



2022 ANNUAL REPORT

nrtc
Member driven. Technology focused.

Letter from the CEO

Suppose you owned the piece of land where you wanted to build your dream house. Your next step might be to contact an architect, who will talk to you about your house. When developing the blueprint, there will be many questions: How big would you like the house to be? What exterior style do you prefer? Do you want a big kitchen? How many bedrooms? Space to garage how many vehicles? And how much is all of this going to cost?

The architect then might help you hire a contractor to build according to the plan. And the contractor would know suppliers to provide materials and where to find the skilled workers to complete the project.

Building a communications network is not that different. You want to find someone who can help you determine how much geographic area you want to cover, the ideal network technologies and how much it will cost. Then you will need somebody to draw up your design. And you will need experienced hands to manage network construction and operation.

Your vision of your dream house will be different from mine. The network you wish to build will be different from the network we would build for any other NRTC member. There will be hundreds of details, both large and small. It's good to know, then, that the people of NRTC understand both the technology and rural America. We will build **your** broadband or smart grid solution - we want to build **your** dream house!

NRTC in 2022 added to its knowledge base. We had in the past worked on network projects with a GIS-based design company named Axin Global, based in New Zealand. With an electronic platform, we can design a full fiber-to-the-home network and integrate the process from preliminary design to detailed designs to a complete bill of materials, all with intermediate steps along the way. The platform offers near-live views of redlines and construction at each phase. And the Axin platform can design smart grid capabilities simultaneously with the broadband design.

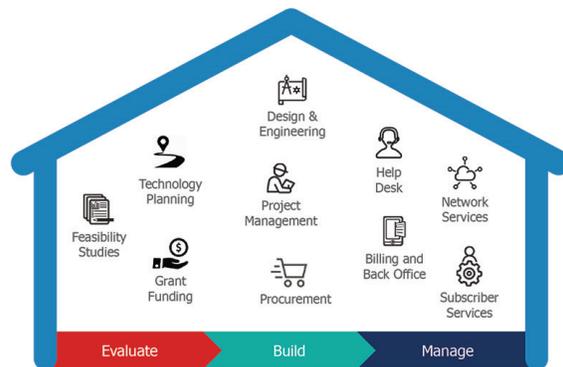
We saw the value Axin brought to our members and took the extra step of bringing that value in-house, and we welcomed our well-known Kiwi friends into the NRTC Broadband Solutions family. But that is something we've done time and again over several years.

Take, for example, CrowdFiber, now part of NRTC Managed Services. A cooperative with the right geographic data can develop a targeted marketing and communications plan to stay in touch with members. The platform can add higher levels of precision to timing network rollout. Accurate map data also helps members meet various regulatory requirements and to complete applications for government funding.



Tim Bryan, CEO

NRTC Today: We've built in-house expertise to help you



Member reaction to NRTC SmartGrid Solutions' technology planning services has been beyond expectations. Just 18 months after we launched the service, as of March 2023, we had completed 25 technology roadmap projects and had more than 25 in the pipeline.

Over at NRTC Mobile Solutions, our members looked on as the nation's largest cable/broadband providers aggressively offered mobile services to their broadband customers. Not to be outdone, NRTC promptly created competing plans for our rural broadband providers, even creating device financing for our members. These plans are a good demonstration of NRTC's Mission Statement: to bring the advantage of technology to rural America.

If I had the space to write, and you had the time to read, I could point to many other cases where we have consciously built our broadband, smart grid, mobile and managed internet services capabilities to meet the changing times in rural America

Turning briefly to our 2022 results, NRTC posted revenue of \$241 million and cash net income of \$15.5 million for the year ended 2022. Our Board in March 2023 determined to make a total of \$7.5 million in combined current patronage payments and patronage retirements which will be distributed early this summer.

To conclude, thank you for your support for, and patronage of, NRTC during 2022. When you're ready to talk about your technology dream house, please call your friends at NRTC!

Sincerely,

A handwritten signature in black ink, appearing to read 'Tim Bryan', written over a circular stamp or seal.

Tim Bryan
Chief Executive Officer



2022 NRTC Board of Directors

Left to right, top row: Gary Stooksbury; Dustin Durden; Jim Matheson; Thomas Preston; George Kitchens; Bryan Lightfoot; Jason Dandridge; Shirley Bloomfield

Front row: Robert L. (Bob) Hance; Chris Seubert; Jimmy Todd, vice chairman; Tim Mergen, chairman; Tim Bryan, CEO; Lynn Hodges, secretary-treasurer; Josh Shallenberger; Mike Malandro

Not pictured: J. Andrew Don

Letter from the Chairman

My twelve years on the NRTC board have coincided with tremendous change. I am truly impressed by how far NRTC has come.

Twelve years ago, NRTC had just ended its highly successful DirecTV business. It had shrunk from more than 200 to about 75 employees. We on the Board and NRTC members wondered about NRTC's future. We were unsure of what its mission should be.

Today, NRTC has more than 800 employees with office locations in seven states and even an office in New Zealand. NRTC members no longer have any question about the organization's value. We work with members every day to build smart grid and broadband networks, to establish solid cyber security strategies and other internet services and to develop mobile solutions that match the capabilities of the national providers.

There is no longer any doubt about NRTC's future or its role. Members can plainly see that NRTC has the expertise and the member focus it takes to build technology solutions.

I give the credit for NRTC's transformation over these last twelve years to three critical constituencies: our membership, my fellow Board directors, and our management team and staff.

First, I want to praise NRTC's membership. As we worked our way to creating this new and exciting NRTC, our members supported us with their capital and their commitment, and their patience. As stewards of our members' capital, we can never forget who we are meant to serve at NRTC.

Next, I credit NRTC's success to my fellow Board members. As a team of electric and telco executives, we forged consensus and learned from each other as we shaped NRTC's strategy. As I retire from the NRTC Board and from my own cooperative I will carry fond memories of our meetings and events long into the future.

And finally, I express my gratitude to NRTC's management team and staff. Recently in an employee survey 91% of NRTC employees positively identified with our mission to serve members and rural America; 91% said they thought NRTC would be successful in the future; and 84% said NRTC is a great place to work. I think that says it all!

It is my sincere belief that NRTC should continue its focus on rural broadband services – these are the modern equivalent of the days nearly a century ago “when the lights went on” in many of our communities. We continually learn about the many ways that students, businesses, farmers, and others need modern connections to complete daily tasks. Broadband and electricity belong together in our thinking as we plan our futures.

As I depart NRTC I know it is in good hands with a promising future. Our members are committed to us, our Board expertise is strong and aligned, and our employees are devoted to our members and their mission. I look forward to following NRTC from the sidelines – and I thank our membership again for allowing me to serve NRTC during this most important time.

Sincerely,



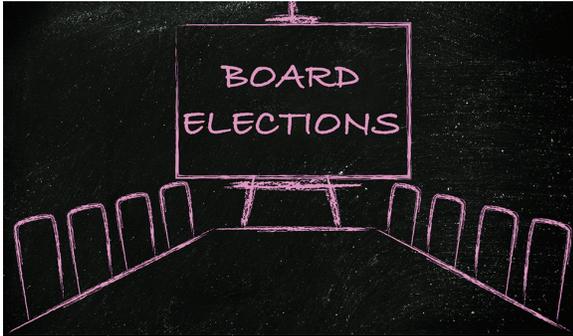
Tim Mergen

Chairman, NRTC Board of Directors



Tim Mergen, Chairman, BOD

2022 Highlights



Gary Stooksbury, CEO of Aiken Electric Cooperative, Aiken, SC, and Josh Shallenberger, president and CEO of Shelby Electric Cooperative, Shelbyville, IL, were elected to the NRTC board representing Districts 2 and 5 and Thomas Preston, CEO, Duo County Telephone Cooperative, Columbia, KY, was elected to an at-large District 12 seat.

[Axin Global](#) became part of NRTC in May. Axin has been NRTC's broadband, fiber and smart grid design partner for several years. The move was part of an overall strategy to bring more technology expertise in-house.



NRTC and CFC teamed up to present a four-part series of webcasts as a companion piece to go along with NRTC's 2021 "Rural Electric Cooperative Smart Grid Benchmarking Report: Creating Value with Smart Grid Applications." The series, which ran in February and March, covered topics including load management technology; consumer demand response programs; distributed energy resources, and distribution system reliability. Each session featured NRTC experts talking with rural utility representatives with extensive experience working with smart grid systems.

In December, NRTC assisted two members in winning funds through Minnesota's Border-to-Border Broadband Development Grant program: East Central Energy (\$14 million) and Meeker Cooperative Light & Power Association (\$327,516). Additional funding opportunities for broadband and smart grid programs are ahead. NRTC posted a [funding opportunity map](#) on its website to help members keep track of the programs and application deadlines as their states announce them.





Vermont Governor Phil Scott (R) made an appearance in the town of Bolton, VT, to announce that the Communications Union District serving the Northeast Kingdom (NEK) would receive more than \$16 million in state support to build fiber broadband access to thousands of homes in Northeast Vermont. NRTC is handling network design and construction and project management. NRTC member telco Waitsfield and Champlain Valley Telecom is handling ISP tasks.

NRTC added managed detection and response (MDR) services to its portfolio of cyber security offerings in partnership with software company SilverSky. MDR offers a range of capabilities from managed endpoint protection, multi-factor authentication and security awareness training to vulnerability assessments, penetration testing and email security.



NRTC CEO Tim Bryan interviewed Apple co-founder and technology innovator Steve Wozniak during the CFC Forum in June. Wozniak shared stories about Apple's origins and gave his views on current technology issues, including cloud computing, autonomous cars and artificial intelligence. He also told how he shares the woes of rural Americas who are still unconnected. "I live in the one part of Silicon Valley that has no broadband ... I very much sympathize with the fact that a lot of people do not have broadband," he said.

NRTC developed and launched a new AI-based operational intelligence [software platform](#) giving NRTC members a tool to monitor and manage their day-to-day broadband network functions. The platform monitors data from multiple sources and anticipates network problems before they arise. Users get a series of alerts from the system, which analyzes data ranging from network traffic flows to the weather and social media posts. United Cooperative Services in Texas assisted NRTC to develop the platform and several NRTC members participated in pilots.



Rural broadband providers had a new regulatory deadline on Sept. 1. The FCC is requiring detailed subscriber information through its Broadband Data Collection (BDC) process. Many NRTC members indicated that they were “terrified” of the BDC reporting burdens prior to the deadline. NRTC’s CrowdFiber held a webinar to demonstrate how its [mapping software](#) could help members meet BDC deadlines quickly and efficiently with accurate information in the FCC’s desired format.



“Installments as a service” is an approach to mobile phone sales to make it easier for more people to buy new devices. NRTC Mobile Solutions partnered with Splitit, which developed the online platform to facilitate easy installment payments. Integrating Splitit software with Mobile Services’ PHOENIX back-office systems allows participating NRTC members to offer installment plans without having to install additional technology or form complex relationships with third-party lending companies.

The year saw heightened interest in advanced metering infrastructure (AMI) among electric cooperatives. NRTC helped kick off a major, multiyear project for Suwannee Valley Electric Cooperative in Florida. SVEC will eventually link 28,500 meters, with about 95 percent of them at rural residences. The project also will combine Itron Gen5 metering with Itron’s Streetlight Vision (SLV) automated streetlighting technology.



The August issue of RE Magazine included an article about SEI Fiber, a partnership of Southeastern Indiana Rural Electric Membership Corp. and telco, SEI Communications, which completed an 1,800-mile fiber network in 2022. NRTC designed and is constructing the network, which is delivering 1 Gbps service, expandable to 10 Gbps in the future. The REMC led in network construction from its substations and SEI Communications is performing home installations and ISP services.

NRTC formed a partnership with [MyBundle.TV](#), which has developed a tool to help viewers navigate the vast supply of streaming video services available. NRTC members' broadband customers will have a simple method to build their own a la carte list of streaming services to fit their own tastes, whether it be free, ad-based services (such as Tubi or PlutoTV); subscription services (Netflix or Disney+) or live services (Sling or YouTube).



In a collaboration with NRECA, NRTC released its second [Broadband Benchmarking Report](#) in October. Like the first report in 2020, it drew on the experiences of electric cooperatives to compile information and help other co-ops launch their own broadband projects. Eighty-eight co-ops participated in the report. One of the main take-aways was that co-ops are having a better-than-expected ability to attract and retain member-customers.

It was delayed two years by the Covid pandemic and then threatened in September by hurricane damage, but in the end NRTC hosted a successful TechConnect conference in Bonita Springs, FL. Sessions covered broadband, smart grid, mobile wireless and internet managed services. Members also enjoyed entertaining activities and had the opportunity to exchange ideas with fellow NRTC members from all over the nation. NRTC plans to hold the next TechConnect conference in Texas, May 2024.



Smart Grid systems vendor Itron awarded NRTC two Engage Awards for outstanding performance. The awards recognize achievements of Itron channel partners. NRTC finalized the greatest number of Itron Gen5 AMI project contracts. NRTC also initiated the first smart grid project to combine electric AMI and streetlighting controls.

DISCOVER THE BENEFITS OF MEMBERSHIP

As a member of NRTC, you will join more than 1,500 other rural electric and telephone utilities that have a stake in development of products and services that can help you grow your business, get closer to your customers and build revenue. NRTC proudly serves the advanced technology needs of its members.

MEMBER OWNED AND CONTROLLED

Our Board of Directors is comprised of representatives from the national rural electric and telephone industries, the CEO of the National Rural Electric Cooperative Association (NRECA), the Governor and CEO of the National Rural Utilities Cooperative Finance Corporation (CFC), and the CEO of NTCA, The Rural Broadband Association.

CAPITAL CREDIT RIGHTS

All members and affiliates are eligible for payment of capital credit refunds based on the volume of business each patron conducts with NRTC during the fiscal year.

FOR MORE INFORMATION

To learn more about NRTC membership or our products and services, please contact NRTC at 866-672-6782.



Member driven. Technology focused.

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