

CENTENNIAL VILLAGE, OAK RIDGE, TENN.



By Joe Bousquin ■ Contributing Editor, *Broadband Communities*

In this issue, BBC showcases Centennial Village, a garden-style, greenfield development in Oak Ridge, Tenn., the site of AT&T's first U-verse fiber-to-the-unit deployment in eastern Tennessee. Our thanks to Phil Hix, Greg Mason, Roger Flood and Kathy Angel of AT&T Connected Communities, as well as John Chilton, the developer of Centennial Village, and Kim McLane of Freeman Webb, the property manager, for their assistance in preparing this feature.

When John Chilton started shopping for tech amenities for Centennial Village, his new 252-unit, garden-style development on the shores of Melton Hill Lake in Oak Ridge, Tenn., he knew he needed something with widespread appeal. Centennial's location attracts retired seniors, and the community's proximity to the University of Tennessee's Agriculture Research Laboratory just down the road meant the solution would have to meet the needs of students, too. In addition, the professionals and scientists who work at the Oak Ridge National Laboratory, where the Manhattan Project originated during World War II, are located less than 10 miles away.

What would appeal to everyone in this diverse resident base, Chilton thought, were fast and easy amenities, so when he had the opportunity to deploy an all-fiber AT&T U-verse offering to his property, he knew the fit was right.

"This agreement with AT&T gives us an advantage over other properties in the area while also boosting the value of the apartments we offer here at Centennial Village," says Chilton, head of Centennial Village Development LLC, which spearheaded the \$25 million development. "Our clientele ranges from students to business professionals to seniors, and with AT&T's U-verse services, we're able to meet the varying technology demands of our residents and guests in an easy, turnkey way."

For AT&T, this project was an opportunity to showcase a 100 percent fiber-to-the-unit deployment, complete with in-unit optical network terminals,

long the signature of archrival Verizon's FiOS service.

"AT&T Connected Communities is yet another way we're working hard to keep Oak Ridge connected to the people and information in their busy lives – whether that be across town or around the world," says Alan Hill, regional director of external affairs for AT&T.

Kim McLane, property manager at Centennial Village, says the offering puts her community on the cutting edge in a region that's long used to being at the forefront of technology advances. "Through this arrangement with AT&T, we're meeting the demands of our new residents by offering the latest

About the Author

Joe Bousquin is a contributing editor to *BROADBAND COMMUNITIES* and a journalist with more than 15 years' experience writing about finance, real estate and technology. You can reach him at joe@ameredit.com.

technology at the property,” says McLane. “Our residents are all about convenience, and bringing U-verse TV directly to them is the perfect complement for the numerous amenities we offer within Centennial Village.”

VITAL STATISTICS

Property Description: Located at 180 Waterview Drive in Oak Ridge, Tenn., Centennial Village has almost-make-you-feel-guilty amenities that include stainless-steel appliances, chef-inspired kitchen designs, a media center, a fitness center, an executive business center with cybercafé, an Olympic-size swimming pool, an outdoor cooking area with gas grills, a children’s playground, a volleyball area, a carwash/dog wash area and a large, state-of-the-art putting green.

Greenfield or retrofit? Greenfield

Number of units: 252

Style: Garden style

Percent of units occupied: 15 percent

Time to deploy: The property was not ready for service until eight months after contract execution. AT&T could have delivered U-verse services earlier, but the property ready dates kept sliding because of bad weather and other contingencies.

Date services started being delivered: May 2011

TECHNOLOGY

The following answers were provided by Phil Hix, AT&T Connected Communities technical support manager; Greg Mason, U-verse network manager and Roger Flood, senior manager for network support.

How is fiber distributed to the living units?

Fiber optic cables are buried in conduit throughout the development. The primary flexibility point (PFP), or main fiber distribution hub, and the fiber serving terminals (FSTs) are aboveground enclosures.

Fiber optic cable from the central office feeds the PFP cabinet, an OmniReach FTTX unit manufactured by TE Connectivity, which contains several 1 x 32 splitters. The distribution fibers from the splitters

“Our residents are all about convenience, and bringing U-verse TV directly to them is the perfect complement for the amenities we offer.”

are distributed around the property to FST pedestals (FibrBoss CB-24 or CB-48 MDU models, also from TE Connectivity). Each distribution fiber serves one customer. From each FST, fiber drops run to Ericsson T111G optical network terminals, one of which is located in each residential unit.

What FTTH technology is used? GPON

Who is the electronics vendor? Ericsson.

In addition to customer-premises equipment, Ericsson also supplies the central-office equipment – a BLM 1500 OLT, an ultra-high-capacity platform that enables high-density GPON and 10G PON services for as many as 1,792 living units.

How did you deal with wiring and plug access within the units? The developer did a great job with the low-voltage wiring during construction. AT&T U-verse installers do not have to run any additional wiring during installations.

Have you provided wireless signals within units? Wireless signals are provided by residential gateways (Pace 2Wire model 3801) in units where customers have ordered AT&T High Speed Internet Access.

How much square footage did you have to dedicate to the network inside the buildings? Because these are garden-style units, an FST is located outdoors at the end of each building.

SERVICES

Does the property have triple-play services?

Yes. Under the agreement, AT&T will deliver 100 percent IP-based AT&T U-verse TV, U-verse High Speed Internet and U-verse Voice on an advanced fiber network to any unit in Centennial Village where customers order these services.

Can residents subscribe to IPTV? Yes.

U-verse TV customers can watch television on a TV, a computer, a mobile device or an Xbox 360. The service offers total-home DVR and more than 25 IP-enabled apps and features. DVR recordings can be scheduled by mobile phone or computer. Cisco set-top boxes and DVRs are used (models IPN330HD and IPN4320).

Are there amenities beyond the triple play?

The clubhouse offers free wireless Internet access through AT&T U-verse High Speed Internet.

Who is the wireless service provider? All

wireless services and routers are provided by AT&T.

PROPERTY OF THE MONTH HIGHLIGHTS CENTENNIAL VILLAGE, OAK RIDGE, TENN.

- First AT&T U-verse fiber-to-the-unit deployment in eastern Tennessee
- Greenfield rental development that draws retirees, students and working professionals from the University of Tennessee and Oak Ridge National Laboratory
- Exclusive marketing agreement between AT&T Connected Communities and Centennial Village Development
- Vendors: Ericsson, TE Connectivity, Pace, Cisco



An Ericsson BLM 1500 optical line terminal provides U-verse services to Centennial Village.

Do residents have a choice of service providers? Customers have a choice between AT&T and satellite service providers.

If residents have an issue or a technical challenge, whom do they call? AT&T U-verse support.

BUSINESS

The following answers were provided by Kim McLane, Centennial Village property manager, and Kathy Angel, AT&T Connected Communities regional sales executive.

Who owns the network? Does the property owner have “skin in the game”? Who paid for what? AT&T owns all fiber provided by AT&T; Centennial Village owns all inside wiring provided by the owner.

Are services automatically included in the rent? No, the services are selected by subscribers.

If residents are billed directly, who handles billing and collection? AT&T.

How are the services marketed, and by whom? There is an exclusive triple-play marketing agreement, and AT&T works with Centennial Village in Oak Ridge on multiple levels. The dedicated account team from AT&T Connected Communities is

the first line of contact for the property staff. The account team partners with the property staff in the local AT&T retail store to provide day-to-day support for residents who want to place orders for AT&T services.

As approved by the property staff, AT&T Connected Communities also provides concierge-level services to residents, which can include on-site visits by an authorized AT&T representative or acceptance of orders faxed from the leasing office.

AT&T and the property also cosponsor such events as resident appreciation days, pool parties and tailgate parties with food, drinks, door prizes and giveaways.

What has the return been on this implementation, in dollars or otherwise?

John Chilton, Developer, Centennial Village: Being able to meet the varying technology demands of our residents and guests in an easy, turnkey way.

ONSITE EXPERIENCE/ LESSONS LEARNED

The following answers were given by Kim McLane, property manager, Centennial Village.

What was the biggest challenge? Explaining the advantages of the new fiber optic system over traditional cable

service competitors and how very different the system is. Even with all the emphasis on fiber that’s out there, it’s not necessarily something that an average resident thinks about. When you explain the difference to residents, and how [a fiber connection is] the best Internet they can get, it helps them “get” it.

What was the biggest success? Once installed, AT&T U-verse offers excellent Internet speed and superior cable TV picture. Our residents love it.

What would you say to owners who want to deploy a similar network? What issues should they consider before they get started? You’re going to have hiccups with any technology you choose. Expect them, and deal with them when they come up. Do your research first, and learn the system’s advantages. Installation issues may occur, so verify technician experience and availability. Making sure your team has the right people available when you need them is critical.

What is the property manager’s perspective on this installation? The system now runs smoothly and seamlessly. Tech knowledge and availability is the key to success, and having a dedicated retail outlet nearby has made a big difference. ❖



The property owner inspects an AT&T U-verse installation.