BUILDING AND SITE LIGHTING ASSESSMENTS

ABOUT ME

- Partner at Alaska Architectural Lighting
- Manager of lighting controls and specification
- Been in the industry for 12 years

GOAL - WHAT ARE WE TRYING TO ACCOMPLISH

- Increased efficiency
- Reduced Maintenance
  - What is L70?
- Increased Function
- Safety
- Increased educational outcomes

INTERIOR ASSESSMENTS

- Equipment required?
- Survey of existing
- Definition of space

INTERIOR ASSESSMENTS

- Fixture replacement – What tools do we have?
  - Approximate equivalencies?
  - Software

EXTERIOR ASSESSMENTS

- Equipment required?
- Survey of existing
- Fixture replacement – What tools do we have?
  - Approximate equivalencies?
  - Software

EXTERIOR ASSESSMENTS

- To what level does this area need to be lit to?
- Can we determine the LZ?
  - Does it need to change?

ECONOMIC ANALYSIS

- Energy isn't the only variable
- Available resources

ALASKA REGIONAL HOSPITAL – CASE STUDY

HID LIGHTING

GROUND VIEW

ROOF VIEW

EXISTING

- Unmaintained HID lighting.
- Existing lighting consisted of (89) 1000w fixtures and (43) 250w fixtures
- Existing line voltage photocell

ANALYSIS OF AREA

- Existing fixture wattage for the complete site was 111kW.
- Accepted lighting retrofit solution consisted of 23kW.
- Based on their annual usage this retrofit is saving them $30,000.00 per year on energy.
- Not only did this improvement save the hospital money, but it increased the safety in the lot.

BEFORE AND AFTER

HID LIGHTING

LED LIGHTING

BEFORE AND AFTER

HID LIGHTING

LED LIGHTING

POSSIBILITY FOR INCREASED SAVINGS

- Lighting control strategies
  - Dimming
  - Occupancy sensing

QUESTIONS?