

2025

PIER GROUP
REFERENCE LIST

ABOUT US

PIER GROUP, PARTNER IN EDUCATION & RESEARCH

Is a multi-vendor, value-added reseller with a national coverage model. Our organization is specifically and specially focused on the Higher Education (HiEd) and Research and Education (R&E) communities. Our team's passion is to help our customers create a competitive advantage, or leadership position, in areas that matter to them most.

The PIER Group team has over 25 years' experience in supporting the nation's R&E community. This includes many Tier 1 research universities across the country. Our lengthy history of working in this community has gained us a very deep understanding of the inner workings of a university, from all aspects of IT through all aspects of the procurement process.

PIER Group has a lengthy history of partnership with many of the nation's leading Tier 1 research universities. Our team has designed, and currently supports, many large university campus networks across the country. Our expertise is in core, distribution, aggregation, wired edge, wireless edge, sensors, unified platforms, automation, network management, etc.

To further our impact on this R&E community, we have partnerships and sponsorship with many of the national research networking entities, such as GENI, US-Ignite, The Quilt, SuperComputing, Internet2, ESnet, as well as many regional network members. Our team continues to stay tightly aligned with the strategic visions of these entities and communities.

These entities play a key role in advancing our country's university and research efforts. Our team collaborates with national and regional network leaders to promote the continuance and expansion of leading-edge concepts.

See next page for a click-through customer list.

CUSTOMERS

CLICK ANY BOLDED NAME TO EXPLORE MORE

ARE-ON | Research and Education Network (Arkansas)

Argonne National Labs

Big Ten Academic Alliance (BTAA)

BOREAS-Net | Research and Education Network (Collaborative of Four Major Research Institutions in the Upper Midwest:

Iowa, Iowa State, University of Minnesota, and University of Wisconsin)

College of Charleston

Colorado State University

DePaul University

Fermi National Labs

George Washington University

Great Plains Network | Research and Education Network (Collaboration of Midwest + Great Plains GigaPop Locations)

Harvard University

iCAIR (International Center for Advanced Internet Research)

ICN | Research and Education Network (Illinois)

I-Light | Research and Education Network (Indiana)

Illinois Central Colleges

Illinois State University

Indiana University

IU Kokomo

IU South Bend

IU Bloomington

IU East (Richmond)

IU Northwest (Gary)

IU Southeast (New Albany)

Internet2 | Research and Education Network (National)

IRON | Research and Education Network (Idaho)

Johns Hopkins University

KyRON | Research and Education Network (Kentucky)

Maryville University

Michigan State University

MREN | Metropolitan Research and Education Network

NCSA (National Center for Supercomputing Applications)

Northwestern University

Oak Ridge National Lab

Ohio State University

Olivet Nazarene University

Penn State University

PSC (Pittsburgh Supercomputing Center)

Purdue University

State of Illinois

State of Indiana

Purdue University West Lafayette

Purdue University Indianapolis (IUPUI)

Purdue University Northwest (Calumet)

Sharp Healthcare (SHARP)

Southwest Ohio Computer Association (SWOCA)

Supercomputing (SciNET)

Sun Corridor | Research and Education Network (Arizona)

Texas A&M University

The Quilt | Research and Education Network (Collaborative Community)

University of California, Los Angeles

University of California, San Diego

University of Chicago

University of Denver

University of Illinois

University of Illinois at Chicago

University of Illinois College of Medicine

University of Illinois Health

University of Illinois Urbana-Champaign

University of Iowa

University of Kentucky

University of Louisville

University of Maryland

University of Michigan

University of Minnesota

University of New Mexico

University of Northern Colorado

University of Notre Dame

University of San Diego

University of South Carolina

University of Tennessee

University of Utah

University of Vermont

University of Virginia

University of Wisconsin

Western Illinois University

Western Kentucky University

WiscNET | Research and Education Network (Wisconsin)

Wright State University



INDIANA UNIVERSITY

IU AT A GLANCE

- 8 consolidated campuses across Indiana
- Approximately 110,000 students across all campuses
- Member of iLight, Indiana's highspeed fiber optic research and education (REN) network work

Contact: Mark Spencer

Title: Director, Network Infrastructure

Phone: (812) 855-3098

Email: maespenc@iu.edu

PIER Group has maintained a strategic IT partnership with Indiana University (IU) for over 30 years, supporting the university's extensive network infrastructure across its eight consolidated campuses throughout Indiana. This long-standing collaboration spans all critical areas of campus networking, including:

- Core Network
- Distribution Network
- Data Center Network
- Local Area Network (LAN)
- WiFi Network
- Security/Next-Generation Firewall (NGFW)/VPN
- Research Computing Network

To ensure alignment on architecture and innovation, PIER Group and IU maintain a bi-weekly collaboration cadence, enabling in-depth discussions across all aspects of campus network strategy and design.

PROJECT HIGHLIGHTS: INDIANA UNIVERSITY

Over the course of their 30-year partnership, Indiana University (IU) and PIER Group have successfully collaborated on numerous network infrastructure upgrade and refresh initiatives, including:

- Five (5) major upgrades of campus core, distribution, data center, LAN, WiFi, and next-generation firewall (NGFW) infrastructure
- Three (3) major refreshes of IU's research core network

These ongoing modernization efforts ensure that IU remains at the leading edge of network technology—delivering a high-performance, reliable, and secure experience to students, faculty, staff, and campus guests.



I-LIGHT AT A GLANCE

- Includes 40 member institutions
- Works closely with Indiana GigaPOP, Internet2 and The Quilt

Name: Marianne Chitwood

Title: Director, I-Light

Phone: (812) 855-0164

Email: chitwood@ilight.net

In addition to IU, PIER Group has also maintained a partnership with I-Light, Indiana's high-speed fiber optic research and education network (REN). I-Light provides robust, high-performance connectivity to every public university and private college throughout the state. PIER Group works in continuous collaboration with the I-Light engineering team on the design, implementation, and ongoing support of this critical statewide network infrastructure.

PROJECT HIGHLIGHTS: I-LIGHT

PIER Group has worked closely with I-Light for nearly 30 years to enhance Indiana's statewide research and education network. Together, they have completed:

- Three (3) major optical backbone refreshes, along with several incremental upgrades between each major refresh

This continual investment in infrastructure enables I-Light to consistently deliver world-class, high-speed network connectivity to Indiana's public universities and private colleges.



UNIVERSITY OF ILLINOIS URBANA CHAMPAIGN (UIUC)

UIUC AT A GLANCE

- Campus spans 6,370 acres
- Over 650 actively owned buildings across its campus
- Student population over 59,000

Contact: Brad Mahaffey

Title: Director, IT Infrastructure

Phone: (217) 244-7530

Email: bmahaffe@illinois.edu

PIER Group has maintained a strong IT partnership with the University of Illinois Urbana-Champaign (UIUC) for over a decade, supporting the university's comprehensive campus networking infrastructure. This collaboration spans:

- Core Network
- Distribution Network
- Data Center Network
- LAN Network
- Wi-Fi Network
- Security / Next-Generation Firewall (NGFW) / VPN Network

PIER Group and UIUC engage in bi-weekly collaboration meetings, providing a consistent forum for in-depth discussions on campus architecture, strategic planning, and evolving technology needs.

Recent Milestones:

- **Wi-Fi Refresh:** UIUC recently completed a large-scale wireless upgrade, deploying 15,000+ of Aruba's latest 6E access points (APs), significantly enhancing wireless performance and capacity across campus.
- **Wired Network Refresh:** In parallel, UIUC initiated a refresh of its legacy HP ProCurve and Aruba OS-S switching infrastructure, transitioning to Aruba's current CX line, including 6300 Series edge switches and 8300 Series aggregation switches.

Expanded Aruba Ecosystem:

Beyond core wired and wireless solutions, UIUC leverages a wide array of HPE Aruba technologies to support advanced use cases and deliver a high-performance network experience, including:

- **ClearPass** for network access control
- **CX 10K (with Pensando)** top-of-rack data center switches
- **UXI Sensors** for user experience insights
- **SD-WAN** for secure, optimized connectivity
- **Outdoor and Stadium Wi-Fi** (State Farm Center and Memorial Stadium, including concession areas)
- **Private 5G** powered by Celona

Project Highlights: University of Illinois Urbana-Champaign (UIUC)

The partnership between UIUC and PIER Group began in 2015 when UIUC issued a competitive RFP to replace its legacy Meru wireless infrastructure. The primary objectives were to restore network stability and reliability while significantly improving the wireless experience for students, faculty, and staff.

Key Initiatives and Outcomes:

- **Wi-Fi 6E Migration:** UIUC's most recent upgrade to Aruba's Wi-Fi 6E access points has brought state-of-the-art wireless capabilities to its local and remote campuses, delivering faster speeds, greater reliability, and improved performance in high-density environments.
- **Wired Network Modernization:** UIUC is actively transitioning to Aruba's CX switch platform. This includes deploying:
 - **Class 6 PoE** to support high-power devices
 - **SmartRate** multi-gigabit ports for device connectivity up to 5GbE
 - **50GbE uplinks** to handle increased bandwidth demands

PIER Group has played a strategic role in both projects, providing comprehensive professional services across planning, testing, and production rollout phases to ensure smooth and successful implementations.

Expanded Innovation Projects:

As a result of these upgrades, several related initiatives have been launched, including:

- Private 5G Wireless to support agricultural research and remote field applications
- SD-WAN to improve remote site connectivity and performance
- Aruba Central Cloud (Phase 1 Deployment) to enhance cloud-based network management for UIUC's remote offices



UNIVERSITY OF MARYLAND (UMD)

UMD AT A GLANCE

- The campus spans 5 square kilometers
- Nearly 42,000 students
- 12 Colleges

Name: Axel Persaud

Title: VP, Infrastructure

Phone: (301) 405-6473

Email: apersaud@umd.edu

The University of Maryland (UMD) has been a valued PIER Group customer since 2022. From the outset, the partnership has been built on mutual trust, technical expertise, and a shared commitment to advancing campus network infrastructure.

PIER Group and UMD maintain a bi-weekly collaboration cadence, enabling consistent engagement around network architecture, project planning, and strategic initiatives.

UMD selected PIER Group based on its proven track record of success in the R1/R2 university community and deep expertise in deploying large-scale, campus-wide network solutions.

Major Campus Network Initiative:

In 2023, UMD and PIER Group began a transformative, large-scale edge network refresh. This initiative involves a full migration to Aruba's unified-edge architecture, delivering a user-centric, policy-driven access layer that enhances network performance, security, and scalability.

Key components of the new infrastructure include:

- **Aruba ClearPass** for network access control (NAC) for 200,000+ devices
- **Over 2500 Aruba switches** for distribution and edge connectivity
- **Approximately 19,000 Wi-Fi 6E access points** to deliver next-generation wireless capabilities campus-wide

PIER Group is providing turnkey implementation services, including:

- Full **ClearPass policy design and deployment**
- **Physical installation** of entire infrastructure

This deployment positions UMD with one of the most advanced campus networks in the country.

Project Highlights: University of Maryland (UMD)

In 2023, PIER Group partnered with the University of Maryland to execute a comprehensive, next-generation edge network refresh. This initiative represents a transformative upgrade to UMD's campus infrastructure, designed to deliver a highly secure, policy-driven, and performance-optimized user experience.

Scope of Implementation:

PIER Group is delivering **turnkey professional services** for the deployment of the following infrastructure components:

- **350** Aruba 8360 Series Building Distribution Switches
- **2,500** Aruba 6300M Series Edge Switches
- **19,000** Aruba Wi-Fi 6E Access Points (AP-655 for campus; AP-605H for residence halls)
- **400+** Aruba AP-585 Outdoor Access Points
- **800** Aruba UXI Sensors for end-user experience monitoring
- **Aruba ClearPass** deployment for comprehensive network access control (NAC) across wired and wireless environments

Next-Generation Network Architecture:

UMD's upgraded network is architected around **dynamic segmentation** and is fully **role-based and policy-driven**, leveraging Aruba ClearPass and OnGuard to intelligently manage secure access for users and devices.

Key Features:

- **Policy-Driven Access:** Role-based access ensures consistent enforcement of security and usage policies across all user groups
- **Self-Supporting, Self-Healing Architecture:** Built-in automation and monitoring tools significantly reduce downtime and streamline operations
- **Proactive Monitoring:** Deployment of ~800 UXI sensors enables real-time visibility into user experience and proactive issue resolution

This modernized infrastructure positions UMD for long-term scalability and operational excellence while enhancing the digital experience for students, faculty, staff, and guests.



TEXAS A&M UNIVERSITY (TAMU)

TEXAS A&M AT A GLANCE

- 3rd largest student body in the nation
- 5,200 acres at College Station campus
- Over 72,000 enrolled at College Station campus

Name: Dan Schmiedt

Title: VP, Network and Telecom

Phone: (979) 845-6908

Email: willys@tamu.edu

In 2023, Texas A&M University engaged PIER Group to assist with the redesign and migration of its Wi-Fi network architecture—laying the foundation for a future-ready, high-performance wireless infrastructure.

To ensure alignment and technical continuity, PIER Group and TAMU established a bi-weekly collaboration cadence. These sessions support ongoing engineering consultation and hands-on migration assistance, enabling a smooth and strategic rollout of the new architecture.

Next-Generation Wireless Infrastructure:

TAMU's wireless network now features over **23,000 Aruba Wi-Fi 6E access points** deployed campus-wide, providing enhanced capacity, reliability, and performance in support of the university's growing digital demands.

Strategic Partnership with TAMU Athletics:

Given the scale and complexity of the environment, PIER Group continues to serve as both a **consultative and implementation partner** with **TAMU Athletics**. The partnership currently focuses on **next-generation network upgrades at Kyle Field**, including:

- Core network enhancements
- Distribution layer improvements
- Advanced wireless infrastructure deployment

This evolving collaboration reflects TAMU's commitment to innovation and operational excellence across both academic and athletic facilities.

Project Highlights: Texas A&M University (TAMU)

Texas A&M University partnered with PIER Group to modernize its Wi-Fi infrastructure with the goal of improving connectivity, scalability, reliability and the overall user experience for students, faculty, and staff.

Modernization Initiative:

As part of this initiative, TAMU transitioned to **Wi-Fi 6E**, unlocking next-generation wireless capabilities. The upgrade delivers:

- **Faster speeds and lower latency**
- **Improved reliability and coverage**
- **Enhanced capacity for high-density environments**

Engineering & Optimization Services:

PIER Group's professional services team led a complete **re-architecture of TAMU's Wi-Fi network design**, ensuring it met the performance and operational goals of the university.

In addition, the team:

- **Optimized TAMU's Aruba ClearPass environment, enhancing network access control**
- **Prepared the ClearPass infrastructure to support future wired network integration**, enabling a unified, policy-driven access strategy across wired and wireless platforms

This project sets a strong foundation for future network expansion and reinforces TAMU's commitment to providing a secure, high-performance digital campus experience



UNIVERSITY OF NOTRE DAME (ND)

ND AT A GLANCE

- Over 13,000 students
- Campus spans over 1,250 acres
- 7 schools and colleges

Name: John Buysse

Title: Sr Director, Networks

Phone: (574) 631-0483

Email: jbuysse@nd.edu

The **University of Notre Dame** and PIER Group have maintained a robust IT partnership for over **20 years**, encompassing a wide range of campus IT initiatives, including:

- **I-Light/Internet2 routing connection**
- **LAN Network**
- **WiFi Network**
- **Security**
- **Research Computing**

This longstanding collaboration is reinforced through **monthly meetings** where PIER Group and Notre Dame engage in in-depth discussions on various aspects of campus architecture, ensuring alignment and continuous improvement in meeting the university's evolving needs.

Project Highlights: University of Notre Dame

Over the past **20 years**, **PIER Group** and the **University of Notre Dame** have partnered on numerous transformative IT initiatives. Some of the most recent and notable projects include:

- **Notre Dame Stadium Wireless Refresh:** PIER Group led a comprehensive wireless design and refresh of **Notre Dame Stadium**, which became the nation's **first WiFi 6e Standard Power wireless stadium**. This upgrade positioned Notre Dame at the forefront of **LPV (Low Power, Long Range) technology**, providing fans with an unparalleled, high-performance network experience.
- **Campus Wireless Refresh:** PIER Group successfully installed and configured approximately **13,000+ WiFi 6e access points** across nearly **200 buildings** on campus. This large-scale wireless refresh included a complete **redesign and reconfiguration** of multiple campus wireless clusters to support the expanded Wi-Fi network, ensuring reliable, high-speed connectivity across the university.

These initiatives underscore the continued commitment of both PIER Group and the University of Notre Dame to maintaining cutting-edge technology, elevating campus experiences for students, faculty, and visitors alike.



NORTHWESTERN UNIVERSITY (NWU)

NWU AT A GLANCE

- Student population is nearly 23,000
- 12 colleges and schools
- The main campus spans 240 acres

Name: Julian Koh

Title: VP, Networks

Phone: (847) 467-5780

Email: kohster@northwestern.edu

Northwestern University and PIER Group have maintained a strategic IT partnership for over a decade, supporting the full spectrum of the university's campus networking infrastructure. This collaboration includes:

- Core Network
- Distribution Network
- Data Center Network
- LAN Network
- Wi-Fi Network
- Security / Next-Generation Firewall (NGFW) / VPN Network

To ensure ongoing alignment and continuous improvement, Northwestern and PIER Group conduct **bi-weekly collaboration meetings**, offering a forum for in-depth discussions around campus architecture, evolving technologies, and long-term strategic planning.

This partnership reflects a shared commitment to delivering a high-performing, secure, and future-ready network environment that supports the university's academic, research, and administrative missions.

Project Highlights: Northwestern University

In 2020, Northwestern University (NWU) made a strategic decision to transition to a unified, single-vendor network architecture by adopting **Aruba Networks** across its entire infrastructure. This comprehensive migration included the **core, distribution, edge, and Wi-Fi** layers, with **Aruba ClearPass** deployed to manage network access control (NAC).

Scope of Deployment:

PIER Group's professional services team provided **turnkey implementation services** for the following:

- **22 Aruba CX8400** Core and Distribution Switches
- **2,000 Aruba CX6300** Edge Switches
- **15,000 Aruba Wi-Fi 6 Access Points**

This next-generation infrastructure significantly enhances network performance, security, and scalability across campus.

Research Enablement & Impact:

The upgraded network has had a transformative effect on Northwestern's research capabilities, particularly in high-demand disciplines such as:

- Artificial Intelligence (AI)
- Machine Learning (ML)
- Biomedical Sciences

With faster data processing and seamless data sharing capabilities, researchers at Northwestern can now collaborate more efficiently and innovate at greater scale. The enhanced infrastructure supports complex workloads, accelerates breakthroughs in AI algorithms, and facilitates advancements in critical medical research.

As a result, Northwestern's campus is now positioned as a hub for **cutting-edge scientific discovery**, contributing meaningfully to the advancement of **global technology and healthcare innovation**.



UNIVERSITY OF MICHIGAN (UM)

UM AT A GLANCE

- 3 locations: Ann Arbor, Dearborn, & Flint
- Over 67,000 students across 3 campuses
- 13 undergraduate schools and colleges

Name: Andy Palms

Title: VP, Infrastructure

Phone: (734) 433-0500

Email: palms@umich.edu

The University of Michigan—comprising three campuses across the state—has partnered with PIER Group for the past five years to advance its campus networking capabilities.

This collaboration focuses primarily on **edge network modernization**, with PIER Group providing strategic consultation, design expertise, and implementation support to ensure the university's edge infrastructure remains secure, scalable, and aligned with evolving academic and operational needs.

This partnership reflects the University of Michigan's commitment to delivering a high-performance network environment that supports cutting-edge research, digital learning, and campus-wide innovation.

Project Highlights: University of Michigan

The University of Michigan (UM) has partnered closely with PIER Group on a series of strategic networking initiatives aimed at modernizing its edge infrastructure and delivering a world-class connectivity experience across its campuses.

- In **2020**, PIER Group began collaborating with UM on a **next-generation campus Wi-Fi migration**, setting the foundation for a high-performance, scalable wireless environment.
- Since then, **monthly collaboration meetings** have provided a forum for continuous strategic dialogue on campus architecture, allowing both teams to align closely on design, implementation, and long-term planning.
- In **2021**, PIER Group's professional services team executed a rapid, **turnkey deployment of Aruba ClearPass (NAC)** and installed **17,000 Aruba Wi-Fi 6E access points across the Ann Arbor and Dearborn campuses**—all completed within a 12-week summer break window.

This landmark deployment made the **University of Michigan the first university in the nation to implement pervasive Wi-Fi 6E connectivity**, setting a new standard in higher education for wireless performance and coverage.



UNIVERSITY OF ILLINOIS AT CHICAGO (UIC)

UIC AT A GLANCE

- Student population nearly 34,000
- 16 schools and colleges
- Campus size of 249 acres

Name: Jelene Crehan

Title: Director, Network Engineering and Infrastructure

Phone: (312) 355-3101

Email: jelene@uic.edu

PIER Group has enjoyed a successful IT partnership with the **University of Illinois at Chicago (UIC)** for over five years, supporting various aspects of campus networking, including:

- **Wired edge switching**
- **Network Access Control (NAC) solutions**
- **Strategic planning for future UIC technology initiatives**

This collaboration is strengthened by **bi-weekly meetings**, where PIER Group and UIC discuss TAC cases, project updates, and future initiatives. These sessions ensure continuous alignment and allow for ongoing strategic planning to meet UIC's evolving needs.

Key milestones in the partnership include:

- **2019:** PIER Group began assisting UIC with the replacement of their **campus wired edge switches**, modernizing the network infrastructure to support high-performance campus connectivity.
- **2020:** PIER Group helped UIC transition from a **Cisco** to a **Palo Alto firewall solution**, providing expert professional services to ensure a smooth and secure migration.

PIER Group continues to support UIC in its efforts to implement cutting-edge technologies while planning for the future to align with UIC's long-term **technology strategies**.

Project Highlights: University of Illinois at Chicago (UIC)

In 2020, UIC embarked on a project to modernize its networking environment, selecting **Aruba's 6300 and 6400 CX series switches** to replace its legacy **Cisco infrastructure**. PIER Group played a crucial role in the successful implementation by providing a **turnkey professional services engagement**, collaborating closely with UIC's technical resources to create a standardized "best practices" template for the new edge switch environment.

Simultaneously, PIER Group's professional services team facilitated the firewall context migration to the new Palo Alto solution, ensuring a seamless transition and enhanced security for UIC's campus network.

Additionally, UIC engaged PIER Group in a multi-phased rollout of a Network Access Control (NAC) solution, which includes Aruba ClearPass as a key component. This strategic deployment strengthens UIC's network security posture, providing comprehensive access management and policy enforcement across its campus.



UNIVERSITY OF LOUISVILLE (UL)

UL AT A GLANCE

- Student population over 24,000
- 3 main campuses
- 12 schools and colleges

Name: Mark Macumber

Title: Exec Director, Networks

Phone: (502) 852-7770

Email: Michael.dyer@louisville.edu

The University of Louisville (UL) and PIER Group have maintained a trusted and strategic IT partnership for over 20 years. This long-standing collaboration spans the full breadth of campus networking and infrastructure, including:

- Multiple **LAN and Wi-Fi** refresh initiatives
- **Core and distribution network** upgrades
- **Next-generation firewall (NGFW)** modernization
- **DDI/IPAM** (DNS, DHCP, and IP Address Management) infrastructure refreshes

PIER Group and UL have built a deeply collaborative relationship over the past two decades, working closely to align technology investments with the university's evolving academic, research, and operational goals. This partnership continues to ensure that UL maintains a secure, high-performing, and future-ready network environment.

Project Highlights: University of Louisville (UL)

In 2015, the University of Louisville partnered with PIER Group to execute a campus-wide network modernization initiative, focused on enhancing both wireless and wired infrastructure.

Key Project Components:

- **Rolling Wi-Fi Refresh:** PIER Group led the design and phased implementation of a **rolling refresh of approximately 7,000 access points** across campus, significantly improving wireless coverage, performance, and reliability for students, faculty, and staff.
- **Next-Generation Network Design:** In parallel, PIER Group collaborated with UL on the **architecture and deployment of a next-generation core and edge switching network**, laying the foundation for a more scalable, secure, and resilient campus network.

This project marked a major step forward in UL's digital infrastructure strategy, ensuring the university remains at the forefront of technology innovation in higher education.



COLORADO STATE UNIVERSITY (CSU)

CSU AT A GLANCE

- Over 34,000 students at the Fort Collins campus
- Fort Collins campus spans over 583 acres
- 15 schools and colleges

Name: Angie Asmus

Title: Director, Networks

Phone: (970) 491-7582

Email: angie.asmus@colostate.edu

Customer Highlights: Colorado State University (CSU)

PIER Group began its partnership with Colorado State University (CSU) in 2022, when CSU engaged the team to assist with a critical rebuild of its Aruba ClearPass environment. After spending more than six months attempting to reconfigure the system internally, CSU turned to PIER Group's professional services team. Within one week, PIER Group engineers successfully rebuilt the entire ClearPass environment, restoring full functionality and stability.

Following this successful engagement, CSU and PIER Group established a strong working relationship, including **bi-weekly collaboration meetings** focused on ongoing architectural planning and strategic IT initiatives.

Expanded Engagement in 2023–2024:

As trust in the partnership deepened, CSU relied on PIER Group for support in designing and executing a series of major infrastructure projects, resulting in four key initiatives:

1. Data Center Firewall Upgrade

- Design and migration to **Palo Alto Networks** firewalls to enhance security and scalability.

2. Core Network Modernization

- Design and implementation of a **next-generation core network** using **Arista Networks** solutions.

3. Border Router Upgrade

- Redesign and deployment of CSU's internet edge using **Juniper Networks** for improved performance and routing control.

4. Edge Network Refresh (Wired and Wireless)

- Comprehensive design and upgrade plan leveraging **Aruba Networks** for campus-wide edge infrastructure.

These projects are transforming CSU's network environment into a modern, secure, and high-performance infrastructure—positioning the university for continued growth, research innovation, and digital excellence.

PROJECT HIGHLIGHTS

- Internally, CSU struggled with rebuilding their ClearPass issue for 6+ months.
- PIER Group resolved/rebuilt in a very short window, leading to a broader partnership.
- PIER Group has since spearheaded many major projects at CSU, including upgrading data center firewalls to Palo Alto, core network to Arista Networks, border routers to Juniper Networks, and planning a refresh of the edge network with Aruba Networks.

These initiatives have transformed CSU's infrastructure, enabling students and faculty to engage in more complex research, utilize high-bandwidth applications, and collaborate seamlessly across digital platforms—capabilities that were previously limited by network constraints.



UNIVERSITY OF DENVER (DU)

DU AT A GLANCE

- Student population over 13,000
- Main campus spans 125 acres
- 10 schools and colleges

Name: Padma Rajendran

Title: Director, Networks

Email: padma.rajendran@du.edu

PIER Group has been a trusted partner to the University of Denver (DU) networking team for over five years, providing a range of strategic and technical services to support the university's evolving infrastructure needs.

Key areas of engagement include:

- **Network design consultation** to support long-term architectural planning
- **Aruba ClearPass health checks and upgrade assistance** to maintain secure, policy-based network access
- **Facilitation of multiple proof-of-concept (PoC) engagements** to evaluate emerging technologies ahead of a planned major access layer refresh

This ongoing collaboration reflects DU's proactive approach to network modernization and its commitment to delivering a secure, high-performance campus experience for students, faculty, and staff.

Project Highlights: University of Denver (DU)

Over the course of a multi-year partnership, the University of Denver (DU) has been proactively preparing for a significant refresh of its access layer environment. PIER Group has played a pivotal role in this transformation by providing comprehensive support across several key areas:

- **Design consultation** to ensure that DU's network architecture aligns with future needs
- **ClearPass health checks and upgrade assistance** to maintain optimal network security and access control
- **Facilitation of multiple proof-of-concept (PoC) engagements** to assess and validate new technologies for the upcoming refresh

This strategic, forward-thinking approach ensures that DU is well-equipped to embrace future technological advancements. By enhancing network performance and security, this effort strengthens the university's infrastructure, positioning it to support the continued growth of academic and research initiatives.



SOUTHWEST OHIO COMPUTER ASSOCIATION (SWOCA)

SWOCA AT A GLANCE

- Serves 43 public and community school districts in Southwest Ohio
- Educates over 140,000 students

Name: Jacob Smith

Title: Network Security Manager

Phone: (513) 869-4754

Email: jacob@swoca.net

SWOCA became a customer of PIER Group in 2024, selecting PIER Group for its deep expertise in large-scale, enterprise-grade networking and its established presence within the R1/R2 university community.

In collaboration with **Fortinet and SWOCA**, PIER Group led the design and implementation of a **next-generation Security Operations Center (SOC)**. This state-of-the-art facility will support **over 50 Information Technology Centers (ITCs)** across the state of Ohio, enabling SWOCA to provide centralized, scalable, and secure network services to a wide range of regional educational institutions.

This strategic engagement—**valued at over \$1.5 million**—included the deployment of **next-generation firewalls (NGFWs)** and a comprehensive suite of **Fortinet security solutions**, significantly enhancing cybersecurity capabilities for Ohio's K-12 education system and related ITC operations.

Customer Highlights: Southwest Ohio Computer Association (SWOCA)

SWOCA became a PIER Group customer in 2024, selecting the firm based on its deep expertise in large-scale, enterprise-grade networking and its proven track record within the R1/R2 university community.

In partnership with **Fortinet and SWOCA**, PIER Group led the design and implementation of a **next-generation Security Operations Center (SOC)**. This advanced facility will provide centralized, scalable, and secure network services for **more than 50 Information Technology Centers (ITCs)** across the state of Ohio, supporting a wide array of regional K-12 educational institutions.

This strategic engagement—**valued at over \$1.5 million**—included the deployment of **next-generation firewalls (NGFWs)** and a full suite of **Fortinet cybersecurity solutions**. The project significantly strengthens the state's IT infrastructure, delivering enhanced threat protection, operational efficiency, and long-term support for Ohio's K-12 education ecosystem.



WESTERN KENTUCKY UNIVERSITY (WKU)

WKU AT A GLANCE

- Student population over 16,000
- Campus spans 200 acres
- 6 colleges and schools

Name: Dereck Keeling

Title: Director, Infrastructure and Operations

Email: derick.keeling@wku.edu

PIER Group and Western Kentucky University (WKU) have maintained a strong and collaborative partnership for over a decade. Throughout this relationship, PIER Group's solution architecture team has played a key role in supporting WKU's evolving technology strategy, particularly in the design and development of next-generation network solutions.

Most recently, following an in-depth collaboration and testing process, WKU selected **Juniper Mist** as its **next-generation wireless platform**, planning the deployment of approximately **6,000 access points across** campus. This marks a significant step forward in delivering a modern, AI-driven wireless experience for students, faculty, and staff.

PIER Group and WKU are also actively engaged in ongoing strategic discussions around **next-generation LAN, core networking, and next-generation firewall (NGFW)** solutions, continuing their joint commitment to building a secure, high-performance, and future-ready campus infrastructure.

Project Highlights: Western Kentucky University (WKU)

PIER Group's professional services team is leading the implementation of Western Kentucky University's **next-generation wireless network**, centered around the deployment of **6,000 Juniper Mist access points**.

This strategic upgrade is designed to significantly enhance **campus-wide connectivity**, delivering:

- **Faster, more reliable wireless access**
- **Improved user experience for students, faculty, and staff**
- **AI-driven performance optimization and network insights via the Juniper Mist platform**

The project supports WKU's ongoing commitment to innovation in educational technology, positioning the university to meet increasing digital demands while maintaining a secure and high-performing network infrastructure.



UNIVERSITY OF NEW MEXICO (UNM)

UUMN AT A GLANCE

- 12 colleges and schools
- Main campus spans approximately 769 acres
- Over 23,000 students on the main campus

Name: Chad VanPelt

Title: Director, Network Services

Phone: (505) 450-4480

Email: chad76@unm.edu

In early 2023, the University of New Mexico (UNM) engaged PIER Group to support a series of strategic network infrastructure upgrades. The university sought PIER Group's expertise to lead a **core network modernization initiative**, transitioning from a decade-old **Brocade infrastructure** to a modern **Aruba spine-leaf architecture**.

This engagement included:

- Comprehensive **network discovery and assessment**
- Detailed **configuration review and consultation**
- **On-site support during the cutover process**, ensuring a seamless migration

This collaboration reflects UNM's commitment to modernizing its core infrastructure, enhancing network performance, scalability, and long-term sustainability in support of its academic and research mission.

PROJECT HIGHLIGHTS: UNIVERSITY OF NEW MEXICO (UNM)

To support its mission of fostering a cutting-edge academic and research environment, the University of New Mexico (UNM) recognized the need to modernize its aging Brocade infrastructure. The university partnered with PIER Group to lead this critical transformation.

The engagement began with a comprehensive **discovery and assessment phase**, followed by detailed **configuration reviews and architectural consultation**. The project culminated in a successful **core network upgrade** to a **state-of-the-art Aruba spine/leaf architecture**, positioning UNM for long-term scalability and performance.

PIER Group and UNM maintain **bi-weekly collaboration meetings** to ensure continuous alignment on campus architecture, technology planning, and evolving needs.

Key Outcomes:

- Significantly improved **network speed, reliability, and scalability**
- Enhanced support for **advanced research, high-bandwidth applications, and academic collaboration**
- Strengthened UNM's position as a **leader in innovation and technological excellence**

This upgrade marks a major step forward in UNM's digital transformation, ensuring the university remains competitive and well-equipped to meet future demands.



UNIVERSITY OF CHICAGO (UC)

UC AT A GLANCE

- Student population of over 18,000
- 12 divisions, colleges and schools
- Main campus spans 217 acres

Name: Mike Ruel

Title: Director, Network Engineering and Operations

Phone: (312) 852-4444

Email: mruel@uchicago.edu

The University of Chicago (UC) and PIER Group have maintained a trusted IT partnership for over a decade, working collaboratively across all aspects of the university's campus and research networking infrastructure.

This long-standing relationship has included:

- Multiple **campus LAN and Wi-Fi refreshes**
- **Core and distribution network upgrades**
- **Next-generation firewall (NGFW)** modernization
- **DDI/IPAM infrastructure** improvements
- Deployment of **research computing solutions** supporting both high-performance computing and advanced network architectures

PIER Group's continued partnership with UC reflects a shared commitment to innovation, security, and performance in support of the university's academic and research mission.

Project Highlights: University of Chicago (UC)

PIER Group has partnered with the University of Chicago (UC) on a range of transformative network infrastructure projects that reflect a decade-long commitment to modernization, scalability, and performance.

- In **2020**, PIER Group led a **next-generation campus Wi-Fi migration**, enhancing wireless connectivity and user experience across UC's campus.
- In **2021**, PIER Group delivered a **comprehensive, rapid-deployment implementation of Aruba ClearPass (NAC)** and installed **9,000 Aruba access points** for the **University of Chicago**—a related project completed within a tight 12-week summer break window, showcasing the team's ability to execute under aggressive timelines.
- Simultaneously, PIER Group supported **UC** in expanding its **ClearPass footprint**, replacing disparate NAC solutions with a **streamlined, unified ClearPass environment**. Plans are currently underway to complete a full **Role-Based Access Control (RBAC)** implementation by 2025.
- Beyond Wi-Fi and NAC, PIER Group has supported UC across core networking, LAN, wireless, and research computing environments—delivering design and implementation services across multiple vendor ecosystems, including **Aruba, Juniper, Arista, and Adtran**.

These initiatives underscore UC's commitment to future-ready network infrastructure, and PIER Group's role as a trusted advisor and implementation partner.



UNIVERSITY OF SOUTH CAROLINA (USC)

USC AT A GLANCE

- 8 campuses in 20 locations
- Main campus spans 444 acres
- More than 55,000 students

Name: Brice Bible

Title: CIO

Phone: (740) 818-5171

Email: bricebible@sc.edu

The University of South Carolina (USC) has partnered with PIER Group on a large-scale initiative to modernize its network infrastructure through a complete **access layer migration to Aruba's unified-edge, policy-driven architecture.**

USC and PIER Group maintain **monthly collaboration meetings** to discuss campus architecture, project milestones, and long-term strategic planning.

Key Infrastructure Components:

- **Aruba ClearPass** for network access control (NAC)
- **Aruba 6300M Series Switches**
- **Aruba Wi-Fi 6E Access Points** (approx. 16,000 units)

PIER Group is delivering **turnkey implementation services**, including full ClearPass deployment and the **physical installation of approximately 3,000 switches and 16,000 APs** across USC's campuses.

Layer 0/1 Infrastructure Upgrades:

In addition to the access layer migration, USC is collaborating with PIER Group on a comprehensive **Layer 0/1 remediation and upgrade initiative**, encompassing:

- **300+ buildings**
- **1,000+ IT closets**

This foundational infrastructure overhaul will address cabling, power, and environmental standards to support long-term scalability and performance. Given the size and scope of the project, implementation will be phased over a **three-year period** in alignment with budget and resource planning.

This partnership underscores USC's commitment to building a resilient, high-performance network that supports innovation, academic excellence, and campus-wide digital transformation.

Project Highlights: University of Southern California (USC)

USC engaged PIER Group to lead a campus-wide modernization of its LAN and Wi-Fi infrastructure. The existing network was significantly outdated, with the majority of switches and access points having reached end-of-life status and no longer receiving vendor support.

Network Modernization Scope:

PIER Group provided **next-generation network architecture and design**, followed by **turnkey installation and configuration services** for the complete replacement of USC's campus LAN and Wi-Fi infrastructure. The new solution includes Aruba's latest switching and wireless platforms, ensuring high performance, scalability, and long-term sustainability.

Layer 0/1 Infrastructure Remediation:

In parallel, USC partnered with PIER Group to address critical **Layer 0/1 infrastructure deficiencies** across campus, impacting nearly:

- **300+ buildings**
- **1,000+ IT closets**

PIER Group is conducting **comprehensive remediation surveys**, documenting the current state of infrastructure and providing detailed upgrade and expansion recommendations. Following the assessment phase, PIER Group is executing the physical implementation of all remediation work—ranging from cabling and power upgrades to space optimization and environmental controls.

Outcome:

This multi-year initiative will result in a **fully modernized and remediated network infrastructure**, positioning USC to support the demands of a next-generation student population. The upgraded architecture will enable advanced academic technologies, seamless campus connectivity, and a secure foundation for digital transformation initiatives.



SHARP HEALTHCARE (SHARP)

SHARP AT A GLANCE

- Four acute-care hospitals
- Four specialty hospitals
- Three affiliated medical groups

Name: Mike Lucent

Title: Networks

Email: mike.lucent@sharp.com

PIER Group has been a trusted partner of **Sharp Healthcare** in Southern California for over a decade. During this long-standing relationship, PIER Group has provided extensive support across several key areas:

- **Aruba hardware procurement and support**
- **Wireless network design and consultation**
- **Wi-Fi coverage surveys and design assistance**

This collaboration has ensured that Sharp Healthcare's network infrastructure remains secure, reliable, and capable of supporting the healthcare provider's mission of delivering high-quality care across its facilities.

Project Highlights: Sharp Healthcare

Sharp Healthcare, a prominent healthcare organization with over 18,000 employees across Southern California, recognized the need to modernize its aging infrastructure to meet the demands of a growing and evolving healthcare environment.

- Over the course of **PIER Group's decade-long partnership**, Sharp Healthcare has leveraged PIER Group's expertise in **Aruba hardware procurement and support, wireless network design, and Wi-Fi coverage surveys** to ensure a seamless and reliable network experience across its facilities.
- As part of this collaboration, PIER Group has provided **comprehensive wireless network design consultations** and **Wi-Fi coverage surveys**, helping Sharp Healthcare stay at the forefront of **technological advancements** while maintaining high network reliability and performance.

This ongoing partnership underscores Sharp Healthcare's commitment to providing top-quality care through a robust and efficient IT infrastructure, ensuring that their staff and patients benefit from reliable and secure network services every day.