1. How do we regulate?
2. What do we regulate?
3. What’s coming next?
How the City Regulates Lighting

Multiple departments:
- 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

<table>
<thead>
<tr>
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<th>Residential Code</th>
<th>Energy Code</th>
<th>Land Use Code</th>
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<tbody>
<tr>
<td>Single-Family Detached</td>
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<td>Duplex</td>
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<td>Multi-Family</td>
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<td>Commercial</td>
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</tbody>
</table>
What the City **DOES** Regulate

**Light Placement:**
- Buildings, parking lots, walkways, plazas, landscape areas
- Spillover lighting (foot-candles)
- 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:
- Color temperature (Kelvin)
- Lumens
- Wattage
- Pole height
- Specific technology (e.g., LEDs)
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
*Commercial & Multi-Family Projects

- Applies to:
  - 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
*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.
*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
What’s Coming Next?

• 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
Questions?

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https://www2.municode.com/library/co/fort_collins/codes/land_use

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