

The background is black and filled with numerous colorful four-pointed stars in shades of orange, yellow, green, blue, and pink, scattered across the entire frame.

BROADCASTING LIGHT POLLUTION

A Presentation By Chase Gumbs

Purpose

- **Gain knowledge** on light pollution and its **negative effects** to society and our environment.
- **Create a YouTube video** that can **increases public outreach** on light pollution and inspire action.
- Present the video from the **persona of a local official**.



Rationale



Why Did I Choose the Local Official Persona?

- A double major in Environmental Engineering and EPP (Engineering and Public Policy).
 - I aim to understand the **bridge between public concern to legislation.**
 - I wish to gain **practical knowledge** of how **local policies** are formed and implemented.



Rationale



Why A YouTube Video?

- Were in the digital age. 83% of U.S. adults mention ever using YouTube (Gottfriend, 2024). This signifies the platforms popularity and ability to be a tool used for outreach.
- When edited properly (considering the use of text, photos, videos, and tone of voice), videos can be an effective learning tool (Brame, 2016).
- A person can watch a video as many times as they want after it being shared with them.

Concept

Video Format (< 6 min.)

- Explains light pollution and its dangers
- What Pittsburgh is currently doing to solve the issue
- What the every day civilian can do
- Addresses safety concerns
- Call to Action



Thumbnail of video

Approach

When & Where

- For local officials to use before interactive workshops, presentations, or Q&A sessions.
- To be presented at high schools, community meetings, libraries, expos, etc.

Target Audience

- High school students and beyond, with no prior knowledge of light pollution.



Approach

Intended Lessons Learned



1. I understand that light pollution is a harm to myself, animals and the environment
2. I understand what the Lighting Ordinance and LED Modernization Project aim to achieve
3. I know at least one valuable lighting practice that I can incorporate into my life to reduce my impact on light pollution

These lessons learned should provide them with the knowledge to engage in their community and spread the word!

Research & Development

Main Sources



- LED streetlight initiatives in other cities.
- Pittsburgh Light Ordinance
- Weekly Readings which prompted interest in other articles
- Updates on the Ordinance

Interviews



Two Local Interviews

- Brian Belowich and Andrea Rooney

One Remote Interview

- Interview with Bettymaya Foott

Production Process

Planning and Scripting

- 2 Page Script for the voice over
- List of shots/b-roll
- Gathering original photos



Editing

- DaVinci Resolve 18



Use of Non-Copyright Clips

- Sourced Non-Copyright b-roll through YouTube
- All sources (articles, videos, and audio) are credited at the end of the video



An aerial, slightly blurred photograph of a city skyline. In the foreground, a tall, dark skyscraper is on the left, and a large, light-colored building with a flat roof is on the right. A green and blue sports field is visible in the lower-left corner. The background shows a dense cluster of various skyscrapers under a clear sky. The word "BUILDINGS" is superimposed in the center in a large, white, bold, sans-serif font.

BUILDINGS

Personal Lessons Learned

- Light pollution is a far more serious issue than I initially realized.
- This research challenged me to structure and produce content in an unfamiliar way.
- Developing the final paper helped me consider how the relevance of my research comes together in a cohesive video.



References

Gottfried, J. (2024, January 31). *Americans' social media use*. Pew Research Center.
<https://www.pewresearch.org/internet/2024/01/31/americans-social-media-use/>

Brame, C. J. (2016). Effective Educational Videos: Principles and Guidelines for Maximizing Student Learning from Video Content. *CBE—Life Sciences Education*, 15(4). <https://doi.org/10.1187/cbe.16-03-0125>

Thank You For Listening!

I will now be taking questions.

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