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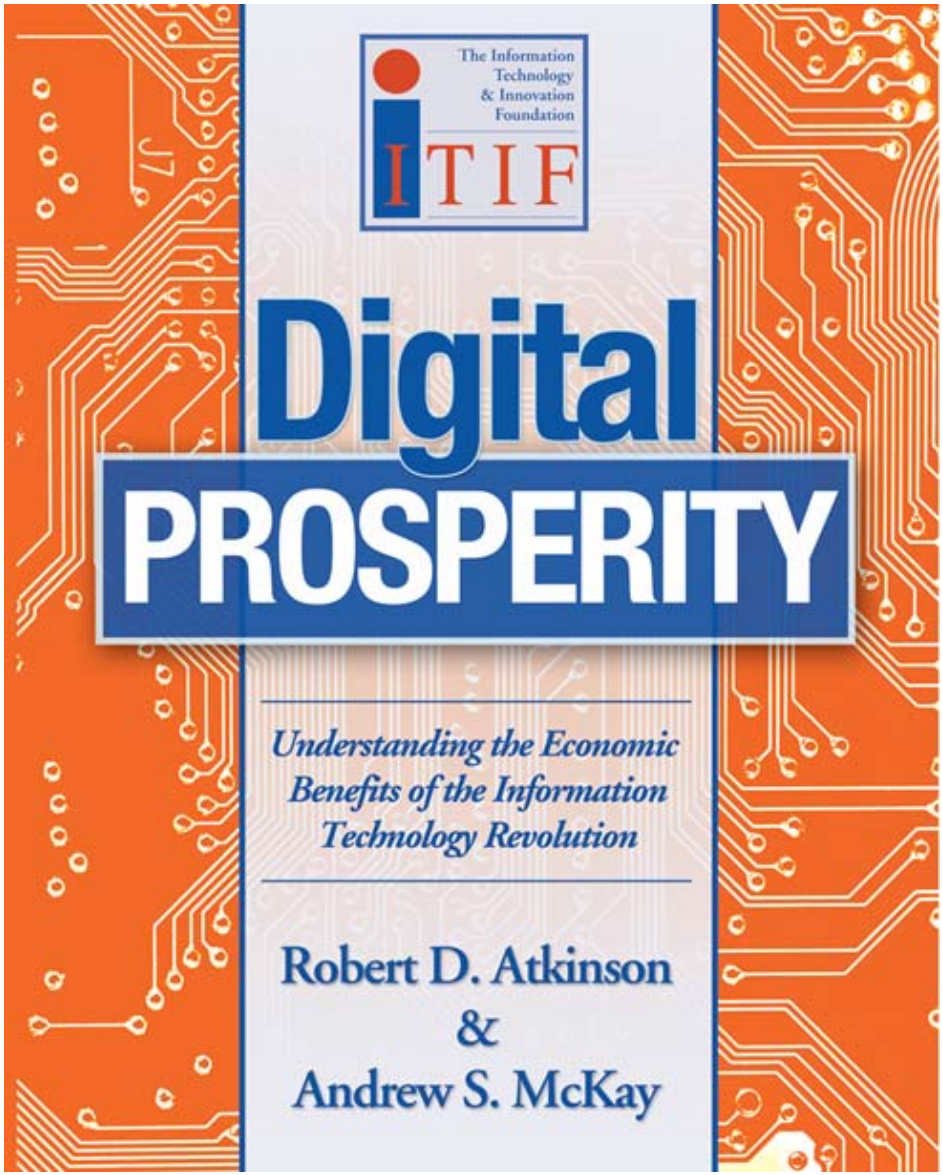
Mind the Gap: Benchmarking Digital Inclusion in America

Robert Atkinson

Presentation to Digital Inclusion Forum

December 10, 2007



- IT has been responsible for most of the productivity acceleration in the U.S. since 1996.

- As a result, U.S. annual GDP is $1.9 trillion larger than it otherwise would be.

- Spurring digital transformation should be the principal goal of nations' economic policies.

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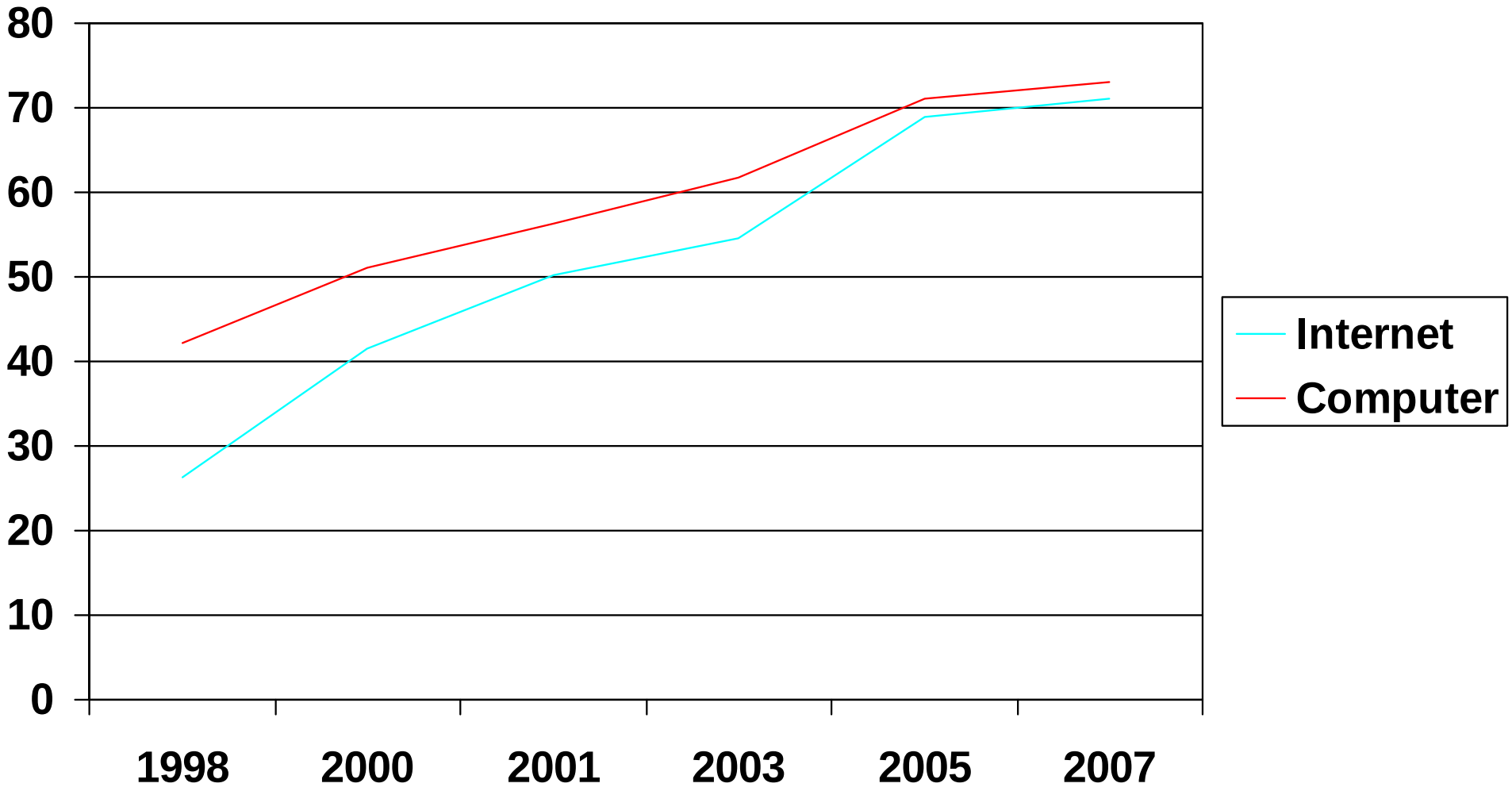
Households with Computers & Internet Access



Source: Pew Internet & American Life Project and National Telecommunications and Information Administration

Multiple Technologies

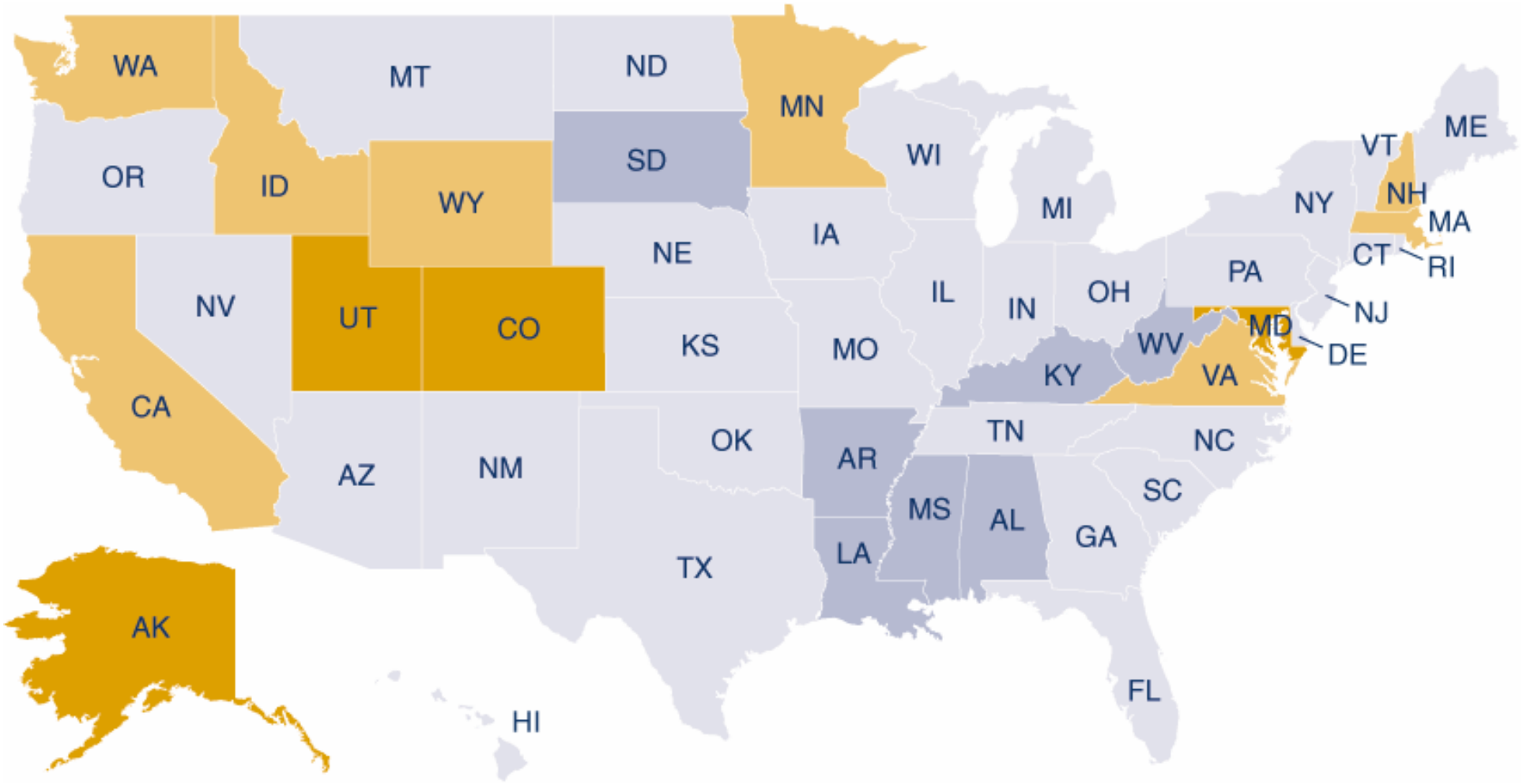
- Computers
- Internet
- Broadband

Multiple Gaps

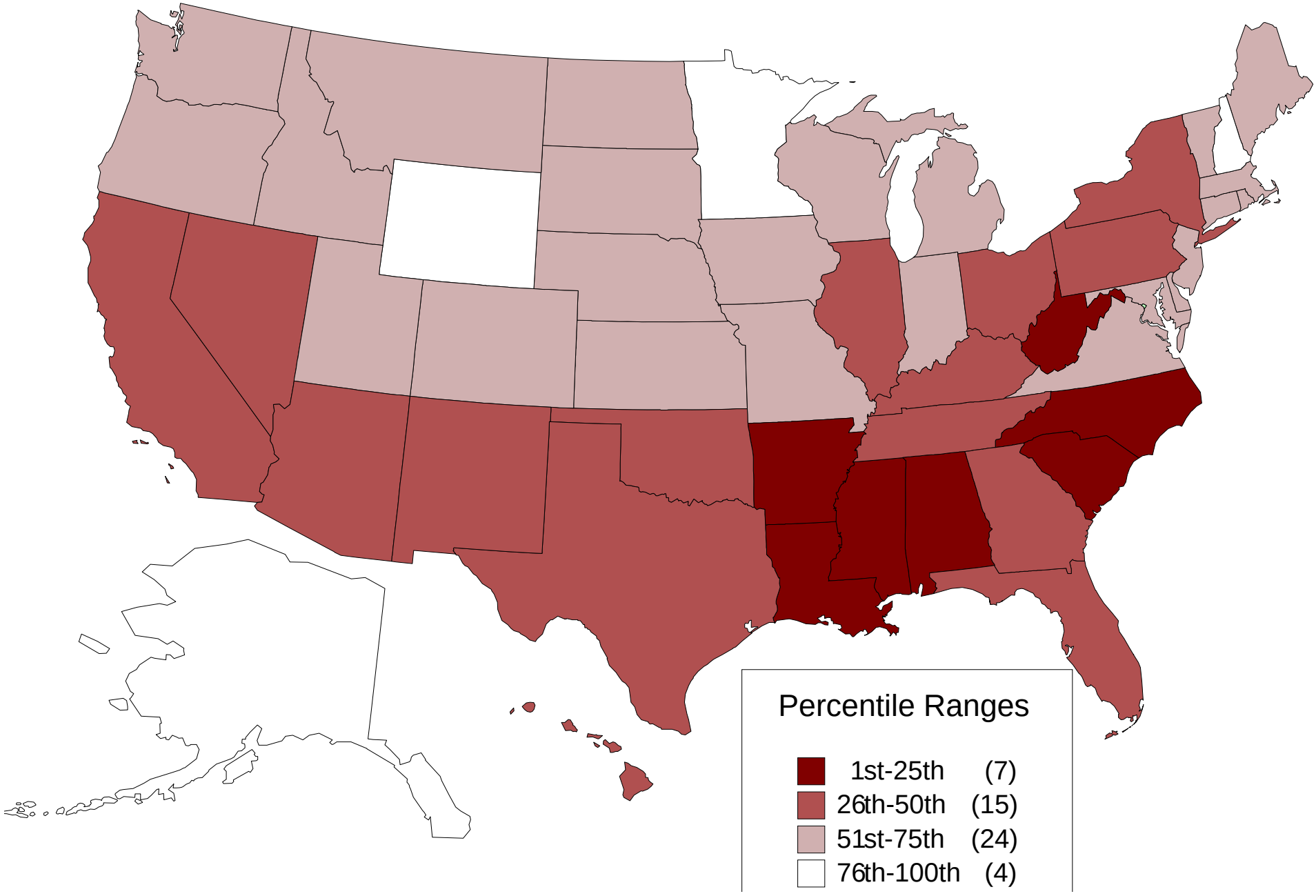
- Spatial
  - state
  - Rural
  - urban core
- Demographic
  - race
  - education
  - income
  - age
  - sex
  - ability

Multiple Gaps: States

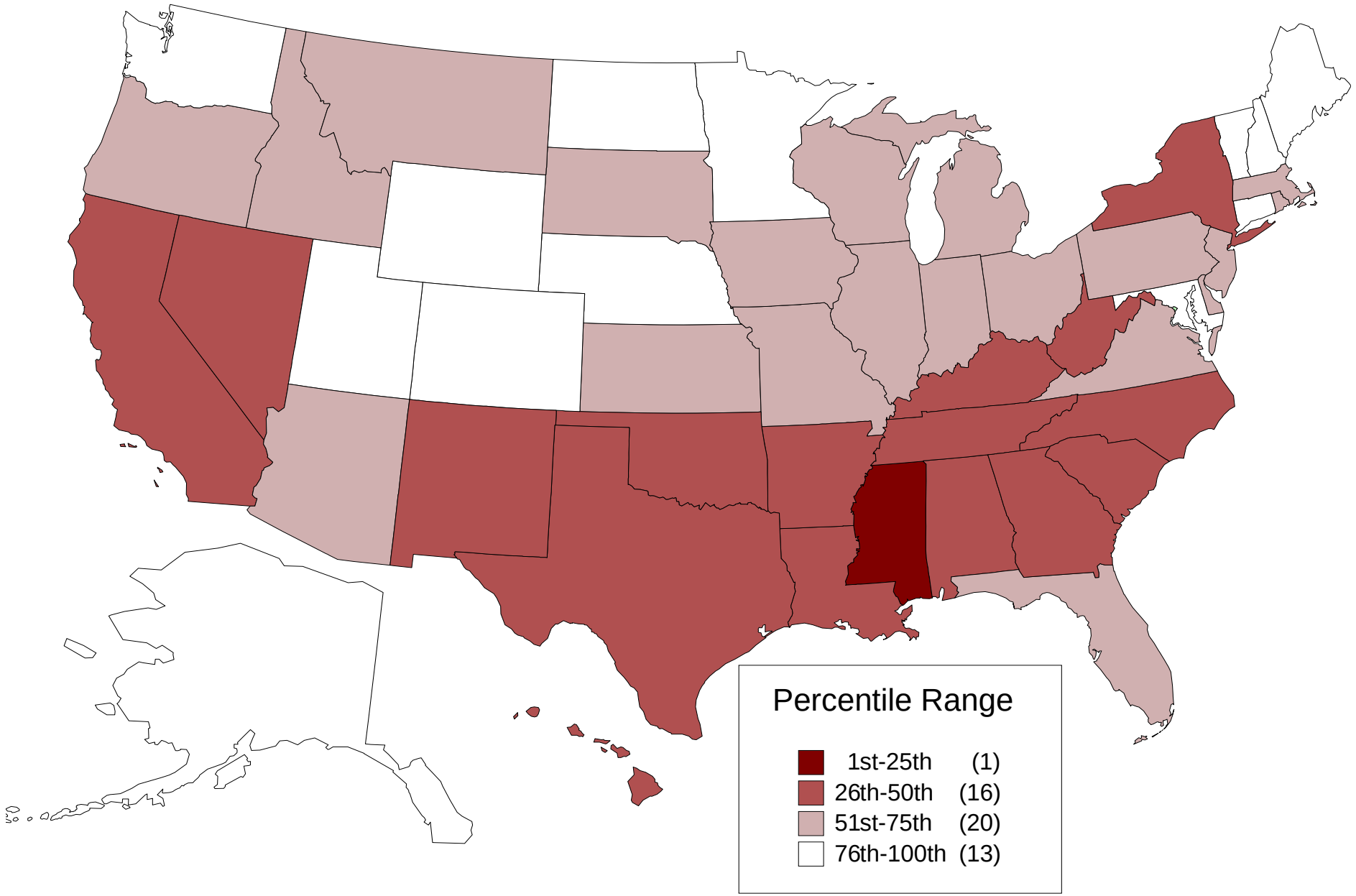
Online Population (1999)



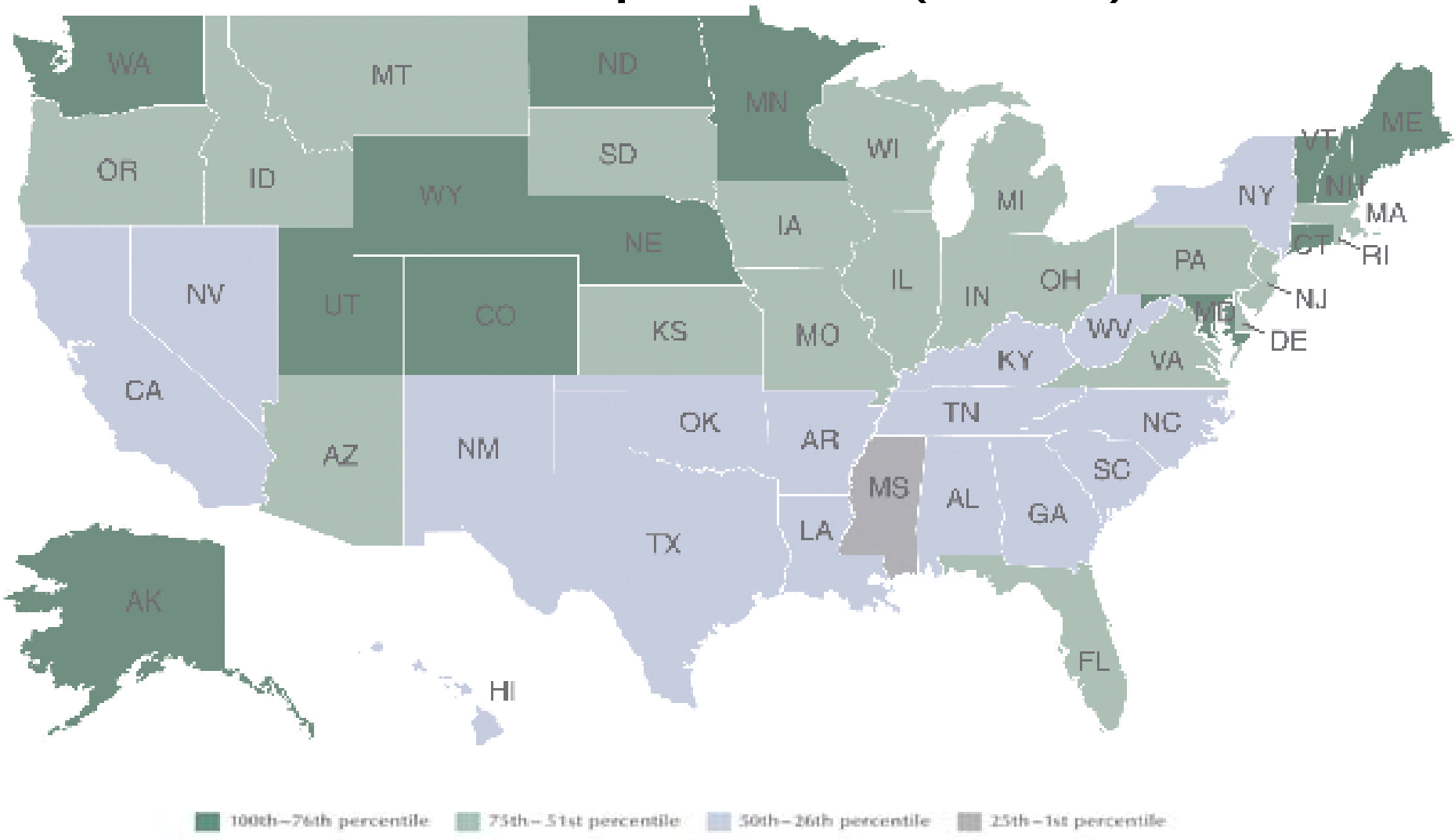
Online Population (2002)



Online Population (2005)



Online Population (2007)



Source: ITIF, “2007 State New Economy Index” (February 2007).

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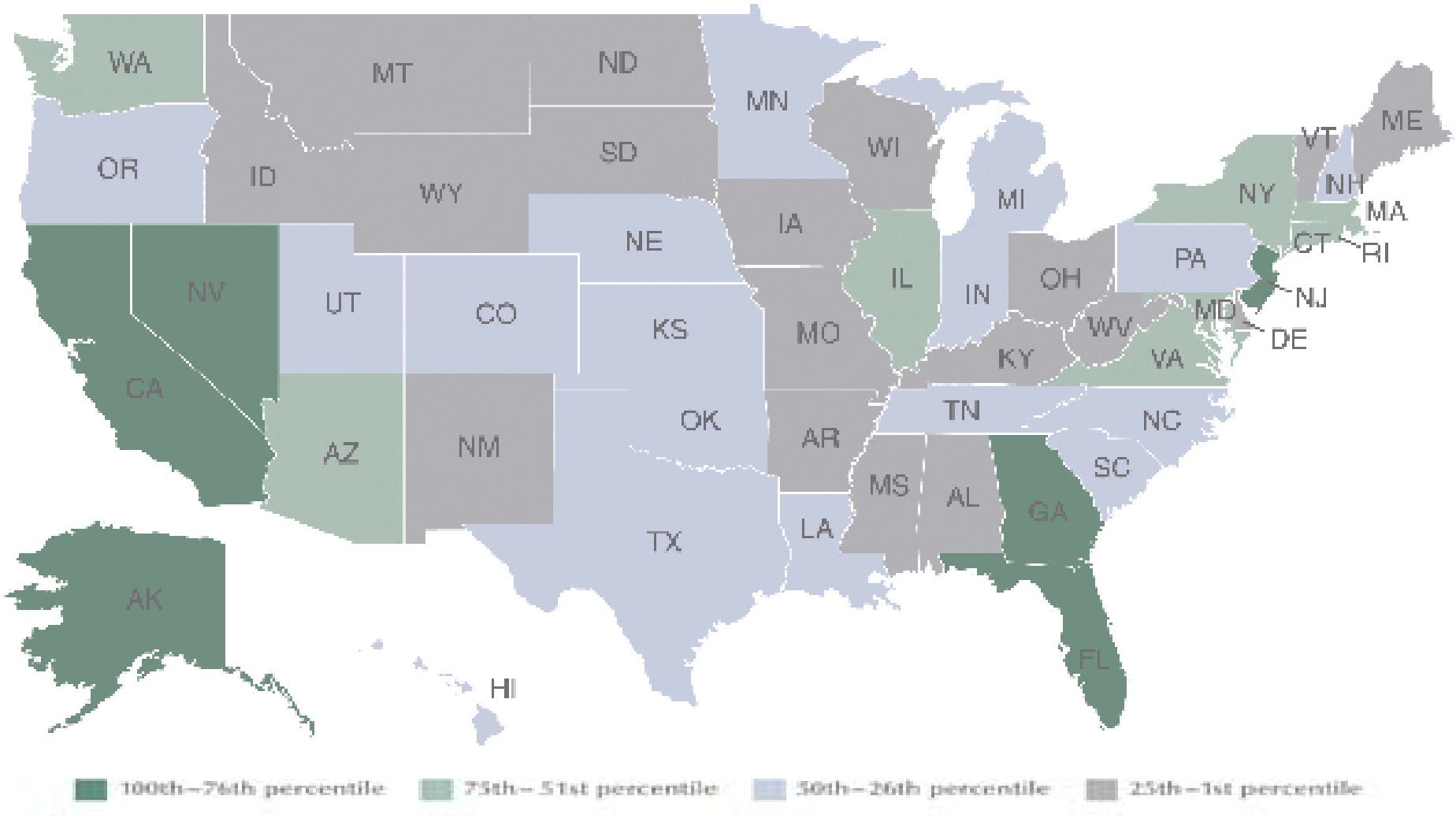
Broadband Telecommunications



Source: ITIF, “2007 State New Economy Index” (February 2007).

Multiple Gaps: Rural

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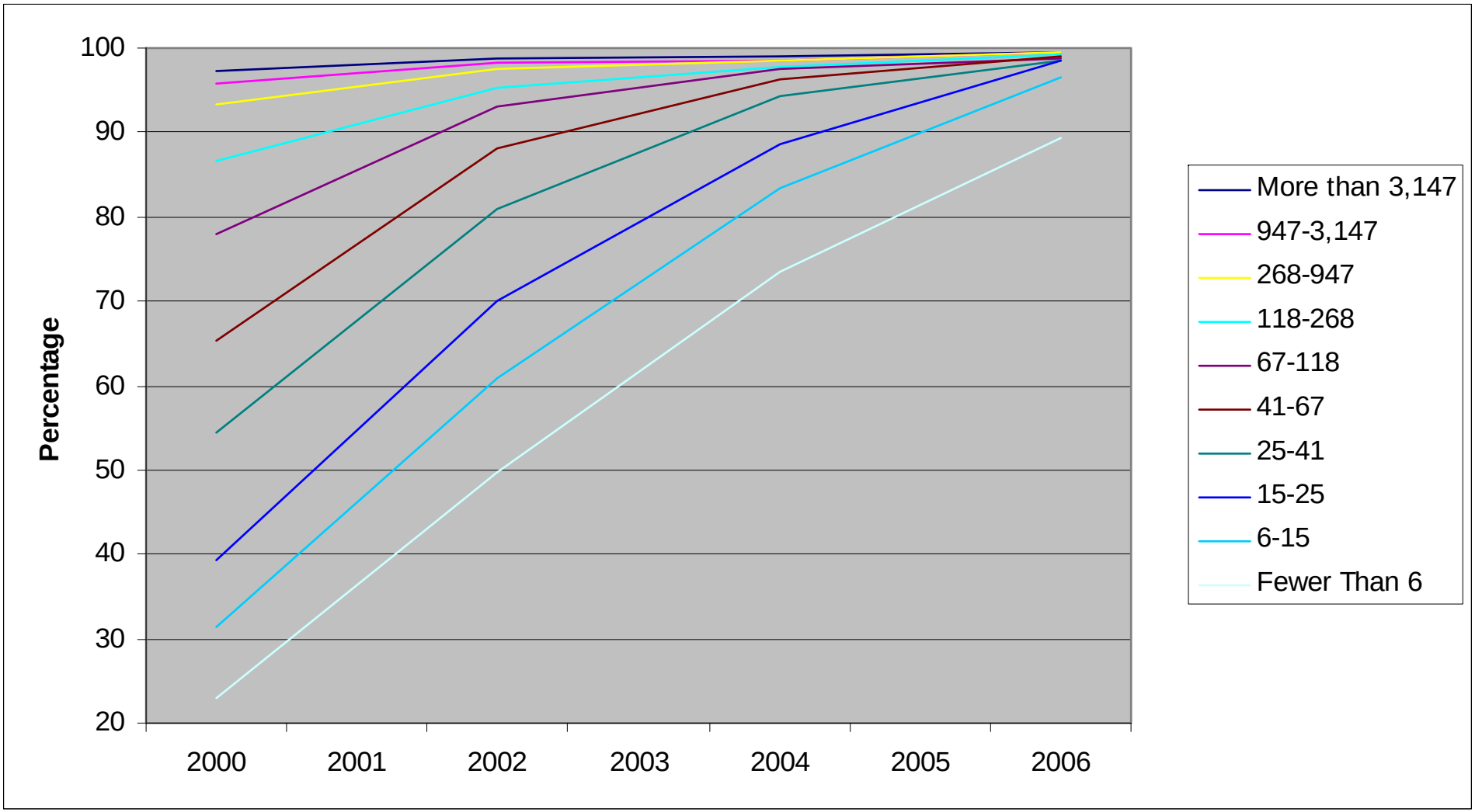
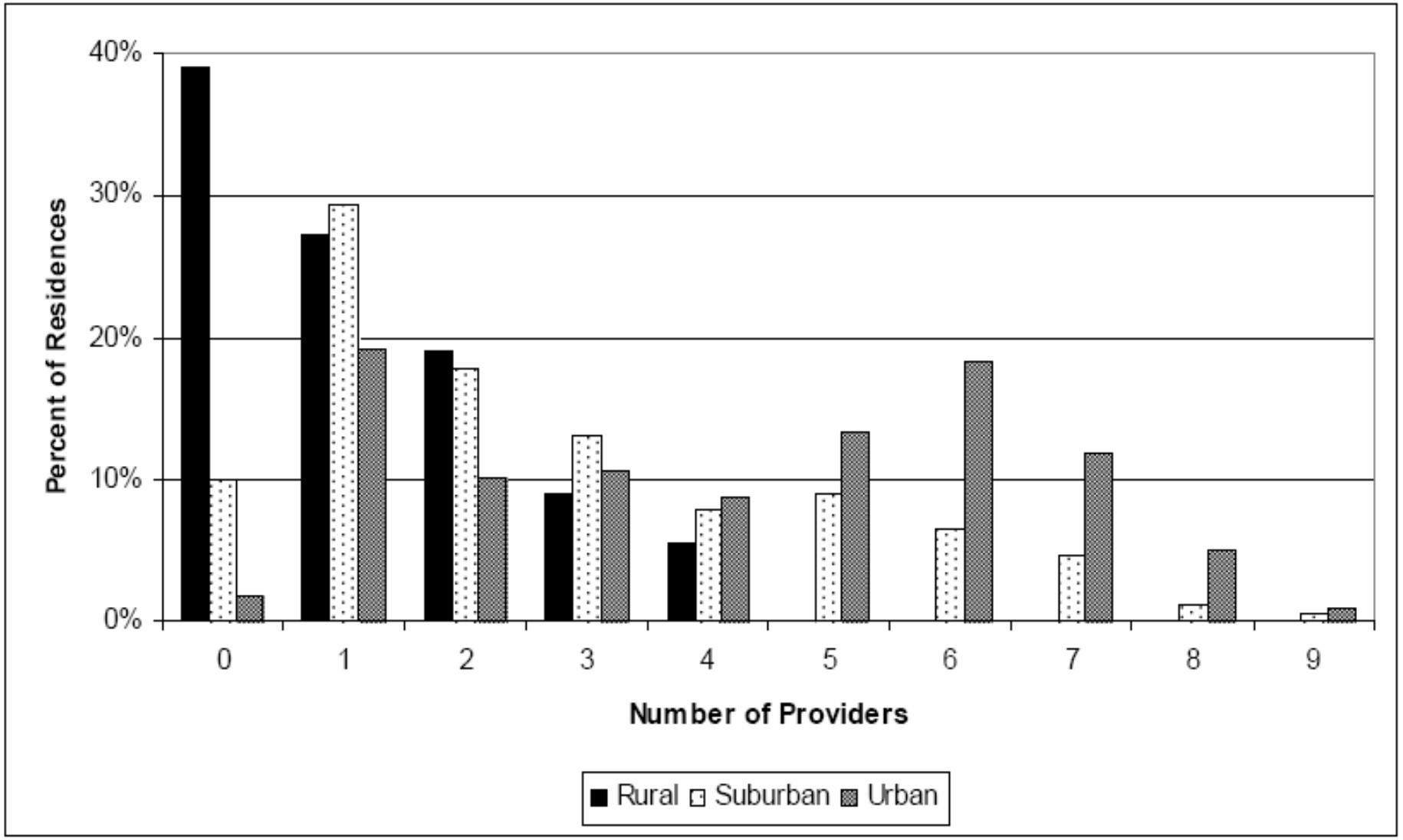
Percentage of Zip Codes with >1 Broadband Subscriber by Pop. Density



Source: Federal Communications Commission, Wireline Competition Bureau, January 2007.

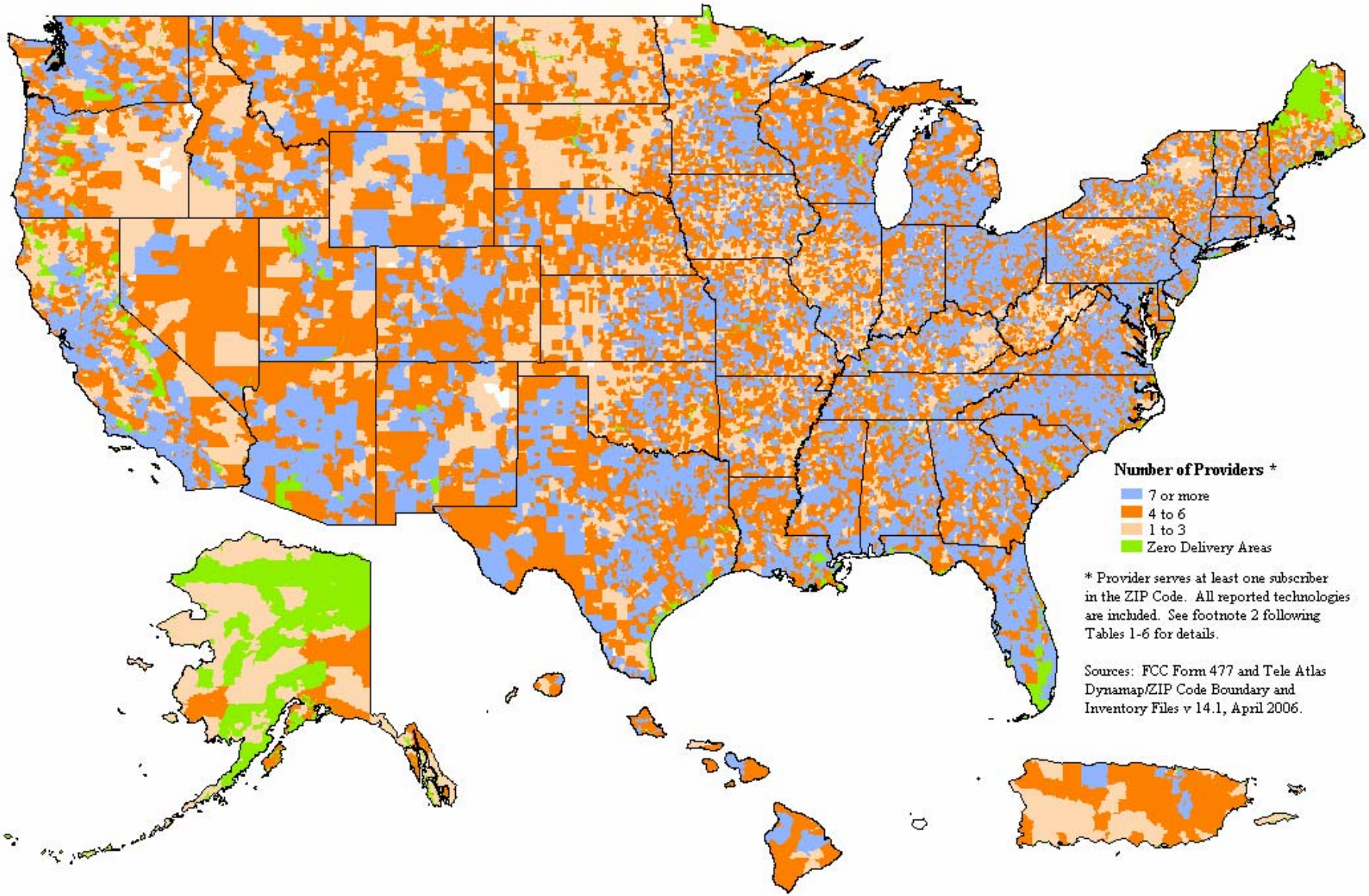


8.50 x 11.00 in

Percentage of Households in Rural, Suburban, and Urban Locations with Various Numbers of Broadband Providers (2004) (Source: Michael Clements and Amy Abramowitz, U.S. Government Accountability Office): <web.si.umich.edu/tprc/papers/2006/518/TPRC2006.pdf>.

High-Speed Providers by 5-Digit Geographical ZIP Code

(As of June 30, 2006)



Prepared by the Federal Communications Commission,
Wireline Competition Bureau, Industry Analysis and Technology Division

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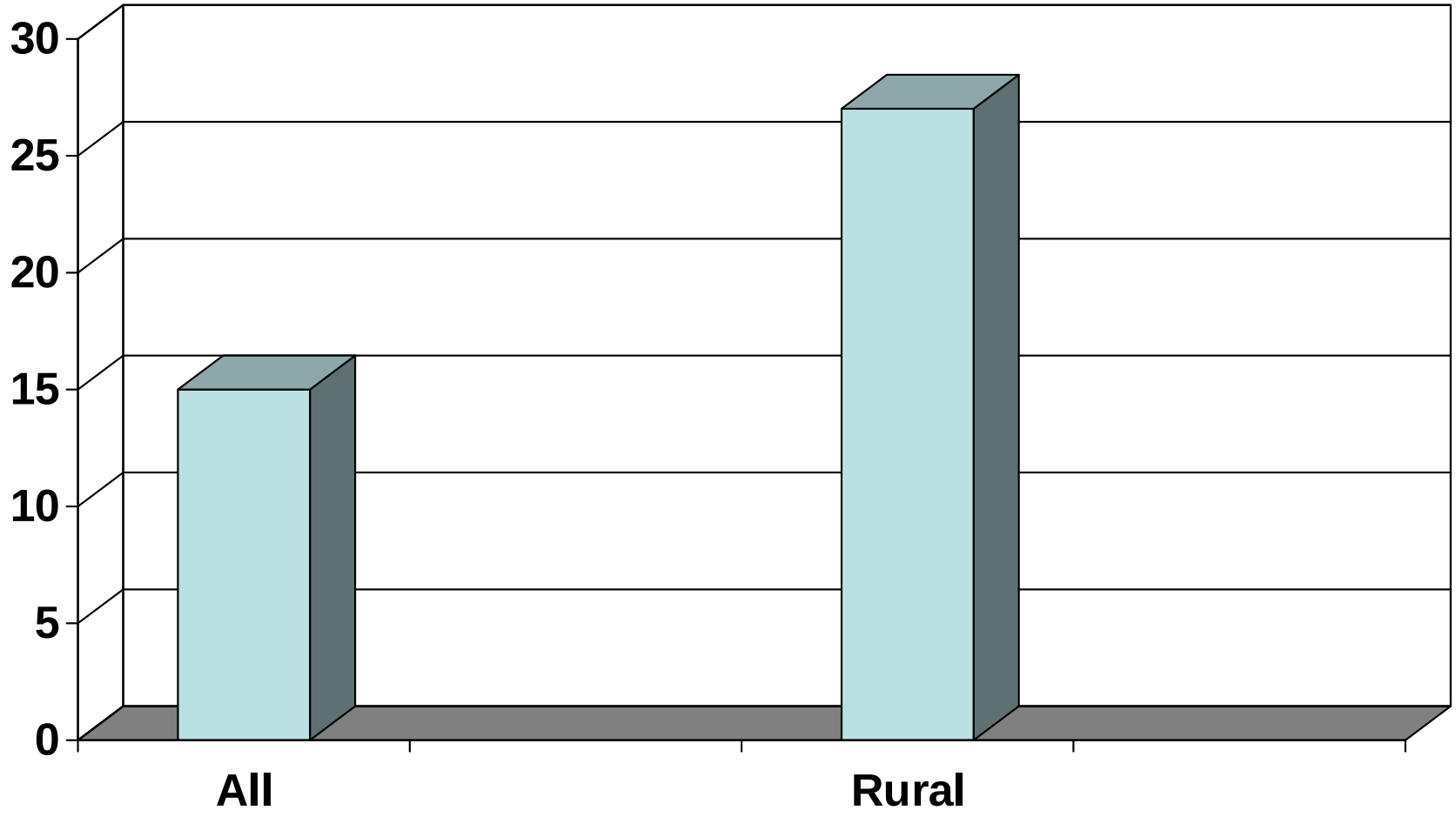
Is Broadband Not Available to Dial-Up Users? (2004)



Source: Pew Internet & American Life Project

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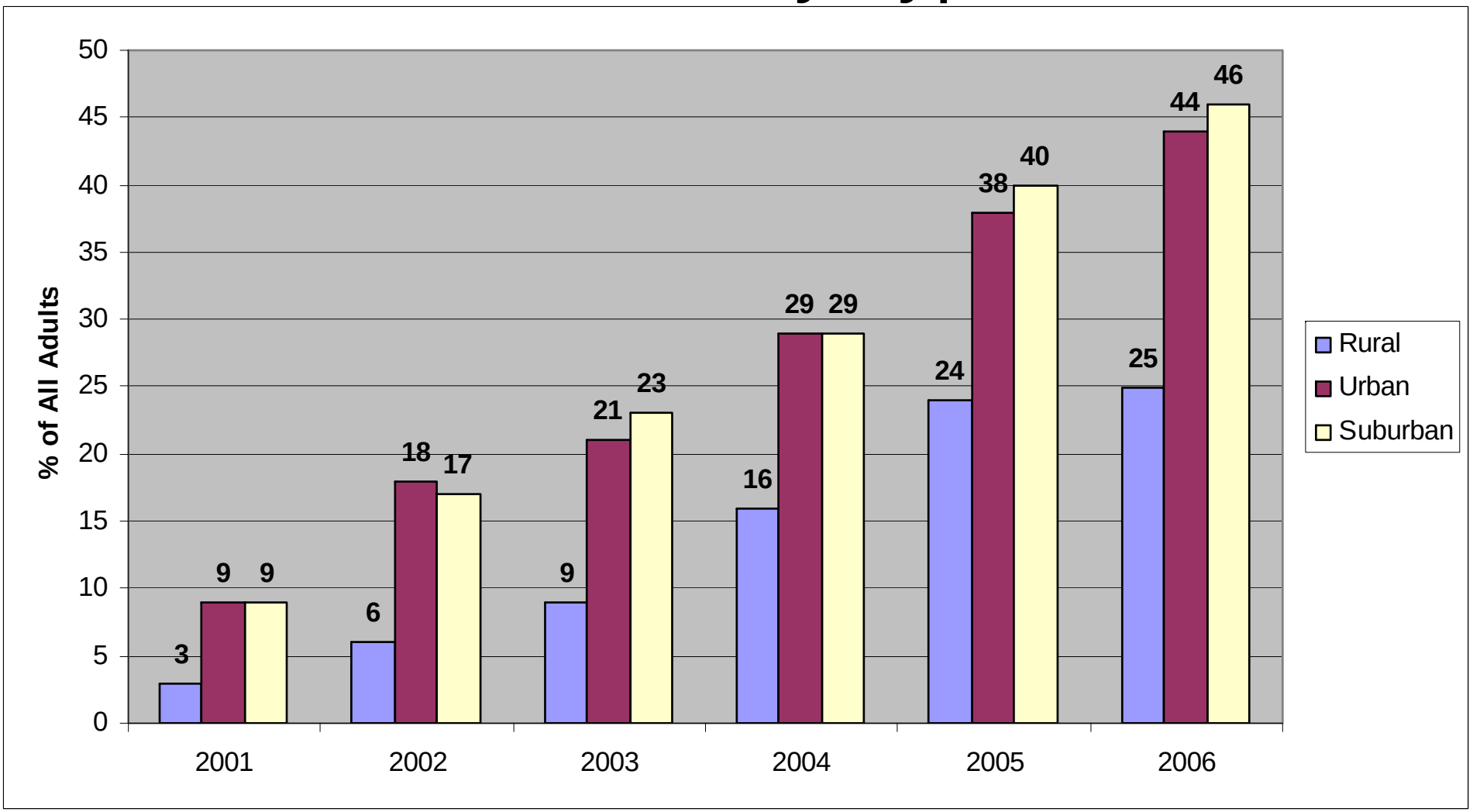
Home Broadband Adoption By Community Type



Source: Pew Internet & American Life Project, “Rural Broadband Internet Use” (February 2006).

Internet Gaps:

Income, Ethnicity, Age, & Sex

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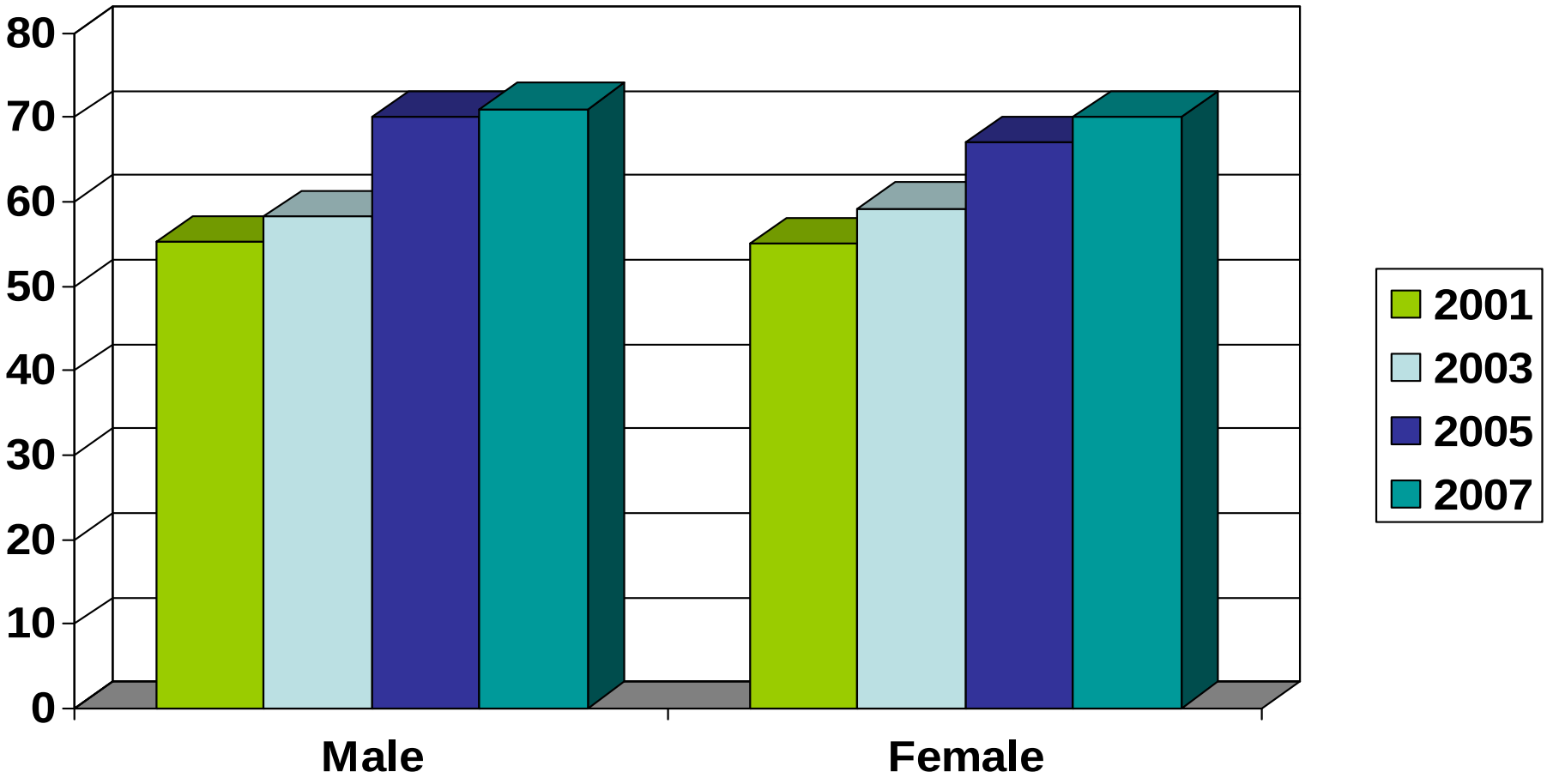
Little Difference in Internet Users by Gender



Source: National Telecommunications and Information Administration (2001, 2003), Pew Internet & American Life Project (2005, 2007)

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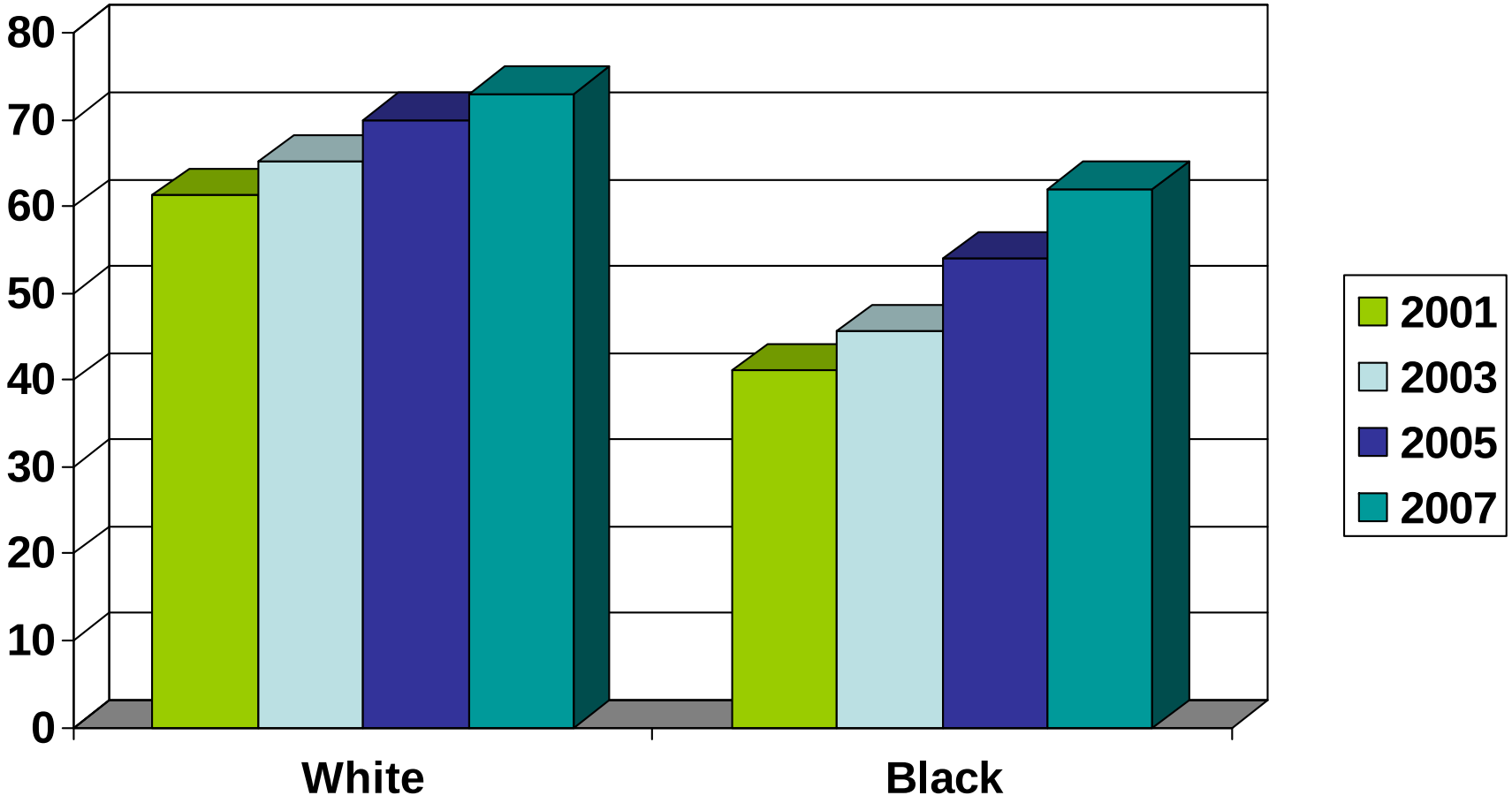
Significant Different in Internet Users by Race/Ethnicity, But Africant Americans Are Making Faster Progress



Source: National Telecommunications and Information Administration (2001, 2003), Pew Internet & American Life Project (2005, 2007)

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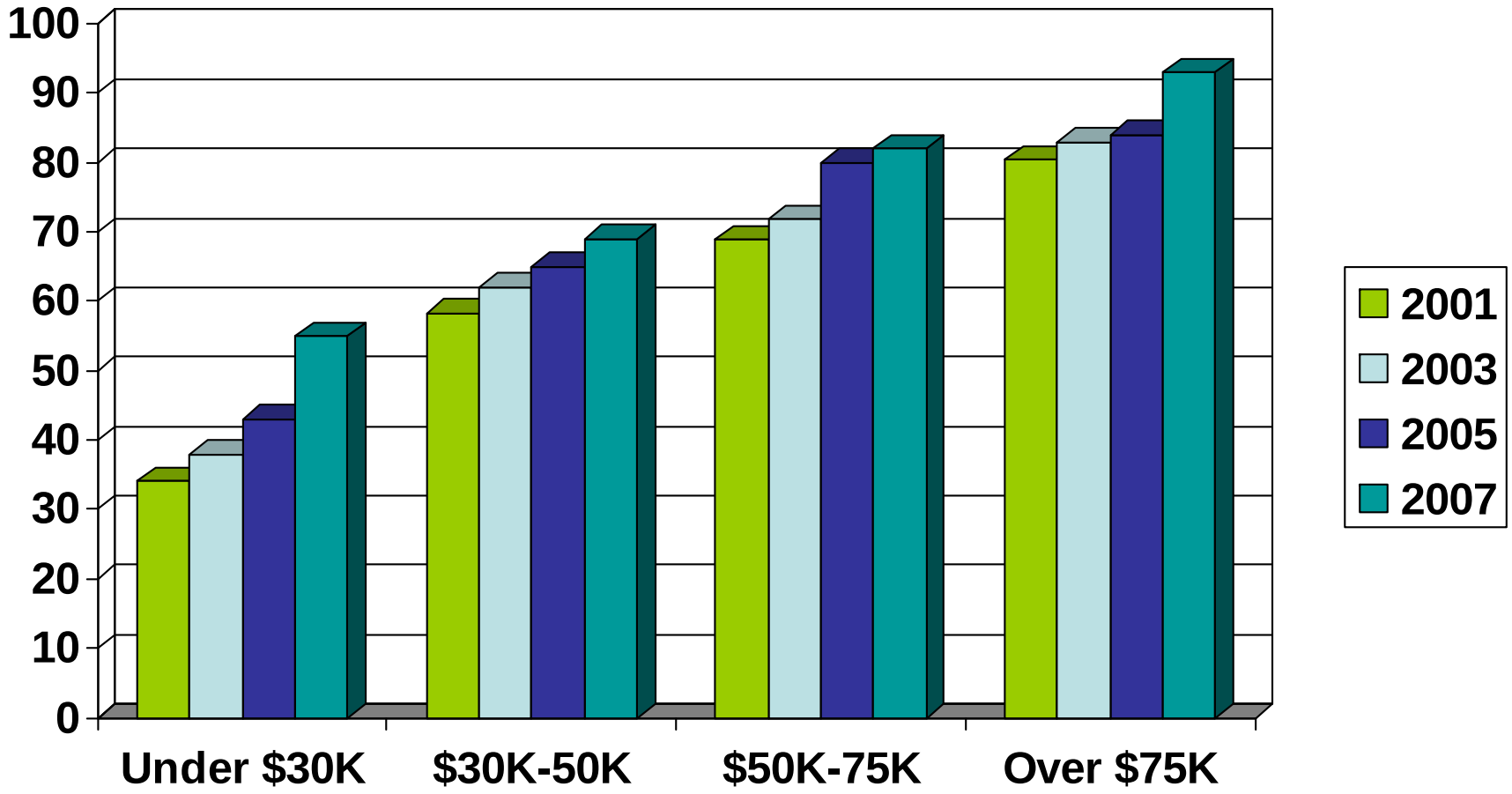
Household Income is a Large Factor Determining Internet Use



Source: National Telecommunications and Information Administration (2001, 2003), Pew Internet & American Life Project (2005, 2007)

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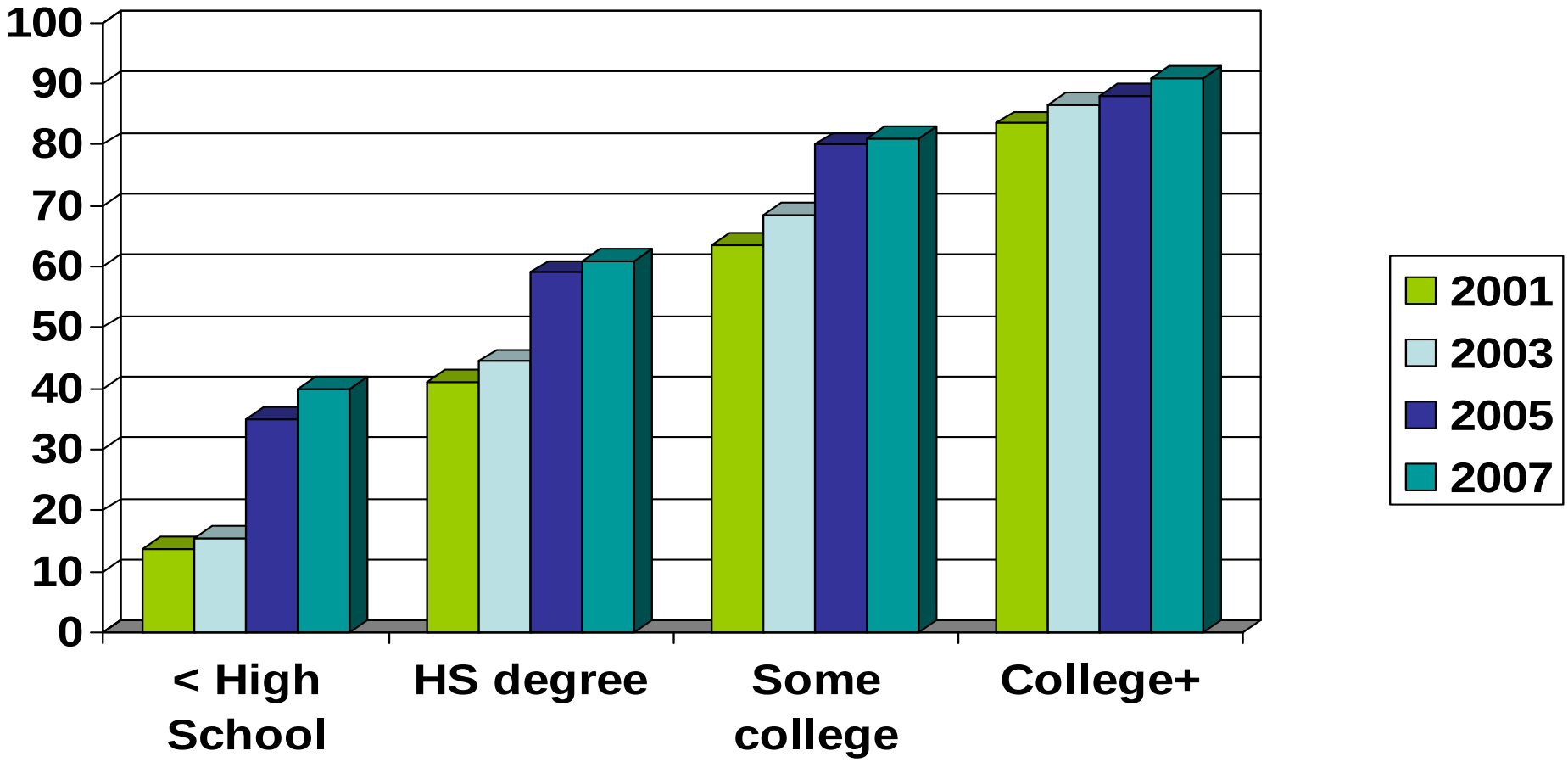
Education is a Large Factor in Determining Internet Use



Source: National Telecommunications and Information Administration (2001, 2003), Pew Internet & American Life Project (2005, 2007)

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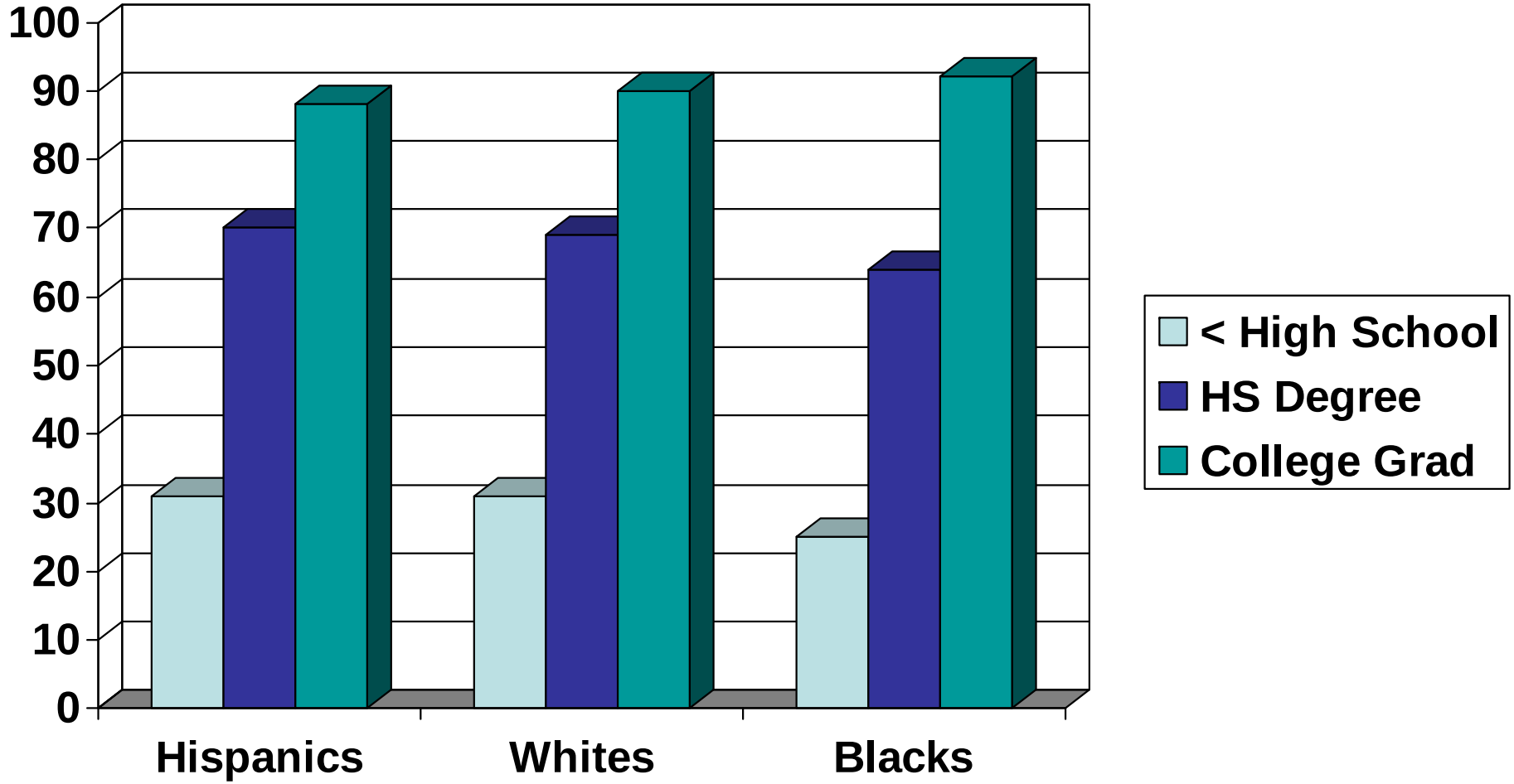
Education is a larger factor than race in Internet Use (% Online By Education and Race/Ethnicity, 2007)



Source: Pew Internet & American Life Project

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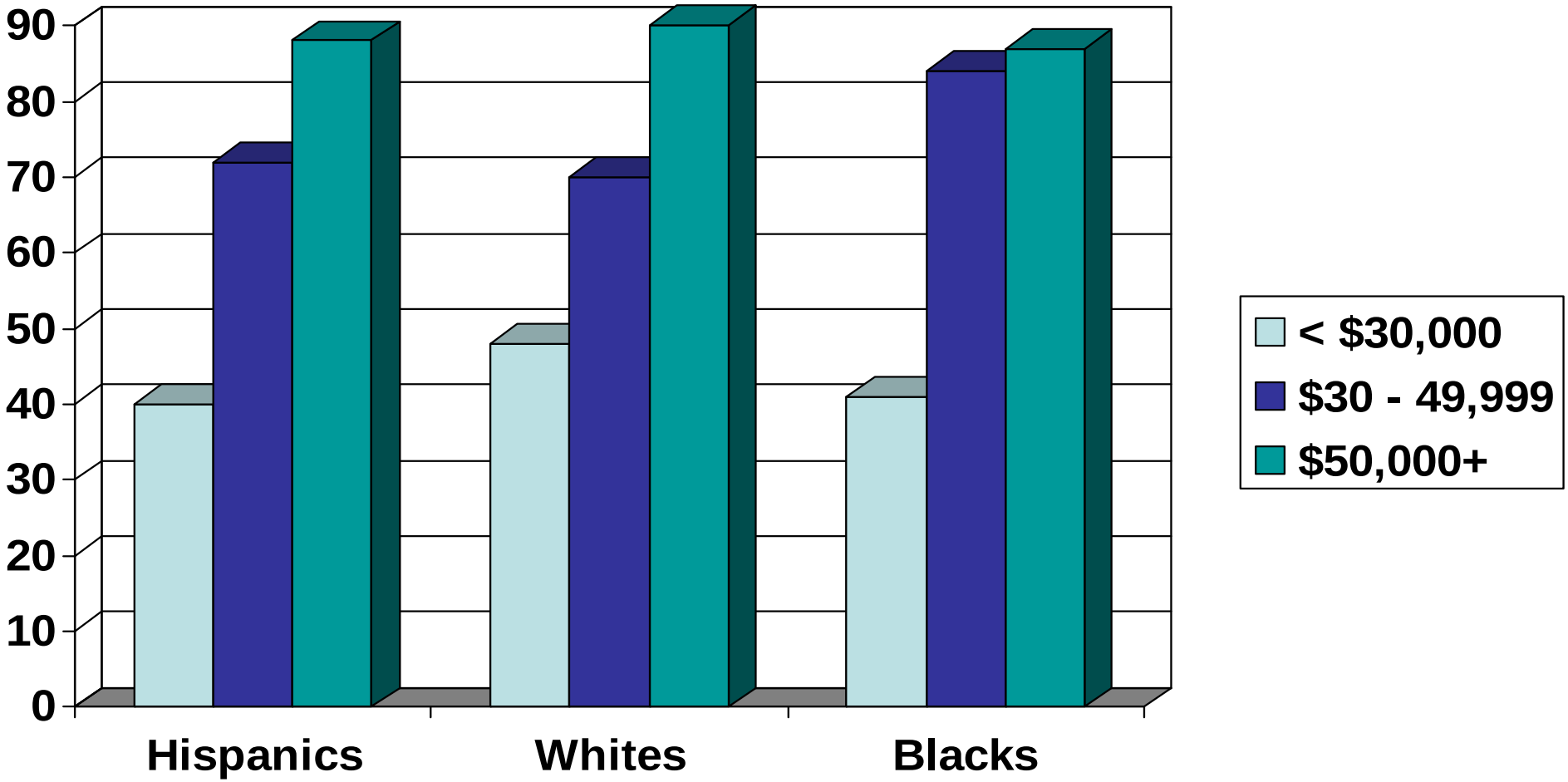
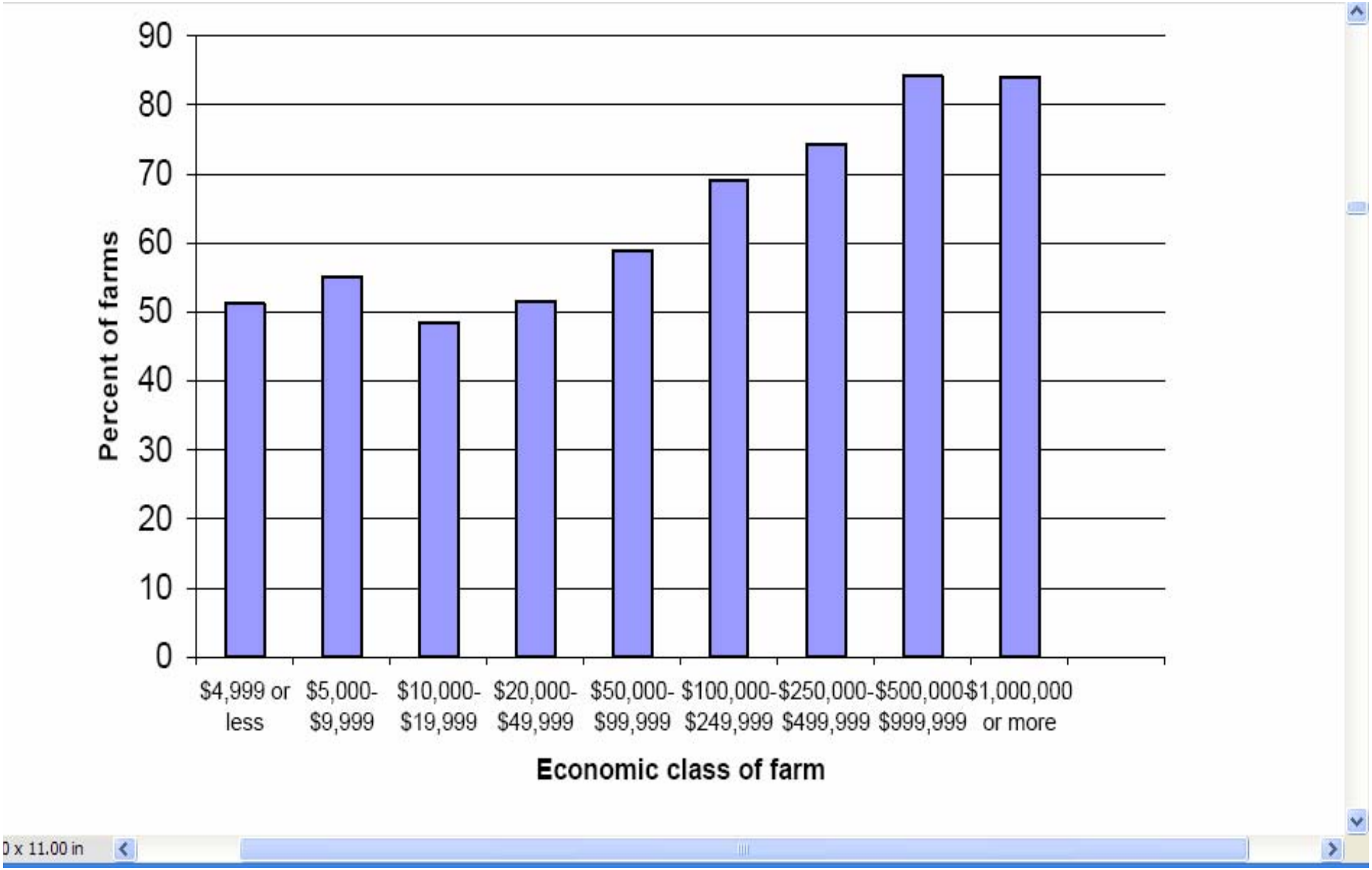
Income is a larger factor than race in Internet Use (% Online By Household Income and Race/Ethnicity, 2007)



Source: Pew Internet & American Life Project



Farm Internet Access by Income (2004)

(Peter Stenberg and Mitchell Morehart Economic Research Service, USDA): <web.si.umich.edu/tprc/papers/2006/649/Stenberg%20TPRC2006%20v2.pdf>.

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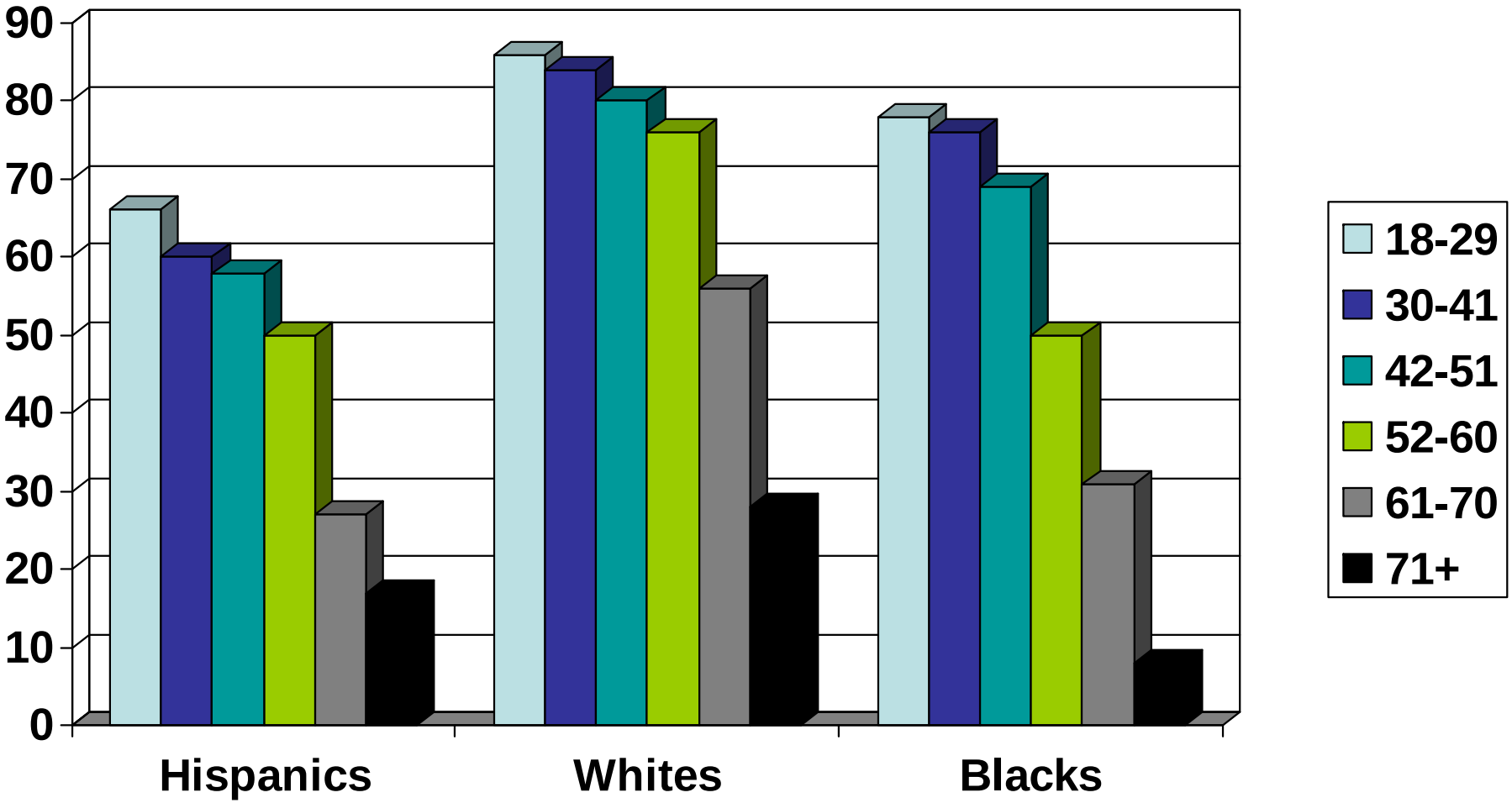
Age is a larger factor than race in Internet Use (% Online By Age and Race/Ethnicity, 2007)



Source: Pew Internet & American Life Project

Broadband Gaps:

Income, Ethnicity, Age, & Sex

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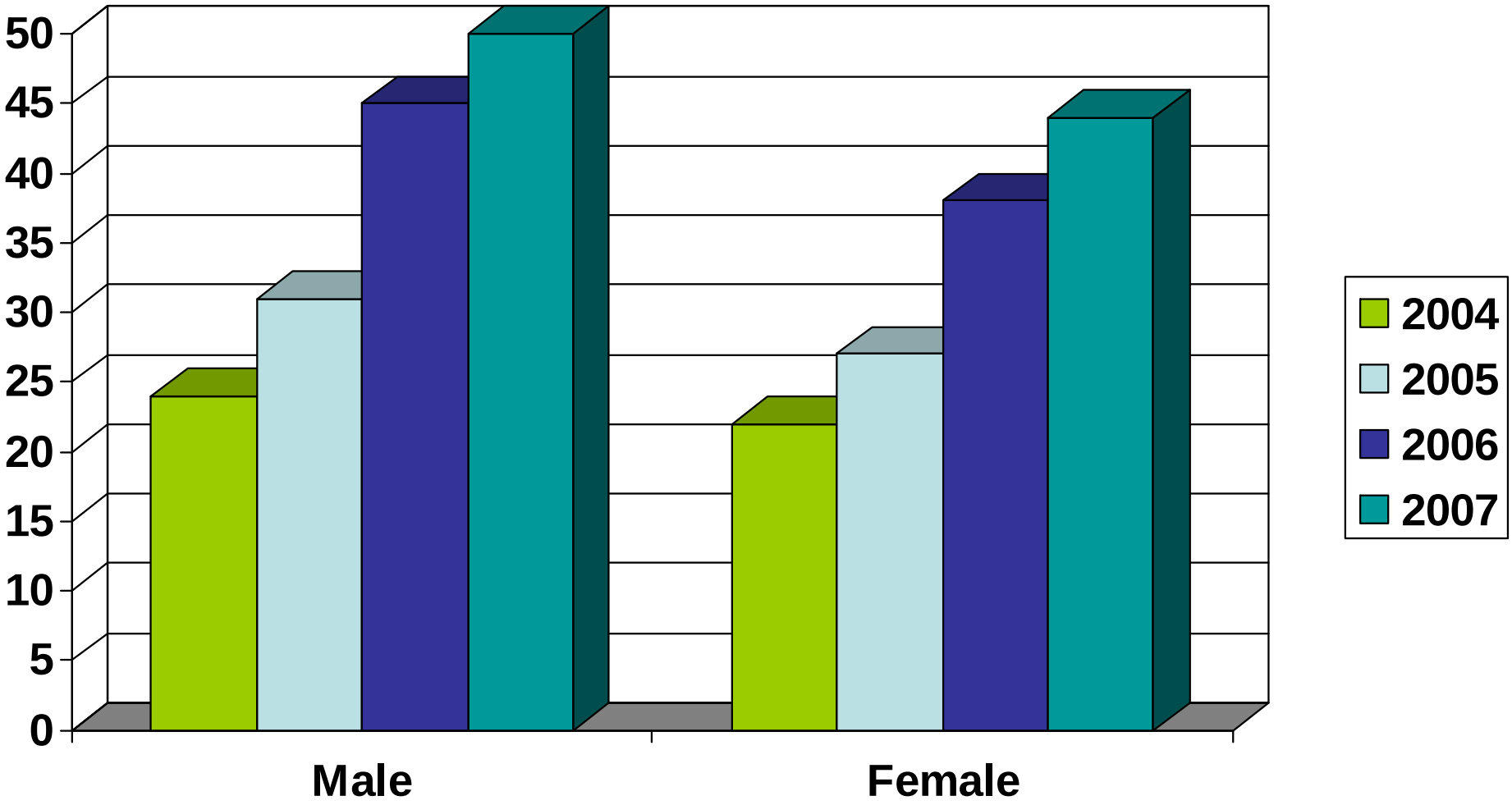
% with Broadband at Home by Gender



Source: Pew Internet & American Life Project and National Telecommunications and Information Administration

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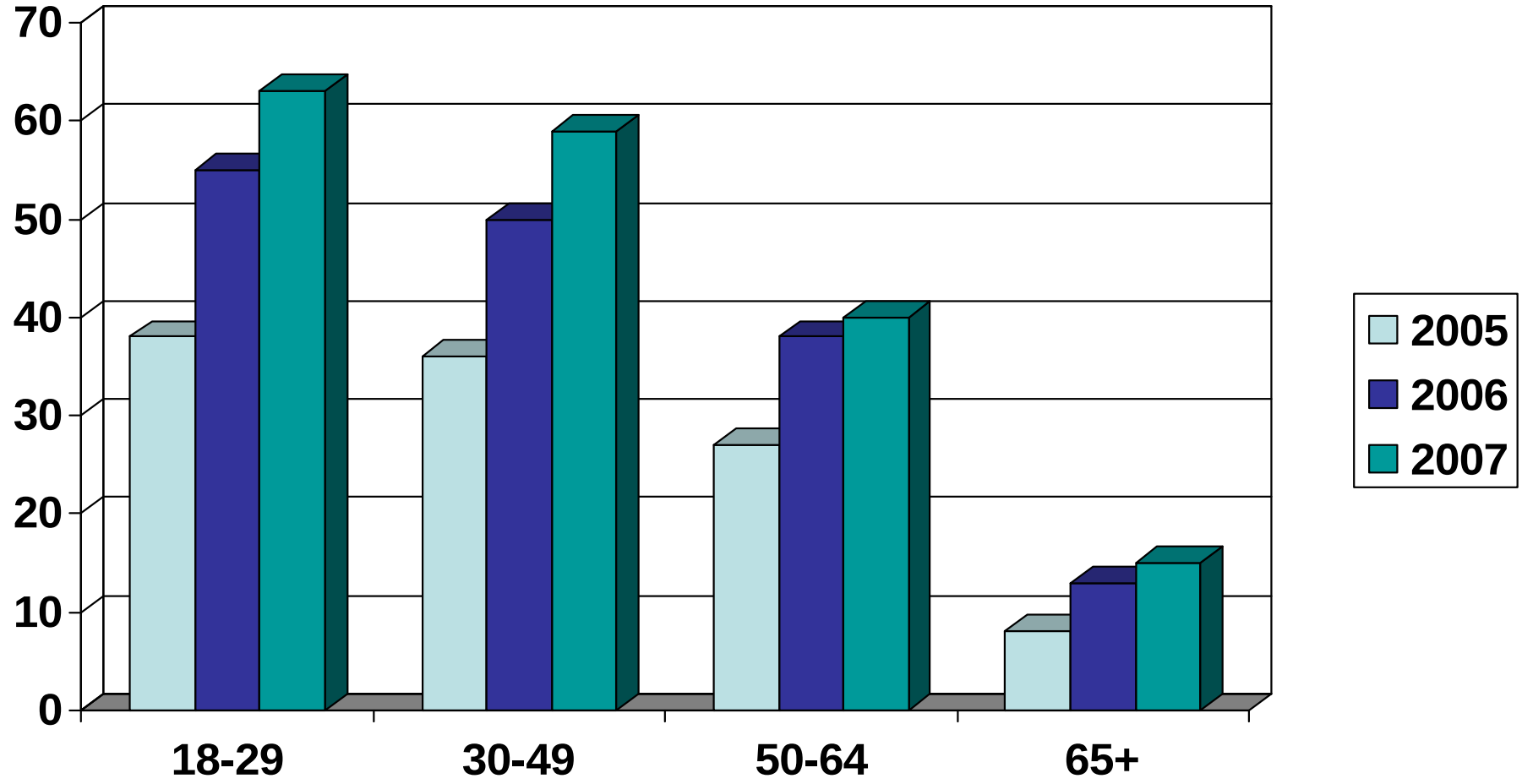
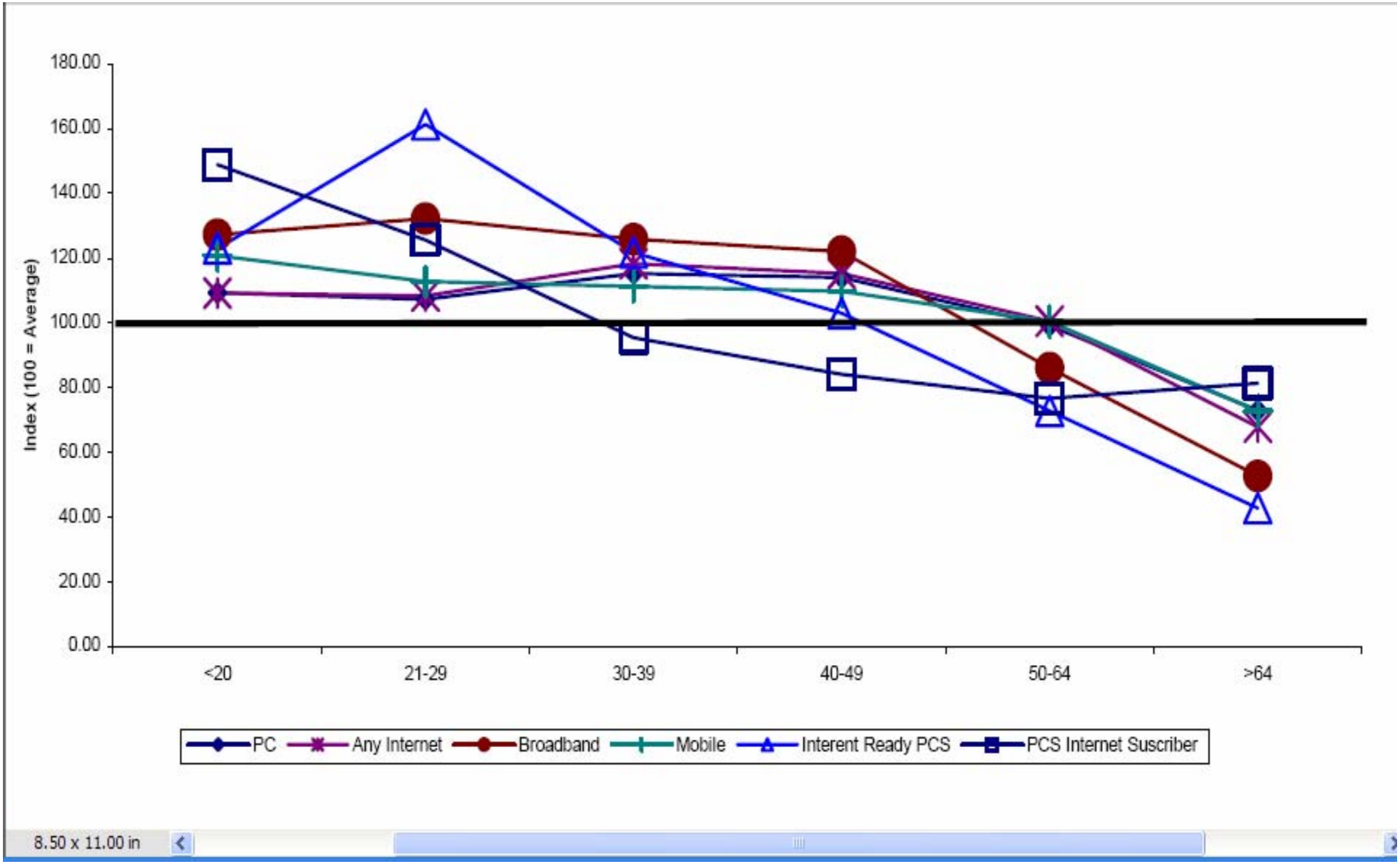
% with Broadband at Home by Age



Source: Pew Internet & American Life Project



Index of Penetration Rates for Selected Products by Age

(Paul Rappoport, James Alleman, & Lester D. Taylor, "Household Demand for Wireless Telephony: An Empirical Analysis"): <tprc.org/papers/2003/215/HouseholdWirelessDemand2.pdf>.

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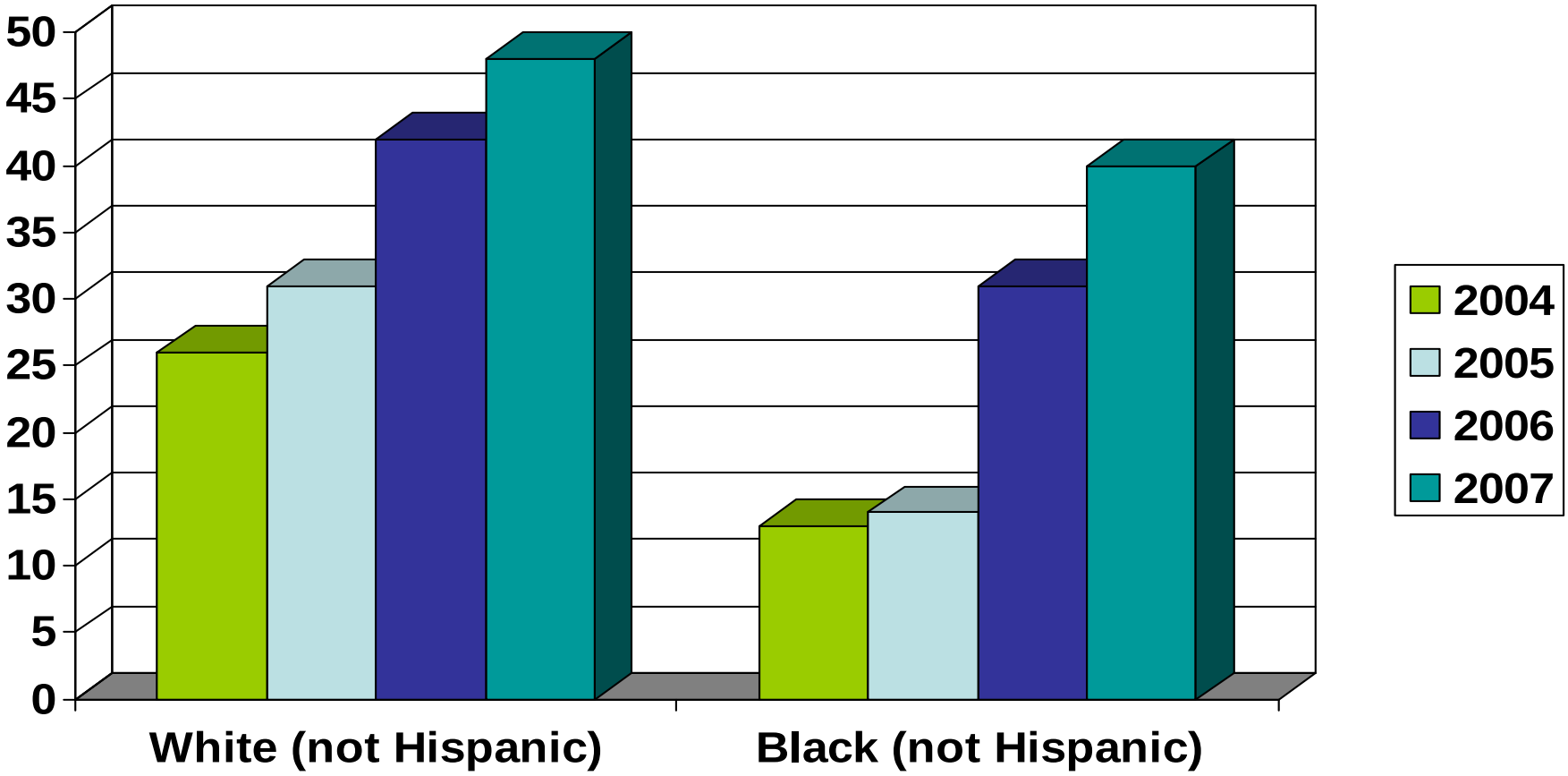
% with Broadband at Home by Race/Ethnicity



Source: Pew Internet & American Life Project and National Telecommunications and Information Administration

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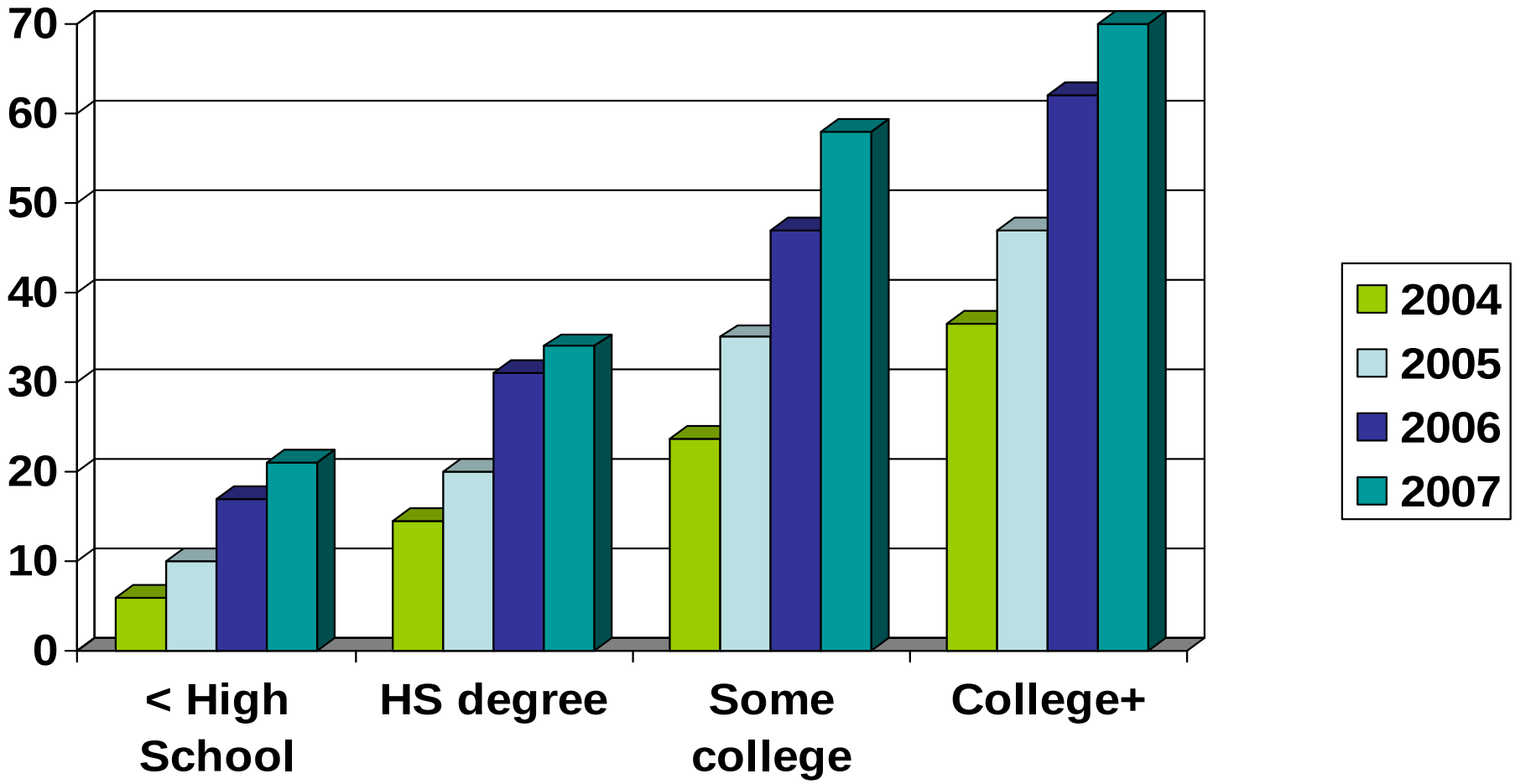
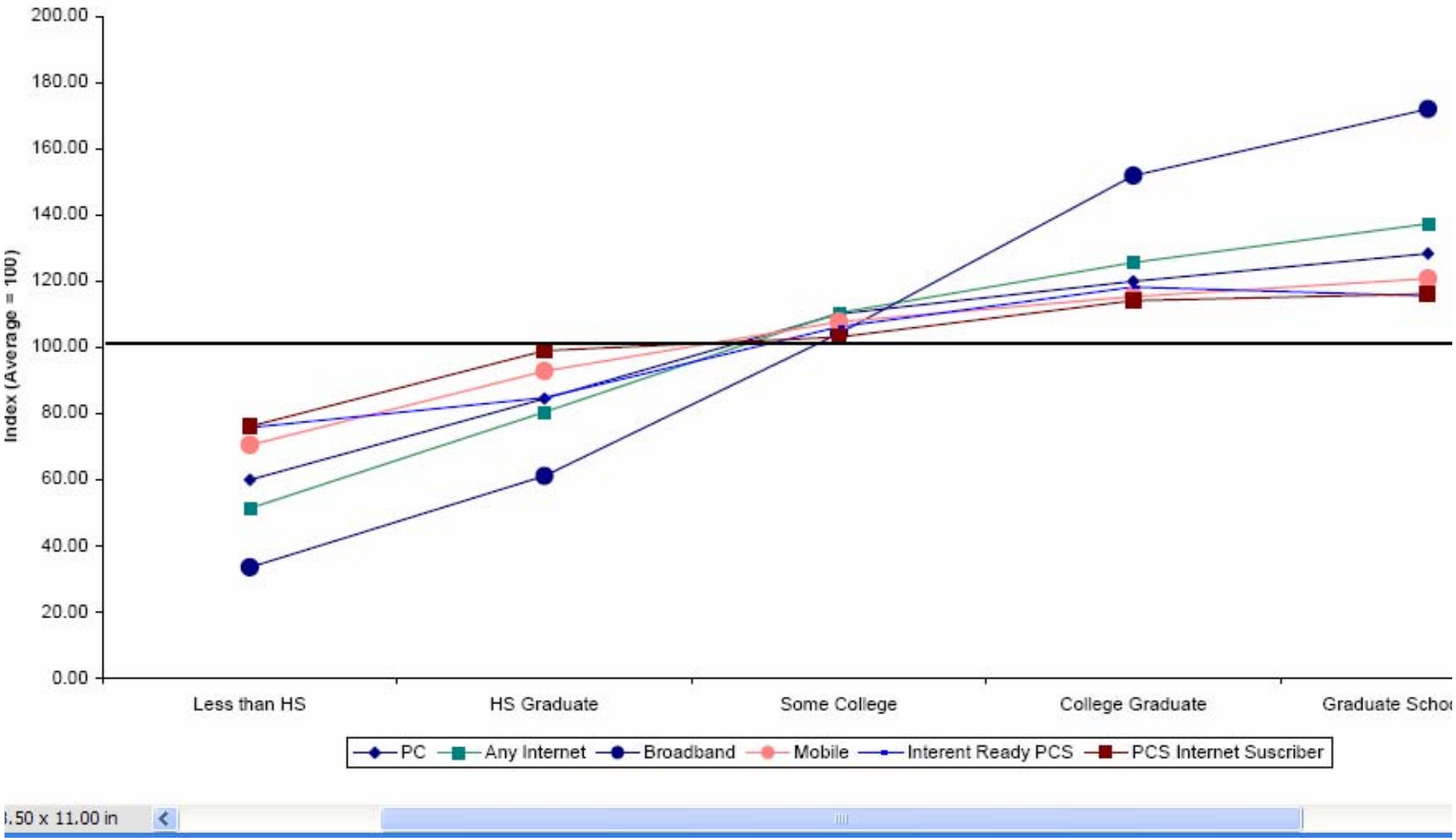
% with Broadband at Home by Education



Source: Pew Internet & American Life Project and National Telecommunications and Information Administration



Index of Penetration Rates for Selected Products by Level of Education

(Paul Rappoport, James Alleman, & Lester D. Taylor, "Household Demand for Wireless Telephony: An Empirical Analysis"): <tprc.org/papers/2003/215/HouseholdWirelessDemand2.pdf>.

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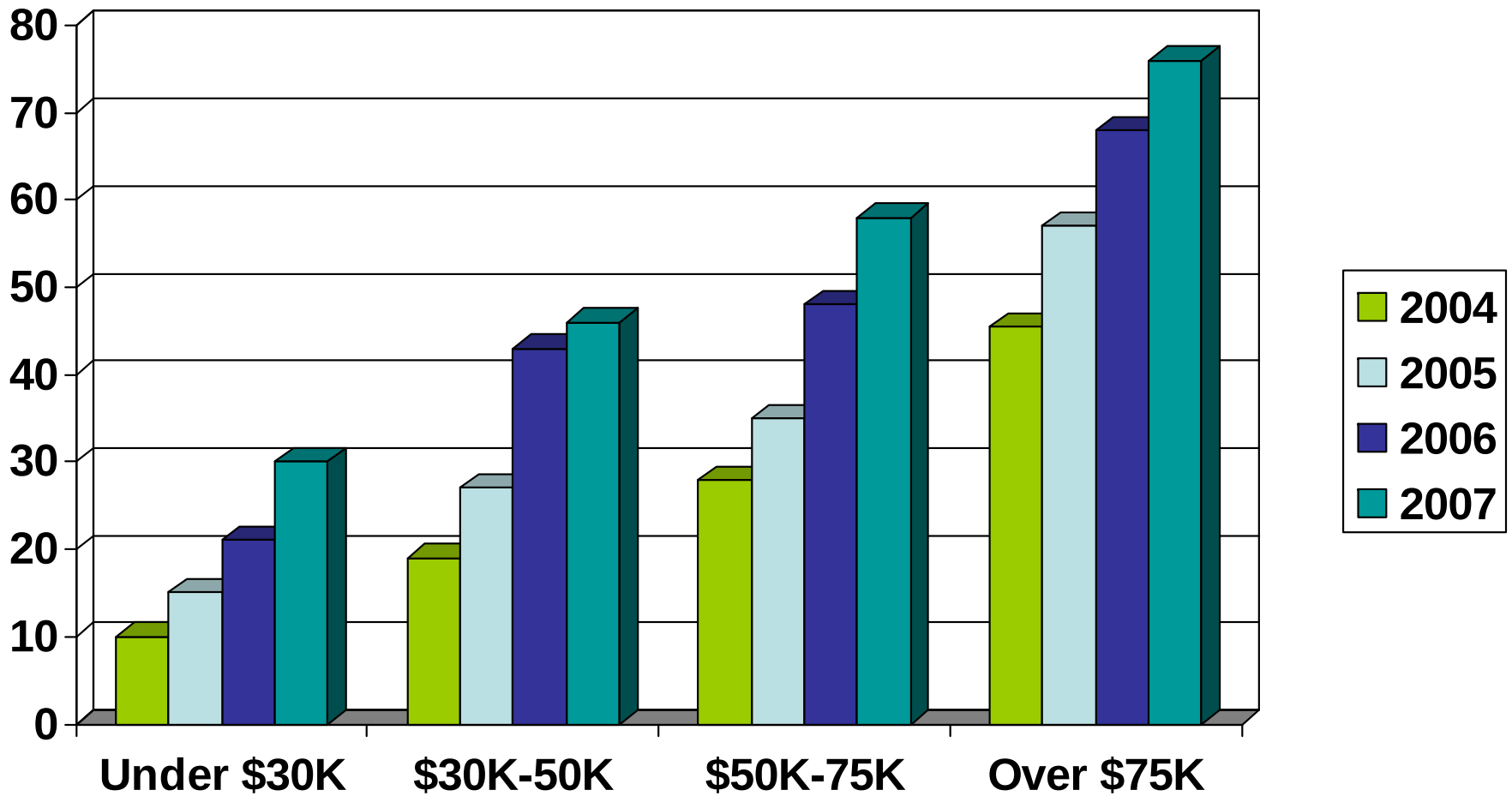
% with Broadband at Home by Household Income



Source: Pew Internet & American Life Project and National Telecommunications and Information Administration

Index of Penetration Rates for Selected Products by Income Level

(Paul Rappoport, James Alleman, & Lester D. Taylor, "Household Demand for Wireless Telephony: An Empirical Analysis"): <tprc.org/papers/2003/215/HouseholdWirelessDemand2.pdf>.

Broadband and Computer Gaps:

Disability

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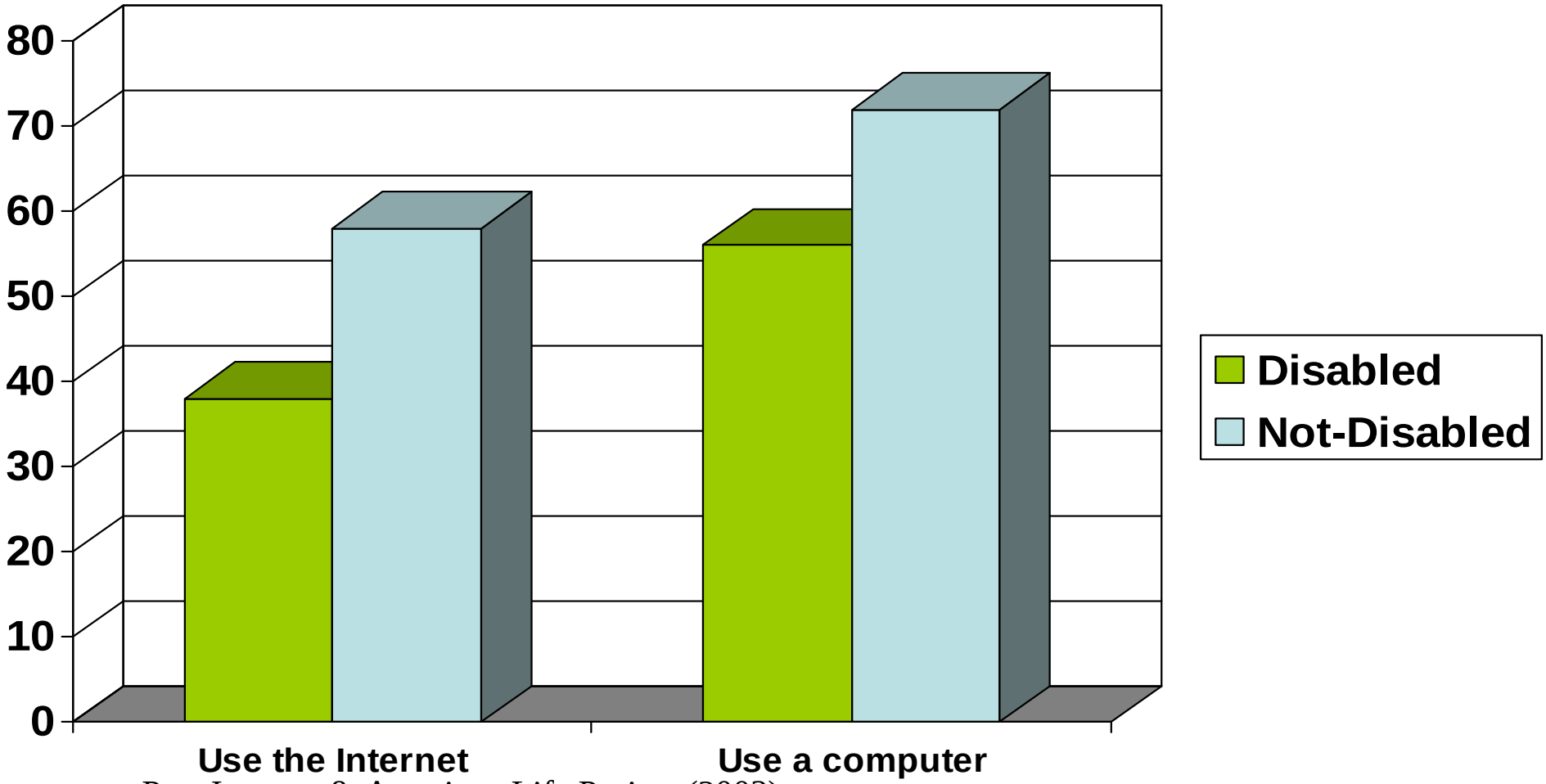
Use of Computer and Internet, Disabled vs. Non-disabled Persons (2003)



Source: Pew Internet & American Life Project (2003)

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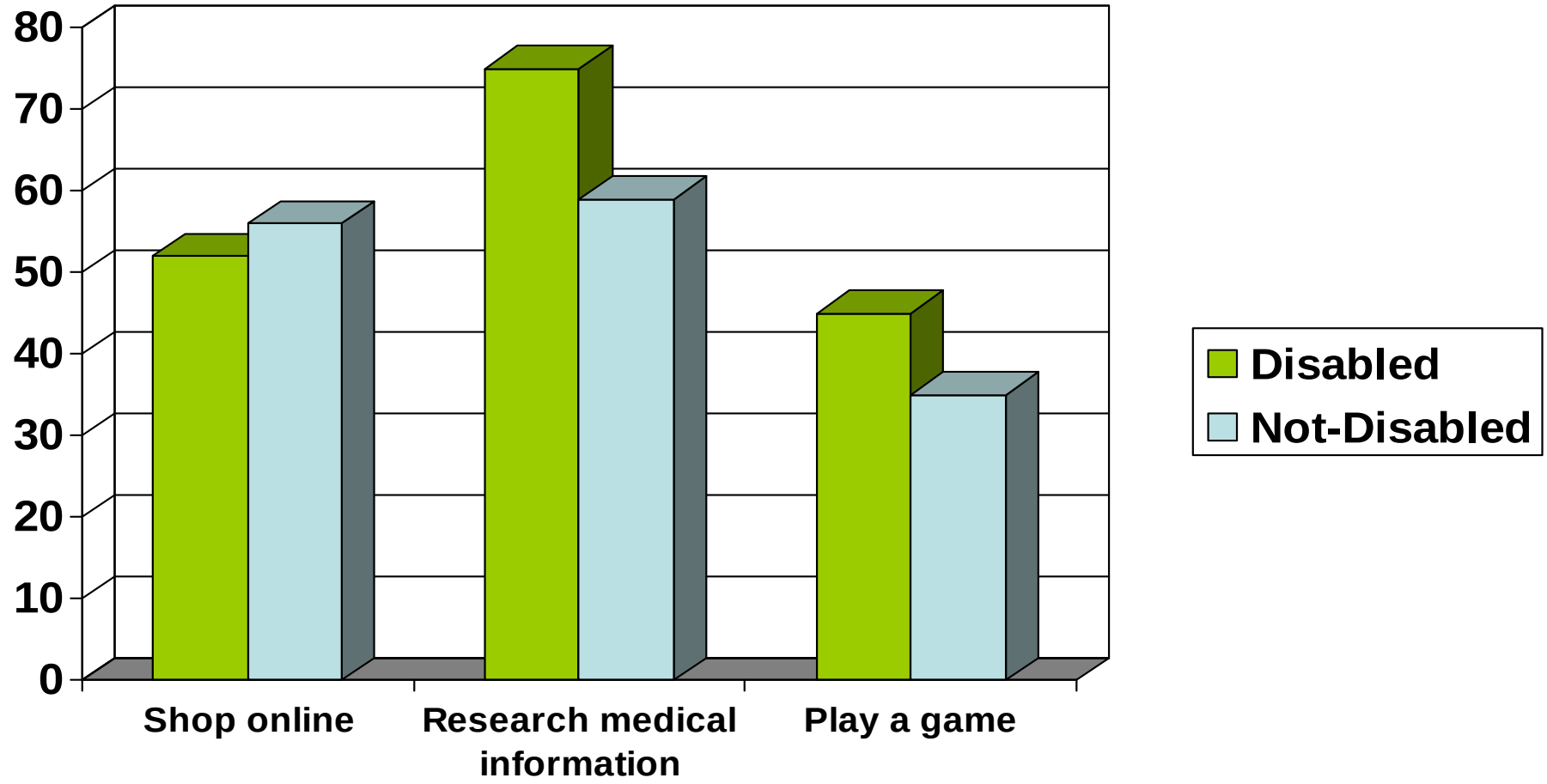
Activities Online, Disabled vs. Non-disabled Persons



Source: Pew Internet & American Life Project (2003)

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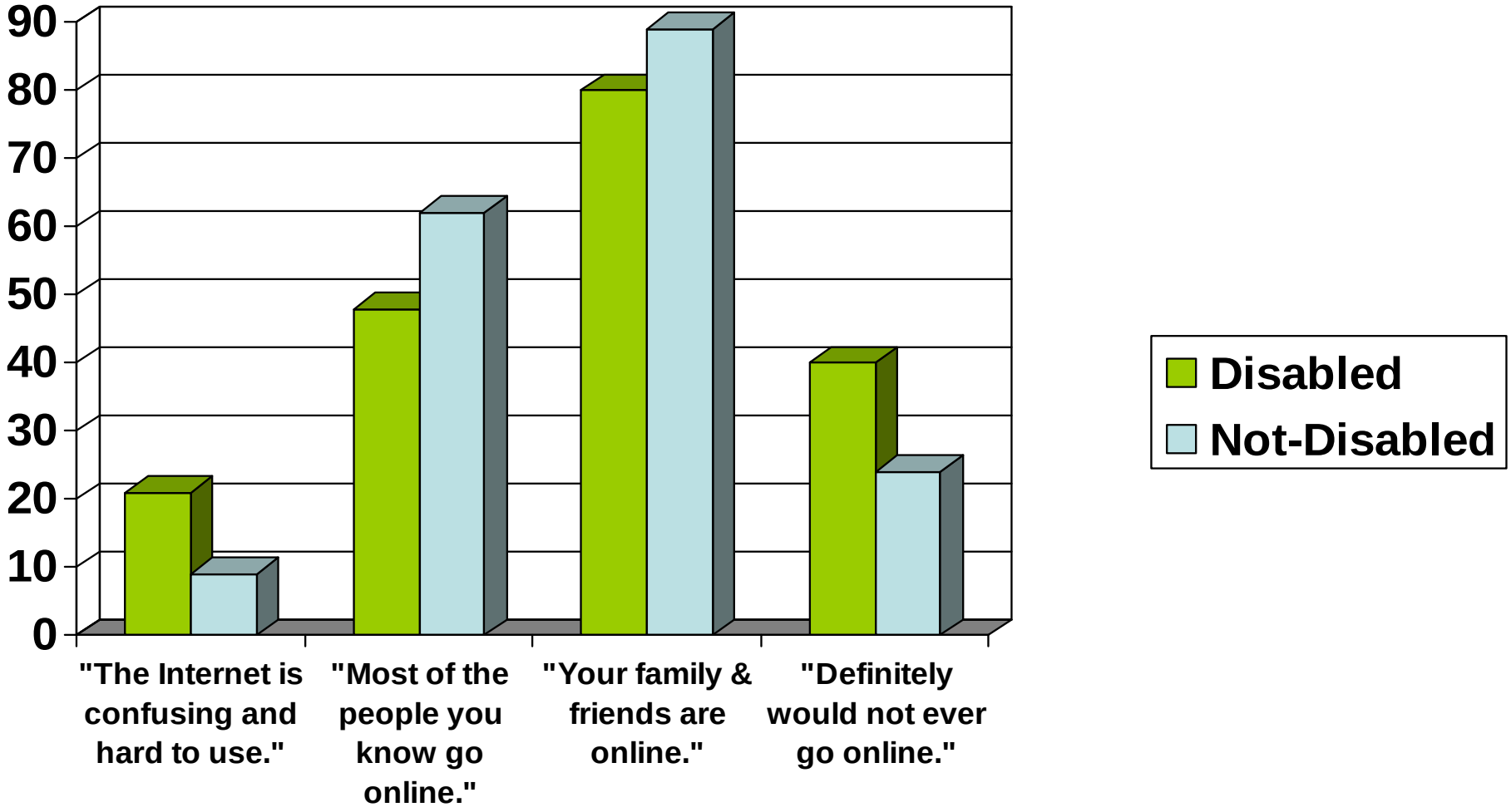
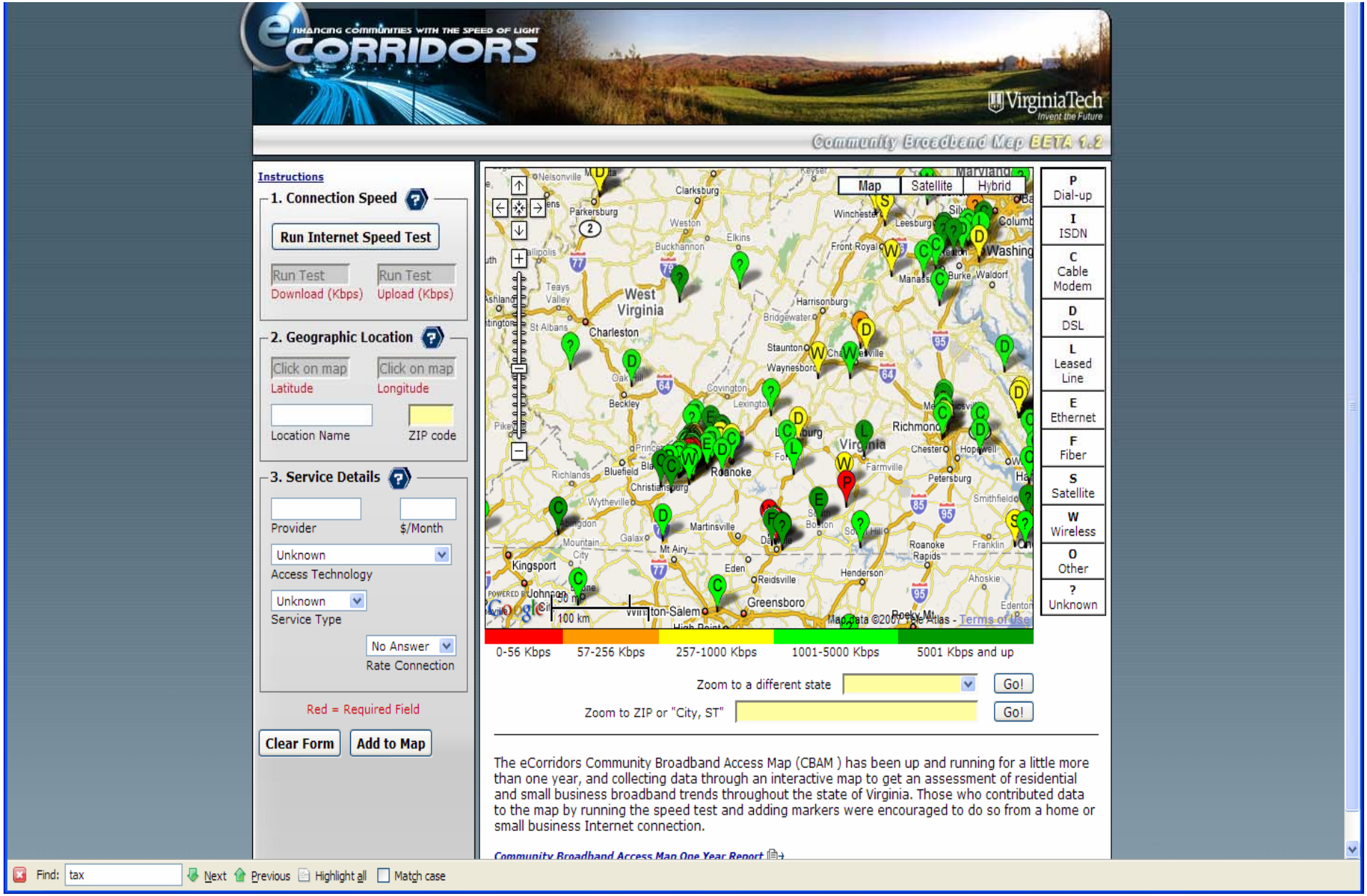
Perceptions of Internet, Disabled vs. Non-disabled Persons



Source: Pew Internet & American Life Project (2003)

Analytical needs …

- Get better data on where broadband is and isn’t.



Virginia Tech's eCorridors Broadband Access map enables real-time, bottom-up broadband mapping (www.ecorridors.vt.edu/maps/broadbandmap.php)

Analytical needs …

• Get better data on where broadband is and isn’t.

• Get better information on why some individuals are digital non-adopters and the best ways to get them to be adopters.

www.itif.org

ratkinson@itif.org