



PUBLIC WORKS DEPARTMENT

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CITY COUNCIL STAFF REPORT

Meeting: September 20, 2022

Subject

Consider the Streetlight Transition Assessment Report.

Recommended Action

Accept the Streetlight Transition Assessment Report.

Background

On March 16, 2021, the City Council introduced and conducted the first reading of Ordinance No. 21-2225 regarding Dark Sky and Bird-Safe Design (Dark Sky Ordinance) (codified as amended at CMC section 19.102.040.) On April 6, 2021, the City Council conducted the second reading and enacted the Dark Sky Ordinance confirming the City's commitment to dark sky lighting goals and bird safety.

In response to the new Ordinance, the City of Cupertino prepared a Streetlight Transition Assessment Report for City streetlights, to verify if a transition from the existing street lighting fixtures to "dark sky" compliant Light Emitting Diode (LED) luminaires would meet the City's needs. The purpose of this report was to confirm that a transition to LED fixtures would comply with "dark sky" requirements, would be cost effective due to the use of less power from more energy efficient fixtures, and to ensure the new fixtures would provide adequate visibility for vehicles and pedestrians.

Discussion

The City's streetlight system is comprised of various fixture types, including Induction (IND,) High Pressure Sodium (HPS,) Metal Halide (MH,) and some LED. The Streetlight Transition Assessment Report indicates that a comprehensive transition to LED could provide a cumulative energy and maintenance cost reduction of nearly \$2,000,000 over 20 years. The initial LED conversion cost of approximately \$1,000,000, is accounted for in these savings. In addition, many of the City's existing 3,000 luminaires are nearing the end of their useful life, which makes the transition timely. An LED conversion project would bring the City's streetlights into compliance with the Dark Sky Ordinance.

Next Steps

Staff will move forward with project design, including environmental review, followed by project bidding and award. The City Lighting LED Improvements Project was included in the 2022/2023 Capital Improvement Program budget approved by Council and no budget appropriation is being requested at this time.

Sustainability Impact

No sustainability impact.

Fiscal Impact

No fiscal impact.

Prepared by: Ryan Do, Project Manager

Reviewed by: Matt Morley, Director of Public Works

Approved for Submission by: Pamela Wu, City Manager

Attachment:

A – Streetlight Transition Assessment Report