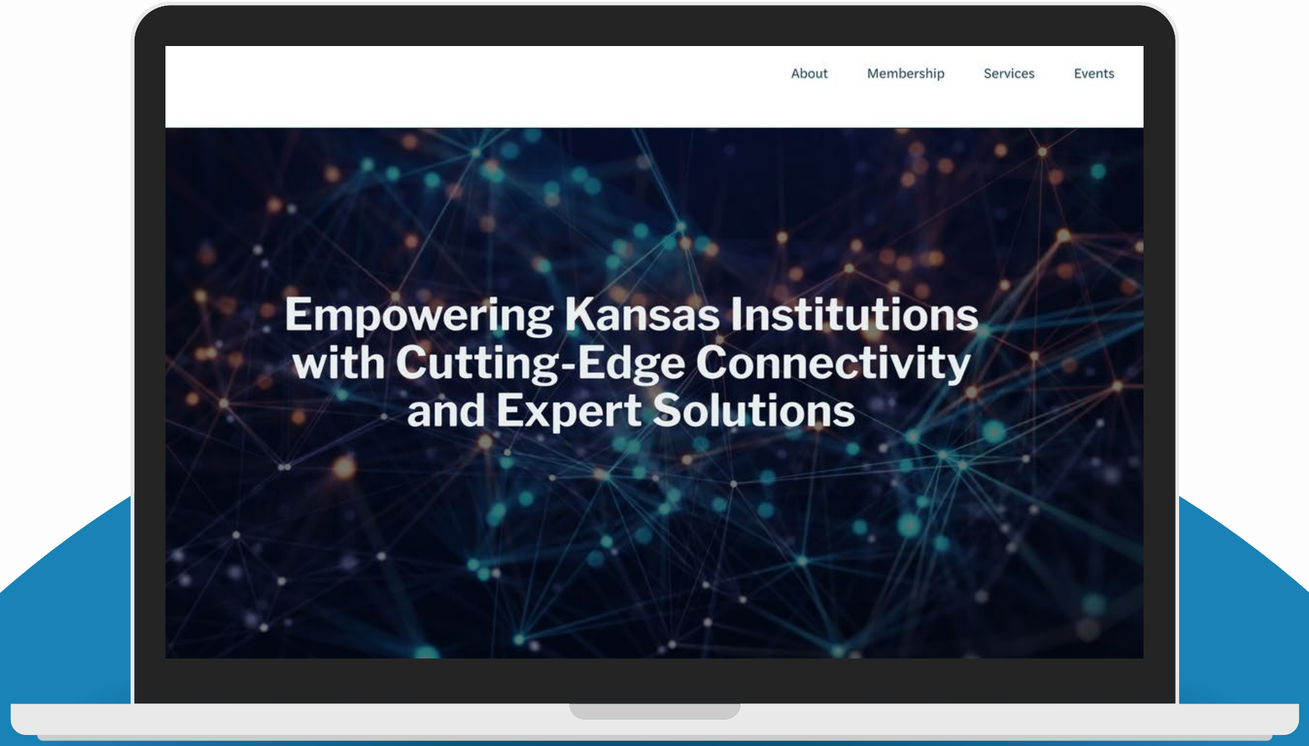
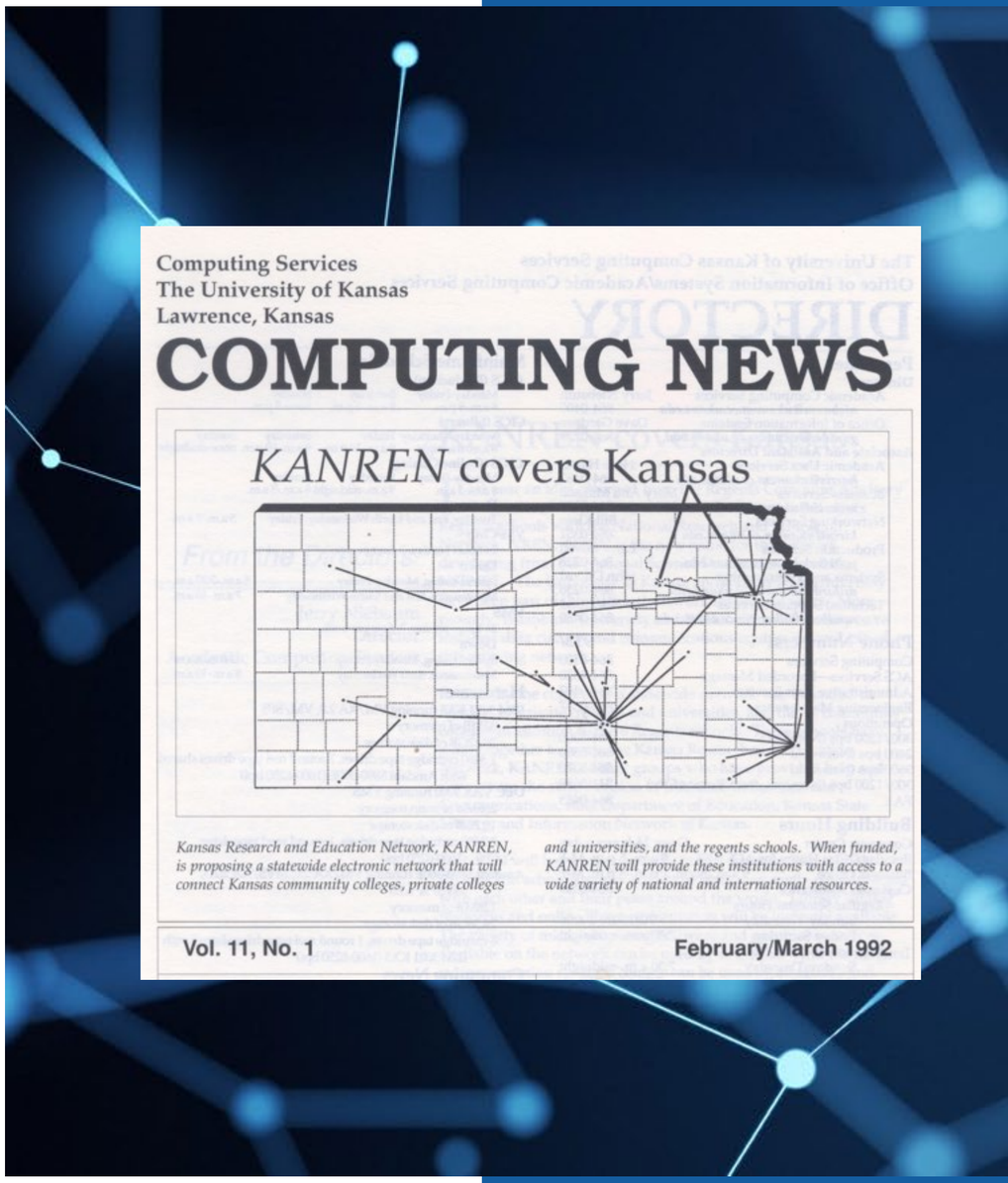
Introduction to KanREN

Christopher Crook



Overview

- Introduction
- About Us
- Our Services
- Key Priorities
- Statistics
- Our Team



About Me

Christopher Crook – KanREN / Executive Director – President

I am a veteran of technology leadership in finance, business, and operations. I am California native but moved to Kansas soon afterward and have been, for the most part, a lifelong Kansan.

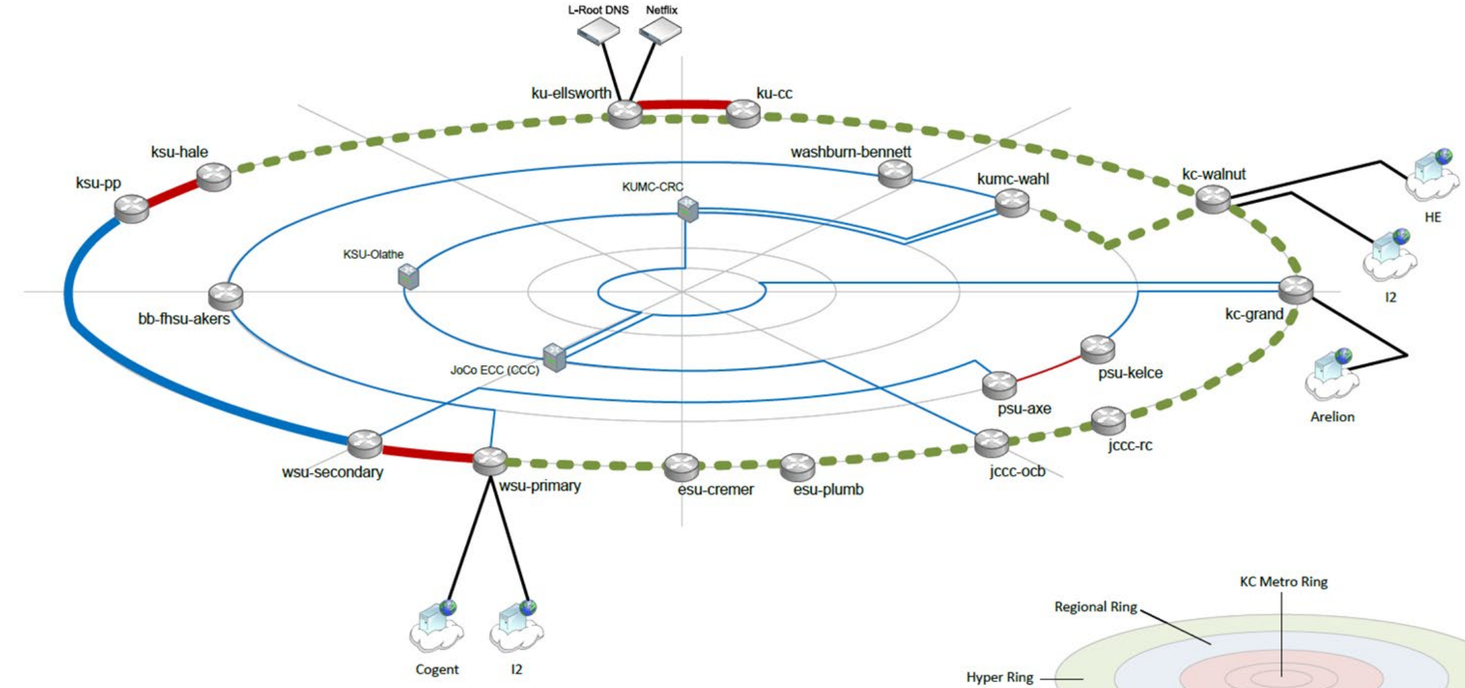
After graduating from Derby High School and The University of Kansas, I soon started with HDR Engineering in Omaha and Washington DC. Finding my love of business, technology, and management he moved to Dallas in the middle of the dot com boom. There I worked for the telecom Citizens Communications, start-up ISP airBand, and cybersecurity giant McAfee.

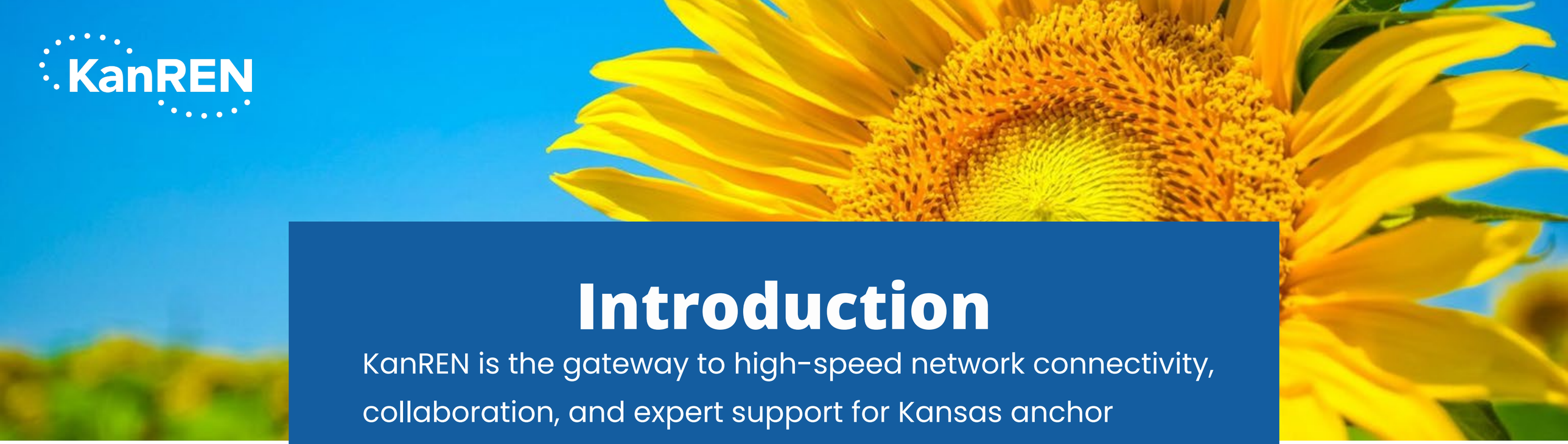
Longing to be back in Kansas, I moved to Lawrence to work for my alma mater, The University of Kansas. Over the next 18 years, I progressed into his previous IT Chief Operations Officer role. I bring over 20 years of technology management and leadership to his new role as the Executive Director of KanREN which started on July 2023.

KanREN in Simple Terms

KanREN is one of the 40 Research and Education Networks in the United States. Demand for the highest speed broadband connections, redundancy and reliability are all key to a REN's existence.

A very high-speed connection to a residential consumer would be at about 1G. KanREN currently has 100G capability and within the next year will have 400G with 800G available.





Introduction

KanREN is the gateway to high-speed network connectivity, collaboration, and expert support for Kansas anchor institutions. We provide exclusive access to research networks and communities, customized technology and security solutions, and personalized support to ensure your institution’s success.

About us

KanREN is the Research and Education Network (R&E) in Kansas. Established in 1992, KanREN is a 501(c)(3) created by the public universities of Kansas. Created as a pioneer in R&E networks nationwide, KanREN shares resources, builds local, state and regional collaboration.

KanREN provides a single entity that works on behalf of all members, eliminating the duplicative skill sets, staffing, contracts, and individual services required to meet the needs of our members. Since 1992, KanREN has provided opportunities beyond physical network connectivity.

Our members are forward-thinking experts from education and community institutions. The relationships formed through our network empower members to achieve challenging goals, foster innovative thinking, and connect with similarly situated institutions. This collective expertise from passionate and highly respected professionals offers unique access and benefits to our members.

KanREN

KanREN

Services

Connect, Innovate, and Secure Your Institution with KanREN
KanREN operates at the forefront of technology services, specializing in network technology for research and higher education. We extend our capabilities to all community anchor institutions across Kansas.

We build the backbone that supports Kansas' education and research, fostering a culture of modernization. KanREN is not just a service provider; we are your partner in progress. Through our state-of-the-art network infrastructure and dedication to cybersecurity, we create an environment where collaboration thrives, academic discoveries are realized, and innovation flourishes.

Discover an ecosystem designed to amplify the capabilities of institutions within Kansas. Join us and unlock your full potential with the expansive range of services KanREN proudly provides.

Connectivity

Security

Information Management

Optimization

Monitoring

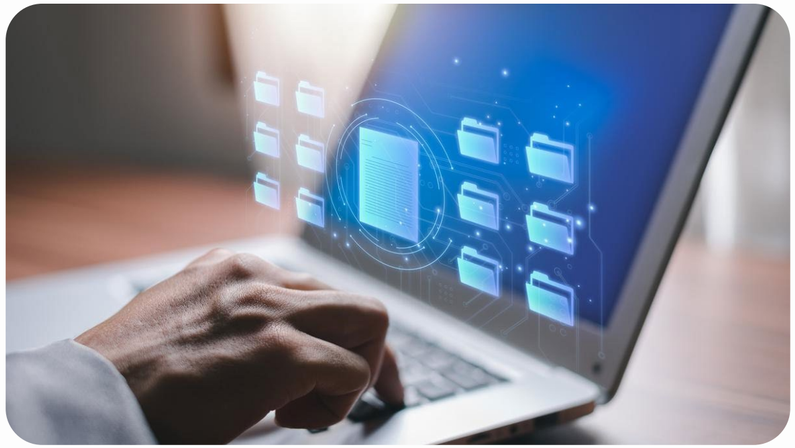
Collaboration

KanREN

Services

Connectivity

- High Speed Internet Connectivity
- Internet 2 (I2)
- Internet 2 Cloud Connect
- Internet 2/GPN (I2 and I2PX)
- DDos Scrubbing



Information Management

- Web Hosting
- File Storage (StormCellar)
- Cloud Storage
- Disaster Recovery/Business Continuity Site
- System Services
- Storage Capacity Planning

Monitoring

- Network Monitoring/Support
- Network Health/Utilization
- Traffic Analysis/Graphs
- Network Operations Center (NOC)
- Speed Test
- High Speed Internet Connectivity
- Flow Analysis

KanREN

Services

Optimization

- IP addresses
- Software Reseller
- Zoom
- Software and Hardware Sales/Discounts
- DNS
- CPE
- LAN/LAN Support
- Training and Education
- Audio Visual Technology
- Proxy Membership – GPN and I2
- Contract Vehicles/Buying Club
- Network Troubleshooting
- Engineering Analysis/Support
- VM construction
- IT Consulting/Resources
- Domains

Security

- Infrastructure Management
- Security Services
- Firewalls
- DDoS Integration
- Vulnerability Scan
- Policy and Compliance Guidance

Collaboration

- Membership
- Zoom
- Training and Education
- Community
- Video QoS
- Voice QoS
- Internet 2 (I2)
- Great Plains Network (GPN)
- Energy Sciences Network (ESnet)
- Fiber Broadband Association
- Schools, Health & Libraries Broadband (SHLB) Coalition USAC Funds
- Augmented Administrative Services

Notes / Key Topics

- Types of Membership and USF
- KanREN and the Freestate Middle Mile Network
- Connecting cutting edge industry / Vocational education paths.
- Partnering with State Offices
- Partnering with Kanas Telecom & Fiber and Technology Providers

KanREN

Member Types

BACKBONE

Higher Ed Institutions that have a need for large amounts of data to securely and quickly move from one institution to another.

These are core members and are the reason KanREN is in existence.

AGGREGATED

K-12 schools, hospitals, libraries, municipalities.

These members utilize KanREN's network, services and consortial pricing.

They also leverage KanREN's technology expertise as fractional IT support.

NON-CONNECTED

Smaller community colleges, and organizations.

While not connected to the KanREN network, they utilize the consortial pricing on products like Zoom as well as the opportunity to connect with other technology professionals.

Universal Service Fund

Managed by the Federal Communications Commission, USF spends about $8 billion annually subsidizing rural broadband networks, plus internet discounts for low-income households, health care centers, and schools and libraries. KanREN Participates in:

- E-Rate
- HCF

KanREN facilitates **over $2.5 million** annually in USAC funding for its members.

FREESTATE
MIDDLE MILE NETWORK

KANSAS OFFICE OF BROADBAND DEVELOPMENT

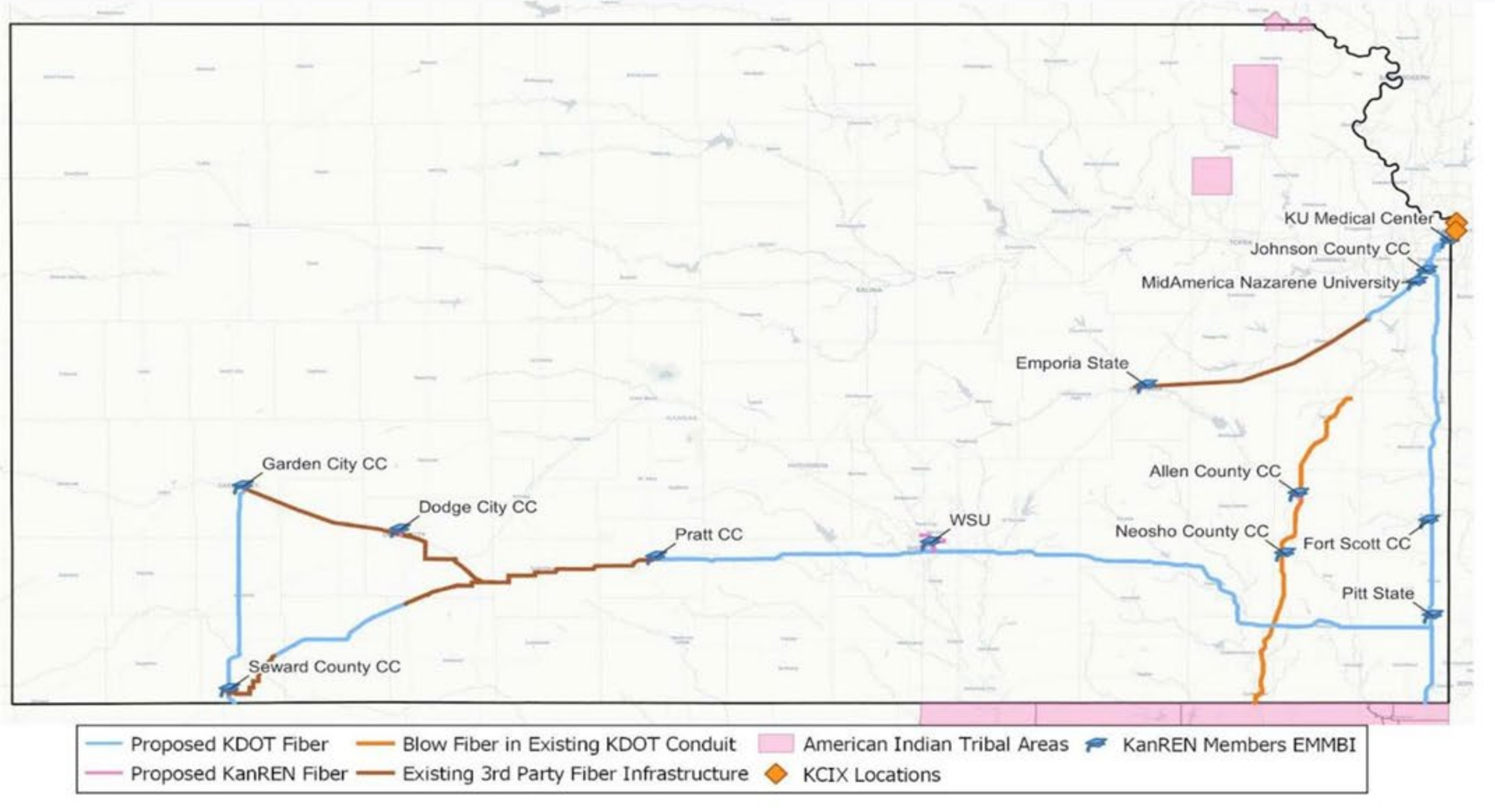
MIDDLE-MILE PARTNERSHIP

KDOT, KANREN, anchor institutions and Kansas communities will benefit from a middle-mile project.

DESIGNATED ROUTES

New Infrastructure

- **US-83: Liberal to Garden City** - *70 Miles*
- **Pratt - Wichita -** *79 miles*
- **Kismet - Minneola -** *43 miles*
- **US-400/US-54: K-96 & US-54 junction to US-69 junction** - *158 miles*
- **US-69: Stateline to Kansas City location** - *157 miles*
- **Wellsville - KC IPX -** *41 miles*
- **US-169: US-166 to Greeley Regeneration Building** - *106 miles*



Interesting Fact

More than half of KanREN traffic doesn’t leave the network

KanREN

Examples of Research that KanREN Supports:

- WSU National Institute for Aviation Research (NIAR)
- National Center for Aviation Training (NCAT)
- KSU Salina Aerospace and Technology Campus

Education in workforce training for Kansans:

- KLETC – Kansas Law Enforcement Training Center in Yoder
- Barton – Welding, EMT and Agricultural Industry Education
- Scott City – Harley Davidson School
- Pittsburg State: Automotive Technology & Caterpillar Tech Certifications

KanREN

Key Partnerships

We can’t do it alone and we value our state and corporate partners to provide guidance, services and support to our mission

State Partners:

- Kansas Office of Broadband Development
- Kansas Department of Transportation
- Office of Procurement and Contracts
- Kansas Board of Regents

Corporate partners:

KFN ksfiber.net

ideatek

LUMEN

AT&T

Zayo

HURRICANE ELECTRIC INTERNET SERVICES

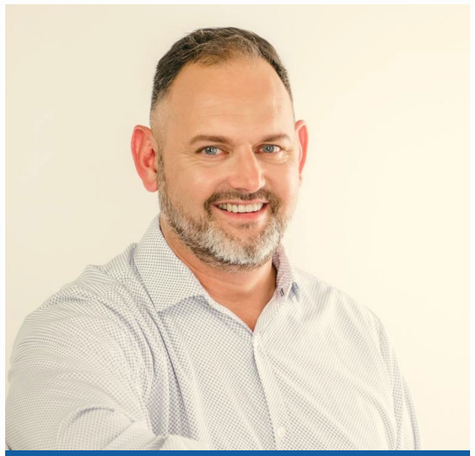
zoom

ciena

INVARY

KanREN

Our Team



Chris Crook
Executive Director/President

Erica McDiffett
Chief Operations Officer

Brad Fleming
Chief Technology Officer

Jeff Sorrels
Director of Technology

Jamie Jeffers
Business Operations Manager

THANK YOU!

Chris Crook

Executive Director/President

785-856-9802

www.kanren.org

2029 Becker Dr., Suite 282,
Lawrence, KS 66047

KanREN