## THE GIGABIT HIGHWAY

## Fiber to Meet Growing Traffic Needs

A new study commissioned by the FTTH Council Americas found that FTTH deployment in North America is accelerating – and Tier-1 telcos account for only about half the growth.

By Heather Burnett Gold / Fiber to the Home Council Americas

ccording to the Cisco Virtual Networking Index released in summer 2016, there will be 12.2 devices per person connected to the internet in North America by 2020. In 2015, there were just over seven devices per person. Globally, by 2020, there will be three network-connected devices per person. Advances in networks will drive these changes, and networks must be able to support all the new traffic to come online.

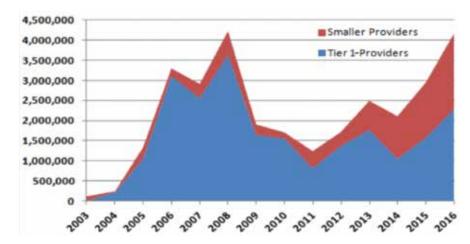
Around the world and here in North America, more people will use more – and more bandwidth-hungry - devices and services. These include such devices as internet-enabled, high-definition televisions, which in some cases require speeds far beyond what is available today.

For example, one internet-enabled HD television is expected to generate as much internet traffic in 45 minutes as an entire household generates today. IP traffic in North America is expected to grow at a compound annual rate of 19 percent to reach 59.1 exabytes per month.

These changes are exciting, but they also pose a formidable challenge. As the demand for bandwidth grows, consumers need and will expect increased capacity on their broadband networks. Structural and operational capacity must be able to meet that demand and support the rising digital tide. The Fiber to the Home (FTTH) Council Americas believes that bandwidth should not be a barrier to innovation and that consumers should not be worried about running out of bandwidth. The internet should just work, as when someone turns on a light switch or a faucet. Luckily, fiber is prepared to rise to the occasion.

The FTTH Council Americas recently released the results of a survey by RVA LLC that reveals new data on the usage and impact of fiber-to-the-home networks in North America. The results show record growth for the industry.

More North American households are able to access fiber than ever before; as of the third quarter of 2016, 13.7 million homes are directly connected to fiber and 30.7 million homes have fiber access. The year 2016 also saw yet another increase



North American homes passed by fiber each year since 2003. In recent years, smaller providers have played a large role in fiber's growth. Source: FTTH Council/RVA LLC

in the annual growth of fiber deployment, which grew by 16 percent year over year and tied the 2008 record of 4.2 million new homes added.

Notably, in North America, small providers now play a big role. The large, national providers accounted for 87 percent of the fiber build from 2004 to 2013 while other providers accounted for a mere 13 percent. But in the last few years, market dynamics have changed. During that time, the large telcos accounted for only about 52 percent of the build while the "other 1,000" FTTH providers added 48 percent in aggregate - almost as much as the large telcos. These other providers include about 1,000 Tier-2 and Tier-3 telcos, public municipalities, private competitive providers, MSO and cable companies, electric co-ops and wireless providers throughout North America.

Deploying fiber in North America is no easy task, but more than 1,000 providers are united in building all-fiber networks. 🍁

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