

# Broadband Diversity; Access Gaps, Complements and Substitutes

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# Access Gaps

- ◆ Need to measure, report on and develop policy to address Internet access for groups showing lower levels of access:
- ◆ Rural
- ◆ Urban
- ◆ Low-income
- ◆ Level of Education
- ◆ Non-English speaking
- ◆ Racial/Ethnic
- ◆ Age
- ◆ Disability

# Access Gaps: Rural

## ◆ Rural

- Examine how rural is defined
- Many federal rules exclude areas that contain a major city, i.e. the areas surrounding Fresno, California from the definition of rural
- These definitions do not account for the limits of the urban infrastructure
- Distinguish between Fresno and nearby farming communities with no or limited broadband access

# Rural Access Gaps

- ◆ The California Public Policy Institute found that in 2008 California regions that include rural areas had significantly lower levels of access:
- ◆ 285 communities in the San Joaquin region which encompasses Fresno lacked broadband access, excluding mobile access
- ◆ 189 communities in California's Inland Empire which includes San Bernardino County lacked broadband access, excluding mobile access

# Urban Adoption and Computer

- ◆ Only 48% of Los Angeles, California residents, the state's largest city and the nation's second largest city have Internet access at home
- ◆ The California Emerging Technology Fund has made Los Angeles a priority

# Issues driving access gaps:

- ◆ Lack of a computer: Computer at home:
  - 48% Latino households
  - 79% African-American households
  - 84% Asian-American households
  - 86% White households
- ◆ Lack of knowledge of benefits of computer and web use
- ◆ Concerns about computer safety, privacy, security, bad content brought into the home

# Language Access Gaps

- ◆ In 2009 the Public Policy Institute of California found:
- ◆ 83% of California English-speaking Latinos use the Internet
- ◆ Only 31% of California non- or limited-English speaking Latinos used the Internet and 17% subscribed to broadband

# Language Access Gaps

- ◆ In 2008 the Pew Internet and American life project found that at home:
- ◆ 82% of English-speaking Hispanics had Internet access
- ◆ Only 32% of Spanish-dominant Hispanics had Internet access



# Internet Access Gaps

- ◆ In 2008 the Pew Internet and American life project found that Internet access at home varied by demographic characteristics. It was:
- ◆ 35% for Americans age 65 and older
- ◆ 59% for African-Americans
- ◆ 44% for non-high school graduates
- ◆ 53% for households with incomes under \$30,000

# Internet Access Differences

- ◆ Pew found that in 2008 Internet access at home varied by demographic characteristics. It was:
- ◆ 75% for White Americans
- ◆ 91% for college graduates
- ◆ 95% for households with incomes above \$75,000
- ◆ People with disabilities also have lower levels of Internet access

# Language Methodology Differences Skew Results

- ◆ Many of Pew's surveys are done in English only
- ◆ Results of English-only surveys reflect English-speaking Hispanics only
- ◆ Pew has acknowledged that when a Spanish-language survey option is included reported income and Internet access levels changes

# Internet Access Differences

- ◆ Pew's 2009 surveys done in English showed growth in Internet access for most groups of Americans except African-Americans
- ◆ The language methodology makes the data not comparable to other surveys that take language into account

# Computer Hardware and Training Gaps:

- ◆ Many households do not own a computer
- ◆ Computer ownership is lower among low-income, non- or limited English-speaking and minority households
- ◆ Library and public access is not a substitute due to restrictions in hours, use limits and other factors

# Wireless Access: Complements or Substitutes

- ◆ Wireless use:
- ◆ Latinos and African-Americans have high levels of wireless phone use

# Wireless Access: Complements or Substitutes

- ◆ Minority communities more likely to be cell phone only Households
- ◆ 15.3% of Latino adults mobile phone only

# Wireless Access: Complements or Substitutes

- ◆ Latinos are more likely to use cell phones for email and web
- ◆ Many Latino households use prepaid cell phones and rely on text and phone use
- ◆ Lower number of cell phones per household for Latino community



# Wireless Access: Complements or Substitutes

- ◆ Limits to ability of cell phone to substitute for computer and terrestrial Internet service:
- ◆ Hardware differences, keyboard, screen size
- ◆ Application limits imposed by ISP especially for mobile
- ◆ Bandwidth limits

# Wireless Access: Complements or Substitutes

- ◆ Access to credit issues for low-income potential web users
- ◆ Many people do not have credit cards or bank accounts
- ◆ Prepaid cellphones with web access creating new opportunities

# Broadband Internet Measurement and Access Gaps: Conclusion

- ◆ The FCC needs to identify and report on different *types* of Internet access to assess deployment and make good public policy
- ◆ Application restrictions, bandwidth limits, usage policies, slowdown policies, device attachment prohibitions, peak, average and slowdown speeds distinguish between *types* of Internet access

# American Recovery and Reinvestment Act of 2009

- ◆ The FCC needs to distinguish between *TYPES* of broadband access as indicated by restrictions on access instead of focusing on peak *SPEEDS*.
- ◆ The FCC also needs to report on *GAPS* in Internet access – *The Digital Divide*