



Insight

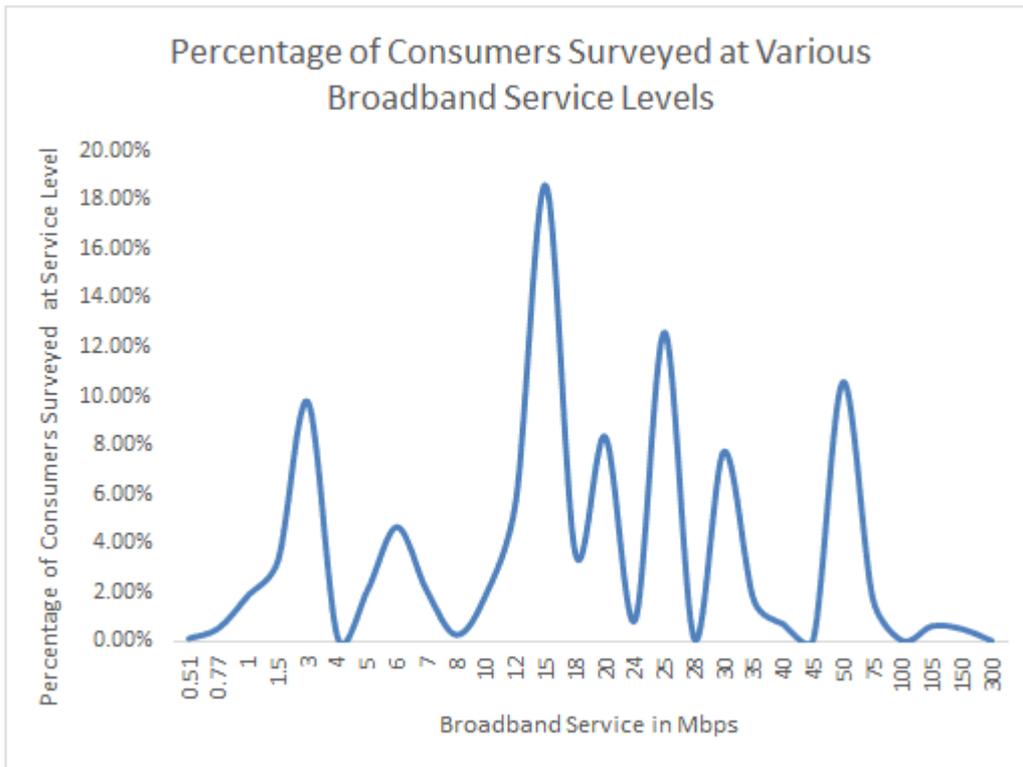
Four More Things We Know About Fixed and Mobile Broadband Competition

WILL RINEHART | MAY 24, 2016

Wired Internet service that comes from cable and DSL connections have been the standard method for Internet access, so analysis and regulatory action has primarily focused on this kind of service. But, [as AAF wrote before](#), there are good reasons to believe we may soon be in a vastly different competitive world for broadband, as wireless takes a more prominent role. Here are four more facts on how mobile broadband is changing the competitive landscape.

NUMBER 1: The single largest group of wired consumers have a 15 Mbps Internet connection.

Even though the Federal Communications Commission (FCC) has officially ranked broadband as only those speeds exceeding 25 Mbps, the single largest group of consumers of wired broadband lies at 15 Mbps, as Chart 1 shows below.



While it could be due to budget constraints, more likely, households consume according to their needs. Perhaps in the future, these consumers will need faster speeds, but currently there are limitations in online applications that limit the competitive level to around 10-15 Mbps, [as the FCC explained](#).

Currently, the four major wireless carriers achieve speeds from 12 Mbps to 19 Mbps, putting them [within this competitive level](#). While not dispositive, these trends taken together suggest that wireless should not be discounted. Especially as the next generation of wireless technologies get deployed, the belief in separate wired and wireless broadband markets held by so many will get tested.

NUMBER 2: Superfast wired broadband connections often struggle to attract consumers.

Not all consumers want to be tethered to a fixed wired connection. Users are demanding different levels of service, as the previous section highlights. But most current online services don't require a superfast connection right now.

At this moment, the superfast 1 gig wired connection is still a niche [product with few subscribers](#). Providers with 1 gig fiber service [are struggling to attract consumers](#) to the top tier offerings. Indeed, there doesn't seem to be a massive unmet demand for wired

broadband in the superfast tiers. Rather people are consuming incrementally faster speeds to fit their demands, which means that massive directed investment into wired technologies might actually leave those assets stranded. Some of the biggest investors of fiber based connections aren't the traditional wired service providers, but the wireless companies, which should be some indication [of the future](#).

NUMBER 3: New wireless technologies promise to upset the competitive balance with wired broadband.

Competition for consumers has driven carriers to close the gap in coverage and performance of current 4G technologies. Thus, efforts to test and standardize the newest mobile technologies, collectively known as 5G, [are underway](#). As these technologies are embedded in consumer products around 2020, wireless networks will change dramatically. For one, 5G speeds will be comparable to the fastest fiber networks of today, and could top 1 Gbps, which is 40 times faster than the FCC's standard for broadband.

Simultaneously, the suite of technologies delivering these faster speeds will allow for dense environments, a current drawback of 4G technologies. While more people in a small area currently means worse performance for everyone, 5G is working to change that, [ensuring high speeds and quality of service](#). An era where consumers could easily choose between traditionally wired broadband or a fixed version of their current wireless service would be a game changer.

NUMBER 4: Industry players are betting on wireless.

Industry players are betting big on wireless technology, which will likely have positive spillovers for consumers. Google is planning to use fixed wireless as a backend component [in their fiber service](#). Sprint has already [committed to use the technology](#) for their cellular services. Google also has been rumored to be working on the [deployment of wireless broadband](#). While both of these wireless broadband projects are moonshots, if they were able to provide widespread cheap Internet service, the core competency of wired broadband [will be competed down](#).

Conclusion

The inability to predict how consumers will react to new products emphasizes the enduring tension between static and dynamic views of the market. As both this post and the previous in this series shows, wireless broadband is quickly becoming an importance force within the market and is increasingly putting pressure on wired services. For the regulatory agencies and for analysts, the totality of evidence demands that current assumptions need to be tested and proven, as we may soon be in a vastly different competitive world.