The Economic Case for Fiber to the Home
Overview

- The FTTH Council Americas sponsors key market studies to analyze the impact of FTTH
  - Annual studies
    - Annual Market Survey (RVA)
    - Annual Consumer Survey (RVA)
  - Topical studies
    - Impact of High-Speed Internet Service on Housing Prices (2015) (Molnar, Savage, Sicker)
Study examined whether the introduction of widespread availability of gigabit broadband has a comparable impact on economic welfare as did the introduction of “always on” DSL and cable modems in the late 90s.

Used NTIA data to identify MSAs in which >50% of the homes were passed by gigabit broadband in 2011-12
  - 14 MSAs in 9 states
  - On average 70% had access to gigabit broadband in 2012

Group was compared to 41 similarly sized MSAs in same 9 states
  - Gigabit broadband was not widely widely available

All MSAs review had populations <1 million.

Used a year and MSA fixed effects regression model to control for other GDP drivers
Impact of Gigabit Broadband on GDP

- Found that GDP levels in MSAs where gigabit broadband service was introduced between 2011 and 2012, was significantly higher.

- Model suggests that the per capita GDP is approximately 1.1% higher than in MSAs with minimal availability.

- 14 communities enjoyed an additional $1.4Billion in GDP in 2012

- Suggests foregone GDP in the 41 communities without access was $3.3Billion
Impact of Fiber Access on Home Prices

- Examined the relationship between the availability of fiber and price of homes in the United States.

- Initial random sample included 1.2 million real estate transactions from 2011-13 (latest year for which RealtyTrac data available).

- Period chosen to correspond with the availability of National Broadband Map data, which indicates where fiber access is available by Census Block Groups which is analogous to a neighborhood.

- Omitted all non-single family homes, all non-arms length transactions or those with incomplete or missing data.

- Final dataset was comprised of 520,931 transactions covering all 50 states and DC. Average sales price of the homes over the period was $234,573. Median was $175,000 which is close to national average of $185,862.
Impact of Fiber Access on Home Prices

- Using the FCC’s recent definition of broadband to be a minimum download of 25 Mbps, the study examines CBGs grouped by various speed cut-offs ISPs in that area are offering

  - 25 Mbps – all ISPs can offer regardless of technology = 7.5% of sample CBGs
    - 1.61% if only CBGs where fiber available considered

  - 50 Mbps – cable can easily offer = 25.7% of sample
    - 18.6% if only CBGs where fiber available considered

  - 100 Mbps – also available from cable = 52.9% of sample
    - 42.6% if only CBGs where fiber available considered

  - 1 Gbps – predominantly if not exclusively fiber = 13.9% of sample
    - 37.2% if only CBGs where fiber available considered
Impact of Fiber Access on Home Prices

Results

• Access to 1 Gbps connection = +1.8% to home’s price
• Access to fiber connection = +1.3% to home’s price

• Total Impact = +3.1% ($5437)

• Equivalent to the value of adding a fireplace or ½ of a bathroom