place, a more competitive environment for cable services will be forthcoming, which will, in turn lead to rate reductions for Indiana cable users. The purpose of this portion of the report is to attempt to quantify the benefits Indiana cable consumers could expect from a more competitive environment. The first section of this paper outlines the conceptual framework for estimating the benefits; the second section outlines the data assumptions used in making the estimation. The third section presents a range of estimates of the benefits of cable rate reductions. The fourth section will consider the capitalized value of those gains and give some indication of the order of magnitude of those gains in the Indiana setting.

Conceptual framework

Economic theory suggests that the benefits consumers obtain from the consumption of goods and services can be quantified in dollar terms¹⁷. The *value* a consumer household places on a good or service of specific quality is measured by their *maximum willingness to pay* for the item. If John and Mary Doe are willing to pay a maximum \$100 per month for the cable service of a particular quality this implies that at a price above \$100 per month they would find it in their best interest to go without the cable service. On the other hand it is assumed they will purchase the cable service if its price is less than \$100 a month.

Suppose the current price they are paying is \$50 a month. The difference between their *value* for the service, \$100 month, and what they actually pay, \$50 a month, is their *consumers' surplus*. Consumers' surplus reflects a dollar value of the gain a consumer obtains from a market transaction. In this case they obtain a gain from their cable TV subscription of \$50 a month or an undiscounted annual benefit of \$600 a year. Note that compared to not having access to cable TV service at all, the Doe's are \$600 a year better off under the current arrangement.

What if the Doe's could obtain the same service at a lower price? It is obvious that their *consumers' surplus* would increase in a straightforward fashion. If competitive

¹⁷ See N. Gregory Mankiw, Chapter 7, Principles of Microeconomics, 3rd edition, Thomson-Southwestern, 2004

forces required their current provider to reduce the price of the service to \$35 a month (or a new provider emerged offering the services for \$35 a month) the Doe's would be \$15 a month ahead, or \$180 a year better off. Put another way, such a price reduction would be equivalent to a \$15 a month or \$180 a year increase in the Doe household income.

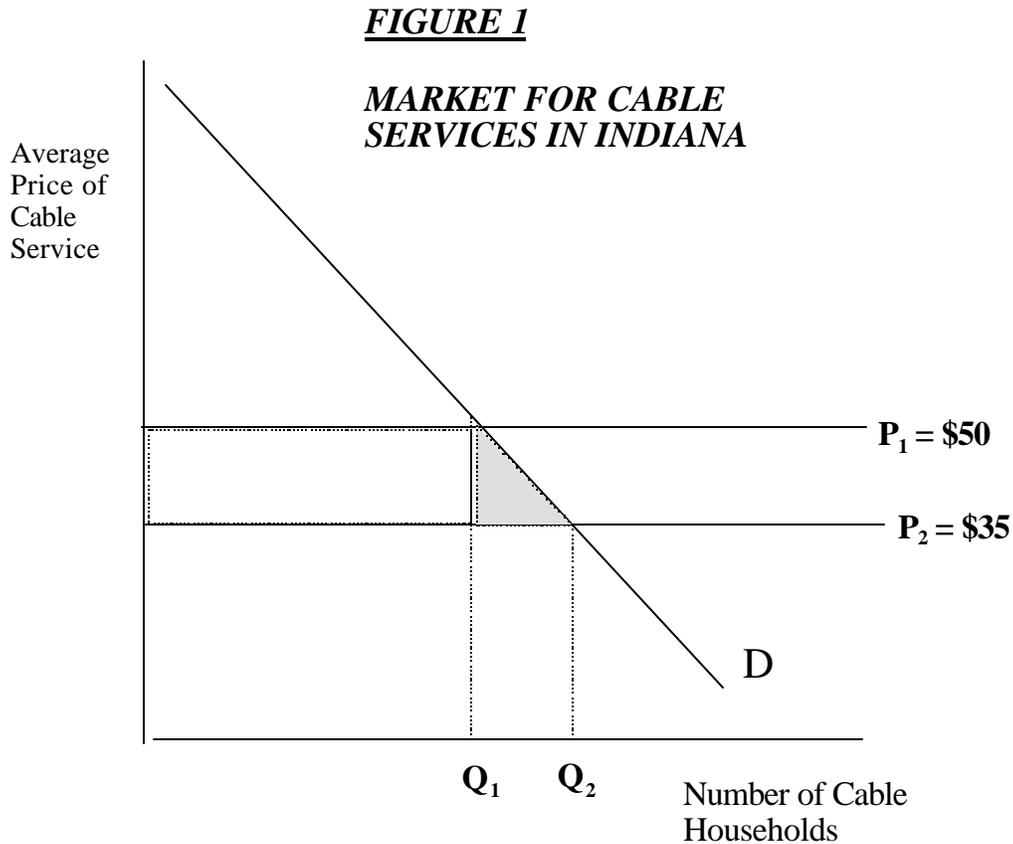
If it is assumed that the decline in price is attributable to increased competition and not to reduce resource cost of providing the service, then the gain of the Doe's is a loss for some factors of production employed by existing cable providers. Put another way, the Doe's are clearly \$180 better off because of the price reduction: the incumbent cable firm is \$180 worse off. But the decline in income to the firm must translate into a decline in income for some factor of production employed by the firm: someone somewhere is \$180 worse off. But this is what one expects: a more competitive environment *transfers* market power and wealth from producers to consumers.

If one assumes that the benefits of the transfer are obtained by Indiana residents— a sensible assumption as the analysis considers residential cable TV users in Indiana— but that some of the current owners of factors of production who benefit from higher cable TV rates are not Indiana residents (such as out-of-state shareholders of cable TV companies) then cable rate reductions would result in a net transfer of wealth to Indiana. Although it is the authors' opinion that a net transfer to Indiana is likely, the analysis will make no effort to quantify the magnitude of this net transfer.

However, there is a second component to a more competitive cable TV environment: reduced cable rates allow more consumers to enjoy the benefits of cable service. These benefits can also be quantified. Suppose George and Martha Jackson did not subscribe to cable service at the original rate of \$50 per month/ \$600 per year. Economic theory asserts that this is because they did not value cable service at \$50 a month. However, if upon a reduction in Cable TV prices to \$35 a month, the Jackson's choose to obtain the service, it must be because they are obtaining consumer's surplus from subscribing to the new service. The size of this surplus, of course, depends upon the value they place on the service which can be anywhere from \$49.99 a month to \$35.01 per month. (For new, additional consumer's surplus between \$.01 to \$14.99 a month)

Assuming the Jackson's valuation is at the mid-point of the valuation range yields additional consumer surplus to the newly subscribing household of \$7.50 per month or \$90 a year. As in the previous case, this is equivalent to a \$7.50 a month or \$90 a year increase in the household's income. However, unlike the previous case this additional gain does not correspond to a loss in surplus to any other party in the economy of Indiana or anywhere else! Given the new users are Indiana residents these are unequivocal net gains to Indiana residents.

This is all shown in Figure 1 below. The horizontal axis indicates the number of cable subscribers in the Indiana market. The vertical axis reflects the price paid by the consumers for cable services. D represents the demand for cable services in Indiana- that is; it tells us how many subscribers there are at any price.



At the original \$50 price it is assumed that there are Q_1 users. The reduction in prices to \$35 increases the number of users to Q_2 . The gains to the original Q_1 users are given by the horizontally shaded rectangle in the Figure. This represents the gains that accrue to the original users such as the Doe's. The gains to the new $Q_2 - Q_1$ users are given by the checkered shaped triangle. This represents to gains that accrue to the new users of cable services such as the Jackson's. Attention will now be turned to estimating these areas for Indiana.

The Data Assumptions

Four variables are required to make estimates of the relevant areas in Figure 1.

The number of cable consumers-- recent data from the National Cable and Telecommunication Association indicates Indiana had 2,418,800 TV households as of January 2005, and 1,460,430 cable households as of September 2004. This implies that 60% of Indiana TV households are cable households.¹⁸ We will use the 1,460, 430 number as an estimate for Q₁.

Average Consumer Price of Cable Services in Indiana-- Recent press release by a major cable TV provider indicated an average national rate for basic service of \$47.70 per month.¹⁹ A recent study by the Phoenix Center for Advanced Legal and Economic Public Policy Studies used a \$50 per month figure based on “reported average revenue per video subscriber” from national data provided by the cable industry.²⁰ We shall use the \$50 figure for our estimate.²¹

Reductions in cable rates due to increased competition-- There are a number of studies that analyze this issue. A recent compilation of the research indicates that “price decreases of 15% or more are common in markets with direct, head-to-head cable competition” with the estimated rate reduction being as high as 42% in some cases.²² The specific reduction that is likely depends upon a host of local factors that vary between locales in Indiana. We shall use two estimates a low-end estimate of 15% and a high-end estimate of 30%.

Expansion of cable service from price reductions— How many new consumers would subscribe to cable if lower rates were forthcoming? Economists formally call this responsiveness of consumers to price changes as the “own price elasticity of demand.” In technical terms this is defined as the percentage change in quantity demanded divided by the percentage change in price, in absolute value terms. There are a number of estimates in the literature as to the own-price elasticity of cable service. These estimates range from .8 to 1.58.²³ As many of these studies are based on historic data when overall cable penetration rates were lower than what they currently are, we would expect the lower end

¹⁸ National Cable & Telecommunications Association, 2006 (available at: www.ncta.com/Docs/PageContent.cfm?pageID=302)

¹⁹ NBC10, *Comcast Enacting Nation's Biggest Cable Rate Hike*, December, 2005 (available at: <http://www.nbc10.com/news/5450043/detail.html?rss=phi&psp=news>)

²⁰ George S. Ford and Thomas M. Koutsky, “*In Delay There Is No Plenty*”: *The Consumer Welfare Cost of Franchise Reform Delay*, Phoenix Center Policy Bulletin No. 13, January, 2006, p. 9.

²¹ Given the \$47.70 figure is for basic cable services and many consumers augment beyond basic service the \$50 price seems reasonable.

²² George S. Ford and Thomas M. Koutsky, op.cit, p.3.

²³ George S. Ford and Thomas M. Koutsky, op.cit, p.8-9; The American Consumer Institute, *An Analysis of Cable TV Services: Are Older Consumers Losing Out?* October, 2005, p. 10, (available at: <http://www.theamericanconsumer.org/cable.pdf>).

of the range to be more reliable estimates. We shall use rather conservative elasticities of .5 and 1.0 for our estimates.²⁴

Estimated Benefits

Given our data assumptions we now report the estimates of the benefits of cable TV rate reductions to Indiana consumers. Table 1 reports two estimates of the benefits that would accrue to current cable TV users, the first assuming a 15% price reduction, the second a 30% price reduction. The gains are, in annual terms, \$131.4- \$262.9 million a year.²⁵

Table 1: Annual Benefits to Current Cable Consumers	
<i>Assumption about rate reductions</i>	<i>Annual Benefits of reduction in Cable costs to existing users</i>
15%	\$131,438,700
30%	\$262,877,400

Table 2 reports four estimates of the number of new users of cable TV services, given the two assumptions about price reduction and the two assumptions about the own-price elasticity of demand for cable service. Note we estimate that there would be 109,000- 438,000 new users of cable services.

Table 2: Number of New Subscribers		
<i>Assumption about rate reductions</i>	<i>New users Of Cable Services/ with elasticity of demand .5</i>	<i>New users Of Cable Services/ with elasticity of demand 1.0</i>
15%	109,532	219,065
30%	219,065	438,129

²⁴ Note that lower elasticity figures lead to lower benefit estimates. Our use of conservative elasticity figures tends to bias our results downwards. We are using a point elasticity estimate. See Mankiw, Chapter 5, op.cit.

²⁵ As noted above all of this would be a clear gain to current Indiana cable households, however, this gain is a transfer from factors of production employed by cable providers. To the extent some of those factors of production likely reside outside the State of Indiana, it is likely some portion is a net transfer to Indiana.

Table 3 estimates the gain to these new users under the price reduction- elasticity assumptions. These gains range from \$4.9 – \$39.4 million dollars a year. Note that these gains are pure gains not offset by a loss to any factor of production inside or outside Indiana.

Table 3: Gains to new Subscribers		
<i>Assumption about rate reductions</i>	<i>Benefits to new users/with elasticity of demand of .5</i>	<i>Benefits to new users/with elasticity of demand of 1.0</i>
15%	\$4,928,951.25	\$9,857,902.5
30%	\$19,715,805.0	\$39,431,610.0

Table 4 reports estimates of the total benefits to Indiana cable TV consumers under the two price reduction- elasticity assumptions. The benefits range from \$136.4 - \$302.3 million in annual benefits.

Table 4: Total Consumer Gains		
<i>Assumption about rate reductions</i>	<i>Total Consumer Benefits /with elasticity of demand of .5</i>	<i>Total Consumer Benefits /with elasticity of demand of 1.0</i>
15%	\$136,367,651.25	\$141,296,602.50
30%	\$282,593,205.0	\$302,309,010.0

Magnitude of the Benefits

There are a number of ways of considering the magnitude of these benefits. One should note that the benefits, as reported are annual benefits. Considering those benefits to be permanent annual additions to consumer well being, one can readily “capitalize” the value of the gains into an asset value.²⁶ Using a generous discount rate of ten percent, the capitalized value of the stream of benefits from reduced cable TV rates estimated in this paper to Indiana cable consumers is \$1.36- \$3.02 billion: or put another way cable rate reductions are equivalent to increasing the assets of Hoosier cable users by up to \$3 billion.

²⁶ The present value of a permanent annual addition to income of A is given by A/r , where A is the annual amount and r is the discount rate.

At the upper end of the capitalization estimate, \$3 billion is equivalent to the current annual Gross National Income of Barbados. It is interesting to note that even the annual benefits of \$136.367 million are in excess of World Bank estimates of Gross National Income of ten sovereign nation states, one of which has a population of 1.5 million!²⁷

²⁷ GNI figures from the World Bank 2005, <http://siteresources.worldbank.org/DATASTATISTICS/Resources/GNI.pdf>; Population Figures from the World Bank 2005 <http://siteresources.worldbank.org/DATASTATISTICS/Resources/POP.pdf>

The Public Policy of Video Franchising

By

Dom Caristi, Ph.D., and Barry D. Umansky, J.D.

*A Brief History*²⁸

Cable television service began in the United States as simply a means to sell television sets. Appliance dealers in mountainous areas in Pennsylvania and Colorado, among other locales, were finding it difficult to sell television sets when their customers at the store couldn't see a clear, strong signal from TV stations that wither were too far away or where intervening terrain blocked the signal. In order to get television signals from major cities a long distance away, or just from the other side of the mountain, antennas were placed on the mountaintop and a coaxial cable was run to the appliance store below. Unfortunately when customers got their new televisions home they didn't get the same quality of reception. So appliance storeowners and others began stringing cables to connect viewers with the outside world of television. Thus cable television, then called "Community Antenna Television" was born as a means of providing better television reception for remotely located communities.

It was decades before the government got involved in the business of regulating cable. In fact, when first approached with the prospect of regulating cable TV, the Federal Communications Commission declined, stating that cable was not really part of their jurisdiction. That changed, though, as broadcast television stations began to see cable as a potential threat, diminishing the size of their viewing audience when cable began to "import" TV stations from far away. When cable systems began to use microwave facilities to relay TV signals over large distances, the FCC felt it then had the jurisdiction to regulate cable, on the twin theories that cable systems now were using the "airwaves" and because their carriage of distant signals "affected" interstate commerce, that is, affected local stations. This position was position was affirmed by the United States Court of Appeals in 1963.²⁹ The Supreme Court in the *Southwestern* case,³⁰ also held the FCC's new approach to regulating cable TV was "reasonably ancillary" to broadcasting and therefore could be justified.

Through a series of congressional legislative actions, FCC decisions and court challenges, we now have a system of cable regulation that is less restrictive than existed thirty years ago, but still involves more regulation than opening a local store on Main Street. Because the rollout of a cable television system involved access to public rights of

²⁸ For a more comprehensive review, see Sterling & Kittross, *Stay Tuned: A History of American Broadcasting*, 3d ed., 2001.

²⁹ *Carter Mountain Transmission Corporation v FCC*, 321 F.2 359 (1963).

³⁰ *U.S. v Southwestern Cable Co.*, 392 U.S. 157 (1968).

way and the new medium took on the appearance of a public utility, cities took on the role of a franchising authority. Federal law has acknowledged localities' interest in these matters and has authorized local communities to negotiate with cable providers; but this federal regulation is explicit in what *cannot* be regulated locally. Cities cannot dictate what television signals must be carried.

Also in most American communities, local authorities have absolutely no jurisdiction over most cable rates. Only basic cable rates can be regulated, and only in those communities where there is no effective competition. The number of those communities declines daily. In communities where 15 percent of the population subscribes to satellite, the FCC finds effective competition exists; hence no rate regulation is permitted.

Although "access channels" once were mandated by federal law, local franchising authorities now have the discretion of whether to require cable providers to offer local public, educational and governmental access channels in their communities. Cities can opt to require none of these channels; they may also opt to require more than one of each in the three categories. Those wanting to provide cable service have no choice but to comply. Of course, because cable rates generally are not regulated, the cost of operating these local channels inevitably is passed along to the local cable customer.

The Current Landscape

Telecommunications regulation has a long history of "catching up" to the technology. Telephone companies began in the nineteenth century yet the Communications Act was not created until 1934.³¹ Television was first introduced to the American public in 1939. In 1948 the FCC stopped licensing stations for *four years* while it determined how it would ensure a fair distribution of television station assignments throughout the country and what to do about the new technologies of UHF and color TV.

Competitive broadband video, which can act much like "cable television," can now be provided by any one of multiple conduits already entering Hoosier homes. Although the initial offering of cable TV services required tearing up streets or parking bucket trucks where they would block traffic, these complications and problems do not attach to competitive broadband entry. Now, the same pipe that provides cable, telephone, internet or even electrical service can be used to provide video to the home. Some broadband providers simply offer their services "over the air" with no requirement of "wired" access to the home or business. In a digital world, companies are no longer "cable" companies or "telephone" companies. The same line that carries phone calls can carry Internet data streams or video channels. They're all just 0s and 1s in the digital world.

³¹ 48 Stat. 1064, June 19, 1934.

Advantages of Statewide Franchising

It is without question that requiring potential video providers to negotiate with each and every franchising authority with jurisdiction over the areas in which the provider wishes to operate results in enormous legal costs to the provider. As such, a potential video provider may well choose to forego initiating services (and investing in physical plant, hiring employees, paying taxes, etc.) in a state or region where local franchising requirements would entail significant start-up costs. Their choice, of course, would be to provide service and other benefits to other states or regions of the country. This phenomenon, as discussed below, also would occur when an existing video provider might wish to offer services to areas contiguous to its existing video operations.

Transparent Process and Costs

Under the current franchising system, negotiations between the provider and the local community have included provision of public, educational and government (PEG) access channels, but they may also contain much more. Because cable providers recognize the profit potential of a franchise in a large city over the 15-year franchise, some communities have been able to extract promises from providers that are completely unrelated to the provision of cable television service. Instances of communities receiving revenues for parks, equipment for emergency services, library enhancements and many other positive community improvements have been included in franchise agreements.

While it may be difficult to argue against community improvements, one must recognize where the revenue comes from for these improvements. Some city officials have been somewhat disingenuous in their criticism of cable costs when they have knowingly engaged in negotiations that have caused the local cost of cable to rise. In addition to the franchise fee paid for by cable customers, they also are made to bear the “hidden cost” of another form of taxation.

Statewide franchising would prevent local communities from extracting “extras” unrelated to the provision of services from providers. Cable subscribers should not be expected to bear the burden of funding “pet projects” of city officials, as worthwhile as they may be. If a community wants to fund improvements it ought to do so in the open rather than through “back room negotiations” funded by cable subscribers.

Attracting Capital Investment

Indiana has an opportunity right now. Communication companies seeking favorable regulatory environments are looking to invest. Telecommunications companies doing business in multiple states will invest capital in those that provide the most promise. Michigan passed a telecommunication reform bill and *Detroit Business* reported that AT&T would now proceed with Michigan’s portion of \$4-5 billion of fiber optic investment planned by the company.³² Texas has moved to statewide franchising and is already seeing increased interest and investment. Multiple states are considering bills that

³² Amy Lane, “AT&T to Battle Cable Companies,” *Detroit Business*, Jan. 16, 2006, p. 1.

would provide statewide franchising. New Jersey withdrew draft legislation with a plan to reintroduce a bill in the spring.³³ A Maine legislator submitted then withdrew a proposal.³⁴ Virginia has a proposed bill in the legislature.³⁵ Missouri is likely to consider such a law in its next legislative session. Telecom Policy Report last month stated that many more states are likely to consider telecommunication deregulation legislation before the year ends.³⁶

In addition, both houses of the U.S. Congress have had legislation introduced that would make statewide franchising the national norm.³⁷ Whether it happens this year or not is the subject of a great deal of speculation. If it does not, similar legislation is likely to be introduced next year. Last November, the Federal Communications Commission issued a Notice of Proposed Rulemaking into whether local franchising authorities impose barriers for new entrants into video services markets.³⁸ If and when statewide franchising becomes a federal mandate, all states will be on a level playing field and any competitive advantage that Indiana had for attracting investment will no longer exist. The irony here is that if the federal government does not act, it is to Indiana's advantage in attracting capital investment. If Indiana is just one of 50 states that operate the same way, there is nothing to make this state more attractive to investment.

Inviting Participants to Expand Service Area

There are administrative costs to any business. A video service provider currently wanting to enter a community must negotiate individually with that community. Thus an entrant wanting to serve one town in Indiana may not try to serve other communities because of the increased administrative costs in drawing up a new franchise agreement with another community. Given a choice, a potential video provider may select a community for whatever reason and ignore dozens of other nearby communities because of the barrier presented by additional franchise requirements.

Alternatively, if there is a system of statewide franchising, providers that had originally intended to serve only a certain community might actually be enticed to go beyond the original target, since there would be no added administrative burden. Seen in this way, franchising community by community is a disincentive for existing video providers (as well as new entrants) from expanding their services outside of an existing coverage area.

³³ Jeff Pillets, "Cable-Choice Bill Pulled in Senate," *The (Hackensack, NJ) Record*, Jan. 6, 2006.

³⁴ "Maine Says 'No' to Verizon," *CableFax Daily*, Vol. 17, No. 20, Jan. 31, 2006.

³⁵ "Va. Becomes 4th State Eyeing Statewide Video Franchises," *Telecom A.M.* Jan. 17, 2006.

³⁶ "State Telecom, Franchise Bills Could Be Prolific," *Telecom Policy Report*, Vol. 4, No. 3, Jan. 17, 2006.

³⁷ See, e.g., S. 1349 and H.R. 3146, each introduced on June 30, 2005, and each titled "Video Choice Act of 2005." One of the proposals in Congress has included a provision of statewide franchising only for Bell companies (previously referred to as Regional Bell Operating Companies, or RBOCs). The Indiana legislation is not considering such a proposal, nor should it. Differential regulatory treatment for RBOCs made sense 20 years ago in the "new world" of a divested AT&T. Those conditions are long gone now.

³⁸ "New NPRM Rocks Local Franchise World," *Telecom Policy Report*, Vol. 3, No. 42, Nov. 7, 2005.

Addressing the Concerns

Build-out Concerns

Frequently raised as a concern to allowing statewide franchising is the belief that new entrants will not necessarily build out their new networks quickly, instead focusing on small, lucrative areas. Everyone wants to see rapid deployment of these new entrants.

There is absolutely no correlation between whether a franchise is awarded locally and the rate of its build-out. Under decades of local franchising authority, cable television providers have shown varying success at rolling out their services to an entire community. No cable company was expected to provide services instantly to an entire community; each one was expected to expand its network incrementally, and some did so ahead of proposed schedule, some did so according to schedule, and some were woefully behind schedule. Local franchising had no effect on the matter.

The adoption of new technologies naturally occurs over an S-shaped curve, as explained decades ago by Everett Rogers in the seminal work, *Diffusion of Innovations*.³⁹ With or without regulation, diffusion of new technologies occurs along a somewhat predictable pattern. Some people will adopt the new technology rather quickly, some will never adopt it, and the vast majority will fall somewhere between the extremes. Cable providers have been rolling out internet services and telephone (Voice over IP) using their existing networks, and still they do so incrementally, not all at once. This is the natural evolution of a new technology.

Loss of Local Control

This issue has been addressed somewhat in the section on improved negotiations. The concern expressed by some communities is that a statewide franchising agreement would remove the community's authority.

One needs to examine precisely what authority the local community has:

- For all intents and purposes, rate regulation is not a possibility. Statewide franchising would have no effect.
- Statewide franchising would not result in any loss of franchising fee revenues. Communities would still have complete discretion over how these franchise fees would be spent in the community.
- Enforcement of local rights of way would still exist. Even if video services were franchised statewide it would not eliminate the police powers available to communities. Communities would not lose any authority over traffic, zoning or other local control.
- The elimination of local franchising would impact the demand of a community for local access channels (public, educational and

³⁹ Everett M. Rogers, *Diffusion of Innovations* 5th ed (2003) Free Press. First edition was published in 1962.

governmental). Despite claims to the contrary, statewide franchising would not eliminate the ability to require access channels, but it would result in local jurisdictions being prohibited from demanding more access channels than the state franchising authority would require. It deserves repeating that the demand for additional access channels incurs an additional cost to cable subscribers, so the more cable channels demanded by a community, the more a provider is likely to charge for the service. The result of the proposed statewide franchising would result in a statewide standardized number of access channels.

In sum, local communities lose only the ability to negotiate precise terms of the franchise. Under statewide franchising they do not lose access channels. They do not lose franchising fees. They do not lose police powers or their rights of way.

Conclusion

The advantages of a program of statewide franchising for video services far outweigh any potential disadvantages. When Texas was the first state in the nation to open the door to statewide franchising, the clock was started on a transition from micromanagement of video franchising at the smallest levels (some communities franchising services for only a few hundred homes) to franchising at a more manageable statewide level. New entrants are going to be attracted first to those states where there is the least resistance to their entry. Texas currently has a distinction that no other state can claim. It is highly likely that many other states will follow Texas in providing statewide franchising. With each month that passes, any competitive advantage that a state has by providing statewide franchising is likely to decline as more states update their legislation. Indiana has an opportunity to move ahead of other states. The longer it dawdles, the less its competitive advantage will be.

The Road Ahead: Potential Impact of Telecom Reform

By

Robert E. Yadon, Ph.D.

Introduction

Two major papers in Indiana, the Indianapolis Star⁴⁰ and the Ft. Wayne News-Sentinel⁴¹, recently endorsed the telecom reform bill (SB 245) in their respective editorials. Inside the Indiana general assembly, the majority in both the house and senate, and both sides of the aisle are clearly in favor of some advanced degree of reform. Labor is on board as a proponent, and a recent series of amendments out of the house won the endorsement of the majority of mayors throughout Indiana. While this is all positive, the devil is always in the details of the final legislation, and the verdict on this legislation awaits final action of the general assembly in the days ahead.

What is the potential to stall or sidetrack this agenda? Indiana is clearly at a crossroads, and there is always a risk it might take the wrong path. Passage of a watered down bill is as dangerous to our economy as not passing reform legislation at all. The unfortunate, negative consequence to Indiana is it may have wasted the last two years to craft a meaningful reform bill, only to pass legislation that severely hampers its chances of meeting its goals. In the end, there is no point in funding the construction of a hotel if government is not going to pave the road in front of it, or worse yet the hotel is empty and you always have the “No Occupancy” sign lit. I think most in the general assembly would agree, what Indiana needs is final passage of telecom reform legislation that will propel our economy forward. It must equitably serve the needs of both metropolitan and rural areas of our state, and not forestall economic recovery or the introduction of competition, as some would ask. What issues are still on the table?

Special Entitlements

In 1984 with the breakup of the Ma Bell monopoly, consumer groups feared prices would immediately soar to the detriment of those on fixed income, and the elderly would be forced to live without basic phone service. It didn't happen. In fact, FCC figures indicate that over the next eighteen years, while telephone prices remained roughly the same, telephone penetration in Indiana actually increased from 90.3 percent in 1983, to 95 percent in 2001. Today, that monopoly for residential service is nearly gone as most in Indiana have a multitude of choices for telephony service (ILEC, CLEC,

⁴⁰ “Telecom reform can't be put on hold”, Indianapolis Star, February 6, 2006.

⁴¹ “Take the fast track to broadband”. Fort Wayne News-Sentinel, January 16, 2006.

cable modem, cellular, and internet-VoIP),⁴² and the ILEC's control of the residential marketplace has dwindled to below 50 percent. The fact is, there are only a few elements of the industry that remain regulated, and those need to be phased out in this competitive landscape.

Here we are, 22 years later, and we still have consumer groups like AARP speculating the sky is falling and under deregulation and the rate of basic telephone service will skyrocket. They were wrong before, and they're wrong now. First, if the wire line telephone business is fully deregulated and allowed to compete on a level playing field with other firms already in the market, it's highly unlikely that the ILEC's would drive additional customers away with unbridled rate increases. That scenario doesn't hold water from a business case or economic sense. On the contrary, Indiana's new regulatory landscape will become the poster child for surrounding states. Under the microscope, ILEC's in Indiana can ill afford any unwarranted or unnecessary rate increase when also hoping to champion a national telecom reform agenda.

Second, in a competitive, deregulated environment, economics suggests price should be allowed to respond to market pressures and approach the actual cost of providing service. This does not include a statutory mandate to provide entitlements to individuals based on age alone. AARP does a creditable job of negotiating with individual businesses for reductions in rates for hotels, car rentals, etc., for its members, but these adjustments are voluntary and not a matter of law. True, this does not eliminate the need for Indiana to meet social obligations like Universal Service, and federal and state assistance programs (Lifeline; Linkup) and continue the support necessary to guarantee affordable telephone service to low income households at or below the poverty level. Yet, Indiana has a proud history of helping those who are truly in need. These assistance programs were largely responsible for increasing telephone penetration in Indiana over the past eighteen years. This legacy continues as the current bill, as amended, sets the qualification benchmark at 175% of the federal poverty level. With these federal and new state safeguards already in place, the most vulnerable of our citizens, those on low and fixed income, will continue to afford telephone service based on documented need, not some lobby-manufactured voodoo that we are all compelled to pay for special entitlements based on age alone.

Finally, the threat of future telephone rate increases as a result of SB 245 is speculative at best. Prior to divestiture, there was no competition in wireline services for residential customers. Cable was technically limited to the provision of video entertainment, there were no cellular telephone companies, the Internet was restricted to military and research university applications, and VoIP wasn't even an acronym. Will there be rate adjustments in the future? Maybe, but the reason rests more with the rebalancing going on within the communications industry, and the inefficiencies of price cap regulation that has historically kept telephone prices below cost. But everyone needs to remember that future increases are limited during a three-year transition period, and are only allowed after broadband service is available to 50-percent of households within

⁴² Loomis, David G. & Swann, Christopher M., "Intermodal competition in local telecommunications markets." *Information Economics and Policy* 17 (2005) 97-113.

an exchange area. Only the marketplace can correctly set price in a competitive environment, and Indiana consumers will choose accordingly. In the end, if the ILEC's set their basic service prices too high, then they will continue to lose market share to the competition (cable, CLEC, cellular, VoIP, etc.).

Ridiculous Suggestion of Redlining

One of the more absurd suggestions by opponents is that the telephone industry will engage in a willful program of redlining of broadband services in Indiana. Again, if history proves correct, exactly the opposite will happen. Dating back to the era of Theodore Vail, the telephone industry evolved under the motto, "One Policy, One System, Universal Service" for all. In short, it's part of a corporate culture that has resulted in over 95% telephone penetration of U.S. households today. If there is factual evidence to the contrary, it hasn't been produced.

Let's set the record straight, redlining is illegal and immoral, and requires no additional enforcement in a statewide franchise agreement. By federal law, common carriers are prohibited from subjecting any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage. This is sometimes confused with "equal access" requirements at the state or local level that force a provider to build in areas where the number of available customers (density) may not support construction, maintenance, or ongoing service in that area. For example, cable systems have been forced to provide "equal access" within specific franchise areas under the reasoning they did so with the economic protection of a 100% market monopoly. Cable systems are not, however, required to meet that same benchmark beyond their franchise area; into each county for example, nor should they unless all providers would have to meet this unrealistic test.

COMPANY	BROADBAND INITIATIVE	ALSO DOING
AT&T	Project Lightspeed 18 million homes by 2008, 3 million this year, 9 million in 2007	Homezone combines DSL, DISH satellite available 2Q 2006
BellSouth	Fiber to the curb	WiMAX broadband wireless, ADSL 2+
Verizon	FiOS reaching 3 million homes per year to 15 million to 20 million by 2009	DSL extensions Fixed wireless trials
Qwest	Qwest ChoiceTV over VDSL to limited communities in Arizona and Colorado, HFC network in Omaha	No specific plans announced

All four companies are doing FTTH in green-field developments.
Source: Carol Wilson, "Big telco initiatives not the whole broadband story," [TelephonyOnline](#) (Feb 6, 2006)

The table above shows that the major communications firms like Verizon and AT&T have already begun the process of testing and deploying broadband technologies that will help return the United States to a leadership position in the global broadband community. Given this landscape, the goal for Indiana is to open the door, put out the welcome mat and elbow our way to the front of the line for investment dollars. When looking at broadband deployment we have a perfect case study right here in Indiana.

. Over the past year, Verizon has been engaged in the remarkable task of deploying fiber to the premise (FTTP) for residents of Ft. Wayne/New Haven and Allen County. Verizon FiOS Internet Service is provided by Verizon Online and uses fiber-optic cable, instead of copper wires, to directly link residential customers to the Verizon backbone. This deployment involved over 800 subcontractors, a \$75 million investment by Verizon, created 200 new jobs while offering high bandwidth internet service to virtually every resident.⁴³ Exceptions include multiple dwelling units (MDU's) where separate, negotiated contracts are required, and a small section of Allen County served by Sprint. This Indiana project is evidence that redlining is a myth. While Verizon has announced no immediate plans to deploy FiOS-TV in the Ft. Wayne market, that decision can probably be expedited under statewide franchising.⁴⁴

As a matter of corporate policy, Verizon has constantly held the practice of redlining to be both immoral and bad business. This hasn't stopped opponents from making unsupported claims to the contrary. In the case of rollouts in New York, a local newspaper serving the Westchester and Rockland communities took upon itself to research claims of redlining in its area. The paper ranked 75 communities in the Westchester area and 40 towns in Rockland County by median household income and examined each to see which Verizon has targeted. The results of the study indicate that communities targeted by Verizon for broadband service do not support charges the firm was focusing only on the richest areas. In fact, the newspaper said, "Viewing the numbers a different way shows Verizon's choices are tilted slightly more toward wealthy communities, but not to the degree where it would be fair to say the company is ignoring low-income cities, towns and villages."⁴⁵

Not all future broadband deployments in Indiana will involve fiber to the premise, like Verizon's FiOS system. As the table above shows, each ILEC will determine the best technical solution to deploy. AT&T's Lightspeed strategy, for example, will likely use some high-capacity version of DSL technology.⁴⁶ Regardless of the technology, fiber to the premises, or fiber to the node, Indiana consumers may soon see a massive rollout

⁴³ FiOS internet service is offered to residential customers in various download increments, starting at 5 Mb/s up to 30 Mb/s.

⁴⁴ In Ft. Wayne, future deployment of FiOS-TV would be in direct competition with Comcast. For a discussion on the impact of direct competition in Indiana see the section entitled, "The Impact of Lower Cable Rates on Indiana Consumers," in this report.

⁴⁵ Drury, Allen. "Verizon denies redlining allegations," *The Journal News* (November 29, 2005).

⁴⁶ One option is to use ADSL2+ to deliver between 12 Mb/s and 24 Mb/s service over copper loops of up to 5000 feet. Also, VDSL2 can offer consumers up to 100 Mbps up and downstream. VDSL2 is a fiber to the hub technology that brings "fiber like" bandwidth to the household via copper telephone lines.

of broadband technology by the major ILEC's that provide phone service to over 80 percent of Indiana's telephone households.⁴⁷

While Verizon's deployment is currently a residential, internet-only rollout, expansion to include commercial customers is not far away. This comes as good news to Ft. Wayne firms like Raytheon and Star Financial Bank who are waiting in the wings. Common themes when talking with executives include broadband as an enabler for recruitment, allowing for small office/home office (SOHO) flexibility, high speed connections with vendors or sub-contractors, communication between remote offices or branches, and of course e-commerce opportunities for retail establishments and entrepreneurs.

Franchising Dichotomy

At the front end of this paper, Dr. Pat Barkey suggested we at least recognize that Indiana's economy is a dichotomy. That is, whatever economic success the state enjoys it is not evenly distributed across the each county. In fact, two clusters appear when examining the data. There is the Indianapolis cluster, and there is everyone else. So while Indianapolis might be doing fine, the same can't necessarily be said for those outside the Indy metro area.

While the issue of statewide franchising is examined earlier in this paper, members of the general assembly who serve constituencies outside the Indy metro might have pause to question the agenda of opponents who seek to delay the rapid deployment of broadband services to non-metro and rural areas of the state. In fact, broadband service would be one equalizer that helps propel our cities and rural towns onto Indiana's economic playing field. If the objections of opponents like the Mayor of Indianapolis are based on ancillary issues that are only secured via the ability to negotiate a stand-alone local franchise, then the balance of Indiana should not be held hostage. Let Indianapolis negotiate separately if they must, perhaps by placing their five percent franchise fee on the table, but do not deny or delay a critical element for economic recovery to the rest of the state. In the end, Governor Daniels position as a proponent of SB 245 represents the best interests of the entire state of Indiana, both urban and rural.

Conclusion

Indiana indeed is at a crossroads, but the legislative road is well lit. Senator Hershman and the other co-sponsors in the senate and house have crafted an excellent roadmap. Indiana can improve its chances for a successful journey by removing those impediments to outside capital investment, competition and eventual economic growth. It's time to enable all in Indiana who desire to compete in the information economy with that opportunity. Indiana can attract new companies, generate more jobs and keep our best and brightest right here in Indiana.

⁴⁷ The ILEC share of the Indiana residential lines was listed at 88.5% for 2004. See [IURC Telephone Report to the General Assembly](#) (2005).

While Indiana was the first state to regulate telecommunications back in 1885, it also should boldly be one of the first to deregulate this industry. Great progress has been made, but Indiana's representatives need to be firm and reject opposition rhetoric that is protectionism at best, and anti-competitive at the outside. What Indiana truly needs is a complete reform bill, to include statewide franchising, to move forward. It's about the information age, it's about new commerce, but most of all it's about the future of Indiana, and it's about time.

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The opinions expressed in this paper are those of the individual authors and the Digital Policy Institute alone and do not necessarily represent the views of Ball State University.