

# FTTH Is Central to a Smart, Responsive Planned Community: Pecan Square in Northlake, Texas

Pecan Square, a housing development in Northlake, Texas, is working with Frontier to provide 500 Mbps and 1 Gbps speeds to support an array of streaming and Amazon home service applications. Our thanks to Rachel McGallian of Frontier and Andrew Pieper at Hillwood Communities for help completing this profile.

By Sean Buckley / *Broadband Communities*

**W**hen Hillwood Communities looked for a broadband provider that could offer Pecan Square residents smart-home capabilities, it found a lot of local providers either were not willing to or could not support its vision. Pecan Square is a new 3,100-home, single-family, master-planned development being constructed by Hillwood Communities in Northlake, Texas.

After Pecan Square considered developing its own broadband service, Frontier Communications offered to bring its fiber-based broadband service to every home in the community via the community's homeowners association (HOA). Pecan Square residents will have access to 1 Gbps services.

Frontier, which cemented its local provider status when it purchased Verizon's wireline assets, has a long-standing relationship with Hillwood. The telco also provides service to Hillwood's Harvest development in Argyle, Texas.

Broadband service for each residence will be included in HOA assessments, providing Pecan Square homeowners with Frontier Communications' symmetric 500 Mbps. Residents will have the option of upgrading to

1 Gbps service and adding both FiOS TV and phone service for additional monthly fees.

Service will be delivered through the Frontier Community Connections division. It markets telecom services over Frontier's fiber-based FiOS and fiber-to-the-node Vantage networks in select regions, serving multiple-dwelling-unit properties and single-family developments. It supports HOAs through marketing and bulk agreements that offer high-definition TV, symmetrical internet speeds, VoIP services, and Frontier Secure, a full suite of digital protection for residents.

Rachel McGallian, senior vice president of national strategy and sales for Frontier, says symmetrical speeds get Frontier's foot in the door early with customers.

"We're bringing a unique service that starts with symmetrical 500 Mbps service to the community," she says. "Customers can then upgrade to 1 Gbps."

McGallian adds that speed gives it a leg up over other providers.

"It's important to understand how much speed is out there," she says. "The speeds we can offer give us a competitive advantage."



Residents at Pecan Square will be able to access symmetrical 500 Mbps FIOS service from Frontier with the option to upgrade to 1 Gbps.

The Pecan Square development is part of a municipal management district (MMD), a special district created by the state of Texas to finance facilities not provided by a municipality. The MMD finances infrastructure such as water, sewer, drainage and roads and also pays for maintaining and operating the rights-of-way where fiber conduit is placed.

After securing Frontier as its provider, Hillwood devised a new model called Canopy. Unlike earlier models that required a home developer to get a local telco or cable operator to provide broadband and phone service and then get another contractor to install a router, Canopy ensures each home is ready when residents move in.

Andrew Pieper, vice president of Hillwood Communities, says the internet service will resonate with various demographic segments, particularly millennials.

“Internet connectivity is critical to any community,” Pieper says. “A big group we sell our homes to are millennials who are used to and expect faster internet speeds.”

On top of the FTTH network, Hillwood made Wi-Fi a priority. Hillwood partnered with HomePro Technologies to wire each home with Cat 6E cabling to support the wireline and Wi-Fi connections. By using a mix of Frontier Communications internet service and HomePro wiring, the home developer can guarantee 100 percent Wi-Fi coverage.

To ensure consistent uptime, HomePro incorporates a process that identifies any potential Wi-Fi coverage dead spots.

“By evaluating the floor plans and using heat mapping, we can maximize Wi-Fi coverage,” Pieper says.

Additionally, Hillwood is integrating Amazon devices into every home, including the Ring doorbell with a camera. Residents also will get access to the voice-activated Echo Show device, which allows homeowners to visually connect to see the TV and internet. It can also display prompts regarding news headlines, suggested Alexa commands, and other information. Alexa can also be used to

## PROPERTY OF THE MONTH HIGHLIGHTS

~ Pecan Square, Northlake, Texas ~

- Symmetric FiOS 500/500 Mbps speeds (upgrade to 1 Gbps for additional cost)
- Community meeting and fitness center
- Hospitality services
- Coworking spaces
- Self-service package pickup
- Ring video doorbell and Echo Show



Frontier is equipping every home in Pecan Square with fiber-to-the-home services.

request the playback of videos on its screen, such as Amazon Video content. It also helps with the package delivery, giving homeowners the option to have a package delivered to their front door or a secure locker.

“Working with HomePro and integrating Echo Show with a resident’s internet connection means the system will be ready to go on day one,” Pieper says. “This cuts down the time to get service.”

## VITAL STATISTICS

**Property Description:** The Pecan Square community comprises 1,100 acres in Northlake, Texas. New home prices range from mid-\$200K to \$500K. Pre-sales began in summer 2019. Pecan Square offers an array of homes by 10 builder partners: Ashton Woods, CB JENI HOMES, D.R. Horton, David Weekley Homes, Drees Custom Homes, Highland Homes, Perry Homes, Plantation Homes, Pulte Homes, and Toll Brothers.

By March 2020, residents will have access to several amenities, including a pool, a community building, a neighborhood park and a playground, a postal and locker center, a coworking space, an “Event Lawn” and trails.

**Demographics:** Pecan Square hopes to appeal to a wide variety of segments – young families, millennials, first-time homebuyers and retirees.

**Greenfield or retrofit?** Greenfield, new construction

**Number of units:** 3,100 homes at buildout, 675 in the first phase

**Style:** Single-family detached homes

**Time to deploy?** Four months

**Services delivery date:** Services will be available in fall 2019.

## SERVICES

**Services offered or planned on the network:** Frontier is delivering symmetrical 500 Mbps FiOS

broadband service to each household. Residents have the option to upgrade to symmetrical 1 Gbps for an additional monthly charge. Residents also can choose a selection of Frontier’s FiOS TV and FiOS digital voice plans for an additional monthly cost.

Pecan Square will offer Wi-Fi services in the development’s common area spaces and adjacent buildings. Homeowners also will be able to access concierge services, and access control will be available for HOA facilities. Finally, HomePro, the service provider contracted directly by Hillwood, will give residents access to building/home monitoring and control.

**Do additional service providers operate separate broadband networks on the same property?** No

**Can residents choose among multiple service providers?** No

**Technical support:** Onsite tech support is provided by HomePro. In addition, Frontier provides a dedicated bulk customer call center with a dedicated telephone number for support or to order services.

## BUSINESS

**Which parts of the network are owned by the service provider, and which parts are owned by the property owner?** The fiber is owned by Frontier up to the optical network terminal (ONT).

**Is there a bulk-service agreement? If so, what services are included? Can residents upgrade from the bulk services?** Yes, 500 Mbps is included in the HOA dues. A homeowner can upgrade to 1 Gbps for \$20 month. Frontier also offers services such as phone and TV for an additional fee.

## TECHNOLOGY

**Architecture:** Using GPON technology, Frontier delivers fiber-to-the-home services to each home. Frontier places the ONT in the garage.

**Where is the fiber terminated?** Fiber is terminated at each house.

*Methods for running cables between buildings, vertically within buildings, horizontally within buildings:* HomePro runs every home with Cat 6E cabling and Luxul routers. Frontier's placement within the subdivision will be underground, in conduit within the right of way. Builders placing conduit from the street to the house are to complete the 100-percent fiber connection to the house.

**Vendors/products:**

- Nokia (ONTs, GPON gear)
- HomePro Tech (wiring, installation, technical support)
- Amazon (Ring doorbell, Echo Show)
- Luxul (Wi-Fi routers)

**LESSONS LEARNED**

*(Answers provided by Frontier and Hillwood Communities)*

**What was the biggest challenge?**

The main challenge was that we could not find a broadband provider who was willing to provide the level of service we desired for our new community. We needed robust infrastructure to fulfill our vision for making Pecan Square's homes as "smart" as possible. We began by looking at local providers, but they were unwilling or unable to provide the necessary level of service. We then explored doing our own broadband service and discussed a partnership with Frontier Communications.

Frontier Communications saw an opportunity to solve a problem. As a team, we set out to harness that opportunity by looking first at the frustrations going on with today's homeowners. We met their expectations by providing a higher level of service with a gigabit standard through the HOA, which enabled us to make it available in every home.

In solving these challenges, we replaced an outdated model with a new one of our own design, which we call Canopy. The old-school model is that you go to the phone or cable provider and they provide phone and internet services.

With smart devices in every home, a community locker system, and virtual connectivity to community events, Hillwood Communities delivers a higher level of convenience and greater security to its residents.

Then, they must contact another contractor or department to come out and put a modem or router in your home. This may be insufficient to provide Wi-Fi coverage, and it certainly is inconvenient. The new model we created enables us to offer homes that already are hooked up and ready to go upon move-in.

To deliver on our new model, we partnered with HomePro Technologies to handle the wiring in the houses. With Frontier Communications providing the internet connection and HomePro the wiring, we can guarantee 100 percent Wi-Fi coverage to homeowners before they move in. Every home incorporates a heat-mapping process to rectify any potential Wi-Fi coverage soft spots.

The next problem we set out to solve is the need to connect homes to the community. We are doing this by way of an agreement with Amazon. We are integrating two Amazon devices for every home. The first is the Ring doorbell with a camera. The next piece is the Echo Show device, which is voice-activated with a screen, like an iPad. This allows homeowners to visually connect to see the TV and internet. This also helps with package delivery in the community. The Amazon partner agreement with the Echo Show means the community will have an Amazon hub located in the square so a homeowner can have a package delivered to the front door or to a secure locker in the hub.

With the Amazon hub, homeowners now can live in a truly "connected" community. To enable this level of connectivity, we use a

"skill" (an app that can be voice- and visually activated) and connect it to all the events at Pecan Square. When new residents move into a house and the Echo Show on the kitchen counter greets them with a list of all the activities going on that day, they can voice-activate the schedule for maximum convenience.

With devices in the home such as the Ring doorbell, a community locker system in the hub, and virtual connectivity to community events, our Canopy solution enables Hillwood Communities to deliver a higher level of convenience, hassle-free and faster internet service and greater security. Hillwood's 360-degree approach to technology comes with the added benefit of a "genius" help desk to provide homeowners with full-time tech support.

**What was the biggest success?**

Our biggest success was breaking down the traditional business models of service delivery and bringing the partners together to achieve the common goal of providing better service and more convenience to homeowners.

**What should other owners consider before they get started on a similar deployment?**

Other owners should consider investing the time and resources in this area. Broadband often is treated as an afterthought. Today it has become many homeowners' most important utility. ❖

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