

Using the Guides

This project is organized into topical chapters: Water, Open Space, Transportation, and Zoning and Development. Each chapter contains *guides* that focus on a particular ordinance, or aspect of an ordinance, your community may be interested in adopting. Each guide introduces the ordinance topic and includes strong example ordinances, resources for further research, and a list of best practices.

EXAMPLE ORDINANCES

A selection of ordinances from the Hill Country and beyond are available for download throughout this guidebook. Strong components and necessary context are included as needed.

CITY NAMES and underlined text link to ordinances and code sections.

RESOURCES

The guides are snapshots of ordinances. Resources include relevant organizations and guiding documents that provide more in-depth information about each topic.

▶ Underlined and italicized titles link to the corresponding document.

BEST PRACTICES

A compilation of methods to undertake when crafting the ordinance. These suggestions are widely accepted as the most responsible and effective procedures for the given topic.



Outdoor Lighting

Outdoor lighting ordinances help communities keep their rural nighttime character, preserve star-filled skies, and maintain public safety while growth occurs. To be clear, outdoor lighting ordinances do not prohibit outdoor lighting - they simply limit the amount of light pollution. When nighttime lighting is shining where it's not intended - onto neighbors' properties, into the eyes of drivers and pedestrians, or up into the sky - it is considered light pollution. Reducing light pollution in our communities benefits human health, safety, and quality of life while also saving money in energy costs. Proper outdoor lighting protects starry views, which increases the tourism draw of our communities, benefits wildlife, and preserves a connection to the stars for children and adults.

Remember, it's not about "no lighting," it's about thoughtful lighting.

EXAMPLE ORDINANCES

BLANCO, TX

• Addresses the city's extraterritorial jurisdiction (ETJ).

WIMBERLEY, TX

LIBERTY HILL, TX

• Uses the Texas Model Outdoor Lighting Ordinance (from Texas IDA).

FREDERICKSBURG, TX

The Hill Country Alliance Night Sky Program helps Hill Country communities minimize the impacts of light pollution through education and outreach, the establishment of outdoor lighting policies, and the celebration of designated Dark Sky Places in our region.

► Explore our resources at <u>hillcountryalliance.org/our-work/night-skies</u>



Examples of Acceptable / Unacceptable Lighting Fixtures



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IDSC INTERNATIONAL DARK-SKY COMMUNITY

Established by the International Dark-Sky Association (IDA), the IDSC designation is granted to towns, cities, or otherwise legally organized communities that show exceptional dedication to night sky preservation through the implementation and enforcement of a quality outdoor lighting ordinance, dark sky education, and citizen support of dark skies.

The **IDA** is an advocacy network working to protect night skies.

- ► Learn more about IDSC and IDA resources at <u>darksky.org</u>
- ▶ Visit the Texas chapter at idatexas.org

The IDA and **Illuminating Engineering Society (IES)** developed a Model Lighting Ordinance to simplify the ordinance process (see Liberty Hill).

► <u>Model Lighting Ordinance</u>

TEXAS IDSC CITIES

DRIPPING SPRINGS (2014)
HORSESHOE BAY (2015)
WIMBERLEY VALLEY (2018)
LAKEWOOD VILLAGE (2019)
FREDERICKSBURG (2020)
BLANCO (2022)

CHAPTER 3000 OF THE TEXAS GOVERNMENT CODE mandates that any municipality that adopts or enforces an outdoor lighting ordinance must also adopt a resolution stating the community's intention to pursue an International Dark-Sky Community (IDSC) designation through the International Dark-Sky Association (IDA). The resolution does not need to indicate a timeline for pursuing the IDSC designation.

► <u>City of Liberty Hill Resolution Supporting Dark-Sky Certification</u>





"THE STARGAZER" PHOTO COURTESY OF TODD WINTERS

BEST PRACTICES

Use visual aids and approachable language to encourage understanding and support. Lighting is a visual subject and diagrams and images are helpful for illustrating permitted designs. Lighting is also a technical subject and uses terms and concepts that will likely require community education. Some terms, like "lumens" and "correlated color temperature (CCT)" are less important to understand technically, and more important to simply get the gist (e.g. "lumens" is a measure of brightness, and "CCT" refers to the color of the light). It is important to discuss the value of an outdoor lighting ordinance with the community to gain support and cooperation.

Limit the amount of unshielded lighting per acre. One of the primary components of an outdoor lighting ordinance is the requirement that outdoor lighting be fully shielded. However, it is typical to allow for some low output lights to remain unshielded, to accommodate string lights and other special uses, provided they do not shine onto neighboring properties or into streets.



Require that outdoor lighting be warmer (amber) in color, using a cap of 3000 Kelvin, CCT. The move to LEDs has led to the proliferation of bright blue-white or "daylight" fixtures in our night time streetscapes. Warmer tones - lights that have less blue in them (lower CCT ratings) - are better for our bodies as well as those of animals and plants. They also create less glare in the eyes of drivers and pedestrians and do less to wash out our view of the stars in the sky. While warmer tones from LEDs were once more expensive, that is no longer the case.

Limit the total amount of lighting on an acre of commercial property or residential property. Typical numbers to use are 17,500 lumens per acre of residential property and 75,000 lumens per acre of commercial property. It is a best practice to define the acreage of the property using "net acres," meaning the portion of the property not covered by a building.

Prohibit light trespass. Light trespass occurs whenever light shines directly across a property line. Reducing light trespass is a key motivator for many residents to support outdoor lighting ordinances. A fully shielded light will not create light trespass, unless it is very close to the property line, so the requirement to fully shield lighting will address most, but not all, instances of light trespass.

Address streetlights and sports lighting. In general terms, the same standards (e.g. CCT maximum of 3000K, full shielding, light trespass restriction) should apply to street lighting. Sports lighting policies should follow similar standards, and have a curfew for what time the lights go out if no scheduled game is underway.

Allow nonconforming lighting to stay in place for a set number of years before needing to be replaced. Grace periods of 5 years or 10 years are typical for this provision.

Address signage, if there is not a sign ordinance that already addresses sign lighting. Lighting for externally lit signs should conform to the same standards as other lighting. Internally lit signs should have a dark background with lighter lettering, as opposed to a white background with darker lettering.

Require a lighting plan and inspection. It is best to require evidence (e.g. an inspection) that the ordinance has been followed, prior to issuing a certificate of occupancy.



