The Economic Impact of Fiber to the Home

Heather Burnett Gold
President & CEO
FTTH Council Americas
NATOA Annual Conference
September 20, 2016
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)
  - Impact of Fiber on MDU pricing (2016) (RVA)
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 ins 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.
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
Impact of Fiber Access on MDU Prices

- Market research conducted via random sample
  - Over 2000 MDU residents
  - Both US and Canada

- MDU dwellers spend more time online and using online streaming video more than comparably aged SF dwellers
  - Broadband is now the #1 amenity desired by all MDU residents – owners and residents

- Residents of fiber to the unit experience better performance and speed than other broadband technology
  - Report more satisfaction with unit
  - Property experiences reduced churn
Impact of Fiber Access on MDU Prices

Results

• Purchasers would be willing to pay 2.8% more for a high speed fiber connection (avg price = $300,000)

• Renters would be willing to pay $80 per month on an avg. $1000/month rental