



City Council Report

Date: November 5, 2018
To: City Council
Through: Karolyn Kent, Assistant City Manager
From: RJ Zeder, Transportation Director
Gordon Haws, Deputy Transportation Director
Subject: City Code Amendment to Allow for Reduced Roadway Lighting in the Desert Uplands Area during the Streetlight Pilot Study Period

Purpose and Recommendation

The purpose of this report is to request Council approval to allow City staff the ability to reduce the Minimum Pilot Study Lumen Level for the remainder of the Pilot Study Period to a level that is not less than approximately 33% of the illumination levels required by American National Standards Institute (ANSI)/Illuminating Engineering Society (IES) RP-8-00 (Recommended Practices for Roadway Lighting), which is 25% power consumption.

Background

On May 8, 2017, Council approved a streetlight Pilot Study Period from June 1, 2017 through December 31, 2019 in two areas of the City (Desert Uplands Area and City of Mesa Electric Service Area) to test alternative night-time lighting levels within various portions of the City. The pilot studies started on April 23, 2018 in both study areas. Based on the results and feedback to-date, Staff would like the authority to test lower lighting levels than the ordinance currently allows in the Desert Uplands Area, which permits staff to go as low as 50% of the lighting levels required by RP-8-00. Staff has briefly tested down to as low as approximately 33% of the RP-8-00 levels and is seeking authority to continue to test at this level in the Desert Uplands Area for the remainder of the Pilot Study Period.

Discussion

The proposed change to City Code Section 9-6-1(C) allows City staff to reduce the Minimum Pilot Lumen Level to a level that is not less than approximately 33% of the illumination levels recommended by RP-8-00 for the duration of the Pilot Study Period. City staff do not have the flexibility to use lighting levels less than the standards originally set by Council on May 8, 2017 for the Pilot Study Areas.

City staff continues to work with the Consultant on a citywide lighting study to evaluate existing inventory and test alternative lighting levels. In addition, the Consultant will review

the pilot study results, including evaluating the economic advantages derived from lower energy costs for LED lighting, determining the return on investment from making the conversion to LED lights, and considering the safety implications of varying the minimum required light level to ensure that our roadways are safe for motorists and pedestrians. It is anticipated that Staff will return to Council at the end of the Pilot Study Period with the results of the pilot studies and recommendations for changes to the City Code based on the results.

Alternatives

The City Council could choose not to approve the proposed code change, which would leave the existing Pilot Study lighting requirements as is for the Pilot Study Areas. This is not recommended as it would not allow City staff to evaluate a further reduction in lighting levels.

Fiscal Impact

There is no direct fiscal impact associated with this request.

Coordinated With

The Mesa Police Department, Mesa Fire and Medical Department and City Attorney's Office concur with this recommendation. Transportation staff held a nighttime dimming demonstration for Police and Fire representatives and there were no objections to the reduced lighting levels.