

## ENVIRONMENT AND ENERGY COMMISSION

**Meeting Minutes**  
**August 1, 2023, 7:00 p.m.**

**Village Hall, Room 101**

Commission Members Present: Liz Lukehart (Chair), Tejas Shah, Darryl Baker, Ramona Blaber, Cassandra West, Lisa Boone, Emily Neumann (arrived 8:10)

Commission Members Absent: Carly Provost-Rizor, Madisyn Burke (attempted to call in)

Staff Present: Marcella Bondie Keenan, Chief Sustainability Officer; Abby Zielinski, Sustainability Coordinator

**Call to Order:** The meeting was called to order by Chairperson Lukehart at 7:00 p.m.

1. **Approval of Agenda:** A Motion was made to approve the agenda, and it was unanimously approved with no revisions.
2. **Approval of Minutes:** A Motion was made to approve the previous meeting minutes, it was unanimously approved with no revisions.
3. **Public Comment:** There was one public comment read by Staff Liaison Zielinski. The comment is attached with these minutes.
4. **International Dark Sky Association Presentation:** Guest presenter, Ken Walczak, shared information on Dark Sky concepts, including the impacts of light on wildlife and humans, the lack of correlation between brighter outdoor light and crime, energy usage, and solutions to reducing light pollution. Presentation slides are attached with these meeting minutes.

Commissioner Boone asked about the status of the Village's light replacements. Staff Liaison Bondie Keenan replied that the alley light replacement project using Dark Sky compliant lights is in progress.

5. **Parkway Planting Ordinance:** Staff Liaison Zielinski presented on community feedback on the draft Parkway Planting Ordinance, and she presented on the revised draft Parkway Planting Ordinance. Presentation slides are attached with these meeting minutes. Discussion included the following:
  - Commissioner Boone asked how existing structures/fences/containers in the parkway would be dealt with once a Parkway Planting Ordinance is adopted. Commissioner Boone asked if the ordinance could be "grandfather in", or give permission to leave existing structures/fences/containers in place.

- Commissioner Blaber asked how invasive and aggressive plants are addressed in the ordinance. Staff Liaison Zielinski explained that the updated draft includes under the definition of Plantings, that “The Village Forester shall maintain a list of native and pollinator plants that are recommended for planting in Village parkways and a list of plants that are discouraged from planting in Village parkways.”
- Commissioners Lukehart and Shah recommended that structures and containers of a certain size are allowed in the parkway without a permit and insurance. Commissioner Lukehart suggested that the ordinance includes a weight threshold for containers that are allowed without a permit.
- Commissioner Shah asked that the \$500,000 insurance requirement be reconsidered because it may be a burden to parkway landscaping for residents. Commissioner Shah requested further explanation of how the value of \$500,000 was determined.
- Commissioners Lukehart and West asked that the Intent section of the ordinance is revised to promote a minimum of the planted area as 70% native or all native.

The EEC voted to table this item and requested to receive additional information to address their concerns (listed above) prior to voting on a recommendation to the Board.

6. **Work Planning for Waste Rate Ordinance:** Staff Liaison Bondie Keenan explained existing waste rates in Oak Park, Climate Ready Oak Park waste reduction goals, and example rate structures that consider factors of affordability, and/or waste reduction. Examples of rate structures include Pay-As-You-Throw, Customer Charges, and Minimum Bills. The discussion included the following:

- Commissioner Shah would like the EEC to consider price sensitivity, or at what point will residents’ behavior change in response to the waste rates. Liaison Bondie Keenan explained that there are research papers on this and a survey for Oak Park could be conducted.
- Commissioners requested that Staff follow up with the Environmental Services Manager to confirm if the Village pays for recycling services and to confirm if residents currently have the option to opt-out of recycling.
- Commissioner Lukehart is interested in a pilot project where households would receive composting for free.
- Commissioner Boone is interested in an inclining block rate, where the price increases as a customer uses more of the service. Commissioner Neuman noted that the inclining block rate may not be effective for the people that are creating the most waste, if cost is not a burden. Commissioner Shah agreed that the waste rate structure needs to impact the people who are creating the most waste. Commissioner Boone and

Blaber noted data comparing residents' usage to neighbors could help incentivize people.

- A community member, McLouis Robinet, offered to present a recommendation for increasing composting in the Village at a future meeting.
- The EEC recommended that the Village conduct a waste rate study. The EEC's goal is to determine the most affordable way to increase composting and reduce waste. The EEC would also like to develop an outreach plan to the community and focus on equity impacts. The EEC will plan to make a recommendation to the Board next year on a new rate structure.

7. **2023 EEC Work Plan Troubleshooting:** There were no questions or concerns about workplan items.
8. **New Business:** The EEC had no new business items to discuss.
9. **Adjourn:** At 8:31 p.m. a motion was made, seconded and unanimously approved to adjourn the meeting.

Anonymous Comment for EEC

Received via email on 7/30/23

I keep hearing that Illinois has a right to dry provision that allows people to dry their clothes outdoors in the sun and that it overrides any Condo or HOA rules. But I can't find the actual law online.

In our condo association we get a violation notice and a \$25 fine if any laundry is visible outside of our units.

There are many of us who would like to avoid the fossil fuel guzzling natural gas dryers provided in the laundry room (we're not allowed to have washers and dryers in our units) but can't afford the fines.

If this isn't an Illinois Law that we're already allowed to dry laundry outdoors, could the Oak Park Sustainability group initiate it as a village ordinance?

# The Reason For Night

The importance of addressing light pollution for all

Oak Park Environment & Energy Commission August 1, 2023

Ken Walczak

*Senior Manager, Adler Planetarium*

*Board Member, DarkSky International*

*Associate Member, Illuminating Engineering Society (IES)*

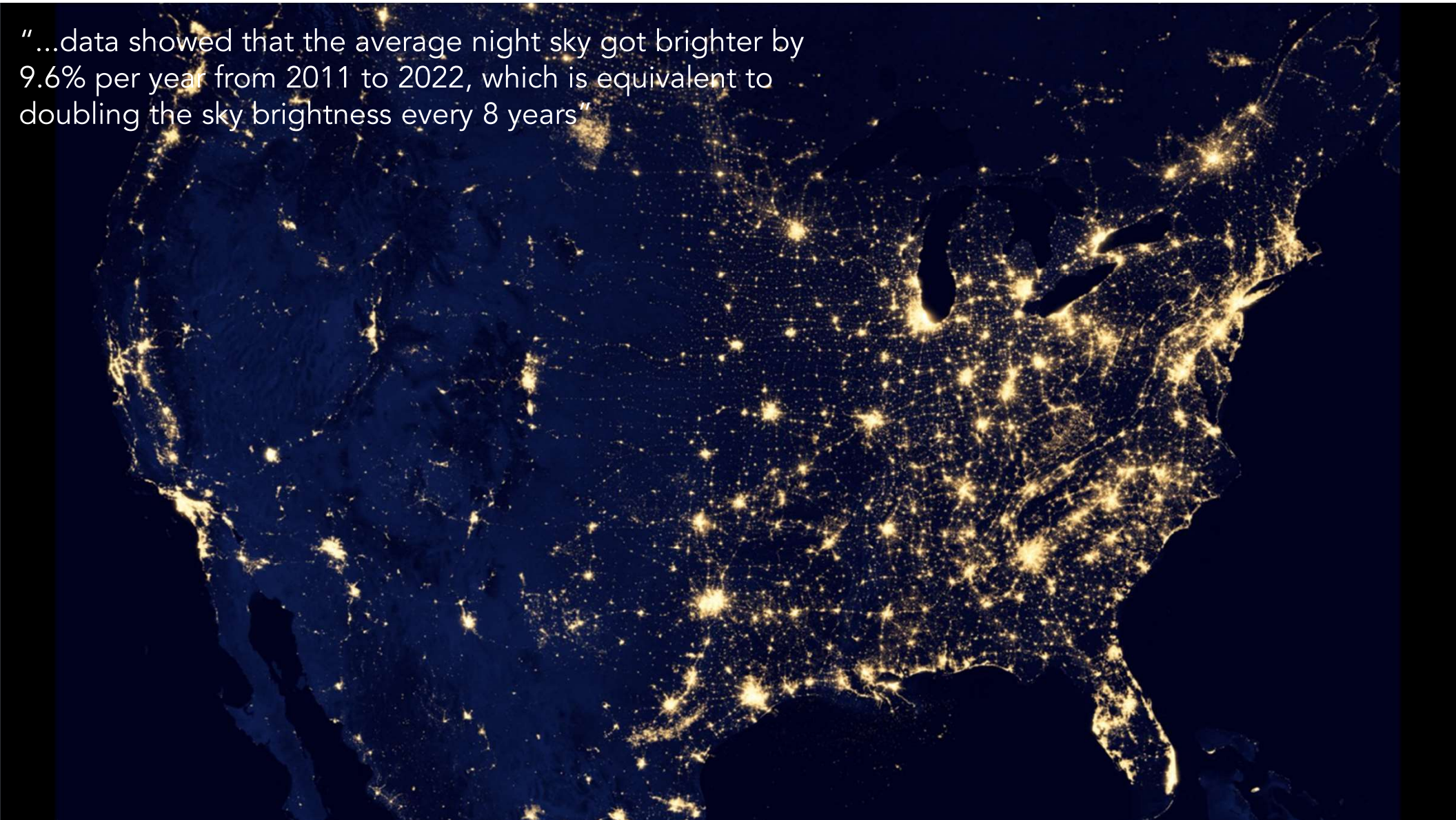


**DarkSky**  
INTERNATIONAL

**Adler**  
PLANETARIUM



"...data showed that the average night sky got brighter by 9.6% per year from 2011 to 2022, which is equivalent to doubling the sky brightness every 8 years"





VIDEO REMOVED  
FOR EMAILING



## Why the lights are going out for fireflies



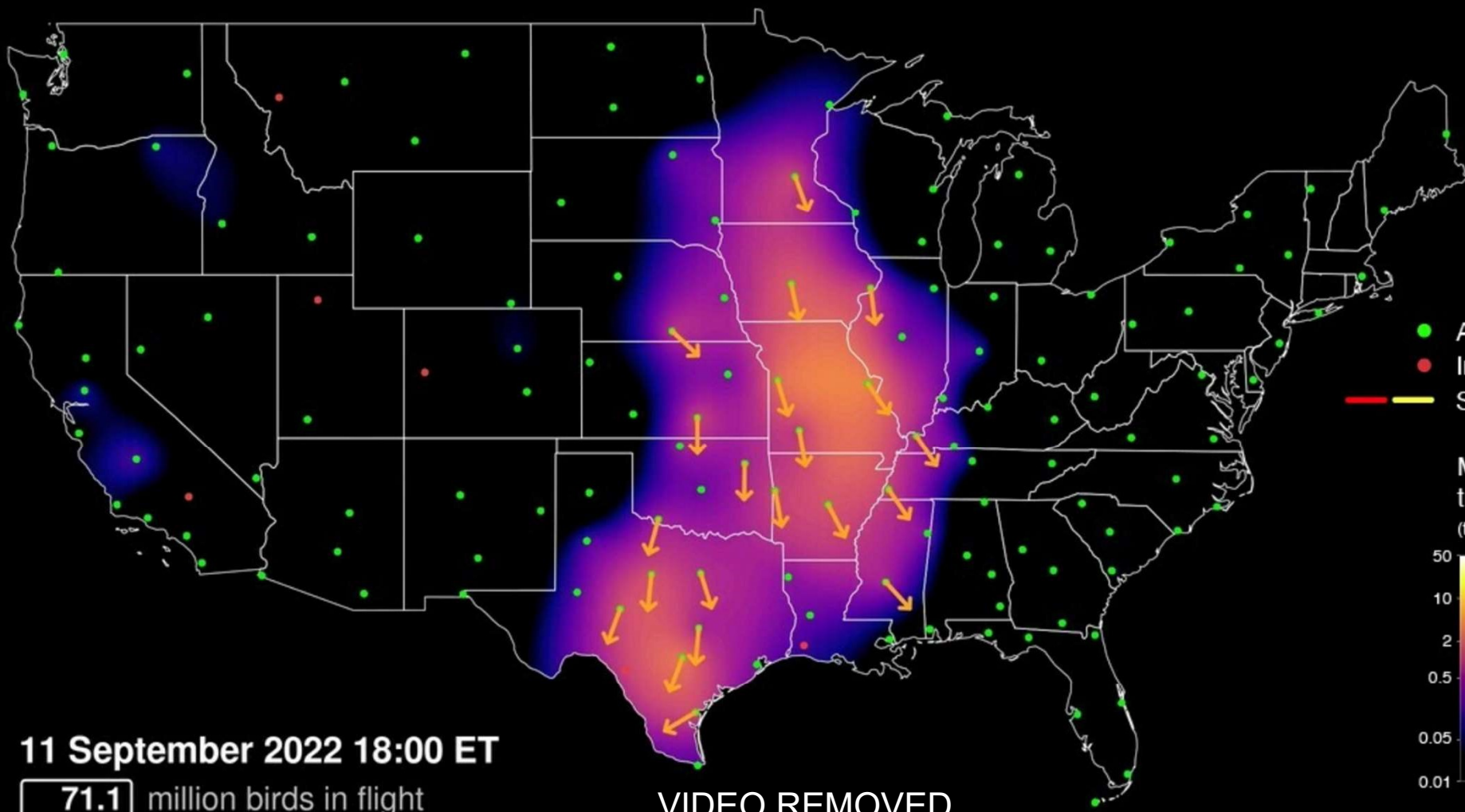
📷 Fireflies in a cedar forest in Tamba, Hyogo Prefecture, Japan. Photograph: Nori Yuasa/Getty Images

4

Fireflies face a dim future because of habitat loss and light pollution. How can conservationists help?







11 September 2022 18:00 ET

71.1 million birds in flight

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FOR EMAILING

Live bird migration maps

Dokter 2022

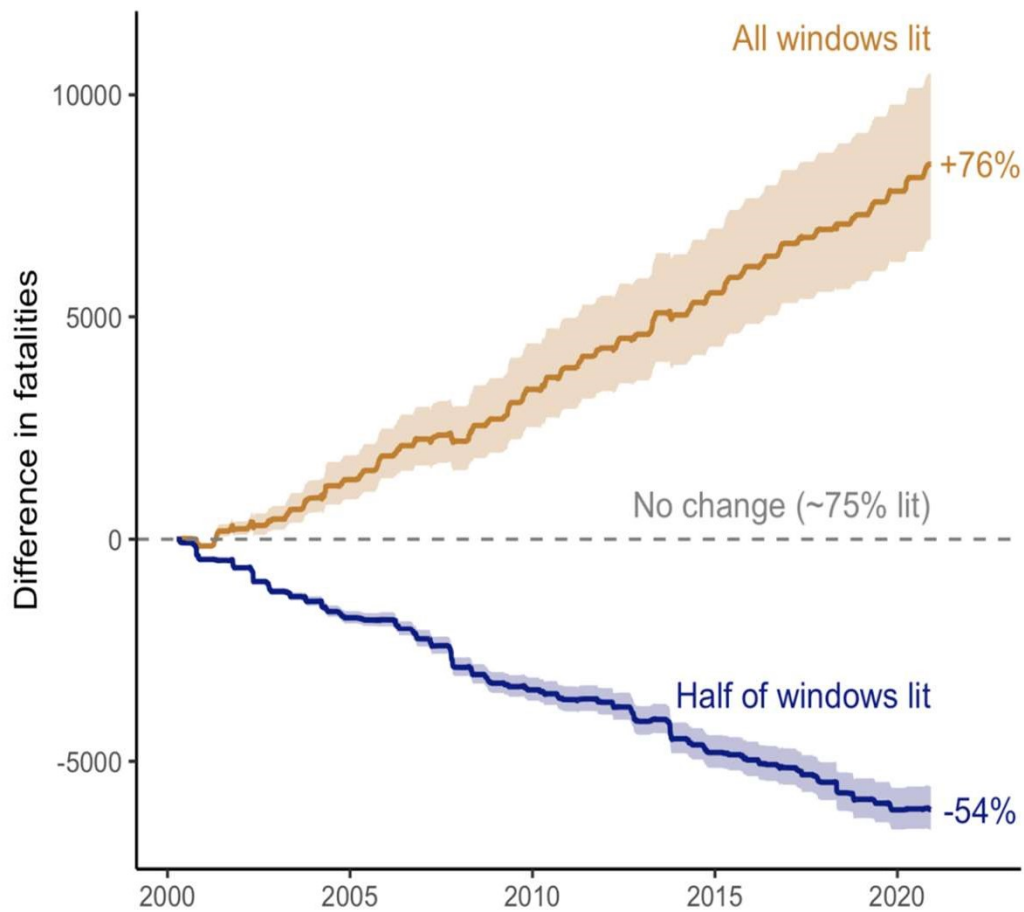
BirdCast

# A new publication on drivers of fatal bird collisions in Chicago

Benjamin Van Doren | The Cornell Lab | Jun 07, 2021



Selection of birds found at McCormick Place, from the scientific collections of the Field Museum. Image courtesy of Karen Bean, Field Museum.



Moderately decreasing lighting could have led to more than a 50% reduction in bird fatalities. On the other hand, if the building had been fully lit, deaths may have been over 75% higher.



# Street Light Outages, Public Safety and Crime Displacement: Evidence from Chicago

Aaron Chalfin  
University of Pennsylvania

Jacob Kaplan  
University of Pennsylvania

Michael LaForest  
University of Chicago

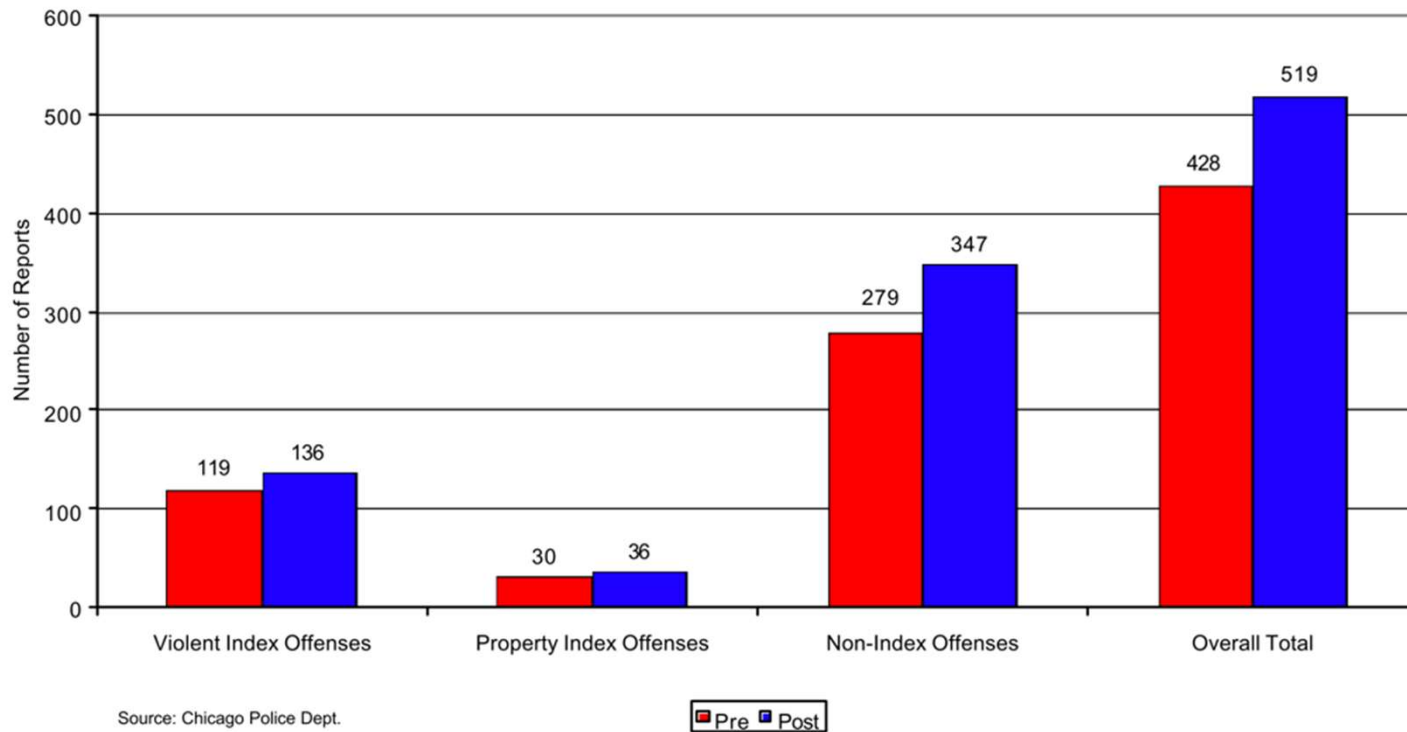
## Abstract

For more than one hundred years, street lighting has been one of the most enduring capital investments to maintain public safety. In this study we provide a comprehensive examination of the effect of street lights on crime, by estimating the effect of nearly 300,000 street light outages in Chicago neighborhoods on crime. We find that outdoor nighttime crimes change very little on street segments affected by street light outages, but that crime appears to spillover to nearby street segments during these outages. These findings suggest that crime may follow patterns of human activity and that the impact of localized street light outages can reverberate throughout a community.



# Chicago Alley Lighting Project: Final Evaluation Report, 2000

Change in Reported Incidents in Experimental Area:  
One Year Pre-and Post-Installation of Alley Lights  
All Offenses

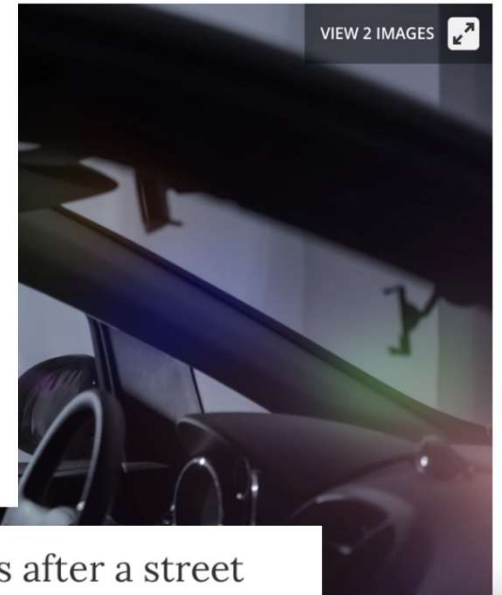


# Study finds car thefts decrease when street lights are turned off

By Rich Haridy  
March 29, 2022



In recent years, as a response to growing environmental concerns around energy use many places in Europe and the United Kingdom have adopted part-night lighting schemes. The idea is to reduce the carbon footprint of a given area by automatically switching off street lights at certain times of night, often between midnight and 6am.

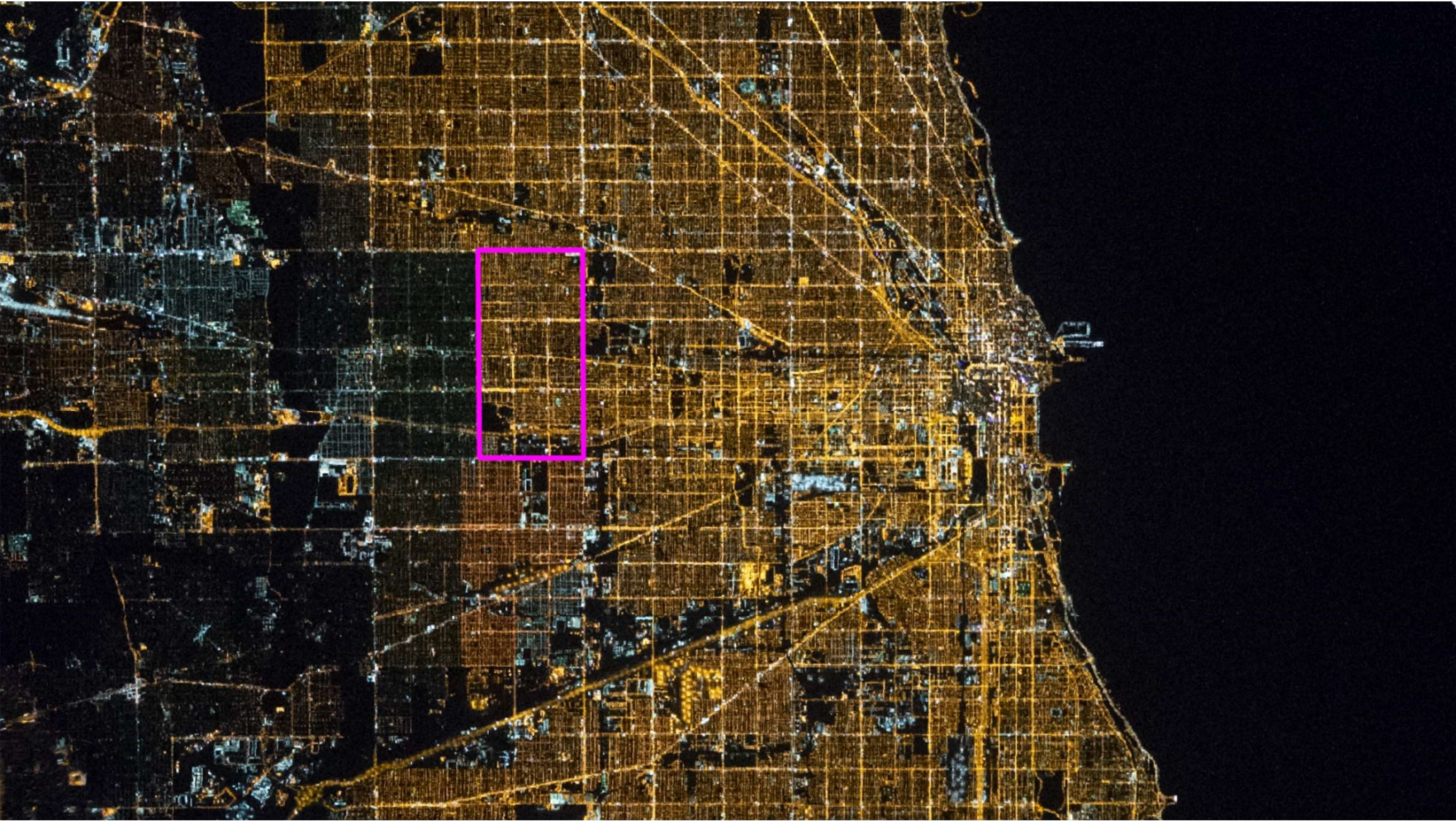


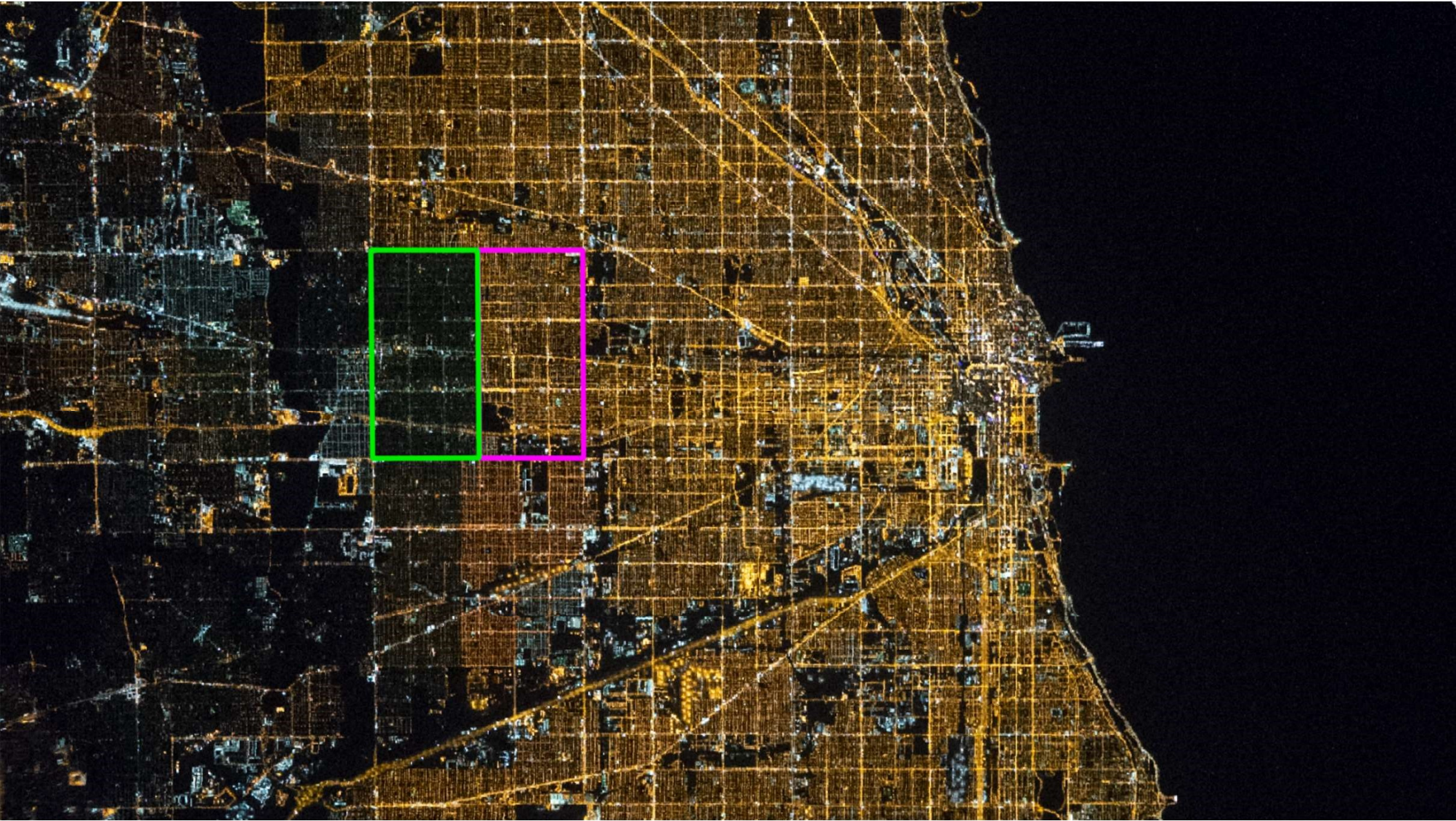
Of course, many people in these local communities have pushed against these part-night light plans arguing it will lead to increases in crime. Phil Edwards, from the London School of Hygiene and Tropical Medicine, says the new research arose out of an attempt to understand the effect of part-night light plans on crime.

However, the interesting finding was a reduction in thefts from parked vehicles after a street introduced part-night lighting. In fact, switching off street lights at midnight led to a 50 percent drop in theft from vehicles compared to before the part-night lighting plan was introduced. Theft of vehicles was also seen to drop after part night lighting was introduced, but the researchers note this reduction was small and deemed not statistically significant.

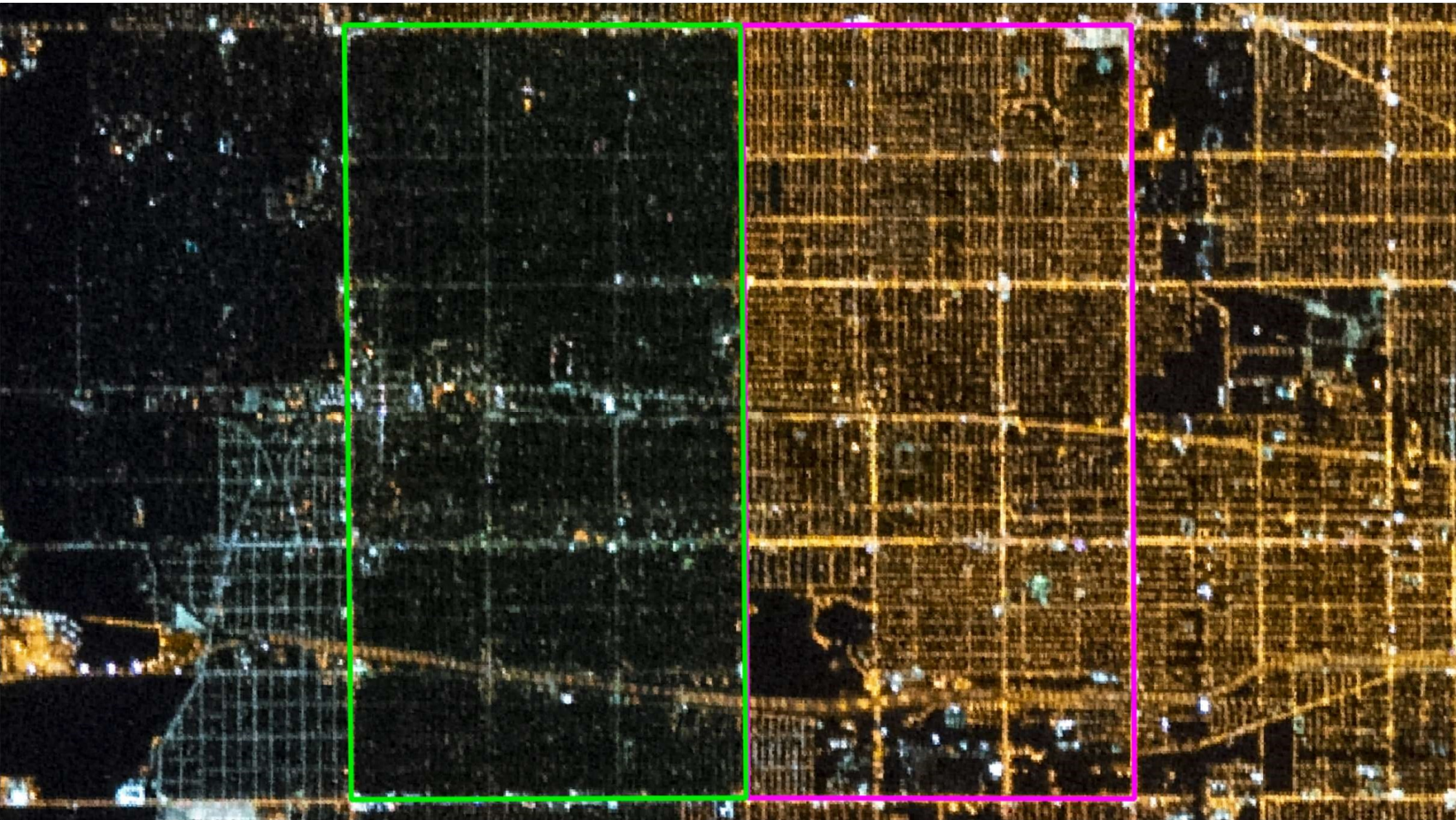


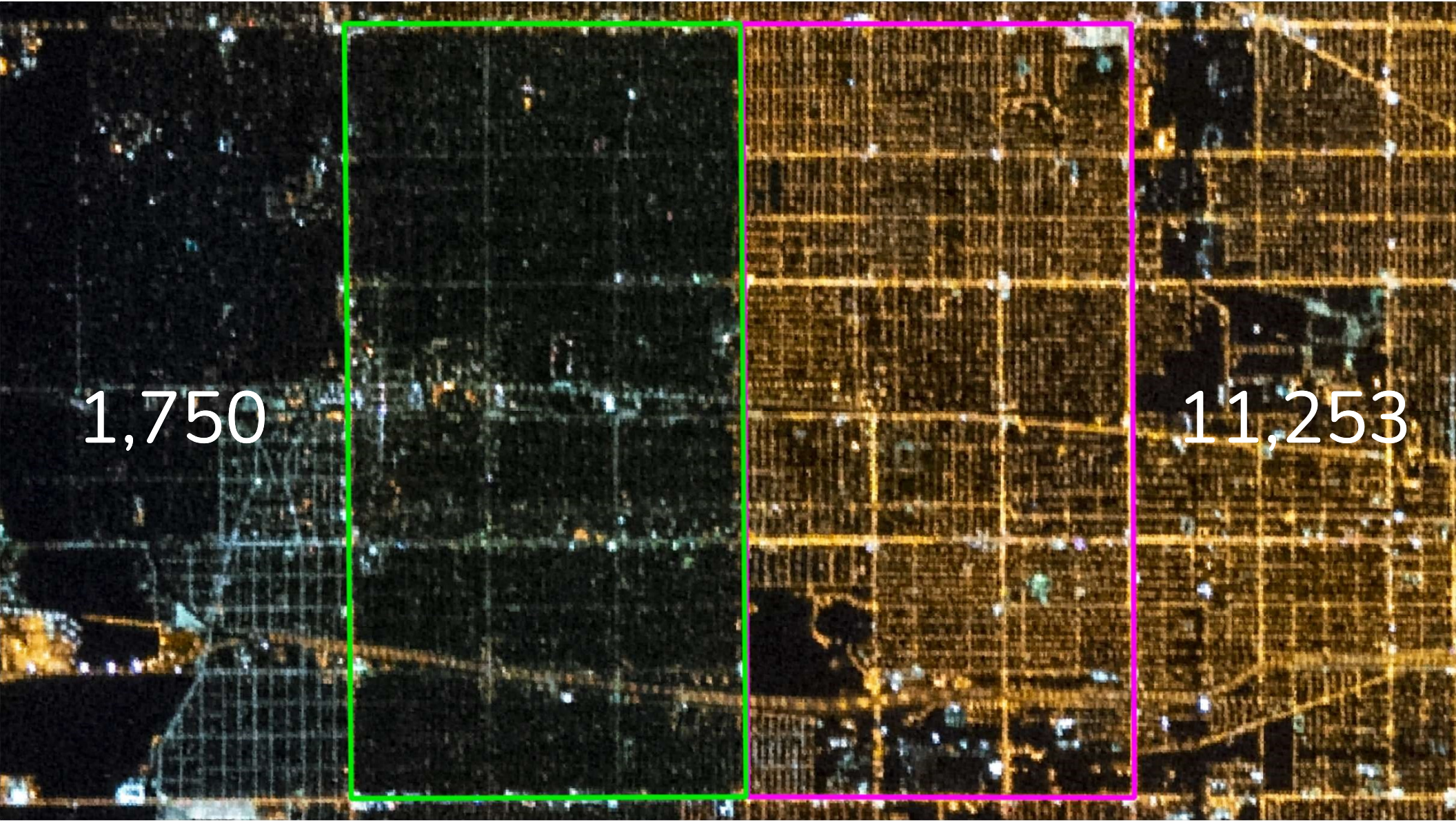












1,750

11,253







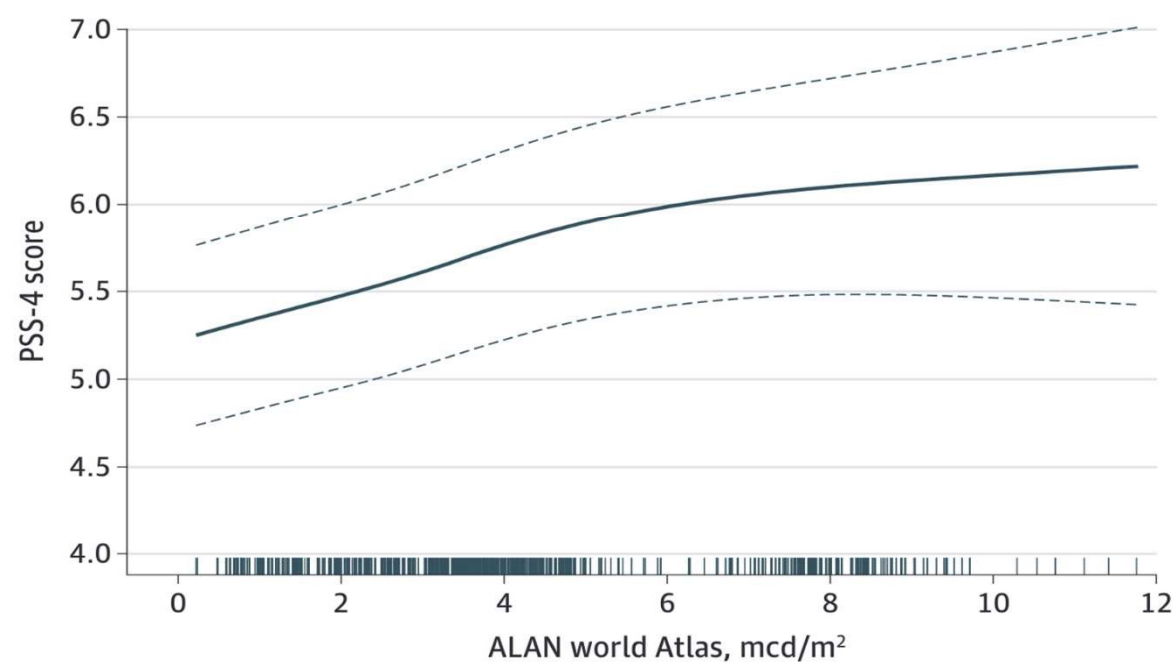
## Association of the Built Environment With Childhood Psychosocial Stress

Meredith Franklin, PhD; Xiaozhe Yin, MSc; Rob McConnell, MD; Scott Fruin, DEnv

### Abstract

**IMPORTANCE** Emerging research suggests that factors associated with the built environment, including artificial light, air pollution, and noise, may adversely affect children's mental health, while living near green space may reduce stress. Little is known about the combined roles of these factors on children's stress.

**Figure 2. Nonlinear Association Between World Atlas-Indicated Artificial Light at Night (ALAN) and Perceived Stress Scale (PSS-4) in the Multi-Exposure Model**



Solid line represents the mean regression curve, and dashed lines are the 95% CIs. mcd/m<sup>2</sup> indicates millicandela per meter squared.

# Association of Exposure to Artificial Light at Night While Sleeping With Risk of Obesity in Women

Yong-Moon Mark Park, MD, PhD; Alexandra J. White, PhD; Chandra L. Jackson, PhD, MS;  
Clarice R. Weinberg, PhD; Dale P. Sandler, PhD

## Results

We included 43 722 women in the analysis (mean [SD] age, 55.4 [8.9] years). Baseline characteristics are presented in **Table 1**, stratified by ALAN categories. **Women with greater exposure to ALAN had higher mean BMI, WC, WHR, and WHtR and were more likely to be non-Hispanic black. They were less likely to have consistent waking and bedtime patterns and more likely to have less sleep, take a longer time to fall asleep, wake up at night, and take naps. They also used less sleep medication (eTable 1 in the Supplement).**





ELSEVIER

Contents lists available at [ScienceDirect](#)

## Environmental Research

journal homepage: [www.elsevier.com/locate/envres](http://www.elsevier.com/locate/envres)

### Cross-sectional association between outdoor artificial light at night and sleep duration in middle-to-older aged adults: The NIH-AARP Diet and Health Study

Qian Xiao<sup>a,b,\*</sup>, Gilbert Gee<sup>c</sup>, Rena R. Jones<sup>d</sup>, Peng Jia<sup>e</sup>, Peter James<sup>f</sup>, Lauren Hale<sup>g</sup>

Finally, we studied ALAN in relation to both short and long sleep according to education and census tract poverty rate as a measure of neighborhood SES. For short sleep, we found a statistically significant interaction between ALAN and census tract poverty rate in relation in women (Table 4;  $p$ -interaction = 0.001). Specifically, the association between higher ALAN and short sleep was larger in magnitude among women living in census tracts with higher poverty (1.22 (1.10, 1.36)) than among those living in lower poverty areas (1.15 (1.08, 1.23)). A

<https://doi.org/10.1016/j.envres.2019.108823>





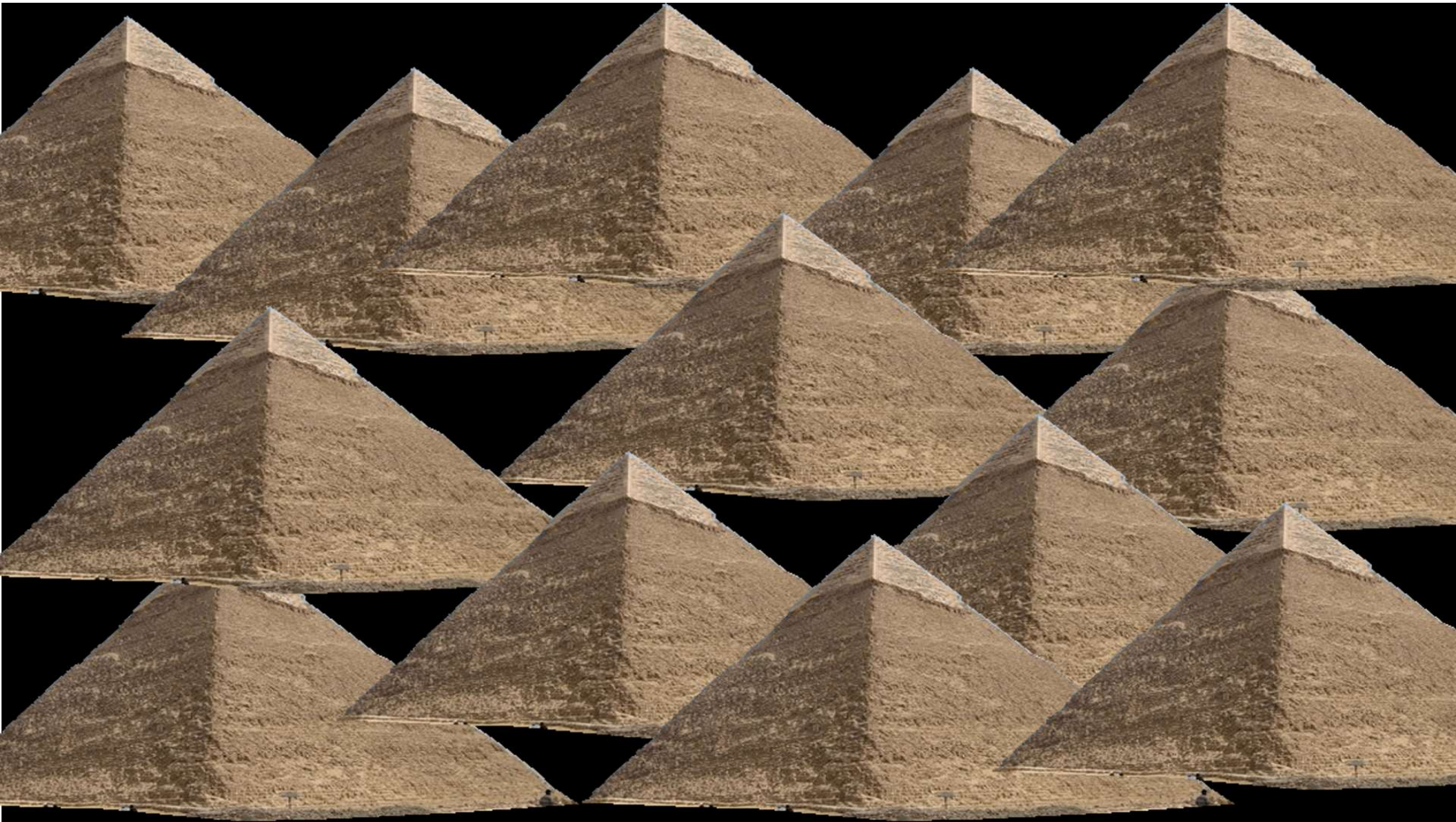
The U.S. uses 143 Trillion Wh of energy for commercial and municipal outdoor lighting every year

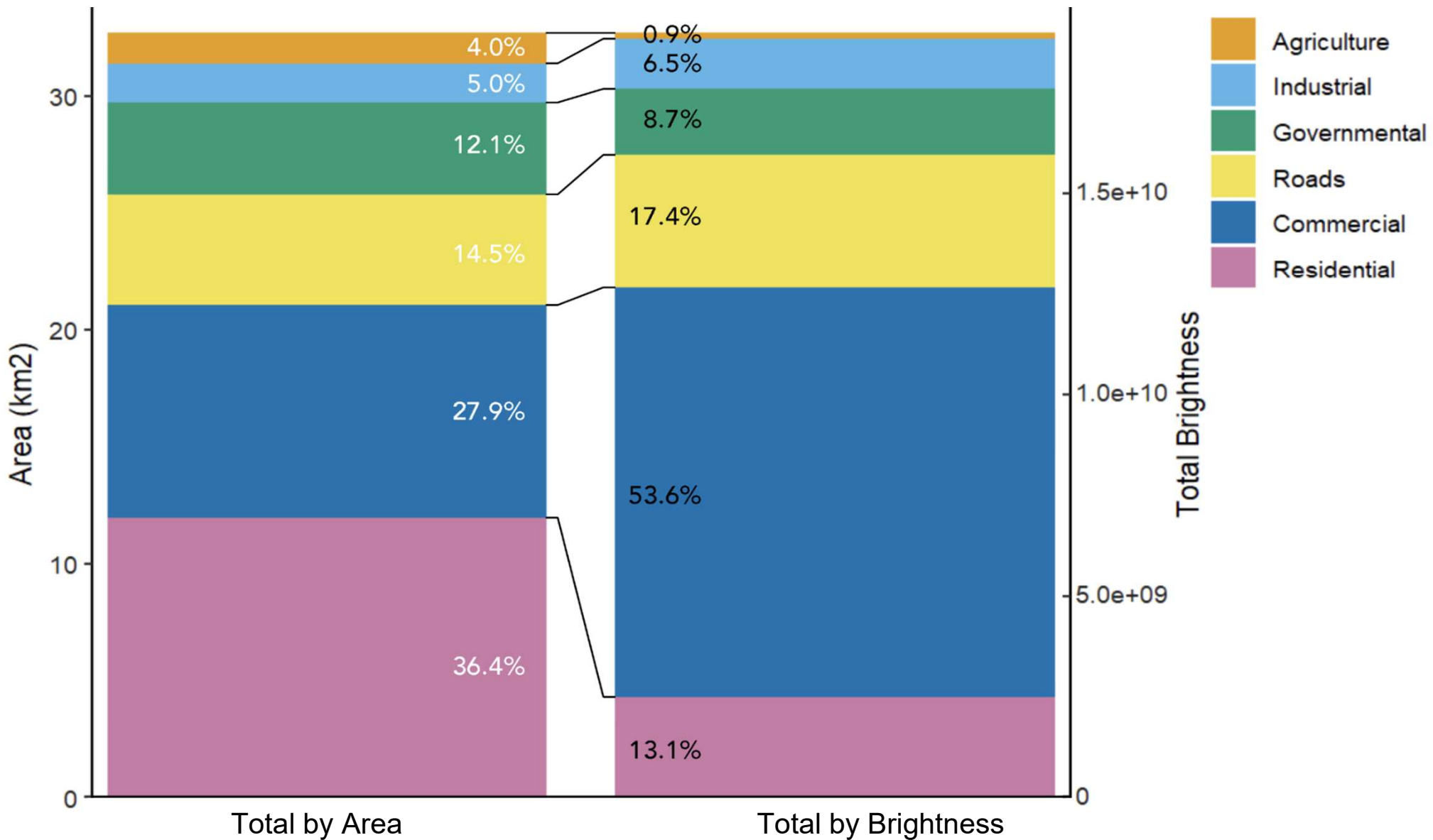
= 85 Million tons of carbon emissions

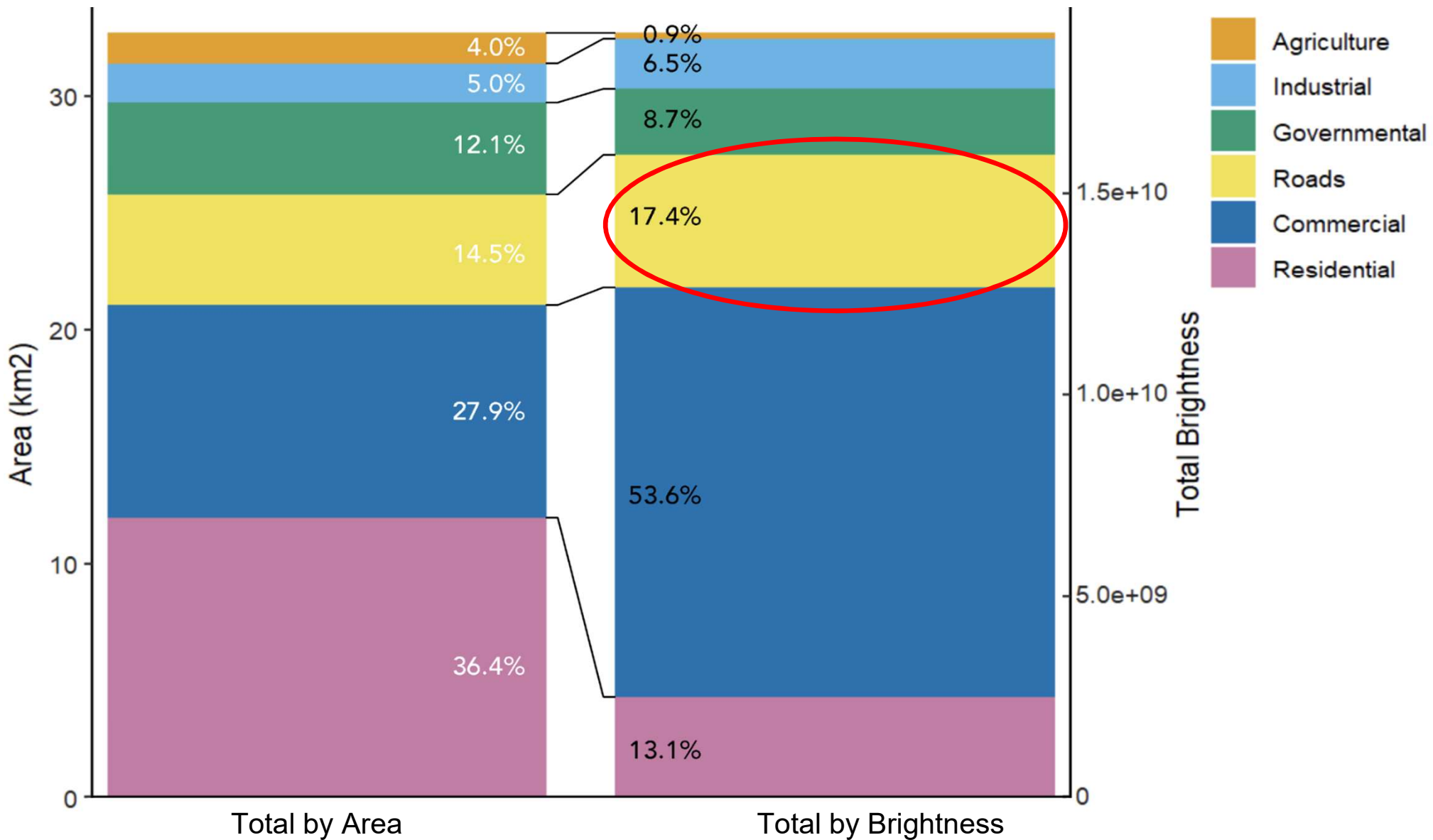


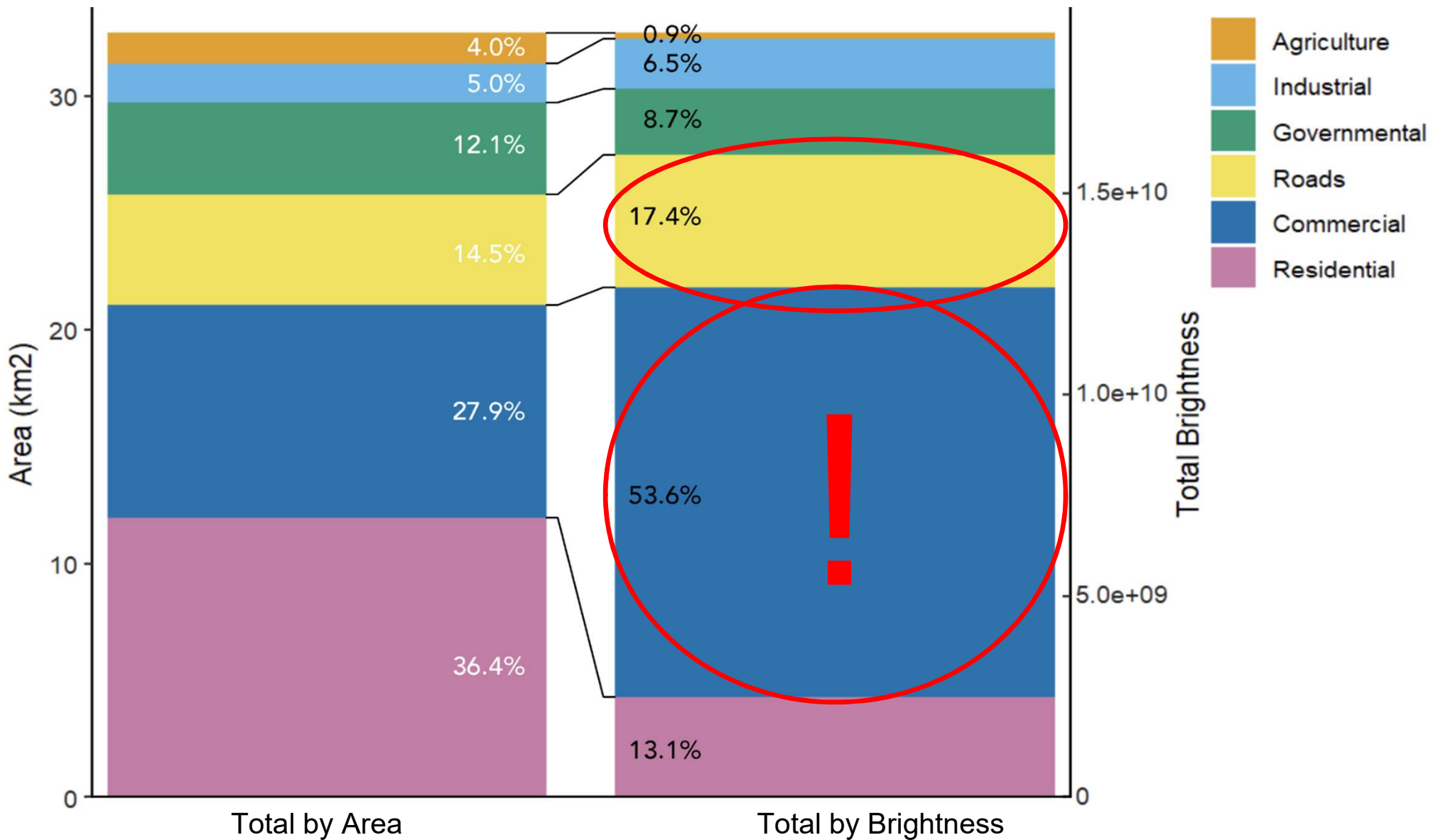
**DarkSky**  
INTERNATIONAL

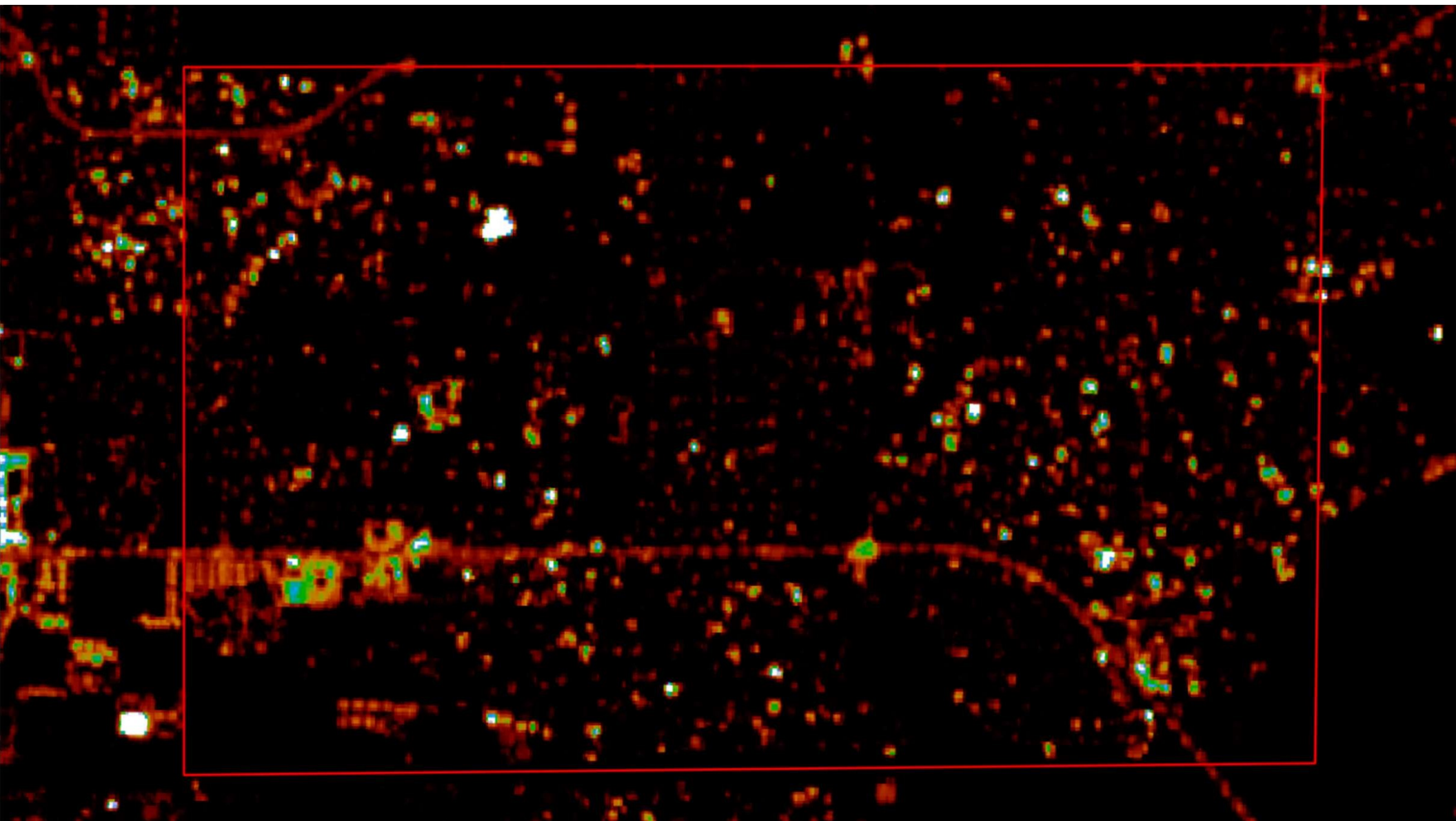


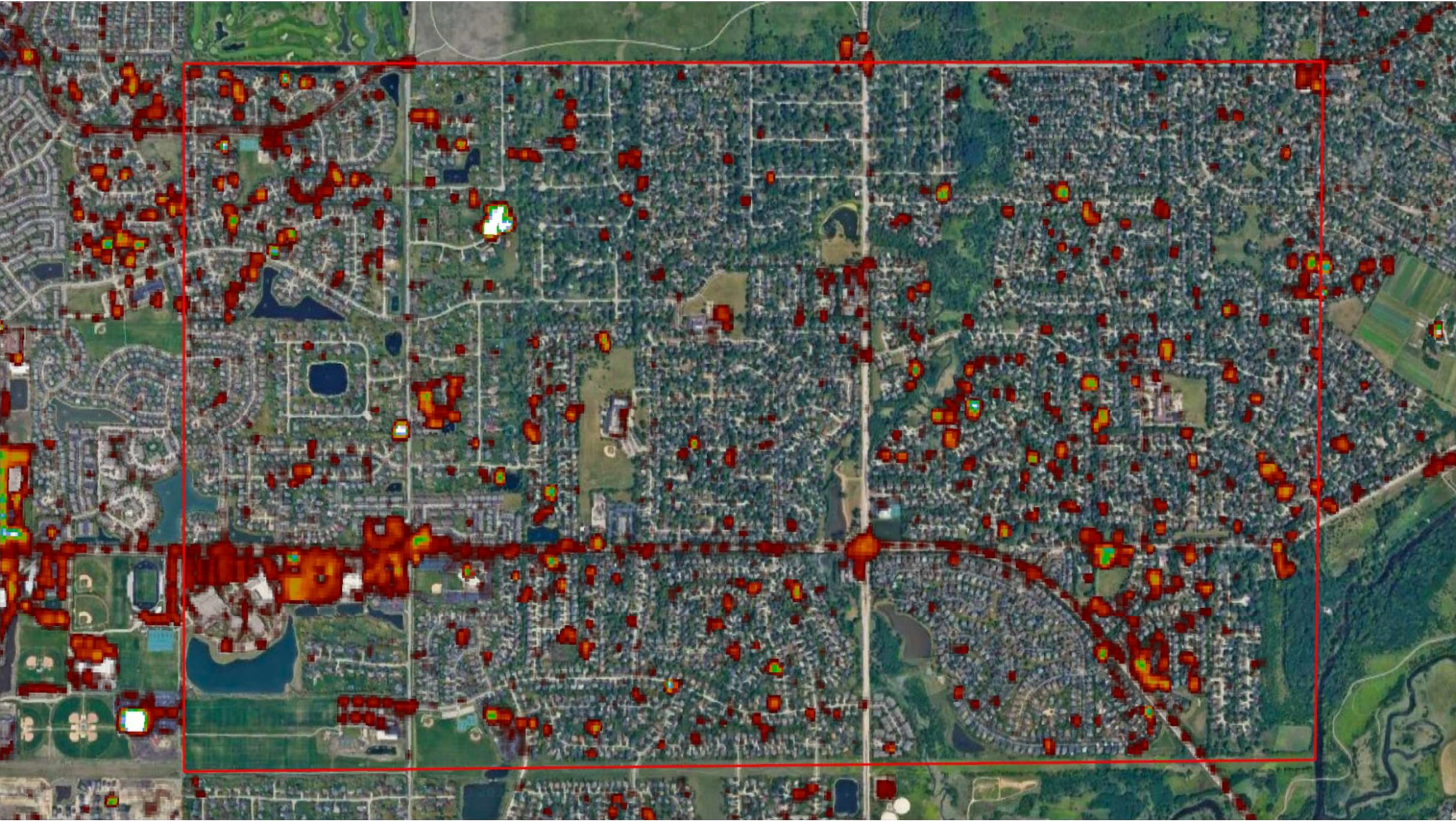


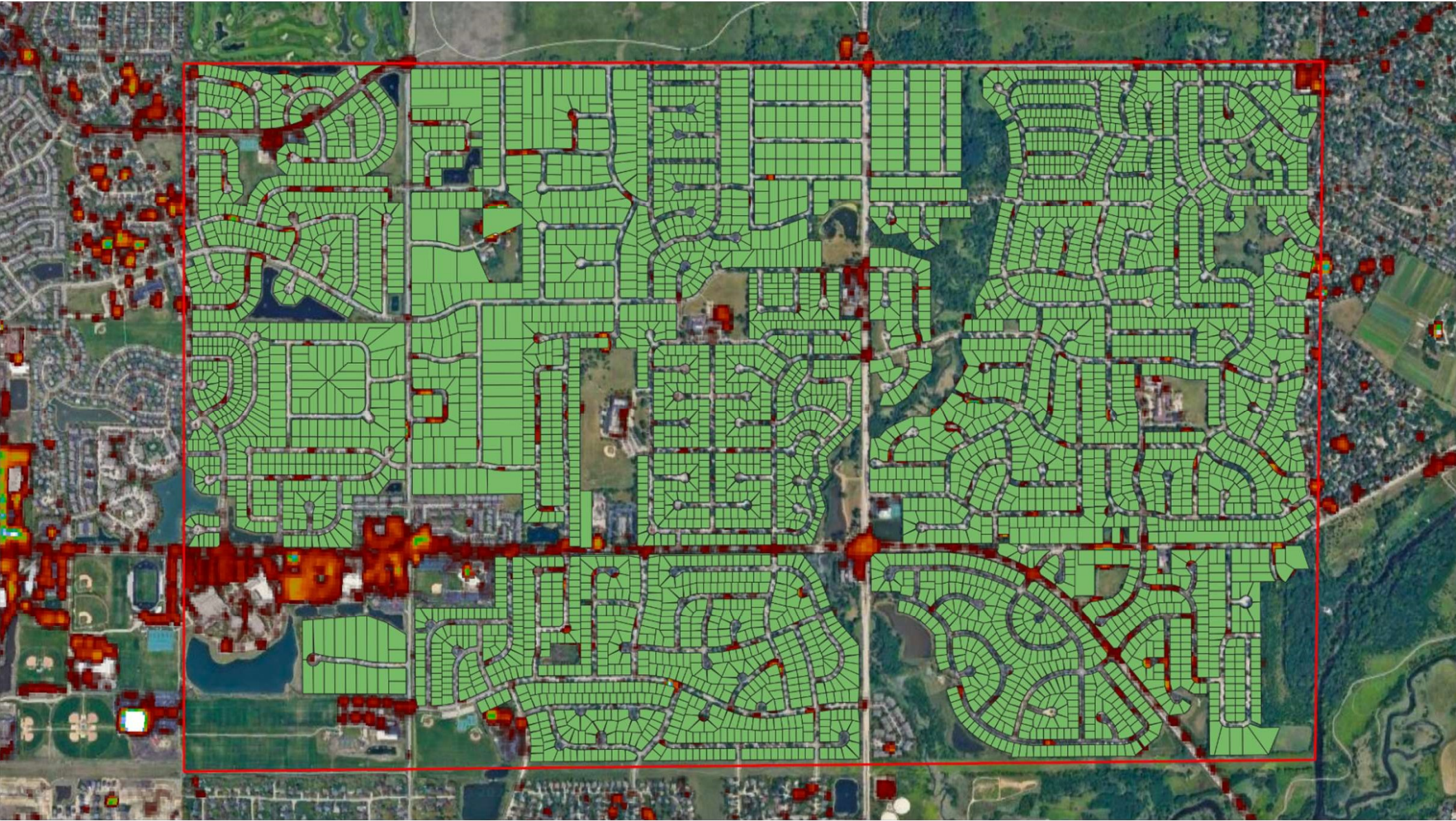




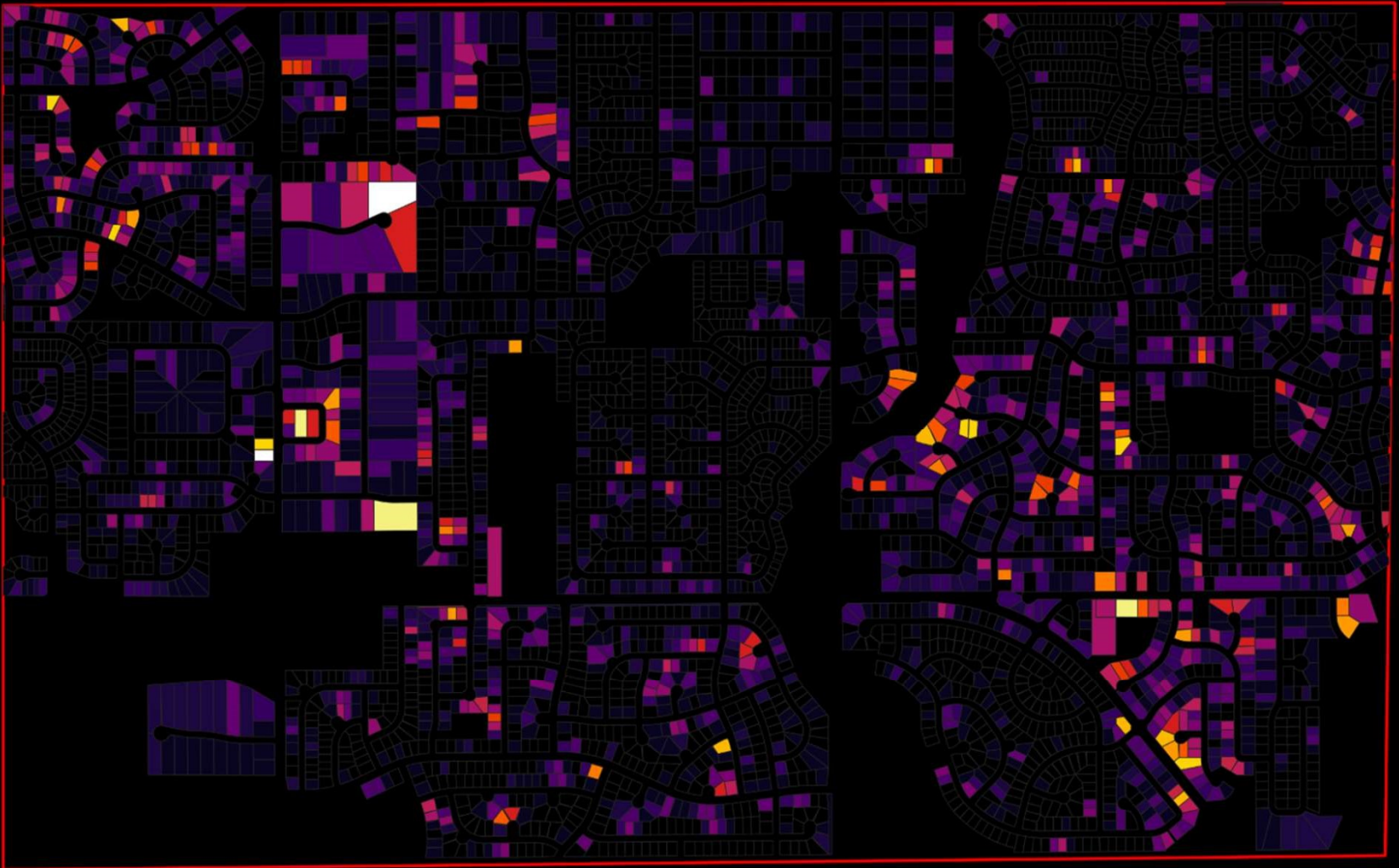
















# LIGHT TO PROTECT THE NIGHT

## Five Principles for Responsible Outdoor Lighting

### USEFUL



#### ALL LIGHT SHOULD HAVE A CLEAR PURPOSE

Before installing or replacing a light, determine if light is needed. Consider how the use of light will impact the area, including wildlife and the environment. Consider using reflective paints or self-luminous markers for signs, curbs, and steps to reduce the need for permanently installed outdoor lighting.

### TARGETED



#### LIGHT SHOULD BE DIRECTED ONLY TO WHERE NEEDED

Use shielding and careful aiming to target the direction of the light beam so that it points downward and does not spill beyond where it is needed.

### LOW LIGHT LEVELS



#### LIGHT SHOULD BE NO BRIGHTER THAN NECESSARY

Use the lowest light level required. Be mindful of surface conditions as some surfaces may reflect more light into the night sky than intended.

### CONTROLLED



#### LIGHT SHOULD BE USED ONLY WHEN IT IS USEFUL

Use controls such as timers or motion detectors to ensure that light is available when it is needed, dimmed when possible, and turned off when not needed.

### COLOR



#### USE WARMER COLOR LIGHTS WHERE POSSIBLE

Limit the amount of shorter wavelength (blue-violet) light to the least amount needed.



# **Parkway Planting Ordinance**

# **Community Survey Results**

*August 1, 2023*



# Parkway Planting Survey

239 responses July 13 – July 25

1. Definition of plantings & Forester plant list
  - 91% support, 9% Do not support
2. Permit required for container, fence, structure  
No permit required for plantings alone.
  - 69% support, 31% Do not support



# Parkway Planting Survey

3. Owner/occupant adjacent to parkway maintains plantings

- 92% support, 8% Do not support

4. Maximum height 36” (except clear sight area 30”)

- 78% support, 22% Do not support

5. Village notification prior to planned work in parkway

- 89% support, 11% Do not support



# Parkway Planting Survey

## 6. Comments for ordinance concepts not supported

# of Comments	% of Comments	Comment Description
40	16.74%	Concern with permit and insurance requirement for containers, fences, structures
12	5.02%	Desire that taller plants are allowed
28	11.72%	Desire that plants are shorter or the parkway remains clear
5	2.09%	Desire for Village to replace plants damaged by Village work
20	8.37%	Other
134	56.07%	No Comment
<b>239</b>	<b>100.00%</b>	



# Parkway Planting Survey

7. What type of plants would you like to plant in the parkway?

- 207 Native plants, 115 Edible plants, 53 non-native plants, 27 other, 18 unsure

8. Would you like the ordinance to suggest or require that a minimum % of the planted area is native vegetation?

- 53% suggestion, 31% requirement, 16% No

9. Minimum % native you would like to be required or suggested

- 50%, none, 70%, other, 30%



# Parkway Planting Survey

10. What type of assistance would encourage you to plant native and pollinator plants?

- 185 Technical Assistance, 121 Financial Assistance, 79 Labor Assistance, 35 Other

11. Interest in Programs

- 148 native garden walks, 132 native yard signs, 123 Native Plant Garden Award, 46 other



# Parkway Planting Survey

## Open-ended Comments

# of Comments	% of Comments	Comment Description
25	10.46%	General Support of the Ordinance
12	5.02%	Requests fewer restrictions to planting in the parkway
5	2.09%	Concern with plants becoming weedy
7	2.93%	Concern with dogs being able to use the parkway
10	4.18%	Other
22	9.21%	Program suggestion / Native plant guidance
13	5.44%	Concern with tall plants and safety and/or sidewalk access
9	3.77%	General Does Not Support the Ordinance
136	56.90%	No Comment
<b>239</b>	<b>100.00%</b>	

# **Revisions to Draft Parkway Planting Ordinance**



# Staff Task Force

- Village Manager's Office
  - Sustainability, DEI Officer, Deputy Village Manager
- Public Works
  - Director, Engineer
- Fire Department
  - Chief, Marshal
- Development Customer Services
  - Director, Building Official
- Village Planner
- Village Attorney



# 25-1-1: Purpose and Intent

## B. Intent

3. The planting of native and pollinator plants in Village parkways with a minimum of thirty percent (30%) of the area of parkway plantings recommended to be native plants. Native plants are a necessary part of a healthy ecosystem and perform functions including, but not limited to, wildlife food and habitat, stormwater attenuation and purification, air purification, and community aesthetics. Landscaping with native plants encourages environmentally-sound maintenance practices by requiring minimal use of water, pesticides, and fertilizers. Furthermore, the planting of native plants in Village parkways supports the Village's commitment to establish thirty percent (30%) of the Village's land as green infrastructure or enhanced park management.



# 25-1-2: Definitions

NATIVE PLANTS: Plants that existed in the local ecosystem prior to European settlement.

POLLINATOR PLANTS: Flowering perennials or annuals that provide the nectar and pollen essential for a flourishing pollinator population. Pollinators include hummingbirds, butterflies, bees, and other beneficial insects.



# 25-1-5: Tree and Shrub Maintenance and Planting Approval

A. Scope Of Requirement: No person except the Forester, an agent of the Forester or a contractor hired by the Village may perform any of the following acts without first obtaining approval from the Forester:

...

3. Place on Village owned property, either above or below ground level, a container, fence, or structure for trees, ~~or~~ shrubs or plantings between March 1 and October 31 without first obtaining a permit, right of way encroachment agreement and required insurance naming the Village as an additional insured in the amount of five hundred thousand dollars (\$500,000.00) subject to the review and approval of the Village Attorney;

7. Place on Village owned property, either above or below ground level, a container, fence, or structure for trees, shrubs, or plantings between November 1 and February 28.





# 25-1-10: Plantings in Parkways Fronting or Abutting Parcels or Lots

The Village shall attempt to notify a property owner, occupant, or lessee of the lot or parcel that fronts, abuts, or is adjacent to parkway plantings two (2) weeks prior to any planned Village work at the parkway that may cause disturbance to plantings, except in cases of emergency.

