

Connected Communities Inspired Mass Fiber Deployments

By Ned Lamont ■ *Lamont Digital Systems*

Mass deployment of fiber to the home (FTTH) has been “just around the corner” for a long, long time. Maybe this time we have rounded the corner.

FTTH has been led over the last several years by special markets such as rural telephone companies, master planned developers, and municipal over builders. But the major telephone carriers, mainly Verizon and SBC, are the 800-pound guerillas of the industry, and now they may be in the market to stay. As the industry moves from tens of thousands to millions of FTTH homes passed over the next several years, maybe this time the industry will enjoy the scale pricing and new 10Mb services which mass deployment will inspire.

Verizon has embarked on several FTTH trials in the past, including Tom’s River in New Jersey about a decade ago. Back then the cable operator provided cable service and Verizon provided telephony over a traditional copper network. The costs and reliability of the FTTH platform could not be justified at the time. More recently a venture financed start up, Win First, inaugurated FTTH in Sacramento, California, but SureWest, the regional telephone provider, bought its assets out of bankruptcy protection.

Until recently, it has not been the major telcos but rather the entrepreneurial companies who have reignited FTTH from the bottom up. There are 128 communities served via FTTH, according to the recent survey by Render, Vanderslice & Associates, with over 78,000 subscribers receiving some combination of voice, video, data and/or security. To justify the FTTH capital costs, some version of

the triple play is a requirement. The FTTH communities are lead by the municipal over builders, who seek a state of the art alternative to the local utilities, competitive offerings which residential and commercial subscribers may choose from, and a return on the taxpayer/rate payer’s investment. In most cases the FTTH overbuild distinguishes the community as a technology “showplace” which may attract new development.

Many of the large master planned developers seek to distinguish their development from the competition and one way is to offer telecommunications services, which surpass what is being offered by the local

utility. About one half of the FTTH deployments are in green field master planned developments. If Kansas leads in municipal systems, Texas is the leader in FTTH systems for planned unit developments with twenty-five and growing. HomeTown Communications in North Richland Hills, Texas is being built and operated by GateHouse Systems. This FTTH plant utilized Alloptic’s electronics, which are modular, allowing installation of voice, video, or data modules at the network interface device (NID) at the side of the home.

The modular design allows GateHouse to provision just those services requested by the homeowner, which minimizes capex and maximizes choice to the consumer. “Each of our homes include home offices,” says Bill Gietema, the Texas-based developer of HomeTown, “and we offer



the telecommunications platform to support these offices.” Integrating the system into the school and into offices planned for the community, including services such as VoIP and community

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wide video conferencing, are the next items on the agenda.

HomeTown Cable TV (no relation) provides a bulk video/data bundle over an Optical Solutions (OSI) platform in Port Saint Lucie, Florida on a bulk basis paid by the homeowners’ association at a wholesale rate less than retail rates from the local utilities. While the OSI platform integrates the voice/video and data into one unit, it is best suited to integrated bulk services that include telephone service.

The cable operators have been slow to embrace FTTH due to cost (2X-3X the installed cost for hybrid fiber-coax) and because their existing HFC plant can be upgraded to support 860 MHz, the 500 channel universe, data speeds up to 3Mb, as well as telephony. Dick Beville, a consultant with Business Edge Solutions, which advises Verizon as well as developers, notes that the existing telephone plant cannot support analog video or the higher data speeds, which makes FTTH a competitive necessity for the telephone companies. “FTTH will support up to 30Mb to the home, making VOD and IP video a reality from day one,” says Beville. “Homeowners and developers know that their home is ‘future proofed’ which will be reflected in sale and resale value.”

FTTH may accelerate the move to IP video and Internet based video services. Starz-Encore and Real Networks recently announced a joint venture to provide movies on demand and there are multiple aggregators of IP-based cable video services. Many of the master planned developments are

in semi rural areas which the incumbent cable and telephone companies are slow to serve and/or upgrade, making the free standing FTTH system a logical choice.

The developers and their builders are pre-wiring the homes for voice, video and data, which means that the high speed data service will be available to every telecommunications outlet in the home without requiring additional modems. Video will be available to the desktop as well as the television. Live feeds from the playground or the first tee will be fed over the community intranet and/or local origination cable channels, emphasizing

the local in local origination. The new technologies available over the fiber plant allow developers and homeowners to customize their service in ways that the regional utilities will find hard to match.

The competition is heating up among the telephone, cable and satellite companies and competition will push new investment into the next generation of fiber platforms and on demand technologies. In the end, the consumer will be the big winner. ■

About The Author

Ned Lamont is founder and president of Lamont Digital Systems, which includes Campus TeleVideo and GateHouse Networks. GateHouse builds and operates HFC and FTTH systems for master planned communities serving over 3,000 subscribers.



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