

## ***Community Informatics: Access and Availability***

1. Benton Foundation. (2002). *Digital Divide Network: DDN home* [Home page]. Benton Foundation. Retrieved July 2, 2007, from <http://www.digitaldividenetwork.org/>

This site is sponsored by the Benton Foundation and includes a wide variety of links to information resources related to the Digital Divide.

2. Bertot, J. C. (2003, May). The multiple dimensions of the Digital Divide: More than the technology 'haves' and 'have nots'. *Government Information Quarterly*, 22(2), 185-191.

This paper reviews the complex and multiple dimensions of the Digital Divide. (MAT abstract).

3. Bonnett, Tom (2001). Starting a Telecommunications Plan in Your Community? *Rural Research Report*, 12(8), 1-12. Retrieved on July 26, 2007 from [http://www.iira.org/pubsnew/publications/IIRA\\_RRR\\_193.pdf](http://www.iira.org/pubsnew/publications/IIRA_RRR_193.pdf).

This report emphasizes the importance of planning efforts in developing a sound telecommunications infrastructure within a rural environment. Bonnett offers suggestions on how to aggregate community demand for telecommunications in rural areas. Several options discussed to increase the demand include building public-private partnerships, leveraging public resources to expand services, and linking rural communities. Also offered is an eleven-step community planning approach to adding a telecommunications structure within a rural community.

4. Boyle, M. (2002, November 25). Wi-Fi U.S.A. *Fortune*, 146(11), 205-. Retrieved July 2, 2007, from the EBSCOhost Academic Search Premier database.

"Discusses the growing popularity of wireless fidelity (Wi-Fi), the trademarked name given by the Wireless Ethernet Compatibility Alliance, which provides wireless Internet access. How companies such as software supplier Novell in Utah launched a wireless local area network (LAN); Development of Wi-Fi and how it operates; Increase in efficiency and productivity of businesses who use Wi-Fi such as Microsoft; Popularity of Wi-Fi among college students and the need for companies to adopt Wi-Fi as a standard technology of the future"-- EBSCOhost Academic Search Premier abstract.

5. Breeding, M. (2002, Summer). A hard look at wireless networks. *netconnect*, 14-17.

6. Brown, G., & Burgess, P. M. (1999). *Points West special report: America's telecommunications revolution : "Not available in all locations"*. Denver, CO: Center for the New West.

This report was prepared for the Western Regional Forums on America's Growing Digital Divide held in Helena, Montana; Spokane, Washington and Colorado Springs, Colorado in Nov/Dec 1998. This report reveals the findings of the first Regional forum held in Salt Lake City in July, 1997, along with the most recent recommendations on universal service by the Federal/State Joint Board.

7. Chu, C. M. (2002). *Digital divide: A resource list* [Home page]. UCLA Dept. of Information Studies. Retrieved July 2, 2007, from <http://www.gseis.ucla.edu/faculty/chu/digdiv/>

This site provides links to information about the digital divide, including demographic information and details about its impact. As well, links to eLists, community sites, and funding sources are also included.

8. eMarketer Inc. (2001). *eDemographics report*.

This is a semi-annual report on worldwide Internet user demographic characteristics, usage patterns, and on-line activities, with detail by world region and/or country. This report details extensive characteristics of US and Canadian users. It highlights, among other things, internet users and penetration rates, by access location and/or Province; number of Internet sessions conducted and average length per session; time spent on-line and per Web site; number of unique pages viewed and Web sites visited; users participating in selected on-line activities; percent of households that have shopped on-line; and user characteristics, including age, sex, income, educational attainment, and primary language used. In addition, this report ranks 35 major U.S. cities by Internet penetration rates and highlights the percent of U.S. children ages 8-12 using selected media products or services.

9. Gable, D., & Kwan, F. (2000). *Accessibility of broadband telecommunication services by various segments of the American population*. Telecommunications Policy Research Conference.

10. Gillett, S. E., & Lehr, W. (2000). *Availability of broadband Internet access: Empirical evidence*. Retrieved on July 2, 2007 from [http://dspace.mit.edu/bitstream/1721.1/1480/1/LehrGillettTPRC99\\_0523.pdf](http://dspace.mit.edu/bitstream/1721.1/1480/1/LehrGillettTPRC99_0523.pdf).

11. Gorman, S., & Malecki, E. J. (2000). The Networks of the Internet: An analysis of provider networks in the U.S.A. *Telecommunications Policy*, 24, 113-134.

12. Greenstein, S. M. (1998). *Universal service in the digital age: The commercialization and geography of U.S. Internet access* (Working Paper No. W6453). Cambridge, MA: National Bureau of Economic Research. Retrieved on July 16, 2007 from <http://papers.nber.org/papers/W6453.pdf>

This paper summarizes some of the major findings of a research project with the primary objective to understand the geographic spread of the commercial Internet Service Provider Market. This project was sponsored by the Council on Library and Information Resources to begin to address whether commercial ISP's will provide a wide geographic scope of Internet access and service on their own or whether issues of profitability will limit their scope of implementation. Commercial ISP's tend to be either firms organized to provide a national service or those structured to rely on local firms providing local services. As well, commercial ISP's tend to be organized in one of five strategy/structure categories: urban/national; urban/local; rural/local; rural/national; and regional firms. The geographic scope of the industry is in part determined by the survival of local and national ISP's; moreover, the expansion of the Internet is driven by the presence of commercial opportunities for ISP's. Current and future discussions of universal access to advanced information communications technology should consider the structural and strategic differences in Internet ISP's and their market organization.

13. Greenstein, S. M. (2000). Building and delivering the virtual world: Commercializing services for Internet access. *Journal of Industrial Economics*, 48(4), 391-411.

This study reviews the provision of services of 2089 Internet Service Providers (ISP's) in the summer of 1998. In order to better classify the services provided, this research develops an Internet access industry product code for different types of services. In general ISP's have begun to offer services above and

beyond basic service and this research illustrates the significant variety of services offered across ISP's. Moreover, there is a pattern of service variation across urban/rural communities. This research concludes that different service provision across firms can generally be explained by firm-specific and location specific factors. .

14. Hurley, D., & Keller, J. H. (1999). *The First 100 feet: Options for Internet and broadband access*. Cambridge, MA: The MIT Press.

This book begins by challenging readers to rethink the so called "problem of the last 100 feet" as an opportunity of the first 100 feet. The contributors to this book look at Telecommunications issues from a user investment perspective, reviewing options for Internet and Broadband access from the perspective of homeowners, apartment complexes and small businesses. They further distinguish the potential positives and negatives of "bottom-up investment" in Internet infrastructure, while also evaluating the implications of these investments for national, regional and local providers. This discussion is especially important as new technologies, such as wireless and data transmission over power lines, develop that will provide new opportunities for user investment in technology infrastructure as leverage points for Internet and broadband access.

15. Leighton, W. A. (2001). *Broadband deployment and the digital divide: A primer* (Policy Analysis No. 410). Washington, DC: The Cato Institute. Retrieved on July 17, 2007 from <http://www.cato.org/pubs/pas/pa410.pdf>

Broadband technology is being touted as the electricity of today. This argument upholds that broadband technology should be treated as electricity once was with subsidization to provide the capital investment required to provide this technology to rural and low-income communities across the nation. This paper upholds that this argument is completely misplaced. The wires over which most broadband is transmitted are already owned by telephone, cable or electricity providers. Moreover, electricity as a rule has been provided by one public utility in a community, while broadband service has many providers and continually evolving technologies. This author further argues that tax credits and subsidies to promote broadband deployment would reduce competition and benefit existing firms. For consumers who hope for lower prices and increased service, the best hope lies in new and expanding technologies and increased

competition, not less.

16. Lentz, R., & Oden, M. D. (2001). Digital divide or digital opportunity in the Mississippi Delta region of the US. *Telecommunications Policy*, 25(5), 291-313.

An underlying assumption of this paper is that telecommunications industries have important linkages to other industries and can further impact the underlying growth and competitiveness potential of these industries. This paper specifically analyzes the relationship of telecommunications industries to manufacturing, service and other industries in the Mississippi Delta region of the U.S. The analysis reveals that this region of the nation has a serious digital divide problem that is further enhanced by the absence of leading telecom manufacturing or service firms in the area. To improve the region's economic development potential the authors conclude that rural businesses, government, health care, education, and non-profit institutions must be able to access and utilize advanced communications technology.

17. National Exchange Carrier Association (2001). *NECA's middle mile broadband cost study*. Washington, DC, NECA.

18. National Exchange Carriers Association (NECA). (2001). *Paving the digital highway: NECA 2001 access market survey*. Whippany, NJ: Author.

19. Pew Research Center. (2002). *The Broadband difference: How online Americans' behavior changes with high-speed Internet connections at home*. Washington, DC: Author. Retrieved July 2, 2007, from [http://www.pewinternet.org/PPF/r/90/report\\_display.asp](http://www.pewinternet.org/PPF/r/90/report_display.asp)

20. Prieger, J. E. (2003). The supply side of the digital divide: is there equal availability in the broadband Internet access market? *Economic Inquiry*, 41(2), 346-363.

This paper reviews a comprehensive U.S. data set detailing access to broadband Internet service to clarify the reality of a broadband digital divide in the U.S. The author primarily looks for evidence of a digital divide in areas where there are high concentrations of poor, minority, or rural households. The results

indicate there is little evidence of a digital divide based on income, black or Hispanic concentration, while there is mixed evidence when looking at access of Native American or Asian concentrations. The author also found that rural locations decrease the availability of broadband, while the presence of Bell increases availability.

21. Schmandt, J., Williams, F., Wilson, R., & Strover, S. (1990). *The New urban infrastructure: Cities and telecommunications*. New York: Praeger.

22. Schumacher, Sharon (2003). A Study of Internet Use Patterns and Broadband Availability Among Rural Illinois Households and Small Businesses. *Rural Research Report*, 14(4), 1-10. Retrieved on July 26, 2007 from [http://www.iira.org/pubsnew/publications/IIRA\\_RRR\\_570.pdf](http://www.iira.org/pubsnew/publications/IIRA_RRR_570.pdf).

This report seeks to inform the reader of various approaches to encouraging deployment in underserved areas of rural Illinois by providing a current picture of rural consumer use of Internet applications and technologies.

23. Tscheschlok, Christian (2001). Rising to Meet the Digital Challenge in Rural Communities: A Growing Divide? *Rural Research Report*, 12(3), 1-12. Retrieved on July 26, 2007 from [http://www.iira.org/pubsnew/publications/IIRA\\_RRR\\_143.pdf](http://www.iira.org/pubsnew/publications/IIRA_RRR_143.pdf).

While rural households with access to the Internet are closing behind the national average there are still major discrepancies that need to be discussed. The quality of the Internet connections within rural communities is assessed. Case studies from North Carolina, Georgia, Wyoming and North Dakota, and Michigan are examined to determine ways in which they have provided higher quality connections to the Internet. This report also examines actions by the State of Illinois to link rural communities and to aggregate the demand for broadband connectivity.

24. U.S. Department of Commerce, National Telecommunications and Information Administration. (2000). *Falling through the net: towards digital inclusion*. Washington, D.C.: Retrieved July 4, 2007, from <http://www.ntia.doc.gov/ntiahome/fttn00/contents00.html>

This report and others by the NTIA describes the information technology gap in America. This report measures the extent of digital inclusion across

America by looking at households and individuals that have a computer and an Internet connection.