

Broadband and Vacation Properties

Wisconsin

An Economic Impact Study
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About Us

- The Fiscal and Economics Research Center (FERC) at the UW - Whitewater along with UW- Extension analyzed the economic impact of availability of broadband in areas with high percentage of vacation homes
- The Center for Community Technology Solutions is working to help Wisconsin communities develop the internet capacity they need



Thank You

- Our Inspiration for this research came from:
 - Andy Lewis of the University of Wisconsin Extension
 - Don Sidlowski of the Northwoods Broadband Development Coalition

Areas of Focus

- Economic Benefits: Increase broadband availability and its effective use to spur the state's economic development
- Community Piloting: Increase broadband connectivity in rural communities
- General Outreach and Engagement: Increase and foster broadband adoption
- Tech/Broadband Training and Coaching: Expand the capacity of staff and faculty to assist communities' broadband connectivity



Economic Impact

- The FERC at the UW-Whitewater analyzed the economic impact of broadband internet connectivity in vacation homes
 - Part-time residents with broadband connectivity will spend more time in their vacation homes; consequently, they inject additional money into the local economy
 - An increase in spending generates extra revenue for businesses and supports job creation in the region



Quote

- Build a place people want to visit, and you'll build a place where people want to live.
Build a place where people want to live, and you'll build a place where people want to work.
Build a place where people want to work, and you'll build a place where business has to be.
Build a place where business has to be, and you'll build a place where people have to visit.
And it all -- and it only -- starts with the visit, and that visit starts with us.
 - Maura Gast: Executive Director, Irving Convention and Visitors Bureau

Quote

- Commissioner (Copp, 2012) of the Federal Communications Commission stated that “In this new century, we will work differently, learn differently, play differently, and probably even govern ourselves differently, all because of the transformative power of telecommunications. Broadband is already becoming key to your nation’s system of education and commerce and jobs, and therefore, key to America’s future. Broadband is going to be front-and-center in America’s 21st Century transformation. Those who have access to advanced communications like broadband will win; those who do not will lose”.

Four Main Economic Impacts of Improved Broadband

Visitors

Relocation of Visitors

Business Development

More Visitors

Almost 45 Years of Research Has Found that:

The benefits of broadband can be classified in terms of:

Efficiency: such as saving time in applying for grants and filing online reports and business data; keeping track of inventory; and managing operations.

Effectiveness: referring to the quality of services provided such as health and education.

Equity: reducing the distance barriers between rural and urban communities by providing access to information, entertainment, education, and other services otherwise not available in remote communities.

Reach: enabling rural Wisconsin to extend their range electronically to market tourism, and other local assets (Hudson, 2012).

Efficiency

- High-speed Internet, also known as broadband, has become a necessity in the lives of most individuals and businesses.
- Without broadband, communication is limited, innovation is restrained, productivity decreases, and quality of life is depressed.
- Broadband has the potential benefit to offer a specific area improved quality of education and health services, improved connectedness of government with society, and provide jobs and prosperity: (California Broadband Task Force)

Effectiveness

- Policymakers are aware that broadband leads to job creation and economic growth, and many, especially in rural areas, put broadband investment at the core of their economic development strategy (Kolko, 2011)

Equity

- In 2009, the federal government announced an investment of 7.2 billion dollars as part of the American Recovery and Reinvestment Act (ARRA), whose ultimate goal was economic stimulus, and the agencies granting these awards were directed to consider the effect of broadband on economic development (Kolko, 2011).
- Therefore, this policy has been successful in providing the private sector with favorable conditions to invest in broadband infrastructure; however, it has not fully addressed deployment in rural high-cost areas (California Broadband Task Force, 2008).

Reach

- **23.7%** of Americans living in **rural areas** lack access to fixed broadband satisfying the 2010 benchmark of 4Mbps downstream/1Mbps upstream, compared to **1.8%** of Americans in **urban areas**: Federal Communications Commission (2012)

The Value of Part-time Residents

- The FERC has done research in Door County in order to determine the economic impact of part-time residents and the benefits they bring to the local economy

The Survey

- Surveys were conducted by the FERC to determine the daily expenses of local part-time residents living in their vacation homes.
 - Construction/ Home improvements
 - Bait and tackle/ Launch fees
 - Dining out/ Groceries
 - Entertainment
 - Shopping
 - Gas for vehicles or boats/ Rental of watercraft/ Licenses
 - Medical Care
 - Cable/Internet



Results: Part-time residents – Liberty Grove Broadband Survey

Category	Daily Expenses
Construction	238.58
Fishing/Boating Exp.	0.58
Launch Fees	1.23
Dining Out	17.72
Entertainment	4.99
Groceries/Liquor	18.24
Gas	8.20
Shopping (General i.e. clothing, personal)	10.79
Shopping (Tourist i.e. gifts, souvenirs)	5.77
Licenses	0.86
Medical Care	1.95
Cable/Internet	6.80
Other (cleaning, communication, maintenance cost)	40.70
Total	356.41



Research Question

- The FERC was tasked with determining how many more days part-time residents would stay at their vacation homes if they had broadband internet connectivity
- Goal: To determine the extra amount of money spent in the local economy, as a consequence of second-home owners staying additional days if they had faster and more reliable Internet



Results: “Liberty Grove” Survey

How much longer would you stay in the Liberty Grove of Wisconsin each year if you had access to broadband internet?

Answer Options	Response Percent	Response Count
I would not stay any longer than I currently do	58%	101
Up to 2 weeks	14%	25
Up to 1 month	11%	20
Up to 3 months	11%	20
I would move permanently	5%	9
	Answered Question	175



*Information derived from the survey FERC conducted to obtain data from part-time residents in Liberty Grove

Calculation Results

- Using a weighted average calculation from the previous table the “Liberty Grove Survey” we concluded that on average, part-time residents would stay in their vacation homes **12.1** more days if they had broadband internet connectivity
- 19.89% of respondents in the “Liberty Grove Survey” indicated that Internet access issues, speed or reliability is a barrier that prevents them from staying longer in their vacation home



Relevant Numbers

- Part-time residents would stay 12.1 days more per year if they had broadband Internet connectivity
- 19.89% of respondents declared that Internet issues is a major barrier that prevents them from staying additional days in their vacation homes
- Construction spending was omitted from the spending estimates due to its volatility
- As a result, we found that part-time residents spend \$117.83 dollars a day per household in their vacation homes



Economic Impact

- Multiplying (average daily expenditure) times 12.1 (average number of extra days residents would spend in their vacation homes) gives us a total \$1,425.74 additional dollars per seasonal home spent a year in the local economy if owners had broadband internet connectivity



Liberty Grove Housing

- Liberty Grove Provided a tax roll list of all homes in the region.
- After removing multiple lots and businesses, we found there were 995 unique seasonal residential properties in Liberty Grove

Results of Aggregate

Category	995 homes*Average Annual Daily Expenditure*12.1 extra days	Result
Construction	995*238.58*12.1	\$2,872,383.91
Fishing/boating Exp.	995*.58*12.1	\$6,982.91
Launch Fees	995*1.23*12.1	\$14,808.59
Dining Out	995*17.72*12.1	\$213,339.94
Entertainment	995*4.99*12.1	\$60,077.11
Groceries/Liquor	995*18.24*12.1	\$219,600.48
Gas	995*8.20*12.1	\$98,723.90
Shopping-General	995*10.79*12.1	\$129,906.21
Shopping-Tourist	995*5.77*12.1	\$69,467.92
Licenses	995*.86*12.1	\$10,353.97
Medical Care	995*1.95*12.1	\$23,477.03
Cable/internet	995*6.8*12.1	\$81,868.60
Other	995*40.7*12.1	\$490,007.65
Total	995*356.41*12.1	\$4,290,998.20

IMPLAN Results

Impact Type	Employment	Labor Income	Output
Direct Effect	17.0	\$308,283	\$854,991
Indirect Effect	1.6	\$40,925	\$171,807
Induced Effect	1.8	\$54,860	\$192,399
Total Effect	20.4	\$404,066	\$1,219,196

Can We Extrapolate to Door County

Perhaps– lets give it a shot

Door County Housing

- The Door County Comprehensive Plan is a local government department that helps plan and administer land use for Door County, Wisconsin.
- Housing is included in their focus, along with keeping track of a census of houses in the county.
- <http://map.co.door.wi.us/planning/>

Door County - Housing

- The Door County Comprehensive Plan determined that in Door County there are currently 7759 seasonal houses
- Of these seasonal houses, the survey concluded that 36% did not have Internet Access or had issues staying connected.
- This compares with the 19.89% in our survey.



Results of Aggregation

Category	7759 homes*Average Annual Daily Expenditure*12.1 extra days	Result
Construction	7759*238.58*12.1	\$22,398,820.86
Fishing/boating Exp.	7759*.58*12.1	\$54,452.66
Launch Fees	7759*1.23*12.1	\$115,477.2
Dining Out	7759*17.72*12.1	\$1,663,622.71
Entertainment	7759*4.99*12.1	\$468,480.66
Groceries/Liquor	7759*18.24*12.1	\$1,712,442.34
Gas	7759*8.20*12.1	\$769,847.98
Shopping-General	7759*10.79*12.1	\$1,013,007.28
Shopping-Tourist	7759*5.77*12.1	\$541,710.10
Licenses	7759*.86*12.1	\$80,740.15
Medical Care	7759*1.95*12.1	\$183,073.61
Cable/internet	7759*6.8*12.1	\$638,410.52
Other	7759*40.7*12.1	\$3,821,074.73
Total	7759*356.41*12.1	\$33,461,160.80

Types of Effects

Direct effect refers to production change associated with a change in demand for the good itself. It is the initial impact to the economy, which is exogenous to the model. Direct effects include respective portions of the amount initially injected into the regional economy (non-local spending in the region)

Indirect effect refers to the secondary impact caused by changing input needs of directly affected industries (e.g., additional input purchases to produce additional output). It concerns inter-industry transactions: The Grocery Stores has a demand for locally produced materials needed to produce their product (often foodstuff)

Induced effect is caused by changes in household spending due to the additional employment generated by direct and indirect effects. The Induced Effect measure the effects of the changes in household income and the spending of this increased household income on consumption items



IMPLAN Results

Impact Type	Employment	Labor Income	Output
Direct Effect	132.4	\$2,403,987	\$6,667,207
Indirect Effect	12.7	\$319,129	\$1,339,748
Induced Effect	13.9	\$427,800	\$1,500,325
Total Effect	158.8	\$3,150,905	\$9,507,280



Conclusions

- Broadband internet connectivity in vacation homes would generate additional spending in the local economy, causing economic prosperity to the region
- The yearly impact in Door County in Wisconsin would be \$9,507,280
- Benefits: job creation, higher tax revenues, and better infrastructure in the county

