

Beverly Hills City Council Liaison / Public Works Commission Committee will conduct a Special Meeting, at the following time and place, and will address the agenda listed below:

CITY HALL 455 North Rexford Drive 4th Floor Conference Room A Beverly Hills, CA 90210

Thursday, November 30, 2017 10:00 AM

AGENDA

- 1) Public Comment
 - a. Members of the public will be given the opportunity to directly address the Committee on any item listed on the agenda.
- 2) LED Street Light Demonstration Project
- 3) Adjournment

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Posted: November 28, 2017

A DETAILED LIAISON AGENDA PACKET IS AVAILABLE FOR REVIEW IN THE LIBRARY AND CITY CLERK'S OFFICE.

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In accordance with the Americans with Disabilities Act, Conference Room A is wheelchair accessible. If you need special assistance to attend this meeting, please call the City Manager's Office at (310) 285-1014 or TTY (310) 285-6881. Please notify the City Manager's Office at least twenty-four (24) hours prior to the meeting if you require captioning service so that reasonable arrangements can be made.



CITY OF BEVERLY HILLS

PUBLIC WORKS DEPARTMENT

MEMORANDUM

TO:

Vice Mayor Julian A. Gold, M.D and Councilmember Robert Wunderlich,

Ph.D.

FROM:

Trish Rhay, Assistant Director of Public Works

Josette Descalzo, Environmental Compliance and Sustainability

Programs Manager

DATE:

November 30, 2017

SUBJECT:

LED Street Light Demonstration Project

ATTACHMENTS

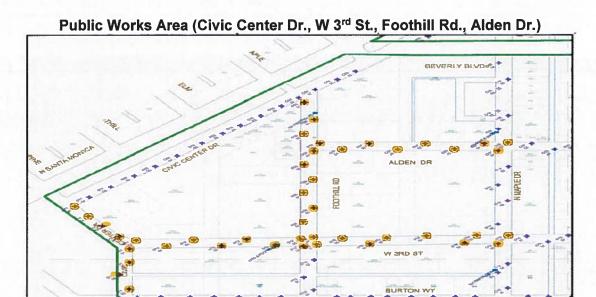
None

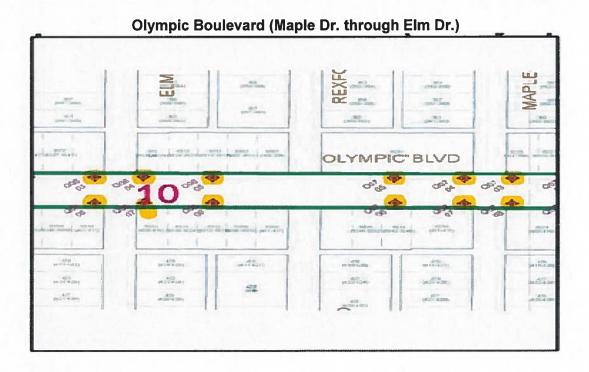
This memorandum summarizes the LED Street Light Demonstration Project. Staff is seeking the City Council Liaison's recommendation to move forward with the project to take advantage of the available incentives. The community feedback portion of the project will provide important information that will be used for the LED Street Light Replacement Program.

PROJECT BACKGROUND

In an effort to become more environmentally sustainable, the City adopted the LED Street Light Replacement Program. As part of the initial phase, staff is embarking on a demonstration project that consists of retrofitting existing street lights around the Public Works Building (Civic Center Dr., W 3rd St., Foothill Rd. and Alden Dr.) and three blocks of Olympic Boulevard (Maple to Elm Drives) with LED street lights (See Figure 1).

Figure 1: Locations of the LED Street Light Demonstration Project





For this project, staff is working with the Southern California Regional Energy Network (REN), a non-profit authorized by the California Public Utilities Commission (CPUC), to assist with transitioning this demonstration into a turnkey project by providing benefits analyses, completing incentives applications and looking for qualified and specialized contractors to complete the retrofits. REN is assisting the City to receive incentives from the Southern California Edison (SCE) program that is set to expire by December 31, 2017.

The LED fixtures that will be used for this project will be set to industry standards to provide the best safety for pedestrian and drivers. The fixtures will be set to the correct downward light onto the roadway that will provide even distribution where it is needed the most and will provide pedestrians and motorists a better vision of color (i.e. light intensity will not be set to the highest level).

For this project, the City and REN worked together in analyzing the street light inventory and identifying locations that use high-pressure sodium (HPS) fixtures that are eligible for the incentives. The locations in Figure 1 became the ideal locations because the community can compare the effects of LED quality versus traditional street lights on residential areas and a major street in the City. Additionally, the impacts to traffic during installation would be minimized at these locations.

If City Council moves forward with this project, staff and REN are prepared to install the LED fixtures immediately to meet the fast approaching incentives deadline of December 31, 2017. In addition, staff is prepared to notice the community, especially those nearby the project areas, about the installation schedule and invite community feedback. The demonstration project will begin on January 1, 2018, lasting through February 28, 2018, with the community feedback survey. The survey will entail comments regarding the overall effects of LED lights related to pedestrian and driver safety (i.e. light intensity and coverage). The survey will be available electronically and will be distributed in print to the community. The results of the survey, and incentives if available, will be used to plan for the next phases of the LED Street Light Replacement Program in 2018. In addition, staff will continue to work REN to provide the same project benefit analysis for a larger retrofitting project.

PROJECT BENEFITS

If City Council decides to move forward with the project, the demonstration project will yield the following benefits:

- 1. Reduce energy consumption by 50 to 70 percent.
- 2. Lower maintenance costs because light sources last longer, requiring less frequent lamp replacement.
- 3. Improved lighting by having consistent, even distribution and directed lighting where it is needed the most.
- 4. Reduced glare: LED directing the light downward onto the roadway reduces the amount of light that is directed into driver's eyes.
- 5. Enhanced controllability with options for instant on/off and light level adjustments to make LED lights better suited for use with advanced lighting control systems.
- 6. Reduced greenhouse gas (GHG) emissions.
- 7. Qualification for utility rebates where cost savings can be accomplished.
- 8. Capture of \$5,213 in utility incentives making the net project cost approximately \$21,000.
- 9. Receive no-cost management and technical services throughout the project.

- 10. Reduce GHG equal to taking 22 cars off the road over the project lifetime.
- 11. Improve safety and reliability.
- 12. Increase occupant comfort.
- 13. Reduce maintenance costs.
- 14. Positions the City of Beverly Hills as a community leader in energy efficiency.
- 15. Estimated \$2,390 utility savings per year.
- 16. Estimated net savings of \$24,995 over the project lifetime.
- 17. Payback period of 6.2 years.

DISADVANTAGES OF NOT MOVING FORWARD:

- 1. Loss of \$5,213 in utility incentives making the net project cost \$26,000.
- 2. Loss of energy savings of approximately \$2,400 per year.
- 3. Lose net savings of approximately \$25,000 over the project lifetime.
- 4. Lose the no-cost management and technical services by REN.
- 5. Lose the environmental and safety benefits of LED lights in the selected areas.
- 6. Lose community feedback opportunity that is critical for planning and rolling out the LED Street Light Replacement Program in 2018.

FISCAL IMPACT

The LED Street Light Demonstration Project will approximately cost \$26,000 to retrofit 56 street light fixtures in areas listed in Figure 2. Funding for this project is budgeted in the CIP No. 0200: LED Street Light Replacement Program.

RECOMMENDATION

Staff is seeking the Liaison's recommendation to move forward with the project and to take advantage of the available incentives that will end on December 31, 2017. In addition, the demonstration project will provide important information that will be useful for the LED Street Light Replacement Program.