

---

# SENATE COMMITTEE ON APPROPRIATIONS

Senator Anthony Portantino, Chair  
2021 - 2022 Regular Session

---

## AB 2382 (Lee) - Light pollution control

**Version:** June 30, 2022

**Urgency:** No

**Hearing Date:** August 8, 2022

**Policy Vote:** G.O. 10 - 3

**Mandate:** No

**Consultant:** Janelle Miyashiro

**Bill Summary:** AB 2382 requires, beginning January 1, 2023, a state agency to ensure that any outdoor lighting fixtures installed or replaced at a building or structure that is owned, leased, or managed by the state agency to be shielded, include an automatic or manual shutoff device, or be motion activated with an automatic shutoff device, with specified exemptions.

### Fiscal Impact:

- Unknown General Fund costs, likely in the millions of dollars, to replace light fixtures for over 24,000 state-owned buildings and structures according to the criteria specified in the bill. These costs will likely be spread out over an unknown amount of time based on a replacement schedule to be determined by the Department of General Services (DGS). Actual costs will be job specific and depend on the type and number of fixtures being replaced and installed for each building.
- Unknown, potentially significant General Fund costs to replace light fixtures on leased buildings. State costs will vary from minor to significant, to the extent that a lessor requires the state to cover costs associated with replacing light fixtures.
- Unknown, potentially significant costs to include light fixtures meeting the specified criteria on newly constructed buildings. Generally, DGS notes that new construction is covered by the California Green Building Standards Code's (CALGreen) backlight, upright, and glare regulations. Any costs for compliant light fixtures in regard to new construction would be absorbed by existing project resources and included in the overall costs of construction.

**Background:** Light pollution, also known as artificial light at night, is caused by increasingly large urban areas and the excessive and inefficient use of lights. Light pollution is characterized by sky glow (brighter sky in urban areas), light trespass (shining of lights in unneeded or unwanted areas), and glare (brightness resulting in visual discomfort).

Light pollution can directly impact human health by interfering with natural circadian rhythms caused by a decrease in the amount of melatonin produced in the body. Sleep disorders, depression, cancer, and other adverse health conditions have been linked to circadian disruption. Studies have demonstrated that light pollution can also alter the behavior of wildlife, often resulting in the death or decline of species such as turtles, birds, fish, reptiles, and other wildlife.

**Proposed Law:**

- Beginning January 1, 2023, requires a state agency to ensure that between the hours of 11 p.m. and sunrise, an outdoor lighting fixture that is installed or replaced on a building or structure that is owned, leased, or managed by the state agency is shielded, extinguished by an automatic or manual shutoff device, or motion activated with a duration of fewer than 15 minutes and equipped with an automatic shutoff device. Exempts:
  - Outdoor lighting fixtures on advertisement signs on interstate highways and federal primary highways.
  - Navigational lighting systems at airports and other lighting necessary for aircraft safety pursuant to the requirements of the Federal Aviation Administration, including, but not limited to, lighting placed on communication towers or wind turbines.
  - Outdoor lighting fixtures that are necessary for worker safety, including, but not limited to, lights at agricultural facilities, and industrial, manufacturing, or commercial sites.
  - Emergency lighting that is used by police, firefighters, correctional personnel, or medical personnel and that is in operation as long as the emergency exists.
  - Outdoor lighting regulated pursuant to federal law, rule, or regulation that preempts state law.
  - Lighting intended for tunnels and roadway underpasses.
  - Outdoor lighting used for programs, projects, or improvements of a state agency relating to construction, reconstruction, improvement, or maintenance of a street or highway.
  - Outdoor lighting used for construction or major renovation of state agency buildings, structures, and facilities.
  - Street light fixtures if the shielding is unavailable from the manufacturer.
  - Incandescent fixtures of 150 watts or fewer and other sources of fewer than 70 watts, including, but not limited to, seasonal and decorative lighting.
- Establishes definitions.
- States legislative findings and declarations.

**Related Legislation:** AB 1710 (Lee, 2022) states the intent of the Legislature to enact legislation relating to the regulation of residential and outdoor light-emitting diodes fixtures that create artificial light pollution at night, which causes harmful environmental and public health effects, as specified. AB 1710 was not referred to an Assembly Committee.

-- END --