City Council Work Session March 13, 2006

Lighting Ordinance Work Session Outline

- 1. Scope and Purpose
- Prior Efforts
- 3. Issues & Concerns>Strategies for improvement
- 4. A Proposed Approach and Schedule

Scope and purpose

 Objective is to obtain direction to begin the drafting of a outdoor lighting ordinance, with general agreement on the issues to be addressed

Is there a need for a lighting ordinance? Yes

What kind of lighting regulations should we include? The answer will depend on the definition of the problem and the public interest served

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Reasons for lighting ordinances:

- 1. Prevention of glare
- 2. Prevention of light spillage or trespass
- 3. Improved night vision
- 4. Enhanced security and public safety
- 5. Preservation of "dark sky"
- 6. Energy conservation
- 7. Improved property appearance

- Current focus of staff efforts is on private site and outdoor building lighting: Parking lot lights, canopy lighting, building mounted lighting, recreational facility lighting, outdoor display lighting, sign illumination, landscape and walkway lighting installations
- Land use focus is commercial installations on new buildings, sites, and new parking lots; selected parts of ordinance could be applicable to existing properties of all types
- City street lighting standards only described at this time for reference purposes – unless Council directs otherwise street lighting typically part of subdivision regulations and standard public improvements specifications

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Review of existing Columbia ordinances

City of Columbia Zoning Ordinance

- All commercial planned districts (O-P, C-P, M-P) require development plans to include "The proposed type and location of all on-site lighting."
- Section 29-30(h)(5) Off-Street parking and Loading Regulations: "Lights shall be required for all parking areas intended for night use. Lights shall be arranged or shielded to direct illumination away from residences and from public streets and other public areas."

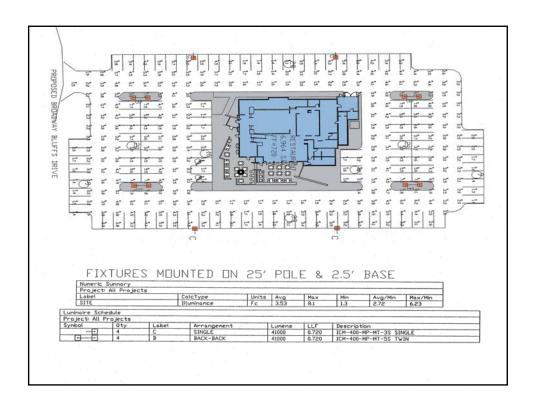
City of Columbia Municipal Code Section 27, Division 7 Street Lighting.

- Establishes general standards for lighting of public streets and policies for establishment of lighting
- Amended in 1999
- Water & Light Department has standard specifications for public street lighting

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Various planned district ordinances (site specific)

- O-P and C-P zoned developments have adopted lighting plans with specifications on a case-by-case basis.
- Generally, lighting plans limit light pole heights to 10 to 35 feet (20 or 25 feet common); specify "full cut-off" or "shielded" fixtures; provide "cut sheets" of typical luminaires; some developments provide photometric layouts; occasionally conditions of approval address lighting issues



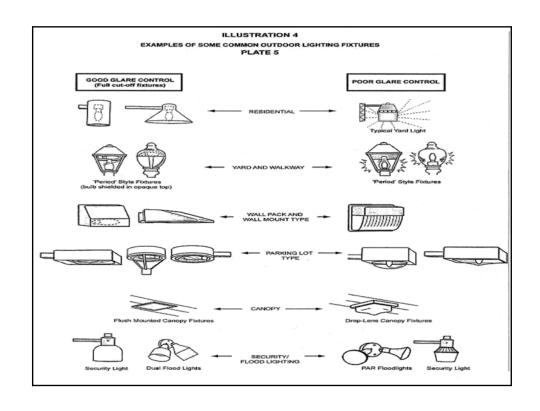
Previous efforts

- 2000 Draft ordinance and reports –
 Environment and Energy Commission comprehensive lighting ordinance, including site, building, & street lighting
- 2001 Draft gas station/convenience store lighting ordinance
- 2004 Staff report reiterated ordinance implementation concerns – review time, staff; applicability to existing structures; costs to retrofit and retool street lighting

Issue or concern

Strategy to improve

 Excessive glare is visible from public roadways or from adjacent or nearby property ■ Lighting ordinance may define and require full cut-off fixtures; shielding; flush-mounted lenses; and other directional standards

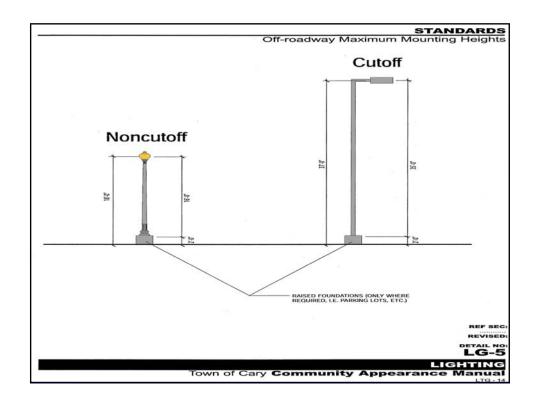


Issue or concern

 Light spillage or trespass on adjacent property

Strategy to improve

■ Directional lighting standards; maximum lighting intensity standards, in footcandles; enforced with a photometric layout and light meter measurements; hours of operation for all except "security" lighting



Issue or concern

"Overlighting" "skyglow" and loss of "dark sky"

Strategy to improve

 Directional lighting standards (incl. restrictions on spotlighting) and limitations on light intensity; lighting districts or zones may be considered to establish priority areas

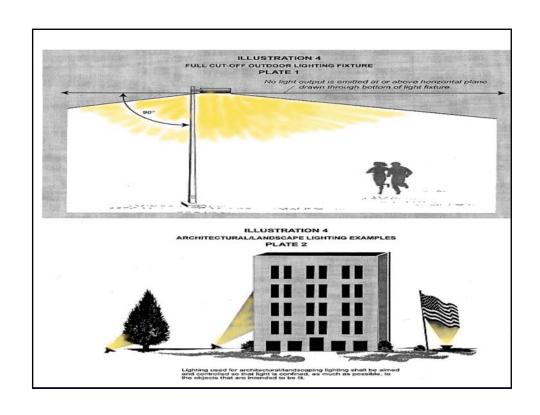
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Issue or concern

Insufficient lighting for security and safety

Strategy to improve

- Ordinance may specify minimum required lighting intensity around buildings during business hours; educational efforts on lighting placement (CPTED); use of uniformity ratios and color rendering indexes
- "Brighter not necessarily better"



Issue or concern

Excessive energy consumption

Strategy to improve

■ Lighting ordinance restrictions on light intensity and directional distribution; discouragement of energy-inefficient light sources (e.g., mercury vapor); hours of operation restrictions

Issues or concerns

Lighting plans may be burdensome to prepare, review and enforce

Strategy to improve

■ Ordinance must be clear when lighting exhibits are required and specify contents; partial applicability to existing developed sites; rely on "third-party certification" and "third-party investigation" of serious lighting complaints.

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Moving ahead - suggested approach

- 1. Form staff work team Planning, Public Works-Protective Inspections, Water & Light, Police, and Law; Environment and Energy Commission and Planning and Zoning Commission in advisory role.
- Draft ordinance in concept.
- 3. "Informal" public hearing to evaluate with stakeholders the suggested scope of the ordinance and regulatory concepts.
- 4. Report to Council and request direction to schedule public hearings.
- 5. Planning and Zoning Commission public hearings on proposed amendment of Zoning Ordinance to include a lighting chapter.
- 6. Final report and recommendations to City Council.

Conclusions:

- Ordinance should be the least obtrusive means to satisfy a legitimate government objective
- Proposal is to add an outdoor lighting chapter, functionally similar to landscaping and parking chapters, to the zoning ordinance, and include appropriate cross-references to other ordinances
- As proposed here, ordinance primarily would be focused on new commercial (office, retail/services, industrial) development with some provisions applicable to existing property in all categories and new development in residential/institutional categories
- City would reserve right to examine public street lighting later

Resources: Illuminating Engineering Society of North America International Dark Sky Association

City of Columbia Draft Sidewalk Master Plan 2006 edition

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Introduction

- Sidewalk Master Plans The City of Columbia has traditionally depicted sidewalk projects of particular importance on master plans (1976, 1981, 1996-97).
- The plan depicts projects that are important to completion of a sidewalk system but does not illustrate a complete network. May be best described as a "sidewalk project plan." CATSO Bicycle and Pedestrian Plan, Parks and Recreation Master Plan Trails, and the Greenbelt and Trails Plan describe networks of pedestrian facilities.
- Emphasis is on major roadway right of ways (arterial and collector streets) where sidewalks are needed to serve important pedestrian origins and destinations (schools, parks, shopping centers, etc.), complement transit, fill gaps, and provide relief from high vehicular traffic volumes.
- Cost estimates of master plan projects tend to be high projects are frequently "retrofits" of roadway right of ways not originally designed to accommodate sidewalks.

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Significance of the Master Sidewalk Plan

- Ranks potential sidewalk priorities for use in the annual budgeting process and as sidewalk funding sources become available; facilitates development of "short lists" of sidewalk projects to fund.
- Includes Columbia Public Schools suggestions of highest-priority sidewalks for routes to school.
- New sidewalk projects on the master plan are eligible for 100 % funding by the City, subject to funding availability, per City policy resolution 93-91A (1991).

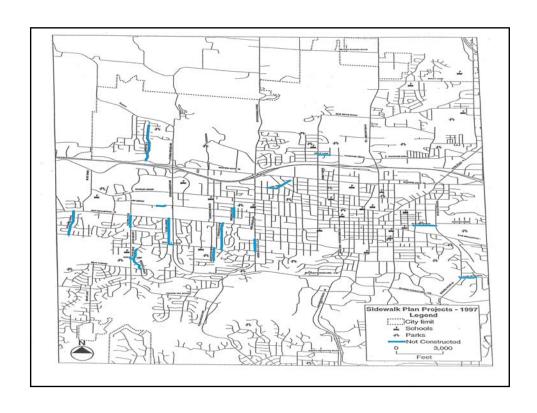
Highlights of the 2006 DRAFT Master Sidewalk Plan

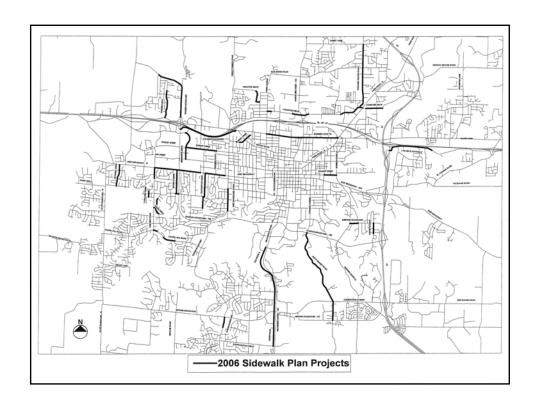
City-initiated proposals:

- √ 14 projects on arterial streets
- √ 14 projects on collector streets
- √ 12 projects on local streets

Columbia Public Schools suggestions:

√ 19 projects, including arterials, collectors and locals





Project rating criteria:

Higher ratings if the sidewalk...

- ✓ connects pedestrian generators
- ✓ is on a City bus route
- ✓ closes a sidewalk gap
- ✓ is along a high-volume roadway
- ✓ is beside an arterial roadway
- ✓ Is included in the City CIP or MoDOT project
- ✓ Is opposite a roadside lacking sidewalk as well

Issues for discussion:

- Additional routes for consideration, or deletions from draft plan;
- Relationship to Pilot Program;
- Sidewalks or pedways? (e.g., Providence Outer Road, Hinkson Creek to Rockbridge H.S.; West Broadway Garth to West Boulevard);
- Assessment of priority between "City" project rating criteria and Columbia Public Schools priority suggestions