

Focus on Broadband Adoption - Policy and Analysis *and their Lamentable Disconnect*

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Recent Policy

| National Broadband Plan: Connecting America | | | |
|--|---|------------------|-----------------------------------|
| Goal | Action Item | Percent Complete | Quarter |
| Maximize Consumer Benefit and Foster Competition | Launch National Broadband Map with NTIA | 58 % complete | Quarter 1 January – March 2011 |
| Accelerate Universal Broadband Access and Adoption | Launch Public/Private Partnership to Maximize Broadband Use by Small Businesses | 74% complete | Quarter 2 April – June 2010 |
| | E-Rate FY 2011 | | |
| | Launch FCC Office of Native Affairs and Policy | | |
| | FCC Native Nations Broadband Task Force | | |

Broadband Technology Opportunities Program (BTOP)

| Type of Grant (number of grants; \$ value) | Start Dates | End Dates | Dollar Values |
|---|--|------------------|------------------------------|
| | 9/2009 – 4/2013 | 10/2011 – 8/2015 | \$176,400 - \$154,640,000 |
| Sustainable Adoption (44; \$250m) | Projects that promote broadband demand and affordability; projects providing broadband education, awareness, training, access, equipment, or support, particularly among vulnerable population groups where broadband technology has traditionally been underutilized. | | |
| Public Computer Center (64; \$200m) | Projects that expand public access to broadband service and enhance broadband capacity at entities that permit the public or a specific vulnerable population to use these computing centers. | | |
| State Data and Development (55; \$350m) | Projects that gather comprehensive and accurate state-level broadband mapping data, develop state-level broadband maps, aid in the development and maintenance of a national broadband map, and fund statewide initiatives for broadband planning. | | |
| Infrastructure Grants (124; \$3,729m) | Projects that focus on "middle mile" infrastructure, which makes it easier for ISPs to sell broadband services in areas where startup costs were previously too high to make the venture profitable. | | |

What We Are Doing...

What Should States Worry About?

Three Main Problems

- (1) Often Policy Does Not Focus on Adoption
- (2) With Policies that Do Focus on Adoption, Policymakers and Analysts Do Not Know What Works
- (3) Adoption is Often Ineffectively Targeted

Demand-Side Programs to Stimulate Adoption of Broadband

The American Recovery and Reinvestment Act states that attention must be paid to both the supply and demand sides of the market.

A recent survey from the Pew Internet & American Life Project indicates that only 4 percent of adults in the US report that they do not subscribe to broadband because of lack of availability.

Crucial Policy Task

Determine the most effective means to increase demand for broadband service.

Problem: *evidence regarding evaluation of demand-side efforts to encourage adoption is exceedingly thin.*

Fallacy of False Cause — concluding that the simultaneous presence of two factors means that one caused the other, or, in a statistical sense, that correlation implies causality.

Evaluations of Programs Intended to Increase Broadband Adoption

National Initiatives

South Korea's Ten Million People Internet Education project

E-rate program

State Initiatives

E-NC

ConnectKentucky

National versus Local Initiatives

National Initiatives

Pros – greater resources

Cons – poor oversight; one-size fits all policies

State and Local Initiatives

Pros – knowledge of community; intended recipients benefit

Cons – limited capabilities to collect data and evaluate programs effectively

What Works Best

A program should *motivate non-users to adopt, make broadband affordable, employ content in the training that relates to everyday life or the use of public services, and focus on the accessibility and usability of broadband and online services.*

What's Missing

Cost Benefit Analysis

- Social costs often are overlooked
- Statements that advantages and benefits of a program are “invaluable,” “profound,” or “priceless” are of little use.

Three Necessary Elements

- (1) Goal of evaluation process must be clarified.
- (2) Appropriate data must be collected.
- (3) Appropriate statistical methods must be used.

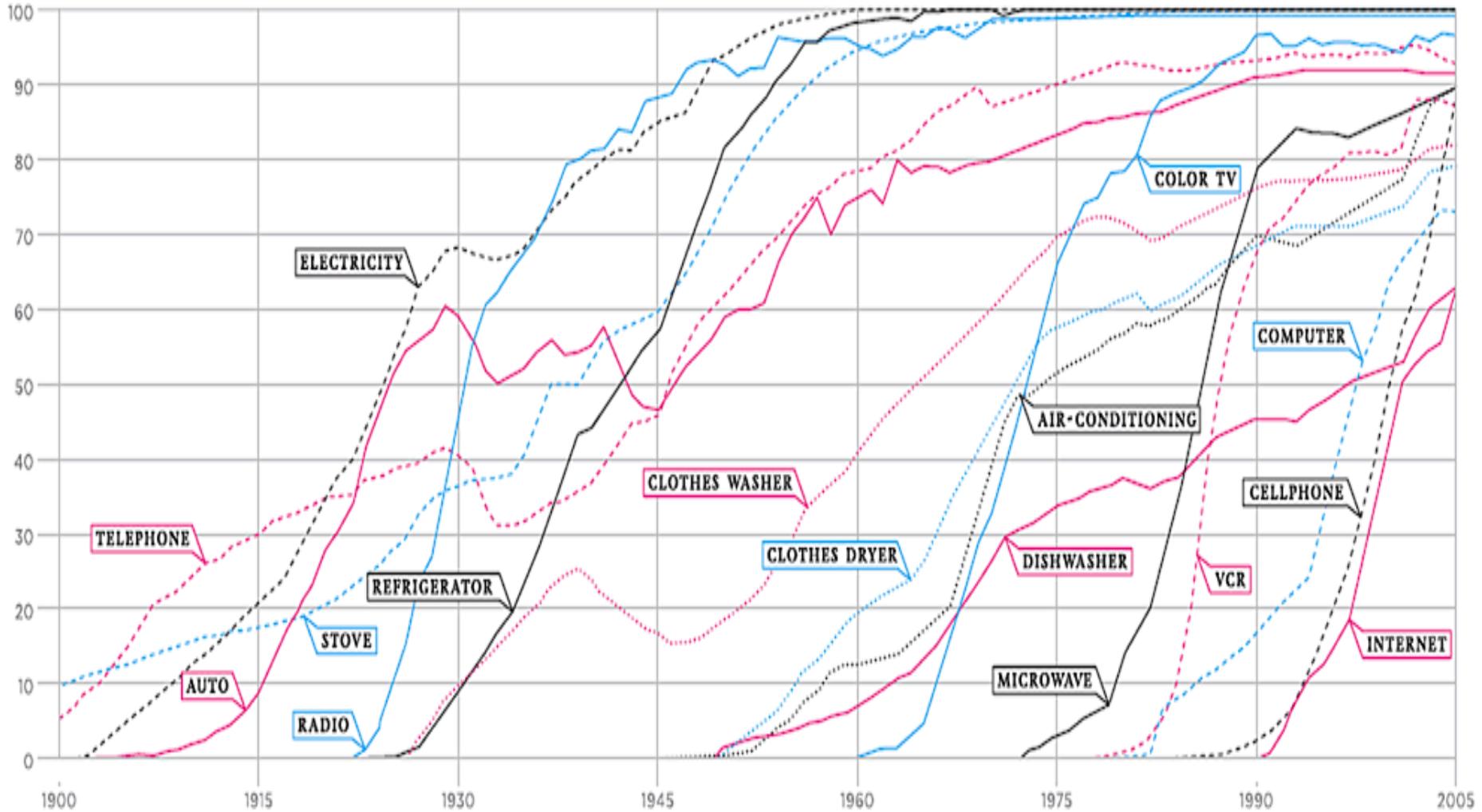
Secondary Policy Task

Remain mindful of barriers to adoption, those well-known and those less known.

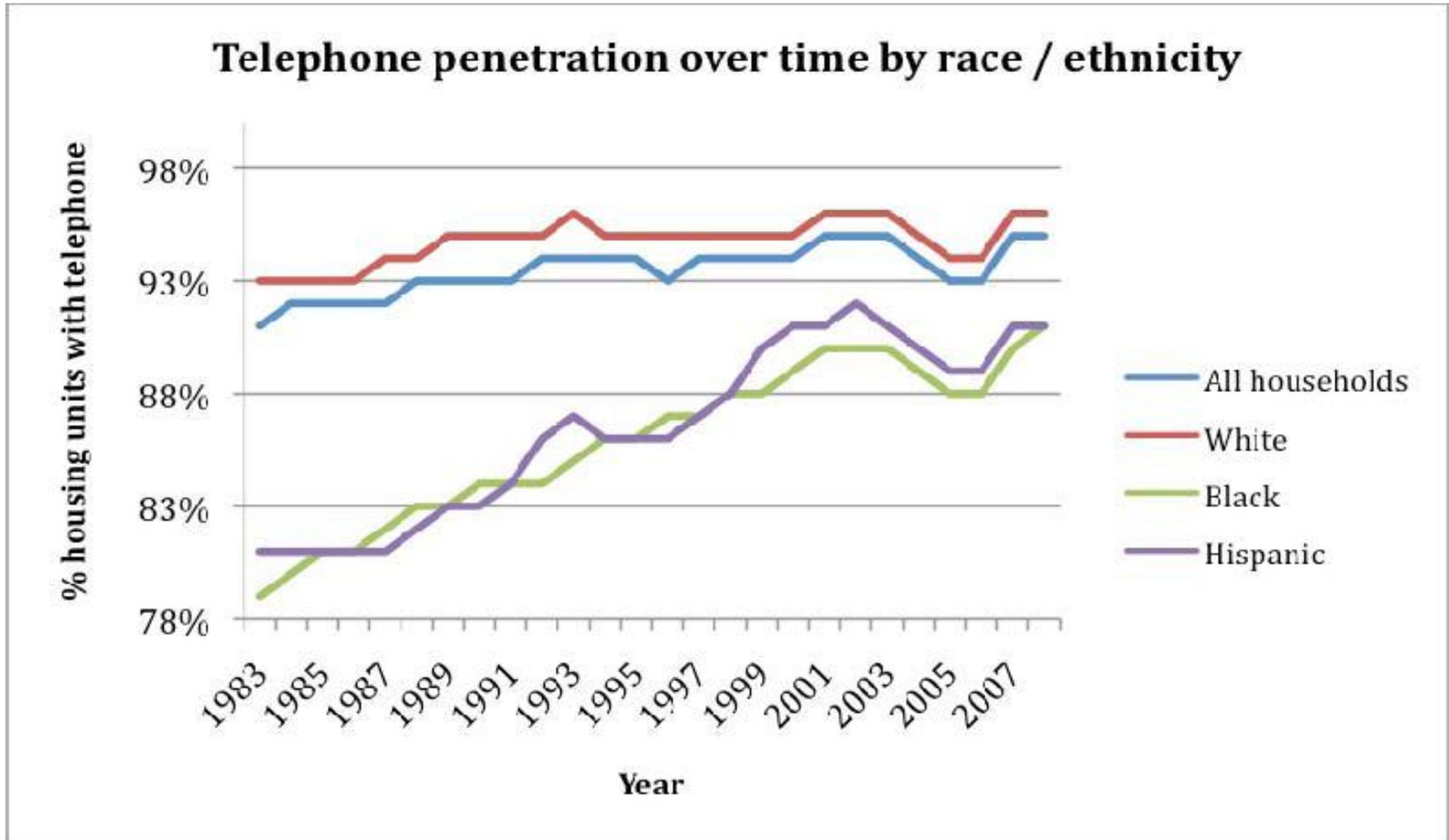
- Price of broadband service
- Lack of computer ownership
- Lack of digital literacy
- Lack of perceived value of broadband

PERCENT OF
U.S. HOUSEHOLDS

CONSUMPTION SPREADS FASTER TODAY



Adoption Has Been Uneven



Years for Technology to Reach American Homes

| | 50 % | 60 %– 80% | 80% - 90% |
|-----------------|------|-----------|-----------|
| Telephone | 71 | 14 | 7 |
| Electricity | 52 | 13 | 10 |
| Radio | 28 | | |
| PC | 19 | 7 | * |
| Color TV | 18 | 5 | 5 |
| Cable | 15 | 9 | * |
| Cell Phone | 14 | 8 | * |
| VCR | 12 | 4 | 4 |
| CD Player | 11 | 11 | * |
| Broadband | 11 | | |
| Internet Access | 10 | 8? | |

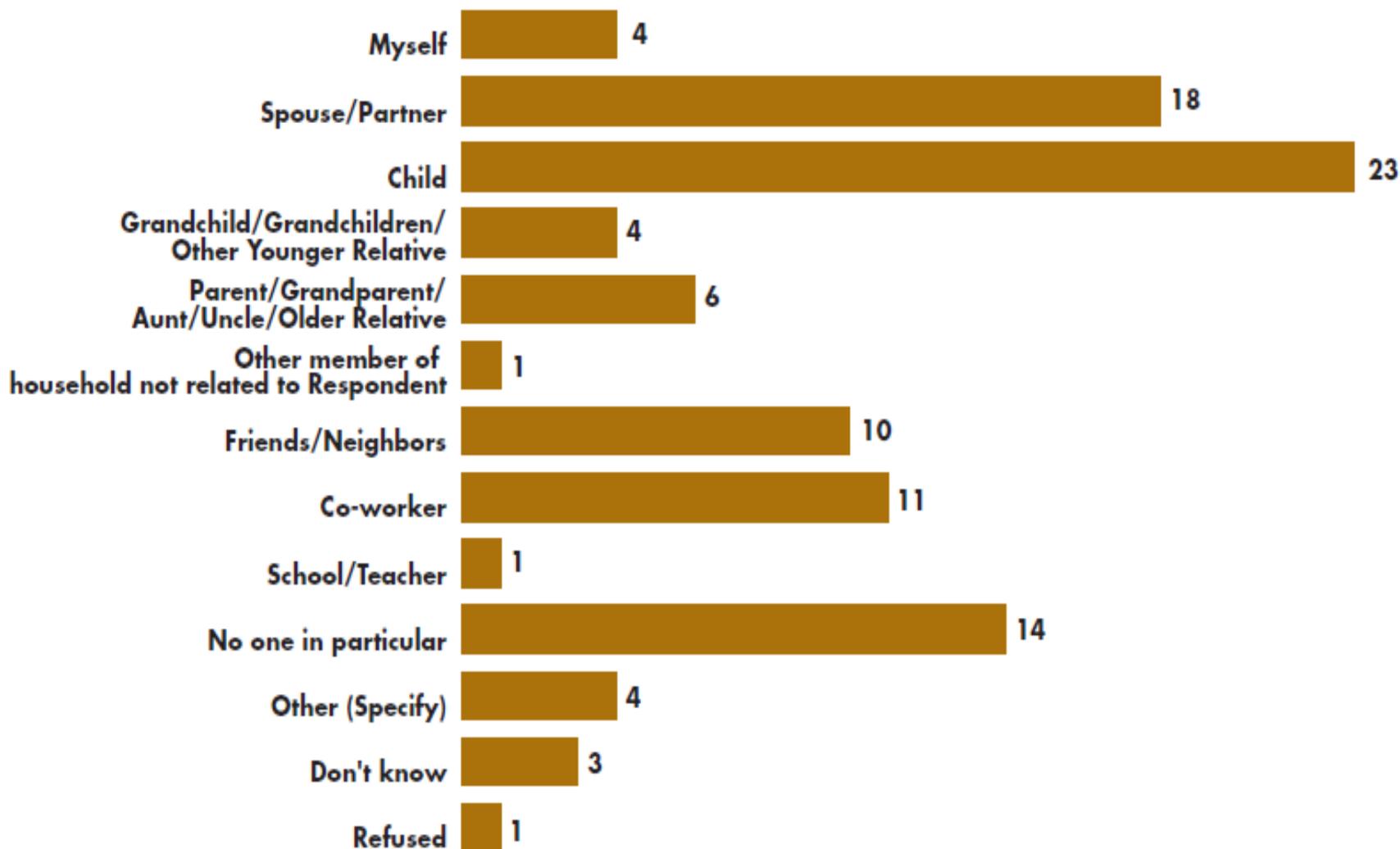
Problem: *if social support is lacking, adoption will falter precisely at the time society has determined the technology is crucial.*

Paradox of the Non-Adopter

“At the very time when the technology is at its cheapest, with many early kinks straightened out, and a large base of users, **non-adopters – stubbornly and for no apparent good reason – hold out.** This moment of unfathomable non-adoption – that is, when a minority remains without – often happens well after society has decided the specific technology is crucial.”

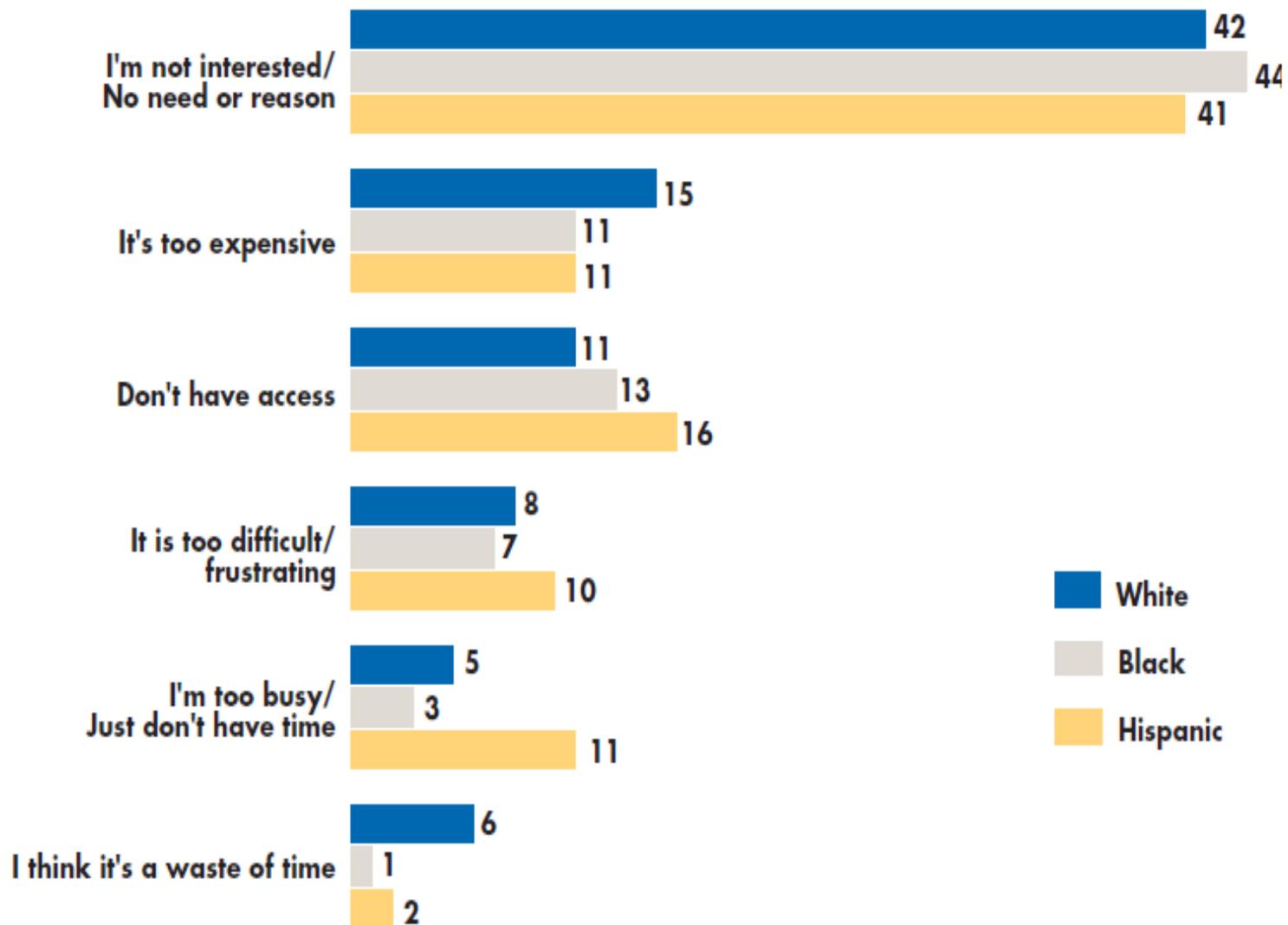
- Horrigan and Satterwhite, 2010

FIGURE 18: PEOPLE WHO HELPED GET INDIVIDUALS STARTED ON THE INTERNET, 2009 (IN PERCENT)



Source: Joint Center for Political and Economic Studies, December 2009-January 2010.
Based on 196 persons who had used the Internet for 2 years or less.

FIGURE 20: MAIN REASONS WHY PEOPLE DON'T USE THE INTERNET BY RACE AND ETHNICITY, 2009 (IN PERCENT)



Source: Joint Center for Political and Economic Studies, December 2009-January 2010.

Based on 134 non-Hispanic Whites, 381 non-Hispanic Blacks and 320 Hispanics who don't use the Internet.

In Conclusion...

What are states doing?

What should we keep doing?

What should we stop doing?

What should we start doing?

What should states be concerned about with respect to policy?