

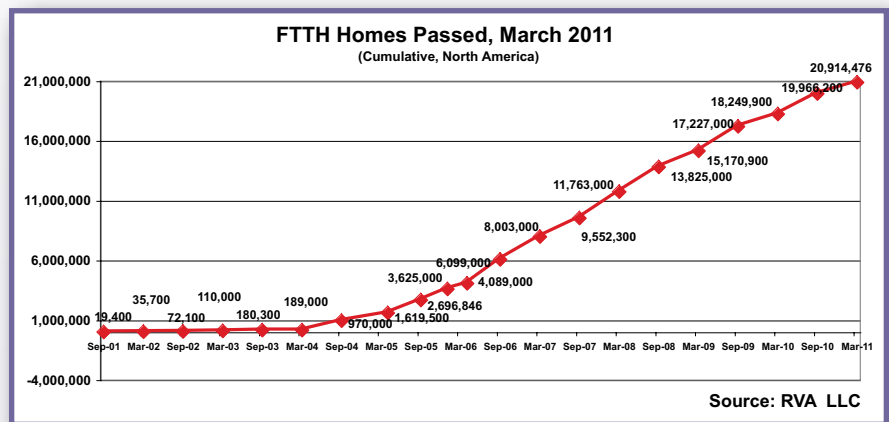
FTTH Deployment Trends: The Bounceback

Market researcher Mike Render predicts that, thanks to stimulus funding, FTTH deployments should start rising later this summer and into 2012.

By Steven S. Ross ■ *Broadband Communities*

Better late than never. The number of homes passed by fiber should start rising by the third quarter of 2011 on a year-over-year basis, thanks largely to construction funded by the stimulus package passed in February 2009. “We’re starting to see a bounceback,” says market researcher Michael Render of RVA LLC.

When Render spoke with 50 recipients of American Relief and Recovery Act grants in March 2011, he found that more than 70 percent were already in construction or planned to be build-



Almost one American home in every five is now passed by fiber.

Deploying fiber to 1,000 homes enables the launch of 35 home-based businesses. That's one of the most inexpensive job-creation strategies available to the federal government.

ing by May. Almost all the others were in the design or engineering phase or awaiting government approvals. Unfortunately, two of the 50 were unable to find suitable funding for the 20 percent local match and returned their hard-won grants to the government.

Though the unspent money is unlikely to be recycled to other network builders, Render's numbers offer good reasons for the government to support more fiber builds. Render says passing 1,000 homes with fiber, at a cost of less than \$1.5 million, creates 35 home-based jobs (there are home-based busi-

nesses in 13 percent of FTTH homes, and 23 percent of that group say their businesses could not exist without FTTH). No other large federal program stimulates job creation as cheaply.

There's a productivity bonus, too: RVA's 2010 consumer survey shows 9 percent of FTTH customers claimed fiber made their home businesses pos-

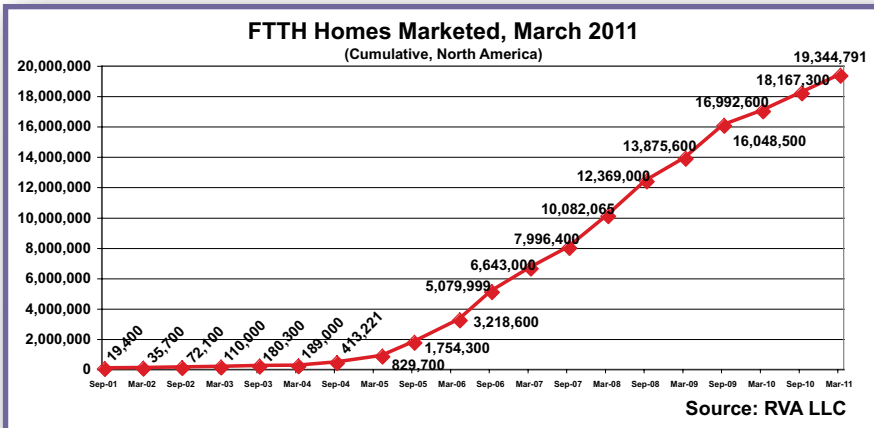
sible or more efficient. Doubling the broadband bitrate adds a half percentage point to the number of home businesses among broadband subscribers. (At the sample size used, the chances of this statistical association being spurious are only about 1 in 10.)

When he spoke at the Broadband Properties Summit 2011 in Dallas, Render noted that “among [the nearly 600] small rural telcos [that already have FTTH], 70 percent say they are continuing to build out with fiber, and the rest are considering expansion.” He also noted that “several reasonably large Canadian providers” started to deploy FTTH last year, mainly to compete with cable companies that are deploying DOCSIS 3.0.

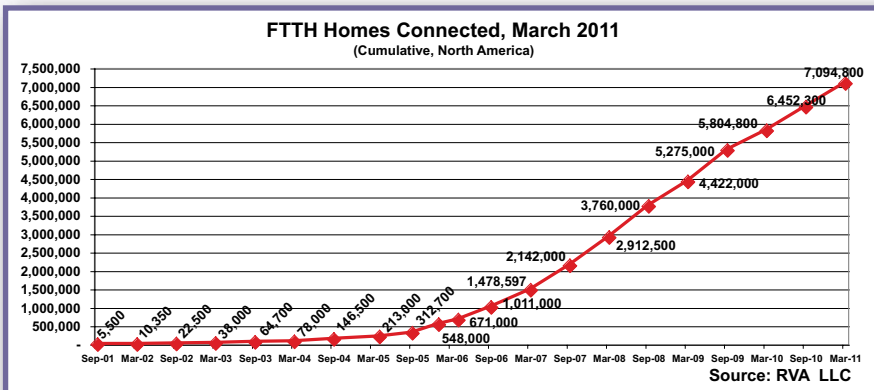
About the Author

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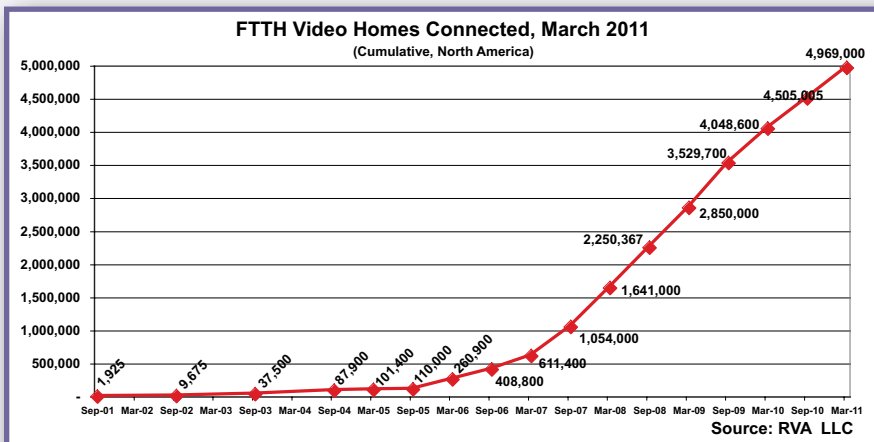
FTTH MARKET REPORT



The number of homes marketed for FTTH rose by almost 1.2 million, a gain slightly above the previous six months.



New FTTH connections accelerated slightly, and homes connected as a percentage of homes passed remained steady at 32 percent, up from 29 percent two years ago.



FTTH served almost 5 million homes with video by March 2011, more than double the number in September 2008. Net additions for FTTH video are running well over 1 million households a year.

GROWTH IN HOMES PASSED BY FIBER

Although FTTH deployment slowed in the past two years, it certainly did not stop. By March 2011, fiber connections were available to about 21 million American homes – almost one in five. About

7 million homes are now connected to FTTH service in North America, making fiber a major economic force in the video and data industries.

Leichtman Market Research notes that cable companies added about the same number of broadband subscribers

with DOCSIS as telcos did with FTTH and DSL technologies. Verizon lost DSL subscribers and gained FiOS subscribers last year, so FiOS outpaced all other technologies in customer growth.

“Some providers have lowered their activity,” said Render. “We’re going to have ups and downs, and of course we are down a bit in activity in the last two years. Verizon is close to reaching its original [deployment] targets.”

Between September 2010 and March 2011, Render found, an additional 948,000 homes were passed with fiber, despite the recession and the worst winter weather in a decade. That’s less activity than in the previous six months but similar to the same period a year earlier (1,022,900 homes were passed in the six months ending March 2010). In general, more construction occurs during the summer months than in winter.

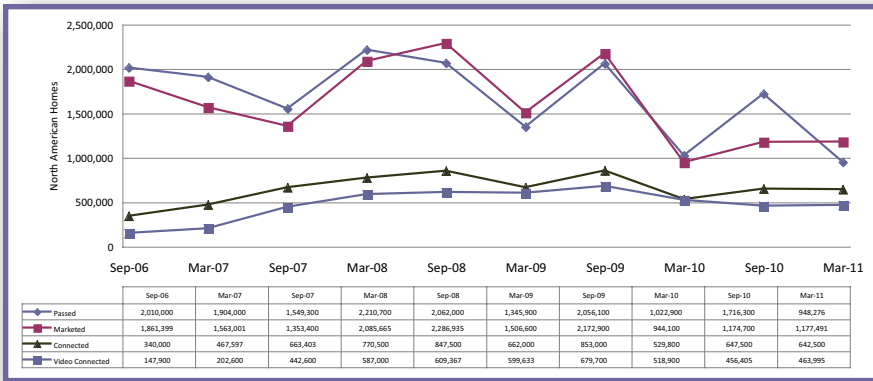
However, there is no denying that the industry is feeling pain. FTTH deployers in North America – almost all in the U.S. – passed more than 2.21 million additional homes in the six months ending March 2008 and 2.06 million in the six months ending September 2009. Recent activity, therefore, is only about half what it was at its peak.

GROWTH IN HOMES MARKETED

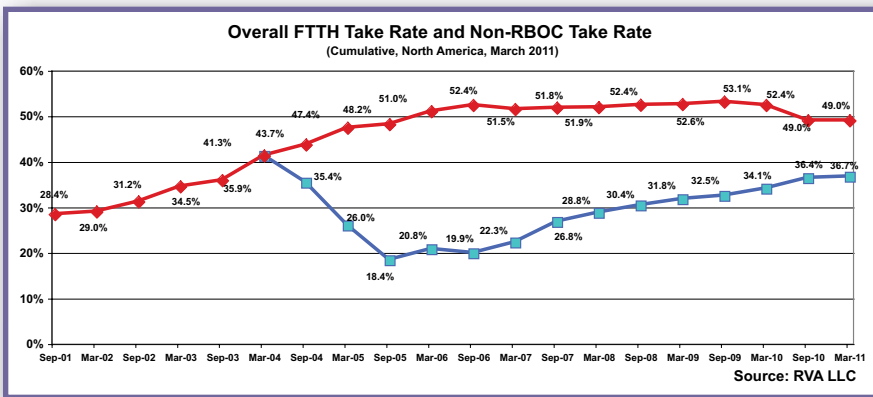
The pace of marketing continued to quicken as well. The increase in homes marketed for FTTH rose to almost 1.2 million between September 2010 and March 2011, a gain slightly above the previous six months and well above the year-earlier period. However, the latest six-month increase was far below the 2.2 million record logged for the corresponding spring-summer months in 2009.

The number of FTTH homes connected is also rising, though slowly. The raw number of connections added for the latest six months, 647,500, is slightly above the September-to-March total of 529,800 a year earlier but well below the record 853,000 of the spring-summer months in 2009. The rate of homes connected as a percentage of homes passed remained steady at 32 percent, up from 29 percent two years ago.

FTTH MARKET REPORT



In the six months that ended in March 2011, FTTH growth rebounded from recessionary lows by all measures. However, the increases in the number of homes marketed, homes connected and homes taking video are still well below long-term trends.



Overall take rates (homes buying services as a percentage of homes marketed) continue to rise.

FTTH VIDEO IS GROWING FAST

Almost 5 million households subscribed to FTTH video services by March 2011, more than double the number in Sep-

tember 2008. Net additions for FTTH video are running well over 1 million households a year. Verizon's 2010 annual report shows how valuable FiOS

GROWTH OR DECLINE, HALF OVER HALF

	Passed	Marketed	Connected	Video Connected
Apr-06	-57%	252%	23%	1620%
Sep-06	333%	27%	176%	0%
Mar-07	-5%	-16%	38%	37%
Sep-07	-19%	-13%	42%	118%
Mar-08	43%	54%	16%	33%
Sep-08	-7%	10%	10%	4%
Mar-09	-35%	-34%	-22%	-2%
Sep-09	53%	44%	29%	13%
Mar-10	-50%	-57%	-38%	-24%
Sep-10	68%	24%	22%	-12%
Mar-11	-45%	0%	-1%	2%

The seasonal pattern shows growth each summer and a lag in winter. The six months ending in March 2011 showed strength compared with the past two years, despite particularly bad weather.

has been for the company: FiOS revenues for the year totaled \$7.5 billion. Of that, \$6.8 billion was for video and data. Only \$700 million was for land-line voice.

FTTH customers younger than 40 are especially interested in broadband video applications, Render found. Older FTTH customers value online face-to-face health care above other video services. One in six older customers would also use FTTH for online courses.

For the universe of FTTH providers, the numbers of new FTTH homes marketed, connected and taking video rebounded in the six months that ended in March 2011. There was more activity than in comparable periods of the previous two years, despite particularly bad weather. (Again, the seasonal pattern shows growth each summer and a lag in winter.)

However, these metrics are also well below long-term trends. The percentage growth rate has slowed both because of the recession and because the market is growing in absolute size.

THE FRONTIER EFFECT

Overall, FTTH take rates (homes buying services as a percentage of those marketed) continue to rise. The Fall 2010 numbers were distorted by Verizon's spinoff of Frontier, which had the effect of moving close to 600,000 FiOS homes passed into the "non-RBOC" category. This raised Verizon's average take rate to 36.4 percent but dropped the non-RBOC average to 49 percent.

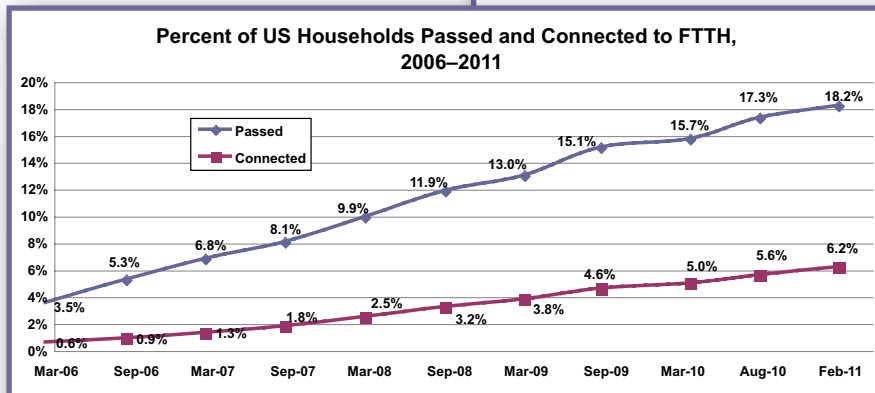
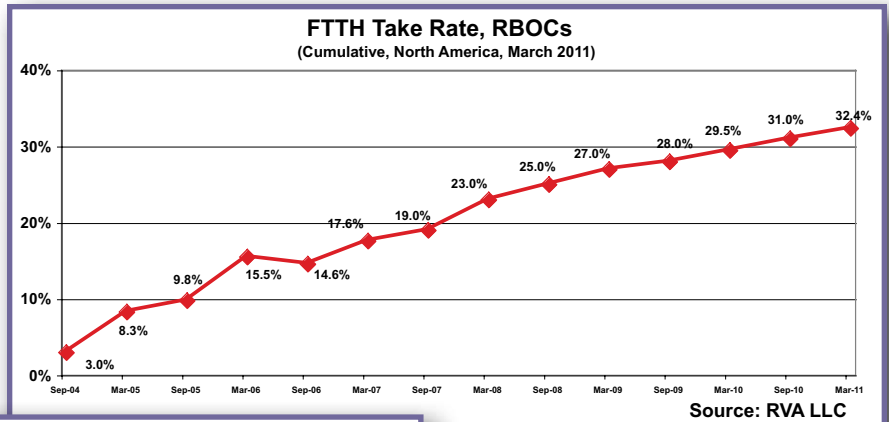
Using Verizon's post-spinoff rate as a base, take rates for RBOCs (the data is almost entirely from Verizon) continued to climb from September 2010 to March 2011.

RVA sees a "base case" that could result in fewer-than-forecast new FTTH customers connected in 2011 and 2012. But many factors could push the forecast higher, including slightly higher-than-expected job growth or home sales. ❖

For more information about the report discussed in this article, see www.RVALLC.com. A video of Mike Render's talk at the 2011 Summit is at bbcma.com.

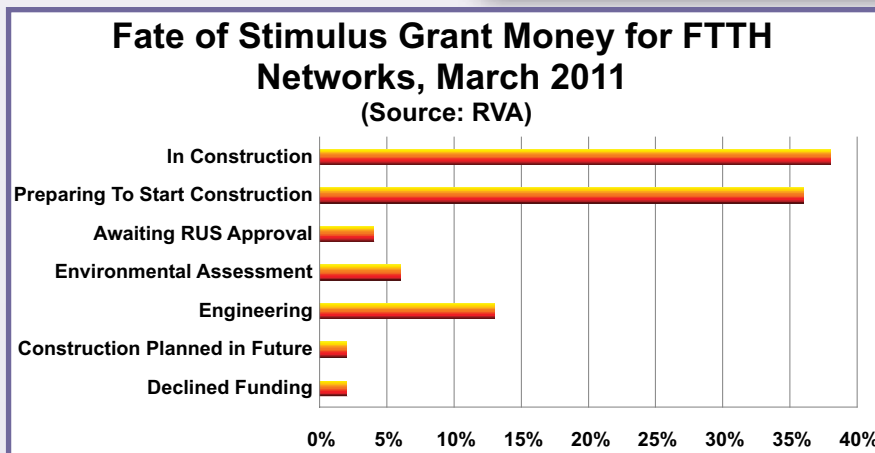
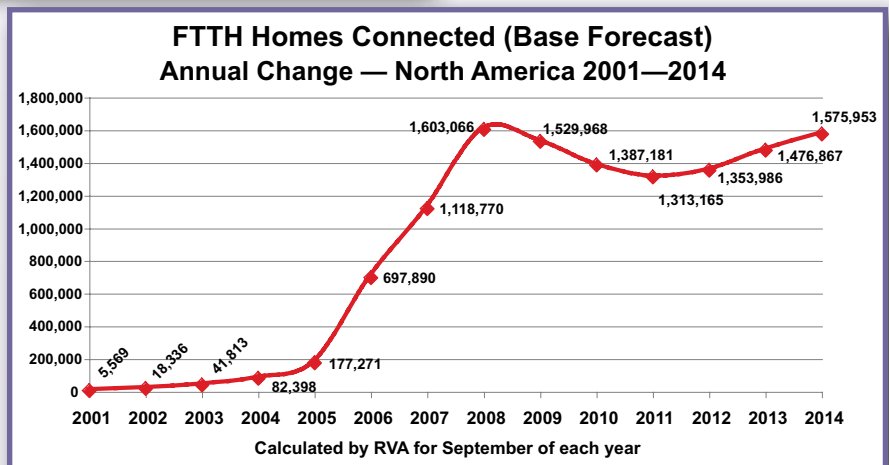
FTTH MARKET REPORT

Take rates specifically for RBOCs (the data is almost entirely from Verizon) continued to climb in the past six months, but they build on Verizon's 2010 spinoff of lower take-rate areas to Frontier.



Over 18 percent of all U.S. homes are now passed by fiber, making FTTH technology a major player in broadband and video services. Over 6 percent of all U.S. households were connected to FTTH by last month. Source: RVA LLC.

RVA sees a "base case" that could result in fewer FTTH customers connected in 2011 and 2012. But many factors could push the forecast higher.



Render's survey of companies that received broadband stimulus funds to build FTTH networks found that most recipients were either already building their networks or preparing to do so.