

# The Effect of Competition on Cable TV & Broadband Internet Services in Iowa

Strategic Economics Group Whitepaper  
Prepared by Harvey Siegelman and Daniel Otto<sup>1</sup>  
September 13, 2004

There are several alternative arrangements to provide cable TV service, broadband access and/or competitive local telephone service in non-metro communities in Iowa. In many markets, Mediacom or Cox Communications is the sole provider of such services provided over copper cable or hybrid copper/coaxial. DirecTV and Dish Network offer similar services via satellite to many Iowans. In some communities, consumers also have the option to choose broadband service through DSL lines provided by Qwest or other providers. In 14 Iowa communities, the city operates a cable TV system and may offer broadband service.

This report examines differences in rate patterns for communication services in those different market settings. We compared the differences in consumer prices for cable TV and broadband service in communities that have effective competition, and in those that do not have such competition.

Table 1 presents individual and summary information on cable TV and broadband service in 32 major markets in Iowa where Mediacom or Cox Communication (in Council Bluffs) are the exclusive providers of cable services. The rate for Basic cable TV service ranges from \$8.95 to \$16.95, with an average monthly rate of \$13.57. Extended Basic packages in these communities range from \$28.95 to \$45.50, with a monthly average of \$42.95. Upgrades to digital packages generally add at least \$10 to the monthly cost. Broadband access over cable generally costs the customer \$42.54. For Mediacom consumers who choose internet service without subscribing to at least the basic level of video service pay \$10 more - an extra 24%.

A second set of Iowa cities have cable TV services provided over a municipally owned and operated utility. Table 2 presents individual and summary data on rates in these cities. Although packages are not identical in terms of number of channels, they do divide into basic and expanded basic categories with several add-ons available. In all of these cities, Qwest offers the option of DSL broadband internet for \$31.99 per month.

## Illustrating the Effects of Competition

In cities where Mediacom competes with the municipal service, or with other providers, *Mediacom has reduced their rates to respond to the competition.* Generally, the Mediacom rates in cities with municipally-owned cable systems are lower than in cities where Mediacom is the sole provider. In communities where competition is not available, the average price difference is:

---

<sup>1</sup> Harvey Siegelman retired in 2001 after serving as Iowa's State Economist for the previous 20 years. He is an Adjunct Professor of Economics at Drake University and president of Strategic Economics Group. Dan Otto is Professor of Economics and Extension Economist at Iowa State University and Senior Economist with the Strategic Economics Group. This reports was commissioned by Fiberutilities of Iowa.

- \$15.07 higher (54% higher) per month for an expanded basic
- \$16.07 higher (43% higher) per month for a minimal digital cable package
- \$17.72 higher (26% higher) per month for maximum digital cable package

On average, Mediacom customers in communities without competitive broadband service pay between 12-16% more than Mediacom customers living in communities with competition.

Residents of communities with municipal cable competition save between \$15.07 and \$17.72 each month on the most frequently selected video services. On average, each month they save an additional \$5.79 on broadband internet access. Residents choosing both services save between \$20.87 and \$23.51 per month, or between \$250 and \$282 each year. Keep in mind that the competitive rates charged by these municipal utilities also include the revenue necessary to cover their debt service and retire the bonds that enabled them to construct their municipal network. In summary, *Mediacom customers in communities without competition pay between 22% and 32% more for comparable services.*

### **The Impact on Consumers**

To illustrate this point, the typical resident in a competitive market saves an average of \$266 (averaging \$250 and \$282) per year on cable television and internet services alone. Consumers could use the \$266 additional annual dollars per household for increased spending in their community. For example, in Mason City, this savings would represent a potential of nearly \$3.3 million in additional disposable income/spending if every resident had this service. With the typical household spending multiplier<sup>2</sup>, that results in a total increase of almost \$4.8 million in the Mason City economy.

### **Impact on Homeowners**

Another way to look at the community benefits is to evaluate the effects the savings would have if reinvested into the purchase of a new homes or of upgrading existing homes. A home capable of receiving competitive services creates an effective savings of \$22.17 per month for the home owner (an average of \$20.87 and \$23.52). For potential buyers, this allows an additional \$22.17 in mortgage or home equity payments for the home. This savings makes such a home worth an additional \$3,965<sup>3</sup> for buyers and increases the property value for homeowners by the same amount.

Extrapolating this increased market value to the total number of households in a community, the increase to property values is quite substantial. In the case of Mason City with 12,368 households, the aggregate value of residential property would increase by more than \$49 million. According to the Census Bureau, the 2000 median owner-occupied home value in Mason City

---

<sup>2</sup> Household spending Multipliers capture the size of the secondary economic effects in a given region of the change in economic activity because of a change in spending. Multipliers indicate the degree of interdependency between businesses and consumers in Iowa communities causing the initial spending increase to turn over 1.45 times.

<sup>3</sup> Based on a 30-year fixed rate mortgage at interest rates of 5.37% (current for September 2, 2004).

was \$72,700. An additional \$3,965 would increase the value of the average home to \$76,665 – a 5.5% increase.

### **Impact on Municipal Tax Receipts**

If every homeowner used the additional savings to purchase a more expensive home or upgrade their existing one, the increased property value would mean more property tax receipts for the community. This would occur, not because the community had increased the tax rate, but because the residents would own property worth more. To estimate the potential property tax revenues associated with this increase in property values, we applied the statewide residential property tax rollback (48.5%) to each community's 2005 assessment rates. In our Mason City example, these rates would yield an additional \$250,718 in annual local revenues. Communities could use this revenue stream to offer more and better public services, could dedicate it to support specific capital improvements or could use it to lower the property tax rates for its homeowners. The procedure illustrates the potential revenue yield to cities, if the residents reinvested their cable savings in their home.

### **Deployment is Cost-Effective**

Estimates of the cost to deploy a fiber-optic communication system that would enable serious competition in this industry range from \$1,200-\$3,000 per household<sup>4</sup>, based largely on terrain (aerial v. underground) and density of the area served. Using an average of these figures, the one-time cost of such a network build-out would be in the \$2,100 per household range – amortized over the 20-year bonding period. The fees for services would cover the debt service on the bonds. In addition, each householder would realize a potential gain in the value of his or her home of an estimated \$3,965 thanks to a more competitive communications environment.

In addition to the cost savings, an expanded infrastructure could provide a windfall of additional benefits including:

- Downward pressure on business communications rates (traditionally accounting for a greater volume of these services than residential customers)
- The ability to attract and retain more business in the community – especially those businesses that require an advanced data/communications infrastructure
- An environment that allows for the creation and attraction of higher paying, information-based jobs and services
- Proliferation of the home-based business, e-businesses and e-government that requires high-speed internet and data service.
- Distance Learning and improved access to education and training opportunities
- Video-on-Demand and other enhanced entertainment services

---

<sup>4</sup> See (1) White Paper: Utah's Public-Private Fiber-to-the-Premises Initiative. Utah Telecommunication Open Infrastructure Agency, November 26, 2003. (2) FTTP - No Other Way to Entertain. Deutsche Bank Securities Inc., May 13, 2004.

- Telemedicine and medical monitoring from the home
- Home security and fire monitoring
- Services for the visually-impaired and the home-bound elderly

### Summary

The effect of competition on cable television and broadband services in Iowa is significant. Consumers in Iowa pay upwards of 32% more for comparable services in areas where effective competition is not available. The impact of effective competition in the 32 sample Iowa communities could be substantial including:

- Average savings of \$266 per year, per resident on cable TV and broadband services alone
- A potential increase of almost \$100 million in disposable income in the 32 communities included in this study
- A potential increase in property values of \$3,965 per homeowner, or more than \$1 billion collectively for those 32 communities
- In addition to consumers being able to enjoy substantial savings on current communication services, communities will have in place the infrastructure to deliver the next-generation of essential services.

Competition is a key driver behind these gains as is the infrastructure capable of supporting a robust, competitive communications environment. The current generation of fiber will allow for *multiple* service providers on a single, shared line creating an even higher order of competition than illustrated in this study.

Communications and the infrastructure these services depend upon are critical to the continued growth and prosperity of Iowa – particularly rural Iowa. The disparity of rates between communities clearly demonstrates how consumers are financially penalized in the absence of effective competition. As our society and economy becomes increasingly dependent upon communications – particularly the internet— this financial chasm will grow broader and deeper, and at an accelerated pace.

Table 1. Summary of Cable Video and Internet Rates in 32 Selected Iowa Markets

Selected Cities	Basic	Expanded Basic	Digital Minimum	Digital Maximum	Broadband/Online	
					W/o Basic	w/ Basic
Ames	\$15.49	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Anamosa	\$8.95	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Atlantic	\$13.45	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Burlington	\$13.30	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Cedar Rapids	\$10.87	\$38.95	\$48.95	\$81.90	\$52.95	\$42.95
Charles City	\$13.49	\$44.95	\$54.95	\$87.90	\$52.95	\$42.95
Clinton	\$14.15	\$45.50	\$55.50	\$88.45	\$52.95	\$42.95
Clive	\$12.95	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Council Bluffs	\$14.00	\$38.15	\$64.05	\$76.95	\$49.95	\$39.95
Decorah	\$16.95	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Dubuque	N/A	\$45.50	\$55.50	\$88.45	\$50.95	\$40.95
Earlham	N/A	\$40.95	\$50.95	\$83.90	\$52.95	\$42.95
Hiawatha	\$10.87	\$38.95	\$48.95	\$81.90	\$50.95	\$40.95
Indianola	\$13.00	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Iowa Falls	\$13.91	\$44.95	\$54.95	\$87.90	\$52.95	\$42.95
Knoxville	\$13.46	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Manchester	\$9.95	\$44.95	\$54.95	\$87.90	\$52.95	\$42.95
Maquoketa	\$14.15	\$45.50	\$55.50	\$88.45	\$50.95	\$40.95
Marion	\$10.87	\$38.95	\$48.95	\$81.90	\$52.95	\$42.95
Mason City	\$16.35	\$44.95	\$54.95	\$87.90	\$52.95	\$42.95
Nevada	\$15.49	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Oelwein	\$16.40	\$44.95	\$54.95	\$87.90	\$52.95	\$42.95
Ottumwa	\$11.94	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Parkersburg	N/A	\$41.95	\$51.95	\$84.90	\$50.95	\$40.95
Pella	\$15.49	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Red Oak	\$16.62	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Shenandoah	\$16.54	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Storm Lake	\$12.30	\$28.95	\$38.95	\$71.90	\$52.95	\$42.95
Vinton	\$15.63	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Waterloo	\$10.96	\$34.95	\$44.95	\$77.90	\$50.95	\$40.95
Waukee	\$13.00	\$43.95	\$53.95	\$86.90	\$52.95	\$42.95
Waverly	\$12.95	\$44.95	\$54.90	\$87.90	\$52.95	\$42.95
Mediacom Averages	\$13.57	\$42.73	\$53.22	\$85.55	\$52.54	\$42.54
Competitive community rate*	\$10.91	\$27.66	\$37.16	\$67.83	\$46.75	\$36.75
Difference	<b>\$2.66</b>	<b>\$15.07</b>	<b>\$16.07</b>	<b>\$17.72</b>	<b>\$5.79</b>	<b>\$5.79</b>
Percent difference	24%	54%	43%	26%	12%	16%

\* The rate that Mediacom charges in communities that have a competitive municipal cable utility.

Table 2. Municipal Cable Systems with Mediacom Competition

Selected Communities	Basic	Expanded	Digital Minimum	Digital Maximum	Broadband	
					256K dl	512K dl
Algona	\$10.95	\$26.95	\$29.95	\$59.95	\$39.95	\$69.95
Mediacom	\$10.00	\$29.00	\$43.00	\$74.00	N/A	\$52.95
Alta	\$9.95	\$26.95	N/A	N/A	\$39.95	\$49.95
Mediacom	\$11.35	\$26.95	\$31.95	\$56.95	N/A	\$52.95
Cedar Falls	\$12.74	\$35.77	\$48.07	\$69.41	\$40.00	N/A
Mediacom	\$9.35	\$34.95	\$44.95	\$77.90	N/A	\$40.95
Grundy Center	N/A	\$24.95	N/A	N/A	\$54.95	N/A
Mediacom	\$15.91	\$26.95	\$36.95	\$69.90	N/A	\$52.95
Harlan	\$10.16	\$24.95	N/A	N/A	\$39.95	\$44.95
Mediacom	\$10.82	\$22.95	\$32.95	\$65.90	N/A	\$39.95
Independence	\$13.95	\$28.95	\$44.95	\$74.95	\$21.95	\$34.95
Mediacom	N/A	\$26.95	\$36.95	\$69.90	N/A	\$34.95
Laurens	N/A	\$23.00	N/A	N/A	\$30.00	\$50.00
Mediacom	\$10.00	\$25.95	\$39.95	\$71.95	N/A	\$52.95
Osage	\$12.00	\$27.50	N/A	N/A	\$45.95	\$55.95
Mediacom	N/A	\$28.95	\$38.95	\$71.90	N/A	\$52.95
Reinbeck	N/A	\$26.95	N/A	N/A	N/A	\$39.95
Mediacom	N/A	\$26.95	\$36.95	\$69.90	N/A	\$52.95
Spencer	\$9.99	\$27.99	\$29.99	\$49.99	\$29.99	\$59.99
Mediacom	\$8.95	\$26.95	\$28.95	\$49.95	N/A	\$33.95
Municipal Averages	\$11.39	\$27.40	\$38.24	\$63.58	\$38.08	\$50.71
Mediacom Averages	\$10.91	\$27.66	\$37.16	\$67.83	N/A	\$46.75

Municipal Cable Systems without Mediacom Competition

Bellevue	\$25.00	\$35.00	N/A	N/A	N/A	N/A
Coon Rapids	\$14.95	\$39.90	N/A	N/A	\$29.95	N/A
Hartley	\$15.00	\$27.75	N/A	\$42.70	N/A	\$29.95
Hawarden	\$9.95	\$24.50	\$40.50	\$40.50	\$49.95	N/A
Manning	N/A	\$24.00	N/A	N/A	\$29.95	N/A
Mapleton	N/A	\$29.97	N/A	N/A	\$39.95	N/A
Muscatine	\$13.98	\$38.75	\$53.25	\$53.25	N/A	\$40.55
Paullina	\$15.00	\$27.75	\$42.70	\$42.70	N/A	\$29.95
Primghar	\$15.00	\$27.75	\$42.70	\$42.70	N/A	\$29.95
Sanborn	\$15.00	\$27.75	\$42.70	\$42.70	N/A	\$29.95
Municipal Averages	\$15.49	\$30.31	\$44.37	\$44.09	\$37.45	\$32.07

Table 3. Impact of the Potential Cable Service Savings to Selected Communities

Selected Communities	Population	Households	Increased Spending	Multiplied Spending	Increased Home Value	Municipal Tax Rate	Increased Revenue
Ames	53,284	18,085	\$4,810,610	\$6,975,385	\$71,707,025	9.949	\$345,679
Anamosa	5,570	1,750	\$465,500	\$674,975	\$6,938,750	14.729	\$49,523
Atlantic	7,110	3,126	\$831,516	\$1,205,698	\$12,394,590	17.957	\$107,850
Burlington	25,966	11,102	\$2,953,132	\$4,282,041	\$44,019,430	14.239	\$303,724
Cedar Rapids	122,542	49,820	\$13,252,120	\$19,215,574	\$197,536,300	13.118	\$1,255,623
Charles City	7,685	3,339	\$888,174	\$1,287,852	\$13,239,135	13.823	\$88,674
Clinton	27,437	11,427	\$3,039,582	\$4,407,394	\$45,308,055	15.343	\$336,842
Clive	13671	4,752	\$1,264,032	\$1,832,846	\$18,841,680	8.927	\$81,504
Council Bluffs	58,656	22,889	\$6,088,474	\$8,828,287	\$90,754,885	17.767	\$781,308
Decorah	8,120	2,819	\$749,854	\$1,087,288	\$11,177,335	12.421	\$67,273
Dubuque	57,204	22,560	\$6,000,960	\$8,701,392	\$89,450,400	10.072	\$436,560
Earlham	1,317	491	\$130,606	\$189,379	\$1,946,815	12.037	\$11,355
Hiawatha	6,506	2,859	\$760,494	\$1,102,716	\$11,335,935	12.017	\$66,008
Indianola	13,205	4,748	\$1,262,968	\$1,831,304	\$18,825,820	11.650	\$106,274
Iowa Falls	5,106	2,215	\$589,190	\$854,326	\$8,782,475	16.639	\$70,808
Knoxville	7,536	3,191	\$848,806	\$1,230,769	\$12,652,315	13.153	\$80,635
Manchester	5,139	2,167	\$576,422	\$835,812	\$8,592,155	15.247	\$63,478
Maquoketa	6,054	2,614	\$695,324	\$1,008,220	\$10,364,510	11.614	\$58,329
Marion	28,756	10,458	\$2,781,828	\$4,033,651	\$41,465,970	13.651	\$274,286
Mason City	28,274	12,368	\$3,289,888	\$4,770,338	\$49,039,120	10.551	\$250,718
Nevada	6,676	2,716	\$722,456	\$1,047,561	\$10,768,940	14.879	\$77,639
Oelwein	6,498	2,808	\$746,928	\$1,083,046	\$11,133,720	15.561	\$83,953
Ottumwa	24,697	10,383	\$2,761,878	\$4,004,723	\$41,168,595	21.434	\$427,570
Parkersburg	1,872	811	\$215,726	\$312,803	\$3,215,615	15.056	\$23,460
Pella	10,107	3,497	\$930,202	\$1,348,793	\$13,865,605	10.200	\$68,531
Red Oak	5,940	2,670	\$710,220	\$1,029,819	\$10,586,550	18.682	\$95,834
Shenandoah	5,290	2,421	\$643,986	\$933,780	\$9,599,265	16.967	\$78,920
Storm Lake	9,973	3,466	\$921,956	\$1,336,836	\$13,742,690	12.021	\$80,051
Vinton	5,210	2,116	\$562,856	\$816,141	\$8,389,940	14.178	\$57,640
Waterloo	67,054	28,169	\$7,492,954	\$10,864,783	\$111,690,085	18.790	\$1,016,920
Waukee	7,287	1,927	\$512,582	\$743,244	\$7,640,555	13.500	\$49,982
Waverly	9,075	3,238	\$861,308	\$1,248,897	\$12,838,670	14.305	\$88,991
Total for 32 selected communities			\$68,362,532	\$99,125,671	\$1,019,012,930		\$6,985,942