

# Case Study:

## Missouri Slope, Bismark, ND



### Background

Like most long-term care facilities, Missouri Slope Lutheran Care Center in Bismarck, North Dakota, faced steep challenges. An aging population and increased demand for care created a need to scale services while dealing with increasing staffing shortages and rising healthcare costs – all while being pressured to raise the quality of care and the overall experience for residents.



- Resident Safety
- Asset Management
- Staff Response
- Cybersecurity

### Challenge

With its existing facility at full capacity, Missouri Slope identified the need for additional private rooms, improved parking, and additional staff services. In 2017, Missouri Slope broke ground on a new, state-of-the-art facility with 192 resident rooms, chapel, sunroom, entertainment center, beauty salon, on-site pharmacy, memory care unit, and childcare center. Cooper Lighting Solutions joined the project in 2021.

### Solution

The facility's new lighting system needed to provide immediate ROI and future scalability. The Cooper Lighting Solutions Smart Spaces Platform fit the bill. Combining high-quality ambient lighting with advanced integrated sensing capabilities, such as daylight, power, occupancy, and RTLS (Real-Time Location System), the lighting system was able to displace the disparate systems of the past with greater value at a lower acquisition and ongoing operational cost.

When it comes to cybersecurity, the system is in a class of its own. Ours is the only smart spaces platform offered by a lighting manufacturer to include IEC 62443-4-2 cybersecurity certification with advanced protection against cyberattacks.

Missouri Slope residents have more control over their environment, while the staff has more information at its fingertips than ever before.

### Results

The Missouri Slope staff will leverage its lighting systems to improve staff and resident experiences in several ways:

**Resident activity:** Staying active is key to long-term residents' health. Using RTLS, the staff can access residents' activity patterns and help them achieve optimal levels.



### Product Used

- 64 WaveLinx switchpacks/load controllers
- 81 WaveLinx/Greengate occupancy sensors
- 128 WaveLinx area controllers
- 876 WaveLinx wallstations/dimmers
- 37 HALO undercabinet
- 49 Neo-Ray linear recessed
- 193 HALO linear Wraps
- 2,389 Metalux troffers, flat panels, strip lighting, vaportights, and other specialty lighting
- 171 Sure-Lite exit
- 22 Prevail area/site
- 27 Galleon wall mounted
- 230 HALO downlights

CORE PRO Hardware platform  
CORE Locate App  
CORE Locate Asset Tags



# Case Study:

## Missouri Slope, Bismark, ND

**Memory care:** RTLS will be used to ensure memory care residents are not entering unauthorized locations. If a resident wanders, staff receives automated alerts.

**Nighttime safety:** With WaveLinx PRO and Cooper Lighting Solutions products, Missouri Slope can monitor certain resident activity – like using the restroom at night – even if they're not wearing their BLE-enabled device. This helps staff quickly and easily know where residents are and prevent incidents such as falls.

**Staff and resident assist:** Badges and wearables are equipped with an alert button that residents can use to request assistance. If no one responds within a set period, the request is escalated automatically.

**Asset management:** Assets, such as equipment and resident belongings, can be tagged and quickly located from any mobile or web-enabled device.

**Identifying equipment in the laundry room:** Smaller equipment sometimes becomes wrapped up in linens that are then processed in the laundry. Tagged equipment can be sensed to prevent it from being laundered.

### National Recognition

Missouri Slope was one of the 2022 Integrated Lighting Campaign organizations recognized by the Department of Energy for exemplary performance in the application of advanced sensors and controls in lighting and the integration of lighting with other building and business systems.

#### ZulaFly:

*"ZulaFly has been a longtime RTLS partner of Missouri Slope, providing real-time locating, alerting, and analytics within our dashboards. Cooper Lighting Solutions' Smart Spaces Platform allows us to provide Missouri Slope with additional RTLS functionality."*

#### Stephanie Andersen

CEO, ZulaFly

#### West-Com:

*"Cooper Lighting Solutions' Smart Spaces Platform integrates seamlessly with the West-Com Nurse Call platform to offer Missouri Slope caregivers and residents an even better way to communicate. In addition, this technology further enhances a facility's falls management program, which is top of mind for many healthcare facilities."*

#### Theresa O'Hollaren

Chief Experience Officer/Chief Nursing Officer, West-Com

#### JNL Technologies:

*"The advanced design of JNL Technologies' Quantum door control system that incorporates Bluetooth for wander management dovetails well with Cooper Lighting Solutions' Smart Spaces Platform. The combined offering provides Missouri Slope greater value for their investment and delivers enhanced safety for their residents."*

#### James Gleason

President/Founder, JNL Technologies

#### Missouri Slope Longterm Care Center:

*"Our advanced lighting system is the next step in the evolution of modern healthcare delivery. It's the backbone of several integrations already in play, including Real Time Location System and motion sensing, to alert caregivers to potential patient/resident needs. Ultimately, the new lighting system significantly increases our ability to analyze operations and to improve quality and safety for all who live and work at Missouri Slope."*

#### Reier Thompson

MBA, LNHA, HSE, President/CEO, Missouri Slope