

La Joya ISD Football Stadium
La Joya, Texas

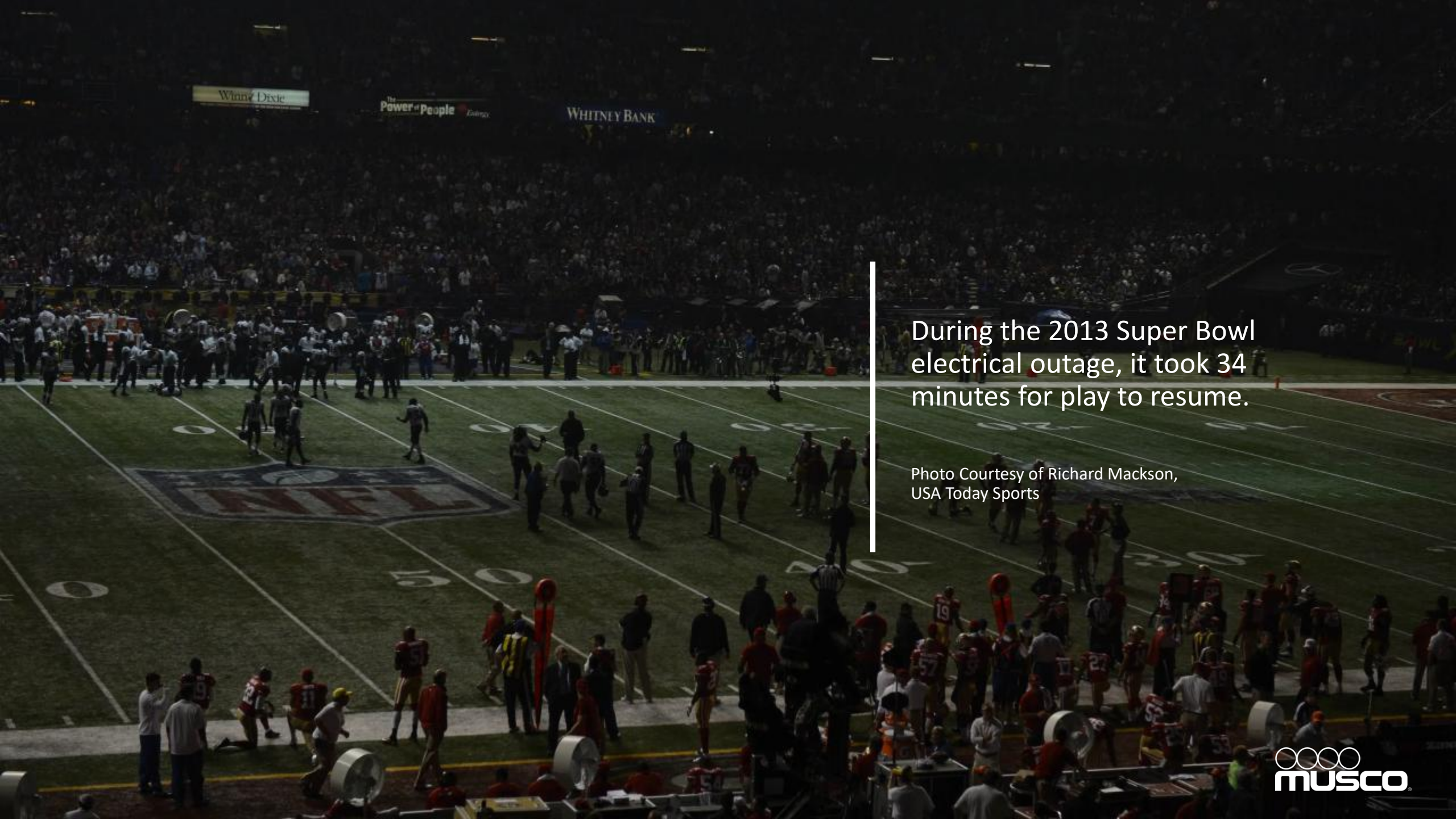
Trends in Sports Lighting



TREND 1

Emergence of LED for Sports Lighting

Potential LED Benefits



During the 2013 Super Bowl
electrical outage, it took 34
minutes for play to resume.

Photo Courtesy of Richard Mackson,
USA Today Sports

BEFORE: PREVIOUS HID EQUIPMENT



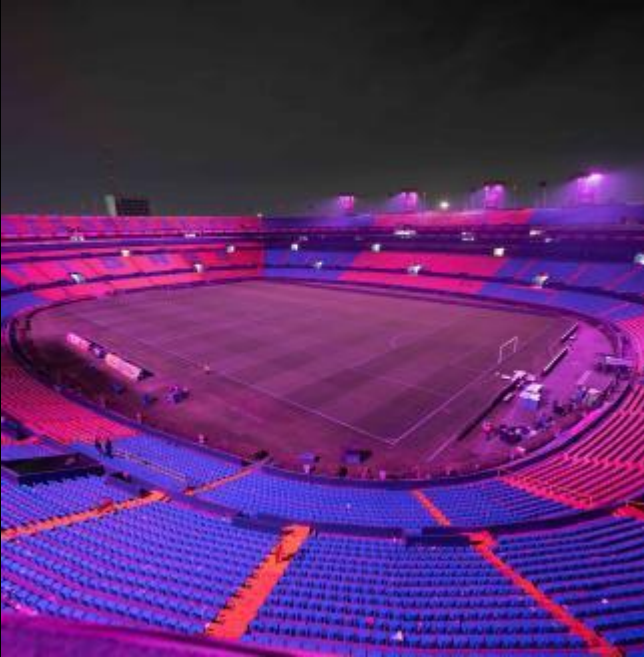
La Joya Independent School District
La Joya, Texas

AFTER: MUSCO LED SYSTEM



LED

Popularized for sports lighting in the past decade



How it Works

Electrical current passing through a microchip causes tiny diodes to glow.

Advantages

Instant, energy efficient, cost-effective, long lifespan

Limitations

Technology itself doesn't guarantee lighting performance and reliability

TREND 2

LED Opportunity

Rewards and Risks

Musco: Total Light Control
– TLC for LED™

Other LED Manufacturer

All LED is **NOT**
created equal

Performance
and Reliability

Service and Warranty

System vs. Fixtures

An aerial night photograph of a sports complex. Several baseball fields are visible, illuminated by bright stadium lights. The fields are arranged in a cluster, with a central building and parking area. The surrounding area is dark, with some trees and a road visible. The text "System vs. Parts" is overlaid in the center of the image.

System vs. Parts

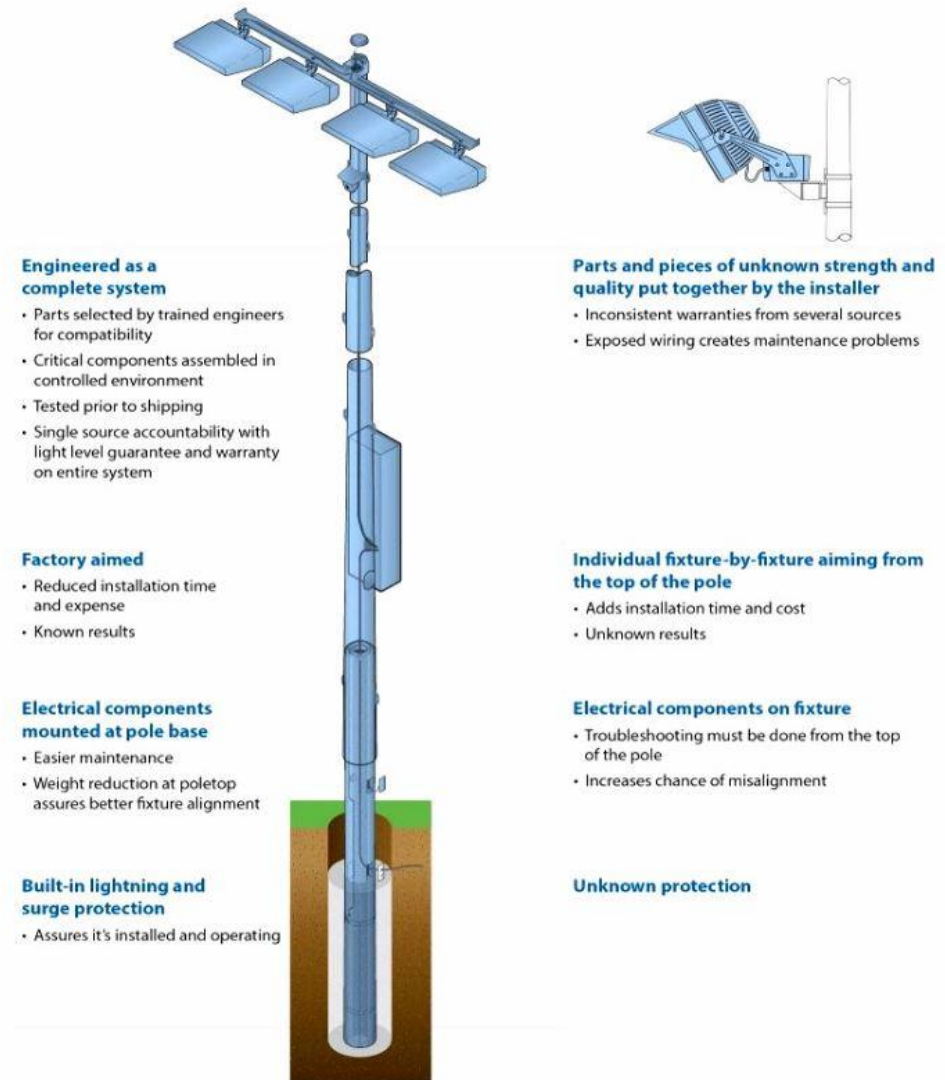
Mill Creek Regional Park GA

Systems Approach vs Parts and Pieces

Other manufacturers offer **parts**, disparate pieces of unknown strength and quality put together by the installer or general contractor.

Implications for Parts Approach

- Inconsistent warranties from multiple sources
- Increased installation time and cost
- Exposed wiring can create maintenance problems
- Higher probability of pole misalignment threatens system integrity and results
- Individual fixture aiming from top of pole builds costs and likelihood of error
- Non-remote drivers mean troubleshooting must be done from the top of the pole, creating more hassle and expense

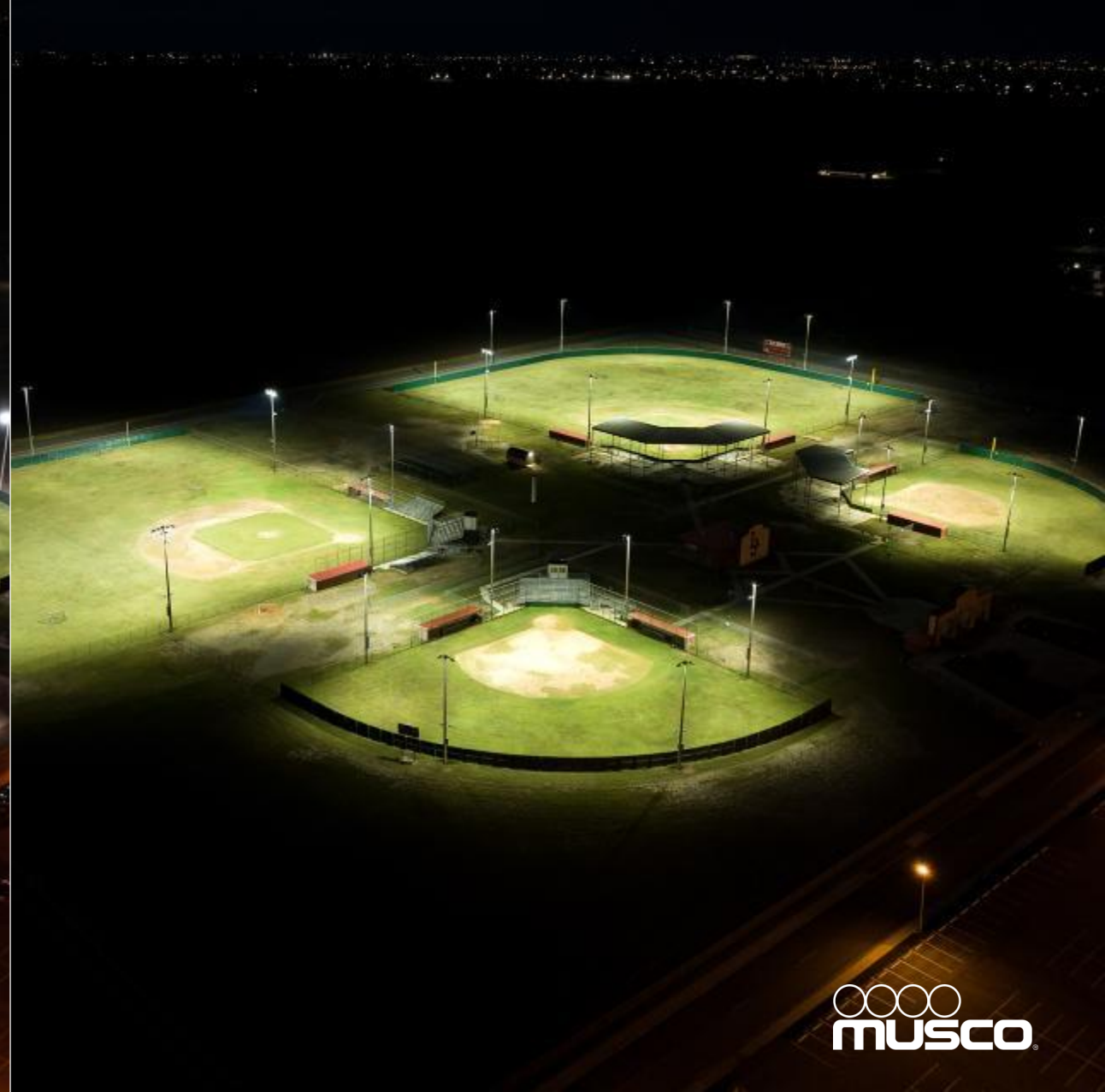


BEFORE: PREVIOUS LED EQUIPMENT



La Joya Independent School District
La Joya, Texas

AFTER: MUSCO LED SYSTEM



BEFORE: PREVIOUS LED EQUIPMENT



Woodinville High School
Woodinville, Washington

AFTER: MUSCO LED SYSTEM



BEFORE: PREVIOUS LED EQUIPMENT



US Naval Academy Farragut Fields
Annapolis, Maryland

AFTER: MUSCO LED SYSTEM





If you're going to get 25 or 30 years of usage of a lighting system, you want to make sure you're getting the best available technology from a company who will be there to back it up.

Jeff Barnes, Athletic Director
Hammond School

TREND 3

The Rise of Controls Capabilities

for Convenience, Flexibility, & Maximum Field Usage



Control-Link[®]



Control-Link®

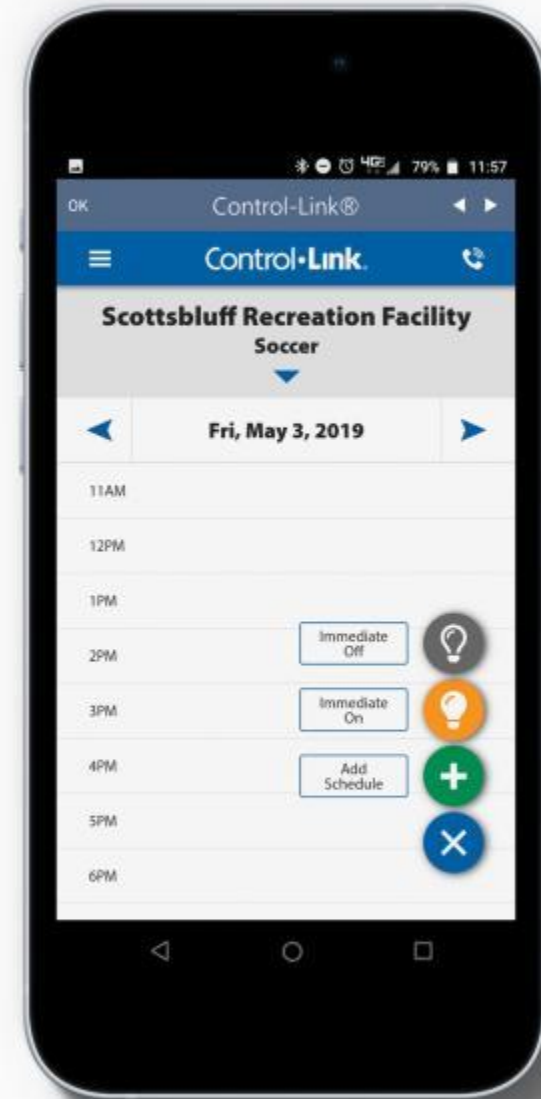
Turn lights on and off from anywhere

Smartphone and laptop compatibility

Easy-to-use scheduling

Proactive system monitoring

24/7 service and support





It's just like having another employee next to you, helping to support the system, and it's one less thing we have to worry about in our day-to-day jobs.

Candice Thompson
Director of Operations
Central Consolidated School District

Warranty and Service



For anything that we invest a lot of money into, we want the highest quality that we can find, and I don't know that you can find higher quality in the lighting world than Musco.

Dr. Rob Brown, Superintendent
Lumpkin County Schools

Lumpkin County High School
Dahlonega, Georgia



TREND 4

Advances in Entertainment Technology

Allowing New Levels of Experience for Players and Fans

Entertainment Technology

Advanced control capabilities

Color changing lights,
pole accents, and effects

Integration with third-party
technology and equipment



Tupelo High School
Tupelo, Mississippi



AT&T Stadium Dallas Cowboys
Arlington, Texas



Cincinnati Bengals
Cincinnati, Ohio



Minute Maid Field, Houston Astros
Houston, Texas



Flexible Controls



Ravsten Stadium
Idaho Falls, Idaho



Temple Independent School District
Temple, Texas



TREND 5

Emphasis on Responsible Lighting Practices

to Protect Players, Neighbors, and the Environment

Responsible Lighting Practices

Safety is always a high priority

Environmental sustainability

Night sky protection

Wildlife protection

Neighbor relations



Salado ISD
Salado, Texas



To anyone who's needing new lights,
my advice would be: Don't
shortchange it. Go with the best.
Musco's name always comes up for
a reason; they have the knowledge
and experience to do it right.

Steve Simpson,
Maintenance, Grounds, and Fields Manager
Northshore School District

Inglemoor High School
Kenmore, Washington



La Joya Independent School District
La Joya, Texas



TREND 6

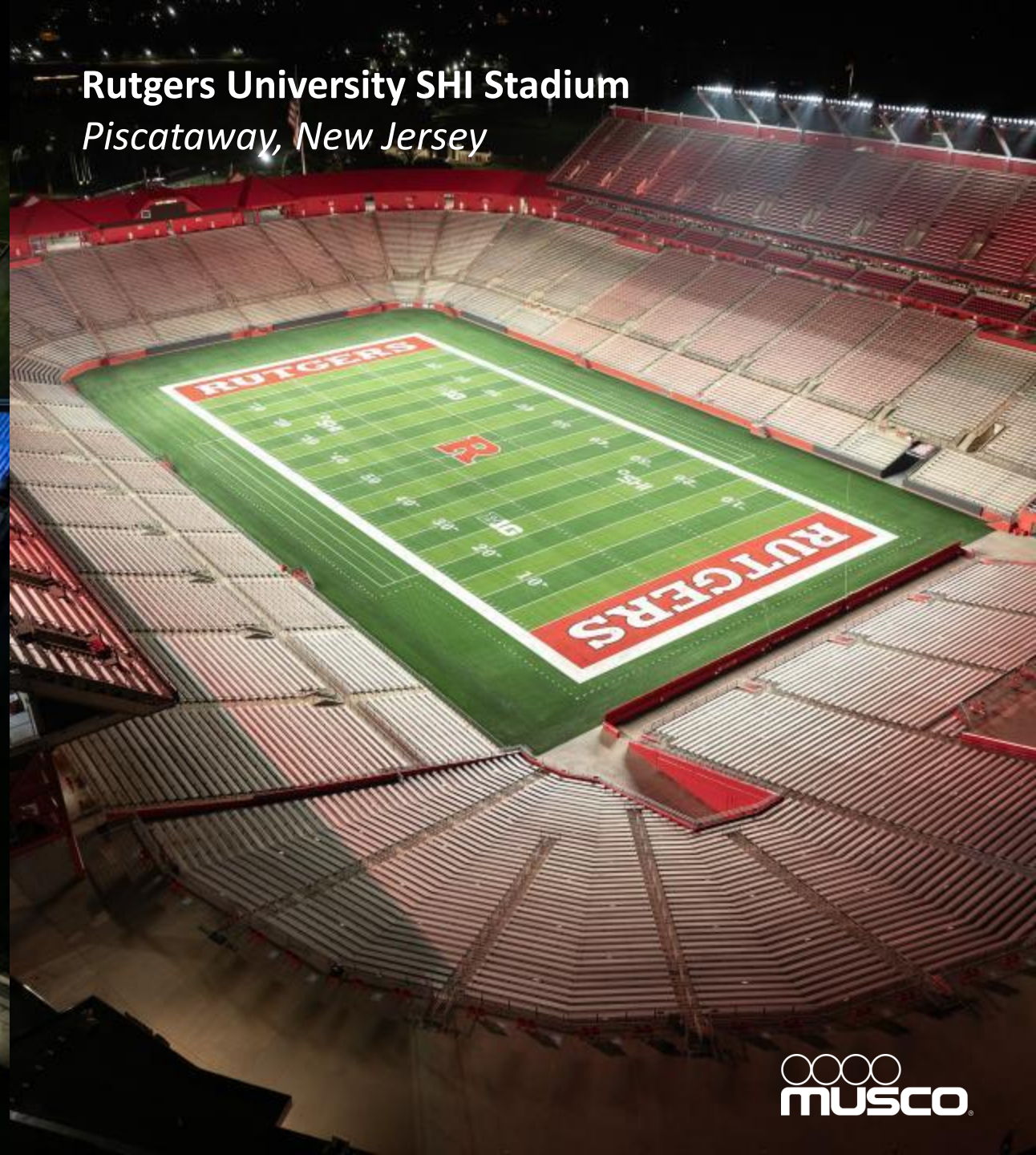
Here to Stay—at Every Level of Play

Everything we've talked about today...

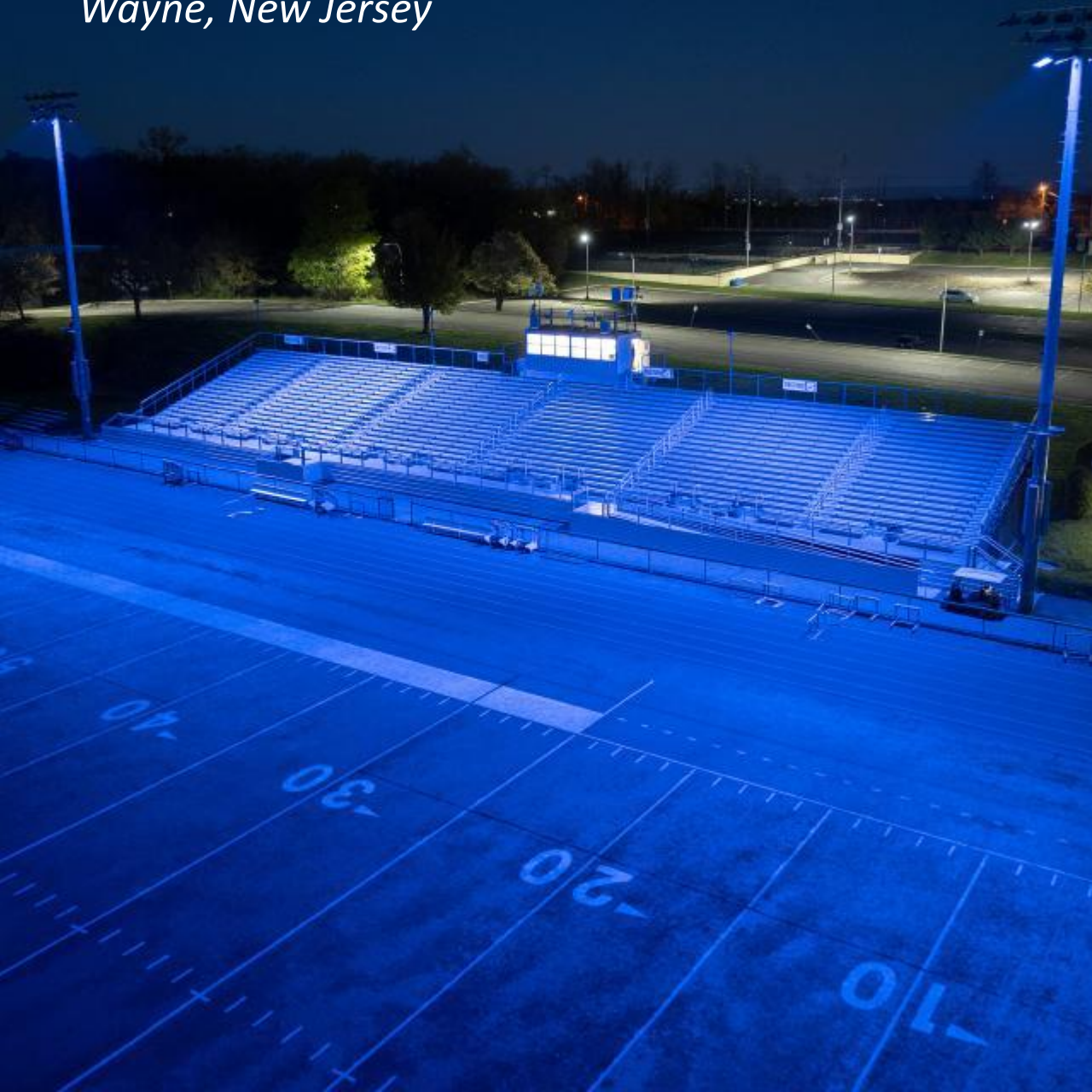
Passaic County Vocational Technical Institute
Wayne, New Jersey



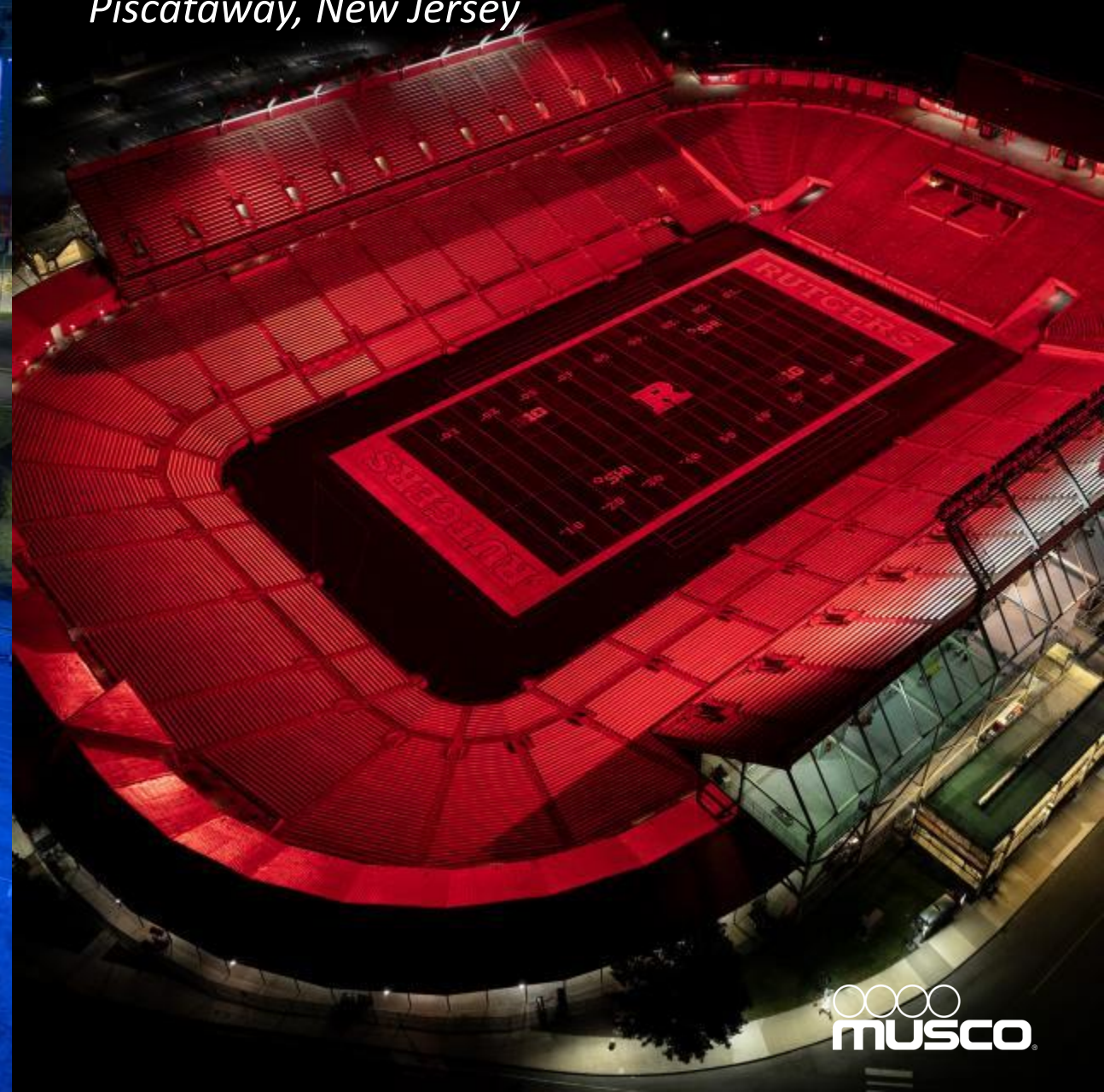
Rutgers University SHI Stadium
Piscataway, New Jersey



Passaic County Vocational Technical Institute
Wayne, New Jersey



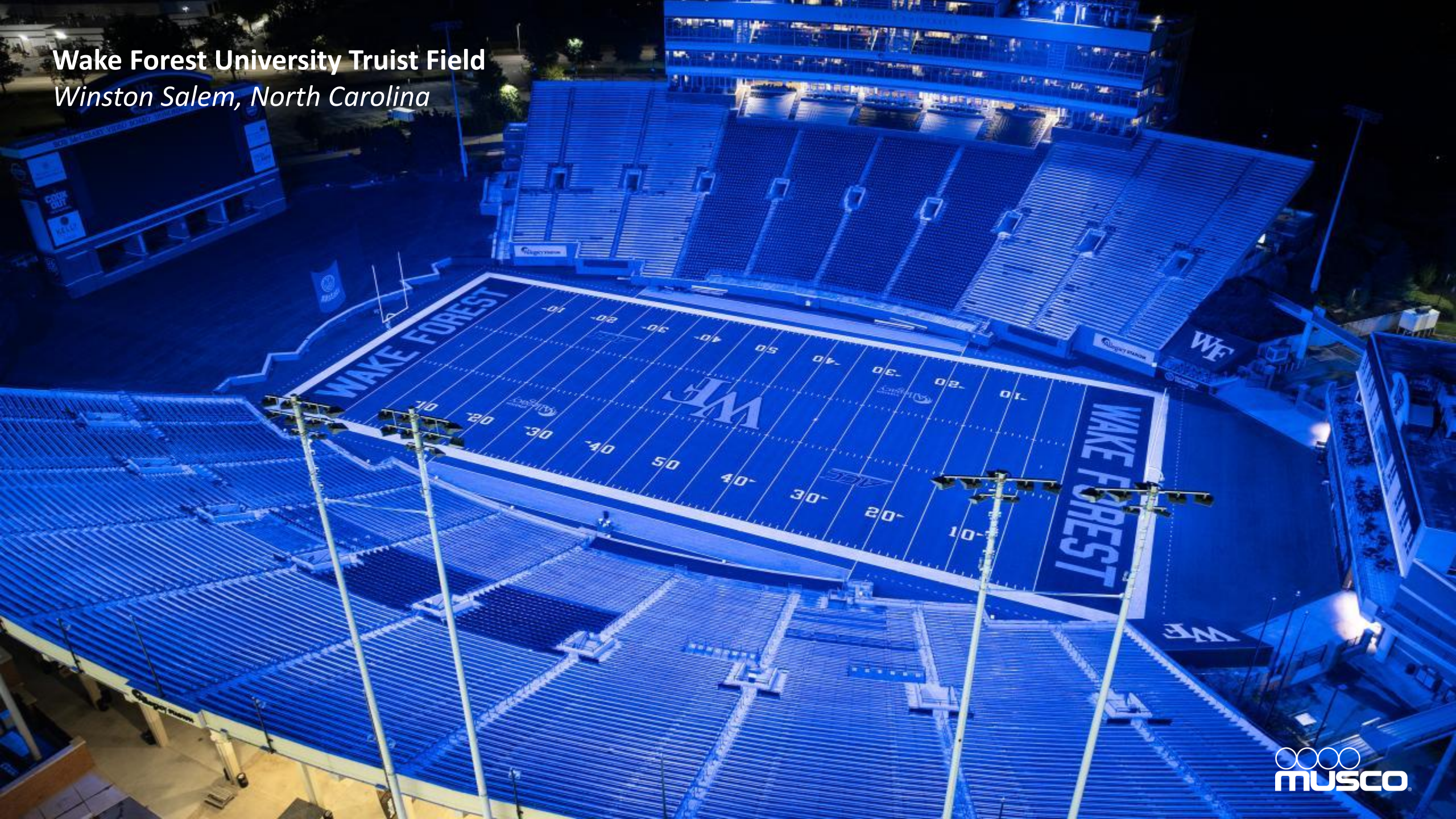
Rutgers University SHI Stadium
Piscataway, New Jersey



Wake Forest University Truist Field
Winston Salem, North Carolina



Wake Forest University Truist Field
Winston Salem, North Carolina



Lumpkin County High School
Dahlonega, Georgia



Neshannock High School
New Castle, Pennsylvania



Biloxi High School
Biloxi, Mississippi



Summary/Key Takeaways

Key Takeaways

All LED is not created equal.

System controls should put you in control.

Field lighting can provide the show, or be part of the show—the sky's the limit.

Responsible lighting practices can help achieve organizational sustainability goals.

LED is here to stay at every level of play.

Q & A

What questions do you have?

Thank You

www.musco.com

lighting@musco.com

800-825-6030

