

RIVERSIDE PUBLIC UTILITIES

Board Memorandum

BOARD OF PUBLIC UTILITIES

DATE: DECEMBER 10, 2018

ITEM NO: 9

SUBJECT: STREET LIGHT PROGRAM AND POLICIES UPDATE AND DESIGN GUIDE

ISSUES:

Approve and recommend City Council adopt the updated Street Light Program and Policies Update and Design Guide.

RECOMMENDATIONS:

That the Board of Public Utilities:

1. Approve the updated Street Light Program and Policies Update and Design Guide; and
2. Recommend City Council adopt the updated Street Light Program and Policies Update and Design Guide.

LEGISLATIVE HISTORY:

Riverside Municipal Code Chapter 19.556 – Lighting, is in the process of being revised to include:

1. Re-organization and update to bring the existing Code into compliance with State laws and technological advancements;
2. New or modified definitions related to lighting;
3. Creation of lighting zones;
4. New design and development standards;
5. New procedures for reviewing lighting plans; and
6. Establishing prohibited types of lighting.

These revisions satisfy a 2008 consent agreement with the Friends of Riverside's Hills and incorporate best practices for mitigating the Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting based on a 2016 Report of the Council on Science and Public Health. The Planning Commission approved Planning Case P18-0290 at their meeting held on May 31, 2018 and recommended the following to the City Council:

1. Accept the Negative Declaration prepared for the project (Citywide Street Light LED Conversion Program) as complying with the California Environmental Quality Act (CEQA);
2. Find that, based on the Negative Declaration that has been prepared for the project, the project will not have a significant negative effect on the environment; and
3. Approve Planning Case P18-0290 (Zoning Code Amendment), as shown in Exhibit 3 of the Planning Commission staff report.

BACKGROUND:

The City Council adopted Illuminating Engineering Society (IES) as the design guide for street lighting systems at their meeting held on January 26, 1982. The City Council also adopted Resolution No. 17953 that reaffirmed this determination and adopted the Street Lighting Functions Report and Policy Recommendations in Board Policy No. 92-1 on March 17, 1992.

On September 6, 2016, the City Council approved the Citywide LED Conversion Program, which will convert all public street lights from high-pressure sodium (HPS) street lights to the more efficient LED street lights. LED streetlights provide better light quality and safety, energy efficiency and cost savings, and reduce greenhouse gas emissions.

DISCUSSION:

While street lighting systems are exempt from the Zoning Code, updates to the Zoning Code (Chapter 19.556 – Lighting) is an item identified in the Scope of Work for the Citywide Street Light LED Conversion project. This is in part because LED lighting and mitigating over-bright development reduces energy consumption and thereby reduces the amount of energy RPU needs to produce or purchase. Another item in the Scope of Work included reviewing and updating the existing Street Light Program and Policies Update and Design Guide and related standards to improve energy efficiency and to reduce light trespass, sky glow and light pollution, while achieving safe lighting levels on roadways and intersections.

The updated Street Light Design Guide has been expanded from a single reference to IES standards in R-17953 to refer to specific IES Recommended Practices (such as RP-8 Roadway Lighting) and Design Guides (such as DG-21 Residential Street Lighting). Specific design criteria to be applied have been identified for each type of roadway identified in the 2025 General Plan Circulation and Community Mobility Element. Typical designs for each type of roadway and intersection are also included. Each design element incorporates the recommendations of the 2016 Report of the Council on Science and Public Health. The proposed Street Light Design Guide has been drafted and reviewed with the assistance of James Benya, PE of Benya Burnett Consultancy as part of a Professional Services Agreement with RPU.

In addition to the Design Guide is an update to the existing Street Lighting Functions Report and Policy Recommendations on March 17, 1992. The Street Lighting Program and Policy Update is an overall presentation of roadway lighting principles and practices for the City. The purpose of this report is to provide updated information on the status of the City's street light system, policies, and procedures. These updates were prepared by RPU and reviewed by the Public Works, Parks and Recreation & Community Services, and Police Departments as well as the City Attorney's and City Manager's Offices.

FISCAL IMPACT:

There is no fiscal impact associated with this report.

Prepared by:	George R. Hanson, Utilities Assistant General Manager/Energy Delivery
Approved by:	Todd L. Jorgenson, Interim Utilities General Manager
Approved by:	Al Zelinka, FAICP, City Manager
Approved as to form:	Gary G. Geuss, City Attorney

Certifies availability of funds:	Aileen Ma, Interim Utilities Assistant General Manager/Finance & Administration
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Attachments:

1. Street Light Design Guide
2. Street Lighting Program and Policy Update
3. Planning Case P18-0290
4. R-17953
5. Presentation