

April 27, 2016

Fort Collins

## **Presentation Overview**

1. How do we regulate?

Fort Collins

- 2. What do we regulate?
- 3. What's coming next?



## How the City Regulates Lighting

Multiple departments:

Collins

- Planning Services
- Building Services
- Utilities

### Multiple codes:

- Land Use Code
- Residential Code
- Energy Conservation Code
- Larimer County Urban Area
  Street Standards





# How the City Regulates Lighting

	Residential Code	Energy Code	Land Use Code
Single-Family Detached	Х		
Single-Family Attached	Х		
Duplex	Х		
Multi-Family		Х	Х
Commercial		Х	Х



# What the City **DOES** Regulate

## Light Placement:

- Buildings, parking lots, walkways, plazas, landscape areas
- Spillover lighting (footcandles)
- Impacts to adjacent properties
- Impacts to natural features

## Light Fixtures:

- Efficiency
- Shielding
- Glare
- Brightness

## **Operations**

- Timing
- Dimming

## What the City **DOES NOT** Regulate

## Light Fixture Specifications:

Fort Collins

- Color temperature (Kelvin)
- Lumens
- Wattage
- Pole height
- Specific technology (e.g., LEDs)





## Land Use Code Requirements

### \*Commercial & Multi-Family Projects

Land Use Code Section 3.2.4 – Site Lighting

- Lighting evaluated in the development review process
- Applies to lighting for:
  - Buildings
  - Parking lots
  - Walkways
  - Plazas
  - Landscape
- Ensure that functional/security needs are met without adversely impacting adjacent properties & neighborhood
- Considers light source, level of illumination, hours of illumination & need for illumination





## Land Use Code Requirements

- Minimum & maximum foot-candle levels depending on location
- LED lighting limited to 1,000 candela/sq. meter (max)
- Light fixtures must be:
  - Concealed
  - Fully shielded
  - Full cut-off
- Up-light, spill-light, glare, contrast & brightness should be minimized
- Natural areas/features should be protected from light spillage



# Energy Code Requirements

### \*Commercial & Multi-Family Projects

• Applies to:

ollins

- Building façades
- Parking lots & garages
- Canopies (sales and non-sales)
- Outdoor sales areas
- Requires:
  - Automatic controls to dim lighting by at least 50% two hours after normal business closing
  - Outdoor lighting must be turned off 30 minutes after sunrise



## **Residential Code Requirements**

#### \*Single-Family Detached, Attached & Duplex Housing

### **Dark Night Skies:**

- Light should be shielded so the lamp itself is not visible beyond the property line
- All exterior lighting fixtures (new buildings) shall have the "Fixture Seal of Approval" from the International Dark-Sky Association (IDA)
- Lighting placement shall conform to IDA Model Lighting Ordinance for Lighting Zone 1 (low ambient lighting):
  - Lighting may be used for safety and convenience but it is not necessarily uniform or continuous
  - After curfew, most lighting should be extinguished or reduced as activity levels decline



## **Residential Code Requirements**

### \*Single-Family Detached, Attached & Duplex Housing

### **Energy Efficiency:**

 A minimum of 75% of light fixtures should be high efficiency lamps

### OR

 A minimum of 50% of lighting fixtures shall contain only LED lamps









- Currently exploring updates to:
  - Land Use Code
  - Energy Code & Residential Code
- Summer 2016:
  - Evaluate best practices & latest technology
- Fall/Winter 2016:
  - Revise code standards as needed



## What's Coming Next?



- Focus of potential updates:
  - Align various codes to reduce confusion & conflicts
  - Customize requirements based on land use context
  - Ensure requirements match new technology and best practices
  - Consider intensity, color temperature and other specifications
  - Consider efficiency & lifecycle costs
  - Reduce light pollution



### **Rebecca Everette**

Senior Environmental Planner City of Fort Collins – Planning Services <u>reverette@fcgov.com</u> 970-416-2625

https://www2.municode.com/library/co/fort\_collins/codes/land\_use

http://www.fcgov.com/building/codes.php