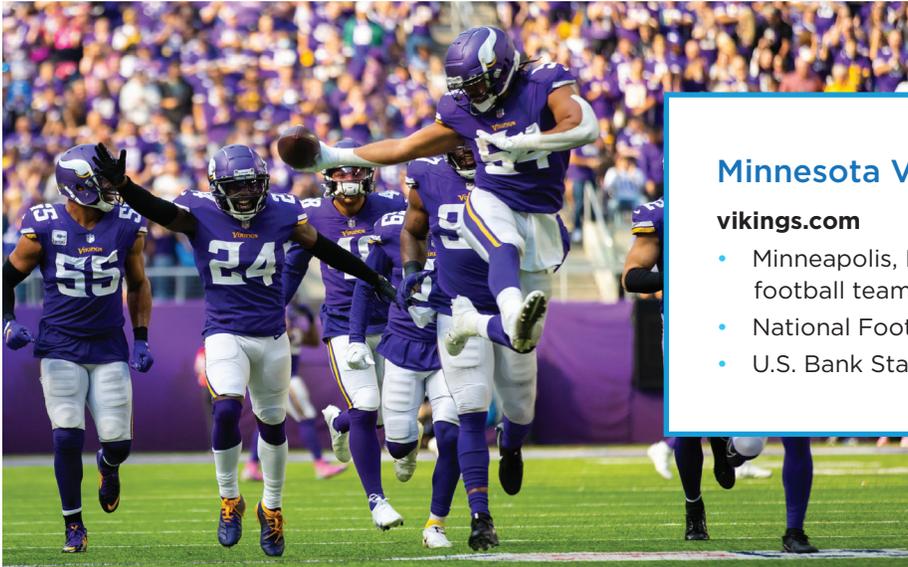


# Home field advantage

The Minnesota Vikings connect fans to exceptional game day experiences in-stadium and beyond



## Minnesota Vikings

[vikings.com](http://vikings.com)

- Minneapolis, Minnesota-based professional American football team
- National Football League member since 1961
- U.S. Bank Stadium home field & headquarters

**99.7%**

tickets purchased via  
mobile app

**16.5 TB**

data streamed  
in single event

**65K+**

fans directly  
connected to Wi-Fi

## Challenges

- Deliver connectivity to 65K+ fans IRT
- Provide 5+ TB data streaming during games
- Increase capacity to reduce networking overhead costs
- Connect headquarters to stadium

## Solutions

- Managed professional services for design, project management and installation
- Fiber-based data circuits to expand bandwidth, reliability and security
- 10 Gbps circuits designed to support growth at stadium and satellite campuses

## Results

- 16.5 TB of data streamed during 2018 Super Bowl by 65K+ attendees and 5,800 media
- Introduction of mobile apps for parking, in-stadium directions and ticketing
- 99.7% of tickets now purchased via mobile app

## Challenge

### Connecting fans to deliver a great experience

When the Vikings set out to build U.S. Bank Stadium and its new headquarters, the Twin Cities Orthopedics (TCO) Performance Center, their primary concern was customer satisfaction. Ninety-eight percent of the fan base has a smart phone, and without high-speed connectivity, those phones are little more than bricks in fans' pockets.

The Vikings previously played at the Metrodome, which lacked the connectivity fans demanded. Entering the Metrodome was like entering a black hole: Fans couldn't send texts, share photos or social media. With games lasting more than three hours, that's a long time to go without connectivity.

"We took the guest experience, which we felt needed to be at the top of our priority list, and we focused on what the guests would need once they arrived," said John Penhollow, Executive Vice President and Chief Revenue Officer. "U.S. Bank Stadium connectivity needs to be correct, powerful and built in a way that allows them to really enjoy their experience."

Whether it was mobile ticketing, navigating the stadium or connecting on social media, the Vikings needed a network that could deliver on that promise.

## Solution

### Network transformation creates a connected backbone for the franchise

The solution is based on 10 Gbps circuits that provide the Wi-Fi bandwidth for fans and operations. Both the stadium and TCO Performance Center rely on a mirrored solution that allows the Vikings organization to leverage its technology investment with each location failing-over to the other, providing resiliency and reliability for fan experiences and operations.

"Lumen delivers all the elements we need to run our operations and deliver an exceptional game-day fan experience," Penhollow said.

Lumen provides Vyvx Solutions for live broadcasting of games and events, allowing for multi-point distribution of TV channels with a single feed. Fiber-based data circuits provide expandable bandwidth, reliability and security while reducing latency issues. The added capacity and network infrastructure at the stadium support the Vyvx circuits utilized on game days.



Our partnership with Lumen helped us create what we believe is the most amazing sports venue in the world."



— John Penhollow  
Executive VP, Chief Revenue Officer  
Minnesota Vikings

## Results and future plans

### Better data—and lots more of it

When the Vikings hosted the 2018 Super Bowl, fans at the stadium used more than 16.5 TB of data, an all-time record for any sporting event at the time. With 67,612 fans and 5,800 media in attendance, plus 103 million television viewers worldwide, this unprecedented demand put the Wi-Fi connectivity, high-speed fiber network and Vyvx solution to the test, allowing more people to stream the game than ever before.

"High-profile events like Super Bowl LII can be stressful, but the reality is we had no blips that night. The Lumen technology held its own, and then some," Penhollow said.

The solution also means that fans now can use the Vikings mobile app to keep them connected to everything in the stadium. As a result, mobile ticketing has increased from 30% to 99.7%.

In the future, Lumen will continue to build out technology for the expansion of the headquarters facility, including the fiber optic backbone for the entire campus.

### Lumen Solution Set

- Lumen® MPLS/IP VPN
- Lumen® Vyvx® Solutions
- 10 Gbps fiber circuits for Wi-Fi connectivity
- SIP Internet and voice service