# Case Study:

# WeLink Communications Amazes Residential Subscribers with 2 Gbps Service
## …AND Grows the Business with Strong ROI
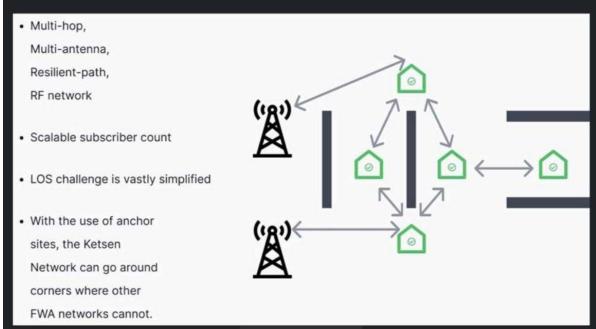


## Service Provider Challenge

The demand for high-speed internet in suburban areas has grown exponentially in recent years. However, traditional broadband providers often struggle to meet this demand due to infrastructure limitations and high deployment costs. Fiber installations, while reliable, are capital-intensive and require years of investment before delivering revenue. Wireless Internet Service Providers (WISPs) have emerged as an alternative, but their ability to deliver consistent, high-speed connectivity across neighborhoods with dense housing and varying topographies remains a challenge.

> "We have had WeLink for 2+ years now. I work from home and usually have 3 devices going at once plus TV. On weekends and nights my husband is on his phone plus TV and both teenage daughters have laptops and phones. 11 devices going at once with no issues. I can count on one hand the outages we've had. And when we have had outages I get an email from one of the head honchos almost immediately that they are aware of it and are working on resolving the issue. 10/10 service!" - Sheryl Ozman - WeLink subscriber since 2022

WeLink, a next-generation fixed wireless ISP with presence in Nevada, Arizona, California, and Texas, faced these challenges as they sought to provide affordable and reliable broadband services to suburban and urban customers. They specialized in 60 GHz technology but needed a solution to efficiently scale their operations while maintaining a competitive edge.

*"Ketsen is a great option for operators that want to offer multi-gigabit speeds, their solution has allowed us to take and defend market share from everyone including upgraded cable and fiber."* - Luke Langford, Chief Executive Officer, WeLink

The key issues included:

| Feature | Impact |
|---|---|
| **Cost-efficiency**: High costs associated with deploying traditional wireless solutions. | Cut equipment costs in half.<br> |
| **Scalability**: Difficulty in expanding networks quickly and cost-effectively in suburban markets. | Rapidly cover suburban areas and grow revenue.<br> |
| **User Experience**: Ensuring consistent 2 Gbps service to end users despite network complexities. | Consistently deliver multi-gigabit speeds to residential users.<br> |

| | |
|---|---|
| **Complexity of Deployment**: Traditional 60 GHz fixed wireless systems often require highly skilled engineers for setup and maintenance, increasing operational costs. | Technicians are able to plan and install networks with easy to use software.<br> |



Example network:

2.5 sqkm area

1000 homes past

97% coverage

Fiber Injection Point
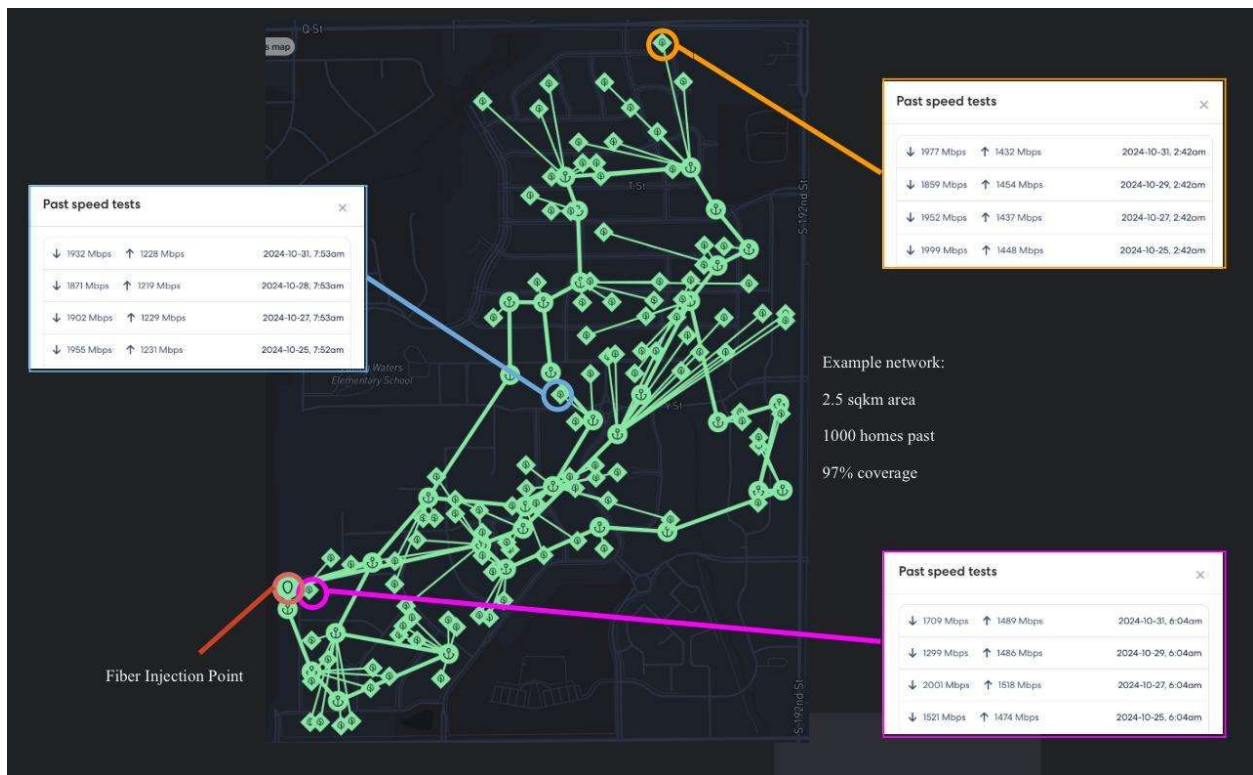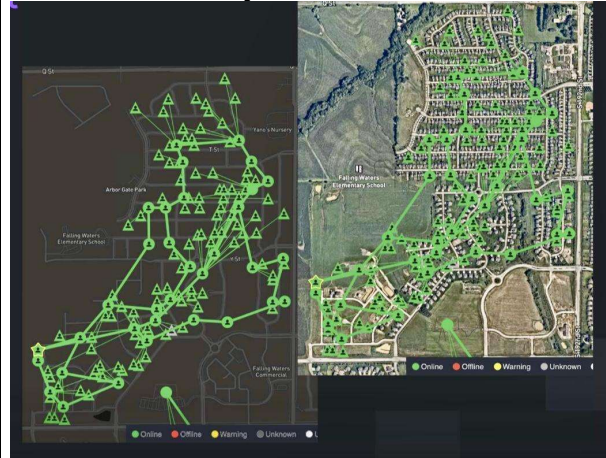
## Solution

WeLink uses Ketsen's innovative approach, leveraging cutting-edge 60 GHz technology and a design philosophy tailored to WISP needs. According to David Island, Ketsen's VP of North America Sales, "Our solution was designed from an operator's perspective. We wanted to simplify deployment and maximize efficiency without compromising performance."

Chad Dewey Ketsen SVP of engineering says "The mission Ketsen set out to solve was creating a platform to deliver multi-gig speeds across suburban and urban markets. We wanted to provide an FWA alternative to fiber and DOCSIS and break the hold incumbents have on the largest population centers across the world. The platform evolved not through sitting in a laboratory, but by doing. We went and learned what it took to do this by deploying 20k sites across the US, UK and Middle East."





Anchor Site          Leaf Site
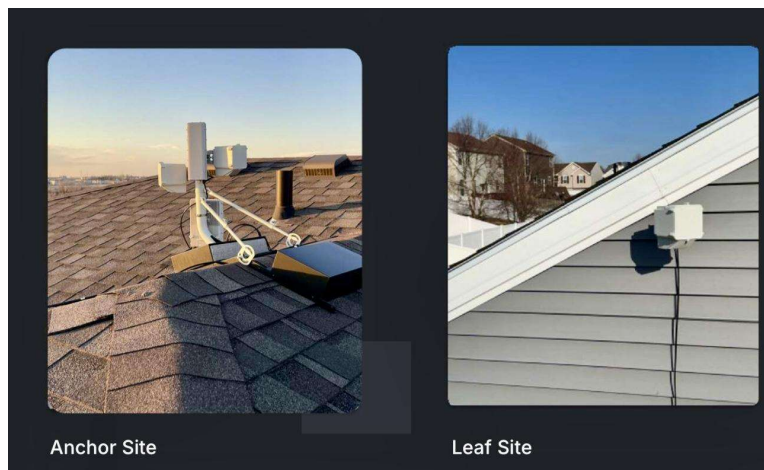
## Key Features of the Ketsen Solution

1. **Proprietary Radios with Advanced Chipsets Enable Greater Coverage and Minimize Deployment Obstacles**
   - Ketsen's radios utilize a leading-edge 60 GHz baseband silicon provider. "The advantage lies in channels five and six, which offer superior range compared to channels one through four," David Island explained.



1. **Innovative Network Architecture enables simplicity and speed of growth**
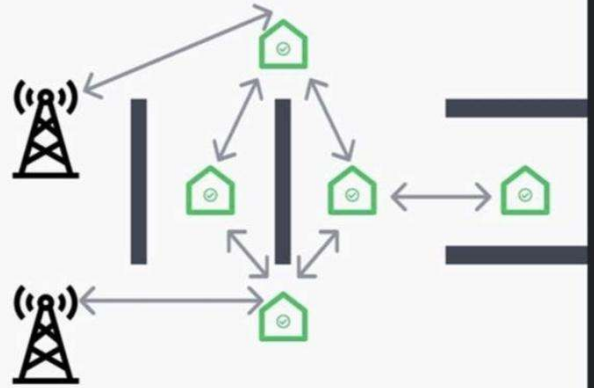
○ Ketsen employs a hybrid mesh topology that combines resilience with spectrum efficiency. Unlike traditional designs, which rely on full-mesh connectivity (e.g., Terragraph), Ketsen's approach uses a separate channel for the backbone. This simplifies spectrum planning and eliminates the need for complex frequency planning and Golay codes.
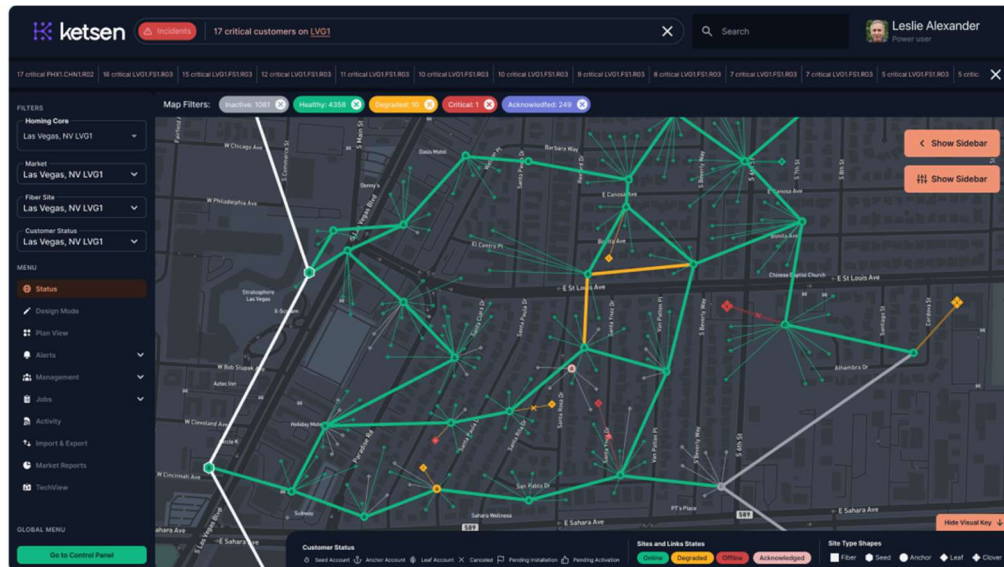


2. **Operator-Centric Software Tools Make Operations Fast and Easy**
   ○ Ketsen's software suite integrates planning and management functions into one platform. The tools are designed to:
      i. Identify optimal anchor homes with superior line-of-sight potential.
      ii. Simplify installation processes so technicians, not engineers, can complete deployments.

  iii. Provide clear deployment guidance, enabling up to four installations per day per team.
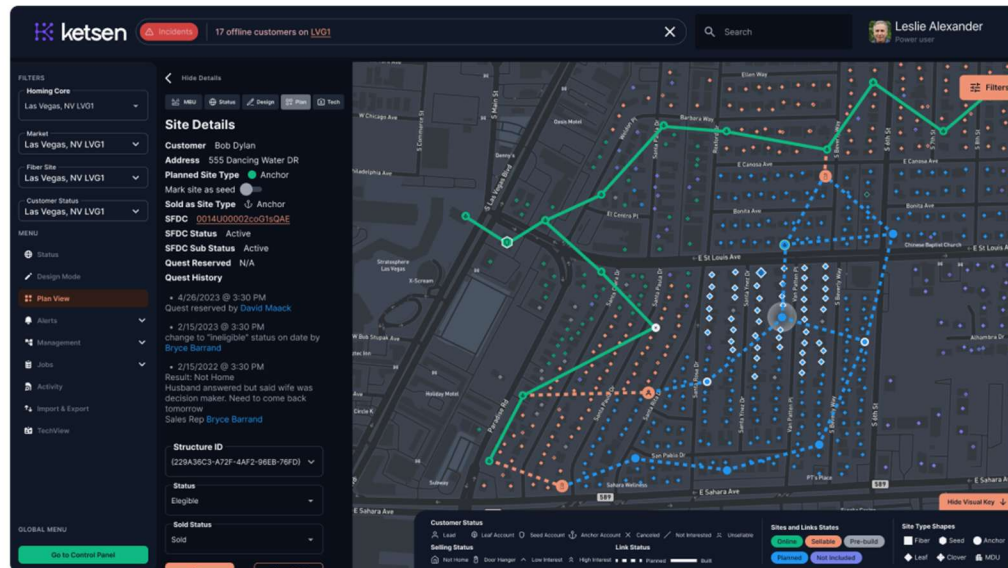


3. **Cost-Effective Hardware Reduces CAPEX**
    ○ By separating routing functionality into a standalone box rather than embedding it in each radio, Ketsen significantly reduced hardware costs. "We're half the price of competing systems," Island stated, highlighting the affordability of their solution.
4. **Proactive Deployment Strategy Delivers a Robust Backbone Strategy**
    ○ Using Ketsen's integrated planning tools, WeLink implemented a proactive sales model. Anchor homes were identified and targeted first, creating a robust backbone. Once these anchors were operational, surrounding homes were connected in a hub-and-spoke pattern.
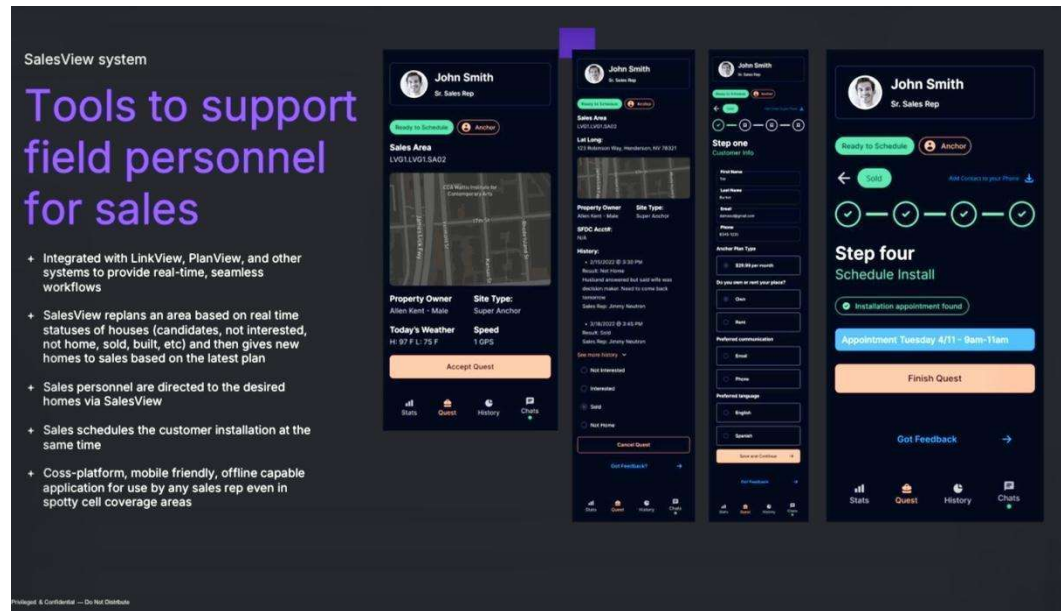
## Deployment in Action
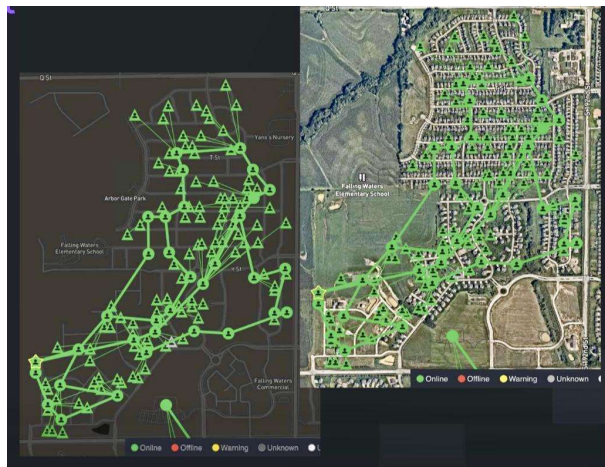


WeLink's deployments focused on suburban neighborhoods in suburban Phoenix and Las Vegas, areas where there is minimal tree cover and densely packed homes. "Our target markets thrive in suburban environments, where we achieve a high anchor-to-leaf ratio," Langford noted. This strategy ensures cost efficiency while maintaining high service quality.

Technicians leveraged Ketsen's software to guide installations, to identify ideal radio placements which optimizes network performance. Planning was completed in a matter of days. The entire process was designed for high quality 2 Gbps service and simplicity, allowing WeLink to scale rapidly and consistently deliver quality connectivity.

# Results

*"Hands down the best internet I have ever had. No lag, always on and great support."* - Kyle Wells - WeLink Customer Since 2023

## Rapid Scalability

WeLink's adoption of Ketsen's technology allowed them to grow their subscriber count into the five-figures in record time. This scalable model enabled them to expand into new markets without significant upfront capital investments and to open revenue streams quickly. "With our solution, you only spend capital as you sign up new customers," Island emphasized. This incremental growth model provides a significant competitive advantage over fiber deployments that require tremendous labor, capital investment, and time.

## Enhanced Performance

Ketsen's hybrid mesh design and advanced chipset technology ensure consistent 2 Gbps speeds to all end users, regardless of their distance and number of hops from the fiber injection point. This performance parity with fiber allowed WeLink to compete directly with traditional service providers. "Our system delivers the same speeds as fiber but at a fraction of the cost and time to deploy," Island stated.

## Cost Efficiency

By leveraging Ketsen's cost-effective hardware and streamlined deployment process, WeLink achieved all in cost-per-home-passed of less than $100. This low-cost model enabled rapid ROI, "A strong business case and efficient deployment is key to our success," Langford noted.

## Improved User Experience

The simplified deployment process and integrated planning tools reduce operational complexity, ensuring a seamless experience for planners, technicians, and end users. Customers benefit from reliable, high-speed internet without the disruptions and delays often associated with traditional broadband installations.

## Expanded Market Opportunities

WeLink's success in suburban areas has opened new opportunities in urban and suburban environments, including multi-dwelling units (MDUs), office parks, and home offices.

## Industry Recognition

WeLink's innovative approach, powered by Ketsen's technology, garnered attention across the industry. The deployment model's efficiency, performance, and cost-effectiveness has set a new standard for WISP operations, positioning WeLink as a leader in suburban broadband.

# Conclusion

WeLink's partnership with Ketsen demonstrates the transformative potential of innovative technology in overcoming long standing industry challenges. By combining advanced 60 GHz radios with full spectrum access, operator-focused software tools, and a proactive deployment

strategy, WeLink has achieved rapid scalability, cost efficiency, and enhanced user experience. As David Island summarized, "Ketsen isn't just a technology provider—we're a partner in enabling success."

For ISPs seeking to scale their operations and deliver high-speed internet to underserved areas, Ketsen's solutions offer a proven path to success. To learn more, visit Ketsen's website or contact our team today to see how the technology delivers 2 Gbps connectivity to connect your market opportunities.

**About WeLink Communications**



WeLink is a rapidly growing next-generation fixed-wireless internet service provider with the motto "Internet by the people, for the people." Founded in 2018 by broadband industry veterans who believed there had to be a better way than the broken status quo, WeLink prides itself on delivering consistently fast speeds, stronger Wi-Fi, straightforward pricing, and quality customer service with its multi-gigabit "wireless fiber" broadband. www.welink.com

**About Ketsen - Wireless Fiber without the Hassle**

Perfect for Point-to-Point (PtP), Point-to-Multipoint (PtMP), and Mesh architectures, our hardware and intuitive software deliver multi-gigabit wireless networks with ease. Enhance your ISP's capabilities with



superior performance, flexibility, and speed, distinguishing yourself in a dynamic market. Fast, reliable, and user-friendly – your network transformation starts here!