

SUMMER 2026

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ISE

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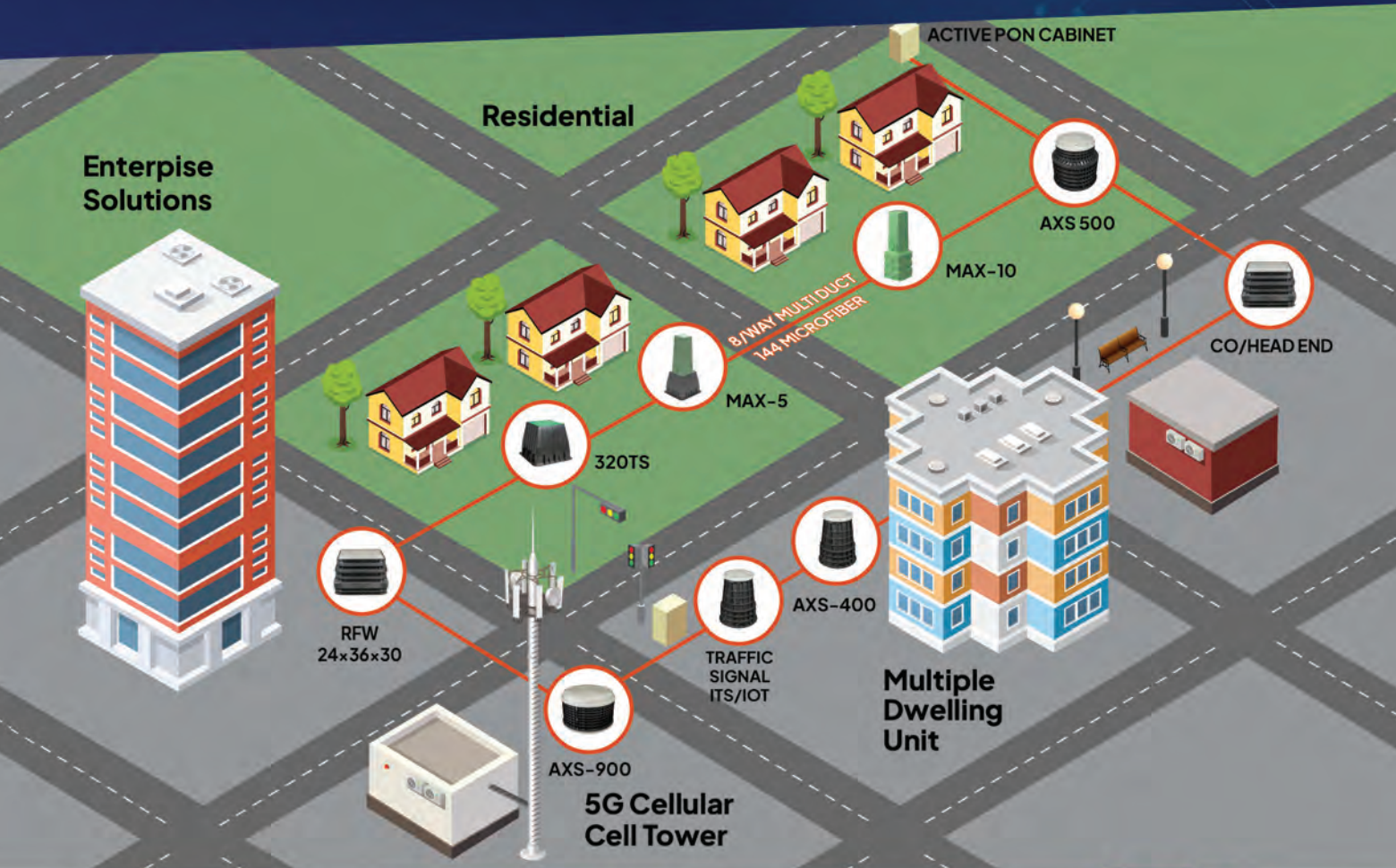
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“When you ask a question, you want to get the same answer every time, not different results on different days. That’s really what creates trust.”

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Missed Moment or Slow Start?

IN MY LAST note, I wrote that the money is moving, and that the question of where it's going is worth asking. I've continued to ask that question and received a variety of answers.

At Fiber Connect this spring, I didn't hear anyone say BEAD is failing, but neither did I hear much optimism. More than one contractor I spoke with described working a pipeline built around private money, data center work, and municipal projects, with BEAD penciled in somewhere off to the side. Nobody was complaining about the program, but nobody was counting on it either.

Then I read Shirley Bloomfield's responses for our Executive Insights feature. Bloomfield helped craft BEAD, and she told us she worries the industry may have missed its moment, that money on this scale will have come and gone without being replicated.

Meanwhile, the money that is moving fast is going to AI, and the industry is working out what to do about it. Our cover story on agentic AI found real deployments and real value, along with a caveat: none of it works without the groundwork of clean, accessible data.

And if you're reading this at ISE EXPO, hopefully the conversations you're having and the sessions you're attending are shedding light on these issues as we find a way to move forward.

Also in this issue: a look at one-touch make-ready, a conversation with Connect the Unconnected Award winner Chris Brooks of GoNetspeed, and our Network Security Expert column on the challenges of a world rapidly adopting AI.

Thanks for reading, and I hope to see you in Nashville.



Hayden Beeson

EDITOR

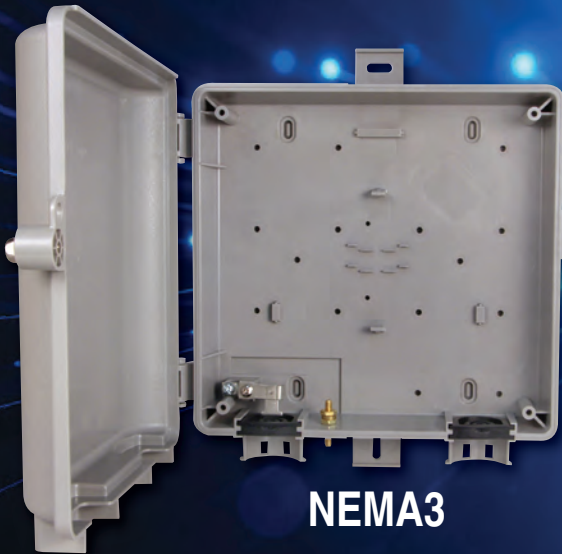
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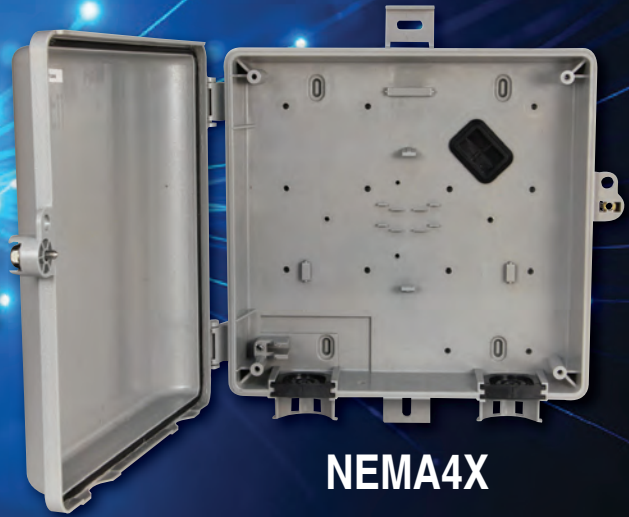
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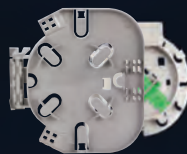
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Living In Exciting Times

The Journey to a New Industrial Evolution

WE ARE IN THE MIDST of the most exciting technology evolution, greater than when the Internet changed our lives almost five decades ago. My excitement comes from seeing it as a journey to a world where humans and AI collaborate, developing outcomes that neither can create separately.

This living article looks out of the window on our AI journey as new ideas and landscapes come into view and speed by. It begins here and covers new developments and challenges live on my website at cybyr.com/aijourney. The first part of the article draws upon the Open Network User Group's collaborative AI Networking Summit in May of this year (onug.net). The event brought together Enterprises and their providers as they explored their current state-of-AI-Networking-implementation and its challenges. Speaking with Nick Lippis, ONUG co-founder and co-chair, we agreed that the following are the main points arising from the conference that must be addressed.

The second part of the article covers other areas that the conference did not cover but are no less important. Together, it encompasses AI, networking and security in 2026 and beyond.

Part 1: AI is Coming, Ready or Not

Some of the many challenges discussed at the AI Networking Summit:

No matter how ready developers are, AI is coming very quickly, whether we are ready or not. The long-term future of IT and networking in general will be highly uncertain, perhaps for the next two years. Experimentation will remain the order of the day during that time.

As one of many findings of IDC's survey, security concerns are rated number one, and are part of every AI conversation. Also, slow governance and compliance adoption are inhibitors to scaling AI. The issue of guardrails and preventative measures is very dynamic, with instances of threat actors using AI to exploit AI's automation capabilities. This is creating new threats at lightning speed without the need for technical expertise.

There's much more. The necessary migration to AI-architected networking has a way to go and will need to accommodate cloud or hybrid implementation over the next two years. Speaking of "hybrid," the decision to build, buy or develop hybrid solutions is governed by cost, functionality and security. Even here, there is a split between platform and best-of-breed solutions.

This is my observation: only the largest organizations have developed AI implementation policies to accompany resilience and security policies. Clear implementation planning and policies are essential to prevent ongoing AI adoption from being abandoned.

This is the table of contents that will be tracked, with the plan being to check in with progress at the ONUG Fall Summit and on my website. Other topics are, of course, cost, agentic sprawl, Network Operating Centers and much more.

Part 2: Other Critical Work in Progress

CAN NEXT GENERATION AI CRUSH RANSOMWARE?

- Anthropic's Glasswing project found 10,000+ high-severity vulnerabilities across widely used software projects.



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There are thoughts that the next generation of AI could curtail cyber-attacks on software by 70-90% over time. It may help indirectly with all other attacks (phishing, social engineering, misconfiguration and supply chain issues that involve software) and change the game against the ransomware-as-a-service threats. Since the AI Summit, the United States government has taken a proactive role in evaluating the AI cybersecurity integrity of AI models in a voluntary initiative.

AGENTIC AI IDENTITY AND AUTHORIZATION: WILL AI BREAK ZERO TRUST?

- "How do we authenticate AI agents?" is more importantly stated as "How do we preserve Zero Trust when the actor is no longer a human, static software or a device?"
- This is critical because AI agents initiating transactions must have their identity and policy conformance approved. If not, then Zero Trust will be broken. Transient AI agents need to dynamically comply with policy as they do for IoTs, etc. This is a very high priority until the end of 2026.
- My initiative on using proxy or supervisory software to continually verify identity and policies so as to authorize all transactions is getting some traction. This becomes a crucial guardrail present for all interactions. Dynamically generated Agentic AI actors can be

similarly policed with dynamic policy enforcement. Although written before the dynamic proliferation of Agentic began, the Cloud Security Alliance wrote a forward-looking paper on the issue, recognizing its importance. (<https://bit.ly/4fwjauQ>)

Bad News on the Doorstep

To mess with Don McLean's famous song, some want it to be the day that AI died or bye-bye Miss American AI. But the Luddites didn't win the first industrial revolution, and I don't think they will win this evolution.

However, there is no doubt that political and state-sponsored disruption is real and aimed at slowing progress. The reality is that the current data center build-out is not dealing with power and water shortfalls with any sense of urgency. In fact, the AI community appears to be ignoring these fears, not making friends or public statements that AI will lower power consumption as devices become efficient,

that water recycling is beginning, as is new job creation—nor that all parties are considering partial public ownership of what are becoming monster AI companies.

Harmonizing Human and AI Strengths: A New Collaboration That Neither Can Create Separately

This topic is a continuation of my previous ISE article on Harmonizing Nine Human Strengths with AI, achieving collectively what cannot be achieved separately. The main point is to eliminate many user fears that AI will take us over. After it was published, I realized that I missed a strength more important than all others: Leadership. Humans can bring leadership qualities to inspire, empower and set transformative purpose for individuals, organizations and communities. Yes, AI does a good job of expanding these ideas, but it's really not in the leadership business. I bring all this together in my Expert-Guided AI software.

AI-Driven Organizations

ExO's Salim Ismail's new work on exponential organizations says, "Don't try to fit AI into the organization—it doesn't work! Instead, reimagine the organization with AI at its center."

I would add: Start by appointing a Chief AI Officer and replacing antiquated structures. Job one would be the creation of a Secure AI implementation policy to remove the current chaos present in 90% of organizations, as we mentioned earlier.

Summary

This is the monster topic of our time. The topics listed must all be addressed so we can all benefit. Please see the expansion of many of the ideas and thoughts at cybyr.com/aijourney and contact me on LinkedIn. ■

Mark Fishburn is President of Cybyr.com, a provider of strategic network, AI, cybersecurity, software, and marketing services.

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Your agent is only as good as its intelligence.

BY HAYDEN BEESON

AI agents are capable of executing multi-step workflows across operational tools without the need for a human to initiate each step and are now deployed in production at fiber operators.

According to vendors interviewed for this story and analyst research, the factor that determines whether the technology delivers value is not model capability but rather the accessibility and quality of an operator's data.

Boston Consulting Group's 2025 report, *The Widening AI Value Gap*, found that agentic AI accounted for approximately 17% of total enterprise AI value in 2025, up from a negligible share in 2024. This figure is projected to reach 29% by 2028. The report found that 46% of surveyed companies are piloting or deploying agentic systems and it ranked telecommunications second among all sectors in AI maturity.

Vendor activity has followed. In June, Nokia announced an agentic AI framework for its Network Services Platform, with agents working within operator-defined policy boundaries. Commercial availability is planned by the end of 2026.

Telstra and Ericsson announced a collaboration in October 2025 to advance autonomous networks, centered on building a "knowledge plane," an information layer using data, AI, and reasoning to monitor, analyze, and control the network.

"Developing and validating ideas and technical possibilities in real environments is essential to closing the gap between aspiration and execution," Telstra chief architect Mark Sanders stated in an October 2025 Ericsson press release.

Most operators considering agentic AI are not evaluating it from a clean starting point. For instance, many are running legacy operations and business support platforms (OSS/BSS) that were designed before modern application programming interfaces (APIs) were standard, and before data accessibility was considered a product requirement.

Stephen Farnsworth, Vice President of Go-to-Market at gaiia, a Montreal-based OSS/BSS provider that closed a \$40 million Series B in May 2026 and reports more than 75 ISP customers, says most operators are trying to retrofit a legacy platform around AI rather than build for it.

New builds are unburdened by prior vendor decisions and are in a position to select modern software from the outset. The operators moving most urgently toward modernization, though, are legacy carriers.

"We're spending a lot of our time with companies that have 10,000 subscribers, 100,000, 200,000 subscribers, where they're looking at their stack and saying, 'I'm getting crushed. I have no ability to move quickly,'" Farnsworth says.



New builds are unburdened by prior vendor decisions and are in a position to select modern software from the outset.



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Data Access as the Threshold Condition

Farnsworth states that agentic AI cannot function for operators whose data is inaccessible.

“People think this agent thing is real, and that they can benefit from agentic AI—but they’re on on-prem software where they have no access to the data,” he says. “I’ll tell you: agentic AI is real, but not for you.”

Farnsworth cites the historical practice of OSS/BSS vendors charging operators to export their own data.

“If you wanted access to your data, you had to pay them. You go to your vendor and say, ‘Hey, I want to do an export here,’ and they say, ‘Okay, great, happy to do that. It’ll cost you \$20,000.’ Or ‘We have a professional services group that’ll get it for you.’ It’s an odd part of how this market has existed for a long time.”

He identifies open data and modern APIs as prerequisites: “How does an AI agent do anything unless it can understand everything?”

gaiia’s architecture is built around that premise, and the platform exposes data through open APIs, continuously updated

in real time or pushed to a database on a regular cycle, so that any agent or external system can access it without a professional services engagement.

Farnsworth also describes a Model Context Protocol (MCP) layer that allows AI agents from different systems to communicate with each other, which he con-

siders a requirement for any platform that claims to be AI-native rather than AI-adjacent.

He applies the same test to vendor software.

“If I’m asking AI to do certain things and it fundamentally can’t access the



When you ask a question, you want to get the same answer every time, not different results on different days. That’s really what creates trust.

and gaiia’s customer relationship management (CRM) and states that any system an agent cannot access leaves the agent without context.

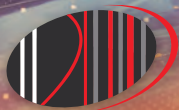
He describes his own use of agents built in Claude Cowork, drawing on Google Calendar, Gmail, Slack, a call recorder,

system, I immediately question that system,” he says.

Farnsworth identifies two additional constraints beyond data access.

The first is data quality. “You can move data from one system to another,” he says, “but if you’re moving bad data into a new system, it’s still bad data.”

The second is network complexity: for legacy operators running mixed plant, automating across that mix is significantly harder than automating a pure-fiber environment.



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Farnsworth reports the same limits within gaiia. The company uses AI extensively, and he states that queries against its own systems sometimes return answers that are “directionally true” but missing context until source priorities are specified.

Deployment Status and Operator Readiness

Reilly McClure, Senior Product Marketing Manager at Sitetracker, reports the same data-readiness gap from the deployment-management layer.

Founded in 2013, Sitetracker reports more than 350 customers operating in over 100 countries. The company announced Scout, an agentic AI platform for critical infrastructure, in limited release on April 8, 2026, following customer pilots that began in late 2025; the product reached general availability this spring, and the company reports agents running in production at customer organizations.

McClure says the data-readiness question is one operators are still working out.

“That’s what a lot of operators are trying to figure out right now: ‘How ready are we really?’” he says.

He also distinguishes data structure from data quality.

“There’s going to be things to clean up. Details left out or lost in translation, or sitting in somebody’s email inbox somewhere.”

Scout is designed as a three-layer platform. At the foundation is a data layer with connectors to external systems (Sitetracker, CRM, ERP, GIS, file storage) that provides access to operational knowledge across a customer’s environment. In the middle is an intelligence layer powered by Compass, the platform’s operational context engine. At the interface layer, Scout provides a conversational UI for natural-language data queries, as well as pre-built agents for common workflows. Customers can also build and maintain their own agents within the platform.

“We’re not going to be able to come up with every use case under the sun,” McClure says. “Ultimately, we see customers building a lot of those and being able to maintain them on their own.”

Model selection follows a similar logic. Both gaiia and Sitetracker allow customers to bring their own underlying LLMs rather than locking operators to a single provider.

“Every other week, Anthropic releases something, and Claude is taking on a whole new industry,” McClure notes. “You just can’t limit yourself to one path right now.”

McClure also describes a shift in how operators are approaching the technology over the past year.

“A year ago, there was some skepticism around AI, and certainly around the security angle,” he says. “Now the conversation is more pragmatic. It’s: ‘We’re going to do due diligence around security, we know we have to do something.’”

Current production use cases are administrative: estimating permitting timelines, checking permit statuses across jurisdictions, and enriching incomplete job and work-order records. McClure characterizes the demand from operators and contractors as “How can I get more time back in my day?”

McClure distinguishes platform approaches from single-purpose tools. He observed numerous narrow AI products at Fiber Connect

2026, including computer vision tools for field photo validation, and considers them useful but limited.

“So many of the problems in fiber deployments happen upstream: in that planning phase, in those handoffs from engineering and design to construction, permitting, as-builts, and service turn-up.”

Deterministic Versus Probabilistic Execution

McClure raised a distinction between probabilistic and deterministic execution that has received limited attention in the industry.

Large language models are probabilistic. “Every time they interpret a prompt, they might look at all the same sources and give you a slightly different output,” McClure says. “And none of them are that great at math.”

Inconsistent outputs, he says, are unacceptable for operational workflows.

“When you think about dates and times and permit compliance and invoice reconciliation, you don’t want variable output for these things. When you ask a question, you want to get the same answer every time, not different results on different days. That’s really what creates trust.”

Farnsworth raised the same point: because AI probabilistically weights available data, input data quality determines output quality.

McClure is skeptical of operators who assume their existing enterprise AI licenses for Claude or ChatGPT are sufficient to build operational tools.

“What we’re hearing from a lot of operators is, ‘Hey, our company bought Claude for all of us, or ChatGPT, or Microsoft Copilot, and we think we can go vibe code a CRM or some field production tool.’ Okay,” he says. “Good luck.”

Scout uses deterministic agent execution: knowledge graphs mapping an operator’s data model and business rules, with workflow steps and routing logic that are explicitly defined, conditional, and repeatable, and a record of every action taken. The mapping is performed by Compass, which McClure describes as understanding “the complete ontology and relationships between objects” in a customer’s environment: the data model, terminology, and business rules teams use to manage work.

The practical consequence is that a Scout user can query their Sitetracker environment in plain language on day one, without manually providing operational context files or building integrations. Compass has already mapped the relationships. An operator asking about permitting status across multiple jurisdictions gets the same answer each time, derived from the same explicit workflow logic, with a documented record of what the agent checked and when.

Beyond efficiency, repeatability is the mechanism by which an operator can explain to a regulator, a funder, or an auditor what an agent did and why. McClure notes that most agentic tools currently on the market do not offer this: audit trails are

FIVE QUESTIONS TO ASK BEFORE DEPLOYING AN AGENT

1. Can it reach all of our data?

Stephen Farnsworth of gaiia identifies data accessibility as the threshold condition: operators on closed, on-premises platforms with no API access are not agentic AI candidates, regardless of what a vendor promises. Before any evaluation, inventory where critical operational data lives and what it costs to export it.

2. Is the output deterministic?

Large language models are probabilistic, meaning the same prompt can return different outputs on different days. For permitting timelines, invoice reconciliation, and compliance reporting, that variability is unacceptable. Ask the vendor to demonstrate that workflow outputs are repeatable and explicitly defined, not model-generated on the fly.

3. Where does our data go?

Confirm that customer data and personally identifiable information remain in your environment and are not used to train or fine-tune third-party models. This is a contractual question, and you should get it in writing before a pilot begins.

4. What permissions does the agent have?

An agent acting on behalf of a user should operate within that user's access boundaries, not around them. Agent access should map to existing role-based controls, and that mapping should be auditable.

5. Can you show me the trail?

Every action an agent takes should be logged, time-stamped, and reviewable. For operators with active BEAD deployments, this is not optional: NTIA requires subgrantees to maintain records for five years after funds are expended.

being added after the fact rather than built into the architecture from the start.

The knowledge plane at the center of the Telstra-Ericsson collaboration appears to be driven by the same principle, giving agents a structured, explainable map of the network before trusting them to act on it.

For operators evaluating agentic products, the distinction is an important question: Is the agent's behavior repeatable, and can the vendor produce a record of its actions?

Governance and Accountability

In BCG's research, 72% of organizations reported unmanaged AI-security risks, frequently tied to poor data quality and unclear oversight. The controls operators should expect from an agentic platform follow directly from that gap.

McClure is direct about the limits: "We're not going to suggest to anybody that you should automate all these processes and then take your lunch break."

Scout addresses that through Watch, its dedicated governance and security layer: virtual private cloud infrastructure, customer data and personally identifiable information kept out of third-party LLM systems, and a full audit trail on every action. Customer data, McClure says, is never used to train or fine-tune Sitetracker's models—the company technically cannot access it.

For BEAD subgrantees, it is not optional. NTIA mandates that subgrantees maintain records and financial documents for five years after BEAD funds are expended or returned, stored wherever practical in open, digital formats. Semi-annual reporting obligations require project-level and location-level data, with subgrantees responsible for compiling supporting documentation on demand. An operator relying on agentic AI to manage permitting timelines, work orders, or deployment milestones without a system that can document what actions were taken, by which agent, and on what basis, is carrying federal compliance exposure with a tool that cannot account for itself.

Audit capability has compliance implications for operators answering to regulators, funders, and federal reporting requirements for BEAD-funded builds.

On autonomy, McClure reports more ambition among customers than anticipated: "I don't know that we've found the line. We've been pleasantly surprised at how aspirational some of the goals are." No customer is pursuing human-out-of-the-loop automation. The adoption model he describes is crawl-walk-run: a conversational data-query layer first, then agents on high-value, low-risk workflows.

Anis Khemakhem, Clearfield's Chief Commercial Officer, describes a similar posture on the manufacturing side. He encourages internal AI use with a stated condition: "Security is, to me, the biggest concern. We want to make sure it's secure—we're publicly traded." On expected value, he says, "It's going to give us more efficiencies, it's going to make us do our job a little bit better, a little bit faster. I don't view it as a cost-cutting tool. It's an optimization tool."

Outlook

The sources interviewed for this story identified the same starting point for operators: data that is structured, accessible, exportable, and clean enough to support automated action. Farnsworth states that access alone changes the calculation: "That right there makes AI possible." ■

EXECUTIVE INSIGHTS WITH

ISE EXPO's Keynote Presenters

Keynote leaders weigh in on permitting, workforce, and the program dividing the industry.

BY HAYDEN BEESON



SE EXPO 2026 is bookended by two keynote conversations. The opening panel brings together David Stehlin, Chief Executive Officer, TIA; Darren Farnan, General Manager, United Fiber; Nick Fischer, General Manager, South Region, GFiber; and Kristina Harrison, Executive Vice President, Operations, Brightspeed. The closing panel features Shirley Bloomfield, former NTCA Chief Executive Officer; Michael Hamilton, Director of Operations, Fiber Business Unit, C Spire; Bo Gresham, Chief Revenue Officer, Dycom Industries; and Steve Harris, Vice President of Sales and Marketing, Broadband, UCL Swift NA.

Ahead of the show, we asked each of them questions about what the industry is getting right, whether BEAD can still deliver, how to solve the workforce shortage, and what success actually looks like.

Consensus on Fiber

The clearest agreement across both keynotes is on technology: the industry has settled on fiber for the long term.

"We've aligned around fiber as the most future-ready platform, and we're seeing unprecedented levels of public and private investment driving real momentum in deployment," said Stehlin.

For Farnan, whose cooperative serves some of the lowest-density territory in Missouri, the bigger shift is in how the country talks about broadband.

"One thing the industry is getting right is recognizing that broadband is essential infrastructure," he said. "Fiber is no longer viewed as a luxury service. It is critical for education, healthcare, agriculture, economic development, and quality of life."

For Harrison, the progress shows in what operators now prioritize: "sustainable economics, operational readiness and customer adoption, not just passing homes."

And Harris points to the architecture itself.

"By moving toward passive optical networks, operators are securing a more sustainable future with lower power consumption, reduced maintenance costs, and a vastly superior Customer Quality of Experience (QoE)," he said.

Bloomfield, who spent decades advocating for rural providers at NTCA, adds a long-term

maintenance dimension to the case for fiber. The technology, she notes, has a nearly unlimited lifespan and keeps operating expenses low, which she said is "particularly critical for those providers in areas where the 'windshield' time for truck rolls can drag on ROI."

Bloomfield notes that the deployment learning curve accelerated sharply during COVID, when local obstacles were sidelined for the sake of speed. "Did we learn nothing about efficiency?" she asks.

What the industry proved it could do under pressure, she suggests, makes the return to slow permitting and bureaucratic process all the more frustrating.

The responses identify the same obstacles again and again: permitting, pole access, and workforce.

"Significant gaps remain, particularly regarding permitting and pole access, which continue to be primary roadblocks holding back progress," said Fischer.

Harrison agrees: "Permitting and rights-of-way remain a major impact on volume and speed to deliver."

Bloomfield has seen how local obstacles derail builds.

"The first time I had a community-based provider share that a railroad crossing agreement slowed down their deployment by 18 months, my jaw dropped," she said.

Rural geography adds another layer of difficulty.

"Rural fiber construction is fundamentally different from building in urban or suburban markets," Farnan said. "We serve some of the lowest-density areas in Missouri, averaging around 2.5 members per mile in parts of our territory."

Where BEAD Stands

The consensus these leaders share on fiber does not necessarily extend to BEAD.

"From my perspective, BEAD has not yet been successful," Stehlin said. "More than four years in, and very few BEAD-funded networks have been built. And along the way, the situation on the ground has changed."

In the same period, "the ramp in privately funded AI data center builds has been tremendous," he said,



Bo Gresham,
Dycom Industries



David Stehlin,
TIA



Steve Harris,
UCL Swift NA / Harris
DigiTech Academy

with suppliers developing new products for data center designs and construction firms re-targeting their workforces to build them.

"I think the lesson is government should be a catalyst for things like fundamental security and infrastructure improvements and not wrap so much bureaucracy around it that it becomes a stumbling block to success," he said.

For Bloomfield, who helped shape BEAD, the program's struggles carry particular weight.

"I poured my heart and soul into the crafting of BEAD during all of the Infrastructure Act deliberations," she said. "So, to watch the endless delays, complications, and then unraveling of some key provisions, like fiber preference, was something I likely took a bit too personally."

She worries about where the program landed. Seeing untested technologies receive large awards, she said, leaves her concerned the industry may have missed an amazing opportunity, and that federal broadband funding of this scale "will have come and gone and not be replicated." Still, she holds out hope the program will succeed.

For Harrison, the definition of success is straightforward: "BEAD success is connecting people who have historically lacked access to quality connectivity with reliable, affordable and lasting infrastructure that provides them the connection for today's digital world and supports the innovations of tomorrow."

Getting there, she said, depends on speed: "We need to execute quickly, which is dependent on strong partnerships between fiber providers and the states."

Harrison makes clear that the partnerships are about more than paperwork, and they need to actively remove the obstacles that slow delivery once construction is underway.

Farnan, whose rural Missouri cooperative has built through some of the most cost-intensive terrain in the program's target footprint, is direct about what the program needs to function for providers like his: "Clear guidance, realistic timelines, and streamlined approval processes. Rural projects are more complex and more expensive, and programs need to reflect those realities. Ultimately, BEAD succeeds when geography no longer determines opportunity."

GFiber, which sits entirely outside the program, is rooting for its success.

"While GFiber is not participating in BEAD, success for the program looks the same to us as it does to anyone else: more people getting fast, reliable internet," Fischer said. "We have to make it easier to build, and funding alone won't put fiber in the ground."

The Missing Workers

Wherever the funding comes from, the networks still need people to build them, and on this point, the concern is unanimous.

"We're looking at a need for hundreds of thousands of additional workers to meet the scale of broadband deployment over the next few years," Stehlin said.

TIA's answer is Broadband Nation, an initiative connecting job seekers with local training and career opportunities across the industry.

Harrison points to a pipeline that's been narrowing for a long time: "People pursuing careers in the trades and trade program enrollments have been declining for years."

Brightspeed's response includes standardized training, clearer career paths, and partnerships with colleges and technical schools.

Fischer said GFiber is taking a similar approach, emphasizing vocational training and working to make network construction a more attractive career path.

"The industry as a whole needs to lean further into local workforce development to ensure we have the talent required for this historic build-out," he said.

Farnan included a lesson from United Fiber's rapid growth: "technology and people have to evolve together."

Harris argues the shortage is as much about quality as quantity. The industry, he said, faces a dual challenge: a hands-on skills gap compounded by a race to the bottom on material quality.

"We see a shortage of qualified technicians who understand the nuances of precision splicing—such as proper fiber preparation, environmental cleanliness, and the physics of a core-aligned arc," he said.

He also argues the training model itself is aging out, with broad, long-form certifications giving way to hands-on micro-credentials.



Kristina Harrison,
Brightspeed



Darren Farnan,
United Fiber

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What Makes ISE EXPO Different

ISE EXPO is the only U.S. event built for the total network practitioner—the professionals responsible for networks that don't run on a single technology. While other industry events focus on one medium, ISE EXPO brings together the full convergence conversation: fiber, 5G, fixed wireless, edge compute, HFC, Wi-Fi, satellite, and AI-driven network operations—all under one roof.

What sets the program apart is its operator-led design. The majority of sessions and panels feature broadband service providers and field leaders sharing what's actually working in the real world—not vendor pitches or analyst projections. Attendees hear peer-to-peer from the people making the same decisions they are.

New for 2026, the Convergence Central Theater brings live sessions directly onto the exhibit floor, keeping education and networking seamlessly connected throughout the event.

Who Attends

ISE EXPO draws senior decision-makers and practitioners from across the network infrastructure ecosystem: telecom operators, rural broadband providers, municipalities and public-sector broadband offices, utilities, network contractors, and systems integrators. Attendees range from network engineers and NOC directors to C-suite executives and broadband program managers navigating BEAD funding execution.

Benefits of Attending

- Three days of operator-led education across three focused tracks: Technology-Neutral Deployment, Reducing OpEx with AI & Automation, and Industry Outlook & Leadership.
- Two executive keynote panels featuring network leaders from Tier 1, Tier 2, rural providers, and contractors.
- Hands-on Learning Labs on August 18 covering ribbon splicing, autonomous

network readiness, and leadership through convergence.

- Direct access to 130+ vendors showcasing solutions across the full network technology spectrum.
- Peer networking with decision-makers from telecom, utilities, municipalities, and the broader connectivity ecosystem.
- The Convergence Central Theater—live floor sessions open to all attendees.

Problems ISE EXPO Solves

Today's network operators are being asked to make simultaneous decisions across multiple technologies—and most industry events only address one piece of that puzzle. ISE EXPO fills the gap for practitioners who need neutral, practical guidance on deploying and operating networks that span fiber, wireless, and everything in between.

Specific pain points the event addresses include:

- Lack of technology-neutral deployment guidance across mixed infrastructure environments.
- Difficulty finding peer-to-peer, vendor-neutral education on AI and automation for network operations.
- Navigating BEAD funding execution.
- Building sustainable infrastructure and planning for long-term network viability.
- Supply chain challenges slowing broadband deployment timelines.
- Workforce development gaps between engineering and field construction teams.
- The need to evaluate and connect with technology partners across the full network stack in one place.

ISE EXPO 2026 runs August 18–20 at Music City Center in Nashville, Tennessee. Early bird registration is open through July 20. Learn more at iseexpo.com.

"In a fast-moving market, the industry needs a 'just-in-time' learning model," he said. "Micro-credentials act as real-time qualifiers, proving a technician has mastered a specific, current skill rather than just general theory. We aren't just training for a career anymore; we are training for the next 18 months of technology."

The goal, as Harris puts it, is to move from a workforce that "knows everything" to one that can "learn anything" quickly.



Nick Fischer,
G Fiber

Beyond Homes Passed

The industry's most consequential gap, in the view of both Hamilton and Harris, is the distance between where deployment metrics stop and where real service begins.

Hamilton, who oversees fiber operations for C Spire across more than 160 communities, locates that gap.

"The gap isn't always the build," he said. "It's the last 100 feet and what happens after the customer says yes."

In his experience, the friction exists at the transitions: OSP contractors finish a segment and hand off to drop crews, who hand off to installation technicians, who hand off to customer care.

"Every one of those handoffs is a place where communication breaks down, and customers feel it," he said.

Harris traces part of that problem to the shortcuts operators reach for in the name of speed. Mechanical connectors and pre-terminated drop cables trade short-term convenience for long-term network health, introducing degradation points and unmanageable slack in the outside plant. The standard he wants the industry to measure itself against is "First Time Right."

"A network is only as strong as its weakest splice," he said.

This makes the metrics the industry relies on to measure progress misleading.

"Homes passed is a construction metric, not a success metric," Hamilton said.

Harris agrees: "'Homes Passed' is a vanity metric if those homes aren't supported by a high-reliability, low-maintenance connection."

A home passed, Hamilton notes, "isn't a home served until someone has

completed that installation and the customer is online."

Pointing to homes passed while ignoring take rates and service quality, he said, "is how you build impressive maps and miss the mission entirely."

For Farnan, the real measure is community impact.

"The technical metrics matter, but for us, the real measurement is community impact," he said. "Broadband changes the future opportunities of rural communities. We see that every day across our footprint. Success is seeing students able to fully participate in

digital learning or seeing healthcare providers expand telehealth services. It is about being able to work from home and helping businesses compete without being limited by connectivity."

Meaningful progress, he added, "is when geography no longer limits what a community or individual can become."

That human dimension is what Farnan's team uses for motivation.





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"Our team thrives on the many notes we get from our customers sharing how much fiber connectivity from a local provider means to them," he said. "Those conversations are every bit as important as deployment statistics."

Bloomfield agrees the economic story is undertold.

"The part of the narrative that deserves more attention is what the deployment of broadband actually brings economically to a community or a region," she said.

She points specifically to the work of Matt Dunne and the Center on Rural Innovation, which has charted the economic impacts fiber broadband brings to entrepreneurs, small businesses, and community vitality.

The AI Effect

The responses agree that AI's impact is real and measurable, but differ on who benefits.

Stehlin sees a structural shift where AI-driven workloads are reshaping how networks and data centers are designed and built.

"Hyperscalers are spending eight times more in CapEx than Telecom companies," he noted.

For some TIA members, AI is a major growth driver. For others, the focus on AI data centers is, in his words, "sucking the air out of the room" by consuming disproportionate amounts of fiber capacity, equipment, and supply chain resources, and making it harder for traditional operators to secure what they need.

"Ultimately," he said, "AI isn't just another technology cycle—it's a structural shift in how digital infrastructure is designed, built, and scaled."

Harrison said the near-term wins are real: automation from insights and better prediction from historical data. But she thinks the industry is still underestimating the bigger win.

"The real opportunity isn't siloed use cases," she said, "it's connecting AI across all core functions; design, construction, operations and the customer experience."

And in the field, Harris sees AI changing what a technician is.

"AI isn't replacing the technician; it's a tool that allows our workforce to leverage data to work smarter," he said. "AI acts as a 'digital co-pilot' that accelerates both how we build and how we learn."



Michael Hamilton,
C Spire



Shirley Bloomfield,
formerly with NTCA

Building Like You Plan to Stay

Harrison, whose company is building at a pace of more than a million passings a year, knows where big builds break down.

"Cracks start to show during hand-offs; design to build, construction to inspection, or deployment to operations," she said.

The mitigation, she said, is tight process integration and real-time visibility.

Hamilton's concern is the gap between building and activation, noting competition means you can't let a well-built network sit dark.

As Hamilton sees it, sequencing decisions have to account for both construction capacity

and installation readiness simultaneously, because a neighborhood that's been passed but not yet activated is still a neighborhood a competitor can win.

He's seen what happens when operational discipline breaks down in the field. In the unpredictable markets C Spire serves, flexibility is as important as planning.

"You have to maintain flexibility without losing momentum," he said. "That means cross-trained crews, local contractor relationships that can flex with you, and installation teams that aren't waiting on a six-week backlog when a neighborhood goes live."

Farnan has watched United Fiber grow from a co-op project, launched when nearly 90% of its membership was unserved or underserved, into a regional fiber footprint, without losing its focus.

"At the end of the day, we never want to lose sight of why we started," he said, "and that is to help our rural customers have the same opportunities as anywhere else."

Asked how operators should build a strategy resilient through 2035, Stehlin said they need to take a long-term view and "skate to where the puck will be."

With 6G architectures taking shape and intelligence migrating from the core to the edge, he said, "success will depend on building networks where intelligence is distributed across the entire infrastructure, not concentrated in a single part of the network."

Hamilton succinctly states the mindset running through all the responses: "We're not building to a grant deadline. We're building a network we'll stand behind in these communities for decades." ■

Interview responses have been edited and condensed for clarity.



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ISE EXPO 2026: Featured Sessions Summary

August 18–20, 2026 | Music City Center | Nashville, TN

OPENING KEYNOTE—August 19, 9:30 AM, Davidson Ballroom

Four of the industry's most experienced operators take the stage to address what's actually working in AI and automation, what network convergence demands from your organization, and how to build strategies that hold through 2030. With perspectives spanning associations, electric co-ops, greenfield builds, and large-scale network modernization, this keynote delivers a complete industry view—no buzzwords, just real direction.



PANELISTS: Ashley Church, GFiber · Kristina Harrison, Brightspeed
Darren Farnan, United Fiber · Dave Stehlin, TIA

MODERATOR: Randall René, ISE EXPO Content Ambassador

CLOSING KEYNOTE—August 20, 9:00 AM, Davidson Ballroom

What does network convergence actually mean for how you operate—not just how you compete? Three operators who are executing convergence at scale tackle the decisions shaping the industry now: what it takes to operate in a truly technology-neutral world, where to win across ownership and orchestration of fiber, wireless, cloud, and edge, and why deployment speed and field execution are becoming defining competitive advantages. Live audience Q&A built in.

PANELISTS: Michael Hamilton, C Spire · Bo Gresham, Dycom Industries · Shirley Bloomfield, Shirley Connected LLC (former CEO of NTCA)

MODERATOR: Steve Harris, UCL Swift NA

FEATURED SESSIONS

A Decade of Fiber Broadband Learning—What's Next?

August 18 / OpEx Track / A decade into FTTH deployment, operators are confronting the long-term consequences of earlier design decisions. This peer-to-peer panel features real operators from Twin Lakes, DTC Communications, and Zirrus sharing hard-won lessons on reducing truck rolls, identifying the service metrics that actually drive performance, and modernizing workforce models for sustained long-term operations.

Research Panel: No More Silos: Building Hybrid Networks That Actually Work

August 18 / As broadband, wireless, and edge networks converge, the challenge is no longer choosing a single technology—it's building infrastructure that allows multiple

architectures to operate together at scale. The panel examines how cable design, deployment practices, and long-term infrastructure planning are evolving to support hybrid network environments, and how providers can improve deployment speed, increase fiber density, and build networks that stay flexible as demand from AI, 5G/6G, and edge applications continues to grow.

BEAD Funding at the Crossroads: Navigating Implementation Hurdles, Equity Gaps, and Long-Term Sustainability

August 18 / Leadership Track / BEAD was designed to close the broadband gap—but delays, regulatory friction, and uneven state execution are raising a harder question: what happens when the funding runs out? This panel confronts the sustainability challenge directly, examining why one-time federal funding may fall short of 10-20-year network viability and the decisive actions that can future-proof broadband strategy beyond the subsidy cycle.

Supply Chain Strategies for Faster Broadband Deployment

August 18 / Technology Track / Fiber builds aren't being slowed by demand—they're being stalled by supply chains. This operator-led panel brings together operators, manufacturers, and distributors to expose what's actually causing deployment delays and what leaders are doing differently to protect build schedules and budgets.

Using AI to Solve NextGen Fiber Network Readiness

August 19 / OpEx Track / As fiber networks expand and SDN architectures grow more complex, reactive workflows can no longer keep pace. This session moves beyond AI hype to deliver a practical roadmap for transforming network operations—combining optical physics with AI analytics to predict degradation, prevent outages, and enable faster first-time-right installs.

Where AI Infrastructure Meets the Network: Power, Fiber, and the New Site Selection Equation

August 19 / OpEx Track / AI is redefining infrastructure demand at a pace that is reshaping site selection, fiber density requirements, and power planning across the telecom ecosystem. This panel examines why power availability is emerging as the primary driver of site selection, what the surge in AI data center development means for telecom infrastructure providers, and how regions like Tennessee and the Southeast are positioning for the next wave of investment. ■



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Utility Make-Ready to Speed Deployments

The promise and limits of one-touch make-ready.

BY ERNIE GALLO & MICHELLE HARRY

In telecommunications and broadband deployment, make-ready activities are often the primary source of project delays and unanticipated costs. One-Touch Make-Ready (OTMR) was promoted by the Federal Communications Commission (FCC) as a means to accelerate broadband deployment and reduce these delays. Although OTMR can expedite multi-party coordination and lower barriers to entry for new service providers, it also introduces operational, safety, and liability considerations that must be carefully addressed.

Make-ready is the process of preparing utility poles for joint use installations of new attachments to help ensure worker and public safety. Joint use refers to an arrangement where multiple entities share the same physical infrastructure, such as a utility pole. A utility pole is typically owned by one company, either an electric utility or a telecom provider, and when multiple entities are connected to the same pole, this shared arrangement is referred to as joint use and is moderated through licensing contracts and formal pole attachment agreements.

Joint use is covered by the Joint Use Agreements (JUA): legal contracts that govern how multiple parties can share the available vertical space on the same utility pole. The JUA covers attachment safety and

construction rules, such as those specified in the National Electrical Safety Code (NESC), as well as defined costs, expected timelines, and inspection and maintenance responsibilities. When clearing space for a new attachment on a utility pole requires rearrangement of existing utilities on a pole, it is important to review the condition of old or overloaded poles that might need reinforcement or replacement and upgrading or replacing poles or infrastructure.

A utility pole is divided into supply space and communications space with a Communications Worker Safety Zone (CWSZ) defined by the IEEE NESC in Rule 238E, which is governed by minimum clearances at the pole and in the span defined in 235 and 238 (IEEE, 2023). When adding a new fiber optic cable attachment to a pole, these rules govern its placement. Often, existing communications cables are already as close to power space as the code allows, and the existing attachments must move down to allow the new, lighter cable with the least sag to be placed at the top of the communications space. The engineering design and work required for this is referred to as simple make-ready. In some cases, there is not enough room for communications cables to move down and maintain adequate ground clearance, and either the electric utility cables must be rearranged, or more likely, the pole must be replaced with

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a taller pole to accommodate the new attachment or a stronger pole to handle the new load. Such pole upgrades are costly and generally referred to as complex make-ready. According to comprehensive studies by the Fiber Broadband Association (Cartesian, Fiber Deployment Cost Annual Report, 2023 through 2025), these costs can range from \$500-\$5,000 per pole, have increased in the last couple of years, and are expected to continue to increase. This significant variability can easily drive construction costs beyond budget and cause significant delays. On a typical 5,000-pole project, even a 10% pole replacement rate can shift costs by millions and delay the project for months.

In some deployments, electric utilities deploying fiber for broadband or utility communications mitigate make-ready costs by installing fiber optic cable in the supply space, typically below the neutral, rather than within the communications space. Under NESC Rule 230F provisions, fiber optic cables may be classified as a supply facility, allowing all-dielectric self-supporting (ADSS) cable to be installed in or above the supply space. This approach can avoid the need to rearrange existing communications attachments and reduces dependency on multi-party coordination, which is often the primary driver of make-ready delays and cost. While this strategy can significantly accelerate deployment and improve cost certainty, NESC clearance compliance must still be maintained, and work in the supply space must be performed by qualified electrical workers in accordance with applicable safety standards.

In the FCC Third Report and Order (FCC, 2018), the FCC acknowledged make-ready as “the largest source of high cost and delays” and introduced the OTMR concept as a solution to speed broadband deployment. OTMR has the potential to improve the efficiency of the pole attachment processes by addressing one of the most persistent bottlenecks in broadband deployment: multi-party coordination.

Under traditional make-ready, each existing attacher performs their own work sequentially, often resulting in cumulative

delays as crews are scheduled weeks or even months apart. OTMR collapses this sequence into a single construction event performed by a qualified contractor, approved by the utility and other joint users on the pole. This reduces schedule uncertainty and compresses timelines for simple make-ready work. By lowering these coordination barriers, OTMR

the supply space. Because communication workers are typically not qualified for power work, strict adherence to NESC separation rules is critical. Improper handling can result in contact with energized facilities. Workers must also have adequate safe access to infrastructure on the poles for repair and maintenance. As part of the make-ready process, the pole and



Make-ready remains one of the most significant and least predictable drivers of cost and schedule in aerial broadband deployment.

can also reduce entry friction for new providers, particularly competitive overbuilders that would otherwise face long and unpredictable deployment timelines. Although OTMR reduces time variability for simple make-ready, it does not reduce complexity-driven delays or the variability of cost. A thorough make-ready analysis must be performed in order to capture the cost and time frame expectations of an aerial fiber build.

However, these gains come with a corresponding shift in operational responsibility and risk. OTMR transfers physical control of existing facilities from the asset owner to a third-party contractor for a defined period, along with commensurate responsibility for care and maintaining service for all the attached plant for the duration.

This introduces operational complexity, as the contractor must properly identify and handle each owner’s facilities correctly. They must maintain proper clearances and tensions across different cable types (e.g., copper, coax, and fiber are attached to the same pole). Most importantly, the contractor must avoid disrupting service to customers who are sometimes configured over legacy plant configurations that may not be fully documented.

Safety is a primary concern, particularly on congested poles. Workers may be operating near the communication worker safety zone (CWSZ) and in proximity to

existing attachments shall be inspected for damage or any issue that could result in an unsafe condition.

Care must be taken not to damage existing aerial plant (copper or fiber) by excessive bending or applied tensions that could lead to service disruptions and outages for subscribers. The FCC anticipated this, as the rule requires the new attacher to notify the affected owner immediately if the contractor causes any damage and shifts the repair responsibility and cost to the new attacher. The compensation for such disruptions can be punitive depending on the service affected (911 or other life safety-related services).

Under Section 224(c) of the Communications Act, a state may “reverse preempt” the FCC by certifying that they regulate pole attachments within their jurisdiction. As a result, the FCC’s one-touch make-ready rules do not apply in those States. According to the FCC’s most recent public notice, 23 States and the District of Columbia have exercised this authority, meaning that pole attachment processes, timelines, and the availability of OTMR vary significantly across the country. In these jurisdictions, state-specific rules may differ from the FCC framework in key areas such as contractor qualification, make-ready timelines, and cost allocation, creating a fragmented regulatory landscape for broadband deployment (FCC DA-22-630; FCC Title 47 Section 224(c)).



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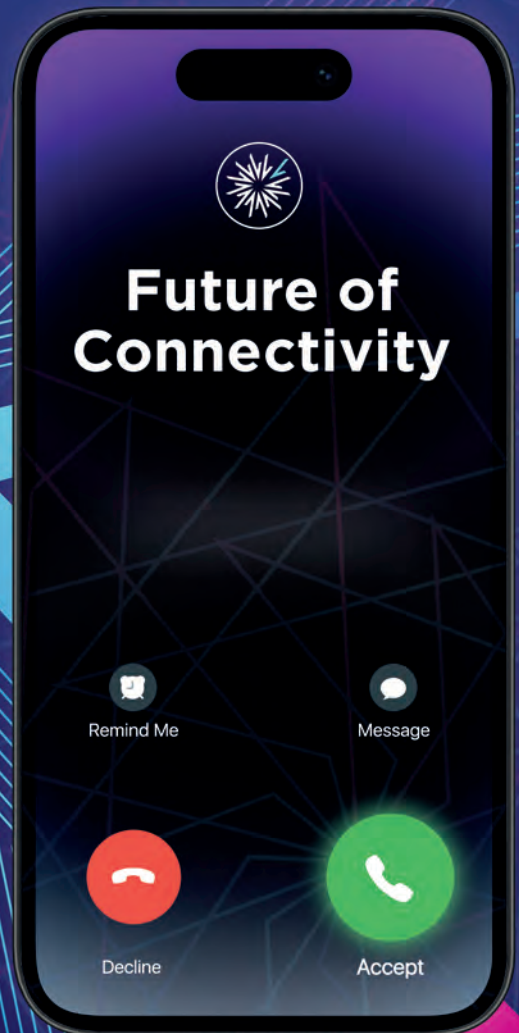
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Make-ready remains one of the most significant and least predictable drivers of cost and schedule in aerial broadband deployment. While the FCC's introduction of OTMR represents a meaningful step toward reducing delays associated with multi-party coordination, it does not eliminate the underlying technical, operational, and regulatory complexities inherent in joint-use infrastructure. Instead, OTMR shifts the nature of these challenges from sequential scheduling delays to execution risk, contractor performance, and liability management.

The most impactful cost drivers are complex make-ready, pole replacement, and system constraints driven by existing infrastructure. These remain largely unaffected by OTMR. At the same time, variability introduced by state-level regulation, differing joint use agreements, and incomplete system visibility continues to create uncertainty for project planning and budgeting. As a result, the true hidden cost of make-ready is not simply the work itself, but the unpredictability associated with scope, coordination, and risk allocation.

For the OTMR program to be a win-win for all parties—the pole owner, existing joint users, and those new candidates for



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attachment—the program needs an agreed consensus process and flowchart with agreed time frames for each step in the process to help reduce contention and legal and regulatory disputes. The program needs to:

- Reduce costs for the new attaching company and, more importantly, increase the speed of the process from the initial application.
- Achieve buy-in (acceptance and cooperation) of the pole owner and existing attachers.
- Ensure make-ready work is completed rapidly, safely, and damage-free.
- Contain well-defined, clear steps with inspections and quality tests along the way.

The 2023 IEEE Guide 2939 “IEEE Guide for Joint Use of Utility Poles with Wireline and/or Wireless Facilities” provides an overview of the elements of such a make-ready process for new wireless antenna attachments. However, in the current hyper-competitive atmosphere and with multiple regulatory stakeholders in the 50 States, consensus and cooperation have proven difficult.

The elements of a successful OTMR process would need to include:

A.) Accurate and accessible maps and databases of poles and vertical space available for new attachments—pole condition, location, and a list of existing attached hardware. This data is not always available on older plants, but with the promise of asset management tools and artificial intelligence (AI), it may be achievable in the near future.

• Such data is likely to reveal that many (>70-80%) poles in a densely populated urban area are congested with no “available” space. Having accurate and accessible maps can assist the new attacher to consider different cable routes, or possible alternate designs for placing lines on new poles, cable over-lashing with partners or in buried plant early in their network design and business planning process.

B.) Consensus guidelines (required information, flowchart, and times) for an application, including:



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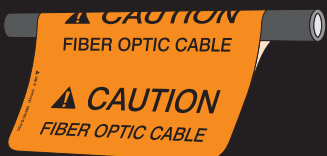
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- Pole Loading Analysis (PLA) identifying the effect of new proposed lines and equipment.
- Specify make-ready (MR) work required (new crew members, moving existing lines, etc.) and time for completion of MR.
- A timeline for X days (30?) after an application for a YES/NO decision, with a detailed reason for a rejection.

C.) Universal cost structure for rental of vertical space applied to all users—e.g., if an existing joint user wishes to add a new line, they will be charged the same as a new company wishing to attach to the pole.

- Who pays for necessary asset mapping, MR costs, and new poles (if needed) is and will be contentious. Making costs clear and unbiased early in the process will at least make economic planning easier.
- The last attacher is at a disadvantage since an existing joint user has the option of over-lashing a fiber cable to their current lines and avoiding the need for a new attachment.

D.) Agreed design principles for new line and equipment—typically based on minimum NESC or California GO 95 safety criteria, augmented by local design criteria and best practices by pole owners or users:

- Minimum clearances and separations.
- Grounding and electrical protection.
- Ice and wind loadings on poles.
- Limits on pole decay before the pole needs replacement.

E.) Dispute resolution process—to avoid costs of parties seeking regulatory compensation or legal litigation to resolve concerns.

Successful broadband deployment, therefore, depends not only on regulatory improvements such as OTMR but on rigorous upfront engineering, accurate asset data, and realistic cost modeling that accounts for the full range of make-ready conditions. Utilities, attachers, and policymakers must recognize that while process improvements can accelerate timelines, they cannot fully mitigate the structural complexities of shared infrastructure. Addressing these challenges will require continued collaboration, improved data transparency, and alignment between regulatory frameworks and field realities to ensure that deployment goals are met efficiently and safely. ■



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Community First

How GoNetspeed's Chris Brooks Is Closing the Connectivity Gap One Town at a Time

BY HAYDEN BEESON

When Chris Brooks talks about broadband deployment, he keeps returning to a single concept: buy-in. His teams have it. His construction partners have it. The municipalities he works with have it. Brooks believes communities need it too, and when they don't have it, GoNetspeed works to earn it.

That philosophy, which has been refined over years of building fiber in underserved communities across the Northeast, recently earned Brooks the Connect the Unconnected Award, which recognizes telecommunications leaders bridging the digital divide through innovative, visionary, and strategic fiber broadband expansion.

As Senior Director of Operations at GoNetspeed, Brooks has helped grow the company from a small regional startup into an operation active in 12 states, with a track record of building in underserved markets where residents have had limited broadband options.

Why He Does It

Brooks didn't set out to become a broadband advocate. His path began in 2020 and 2021, during the early months of the COVID-19 pandemic, when he was working for two small, family-owned upstate New York telephone companies overbuilding their legacy copper networks with fiber.

"I was able to go into homes where young students were forced to do school," Brooks said, "and literally had children crying because they were worried that they weren't going to be able to complete their schoolwork."

The memory has stayed with him. "Seeing children that want education, want to continue to grow in life, and don't have the ability because they didn't have broadband internet—that's a really good motivation."

That motivation shapes how GoNetspeed selects its markets. The company often targets communities where residents have few high-quality broadband options, particularly those reliant on legacy DSL or a single cable provider.

"We're not going to take 100% of the customers," he said. "That's not even our goal. Our goal is to just provide an option for the residents of the community."

Building Trust

GoNetspeed's approach is distinguished not only by where it builds, but by the way it builds. Before a single permit is filed, the company's government affairs team is already in the room with local officials. Marketing follows. Then construction crews arrive, and they're expected to carry the company's message too.

"The construction team is really the first face in the community," Brooks said. "And again, they buy into what we're doing. They're huge components and a huge mouthpiece for us in the field."

That community integration extends beyond the build itself. GoNetspeed employs field events managers and, last year, participated in hundreds of community events, from nonprofit partnerships to golf tournaments, not just to sell subscriptions, but to be present and available.

"It's face-to-face contact," Brooks said. "And if you're truly genuine, people are going to believe in what you're saying."

Not every community rolls out the welcome mat, though. Brooks acknowledges a vocal minority of residents who question why GoNetspeed is coming at all. He sees much of that resistance as generational, pointing to changing demographics and newly elected local officials.

"We're going to build it one way or another, because we're giving the majority an option of a new provider," he said.

Partners, Not Contractors

GoNetspeed's internal buy-in philosophy extends to its construction relationships. Brooks avoids the word "contractor," preferring "partner"—an intentional distinction.

"We have great partners that have been with us a long time," he said. "They see our vision. They know where we're going, and they're good to us, and we're good to them."



The company puts its branding on partner vehicles and operates on a simple shared-stakes premise: “We don’t succeed if you don’t succeed.”

That stability has paid dividends as BEAD funding begins to draw new entrants and new opportunists into the construction market.

“As BEAD continues to ramp up, contractors are going to come out of the woodwork and just want to make the quick buck,” Brooks said. “But we work so closely with everybody, whether it be sales contractors, construction contractors, splicing contractors, that they are GoNetspeed.”

GoNetspeed itself has not pursued BEAD funding, and the federal program’s recent budget reductions have had little direct impact on the company’s trajectory.

“That’s the great part about being privately owned,” Brooks noted. “It’s our money.”

The Pole Problem

If there’s one thing Brooks would change about broadband deployment in the United States, it’s access to utility poles.

GoNetspeed has been actively engaged in Massachusetts for four to five years,



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successful and take all of their customers,” Brooks said. “They have no incentive to put us on the pole.”

GoNetspeed has been advocating for Massachusetts to adopt an FCC One Touch Make Ready framework, a policy that would streamline the process for all attachers. The effort appears to be gaining traction: in March, Massachusetts regulators initiated

business 100 years. And nobody knew what they were doing.”

Twenty-eight people, several of them in finance or customer service, with little fiber-to-the-home experience, set out to completely overbuild two legacy telephone networks. In roughly a year and a half, they built 675 miles of fiber. Brooks, then an executive, was crawling around basements doing installs himself.

“It didn’t matter what your title was,” he said. “It was all hands on deck.”

The culture that emerged from that time still defines how Brooks thinks about the work.

“We just became so close,” he said. “And they said it was a family-owned company, and everybody was treated like that.”

The team sold that network in 2021 to GoNetspeed. GoNetspeed, weeks before Brooks accepted his award, announced its acquisition by T-Mobile: a trajectory from two small upstate New York telcos to one of the country’s largest wireless carriers.

Brooks accepted the award on behalf of 750 people. To him, that’s the whole point: the recognition belongs to everyone who bought in.

“We have an awesome group of people that come to work and just get things done every day,” he said. “And that’s why I’m excited about this.” ■



Seeing children that want education, want to continue to grow in life, and don’t have the ability because they didn’t have broadband internet—that’s a really good motivation.

working with the state to reform pole attachment rules, a fight Brooks describes as one of the most concrete and underappreciated obstacles to connecting underserved communities.

“Every state has different rules,” he said. “Getting on poles in Connecticut is extremely simple. New York, Massachusetts—it’s years to get on the poles.”

Pole owners, primarily power companies and incumbent telephone providers, have little competitive incentive to expedite access for providers who will directly compete for their customers.

“We’re going to come in and be really

a joint rulemaking to revise the state’s pole attachment rules, with proposed amendments that include OTMR procedures.

“It’s not just us,” Brooks said. “It’s for every provider.”

From 28 People to T-Mobile

When asked what accomplishment he’s most proud of, Brooks didn’t point to GoNetspeed’s current scale or its announced acquisition by T-Mobile. He pointed to the beginning.

“We had two local, small, hometown telephone companies,” he said. “The company needed to stay alive. It had been in

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A hydraulic earth drill with a high-torque anchor handle and utility anchor adapter can significantly improve safety for anchor installation.



Earth Drills for Safer Utility Anchoring

Enabling a one-person install, the earth drill has several advantages over manually setting drive rods or using anchor crankers.

BY JOE HAYNES

Utility anchoring crews face many challenges, including meeting demanding productivity goals while protecting crew members on the jobsite and finding new ways to safely complete projects. Anchoring equipment has come a long way, though, and new solutions offer alternatives to manual installation. For innovative crews, the right combination of equipment can transform the entire anchoring process.

This article discusses what to consider when deciding what process to use for your utility anchoring jobs.

Drive Rods, Anchor Crankers, and Hydraulic Drills: The Safety Considerations

Although anchoring crews don't work with high-voltage wires, the potential for injury always exists with manual labor. That's

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Hydraulic drills fitted with a torque tube that connects the handle of the drill to the hydraulic power source provide protection when encountering obstacles.

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why it's important to look at what will be safest before choosing what installation method to work with.

Manual-drive rods were originally the go-to option for anchoring crews, but the physical toll of manually hammering the rods into place increased the risk of injury and hindered productivity due to worker fatigue. Drive rods are still used in some situations, but as technology has continued to advance, handheld drills have taken the spotlight.

Some handheld drills are known as “anchor crankers” and have a chainsaw-like engine with a high-speed rotary that includes large handles for two crew members to operate. These anchoring tools are much more efficient than drive rods because of their increased speed and power. However, with high revolutions per minute (RPM) and torque, anchor crankers come with their share of risks. If one operator loses their grip, the other is usually unable to maintain control, especially if the anchor hits an underground object. If both operators let go, the machine's torque instantly switches from driving the machine into the ground to aggressively spinning the handles above the ground. These free-spinning metal handles have been known to strike operators, resulting in injuries.

An investment in a hydraulic earth drill with a high-torque anchor handle and utility anchor adapter can significantly

improve safety for anchor installation. Hydraulic drills fitted with a torque tube that connects the handle of the drill to the hydraulic power source provide protection when encountering obstacles. It works by transferring kickback to the power unit if the auger strikes an object or requires additional torque to power through tough soil. By doing this, the vibration bypasses the operator and nearly eliminates the risk of strain or serious injury.

It's worth noting that some torque tubes are adjustable in length so operators can adapt the placement of the power unit. This allows operators to accommodate the ideal anchor location and prevent being limited to just one area.

Hydraulic earth drills also offer quieter operation and easier maneuvering compared to their gas-powered, anchor cranker counterparts. They minimize vibration to the operator's arms and hands, reducing strain. This increases safety and saves both time and money by preventing injuries. It also reduces both worker's comp claims and project delays due to injuries or work time limits.

The Productivity Factor

Once safety has been addressed, it's time to turn to productivity for maximum return on investment. Using an anchoring adapter on a hydraulic drill brings out several efficiency benefits in addition to the safety this combination already provides.



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Unlike anchor crankers and hand setting—which takes up to 30 minutes to set one anchor and requires a significant amount of energy and physical labor—a hydraulic drill fitted with an anchoring adapter installs a utility anchor in under two minutes. In less than an hour, a crew can set the anchors for an entire pole.

Some hydraulic drills are also designed for true one-man operation to maximize productivity. Instead of having two people install the anchor, one of those crew members can take on a different role to complete the project faster or operate a second drill. Removing the anchor proves to be just as fast and easy, because the hydraulic drill simply reverses the anchor out of the hole. This feature is beneficial when removing the anchor, but also when encountering any kind of obstacles while setting the anchor.

For even more efficiency, make sure to match the anchor to the soil conditions. For example, soil nails can be used in soft

“

An investment in a hydraulic earth drill with a high-torque anchor handle and utility anchor adapter can significantly improve safety for anchor installation.

soil that’s prone to landslides while tieback anchors are a good choice for projects with limited access, such as retaining walls. To learn more about which anchor will maximize productivity based on the jobsite, contractors should reach out to a trusted manufacturer.

To summarize, a hydraulic drill with an anchoring attachment maximizes safety and productivity in utility anchoring applications. Contractors can feel confident investing in solutions like hydraulic drills with anchor adapters as an opportunity to improve ROI. With this setup, contractors don’t just gain a better way to

install anchors; they get a powerful drilling combination that marks a clear path to success. ■

This article originally appeared in *Cabling Installation & Maintenance* magazine, a sister publication.



Joe Haynes is President of Little Beaver, Inc., a three-generation manufacturer of drilling equipment headquartered in Livingston, TX. For more information, visit www.littlebeaver.com.

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