

Hunnewell Fields Athletic Lighting Review

Bob Parks

Smart Outdoor Lighting Alliance (SOLA)

May 20, 2021

Goals of Assessment

1

Evaluate Existing
Conditions,
Opportunities for
Improvement

2

Verify existing Lighting
plans

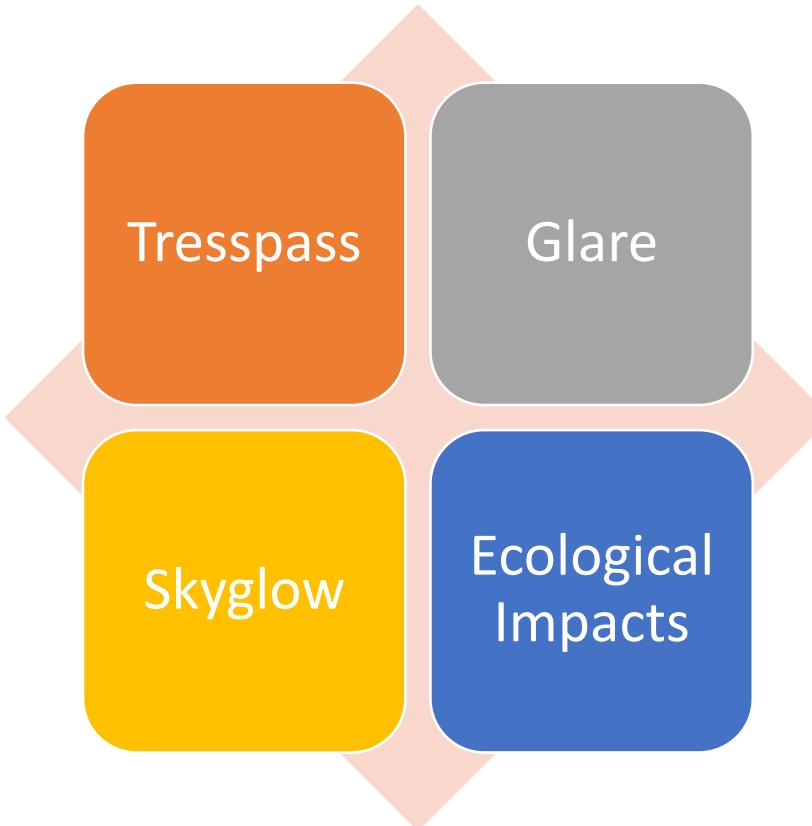
3

Calculate Baseline
Lighting Levels

4

Explore Costs and
Benefits of Lighting
Modifications, potential
addition of lighting
system at High School.

Adverse Lighting Impacts



Initial Findings

- **Hunnewell Multipurpose Diane P. Warren Field and Tennis Courts**
 - Metal Halide (HID) system installed ~20 years ago
 - Used some shielding to minimize off-site impact
 - Still creates substantial glare and light trespass to neighborhood residences
- **Reidy Field**
 - Metal Halide (HID) system Installed ~15 years ago
 - Uses the best shielding available for HID
 - Minimizes glare and light trespass
 - Still under manufacturer's warranty

Tennis Courts





Diane P. Warren Multipurpose Field



Reidy Field



Adverse Off-site Impacts



Glare







Light Trespass









Driver Distraction





Ecological Impacts

Sky Glow

1681



Questions?

Please use the chat function on the webinar.

High School Track and Field



Initial Findings

- **Track and Field**
 - Proposed LED System will use the best fixtures available for type of field
 - Design should meet IDA Community Friendly Lighting Program Requirements
 - Energy reduction of 60% over traditional HID systems
 - Innovative fixture design/shielding will minimize off-site impact
 - Combined fixtures will introduce 6.75 million lumens into the community
 - This will create glare and light trespass for neighborhood residences and increase sky glow
 - Only real mitigation strategy available is to use appropriate lighting levels and scheduling.



Proposed Musco TLC LED System











Glare





Light Trespass





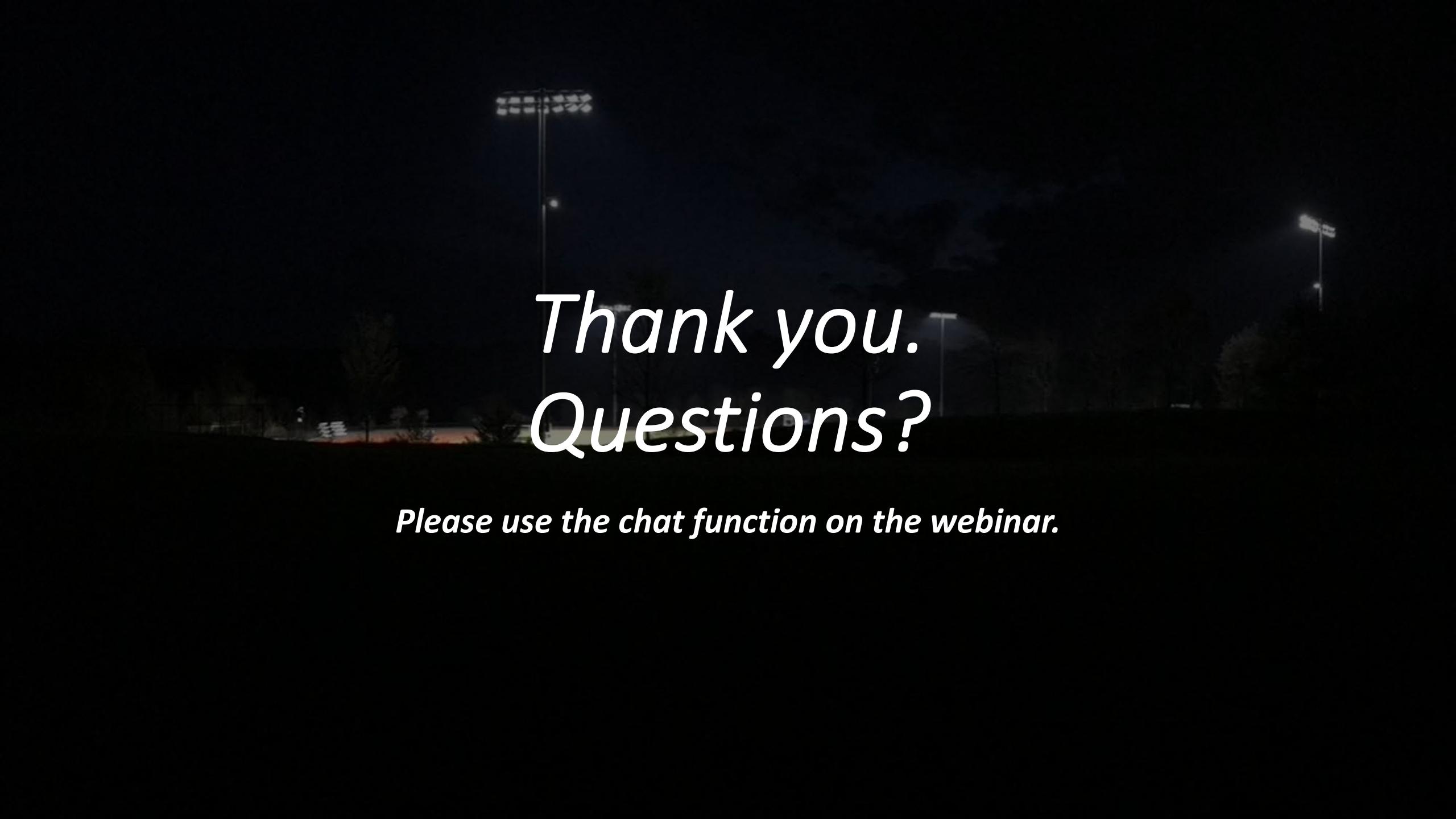
Musco Initial Estimates

- **Reidy Multipurpose Field** - \$80,000 - \$90,000 plus labor
- **Hunnewell Tennis Courts** - \$85,000 - \$95,000 plus labor
- **Hunnewell Multipurpose Field** - \$125,000 - \$135,000 plus labor
- **WHS Track and Field** - \$305,000 - \$315,000 plus labor

Recommendations



- *Conduct extensive public outreach and education*
- *Use appropriate class of play lighting levels*
- *Use scheduling app to ensure lights are only on when needed*
- *Install Hunnewell Multipurpose Field LED as a proof of concept before proceeding with others*



*Thank you.
Questions?*

Please use the chat function on the webinar.