

From: [Lyn Heideman](#)
To: [Planning Commission](#)
Subject: Palo Alto's Lighting and Bird-Friendly Design Ordinances: Comments on August 28 Meeting
Date: Wednesday, September 4, 2024 11:22:35 PM

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Commissioners,

I attended with interest the meeting on August 28, 2024, on Palo Alto's Lighting and Bird-Friendly Design Ordinances. What follows are research studies that I hope you find relevant for the ordinances.

Applicability: How can the ordinances be effective with so many exemptions?

More than 1 in 4 birds in North America have disappeared in the last 50 years ([Science journal, September 2019](#)). That is a loss of 3 billion birds flying in our skies each year. One of the major reasons for that decline is birds striking windows. Numerous studies have confirmed this: the most recent study was published last month in [PLOS ONE](#) and uncovered new evidence that building collisions are killing well over 1 billion birds annually in the United States alone. The [research highlights the urgent need for bird-safe glass and artificial light reduction measures](#).

Daniel Klem, Jr., a Muhlenberg College ornithologist and expert on bird collisions, believes that building strikes cause far more deaths than even the new PLOS ONE paper suggests; he [published findings](#) earlier this year estimating U.S. collision mortality at somewhere between 1.3 billion and 3.5 billion birds, and possibly much higher.

If both the Lighting and the Bird-Friendly Design ordinances apply only to new buildings and major remodels, it will take too long for them to significantly reduce the bird deaths caused by glass collisions and lighting as well as to achieve the positive effects of reduced lighting (see "Reducing Light at Night" below).

- Some city ordinances establish a timeframe for getting all homes and buildings in compliance with the ordinance. Are you familiar with the Yale Bird-Friendly Building Initiative? Here is their database of U.S. Bird-Friendly Building Policies: <https://bird-friendly.yale.edu/usa-policy-database>.

Homes: Windows on even one-story homes kill birds

Smithsonian data estimates that [homes and buildings one to three stories tall account for 44% of all bird fatalities](#). More recent information from Audubon is that "[buildings of any size can attract bird collisions but the vast majority occur at homes and low-rise buildings, not skyscrapers](#)."

If you see evidence of a bird strike on a window--home or building--and no dead bird, you cannot assume the bird survived. The journal [PLOS ONE](#), analyzed the records of more than 3,100 collision victims brought to wildlife rehabilitators, representing 152 species. It found that about 60 percent of those birds ended up dying, far more than previously thought. And when an injured bird receives care is the best-case scenario. The vast minority don't--and most likely don't survive.

Reducing Light at Night: It's about the health of everyone--people, animals, plants, ecosystems

There seems to be a misunderstanding that the purpose of a Dark Sky ordinance is to protect birds. If people understood what light at night is doing to **their health**, they might be a lot more receptive to making the needed investments to modify their lighting. More education is needed to educate and engage the community about how reducing light can positively affect the health of citizens, wildlife, plants, and our ecosystems. The community might even be thrilled that you've uncovered and addressed this threat to their well-being.

DarkSky International summarizes the scientific understanding of light pollution in [*Artificial Light at Night: State of the Science 2024*](#).

➤ **ALAN (artificial light at night) impact on wildlife:** “Scientists have studied at least 160 species for effects due to ALAN exposure. They have observed **harms at levels from individual plants and animals all the way up to entire populations** (81-84). Nearly all living things react to light. Often these reactions negatively affect both individual organisms and entire populations. Observed effects have been seen among birds (85-87), fishes (88), mammals (89-91), reptiles (92-94); amphibians (95-97), insects and other invertebrates (98-101), and plants (102-105). Effects are seen particularly in aquatic environments (107) including the world's oceans (107, 108) to depths of hundreds of meters (109).”

➤ **ALAN impact on humans:** “ALAN exposure seems to have effects on the entire life cycle, from childhood (219, 220) and adolescence (221-223) to old age (224, 225). **In particular, these effects seem to result from short-wavelength (“blue”) light.** While exposure to blue light during the day is important for healthy circadian functioning (226), exposure to this light at night can disrupt the human circadian rhythm. This can affect everything from the timing of hormone release in the body to the duration and quality of our sleep (227), **potentially resulting in adverse health effects** (228, 229). The significance of **these effects depend on the intensity of light, the proportion of blue light, and the timing and duration of the exposure.**”

➤ “ALAN exposure delays or prevents recovery from stroke (284, 285), hardening of the arteries (286), skin wounds (287), and whole-body inflammation (288, 289). Controlling ALAN exposures in places like hospitals results in better health outcomes (290-292). The growth of outdoor lighting may be encouraging the spread of communicable diseases (293). It may also create conditions for new and devastating diseases, such as COVID-19, to emerge (294, 295).”

Lighting and Crime: The influence of outdoor light at night on crime is mixed

More from DarkSky International's summary of the scientific understanding of light pollution in [*Artificial Light at Night: State of the Science 2024*](#).

➤ “Researchers have not been able to predictively model the way outdoor lighting might affect safety and security. This is one reason why it is difficult to establish the significance of lighting in studies. There is no clear known “dose-response” relationship that may predict appropriate lighting levels (366). In other words, even if lighting influences outcomes, scientists can't determine how much light is required.”

➤ “As with most road safety, the influence of outdoor light at night on crime is mixed. Some of the same studies that looked at lighting and traffic/pedestrian safety also considered nighttime crime incidence. Certain studies reported crime reduction when lighting is added to outdoor spaces (371). Others find either a negative effect (372), no effect (373, 374), or mixed results (375).”

➤ “Decisionmakers, from elected officials to lighting designers, often substitute their intuition when guidance is lacking. In a belief that more of something is always better, they often specify too much light relative to actual needs.”

The research on lighting and crime is mixed, and there is no proof that brighter lighting is a better crime deterrent. Do we go with bright lighting at night just because it might reduce crime? Or do we reduce lighting for its proven health benefits?

Architect: Who is knowledgeable about bird-friendly glass?

Staff mentioned that they had not had much interaction with architects and none with builders on bird-safe design. I attended a presentation last March by Danielle Appello, an Associate Principal at [Wight & Company](#) and a licensed architect, LEED Accredited Professional, and member of the American Institute of Architects. The topic was bird-safe design, focused mostly on glass (she had lots of great data on cost, etc.). The example was a new project, the Willowbrook Wildlife Center (Glen Ellyn, IL). The design included bird-friendly glass and dark-sky lighting (plus many more sustainable features). If you want to contact Ms. Appello, the Chicago firm's phone number is +1 312-261-5700.

I hope this information is useful. Thank you for your consideration.

Sincerely,

Lyn Heideman

From: [herb](#)
To: [Planning Commission](#)
Subject: September 5, 2024 ARB Meeting, Item #3: 3000 El Camino Real [23PLN-001000]
Date: Thursday, September 5, 2024 1:39:13 PM

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SEPTEMBER 5, 2024 ARCHITECTURAL REVIEW BOARD MEETING, AGENDA
ITEM #3
3000 EL CAMINO REAL [23PLN-00110]

I urge you to continue this agenda item to a date uncertain to provide the City Council and the Planning and Transportation Commission the opportunity to correct a drafting error that occurred when Ordinance No.4648 was considered and adopted.

The original Planned Community (PC) zone district for this site (Ordinance No. 2533) was adopted prior to the time that a public benefit was required for PC zones.

When a new Zoning Ordinance became effective in July 1978, a public benefit finding was required for new PC zone districts, including those that amended previously adopted PC zone districts such as the one for 3000 El Camino Real.

On May 22, 2000, the City Council adopted Ordinance No. 4637 that amended PC 2533 to permit child care facilities at 3000 El Camino Real and amended the Zoning Map to show the site with the designation PC 4637.

One month later, on June 26, 2000, the City Council adopted Ordinance No. 4648 that amended PC 2533 (instead of amending PC 4637) to permit building-mounted telecommunications facilities at 3000 El Camino Real and amended the Zoning Map to show the site with the designation of PC 4648.

The result is that the Zoning Map shows the designation PC 4637 that permits child care facilities, but does not permit building-mounted telecommunication facilities, but if the Zoning Map showed the designation PC 4648 it would refer to a zone district that permits building-mounted telecommunications facilities, but not permit child care facilities.

The California Environmental Quality Act (CEQA) requires evaluation of the whole of a project that includes multiple discretionary approvals. [CEQA Regulation 15378(c): The term "project" refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term "project" does not mean each separate governmental approval.]

When the City Council adopts a PC zone district, it approves a Development Plan that includes "A land use plan for the proposed district indicating the areas proposed for each use or combination of uses identified by the development program statement". [Palo Alto Municipal Code (PAMC) Section 18.38.190(d)]

PC 2533 adopted a land use plan that shows the location of the theaters.

Replacing the theaters with offices requires an amendment to the PC zone district pursuant to PAMC Chapter 18.80.

Thank you for your consideration of these comments.

Herb Borock

From: [Arthur Keller](#)
To: [Planning Commission](#); [Council, City](#)
Subject: Redevelopment of Charleston Plaza
Date: Tuesday, September 10, 2024 12:38:57 AM

Some people who received this message don't often get email from arthur@kellers.org. [Learn why this is important](#)

Dear Councilmembers, Commissioners and Planning Staff,

There is parking lot within the plaza that is located within the City of Palo Alto. So Palo Alto should have some say over this development.

The Comp Plan has the following program.

Program T8.6.1 Support provision of a new southbound entrance ramp to Highway 101 from San Antonio Road, in conjunction with the closure of the southbound Charleston Road on-ramp at the Rengstorff Avenue interchange in Mountain View. [Previously Program T-55] [T173]

We must push for this program to be done prior to redevelopment of Charleston Plaza.

Best regards,
Arthur