# Home field advantage

Minnesota Vikings score with state-of-the-art in-stadium network

## Minnesota Vikings

**vikings.com**

- Minneapolis, Minnesota-based professional American football team
- National Football League member since 1960
- U.S. Bank Stadium home field & headquarters

**98.5%**
tickets purchased via mobile app

**16.5 TB**
data streamed

**40K+**
fans direct WiFi connected

## Challenges

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

## 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 Super Bowl 2018 by 65K+ attendees and 5,800 media
- Introduction of mobile apps for parking, in-stadium directions and ticketing
- 98.5% of tickets now purchased via mobile app

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## 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.

"Delivering that fan experience was a big challenge for us and our satisfaction scores reflected that," said Rich Wang, Vikings Director of analytics and engagement. "Fans want the same connectivity at the stadium that they have at home."

They needed a solution that could deliver on this promise.

## Solution

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

The solution is based on 10 Gbps circuits that provide the WiFi 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," said John Penhollow, Vikings VP of corporate and technology partnerships.

Lumen provides the 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.

> "Connecting the two facilities has been a game changer. It has greatly improved communications throughout the organization."
>
> — Cheryl Nygaard
> Director of IT
> Minnesota Vikings

## Results and future plans

**Better data – and lots more of it**

When the Vikings hosted the Super Bowl in 2018, 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 WiFi connectivity, highspeed 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," said Penhollow.

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 percent to 98.5 percent in 2019.

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 WiFi connectivity
- SIP Internet and voice service





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