

DEPARTMENT OF PUBLIC WORKS
BUREAU OF STREET LIGHTING

AS AMENDED**

REPORT NO. 1

NOVEMBER 4, 2016

ADOPTED BY THE BOARD
PUBLIC WORKS OF THE CITY
of Los Angeles California
AND REFERRED TO THE CITY COUNCIL
NOV - 4 2016

C.D. 1, 3, 4, 5, 9, 14

Honorable Board of Public Works
of the City of Los Angeles


Executive Officer
Board of Public Works

AUTHORITY TO REQUEST FOUR LOANS FROM THE PUBLIC WORKS TRUST FUND TO BE REIMBURSED AS GRANT PROCEEDS ARE RECEIVED

RECOMMENDATIONS:

1. Approve and forward this report to the Los Angeles City Council requesting to:
 - 1.2 Authorize four loans, ****subject to grant award approval,** from the Public Works Trust Fund (Fund 834) totaling \$6,875,000, payable by the Street Maintenance Assessment Fund (Fund 347), to front fund the construction of four street lighting projects to be repaid as federal grant proceeds are received from Caltrans on a cost reimbursement basis.
 - 1.3 Authorize that grant reimbursements from the State be deposited into the Street Lighting Maintenance Assessment Fund and subsequently transferred back to the Public Works Trust Fund no later than one week after the deposit has been made.

DISCUSSION

The Bureau of Street Lighting maintains over 215,000 streetlights comprising the second largest municipal system in the Country. The City's lighting system has over 400 different designs from ornate/historical streetlights that date back to the early 1900's. In addition to continually repairing light fixtures, the Bureau prioritizes older, outdated systems/circuits that are in need of replacement or refurbishment. Many of the systems are on major and secondary highways that qualify for federal reimbursement of construction costs with the only requirement that the City front fund the projects.

The Bureau of Street Lighting has identified four projects on major or secondary highways that qualify for federal reimbursement of construction costs under the Surface Transportation Program. On Oct. 13, 2016, the projects received preliminary approval for inclusion into the 2017 FTIP (Federal Transportation Improvement Program). Inclusion on the FTIP listing confirms eligibility to apply for federal reimbursement. Funding from Gas Tax was denied for FY2016-17, and the Street Lighting Maintenance Assessment Fund does not have sufficient funding to front the construction of these projects. The improvements for these projects will greatly enhance the existing lighting system's reliability and light output thereby improving vehicular and pedestrian safety.

1. **LOWER GRAND TUNNEL** – CD 14 (4th St. to General Thaddeus Kosciuzkow Way (GTK Way)

Loan Amount Requested: \$2,875,000

The existing lighting in the tunnel utilizes 40 foot 400W Metal Halide light pipes. The illumination is below current standards and the lighting fixtures are failing. Current and future increases in downtown traffic due to continuing property developments in the area has made this project a high priority for the Bureau.

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Approximately 170 fixtures will be replaced with new LED fixtures. Replacement of the tunnel lighting to LED will save an estimated 208,000 KWhrs in energy per year, resulting in a savings of over \$27,000 per year.

This project will result in a more reliable system that will raise lighting levels to increase visibility and reduce energy use.

The timeline is estimated to be:

Advertise Project:	May 2017
Contract Award:	November 2017
Construction Complete:	March 2019
Board Acceptance:	September 2019

2. OLYMPIC BLVD – FLOWER ST TO LAKE ST (VISION ZERO) STM/STP – CD 1, 9, 14

Loan Amount Requested: \$1,000,000

The project location is on the High Injury Network of the Mayor's Vision Zero Initiative. This STM (series to multiple) conversion project will replace the existing high voltage street lighting with low voltage LED units.

Most of the existing mid-block poles and conduit were installed in 1938 and 1939 with lead sheath cable. Whether it is dirt accumulation or deterioration, lead sheath cable in aged conduit does not allow the existing cables to be removed to an extent where new wires may be installed in the existing conduit. Since the existing conduit cannot be reused, new conduit will be installed.

Approximately 80 lights will be converted to LED. The existing luminaires are a mix of HPS (high pressure sodium) and MV (mercury vapor) lamps in cobrahead and pendant fixtures. The project will save an estimated 80,000 KWhrs of energy, or \$10,400 in energy cost per year.

This project will result in a safer system, effectively reducing energy usage and the maintenance required on the system.

The timeline is estimated to be:

Advertise Project:	January 2018
Contract Award:	July 2018
Construction Complete:	July 2019
Board Acceptance:	December 2019

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3. WILSHIRE BLVD - CURSON AVE TO WILTON PL (VISION ZERO) STM/STP – CD 4

Loan Amount Requested: \$2,200,000

The project location is on the High Injury Network of the Mayor's Vision Zero Initiative. This STM conversion project will replace the existing high voltage street lighting with low voltage LED units.

The street lighting system was installed circa 1956 with lead sheath cable. Whether it is dirt accumulation or deterioration, lead sheath cable in aged conduit does not allow the existing cables to be removed to an extent where new wires may be installed in the existing conduit. Since the existing conduit cannot be reused, new conduit will be installed.

Approximately 328 fixtures will be converted to LED. These fixtures are decorative utilizing old energy inefficient lamps. The new project will replace them with the same ornate look. The project will save an estimated 401,000 KWhrs in energy, or \$52,000 in energy cost per year.

This project will result in a safer system, effectively reducing energy usage and the maintenance required on the system.

The timeline is estimated to be:

Advertise Project:	June 2018
Contract Award:	December 2018
Construction Complete:	March 2020
Board Acceptance:	September 2020

4. VENTURA BL - AMIGO AVE TO CALHOUN AVE (VISION ZERO) STM/STP – CD 3, 4, 5

Loan Amount Requested: \$800,000

The project location is on the High Injury Network of the Mayor's Vision Zero Initiative. This STM conversion project will replace the existing high voltage street lighting with low voltage LED units.

The street lighting system was installed between 1962 and 1972. Though the existing cables are not lead sheathed, the conduits between Densmore Ave and Sepulveda Blvd have deteriorated and need to be replaced.

Approximately 220 lights will be converted to LED. The existing luminaires are a mix of HPS, MV and incandescent cobrahead fixtures. All fixtures will be replaced with LED. The project will save an estimated 160,000 KWhrs in energy, or \$21,000 in energy cost per year.

This project will result in a safer system, effectively reducing energy usage and the maintenance required on the system.

The timeline is estimated to be:

Advertise Project:	January 2018
Contract Award:	July 2018
Construction Complete:	July 2019
Board Acceptance:	December 2019

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FISCAL IMPACT STATEMENT

There is no impact to the City's General Fund. The PWTF will front fund the projects for a total of \$6,875,000, and the PWTF will be reimbursed by the Street Lighting Maintenance Assessment Fund as soon as grant proceeds are received from Caltrans.

STATUS OF FINANCING

If awarded, funding will be available at the PWTF, Fund 834 to transfer to Street Lighting Maintenance Assessment (SLMAF) Fund, 347, New Account (Project Name) to front fund the construction of the projects. Funds will be transferred from the PWTF to SLMAF upon awarding of contract and showing proof of grant award.

Federal billings will be submitted progressively and PWTF will be reimbursed as grant proceeds are received from Caltrans as per Recommendation 1.1.3.

Report prepared by:



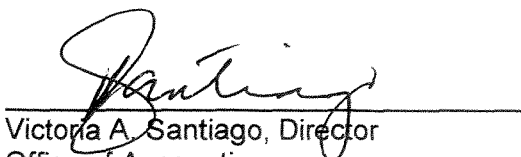
Shant Hovasapian,
Division Manager
INFRASTRUCTURE IMPROVEMENT DIVISION
213-847-1438

Respectfully submitted,



Ed Ebrahimian, Director
Bureau of Street Lighting

**STATEMENT AS TO FUNDS AND ACCOUNTING
INSTRUCTIONS APPROVED BY:**



Victoria A. Santiago, Director
Office of Accounting

Date: 10/25/16