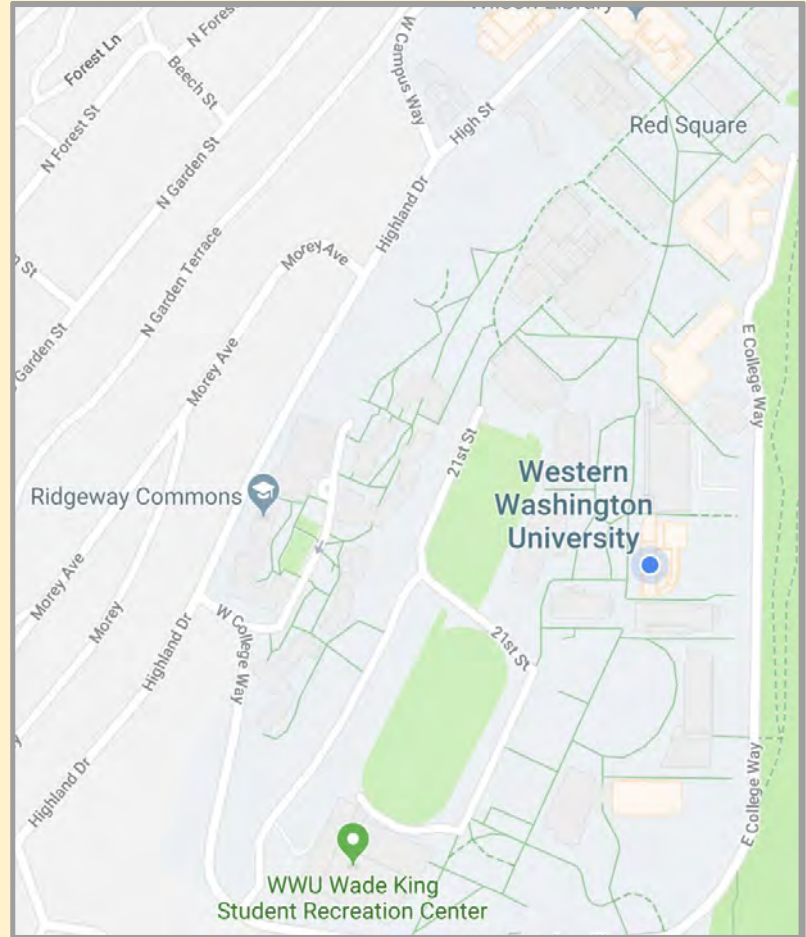


Lighting the Way: Improving Lighting Conditions on the Ridge

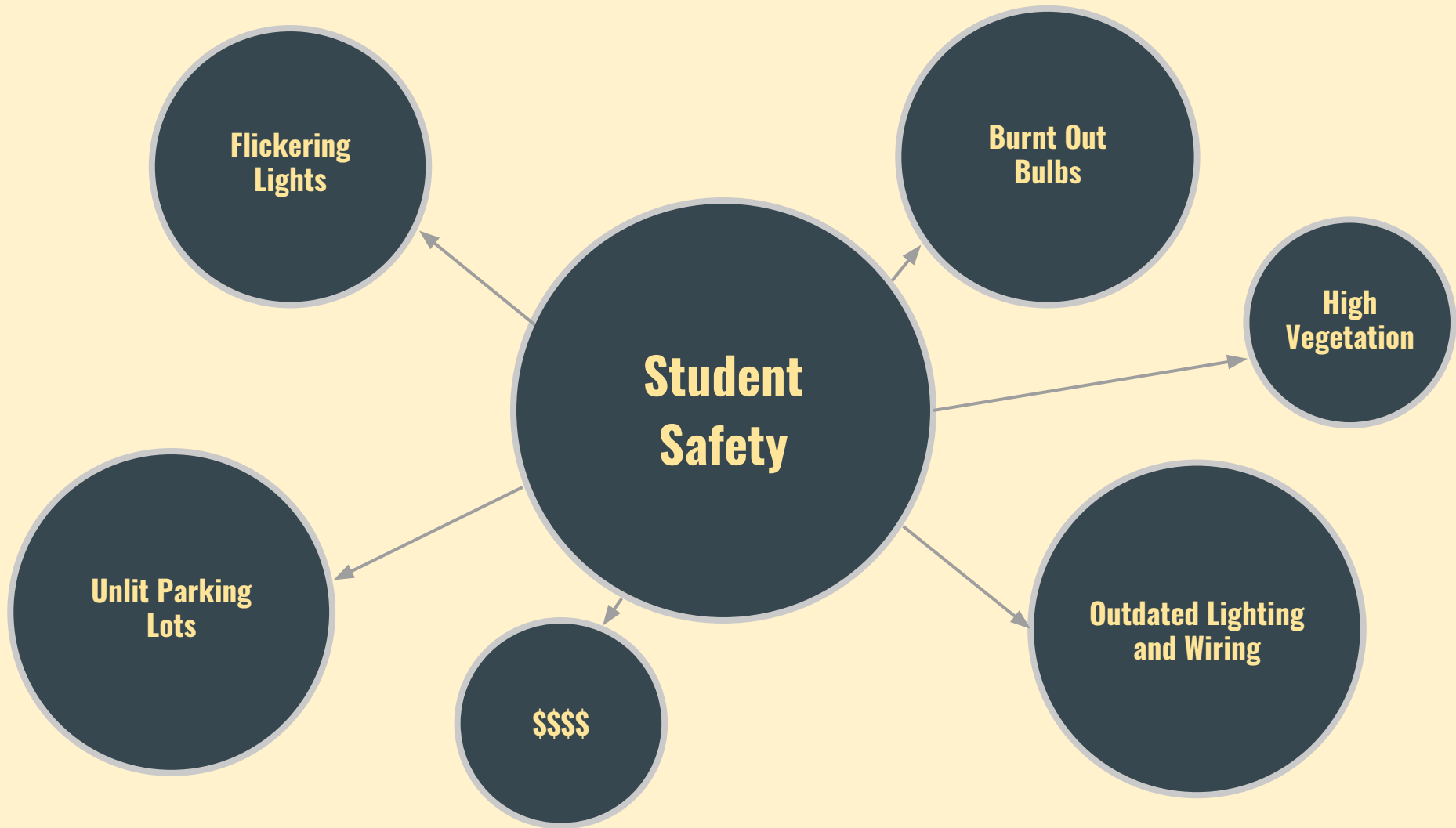


By: Alex Ericson & Joe Krivichi

The Ridgeway Complex



The Problem



**Flickering
Lights**

**Burnt Out
Bulbs**

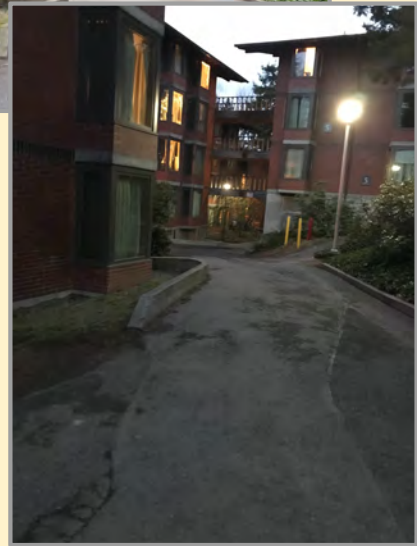
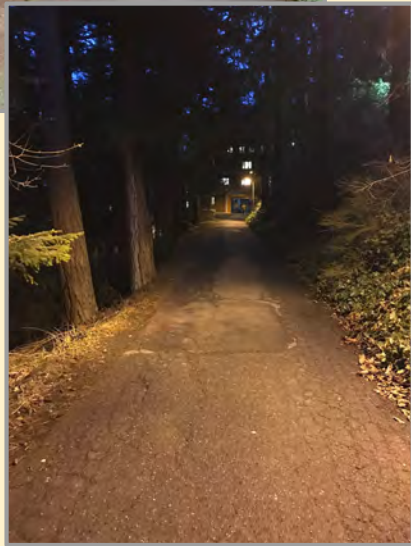
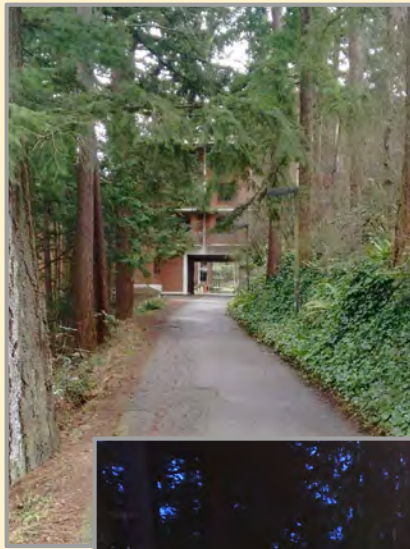
**High
Vegetation**

**Student
Safety**

**Outdated Lighting
and Wiring**

\$\$\$\$

**Unlit Parking
Lots**

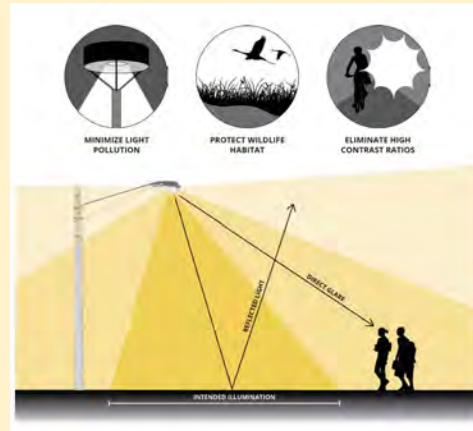




Case Studies

University of Washington-Seattle

- Comprehensive analysis of campus lighting
 - Current conditions
 - Student input
 - Data analysis
 - Recommendations for future projects



Hawaii Pacific University Lighting Renovation

- Josh Pridge: (2012)
 - Lead Designer
- Improve the Lighting
 - Meant for sustainability and safety
- Timeline
 - 3-4 months



Data & Research

Student Survey

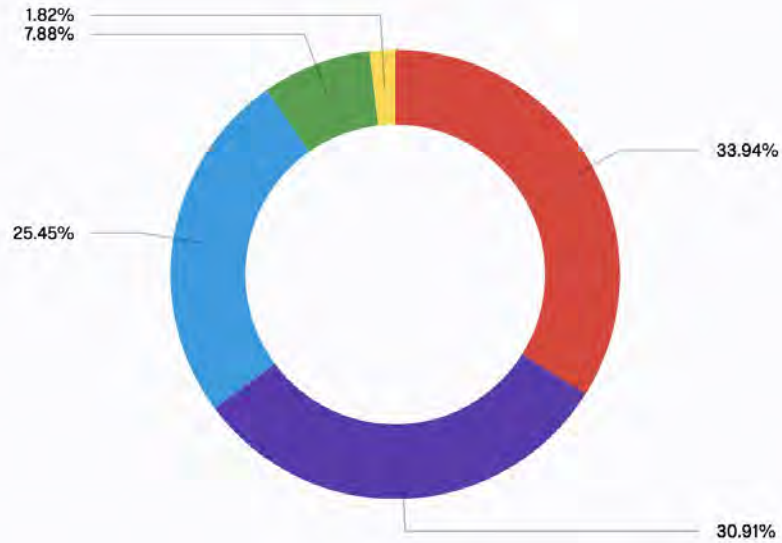
“I don’t change my route, but I can see why people would.”

“Many of the lights are dim or out. More lighting is desperately needed!!!”

“I take the same route no matter what.”

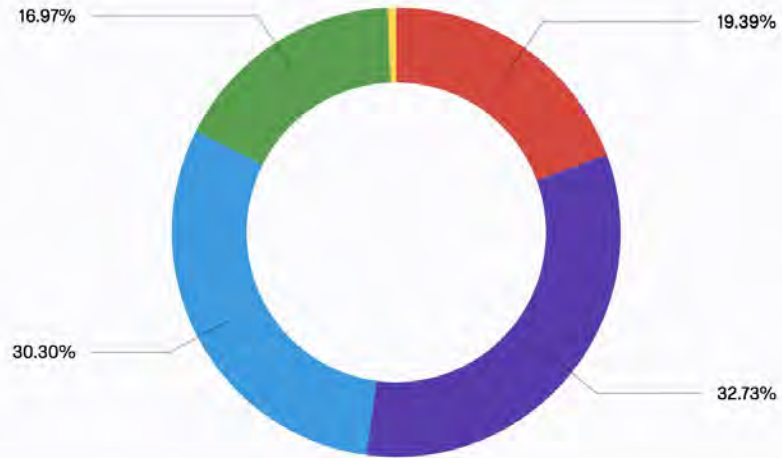
“The lighting is ok, but the high bushes make me feel unsafe.”

How much does lighting contribute to your feeling of safety?



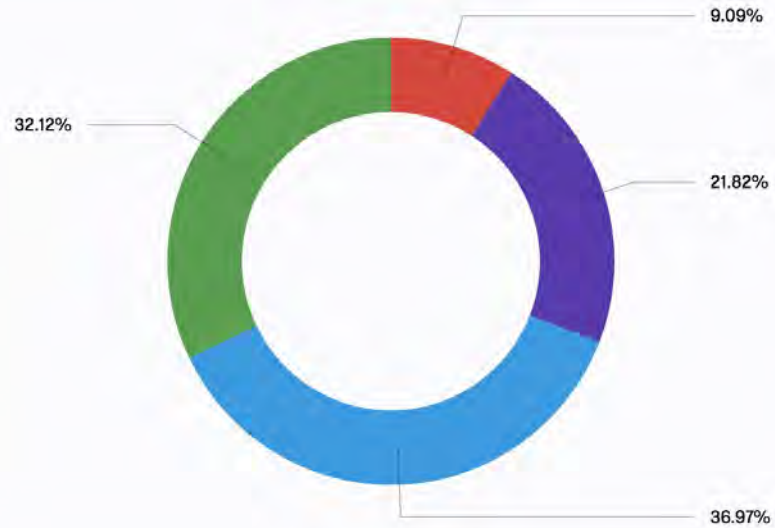
■ A great deal ■ A lot ■ A moderate amount ■ A little ■ None at all

Rank how safe you feel walking on the Ridge in the dark?



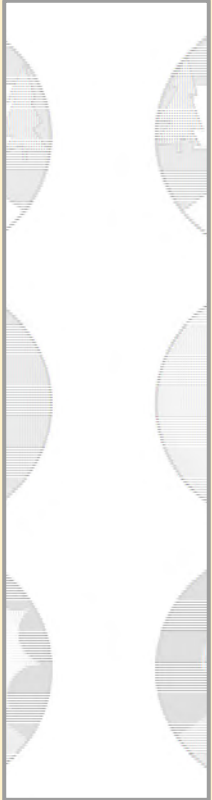
Safe Somewhat safe Somewhat unsafe Unsafe No opinion

Do you change your walking routes when it is dark?



Every time Most of the time Sometimes Never

Lighting Considerations



Sense of Comfort

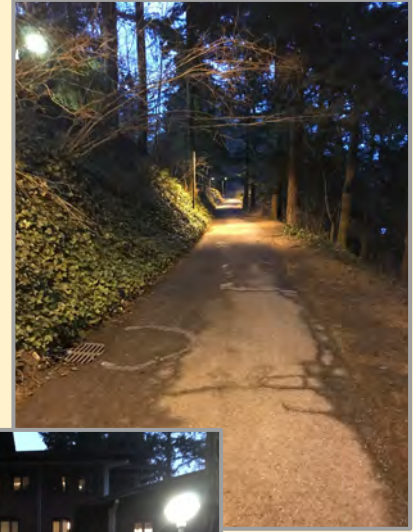
Highlight Connections and Destinations

Long-term Plan for LED Replacement

Avoid High Contrast

Appropriate Scale

Dark Sky Association



Recommendations & Conclusion

Recommendations

Short Term		
Recommendation/Goal	Cost	Benefit
Replace bulbs with LEDs	\$62.50 <ul style="list-style-type: none">\$2.50/bulb x 25 bulbs	Increase light intensity and create consistent lighting along path
Replace fixtures underneath dorms	\$300 <ul style="list-style-type: none">\$100/fixture x 3 fixtures	Old fixtures do not support LED bulbs, new fixtures will allow for consistency
Improve existing safety program		Provide information to students about safe travel practices
Long Term		
Contribute student data to Facilities project	Priceless <ul style="list-style-type: none">\$0	Provide a student voice to the conversation already being had by campus administration about lighting issues



Conclusion

The key to adequate lighting is thoughtful implementation!